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Publications

Passivity-Based Stabilization of LCL-Type Grid-Connected Inverters via a General Admittance Model

Xie, C., Li, K., Zou, J. & Guerrero, J. M., Jun 2020, In : IEEE Transactions on Power Electronics . 35, 6, p. 6636-6648 13 p., 8911433.

Optimal allocation for combined heat and power system with respect to maximum allowable capacity for reduced losses and improved voltage profile and reliability of microgrids considering loading condition

Naderipour, A., Abdul-Malek, Z., Nowdeh, S. A., Ramachandaramurthy, V. K., Kalam, A. & Guerrero, J. M., 1 Apr 2020, In : Energy. 196, 117124.

Cascaded Multilevel PV Inverter with Improved Harmonic Performance During Power Imbalance Between Power Cells

Lashab, A., Séra, D., Hahn, F., Camurca, L., Terriche, Y., Liserre, M. & Guerrero, J. M., 4 Mar 2020, (Accepted/In press) In : IEEE Transactions on Industry Applications.

A Comprehensive Inertial Control Strategy for Hybrid AC/DC Microgrid with Distributed Generations

He, L., Li, Y., Guerrero, J. M. & Cao, Y., Mar 2020, In : IEEE Transactions on Smart Grid. 11, 2, p. 1737-1747 11 p., 8845667.

A Model Predictive Power Control Method for PV and Energy Storage Systems with Voltage Support Capability

Shan, Y., Hu, J. & Guerrero, J. M., Mar 2020, In : IEEE Transactions on Smart Grid. 11, 2, p. 1018-1029 12 p., 8766341.

Analysis and optimization of hybrid modular multilevel converters under over-modulation conditions

Hu, P., He, Z., Yin, R., Guo, J., Guerrero, J. M. & Teodorescu, R., Mar 2020, In : International Journal of Electrical Power and Energy Systems. 116, 105578.

An efficient interactive framework for improving resilience of power-water distribution systems with multiple privately-owned microgrids

Najafi, J., Peiravi, A., Anvari-Moghaddam, A. & Guerrero, J. M., Mar 2020, In : International Journal of Electrical Power & Energy Systems. 116, 105550

A Self-Sustained and Flexible Control Strategy for Islanded DC Nanogrids without Communication Links

Nguyen, T. L., Guerrero, J. M. & Griepentrog, G., Mar 2020, In : IEEE Journal of Emerging and Selected Topics in Power Electronics. 8, 1, p. 877-892 16 p., 8625458.

A Two-layer Distributed Cooperative Control Method for Islanded Networked Microgrid Systems

Wu, X., Xu, Y., Wu, X., He, J., Guerrero, J. M., Liu, C., Schneider, K. P. & Ton, D. T., Mar 2020, In : IEEE Transactions on Smart Grid. 11, 2, p. 942-957 16 p., 8760423.

Is Using A Complex Control Gain in Three-phase FLLs Reasonable?

Golestan, S., Guerrero, J. M. & Vasquez, J. C., Mar 2020, In : IEEE Transactions on Industrial Electronics. 67, 3, p. 2480 - 2484 5 p.

Modeling and Stability Analysis of Inverter-Based Microgrid under Harmonic Conditions

Peng, Y., Shuai, Z., Liu, X., Li, Z., Guerrero, J. M. & Shen, Z. J., Mar 2020, In : IEEE Transactions on Smart Grid. 11, 2, p. 1330-1342 13 p., 8805139.

Real-Time Load and Ancillary Support for a Remote Island Power System Using Electric Boats

Mahmud, K., Rahman, M. S., Ravishankar, J., Hossain, J. & Guerrero, J. M., Mar 2020, In : IEEE Transactions on Industrial Informatics. 16, 3, p. 1516 - 1528 13 p.

Analysis and Control of Modular Multilevel Converter with Split Energy Storage for Railway Traction Power Conditioner

Guo, P., Xu, Q., Yue, Y., Ma, F., He, Z., Luo, A. & Guerrero, J. M., Feb 2020, In : IEEE Transactions on Power Electronics. 35, 2, p. 1239-1255 17 p.

Improvement of Frequency Regulation in VSG-Based AC Microgrid via Adaptive Virtual Inertia

Hou, X., Sun, Y., Zhang, X., Lu, J., Wang, P. & Guerrero, J. M., Feb 2020, In : IEEE Transactions on Power Electronics. 35, 2, p. 1589 - 1602 13 p.

Model Predictive Voltage and Power Control of Islanded PV-Battery Microgrids with Washout Filter Based Power Sharing Strategy

Shan, Y., Hu, J., Liu, M., Zhu, J. & Guerrero, J. M., Feb 2020, In : IEEE Transactions on Power Electronics. 35, 2, 12 p.

Nonlinear control and stability analysis of single stage grid-connected photovoltaic systems

Aourir, M., Abouloifa, A., Lachkar, I., Aouadi, C., Giri, F. & Guerrero, J. M., Feb 2020, In : International Journal of Electrical Power and Energy Systems. 115, 105439.

Passivity-Based Design of Plug-and-Play Current-Controlled Grid-Connected Inverters

Akhavan, A., Mohammadi, H. R., Vasquez, J. & Guerrero, J. M., Feb 2020, In : IEEE Transactions on Power Electronics. 35, 2

New hybrid-microgrid topology using a bidirectional interleaved converter as a robust power interface operating in grid-connected and islanded modes

Tricarico, T., Gontijo, G. F., Aredes, M., Dias, R. & Guerrero, J. M., 6 Jan 2020, In : IET Renewable Power Generation. 14, 1, p. 134-144 11 p.

Adaptive Reference Trajectory for Power Quality Enhancement in Three-Phase Four-Wire Standalone Power Supply Systems with Nonlinear and Unbalanced Loads

Saim, A., Houari, A., Ahmed, M. A., Djerioui, A., Machmoum, M. & Guerrero, J. M., 1 Jan 2020, (Accepted/In press) In : IEEE Journal of Emerging and Selected Topics in Power Electronics.

Microgrid transactive energy: Review, architectures, distributed ledger technologies, and market analysis

Zia, M. F., Benbouzid, M., Elbouchikhi, E., Muyeen, S. M., Techato, K. & Guerrero, J. M., 1 Jan 2020, In : IEEE Access. 8, p. 19410-19432 23 p., 8966274.

Performance Analysis of 4-Leg IB APF for 3-Phase 4-Wire System with Renewable Energy Interface Fuzzy Control DC-Bus Capacitor

Patel, R., Panda, A. K. & Guerrero, J. M., 1 Jan 2020, *Renewable Energy and Climate Change - Proceedings of REC 2019*. Deb, D., Dixit, A. & Chandra, L. (eds.). Springer Science+Business Media, p. 49-60 12 p. (Smart Innovation, Systems and Technologies, Vol. 161).

Power sharing control strategy of parallel inverters in AC microgrid using improved reverse droop control

Chethan Raj, D., Gaonkar, D. N. & Guerrero, J. M., 1 Jan 2020, In : International Journal of Power Electronics. 11, 1, p. 116-137 22 p.

An Efficient External Energy Maximization-based Energy Management Strategy for a Battery/Supercapacitor of a Micro Grid System

Dhifli, M., Jawadi, S., Lashab, A., Guerrero, J. M. & Cherif, A., Jan 2020, In : International Journal of Computer Science and Network Security. 20, 1, p. 196 203 p.

Distributed consensus-based fault tolerant control of islanded microgrids

Shahab, M. A., Mozafari, B., Soleymani, S., Dehkordi, N. M., Shourkaei, H. M. & Guerrero, J. M., Jan 2020, In : IEEE Transactions on Smart Grid. 11, 1, p. 37-47 11 p., 8714062.

Modeling, Control and Experimental Verification of a DFIG with a Series-Grid-Side Converter with Voltage Sag, Unbalance and Distortion Compensation Capabilities

Gontijo, G. F., Tricarico, T. C., da Silva, L. F., Krejci, D., França, B. W., Aredes, M. & Guerrero, J. M., Jan 2020, In : IEEE Transactions on Industry Applications. 56, 1, p. 584-600 16 p.

A Hybrid Compensator Configuration for VAR Control and Harmonic Suppression in All-Electric Shipboard Power Systems

Terriche, Y., Mutarraf, M. U., Golestan, S., Su, C-L., Guerrero, J. M. & Vasquez, J. C., 2020, In : I E E E Transactions on Power Delivery.

An Adaptive Power Sharing Control for Management of DC Microgrids Powered by Fuel Cell and Storage System

Aguiar, C. R., Fuzato, G. F., Machado, R. Q. Q. & Guerrero, J. M., 2020, In : IEEE Transactions on Industrial Electronics. 67, 5, p. 3726-3735 10 p., 8718013.

A Simple Method for Passivity Enhancement of Current Controlled Grid-Connected Inverters

Akhavan, A., Vasquez, J. C. & Guerrero, J. M., 2020, In : IEEE Transactions on Power Electronics.

Blockchain for power systems: Current trends and future applications

Di Silvestre, M. L., Gallo, P., Guerrero, J. M., Musca, R., Riva Sanseverino, E., Sciumè, G., Vásquez, J. C. & Zizzo, G., 2020, In : Renewable and Sustainable Energy Reviews. 109585.

Coupling effect analysis and control for grid-connected multi-microgrid clusters

Akhavan, A., Mohammadi, H. R., Vasquez, J. C. & Guerrero, J. M., 2020, In : IET Power Electronics.

DC Microgrid Protection: A Comprehensive Review

Beheshtaein, S., Cuzner, R. M., Forouzesh, M., Savaghebi, M. & Guerrero, J. M., 2020, In : IEEE Journal of Emerging and Selected Topics in Power Electronics.

Dual-Input Quasi Z-Source PV Inverter: Dynamic Modeling, Design, and Control

Lashab, A., Séra, D., Rodrigues Martins, J. P. & Guerrero, J. M., 2020, In : I E E E Transactions on Industrial Electronics.

Enhanced Current-Limiting Droop Controller for Grid-Connected Inverters to Guarantee Stability and Maximize Power Injection Under Grid Faults

Paspatis, A. G., Konstantopoulos, G. C. & Guerrero, J. M., 2020, In : IEEE Transactions on Control Systems Technology. 9 p.

New Inter and Inner Phase Power Control Method for Cascaded H-Bridge Based on Simplified PWM Strategy

Ye, Z., Yu, D., Fernando, T., Zheng, Q., Pei, H., Guerrero, J. M., Mao, S., Wang, T., Chen, A., Zhang, Z. & Jiang, L., 2020, In : IEEE Transactions on Power Electronics .

On the Secondary Control Architectures of AC Microgrids: An Overview

Khayat, Y., Shafiee, Q., Heydari, R., Naderi, M., Dragicevic, T., Simpson-Porco, J., Dörfler, F., Fathi, M., Blaabjerg, F., Guerrero, J. M. & Bevrani, H., 2020, In : IEEE Transactions on Power Electronics . 19 p.

Resynchronization Analysis and Improvement of Grid-Connected VSCs During Grid Faults

He, X., Geng, H., Xi, J. & Guerrero, J. M., 2020, In : IEEE Journal of Emerging and Selected Topics in Power Electronics.

Stochastic Risk-Constrained Scheduling of Renewable-Powered Autonomous Microgrids with Demand Response Actions: Reliability and Economic Implications

Vahedipour-Dahraie, M., Rashidizadeh-Kermani, H., Anvari-Moghaddam, A. & Guerrero, J. M., 2020, In : IEEE Transactions on Industry Applications. 56, 2, p. 1882-1895

AC Microgrid Small-Signal Modeling: Hierarchical Control Structure Challenges and Solutions

Wu, Y., Wu, Y., Guerrero, J. M., Vasquez, J. C. & Li, J., Dec 2019, In : IEEE Electrification Magazine. 7, 4, p. 81-88 8 p.

A control scheme for voltage unbalance compensation in an islanded microgrid

Hoseinnia, S., Akhbari, M., Hamzeh, M. & Guerrero, J. M., Dec 2019, In : Electric Power Systems Research. 177, 106016.

A Hybrid Power System Laboratory: Testing Electric and Hybrid Propulsion

Othman, M. B., Reddy, N. P., Ghimire, P., Karbalaye Zadeh, M., Anvari-Moghaddam, A. & Guerrero, J. M., Dec 2019, In : IEEE Electrification Magazine. 7, 4, p. 89-97 9 p.

Hybrid Energy Storage Systems for Voltage Stabilization in Shipboard Microgrids

Mutarraf, M. U., Terriche, Y., Nasir, M., Niazi, K. A. K., Vasquez, J. C. & Guerrero, J. M., Dec 2019, *Proceedings of 2019 9th International Conference on Power and Energy Systems (ICPES)*. IEEE Press, 6 p.

More in-depth analytical investigations of two Effective Harmonics Filters for More Electric Marine Vessel Applications

Terriche, Y., Mutarraf, M. U., Mehrzadi, M., Su, C-L., Guerrero, J. M. & Vasquez, J. C., Dec 2019, *Proceedings of 2019 9th International Conference on Power and Energy Systems (ICPES)*. IEEE Press, 6 p.

Non-Ideal Proportional Resonant Control for Modular Multilevel Converters under Sub-Module Fault Conditions

Hu, P., He, Z., Li, S. & Guerrero, J. M., Dec 2019, In : IEEE Transactions on Energy Conversion. 34, 4, p. 1741-1750 10 p., 8820074.

Single-phase FLLs Based on Linear Kalman Filter, Limit-Cycle Oscillator, and Complex Band-pass Filter: Analysis and Comparison With a Standard FLL in Grid Applications

Golestan, S., Guerrero, J. M., Vasquez, J., Abusorrah, A. M. & Al-Turki, Y. A., Dec 2019, In : IEEE Transactions on Power Electronics. 34, 12, p. 11774 - 11790 17 p., 8668789.

Single-phase frequency-locked loops: A comprehensive review

Golestan, S., Guerrero, J. M., Musavi, F. & Vasquez, J. C., Dec 2019, In : IEEE Transactions on Power Electronics . 34, 12, p. 11791-11812 22 p., 8685187.

State observer based capacitor-voltage-balancing method for modular multilevel converters without arm-current sensors

Hu, P., Teodorescu, R. & Guerrero, J. M., Dec 2019, In : International Journal of Electrical Power and Energy Systems. 113, p. 188-196 9 p.

A hybrid islanding detection technique for inverter-based distributed generator units

Seyedi, M., Taher, S. A., Ganji, B. & Guerrero, J. M., 1 Nov 2019, In : International Transactions on Electrical Energy Systems. 29, 11, e12113.

Energy Management System for an Islanded Microgrid with Convex Relaxation

Zia, M. F., Elbouchikhi, E., Benbouzid, M. & Guerrero, J. M., 1 Nov 2019, In : IEEE Transactions on Industry Applications. 55, 6, p. 7175-7185 11 p., 8716558.

Integration and Decentralized Control of Standalone Solar Home Systems for off-grid Community Applications

Nasir, M., Anees, M., Khan, H. A., Khan, I., Xu, Y. & Guerrero, J. M., 1 Nov 2019, In : IEEE Transactions on Industry Applications. 55, 6, p. 7240-7250 11 p., 8692636.

Stability analysis and robust damping of multiresonances in distributed-generation-based islanded microgrids

Saim, A., Houari, A., Guerrero, J. M., Djerioui, A., Machmoum, M. & Ahmed, M. A., 1 Nov 2019, In : IEEE Transactions on Industrial Electronics. 66, 11, p. 8958-8970 13 p., 8643083.

A novel compact dq-reference frame model for inverter-based microgrids

Macana, C. A., Mojica-Nava, E., Pota, H. R., Guerrero, J. M. & Vasquez, J. C., Nov 2019, In : Electronics (Switzerland). 8, 11, 15 p., 1326.

A power calculation algorithm for single-phase droop-operated-inverters considering linear and nonlinear loads HIL-assessed

Mariachet, J. E., Matas, J., Martín, H., Li, M., Guan, Y. & Guerrero, J. M., Nov 2019, In : Electronics (Switzerland). 8, 11, 19 p., 1366.

A Stochastic Bi-Level Decision-Making Framework for a Load-Serving Entity in Day-Ahead and Balancing Markets

Rashidizadeh-Kermani, H., Vahedipour-Dahraie, M., Anvari-Moghaddam, A. & Guerrero, J. M., Nov 2019, In : International Transactions on Electrical Energy Systems. 29, 11, 20 p., e12109.

Energy scheduling of community microgrid with battery cost using particle swarm optimisation

Hossain, M. A., Pota, H. R., Squartini, S., Zaman, F. & Guerrero, J. M., Nov 2019, In : Applied Energy. 254, 14 p., 113723.

Finite-Gain Repetitive Controller for Harmonic Sharing Improvement in a VSM Microgrid

Roldán-Pérez, J., Prodanovic, M., Rodríguez-Cabero, A., Guerrero, J. M. & García-Cerrada, A., Nov 2019, In : IEEE Transactions on Smart Grid. 10, 6, p. 6898 - 6911 14 p., 8700267.

Microgrids literature review through a layers structure

Carpintero-Rentería, M., Santos-Martín, D. & Guerrero, J. M., Nov 2019, In : Energies. 12, 22, 22 p., 4381.

Multirate Resonant Controllers for Grid-Connected Inverters with Harmonic Compensation Function

Xie, C., Zhao, X., Li, K., Zou, J. & Guerrero, J. M., Nov 2019, In : IEEE Transactions on Industrial Electronics. 66, 11, p. 8981 - 8991 11 p., 8464052.

Operation Planning of Standalone Maritime Power Systems Using Particle Swarm Optimization

Mehrzadi, M., Lien Su, C., Terriche, Y., Vasquez, J. C. & Guerrero, J. M., Nov 2019, *Proceedings of 2019 1st International Conference on Electrical, Control and Instrumentation Engineering (ICECIE)*. IEEE Press, 6 p.

Overload and short-circuit protection strategy for voltage source inverter-based UPS

Wei, B., Marzabal, A., Perez, J., Pinyol, R., Guerrero, J. M. & Vasquez, J. C., Nov 2019, In : IEEE Transactions on Power Electronics. 34, 11, p. 11371-11382 12 p., 8637785.

Parameter Stability Region Analysis of Islanded Microgrid Based on Bifurcation Theory

Shuai, Z., Peng, Y., Liu, X., Li, Z., Guerrero, J. M. & Shen, J., Nov 2019, In : IEEE Transactions on Smart Grid. 10, 6, p. 6580 - 6591 12 p., 8674588.

Performance Assessment of the RTDS/RSCAD VSC model

Tinajero, G. D. A., Guerrero, J. M., Segundo-Ramirez, J. & Esparza, A., Nov 2019, *Proceedings of the 12th International Conference on Computer and Electrical Engineering (ICCEE 2019)*. IOP Publishing, 7 p. (Journal of Physics - Conference Series, Vol. 1457).

Investigation of Nonlinear Droop Control in DC Power Distribution Systems: Load Sharing, Voltage Regulation, Efficiency, and Stability

Chen, F., Burgos, R., Boroyevich, D., Vasquez, J. C. & Guerrero, J. M., 1 Oct 2019, In : IEEE Transactions on Power Electronics. 34, 10, p. 9407-9421 15 p., 8616804.

Modulated Model Predictive Control for Modular Multilevel AC/AC Converter

He, Z., Guo, P., Shuai, Z., Xu, Q., Luo, A. & Guerrero, J. M., 1 Oct 2019, In : IEEE Transactions on Power Electronics. 34, 10, p. 10359-10372 14 p., 8625605.

A Dual-Discrete Model Predictive Control-based MPPT for PV systems

Lashab, A., Séra, D. & Zapata, J. M. G., Oct 2019, In : IEEE Transactions on Power Electronics. 34, 10, p. 9686 - 9697 12 p., 8611184.

An Evaluation Method for Voltage Dips in a Shipboard Microgrid under Quasi-balanced and Unbalanced Voltage Conditions

Liu, W., Tarasiuk, T., Su, C. L., Gorniak, M., Savaghebi, M., Vasquez, J. C. & Guerrero, J. M., Oct 2019, In : IEEE Transactions on Industrial Electronics. 66, 10, p. 7683 - 7693 11 p., 8580555.

Coordinated Primary and Secondary Frequency Support between Microgrid and Weak Grid

Xiao, Z., Zhu, M., Huang, Y., Guerrero, J. M. & Vasquez, J. C., Oct 2019, In : IEEE Transactions on Sustainable Energy. 10, 4, p. 1718-1730 13 p., 8463604.

Large Photovoltaic Power Plants Integration: A Review of Challenges and Solutions

Mansouri, N., Lashab, A., Séra, D., Guerrero, J. M. & Cherif, A., Oct 2019, In : Energies. 12, 19, 17 p., 3798.

Model Predictive Control of Bidirectional DC-DC Converters and AC/DC Interlinking Converters - A New Control Method for PV-Wind-Battery Microgrids

Shan, Y., Hu, J., Chan, K. W., Fu, Q. & Guerrero, J. M., Oct 2019, In : IEEE Transactions on Sustainable Energy. 10, 4, p. 1823-1833 11 p., 8478371.

Regulatory-framework-embedded energy management system for microgrids: The case study of the Spanish self-consumption scheme

de la Hoz, J., Martín, H., Alonso, A., Carolina Luna, A., Matas, J., Vasquez, J. C. & Guerrero, J. M., Oct 2019, In : Applied Energy. 251, 113374.

Stability Improvement of Converter-side Current Controlled Grid-Connected Inverters

Akhavan, A., Mohammadi, H. R., Vasquez, J. C. & Guerrero, J. M., Oct 2019, *Proceedings of IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society*. IEEE Press, 8927492. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Control of Hybrid Diesel/PV/Battery/Ultra-Capacitor Systems for Future Shipboard Microgrids

Mutarraf, M. U., Terriche, Y., Niazi, K. A. K., Khan, F., Vasquez, J. C. & Guerrero, J. M., 7 Sep 2019, In : Energies. 12, 18, 23 p., 3460.

Stochastic Predictive Control of Multi-Microgrid Systems

Bazmohammadi, N., Tahsiri, A., Anvari-Moghaddam, A. & Guerrero, J. M., 1 Sep 2019, In : IEEE Transactions on Industry Applications. 55, 5, p. 5311 - 5319 9 p., 8718558.

A GaN-Based Active Power Decoupling Approach for Enhancing the Efficiency and Reliability of Residential PV Microinverters

Ramezani, M., Musavi, F., Golestan, S., Beheshtaein, S., Guerrero, J. M. & Cuzner, R., Sep 2019, *Proceedings of 2019 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE, p. 2039-2046 8 p. 8912220. (IEEE Energy Conversion Congress and Exposition).

An enhanced power decoupling control for grid-connected capacitive-coupling inverters

Deng, W., Dai, N. Y., Lao, K. W. & Guerrero, J. M., Sep 2019, *Proceedings of 2019 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE, p. 1466-1473 8 p. 8913281. (IEEE Energy Conversion Congress and Exposition).

A New Adaptive Virtual Impedance based Fault Current Limiter for Converters

Beheshtaein, S., Golestan, S., Cuzner, R. & Guerrero, J. M., Sep 2019, *Proceedings of 2019 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE, p. 2439-2444 6 p. 8912505. (IEEE Energy Conversion Congress and Exposition).

Bumpless optimal control over multi-objective microgrids with mode-dependent controllers

Wu, Y., Guerrero, J. M., Vasquez, J. C. & Wu, Y., Sep 2019, In : *Energies*. 12, 19, 16 p., 3619.

Control method for three-phase grid-connected inverter PV system employing unity power factor (UPF) strategy in microgrid

Naderipour, A., Abdul-Malek, Z., Ramachandaramurthy, V. K. & Guerrero, J. M., Sep 2019, In : *E3S Web of Conferences*. 115, 5 p., 01006.

Coordinated Control of a Hybrid-Electric-Ferry Shipboard Microgrid

Zhao-xia, X., Tianli, Z., Huaimin, L., Guerrero, J. M., Su, C-L. & Vasquez, J. C., Sep 2019, In : *IEEE Transactions on Transportation Electrification*. 5, 3, p. 828-839 12 p., 8759888.

Design of Space Microgrid for Manned Lunar Base: Spinning-in Terrestrial Technologies

Bintoudi, A. D., Timplalexis, C., Mendes, G., Guerrero, J. M. & Demoulias, C., Sep 2019, *Proceedings of 2019 European Space Power Conference (ESPC)*. IEEE Signal Processing Society, 8 p. 8932024

Double Deadbeat Plus Repetitive Control Scheme for Microgrid System

Madichetty, S., Basu, M., Mishra, S. & Guerrero, J. M., Sep 2019, In : *IEEE Systems Journal*. 13, 3, p. 3194 - 3202 9 p., 8506412.

Dual-loop control strategy applied to the cluster of multiple nanogrids for rural electrification applications

Nasir, M., Anees, M., Khan, H. A. & Guerrero, J. M., Sep 2019, In : *IET Smart Grid*. 2, 3, p. 327-335 9 p.

Microgrid Optimal Energy and Reserve Scheduling Considering Frequency Constraints

Mohiti, M., Mazidi, M., Anvari-Moghaddam, A. & Guerrero, J. M., Sep 2019, *SEST 2019 - 2nd International Conference on Smart Energy Systems and Technologies*. IEEE Press, 6 p. 8849072

Modelling and vulnerability analysis of cyber-physical power systems based on interdependent networks

Zhang, H., Peng, M., Guerrero, J. M., Gao, X. & Liu, Y., Sep 2019, In : *Energies*. 12, 18, 3439.

Model Predictive Control of Cascaded Multilevel Battery Assisted Quasi Z-Source PV Inverter with Reduced Computational Effort

Lashab, A., Séra, D. & Guerrero, J. M., Sep 2019, *Proceedings of 2019 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 6501-6507 7 p. 8912551. (IEEE Energy Conversion Congress and Exposition).

Open IoT Infrastructures for In-Home Energy Management and Control

Palacios-Garcia, E. J., Arbab-Zavar, B., Vasquez, J. C. & Guerrero, J. M., Sep 2019, *Proceedings of 2019 IEEE 9th International Conference on Consumer Electronics (ICCE-Berlin)*. Velikic, G. & Gross, C. (eds.). IEEE Press, p. 376-379 4 p. 8966225. (IEEE International Conference on Consumer Electronics).

Stability Analysis Considering Dual Physical Constraints of Parallel-connected Virtual Synchronous Generators forming Microgrids

Xie, P., Yuan, C., Guan, Y., Tan, S., Li, M., Vasquez, J. C. & Guerrero, J. M., Sep 2019, *Proceedings of 2019 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE, p. 2092-2098 7 p. 8912574. (IEEE Energy Conversion Congress and Exposition).

Stochastic Consensus-based Control of μ Gs with Communication Delays and Noises

Shahab, M. A., Mozafari, S. B., Soleymani, S., Mahdian, N., Mohammadnezhad, H. & Guerrero, J. M., Sep 2019, In : *IEEE Transactions on Power Systems*. 34, 5, p. 3573 - 3581 9 p., 8667738.

Synchronization and Current Sharing for Nonlinearoscillator-based Inverters in Islanded Three-phase Microgrid

Li, M., Wei, B., Xie, P., Tan, S., Guerrero, J. M. & Vasquez, J. C., Sep 2019, *Proceedings of 2019 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 2566-2571 6 p. 8913050. (IEEE Energy Conversion Congress and Exposition).

Voltage Quality Improvement in Low Voltage Distribution Networks Using Reactive Power Capability of Single-Phase PV Inverters

Zeraati, M., Golshan, M. E. H. & Guerrero, J. M., Sep 2019, In : *IEEE Transactions on Smart Grid*. 10, 5, p. 5057 - 5065 9 p.

A reactive power-voltage control strategy of an AC microgrid based on adaptive virtual impedance

Liu, Y., Guan, L., Guo, F., Zheng, J., Chen, J., Liu, C. & Guerrero, J. M., Aug 2019, In : *Energies*. 12, 16, 15 p., 3057.

Compromised Controller Design for Current Sharing and Voltage Regulation in DC Microgrid

Han, R., Wang, H., Jin, Z., Meng, L. & Guerrero, J. M., Aug 2019, In : *IEEE Transactions on Power Electronics*. 34, 8, p. 8045 - 8061 17 p., 8509187.

Direct matrix converter topologies with model predictive current control applied as power interfaces in AC, DC, and hybrid microgrids in islanded and grid-connected modes

Gontijo, G., Soares, M., Tricarico, T., Dias, R., Aredes, M. & Guerrero, J., Aug 2019, In : *Energies*. 12, 17, 28 p., 3302.

Experiments on a real-time energy management system for islanded prosumer microgrids

Macana, C. A., Pota, H. R., Zhu, Q., Guerrero, J. M. & Vasquez, J. C., Aug 2019, In : *Electronics (Switzerland)*. 8, 9, 17 p., 925.

Fault-tolerant Oriented Hierarchical Control and Configuration of Modular Multilevel Converter for Shipboard MVDC System

Hong, L., Xu, Q., He, Z., Ma, F. J., Luo, A. & Guerrero, J. M., Aug 2019, In : *IEEE Transactions on Industrial Informatics*. 15, 8, p. 4525 - 4535 11 p.

Happiness is a hybrid-electric: A diesel-burning boat finds new life with a direct-current microgrid

Su, C. L., Guerrero, J. M. & Chen, S. H., Aug 2019, In : *IEEE Spectrum*. 56, 8, p. 42-47 6 p., 8784122.

Optimal Operation of Energy Storage System for a Prosumer Microgrid Considering Economical and Environmental Effects

Muqet, H. A., Sajjad, I. A., Ahmad, A., Iqbal, M. M., Ali, S. & Guerrero, J. M., Aug 2019, *Proceedings of 2019 International Symposium on Recent Advances in Electrical Engineering (RAEE)*. Gul, S. T., Nazir, M. S. & Nadeem, S. (eds.). IEEE Press, 8887002

Producing Bio-electricity and Bio-heat from Urban Sewage Sludge in Turkey Using a Two-Stage Process

Abusoglu, A., Anvari-Moghaddam, A. & Guerrero, J. M., Aug 2019, *5th International Conference on Power Generation Systems and Renewable Energy Technologies, PGSRET 2019*. IEEE Press, 4 p. 8882699

A Novel Dynamic Aggregation Modeling Method of Grid-Connected Inverters: Application in Small-Signal Analysis

Liao, S., Zha, X., Li, X., Huang, M., Sun, J., Pan, J. & Guerrero, J. M., 1 Jul 2019, In : *IEEE Transactions on Sustainable Energy*. 10, 3, p. 1554-1564 11 p., 8618366.

Mode-dependent seamless transfer control strategy of a microgrid via a small-signal stability approach

Wu, Y., Guerrero, J. M. & Wu, Y., 1 Jul 2019, In : *Asian Journal of Control*. 21, 4, p. 2087-2104 18 p.

Adaptive CDSC-Based open-loop synchronization technique for dynamic response enhancement of active power filters

Terriche, Y., Mutarrarf, M. U., Mehrzadi, M., Lashab, A., Kerdoun, D., Guerrero, J. M. & Vasquez, J. C., Jul 2019, In : *IEEE Access*. 7, p. 96743 - 96752 10 p., 8765714.

A Hierarchical Energy Management Strategy for Interconnected Microgrids Considering Uncertainty

Bazmohammadi, N., Tahsiri, A., Anvari-Moghaddam, A. & Guerrero, J. M., Jul 2019, In : International Journal of Electrical Power & Energy Systems. 109, p. 597-608 12 p.

Distributed Average Integral Secondary Control for Modular UPS Systems based Microgrids

Wei, B., Gui, Y., Marzabal, A., Trujillo, S., Guerrero, J. M. & Vasquez, J. C., Jul 2019, In : IEEE Transactions on Power Electronics. 34, 7, p. 6922-6936 15 p., 8481540.

Distributed noise-resilient economic dispatch strategy for islanded microgrids

Chen, F., Chen, M., Xu, Z. Z., Guerrero, J. M. & Wang, L. Y., Jul 2019, In : IET Generation, Transmission and Distribution. 13, 14, p. 3029-3039 11 p.

Distributed Noise-resilient Secondary Voltage and Frequency Control for Islanded Microgrids

Dehkordi, N. M., Baghaee, H. R., Sadati, N. & M.Guerrero, J., Jul 2019, In : IEEE Transactions on Smart Grid. 10, 4, p. 3780 - 3790 11 p.

Dual-loop Control Strategy applied to PV/battery based Islanded DC microgrids for Swarm Electrification of Developing Regions

Nasir, M., Khan, H. A., Niazi, K. A. K., Jin, Z. & Guerrero, J. M., Jul 2019, In : The Journal of Engineering. 2019, 18, p. 5298-5302 5 p.

Dynamic Equivalent Modeling for Multi-Microgrid Based on Structure Preservation Method

Shuai, Z., Peng, Y., Liu, X., Li, Z., Guerrero, J. M. & Shen, Z. J., Jul 2019, In : IEEE Transactions on Smart Grid. 10, 4, p. 3929 - 3942 14 p., 8371621.

Energy Harvesting from Harbor Cranes with Flywheel Energy Storage Systems

Ahamad, N. B. B., Su, C. L., Zhaoxia, X., Vasquez, J. C., Guerrero, J. M. & Liao, C. H., Jul 2019, In : IEEE Transactions on Industry Applications. 55, 4, p. 3354-3364 11 p., 8686140.

Hybrid Machine Intelligent SVR Variants for Wind Forecasting and Ramp Events

Dhiman, H. S., Deb, D. & Guerrero, J. M., Jul 2019, In : Renewable & Sustainable Energy Reviews. 108, p. 369-379 11 p.

Resilience Improvement Planning of Power-Water Distribution Systems with Multiple Microgrids Against Hurricanes Using Clean Strategies

Najafi, J., Peiravi, A., Anvari-Moghaddam, A. & Guerrero, J. M., 20 Jun 2019, In : Journal of Cleaner Production. 223, p. 109-126 18 p.

An Efficient Decision-Making Approach for Optimal Energy Management of Microgrids

Bazmohammadi, N., Karimpour, A., Bazmohammadi, S., Anvari-Moghaddam, A. & Guerrero, J. M., Jun 2019, *Proceedings of 2019 IEEE Milan PowerTech*. IEEE Press, 6 p.

Battery Energy Storage Systems for Mitigating Fluctuations Caused by Pulse Loads and Propulsion Motors in Shipboard Microgrids

Mutarraf, M. U., Terriche, Y., Niazi, K. A. K., Su, C-L., Vasquez, J. C. & Guerrero, J. M., Jun 2019, *Proceedings - 2019 IEEE 28th International Symposium on Industrial Electronics, ISIE 2019*. IEEE Press, p. 1047-1052 6 p. 8781182

DAVIC: A New Distributed Adaptive Virtual Impedance Control for Parallel-Connected Voltage Source Inverters in Modular UPS System

Wei, B., Marzabal, A., Ruiz, R., Guerrero, J. M. & Vasquez, J. C., Jun 2019, In : IEEE Transactions on Power Electronics. 34, 6, p. 5953 - 5968 16 p., 8463524.

Distributed Control of Low-Voltage Resistive AC Microgrids

Golsorkhi Esfahani, M. S., Shafiee, Q., Lu, D. D. C. & Guerrero, J. M., Jun 2019, In : IEEE Transactions on Energy Conversion. 34, 2, p. 573 - 584 12 p., 8515065.

Harmonics Mitigation in Cascaded Multilevel PV Inverters During Power Imbalance Between Cells

Lashab, A., Séra, D. & Guerrero, J. M., Jun 2019, *Proceedings - 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe, IEEEIC/I and CPS Europe 2019*. IEEE Press, 6 p. 8783901

Modeling and Tuning of Adaptive Complex Current Controller for Three-Phase Grid-Interfaced Power Converters

Golestan, S., Guerrero, J. M., Vasquez, J. C. & Abusorrah, A. M., Jun 2019, *Proceedings of 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (IEEEIC / I&CPS Europe)*. IEEE Press, 8783769

Modified Secondary-Control-Based Fault Current Limiter for Inverters

Beheshtaein, S., Savaghebi, M., Cuzner, R. M., Golestan, S. & Guerrero, J. M., Jun 2019, In : *IEEE Transactions on Industrial Electronics*. 66, 6, p. 4798-4804 7 p., 8408730.

Multi-Mode Operation for On-line Uninterruptible Power Supply System

Lu, J., Savaghebi, M., Golestan, S., Vasquez, J. C., Guerrero, J. M. & Marzabal, A., Jun 2019, In : *IEEE Journal of Emerging and Selected Topics in Power Electronics*. 7, 2, p. 1181-1196 16 p., 8370026.

Optimal Operation of an Energy Hub in the Presence of Uncertainties

Javadi, M. S., Anvari-Moghaddam, A., Guerrero, J. M., Esmaeel Nezhad, A., Lotfi, M. & Catalão, J. P. S., Jun 2019, *Proceedings of 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (IEEEIC / I&CPS Europe)*. IEEE Press, 4 p. 8783452

Power-Heat Generation Sources Planning in Microgrids to Enhance Resilience against Islanding due to Natural Disasters

Najafi, J., Peiravi, A., Anvari-Moghaddam, A. & Guerrero, J. M., Jun 2019, *Proceedings - 2019 IEEE 28th International Symposium on Industrial Electronics, ISIE 2019*. IEEE Press, p. 2446-2451 6 p. 8781415. (Industrial Electronics (ISIE), IEEE International Symposium on)

Power quality and Voltage Stability improvement of Shipboard Power Systems with Non-Linear Loads

Terriche, Y., Mutarraf, M. U., Mehrzadi, M., Su, C-L., Guerrero, J. M., Vasquez, J. C., Kerdoune, D. & Alonso, A., Jun 2019, *2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (IEEEIC / I&CPS Europe)*. IEEE Press, 6 p. 8783356

Voltage Stabilization: A Critical Step Toward High Photovoltaic Penetration

Hu, J., Li, Z., Zhu, J. & Guerrero, J. M., Jun 2019, In : *IEEE Industrial Electronics Magazine*. 13, 2, p. 17-30 14 p., 8744349.

A Low-Computational High-Performance Model Predictive Control of Single Phase Battery Assisted Quasi Z-Source PV Inverters

Lashab, A., Séra, D. & Guerrero, J. M., May 2019, *Proceedings of 2019 10th International Conference on Power Electronics and ECCE Asia (ICPE 2019 - ECCE Asia)*. IEEE Press, p. 1873-1878 6 p. 8797173. (International Conference on Power Electronics).

An Effective Solution for Regeneration Protection in Uninterruptible Power Supply

Lu, J., Guerrero, J. M., Savaghebi, M., Ghias, A. M. Y. M., Guan, Y., Hou, X. & Vasquez, J. C., May 2019, In : *IEEE Transactions on Industry Applications*. 55, 3, p. 3055-3065 11 p., 8645693.

An optimized direct control method applied to multilevel inverter for microgrid power quality enhancement

Naderi, Y., Hosseini, S. H., Zadeh, S. G., Mohammadi-Ivatloo, B., Savaghebi, M. & Guerrero, J. M., May 2019, In : *International Journal of Electrical Power and Energy Systems*. 107, p. 496-506 11 p.

Decentralized optimal frequency control in autonomous microgrids

Khayat, Y., Naderi, M., Shafiee, Q., Batmani, Y., Fathi, M., Guerrero, J. M. & Bevrani, H., May 2019, In : *IEEE Transactions on Power Systems*. 34, 3, p. 2345-2353 9 p., 8588380.

Distributed Strategy for Optimal Dispatch of Unbalanced Three-Phase Islanded Microgrids

Vergara, P. P., Rey, J. M., Shaker, H. R., Guerrero, J. M., Jørgensen, B. N. & da Silva, L. C. P., May 2019, In : IEEE Transactions on Smart Grid. 10, 3, p. 3210 - 3225 16 p., 8327897.

Dynamic Pricing for Microgrids Energy Transaction in Blockchain-based Ecosystem

Yue, J., Hu, Z., Li, C., Anvari-Moghaddam, A., Guerrero, J. M. & Dulout, J., May 2019, *Proceedings of 2019 IEEE Innovative Smart Grid Technologies - Asia (ISGT Asia)*. IEEE Press, p. 1598-1602 5 p. 8881671. (Innovative Smart Grid Technologies - Asia (ISGT Asia), IEEE).

Stability Analysis of Primary Plug-and-Play and Secondary Leader-based Controllers for DC Microgrid Clusters

Han, R., Tucci, M., Martinelli, A., Guerrero, J. M. & Ferrari-Trecate, G., May 2019, In : IEEE Transactions on Power Systems. 34, 3, p. 1780 - 1800 21 p., 8556484.

VICINITY platform-based load scheduling method by considering smart parking and smart appliance

Guan, Y., Feng, W., Palacios-Garcia, E. J., Vasquez, J. C. & Guerrero, J. M., May 2019, *Proceedings of 2019 15th International Conference on Distributed Computing in Sensor Systems (DCOSS)*. IEEE Press, p. 248-254 7 p. 8804844. (International Conference on Distributed Computing in Sensor Systems (DCOSS)).

Virtual Positive-Damping Reshaped Impedance Stability Control Method for the Offshore MVDC System

Zhou, L., Wu, W., Chen, Y., He, Z., Zhou, X., Huang, X., Yang, L., Luo, A. & Guerrero, J. M., May 2019, In : IEEE Transactions on Power Electronics. 34, 5, p. 4951 - 4966 16 p., 8435958.

Advanced Single-Phase DSC-Based PLLs

Golestan, S., Guerrero, J. M., Vasquez, J. C., Abusorrah, A. M. & Al-Turki, Y., 1 Apr 2019, In : IEEE Transactions on Power Electronics. 34, 4, p. 3226-3238 13 p., 8412605.

A Cost-Effective and Low-Complexity Predictive Control for Matrix Converters under Unbalanced Grid Voltage Conditions

Xiong, W., Sun, Y., Lin, J., Su, M., Dan, H., Rivera, M. & Guerrero, J. M., Apr 2019, In : IEEE Access. 7, p. 43895-43905 11 p., 8678641.

Analysis and Comparison of Notch Filter and Capacitor Voltage Feedforward Active Damping Techniques for LCL Grid-Connected Converters

Rodriguez-Diaz, E., Freijedo, F. D., Vasquez, J. C. & Guerrero, J. M., Apr 2019, In : IEEE Transactions on Power Electronics. 34, 4, p. 3958 - 3972 15 p., 8411490.

Distributed coordination control for suppressing circulating current in parallel inverters of islanded microgrid

Wu, Y., Guerrero, J. M. & Wu, Y., Apr 2019, In : IET Generation, Transmission and Distribution. 13, 7, p. 968-975 8 p.

Energy Management Considering Unknown Dynamics Based on Extremum Seeking Control and Particle Swarm Optimization

Ma, K., Hu, S., Hu, G., Bai, Y., Yang, J., Dou, C. & Guerrero, J. M., Apr 2019, In : IEEE Transactions on Control Systems Technology. 9 p.

Fault location in microgrids: A communication-based high-frequency impedance approach

Beheshtaein, S., Cuzner, R., Savaghebi, M., Golestan, S. & Guerrero, J. M., Apr 2019, In : IET Generation, Transmission and Distribution. 13, 8, p. 1229-1237 9 p.

Transient Response Analysis of Inverter-based Microgrids under Unbalanced Conditions using Dynamic Phasor Model

Shuai, Z., Peng, Y., Guerrero, J. M., Li, Y. & Shen, J. Z., Apr 2019, In : IEEE Transactions on Industrial Electronics. 66, 4, p. 2868-2879 12 p., 8384274.

An Optimal Market-Oriented Demand Response Model for Price-Responsive Residential Consumers

Sharifi, R., Anvari-Moghaddam, A., Fathi, S. H., Guerrero, J. M. & Vahidinasab, V., 5 Mar 2019, In : Energy Efficiency. 12, 3, p. 803-815 13 p.

Adaptive protection combined with machine learning for microgrids

Lin, H., Sun, K., Tan, Z. H., Liu, C., Guerrero, J. M. & Vasquez, J. C., Mar 2019, In : IET Generation, Transmission and Distribution. 13, 6, p. 770-779 10 p.

A Decentralized Robust Model for Optimal Operation of Distribution Companies with Private Microgrids

Mohiti, M., Monsef, H., Anvari-Moghaddam, A., Guerrero, J. M. & Lesani, H., Mar 2019, In : International Journal of Electrical Power & Energy Systems. 106, p. 105-123 19 p.

A New Tuning Method of Multi-Resonant Current Controllers for Grid-Connected Voltage Source Converters

Xie, C., Zhao, X., Li, K., Zou, J. & Guerrero, J. M., Mar 2019, In : IEEE Journal of Emerging and Selected Topics in Power Electronics. 7, 1, p. 458-466 9 p., 8355497.

A novel Decoupled Trigonometric Saturated droop controller for power sharing in islanded low-voltage microgrids

Bouzid, A. E. M., Sicard, P., Chaoui, H., Cheriti, A., Sechilariu, M. & Guerrero, J. M., Mar 2019, In : Electric Power Systems Research. 168, p. 146-161 16 p.

A Novel Model Predictive Control Strategy to Eliminate Zero-Sequence Circulating Current in Paralleled Three-Level Inverters

Wang, X., Zou, J., Zhao, J., Xie, C., Li, K., Munir, H. M. & Guerrero, J. M., Mar 2019, In : IEEE Journal of Emerging and Selected Topics in Power Electronics. 7, 1, p. 309-320 12 p., 8525282.

A robust design strategy for resonant controllers tuned beyond the LCL filter resonance frequency

Zhao, X., Kang, Z., Wu, X., Li, W., Wu, X., Xie, C. & Guerrero, J. M., Mar 2019, *Proceedings of 2019 IEEE Annual Applied Power Electronics Conference and Exposition (APEC 2019)*. IEEE Press, p. 3051-3055 5 p. 8722227. (IEEE Applied Power Electronics Conference and Exposition (APEC)).

Distributed Secondary Control and Management of Islanded Microgrids via Dynamic Weights

Li, Q., Peng, C., Wang, M., Chen, M., Guerrero, J. M. & Abbott, D., Mar 2019, In : IEEE Transactions on Smart Grid. 10, 2, p. 2196-2207 12 p., 8252801.

Guest Editorial Special Section on Energy Internet

Guerrero, J. M., Guan, Y., Vasquez, J. C. & Sun, K., Mar 2019, In : IEEE Transactions on Industrial Informatics. 15, 3, p. 1753-1755 3 p., 8606128.

Multiple second-order generalized integrators based comb filter for fast selective harmonic extraction

Xie, C., Li, K., Zou, J., Zhou, K. & Guerrero, J. M., Mar 2019, *Proceedings of 2019 IEEE Annual Applied Power Electronics Conference and Exposition (APEC 2019)*. IEEE, p. 2427-2432 6 p. 8721816. (IEEE Applied Power Electronics Conference and Exposition. Conference Proceedings).

Performance assessment of shooting methods using parallel cloud computing

Agundis-Tinajero, G., Gallardo, R. P., Segundo-Ramírez, J., Visairo-Cruz, N. & Guerrero, J. M., Mar 2019, In : COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering. 38, 2, p. 915-926 12 p.

Real-Time Supervisory Control for Power Quality Improvement of Multi-Area Microgrids

Hashempour, M. M., Lee, T-L., Savaghebi, M. & Guerrero, J. M., Mar 2019, In : IEEE Systems Journal. 13, 1, p. 864 - 874 11 p., 8340771.

Review on microgrids protection

Beheshtaein, S., Cuzner, R., Savaghebi, M. & Guerrero, J. M., Mar 2019, In : IET Generation, Transmission and Distribution. 13, 6, p. 743-759 17 p.

Smart Inverters for Microgrid Applications: A Review

Zavar, B. A., Palacios-Garcia, E. J., Vasquez, J. C. & Guerrero, J. M., Mar 2019, In : Energies. 12, 5, p. 1-22 22 p., 840.

Stability Analysis for the Grid-Connected Single-Phase Asymmetrical Cascaded Multilevel Inverter with SRF-PI Current Control under Weak Grid Conditions

Han, Y., Chen, H., Li, Z., Yang, P., Xu, L. & Guerrero, J. M., Mar 2019, In : IEEE Transactions on Power Electronics. 34, 3, p. 2052-2069 18 p., 8450070.

A Novel Approach to Neighborhood Fair Energy Trading in a Distribution Network of Multiple Microgrid Clusters

Jadhav, A. M., Patne, N. R. & Guerrero, J. M., 1 Feb 2019, In : IEEE Transactions on Industrial Electronics. 66, 2, p. 1520-1531 12 p., 8316917.

A Currentless Sorting and Selection based Capacitor-Voltage-Balancing Method for Modular Multilevel Converters

Hu, P., Teodorescu, R., Wang, S., Li, S. & Guerrero, J. M., Feb 2019, In : IEEE Transactions on Power Electronics. 34, 2, p. 1022 - 1025 4 p., 8395396.

A Decentralized Control Architecture applied to DC Nanogrid Clusters for Rural Electrification in Developing Regions

Nasir, M., Jin, Z., Khan, H., Zaffar, N., Vasquez, J. & Guerrero, J. M., Feb 2019, In : IEEE Transactions on Power Electronics. 34, 2, p. 1773-1785 13 p., 8341807.

A Nonlinear, Bounded and Lipchitz Continuous Distributed Active Power Sharing Control Method for Islanded AC Microgrids

Meng, X., Zhou, N., Wang, Q. & Guerrero, J. M., Feb 2019, In : IEEE Access. 7, p. 36843-36853 11 p., 8648177.

Input-Admittance Passivity Compliance for Grid-Connected Converters With an LCL Filter

Diaz, E. R., Freijedo, F. D., Guerrero, J. M., Marrero-Sosa, J. A. & Dujic, D., Feb 2019, In : IEEE Transactions on Industrial Electronics. 66, 2, p. 1089-1097 9 p., 8357486.

Power Flow Modeling of Islanded AC Microgrids with Hierarchical Control

Agundis-Tinajero, G., Segundo-Ramírez, J., Visairo-Cruz, N., Savaghebi, M., Guerrero, J. M. & Barocio, E., Feb 2019, In : International Journal of Electrical Power and Energy Systems. 105, p. 28-36 9 p.

Power System Real-Time Emulation: A Practical Virtual Instrumentation to Complete Electric Power System Modeling

Parizad, A., Mohamadian, S., Iranian, M. E. & Guerrero, J. M., Feb 2019, In : IEEE Transactions on Industrial Informatics. 15, 2, p. 889-900 12 p., 8360043.

Stochastic Risk-Constrained Decision-making Approach for a Retailer in a Competitive Environment with Flexible Demand Side Resources

Rashidizadeh-Kermani, H., Vahedipour-Dahraie, M., Anvari-Moghaddam, A. & Guerrero, J. M., Feb 2019, In : International Transactions on Electrical Energy Systems. 29, 2, 23 p., e2719.

Cloud-fog architecture based energy management and decision-making for next-generation distribution network with prosumers and internet of things devices

Yue, J., Hu, Z., He, R., Zhang, X., Dulout, J., Li, C. & Guerrero, J. M., 22 Jan 2019, In : Applied Sciences (Switzerland). 9, 3, 16 p., 372.

A Multi-Market-Driven Approach to Energy Scheduling of Smart Microgrids in Distribution Networks

Yue, J., Hu, Z., Anvari-Moghaddam, A. & Zapata, J. M. G., 9 Jan 2019, In : Sustainability. 11, 2, 16 p., 301.

Effect of phase-locked loop on small-signal perturbation modelling and stability analysis for three-phase LCL-type inverter connected to weak grid

Yang, L., Chen, Y., Luo, A., Chen, Z., Zhou, L., Zhou, X., Wu, W., Tan, W. & Guerrero, J. M., 7 Jan 2019, In : IET Renewable Power Generation. 13, 1, p. 86-93 8 p.

A Study on Three-Phase FLLs

Golestan, S., Guerrero, J. M., Quintero, J. C. V., Abusorrah, A. & Al-Turki, Y., 1 Jan 2019, In : IEEE Transactions on Power Electronics. 34, 1, p. 213-224 12 p., 8336898.

Direct harmonic voltage control strategy of shunt active power filters suitable for microgrid applications

Munir, H. M., Zou, J., Xie, C., Li, K., Younas, T. & Guerrero, J. M., 1 Jan 2019, In : Journal of Power Electronics. 19, 1, p. 265-277 13 p.

Power Quality Assessment in Shipboard Microgrids under Unbalanced and Harmonic AC Bus Voltage

Liu, W., Tarasiuk, T., Gorniak, M., Savaghebi, M., Quintero, J. C. V., Su, C-L. & Guerrero, J. M., 1 Jan 2019, In : IEEE Transactions on Industry Applications. 55, 1, p. 765-775 11 p., 8447296.

A communication-free economical-sharing scheme for cascaded-type microgrids

Li, L., Ye, H., Sun, Y., Han, H., Li, X., Su, M. & Guerrero, J. M., Jan 2019, In : International Journal of Electrical Power and Energy Systems. 104, p. 1-9 9 p.

A Consensus-Based Cooperative Control of PEV Battery and PV Active Power Curtailment for Voltage Regulation in Distribution Networks

Zeraati, M., Golshan, M. E. H. & Guerrero, J. M., Jan 2019, In : IEEE Transactions on Smart Grid. 10, 1, p. 670-680 11 p., 8027057.

A coordinated control of hybrid ac/dc microgrids with PV-wind-battery under variable generation and load conditions

Hu, J., Shan, Y., Xu, Y. & Guerrero, J. M., Jan 2019, In : International Journal of Electrical Power and Energy Systems. 104, p. 583-592 10 p.

Control design, stability analysis and experimental validation of new application of an interleaved converter operating as a power interface in hybrid microgrids

Tricarico, T., Gontijo, G., Neves, M., Soares, M., Aredes, M. & Guerrero, J. M., Jan 2019, In : Energies. 12, 3, 23 p., 437.

Design and analysis of a transformerless STATCOM based on hybrid cascaded multilevel converter

Hu, P., Guerrero, J. M. & He, Z., Jan 2019, In : International Journal of Electrical Power and Energy Systems. 104, p. 694-704 11 p.

Dynamic Characteristics Analysis and Stabilization of PV-Based Multiple Microgrid Clusters

Zhao, Z., Yang, P., Wang, Y., Xu, Z. & Guerrero, J. M., Jan 2019, In : IEEE Transactions on Smart Grid. 10, 1, p. 805-818 14 p., 8049314.

Extended-Optimal-Power-Flow-Based Hierarchical Control for Islanded AC Microgrids

Tinajero, G. D. A., Aldana, N. L. D., Luna, A. C., Segundo-Ramirez, J., Visairo, N., Guerrero, J. M. & Vasquez, J., Jan 2019, In : IEEE Transactions on Power Electronics. 34, 1, p. 840-848 9 p., 8314093.

Harmonic Current Suppression Strategy for Grid-Connected PWM Converters with LCL Filters

Zhao, R., Li, Q., Xu, H., Wang, Y. & Guerrero, J. M., Jan 2019, In : IEEE Access. 7, p. 16264-16273 10 p., 8618432.

Modeling and Stability Assessment of Single-Phase Grid Synchronization Techniques: Linear Time-Periodic versus Linear Time-Invariant Frameworks

Golestan, S., Guerrero, J. M. & Vasquez, J., Jan 2019, In : IEEE Transactions on Power Electronics. 34, 1, p. 20-27 8 p., 8357505.

Optimal simultaneous day-ahead scheduling and hourly reconfiguration of distribution systems considering responsive loads

Esmaili, S., Anvari-Moghaddam, A., Jadid, S. & Guerrero, J. M., Jan 2019, In : International Journal of Electrical Power & Energy Systems. 104, p. 537-548 12 p.

Sequence-Impedance-Based Stability Comparison between VSGs and Traditional Grid-Connected Inverters

Wu, W., Zhou, L., Chen, Y., Luo, A., Dong, Y., Zhou, X., Xu, Q., Yang, L. & Guerrero, J. M., Jan 2019, In : IEEE Transactions on Power Electronics. 34, 1, p. 46-52 7 p., 8368151.

Small-Signal Stability Analysis and Optimal Parameters Design of Microgrid Clusters

He, J., Wu, X., Wu, X., Xu, Y. & Guerrero, J. M., Jan 2019, In : IEEE Access. 7, p. 36896-36909 14 p., 8649582.

Optimal Probabilistic Planning of Passive Harmonic Filters in Distribution Networks with High Penetration of Photovoltaic Generation

Jannesar, M. R., Sedighi, A., Savaghebi, M., Anvari-Moghaddam, A. & Guerrero, J. M., 2019, In : International Journal of Electrical Power & Energy Systems. 110, p. 332-348 17 p.

Steady-State Linear Kalman Filter-based PLLs for Power Applications: A Second Look

Golestan, S., Guerrero, J. M. & Quintero, J. C. V., 1 Dec 2018, In : IEEE Transactions on Industrial Electronics. 65, 12, p. 9795-9800 6 p., 8331945.

A Distributed Control Strategy for Islanded Single-Phase Microgrids with Hybrid Energy Storage Systems Based on Power Line Signaling

Quintana-Barcia, P., Dragicevic, T., Garcia, J., Ribas, J. & Guerrero, J. M., Dec 2018, In : Energies. 12, 1, p. 1-16 16 p., 85.

A Flexible Power Control Strategy for Hybrid AC/DC Zones of Shipboard Power System with Distributed Energy Storages

He, L., Li, Y., Shuai, Z., Guerrero, J. M., Cao, Y., Wen, M., Wang, W. & Shi, J., Dec 2018, In : IEEE Transactions on Industrial Informatics. 14, 12, p. 5496-5508 13 p., 8392448.

Cooperation of voltage controlled active power filter with grid-connected DGs in microgrid

Munir, H. M., Zou, J., Xie, C. & Guerrero, J. M., Dec 2018, In : Sustainability (Switzerland). 11, 1, 15 p., 154.

Dynamic Assessment of COTS Converters-based DC Integrated Power Systems in Electric Ships

Francés, A., Anvari-Moghaddam, A., Diaz, E. R., Quintero, J. C. V., Guerrero, J. M. & Uceda, J., Dec 2018, In : IEEE Transactions on Industrial Informatics. 14, 12, p. 5518-5529

Elimination of zero sequence circulating currents in paralleled three-level T-type inverters with a model predictive control strategy

Wang, X., Zou, J., Peng, Y., Xie, C., Li, K. & Guerrero Zapata, J. M., Dec 2018, In : IET Power Electronics. 11, 15, p. 2573-2581 9 p.

Energy Management of CHP-Based Microgrid with Thermal Storage for Reducing Wind Curtailment

Cheng, Z., Geng, G., Jiang, Q. & Guerrero, J. M., Dec 2018, In : Journal of Energy Engineering. 144, 6, p. 1-12 12 p., 04018066.

Energy Management Strategy for Grid-tied Microgrids considering the Energy Storage Efficiency

Wu, J., Xing, X., Liu, X., Guerrero, J. M. & Chen, Z., Dec 2018, In : IEEE Transactions on Industrial Electronics. 65, 12, p. 9539-9549 11 p., 8322287.

Energy Storage Systems for Shipboard Microgrids: A Review

Mutarraf, M. U., Terriche, Y., Niazi, K. A. K., Vasquez, J. C. & Guerrero, J. M., Dec 2018, In : Energies. 11, 12, p. 1-32 32 p., 3492.

Modeling, Tuning, and Performance Comparison of Second-Order-Generalized-Integrator-based FLLs

Golestan, S., Guerrero, J. M., Quintero, J. C. V., Abusorrah, A. M. & Al-Turki, Y., Dec 2018, In : IEEE Transactions on Power Electronics. 33, 12, p. 10229-10239 11 p., 8295261.

Optimal Operational Scheduling of Smart Microgrids Considering Hourly Reconfiguration

Esmaili, S., Anvari-Moghaddam, A., Jadid, S. & Guerrero, J. M., Dec 2018, *Proceedings of the 4th IEEE Southern Power Electronics Conference : SPEC 2018*. IEEE Press, 6 p.

Optimal Scheduling and Economic Analysis of Hybrid Electric Vehicles in a Microgrid

Savari, G. F., Krishnasamy, V. & Guerrero, J. M., Dec 2018, In : International Journal of Emerging Electric Power Systems. 19, 6, p. 1-18 18 p., 20180104.

Power Quality Enhancement and Power Management of a Multi-Functional Interfacing Inverter for PV and Battery Energy Storage System

Mousazadeh, S. Y., Jalilian, A., Savaghebi, M. & Guerrero, J. M., Dec 2018, In : International Transactions on Electrical Energy Systems. 28, 12, p. 1-15 15 p., e2643.

Robust Grid-Current-Feedback Resonance Suppression Method for LCL-Type Grid-Connected Inverter Connected to Weak Grid

Zhou, X., Zhou, L., Chen, Y., Shuai, Z., Guerrero, J. M., Luo, A., Wu, W. & Yang, L., Dec 2018, In : IEEE Journal of Emerging and Selected Topics in Power Electronics. 6, 4, p. 2126-2137 12 p., 8290960.

Scalable Solar dc Microgrids: On the Path to Revolutionizing the Electrification Architecture of Developing Communities

Nasir, M., Khan, H. A., Zaffar, N. A., Vasquez, J. C. & Guerrero, J. M., Dec 2018, In : I E E E Electrification Magazine. 6, 4, p. 63-72 10 p.

Triangle Carrier-Based DPWM for Three-Level NPC Inverters

Li, K., Wei, M., Xie, C., Deng, F., Guerrero, J. M. & Vasquez, J. C., Dec 2018, In : IEEE Journal of Emerging and Selected Topics in Power Electronics. 6, 4, p. 1966-1978 13 p., 8307062.

提高船舶微电网侧推进器运行能效的控制策略

Xiao, Z., Li, H., Zhu, T., Guerrero, J. M. & Feng, J., Dec 2018, In : Diangong Jishu Xuebao/Transactions of China Electrotechnical Society. 33, p. 519-526 8 p.

Full Discrete Modeling, Controller Design and Sensitivity Analysis for High Performance Grid-Forming Converters in Islanded Microgrids

Ribeiro, L. A. D. S., Freijedo, F. D., Bosio, F. D., Lima, M. S., Guerrero, J. M. & Pastorelli, M., 1 Nov 2018, In : IEEE Transactions on Industry Applications. 54, 6, p. 6267-6278 12 p., 8386696.

A Model Predictive Control for Renewable Energy Based AC Microgrids without Any PID Regulators

Shan, Y., Hu, J., Li, Z. & Guerrero, J. M., Nov 2018, In : IEEE Transactions on Power Electronics. 33, 11, p. 9122-9126 5 p., 8329538.

Autonomous Control of Current- and Voltage-Controlled DG Interface Inverters for Reactive Power Sharing and Harmonics Compensation in Islanded Microgrids

Mousazadeh, S. Y., Jalilian, A., Savaghebi, M. & Guerrero, J. M., Nov 2018, In : I E E E Transactions on Power Electronics. 33, 11, p. 9375-9386 12 p., 8263177.

Distributed Hierarchical Control of AC Microgrid Operating in Grid-Connected, Islanded and Their Transition Modes

Hou, X., Sun, Y., Lu, J., Zhang, X., Hai, K. L., Su, M. & Guerrero, J. M., Nov 2018, In : IEEE Access. 6, p. 77388-77401

Passivity-based coordinated control for islanded AC microgrid

Gui, Y., Wei, B., Li, M., Guerrero, J. M. & Vasquez, J. C., Nov 2018, In : Applied Energy. 229, p. 551-561 11 p.

Optimal Passive Filter Planning in Distribution Networks with Nonlinear Loads and Photovoltaic Systems

Jannesar, M. R., Sedighi, A., Savaghebi, M., Anvari-Moghaddam, A. & Guerrero, J. M., 30 Oct 2018, *Proceedings of the 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe)*. IEEE Press, p. 1-9 9 p. 8515645

A Deviation Elimination Control Based on Autonomous Current-Sharing Controller for the Parallel-Connected Inverters in AC Microgrids

Guan, Y., Feng, W., Wei, B., Liu, W., Li, M., Quintero, J. C. V. & Guerrero, J. M., 22 Oct 2018, *Proceedings of the 2018 International Power Electronics Conference (IPEC-Niigata 2018 -ECCE Asia)*. IEEE, p. 3678-3683 6 p. 8507423

A Synchronous-Reference-Frame I-V Droop Control Method for Parallel-Connected Inverters

Li, M., Gui, Y., Jin, Z., Guan, Y. & Guerrero, J. M., 22 Oct 2018, *2018 International Power Electronics Conference, IPEC-Niigata - ECCE Asia 2018*. IEEE, p. 2668-2672 5 p. 8507446

Integrated Expansion Planning of Gas-Electricity System: A Case Study in Iran

Khaligh, V., Oloomi Buygi, M., Anvari-Moghaddam, A. & Guerrero, J. M., 17 Oct 2018, *2018 International Conference on Smart Energy Systems and Technologies, SEST 2018 - Proceedings*. IEEE Press, p. 1-6 6 p. 8495704

A Decentralized Model for Coordinated Operation of Distribution Network and EV Aggregators

Mohiti, M., Monsef, H., Mazidi, M., Anvari-Moghaddam, A. & Guerrero, J. M., 16 Oct 2018, *Proceedings - 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe, IEEEIC/I and CPS Europe 2018*. IEEE Press, p. 1-6 6 p. 8494429

Microgrids Technologies in Future Seaports

Baizura Binti Ahamad, N., Guerrero, J. M., Su, C-L., Quintero, J. C. V. & Zhaoxia, X., 16 Oct 2018, *Proceedings - 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe, IEEEIC/I and CPS Europe 2018*. Italy: IEEE Press, p. 1-6 6 p. 8494428

Optimal Overcurrent Relay Coordination in Presence of Inverter-based Wind Farms and Electrical Energy Storage Devices

Javadi, M. S., Esmael Nezhad, A., Anvari-Moghaddam, A. & Guerrero, J. M., 16 Oct 2018, *Proceedings - 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe, IEEEIC/I and CPS Europe 2018*. IEEE Press, p. 1-5 5 p. 8494605

Scheduling of Power Generation in Hybrid Shipboard Microgrids with Energy Storage Systems

Othman @ Marzuki, M. B., Anvari-Moghaddam, A., Baizura Binti Ahamad, N., Su, C-L. & Guerrero, J. M., 16 Oct 2018, *Proceedings - 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe, IEEEIC/I and CPS Europe 2018: IEEEIC 2018*. IEEE Press, p. 1-6 6 p. 8494363

Stochastic Predictive Control of Multi-Microgrid Systems

Bazmohammadi, N., Tahsiri, A., Anvari-Moghaddam, A. & Guerrero, J. M., 16 Oct 2018, *Proceedings of 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (IEEEIC / I&CPS Europe): IEEEIC 2018*. IEEE Press, p. 1-5 5 p. 8494353

A comprehensive control system for multi-parallel grid-connected inverters with LCL filter in weak grid condition

Akhavan, A., Mohammadi, H. R. & Guerrero, J. M., Oct 2018, In : *Electric Power Systems Research*. 163, Part A, p. 288-300 13 p.

A Direct Maximum Power Point Tracking Method for Single-Phase Grid-Connected PV Inverters

EL Aamri, F., Maker, H., Sera, D., Spataru, S., Guerrero, J. M. & Mouhsen, A., Oct 2018, In : *IEEE Transactions on Power Electronics*. 33, 10, p. 8961 - 8971 11 p.

A hierarchical multiagent-based protection structure for meshed microgrids

Beheshtaein, S., Savaghebi, M., Cuzner, R. & Guerrero, J. M., Oct 2018, *Proceedings of the IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society*. IEEE Press, p. 45-52 8 p. 8591663. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

A novel compensation current control method for grid-connected PV inverter to improve power quality in micro-grid

Naderipour, A., Abdul-Malek, Z., Afrouzi, H. N., Ramachandaramurthy, V. K. & Guerrero, J. M., Oct 2018, *Proceedings of the IEEE PES Asia-Pacific Power and Energy Engineering Conference, APPEEC 2018*. IEEE Press, Vol. 2018-October. p. 143-148 6 p. 8566526. (Asia-Pacific Power and Energy Engineering Conference (APPEEC)).

An overview of power quality enhancement techniques applied to distributed generation in electrical distribution networks

Naderi, Y., Hosseini, S. H., Ghassem Zadeh, S., Mohammadi-Ivatloo, B., Vasquez, J. C. & Guerrero, J. M., Oct 2018, In : *Renewable and Sustainable Energy Reviews*. 93, p. 201-214 14 p.

A Reduced-Order Enhanced State Observer Control of DC-DC Buck Converter

Lu, J., Savaghebi, M., Guan, Y., Quintero, J. C. V., Ghias, A. M. Y. M. & Guerrero, J. M., Oct 2018, In : IEEE Access. 6, p. 56184-56191 8 p., 8472209.

A reduced-switching-frequency modulation method for hybrid MMCs under over-modulation conditions

Hu, P., Yin, R., Teodorescu, R., Wang, S. & Guerrero, J. M., Oct 2018, *Proceedings of the IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society*. IEEE Press, p. 3903-3908 6 p. 8591364. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

A Voltage Modulated DPC Approach for Three-Phase PWM Rectifier

Gui, Y., Li, M., Lu, J., Golestan, S., Guerrero, J. M. & Quintero, J. C. V., Oct 2018, In : IEEE Transactions on Industrial Electronics. 65, 10, p. 7612-7619 8 p.

Energy and Frequency Hierarchical Management System Using Information Gap Decision Theory for Islanded Microgrids

Rezaei, N., Ahmadi, A., Khazali, A. & Guerrero, J. M., Oct 2018, In : IEEE Transactions on Industrial Electronics. 65, 10, p. 7921-7932 12 p.

Improved Direct Power Control for Grid-Connected Voltage Source Converters

Gui, Y., Kim, C., Chung, C. C., Guerrero, J. M., Guan, Y. & Quintero, J. C. V., Oct 2018, In : IEEE Transactions on Industrial Electronics. 65, 10, p. 8041-8051 11 p.

Modeling and Experimental Validation of an Islanded No-Inertia Microgrid Site

Bonfiglio, A., Delfino, F., Labella, A., Mestriner, D., Pampararo, F., Procopio, R. & Guerrero, J. M., Oct 2018, In : IEEE Transactions on Sustainable Energy. 9, 4, p. 1812-1821 10 p., 8316913.

Modeling of complex resonances in islanded Microgrids

Saim, A., Houari, A., Guerrero, J. M., Djerioui, A., Ahmed, M. A. & Machmoum, M., Oct 2018, *Proceedings of the 7th International IEEE Conference on Renewable Energy Research and Applications, ICRERA 2018*. IEEE Press, p. 804-808 5 p. 8566906. (International Conference on Renewable Energy Research and Applications (ICRERA)).

Research On Variable-Length Transfer Delay and Delayed-Signal-Cancellation-Based PLLs

Golestan, S., Guerrero, J. M., Quintero, J. C. V., Abusorrah, A. M. & Al-Turki, Y., Oct 2018, In : IEEE Transactions on Power Electronics. 33, 10, p. 8388-8398 11 p.

Smart transactive energy framework in grid-connected multiple home microgrids under independent and coalition operations

Marzband, M., Azarnejadian, F., Savaghebi, M., Pouresmaeil, E., Guerrero, J. M. & Lightbody, G., Oct 2018, In : Renewable Energy. 126, p. 95-106 12 p.

Optimal placement, sizing, and daily charge/discharge of battery energy storage in low voltage distribution network with high photovoltaic penetration

Jannesar, M. R., Sedighi, A., Savaghebi, M. & Guerrero, J. M., 15 Sep 2018, In : Applied Energy. 226, p. 957-966 10 p.

Power management optimization of hybrid power systems in electric ferries

Al-Falahi, M. D. A., Nimma, K. S., Jayasinghe, S. D. G., Enshaei, H. & Guerrero, J. M., 15 Sep 2018, In : Energy Conversion and Management. 172, p. 50-66 17 p.

Optimal Decision-Making Strategy of an Electric Vehicle Aggregator in Short-Term Electricity Markets

Rashidizadeh-Kermani, H., Najafi, H. R., Anvari-Moghaddam, A. & Guerrero, J. M., 12 Sep 2018, In : Energies. 11, 9, p. 1-20 20 p., 2413.

A Dynamic Consensus Algorithm to Adjust Virtual Impedance Loops for Discharge Rate Balancing of AC Microgrid Energy Storage Units

Guan, Y., Meng, L., Li, C., Quintero, J. C. V. & Guerrero, J. M., 1 Sep 2018, In : IEEE Transactions on Smart Grid. 9, 5, p. 4847-4860 14 p., 7862235.

A microgrid cluster structure and its autonomous coordination control strategy

Zhou, X., Zhou, L., Chen, Y., Guerrero, J. M., Luo, A., Wu, W. & Yang, L., 1 Sep 2018, In : International Journal of Electrical Power and Energy Systems. 100, p. 69-80 12 p.

Distributed Coordination of Islanded Microgrid Clusters Using a Two-layer Intermittent Communication Network

Lu, X., Lai, J., Yu, X., Wang, Y. & Guerrero, J. M., 1 Sep 2018, In : IEEE Transactions on Industrial Informatics. 14, 9, p. 3956-3969 14 p., 8207598.

Secondary restoration control of islanded microgrids with a decentralized event-triggered strategy

Chen, M., Xiao, X. & Guerrero, J. M., 1 Sep 2018, In : IEEE Transactions on Industrial Informatics. 14, 9, p. 3870-3880 11 p., 8219745.

A Multi-Attribute Expansion Planning Model for Integrated Gas–Electricity System

Khaligh, V., Oloomi Buygi, M., Anvari-Moghaddam, A. & Guerrero, J. M., Sep 2018, In : Energies. 11, 10, p. 1-22 22 p., 2573.

An Alternative Realization of Droop Control and Virtual Impedance for Paralleled Converters in DC Microgrid

Jin, Z., Guerrero, J. M. & Li, M., Sep 2018, *Proceedings of 2018 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE, p. 3765-3770 6 p. (IEEE Energy Conversion Congress and Exposition).

Analysis of Washout Filter-Based Power Sharing Strategy - An Equivalent Secondary Controller for Islanded Microgrid without LBC Lines

Han, Y., Li, H., Xu, L., Zhao, X. & Guerrero, J. M., Sep 2018, In : IEEE Transactions on Smart Grid. 9, 5, p. 4061-4076 16 p., 7809173.

A New Communication-less Harmonic-based Protection Architecture for Meshed Microgrids

Beheshtaein, S., Cuzner, R., Benigni, A., Savaghebi, M. & Guerrero, J. M., Sep 2018, *Proceedings of the 2018 IEEE Energy Conversion Congress and Exposition, ECCE 2018*. Electrical Engineering/Electronics, Computer, Communications and Information Technology Association, p. 502-508 7 p. 8557587. (IEEE Energy Conversion Congress and Exposition).

A Novel Grid-connected Harmonic Current Suppression Control for Autonomous Current Sharing Controller-based AC Microgrids

Guan, Y., Feng, W., Lu, J., Guerrero, J. M. & Vasquez, J. C., Sep 2018, *Proceedings of the 2018 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 5899-5904 6 p. 8557795. (IEEE Energy Conversion Congress and Exposition).

Cyber Physical Energy Systems Modules for Power Sharing Controllers in Inverter Based Microgrids

Macana, C. A., Abdou, A. F., Pota, H. R., Guerrero, J. M. & Vasquez, J. C., Sep 2018, In : *Inventions*. 3, 3, p. 1-21 21 p., 66.

Dynamic-Phasor Modeling and Transient Analysis of Inverter-Based Microgrid under Unbalanced and Harmonic Condition

Peng, Y., Shuai, Z., Li, Y., Guerrero, J. M. & Shen, Z. J., Sep 2018, *Proceedings of the 2018 IEEE Energy Conversion Congress and Exposition, ECCE 2018*. IEEE Press, p. 3760-3764 5 p. 8558449. (IEEE Energy Conversion Congress and Exposition).

Hybrid Mixed-Integer Non-Linear Programming Approach for Directional Over-Current Relay Coordination

Javadi, M. S., Esmaeel Nezhad, A., Anvari-Moghaddam, A. & Guerrero, J. M., Sep 2018, *Proceedings of the 7th International Conference on Renewable Power Generation*. IET Conference Proceeding, p. 1-6 6 p.

Inverter-Current-Feedback Resonance-Suppression Method for LCL-Type DG System to Reduce Resonance-Frequency Offset and Grid-Inductance Effect

Zhou, L., Zhou, X., Chen, Y., Lv, Z., He, Z., Wu, W., Yang, L., Yan, K., Luo, A. & Guerrero, J. M., Sep 2018, In : IEEE Transactions on Industrial Electronics. 65, 9, p. 7036-7048 13 p.

Modeling and controls of flywheel energy storage systems for energy harvesting from harbor electrical cranes

Ahamad, N. B. B., Su, C. L., Zhaoxia, X., Vasquez, J. C. & Guerrero, J. M., Sep 2018, *Proceedings of the 2018 IEEE Industry Applications Society Annual Meeting, IAS 2018*. IEEE Press, p. 1-8 8 p. 8544652. (Industry Applications Society. I E E E - I A S Annual Meeting. Conference Record).

Modeling and stability analysis of CCIs- and VCI-based hybrid microgrids operating in grid-connected modes

Yu, Y., Guerrero, J. M., Zheng, X., Sun, L. & Li, H., Sep 2018, *Proceedings of the 2018 International Conference on Smart Energy Systems and Technologies, SEST 2018 - Proceedings*. IEEE Press, p. 1-6 6 p. 8495714

Model predictive-Based direct battery control in PV fed Quasi Z-source inverters

Lashab, A., Sera, D., Martins, J. P. R. & Guerrero, J. M., Sep 2018, *2018 5th International Symposium on Environment-Friendly Energies and Applications (EFEA)*. Rome, Italy.: IEEE Press, p. 1-6 6 p.

Multilevel DC-link converter-based photovoltaic system with integrated energy storage

Lashab, A., Sera, D., Martins, J. P. R. & Guerrero, J. M., Sep 2018, *Proceedings of the 5th IEEE International Symposium on Environment Friendly Energies and Applications (EFEA)*. Rome, Italy: IEEE Press, p. 1-6 6 p.

Novel model predictive control method to eliminate common-mode voltage for three-level T-type inverters considering dead-time effects

Wang, X., Zou, J., Dong, Z., Xie, C., Li, K. & Guerrero, J. M., Sep 2018, In : *Journal of Power Electronics*. 18, 5, p. 1458-1469 12 p., JPE 18-5-15.

Robust AC Voltage Controller with Harmonic Elimination for Stand-Alone and Weak-Grid-Connected Operation

Pérez-Estévez, D., Doval-Gandoy, J. & Guerrero, J. M., Sep 2018, *Proceedings of the 2018 IEEE Energy Conversion Congress and Exposition, ECCE 2018*. IEEE Press, p. 4876-4883 8 p. 8558074. (IEEE Energy Conversion Congress and Exposition).

Scheduling of power generations for energy saving in hybrid AC/DC shipboard microgrids

Othman, M., Su, C. L., Anvari-Moghaddam, A., Guerrero, J. M., Kifune, H. & Teng, J. H., Sep 2018, *Proceedings of the 2018 IEEE Industry Applications Society Annual Meeting, IAS 2018*. IEEE Press, p. 1-7 7 p. 8544723. (Industry Applications Society. I E E E - I A S Annual Meeting. Conference Record).

Security-Constrained Unit Commitment in AC Microgrids Considering Stochastic Price-Based Demand Response and Renewable Generation

Vahedipour-Dahraie, M., Najafi, H. R., Anvari-Moghaddam, A. & Guerrero, J. M., Sep 2018, In : *International Transactions on Electrical Energy Systems*. 28, 9, p. 1-26 26 p., e2596.

Stable current sharing and voltage balancing in DC microgrids: A consensus-based secondary control layer

Tucci, M., Meng, L., Guerrero, J. M. & Ferrari-Trecate, G., Sep 2018, In : *Automatica*. 95, p. 1-13 13 p.

A cost-effective decentralized control for AC-stacked photovoltaic inverters

Han, H., Luo, C., Hou, X., Su, M., Yuan, W., Liu, Z. & Guerrero, J. M., Aug 2018, In : *Energies*. 11, 9, p. 1-12 12 p., 2262.

Adaptive Control Design for Autonomous Operation of Multiple Energy Storage Systems in Power Smoothing Applications

Meng, L., Dragicevic, T. & Guerrero, J. M., Aug 2018, In : *IEEE Transactions on Industrial Electronics*. 65, 8, p. 6612-6624 13 p.

A New Harmonic-based Protection structure for Meshed Microgrids

Beheshtaein, S., Cuzner, R., Savaghebi, M. & Guerrero, J. M., Aug 2018, *Proceedings of the 2018 IEEE Power and Energy Society General Meeting, PESGM 2018*. IEEE Press, Vol. 2018-August. p. 1-6 6 p. 8585807. (IEEE Power and Energy Society General Meeting).

A Unified Voltage Harmonic Control Strategy for Coordinated Compensation with VCM and CCM Converters

Zhao, X., Meng, L., Xie, C., Guerrero, J. M. & Wu, X., Aug 2018, In : *IEEE Transactions on Power Electronics*. 33, 8, p. 7132-7147 16 p.

Discrete Model-Predictive-Control-Based Maximum Power Point Tracking for PV Systems: Overview and Evaluation
Lashab, A., Sera, D., Guerrero, J. M., Máthé, L. & Bouzid, A., Aug 2018, In : IEEE Transactions on Power Electronics. 33, 8, p. 7273 - 7287 15 p.

Improved P-f/Q-V and P-V/Q-f droop controllers for parallel distributed generation inverters in AC microgrid
Raj D, C., Gaonkar, D. N. & Guerrero, J. M., Aug 2018, In : Sustainable Cities and Society. 41, p. 421-442 22 p.

MAS-based Distributed Coordinated Control and Optimization in Microgrid and Microgrid Clusters: A Comprehensive Overview
Han, Y., Zhang, K., Hong, L., Coelho, E. A. A. & Guerrero, J. M., Aug 2018, In : IEEE Transactions on Power Electronics. 33, 8, p. 6488-6508 21 p.

Multiple-Complex Coefficient-Filter-Based PLL for Improving the Performance of Shunt Active Power Filter under Adverse Grid Conditions
Terriche, Y., Golestan, S., Guerrero, J. M. & Quintero, J. C. V., Aug 2018, *Proceedings of the 2018 IEEE Power & Energy Society General Meeting (PESGM)*. IEEE, p. 1-5 5 p. (IEEE Power and Energy Society General Meeting).

Optimal Operation Management of a Regional Network of Microgrids Based On Chance-Constrained Model Predictive Control
Bazmohammadi, N., Tahsiri, A., Anvari-Moghaddam, A. & Guerrero, J. M., Aug 2018, In : IET Generation, Transmission & Distribution. 12, 15, p. 3772 – 3779 8 p.

Active Power Quality Improvement Strategy for Grid-connected Microgrid Based on Hierarchical Control
Wei, F., Sun, K., Guan, Y., Guerrero, J. M. & Xiao, X., Jul 2018, In : IEEE Transactions on Smart Grid. 9, 4, p. 3486-3495 10 p.

A model predictive control strategy of PV-Battery microgrid under variable power generations and load conditions
Hu, J., Xu, Y., Cheng, K. W. & Guerrero, J. M., Jul 2018, In : Applied Energy. 221, p. 195-203 9 p.

A Multi-Functional Fully Distributed Control Framework for AC Microgrids
Shafiee, Q., Nasirian, V., Quintero, J. C. V., Guerrero, J. M. & Davoudi, A., Jul 2018, In : IEEE Transactions on Smart Grid. 9, 4, p. 3247-3258 12 p.

An Open-Loop Grid Synchronization Approach for Single-Phase Applications
Golestan, S., Guerrero, J. M. & Quintero, J. C. V., Jul 2018, In : IEEE Transactions on Power Electronics. 33, 7, p. 5548-5555 8 p.

A Novel Distributed Secondary Coordination Control Approach for Islanded Microgrids
Lu, X., Yu, X., Lai, J., Wang, Y. & Guerrero, J. M., Jul 2018, In : IEEE Transactions on Smart Grid. 9, 4, p. 2726-2740 15 p.

A Stochastic Model Predictive Control Approach for Joint Operational Scheduling and Hourly Reconfiguration of Distribution Systems
Esmaili, S., Anvari-Moghaddam, A., Jadid, S. & Guerrero, J. M., Jul 2018, In : Energies. 11, 7, p. 1-19 19 p., 1884.

Cooperative Control of Multi-Master-Slave Islanded Microgrid with Power Quality Enhancement Based on Conservative Power Theory
Mortezaei, A., Simões, M. G., Savaghebi, M., Guerrero, J. M. & Al-Durra, A., Jul 2018, In : IEEE Transactions on Smart Grid. 9, 4, p. 2964-2975 12 p.

Distributed Control of Battery Energy Storage Systems for Voltage Regulation in Distribution Networks with High PV Penetration
Zeraati, M., Golshan, M. E. H. & Guerrero, J. M., Jul 2018, In : IEEE Transactions on Smart Grid. 9, 4, p. 3582-3593 12 p.

Distributed Nonlinear Control with Event-Triggered Communication to Achieve Current-Sharing and Voltage Regulation in DC Microgrids

Han, R., Meng, L., Guerrero, J. M. & Quintero, J. C. V., Jul 2018, In : IEEE Transactions on Power Electronics. 33, 7, p. 6416 - 6433 18 p.

Microgrids: A review of technologies, key drivers, and outstanding issues

Hirsch, A., Parag, Y. & Guerrero, J., Jul 2018, In : Renewable and Sustainable Energy Reviews. 90, p. 402-411 10 p.

Model predictive control methods of leakage current elimination for a three-level T-type transformerless PV inverter

Wang, X., Zou, J., Ma, L., Zhao, J., Xie, C., Li, K., Meng, L. & Guerrero, J. M., Jul 2018, In : IET Power Electronics. 11, 8, p. 1492-1498 7 p.

Performance improvement of shunt active power filter based on non-linear least-square approach

Terriche, Y., Guerrero, J. M. & Quintero, J. C. V., Jul 2018, In : Electric Power Systems Research. 160, p. 44-55 12 p.

Stability Analysis of Digital-Controlled Single-Phase Inverter with Synchronous Reference Frame Voltage Control

Han, Y., Fang, X., Yang, P., Wang, C., Xu, L. & Guerrero, J. M., Jul 2018, In : IEEE Transactions on Power Electronics. 33, 7, p. 6333-6350 18 p.

Primary Control Design Based on Capacity Curves for Inverter-Based Microgrids

Kordkheili, H. H., Banejad, M., Guerrero, J. M. & Kalat, A. A., 15 Jun 2018, In : Electric Power Components and Systems. 46, 10, p. 1145-1157 13 p.

AC Ship Microgrids: Control and power management optimization

Al-Falahi, M. D. A., Tarasiuk, T., Jayasinghe, S. G., Jin, Z., Enshaei, H. & Guerrero, J. M., Jun 2018, In : Energies. 11, 6, p. 1-20 20 p., 1458.

Adaptive Distributed EMS for Small Clusters of Resilient LVDC Microgrids

Ciornei, I., Albu, M., Sanduleac, M., Rodriguez-Diaz, E., Teodorescu, R. & Guerrero, J., Jun 2018, *Proceedings of the 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe, IEEEIC/ICPS Europe 2018*. IEEE, p. 1-6 6 p.

A Leader-Follower Approach to Gas-Electricity Expansion Planning Problem

Khaligh, V., OloomiBuygi, M., Anvari-Moghaddam, A. & Guerrero, J. M., Jun 2018, *Proceedings of the 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (IEEEIC / ICPS Europe): IEEEIC 2018*. IEEE Press, p. 1-5 5 p.

A Novel Coordinated Control of Renewable Energy Sources and Energy Storage System in Islanded Microgrid

Gui, Y., Li, M., Guerrero, J. M. & Quintero, J. C. V., Jun 2018, *Proceedings of the 2018 Annual American Control Conference (ACC)*. Milwaukee, WI, USA: IEEE Press, p. 4616-4621 6 p. 8430920. (Annual American Control Conference (ACC)).

A simple approach to enhance the performance of complex-coefficient filter-based PLL in grid-connected applications

Ramezani, M., Golestan, S., Li, S. & Guerrero, J. M., Jun 2018, In : IEEE Transactions on Power Electronics. 65, 6, p. 5081 - 5085 5 p.

Dealing with Uncertainty in PV-Powered Microgrids: An Optimal Corrective Approach

Calderon-Obaldia, F., Anvari-Moghaddam, A., Badosa, J., Guerrero, J. M., Quintero, J. C. V., Migan-Dubois, A. & Bourdin, V., Jun 2018, *Proceedings of CIRED 2018*. CIRED, p. 1-4 4 p. 0329

Designing high-order power-source synchronous current converters for islanded and grid-connected microgrids

Ashabani, M., Gooi, H. B. & Guerrero, J. M., Jun 2018, In : Applied Energy. 219, p. 370-384 15 p.

Optimal Performance Design Guideline of Hybrid Reference Frame based Dual-Loop Control Strategy for Stand-Alone Single-Phase Inverters

Han, Y., Jiang, A-T., Coelho, E. A. A. & Guerrero, J. M., Jun 2018, In : I E E E Transactions on Energy Conversion. 33, 2, p. 730-740 11 p.

Optimal siting and sizing of DG units for a MV network going through voltage transition

Prenc, R., Cuculio, A., Capuder, T. & Guerrero, J. M., Jun 2018, *Proceedings of the 2018 IEEE International Energy Conference, ENERGYCON 2018*. IEEE Press, p. 1-6 6 p.

Plug-and-Play Voltage/Current Stabilization DC Microgrid Clusters with Grid-Forming/Feeding Converters

Han, R., Tucci, M., Martinelli, A., Guerrero, J. M. & Ferrari-Trecate, G., Jun 2018, *Proceedings of the 2018 American Control Conference (ACC)*. IEEE Press, p. 5362-5367 6 p. 8430783. (Annual American Control Conference (ACC)).

Real-Time optimal scheduling for prosumers resilient to regulatory changes

Ciornei, I., Albu, M., Sanduleac, M., Rodriguez-Diaz, E., Guerrero, J. & Vasquez, J. C., Jun 2018, *Proceedings of the 2018 IEEE International Energy Conference, ENERGYCON 2018*. IEEE Press, p. 1-6 6 p. (I E E E International Energy Conference. ENERGYCON proceedings).

Stochastic Frequency-Security Constrained Scheduling of a Microgrid Considering Price-driven Demand Response

Vahedipour-Dahraie, M., Rashidzadeh-Kermani, H., Anvari-Moghaddam, A. & Guerrero, J. M., Jun 2018, *Proceedings of the 2018 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM): SPEEDAM 2018*. IEEE Press, p. 716-721 6 p.

A communication-free decentralized control for grid-connected cascaded pv inverters

Su, M., Luo, C., Hou, X., Yuan, W., Liu, Z., Han, H. & Guerrero, J. M., May 2018, In : *Energies*. 11, 6, p. 1-18 18 p., 1375.

A Decentralized Current-Sharing Controller Endows Fast Transient Response to Parallel DC-DC Converters

Wang, H., Han, M., Han, R., Guerrero, J. M. & Quintero, J. C. V., May 2018, In : I E E E Transactions on Power Electronics. 33, 5, p. 4362-4372 11 p., 7946266.

An Approach for the Emulation of DC Grid Admittances: Implementation on a Buck Converter

Rodriguez-Diaz, E., Freijedo, F. D., Dujic, D., Vasquez, J. C. & Guerrero, J. M., May 2018, *Proceedings of the 2018 International Power Electronics Conference, IPEC-Niigata - ECCE Asia 2018*. IEEE, p. 1498-1503 6 p. 8506676

A Voltage Feedback Based Harmonic Compensation Strategy for Current-Controlled Converters

Zhao, X., Meng, L., Xie, C., Guerrero, J. M., Wu, X., Vasquez, J. C. & Savaghebi, M., May 2018, In : I E E E Transactions on Industry Applications. 54, 3, p. 2616-2627 12 p.

Controller design and stability analysis of grid connected DC microgrid

Chauhan, R. K., Chauhan, K. & Guerrero, J. M., May 2018, In : *Journal of Renewable and Sustainable Energy*. 10, 3, 035101.

DC-Link Protection and Control in Modular Uninterruptible Power Supply

Lu, J., Savaghebi, M., Guan, Y., Golestan, S., Quintero, J. C. V., Guerrero, J. M. & Marzabal, A., May 2018, In : I E E E Transactions on Industrial Electronics. 65, 5, p. 3942 - 3953 12 p., 8060574.

Design and Implementation of Single-Phase Asymmetric Multilevel STATCOM

Chen, H., Han, Y., Yang, P., Wang, C. & Guerrero, J. M., May 2018, *Proceedings of the 2018 International Power Electronics Conference, IPEC-Niigata - ECCE Asia 2018*. IEEE Press, p. 3112-3116 5 p. 8507803

Finite-gain-current repetitive controller for synchronverters with harmonic-sharing capabilities

Róldan-Pérez, J., Prodanovic, M., Rodriguez-Cabero, A., Guerrero, J. M. & Garcia-Cerrada, A., May 2018, *Proceedings of the ICHQP 2018 - 18th International Conference on Harmonics and Quality of Power*. IEEE, Vol. 2018-May. p. 1-6 6 p. (International Conference on Harmonics and Quality of Power (ICHQP)).

Internet of Things for Modern Energy Systems: State-of-the-Art, Challenges, and Open Issues

Shakerighadi, B., Anvari-Moghaddam, A., Vasquez, J. C. & Guerrero, J. M., May 2018, In : *Energies*. 11, 5, p. 1-23 23 p., 1252.

Island operation capability in the Colombian electrical market: a promising ancillary service of distributed energy resources

Marín-Jiménez, J. D., Carvajal-Quintero, S. & Guerrero, J. M., May 2018, In : *TecnoLogicas*. 21, 42, p. 169-185 17 p.

Phase Compensated Reduced Order Generalized Integrators for Grid-Tied VSCs with Harmonics Compensation Capability

Xie, C., Zhao, X., Ki, K., Liu, D., Guerrero, J. M. & Vasquez, J. C., May 2018, In : *IEEE Transactions on Industry Applications*. 54, 3, p. 2568-2578 11 p.

Power coordinated control method with frequency support capability for hybrid single/three-phase microgrid

Zhou, X., Chen, Y., Zhou, L., Luo, A., Guerrero, J. M., Wu, W., Yang, L. & Tan, W., May 2018, In : *IET Generation, Transmission and Distribution*. 12, 10, p. 2397-2405 9 p.

Power distribution system improvement planning under hurricanes based on a new resilience index

Najafi, J., Peiravi, A. & Guerrero, J. M., May 2018, In : *Sustainable Cities and Society*. 39, p. 592-604 13 p.

Transient Monitoring Function-Based Fault Detection for Inverter-Interfaced Microgrids

Sadeghkhani, I., Esmail Hamedani Golshan, M., Mehrizi-Sani, A., Guerrero, J. M. & Ketabi, A., May 2018, In : *IEEE Transactions on Smart Grid*. 9, 3, p. 2097-2107 11 p.

Virtual-Impedance-Based Fault Current Limiters for Inverter Dominated AC Microgrids

Lu, X., Wang, J., Guerrero, J. M. & Zhao, D., May 2018, In : *IEEE Transactions on Smart Grid*. 9, 3, p. 1599-1612 14 p.

Evaluation of Reliability in Risk-Constrained Scheduling of Autonomous Microgrids with Demand Response and Renewable Resources

Vahedipour-Dahraie, M., Anvari-Moghaddam, A. & Guerrero, J. M., 30 Apr 2018, In : *IET Renewable Power Generation*. 12, 6, p. 657-667 11 p.

An Economic Customer-Oriented Demand Response Model in Electricity Markets

Sharifi, R., Fathi, S. H., Anvari-Moghaddam, A., Guerrero, J. M. & Vahidinasab, V., 27 Apr 2018, *Proceedings - 2018 IEEE International Conference on Industrial Technology, ICIT 2018*. IEEE Press, Vol. 2018-February. p. 1149-1153 5 p.

Matrix pencil method-based reference current generation for shunt active power filters

Terriche, Y., Golestan, S., Guerrero, J. M., Kerdoune, D. & Quintero, J. C. V., 10 Apr 2018, In : *IET Power Electronics*. 11, 4, p. 772-780 9 p.

A novel quasi-master-slave control frame for PV-storage independent microgrid

Yang, J., Yuan, W., Sun, Y., Han, H., Hou, X. & Guerrero, J. M., Apr 2018, In : *International Journal of Electrical Power and Energy Systems*. 97, p. 262-274 13 p.

Boundary detection and enhancement strategy for power system bus bar stabilization: investigation under fault conditions for islanding operation

Pouryekta, A., Ramachandramurthy, V. K., Padmanaban, S., Blaabjerg, F. & Guerrero, J. M., Apr 2018, In : *Energies*. 11, 4, p. 1-22 22 p., 889.

Distributed secondary and tertiary controls for I-V droop-controlled-paralleled DC-DC converters

Wang, H., Han, M., Guerrero, J. M., Vasquez, J. C. & Teshager, B. G., Apr 2018, In : *IET Generation, Transmission and Distribution*. 12, 7, p. 1538-1546 9 p.

Low-voltage ride-through of a droop-based three-phase four-wire grid-connected microgrid

Sadeghkhani, I., Golshan, M. E. H., Mehrizi-Sani, A. & Guerrero, J. M., Apr 2018, In : IET Generation, Transmission and Distribution. 12, 8, p. 1906-1914 9 p.

Optimal Scheduling of Distributed Energy Resources and Responsive Loads in Islanded Microgrids Considering Voltage and Frequency Security Constraints

Vahedipour-Dahraie, M., Najafi, H. R., Anvari-Moghaddam, A. & Guerrero, J. M., Apr 2018, In : Journal of Renewable and Sustainable Energy. 10, 2, p. 1-22 22 p., 025903.

Power Quality Assessment in Real Shipboard Microgrid Systems under Unbalanced and Harmonic AC Bus Voltage

Liu, W., Tarasiuk, T., Gorniak, M., Guerrero, J. M., Savaghebi, M., Quintero, J. C. V. & Su, C-L., Apr 2018, *2018 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 521-527 7 p. (IEEE Applied Power Electronics Conference and Exposition (APEC)).

Ripple Mitigation with Improved Line-Load Transients Response in a Two-Stage DC-DC-AC Converter: Adaptive SMC Approach

Gautam, A. R., Gaurav, K., Guerrero, J. M. & Fulwani, D., Apr 2018, In : IEEE Transactions on Industrial Electronics. 65, 4, p. 3125 - 3135 11 p., 8036200.

Stability analysis of DC microgrids with constant power load under distributed control methods

Liu, Z., Su, M., Sun, Y., Han, H., Hou, X. & Guerrero, J. M., Apr 2018, In : Automatica. 90, p. 62-72 11 p.

基于分层控制的微电网并网谐波电流主动抑制控制策略

Feng, W., Sun, K., Guan, Y., Guerrero, J. M. & Xiao, X., 25 Mar 2018, In : Diangong Jishu Xuebao/Transactions of China Electrotechnical Society. 33, 6, p. 1400-1409 10 p.

A Communication-less Distributed Control Architecture for Islanded Microgrids with Renewable Generation and Storage

Aldana, N. L. D., Quintero, J. C. V. & Guerrero, J. M., Mar 2018, In : IEEE Transactions on Power Electronics. 33, 3, p. 1922 - 1939 18 p., 7911341.

Adaptive synchronization of grid-connected three-phase inverters by using virtual oscillator control

Li, M., Gui, Y., Vasquez, J. C. & Guerrero, J. M., Mar 2018, *Proceedings of the APEC 2018 - 33rd Annual IEEE Applied Power Electronics Conference and Exposition*. IEEE Press, Vol. 2018-March. p. 1130-1135 6 p.

An Adaptive Resonant Regulator for Single-phase Grid-Tied VSCs

Golestan, S., Ebrahimzadeh, E., Guerrero, J. M. & Quintero, J. C. V., Mar 2018, In : IEEE Transactions on Power Electronics. 33, 3, p. 1867 - 1873 7 p., 8004506.

An MPC Based ESS Control Method for PV Power Smoothing Applications

Lei, M., Yang, Z., Wang, Y., Xu, H., Meng, L., Quintero, J. C. V. & Guerrero, J. M., Mar 2018, In : IEEE Transactions on Power Electronics. 33, 3, p. 2136 - 2144 9 p., 7900331.

Control of Grid Connected Photovoltaic Systems with Microinverters: New Theoretical Design and Numerical Evaluation

Yahya, A., El Fadil, H., Oulcaid, M., Ammeh, L., Giri, F. & Guerrero, J. M., Mar 2018, In : Asian Journal of Control. 20, 2, p. 906-918 13 p.

Harmonic Issues Assessment on PWM VSC-Based Controlled Microgrids using Newton Methods

Agundis-Tinajero, G., Segundo-Ramírez, J., Peña-Gallardo, R., Visairo-Cruz, N., Núñez-Gutiérrez, C., Guerrero, J. M. & Savaghebi, M., Mar 2018, In : IEEE Transactions on Smart Grid. 9, 2, p. 1002 - 1011 10 p.

Morphological PLL for potential applications on renewable energy

Rocha-Osorio, C. M., Solís-Chaves, J. S., Golestan, S., Costa, F. F., Fernandes, D. A., Guerrero, J. M. & Sgurezi Filho, A. J., Mar 2018, In : Electric Power Systems Research. 156, p. 15-23 9 p.

Multi-mode operations for on-line uninterruptible power supply

Lu, J., Savaghebi, M., Guan, Y., Li, M. & Guerrero, J., Mar 2018, *Proceedings of the 33rd Annual IEEE Applied Power Electronics Conference and Exposition - APEC 2018*. IEEE Press, p. 180-187 8 p. (IEEE Applied Power Electronics Conference and Exposition (APEC)).

Online Energy Management Systems for Microgrids: Experimental Validation and Assessment Framework

Hernández, A. C. L., Meng, L., Aldana, N. L. D., Graells, M., Quintero, J. C. V. & Guerrero, J. M., Mar 2018, In : *IEEE Transactions on Power Electronics*. 33, 3, p. 2201 - 2215 15 p., 7915727.

Two-degree-of-freedom admittance-type droop control for plug-and-play DC microgrid

Jin, Z. & Guerrero, J. M., Mar 2018, *Proceedings of the 33rd Annual IEEE Applied Power Electronics Conference and Exposition (APEC 2018)*. IEEE Press, p. 3326-3332 7 p. (IEEE Applied Power Electronics Conference and Exposition (APEC)).

An Enhanced State Observer for DC-Link Voltage Control of Three-Phase AC/DC Converters

Lu, J., Golestan, S., Savaghebi, M., Quintero, J. C. V., Guerrero, J. M. & Marzabal, A., Feb 2018, In : *IEEE Transactions on Power Electronics*. 33, 2, p. 936 - 942 7 p., 7976369.

An improved power control strategy for hybrid AC-DC microgrids

Baharizadeh, M., Karshenas, H. R. & Guerrero, J. M., Feb 2018, In : *International Journal of Electrical Power and Energy Systems*. 95, p. 364-373 10 p.

A PLL-Based Controller for Three-Phase Grid-Connected Power Converters

Golestan, S., Guerrero, J. M. & Vasquez, J., Feb 2018, In : *IEEE Transactions on Power Electronics*. 33, 2, p. 911-916 6 p., 7959117.

Coordinated Control of Multifunctional Inverters for Voltage Support and Harmonic Compensation in a Grid-Connected Microgrid

Mousazadeh, S. Y., Jalilian, A., Savaghebi, M. & Guerrero, J. M., Feb 2018, In : *Electric Power Systems Research*. 155, p. 254-264 11 p.

Hierarchical Control Design for Shipboard Power System with DC Distribution and Energy Storage aboard Future More-Electric Ships

Jin, Z., Meng, L., Guerrero, J. M. & Han, R., Feb 2018, In : *IEEE Transactions on Industrial Informatics*. 14, 2, p. 703-714 12 p.

Optimal Sizing and Performance Evaluation of a Renewable Energy Based Microgrid in Future Seaports

Baizura Binti Ahamad, N., Othman @ Marzuki, M. B., Quintero, J. C. V., Guerrero, J. M. & Su, C. L., Feb 2018, *Proceedings of the IEEE International Conference on Industrial Technology (ICIT), 2018*. Lyon, France: IEEE Press, p. 1043-1048 6 p.

A Nonadaptive Window-Based PLL for Single-Phase Applications

Golestan, S., Guerrero, J. M. & Quintero, J. C. V., Jan 2018, In : *IEEE Transactions on Power Electronics*. 33, 1, p. 24-31 8 p., 7942085.

Flat tie-line power scheduling control of grid-connected hybrid microgrids

Xiao, Z. X., Guerrero, J. M., Shuang, J., Sera, D., Schaltz, E. & Vásquez, J. C., Jan 2018, In : *Applied Energy*. 210, p. 786-799 14 p.

Modeling and design of a multivariable control system for multi-paralleled grid-connected inverters with LCL filter

Akhavan, A., Mohammadi, H. R. & Guerrero, J. M., Jan 2018, In : *International Journal of Electrical Power and Energy Systems*. 94, p. 354-362 9 p.

New strategy for eliminating zero-sequence circulating current between parallel operating three-level NPC voltage source inverters

Li, K., Dong, Z., Wang, X., Peng, C., Deng, F., Guerrero, J. & Vasquez, J., Jan 2018, In : *Journal of Power Electronics*. 18, 1, p. 70-80 11 p.

Stabilizing plug-and-play regulators and secondary coordinated control for AC islanded microgrids with bus-connected topology

Riverso, S., Tucci, M., Vasquez, J. C., Guerrero, J. M. & Ferrari-Trecate, G., Jan 2018, In : *Applied Energy*. 210, p. 914-924 11 p.

Distributed Averaging Control for Voltage Regulation and Current Sharing in DC Microgrids: Modelling and Experimental Validation

Trip, S., Han, R., Cucuzzella, M., Cheng, X., Scherpen, J. & Zapata, J. M. G., 2018, *IFAC-PapersOnLine*. 23 ed. Vol. 51. p. 242-247 6 p. (I F A C Workshop Series).

Optimal Decision Making Framework of an Electric Vehicle Aggregator in Future and Pool markets

Rashidzadeh-Kermani, H., Najafi, H. R., Anvari-Moghaddam, A. & Guerrero, J. M., 2018, In : *Journal of Operation and Automation in Power Engineering*. 6, 2, p. 157-168 12 p., 2.

Multi-time-scales energy management for grid-on multi-layer microgrids cluster

Xing, X., Meng, H., Xie, L., Li, P., Toledo, S., Zhang, Y. & Guerrero, J. M., 1 Dec 2017, *2017 IEEE Southern Power Electronics Conference (SPEC)*. IEEE, p. 1-6 6 p.

Energy Production: A Comparison of Forecasting Methods using the Polynomial Curve Fitting and Linear Regression

El Kafazi, I., Bannari, R., Abouabdellah, A., Aboutafail, M. O. & Guerrero, J. M., Dec 2017, *Proceedings of the 2017 International Renewable and Sustainable Energy Conference, IRSEC 2017*. Zaz, Y. & Essaaidi, M. (eds.). IEEE Press, p. 1-5 5 p. 8477278

Guest Editorial: Flexible Operation and Control for Medium Voltage Direct-Current (MVDC) Grid

Li, Y., Guerrero, J. M., Siano, P., Wheeler, P., Li, W. & Krause, O., Dec 2017, In : *IET Power Electronics*. 10, 15, p. 2021 – 2022 2 p.

Plug-and-Play Design of Current Controllers for Grid-feeding Converters in DC Microgrids

Han, R., Tucci, M., Soloperto, R., Guerrero, J. M. & Ferrari-Trecate, G., Dec 2017, *Proceedings of 2017 11th Asian Control Conference (ASCC)*. IEEE Press, 6 p.

Single-Phase PLLs: A Review of Recent Advances

Golestan, S., Guerrero, J. M. & Quintero, J. C. V., Dec 2017, In : *IEEE Transactions on Power Electronics*. 32, 12, p. 9013 - 9030 18 p.

Stochastic Security and Risk-Constrained Scheduling for an Autonomous Microgrid with Demand Response and Renewable Energy Resources

Vahedipour-Dahraie, M., Rashidzadeh-Kermani, H., Najafi, H. R., Anvari-Moghaddam, A. & Guerrero, J. M., Dec 2017, In : *IET Renewable Power Generation*. 11, 14, p. 1812-1821 10 p.

PCC Voltage Power Quality Restoring Strategy Based on the Droop Controlled Grid-connecting Microgrid

Wei, F., Sun, K., Guan, Y., Guerrero, J. M. & Xiao, X., 29 Nov 2017, In : *The Journal of Engineering*. 2017, 13, p. 1399–1403 4 p.

Admittance-type RC-mode Droop Control to Introduce Virtual Inertia in DC Microgrids

Jin, Z., Meng, L., Han, R., Guerrero, J. M. & Vasquez, J. C., 3 Nov 2017, *Proceedings of 2017 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, Vol. 2017-January. p. 4107-4112 6 p. 8096714. (IEEE Energy Conversion Congress and Exposition).

A proportional harmonic power sharing scheme for hierarchical controlled microgrids considering unequal feeder impedances and nonlinear loads

Li, H., Han, Y., Yang, P., Xiong, J., Wang, C. & Guerrero, J. M., 3 Nov 2017, *2017 IEEE Energy Conversion Congress and Exposition, ECCE 2017*. IEEE, Vol. 2017-January. p. 3722-3727 6 p. 8096658

A Distributed Control Framework for Integrated Photovoltaic-Battery-Based Islanded Microgrids

Golsorkhi, M., Shafiee, Q., Lu, D. D-C. & Guerrero, J. M., Nov 2017, In : I E E E Transactions on Smart Grid. 8, 6, p. 2837 - 2848 12 p.

An Enhanced Instantaneous Circulating Current Control for Reactive power and Harmonic Load Sharing in Islanded Microgrids

Lorzadeh, I., Askarian Abyaneh, H., Savaghebi, M., Bakhshai, A. & Guerrero, J. M., Nov 2017, In : Journal of Power Electronics. 17, 6, p. 1658-1671 14 p.

Centralized Disturbance Detection in Smart Microgrids With Noisy and Intermittent Synchrophasor Data

Seyedi, Y., Karimi, H. & Guerrero, J. M., Nov 2017, In : I E E E Transactions on Smart Grid. 8, 6, p. 2775 - 2783 9 p.

Containment and Consensus-Based Distributed Coordination Control to Achieve Bounded Voltage and Precise Reactive Power Sharing in Islanded AC Microgrids

Han, R., Meng, L., Ferrari-Trecate, G., Coelho, E. A. A., Quintero, J. C. V. & Guerrero, J. M., Nov 2017, In : I E E E Transactions on Industry Applications. 53, 6, p. 5187-5199 13 p.

Dynamic Pricing: An Efficient Solution for True Demand Response Enabling

Sharifi, R., Anvari-Moghaddam, A., Fathi, S. H., Guerrero, J. M. & Vahidinasab, V., Nov 2017, In : Journal of Renewable and Sustainable Energy. 9, 6, 14 p., 065502.

Economic demand response model in liberalised electricity markets with respect to flexibility of consumers

Sharifi, R., Anvari-Moghaddam, A., Fathi, S. H., Guerrero, J. M. & Vahidinasab, V., Nov 2017, In : IET Generation, Transmission & Distribution. 11, 17, p. 4291-4298 8 p., 17339914 .

Grid-forming VSC control in four-wire systems with unbalanced nonlinear loads

Lliuyacca, R., Mauricioa, J. M., Gomez-Exposito, A., Savaghebi, M. & Guerrero, J. M., Nov 2017, In : Electric Power Systems Research. 152, p. 249-256 8 p.

Grid-tied photovoltaic and battery storage systems with Malaysian electricity tariff: A review on maximum demand shaving

Subramani, G., Ramachandaramurthy, V. K., Padmanaban, S., Mihet-Popa, L., Blaabjerg, F. & Guerrero, J. M., Nov 2017, In : Energies. 10, 11, 17 p., 1884.

New Metrics for Evaluating Technical Benefits and Risks of DGs Increasing Penetration

Akbari, M. A., Aghaei, J., Barani, M., Savaghebi, M., Shafie-khah, M., Guerrero, J. M. & Catalao, J. P. S., Nov 2017, In : I E E E Transactions on Smart Grid. 8, 6, p. 2890 - 2902 13 p.

Online optimization of a multi-conversion-level DC home microgrid for system efficiency enhancement

Boscaino, V., Guerrero, J. M., Ciornei, I., Meng, L., Riva Sanseverino, E. & Zizzo, G., Nov 2017, In : Sustainable Cities and Society. 35, p. 417-429 13 p.

Optimization for Customized Power Quality Service in Multibus Microgrids

Meng, L. & Guerrero, J. M., Nov 2017, In : IEEE Transactions on Industrial Electronics. 64, 11, p. 8767-8777 11 p., 7920301.

Power Flow Analysis for Low-Voltage AC and DC Microgrids Considering Droop Control and Virtual Impedance

Li, C., Chaudhary, S. K., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., Nov 2017, In : I E E E Transactions on Smart Grid. 8, 6, p. 2754 - 2764 11 p.

A Multi-Agent Based Energy Management Solution for Integrated Buildings and Microgrid System

Anvari-Moghaddam, A., Rahimi-Kian, A., Mirian, M. S. & Guerrero, J. M., Oct 2017, In : Applied Energy. 203, p. 41-56

A Multi-Objective Demand Side Management Considering ENS Cost in Smart Grids

Yousefi Khanghah, B., Ghassemzadeh, S., Hosseini, S. H., Mohammadi-Ivatloo, B., Anvari-Moghaddam, A., Guerrero, J. M. & Quintero, J. C. V., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 26-31 6 p.

An Enhanced Control Scheme for Uninterruptible Power Supply

Lu, J., Savaghebi, M., Wei, B. & Guerrero, J. M., Oct 2017, *Proceedings of 2017 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, 8 p. (IEEE Energy Conversion Congress and Exposition).

A novel harmonic current sharing control strategy for parallel-connected inverters

Guan, Y., Guerrero, J. M., Savaghebi, M., Quintero, J. C. V. & Wei, F., Oct 2017, *Proceedings of 2017 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 1602-1607 6 p.

A Power Sharing Method Based on Modified Droop Control for Modular UPS

Wei, B., Liu, W., Guerrero, J. M. & Quintero, J. C. V., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 4839-4844 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

A Root-Locus Design Methodology Derived from the Impedance/Admittance Stability Formulation and Its Application for LCL Grid-Connected Converters in Wind Turbines

Freijedo Fernandez, F. D., Diaz, E. R., Golsorkhi, M., Quintero, J. C. V. & Guerrero, J. M., Oct 2017, In : *IEEE Transactions on Power Electronics*. 32, 10, p. 8218 - 8228 11 p.

A Secondary-Control Based Fault Current Limiter for Four-Wire Three Phase Inverter-Interfaced DGs

Beheshtaein, S., Savaghebi, M., Guerrero, J. M., Cuzner, R. & Quintero, J. C. V., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 2363-2368 6 p.

A Stochastic Bi-Level Scheduling Approach for the Participation of EV Aggregators in Competitive Electricity Markets

Rashidizadeh-Kermani, H., Vahedipour-Dahraie, M., Najafi, H. R., Anvari-Moghaddam, A. & Guerrero, J. M., Oct 2017, In : *Applied Sciences*. 7, 10, p. 1-16 1100.

A unified triangle carrier based PWM strategy for three-phase N-level diode clamped inverters

Li, K., Xie, C., Wei, M., Dong, Z., Li, M. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 726-731 6 p.

Constant Power Load Instability Mitigation in DC Shipboard Power Systems Using Negative Series Virtual Inductor Method

Jin, Z., Meng, L. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Direct harmonic voltage control strategy for shunt active power filter

Munir, H. M., Zou, J., Xie, C., Li, K., Zhao, X. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 1101-1106 6 p.

Discrete-Time Domain Modelling of Voltage Source Inverters in Standalone Applications: Enhancement of Regulators Performance by Means of Smith Predictor

Federico, D. B., de Sousa Ribeiro, L. A., Freijedo Fernandez, F. D., Pastorelli, M. & Guerrero, J. M., Oct 2017, In : *IEEE Transactions on Power Electronics*. 32, 10, p. 8100 - 8114 15 p.

Dynamic Modeling of Networks, Microgrids, and Renewable Sources in the dq0 Reference Frame: A Survey

Baimel, D., Belikov, J., Guerrero, J. M. & Levron, Y., Oct 2017, In : *IEEE Access*. 5, p. 21323-21335 13 p., 8057270.

Flexible Compensation of Voltage and Current Unbalance and Harmonics in Microgrids

Mousazadeh, S. Y., Jalilian, A., Savaghebi, M. & Guerrero, J. M., Oct 2017, In : *Energies*. 10, 10, 19 p., 1568.

Frequency participation by using virtual inertia in wind turbines including energy storage

Xiao, Z. X., Huang, Y., Guerrero, J. M. & Fang, H., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 2492-2497 6 p.

Generation and Demand Scheduling for a Grid-Connected Hybrid Microgrid Considering Price-based Incentives

Hernández, A. C. L., Aldana, N. L. D., Savaghebi, M., Wei, F., Sun, K., Quintero, J. C. V. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 2498-2503 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Grid Voltage Modulated Control of Grid-Connected Voltage Source Inverters under Unbalanced Grid Conditions

Li, M., Gui, Y., Quintero, J. C. V. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 2510-2515 6 p.

Guest Editorial Special Section on Systems of Power Converters: Design, Modeling, Control, and Implementation

Liu, W., Guerrero, J. M. & Kim, J. M., Oct 2017, In : *IEEE Transactions on Industrial Informatics*. 13, 5, p. 2631-2633 3 p., 8059739.

Hierarchical control of a photovoltaic/battery based DC microgrid including electric vehicle wireless charging station

Xiao, Z. X., Fan, H., Guerrero, J. M. & Fang, H., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 2522-2527 6 p.

Hybrid Droop Control Strategy Applied to Grid-Supporting Converters in DC Microgrids: Modeling, Design and Analysis

Han, R., Meng, L. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 268-273 6 p.

Hybrid Shipboard Microgrids: System Architectures and Energy Management Aspects

Othman @ Marzuki, M. B., Anvari-Moghaddam, A. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 6801-8606 6 p.

Impact of the Voltage Dips in Shipboard Microgrid Power Systems

Liu, W., Guerrero, J. M., Savaghebi, M., Quintero, J. C. V., Tarasiuk, T. & Gorniak, M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 2287-2292 6 p.

Impedance Stability Assessment of Active Damping Strategies for LCL Grid-Connected Converters

Díaz, E. R., Quintero, J. C. V., Guerrero, J. M. & Freijedo, F. D., Oct 2017, *Proceedings of 2017 International Symposium on Power Electronics (Ee)*. IEEE Press, 5 p.

Modeling and control of LCL-filtered grid-tied inverters with wide inductance variation

Xie, C., Li, K., Zhang, G., Zou, J. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 2522-2527 6 p.

Multiple time-scale optimization scheduling for islanded microgrids including PV, wind turbine, diesel generator and batteries

Xiao, Z. X., Nan, J., Guerrero, J. M. & Fang, H., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 2594-2599 6 p.

Optimal Planning and Operation of Hybrid Energy System Supplemented by Storage Devices

Javadi, M. S., Anvari-Moghaddam, A. & Guerrero, J. M., Oct 2017, *Proceedings of the 7th Solar Integration Workshop*. Energynautics GmbH, 6 p.

Robust Energy Hub Management Using Information Gap Decision Theory

Javadi, M. S., Anvari-Moghaddam, A. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 410-415 6 p.

SCADA system for islanded DC microgrids

Xiao, Z. X., Zhijun, G., Guerrero, J. M. & Fang, H., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 2669-2674 5 p.

Second Order Washout filter based Power Sharing Strategy for Uninterruptible Power Supply

Lu, J., Savaghebi, M. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, 6 p.

Specialized Hierarchical Control Strategy for DC Distribution based Shipboard Microgrids: A combination of emerging DC shipboard power systems and microgrid technologies

Jin, Z., Meng, L., Quintero, J. C. V. & Guerrero, J. M., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 6820-6825 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

The influence of internal current loop on transient response performance of I-V droop controlled paralleled DC-DC converters

Wang, H., Han, M., Guerrero, J. M., Quintero, J. C. V. & Han, R., Oct 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017*. IEEE Press, p. 4982-4987 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society, Vol. 2017).

Virtual resistance-based control strategy for DC link regeneration protection and current sharing in uninterruptible power supply

Lu, J., Guan, Y., Savaghebi, M. & Guerrero, J. M., Oct 2017, *Proceedings of 2017 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, 7 p. (IEEE Energy Conversion Congress and Exposition, Vol. 2017).

A Cost-effective and Emission-aware Power Management System for Ships with Integrated Full Electric Propulsion

Kanellos, F. D., Anvari-Moghaddam, A. & Guerrero, J. M., Sep 2017, In : *Electric Power Systems Research*. 150, p. 63-75 13 p.

A Critical Examination of Frequency-Fixed Second-Order Generalized Integrator-Based Phase-Locked Loops

Golestan, S., Mousazadeh Mousavi, S-Y., Guerrero, J. M. & Quintero, J. C. V., Sep 2017, In : *IEEE Transactions on Power Electronics*. 32, 9, p. 6666 - 6672 7 p.

A Current Limiting Strategy to Improve Fault Ride-Through of Inverter Interfaced Autonomous Microgrids

Sadeghkhan, I., Esmail Hamedani Golshan, M., Guerrero, J. M. & Mehrizi-Sani, A., Sep 2017, In : *IEEE Transactions on Smart Grid*. 8, 5, p. 2138 - 2148 11 p.

Analysis and Design of Improved Weighted Average Current Control Strategy for LCL-Type Grid-Connected Inverters

Han, Y., Li, Z., Yang, P., Wang, C., Xu, L. & Guerrero, J. M., Sep 2017, In : *IEEE Transactions on Energy Conversion*. 32, 3, p. 941-952 12 p.

An optimal energy management system for islanded Microgrids based on multi-period artificial bee colony combined with Markov Chain

Marzband, M., Azarnejadian, F., Savaghebi, M. & Guerrero, J. M., Sep 2017, In : *IEEE Systems Journal*. 11, 3, p. 1712 - 1722 11 p.

Customized power quality service provided by converter interfaced microgrids — Voltage harmonics as a study case

Meng, L., Chaudhary, S. K. & Guerrero, J. M., Sep 2017, *Proceedings of 2017 19th European Conference on Power Electronics and Applications (EPE'17 ECCE Europe)*. IEEE Press, 7 p.

Demand Response Load Following of Source and Load Systems

Hu, J., Cao, J., Yong, T., Guerrero, J. M., Z. Q. Chen, M. & Li, Y., Sep 2017, In : *IEEE Transactions on Control Systems Technology*. 25, 5, p. 1586 - 1598 13 p.

Feedforward control strategy for the state-decoupling Stand-alone UPS with LC output filter

Lu, J., Savaghebi, M. & Guerrero, J. M., Sep 2017, *Proceedings of 2017 19th European Conference on Power Electronics and Applications (EPE'17 ECCE Europe)*. IEEE Press, 8 p.

Flexible operation of parallel grid-connecting converters under unbalanced grid voltage

Lu, J., Savaghebi, M. & Guerrero, J. M., Sep 2017, *Proceedings of 2017 19th European Conference on Power Electronics and Applications (EPE'17 ECCE Europe)*. IEEE Press, 9 p.

Guest Editorial Special Issue on Structured DC Microgrids

Guerrero, J. M. & Tan, D. F. D., Sep 2017, In : *IEEE Journal of Emerging and Selected Topics in Power Electronics*. 5, 3, p. 925-927 3 p., 7997964.

Multiagent System-Based Distributed Coordinated Control for Radial DC Microgrid Considering Transmission Time Delays

Dou, C-X., Yue, D., Guerrero, J. M., Xie, X. & Hu, S., Sep 2017, In : *IEEE Transactions on Smart Grid*. 8, 5, p. 2370 - 2381 12 p.

Performance Evaluation of Type-3 PLLs Under Wide Variation in Input Voltage and Frequency

Aravind, C. K., Rani, B. I., Chakkarapani, M., Guerrero, J. M., Ilango, G. S. & Nagamani, C., Sep 2017, In : *IEEE Journal of Emerging and Selected Topics in Power Electronics*. 5, 3, p. 971 - 981 11 p.

Review on Control of DC Microgrids and Multiple Microgrid Clusters

Meng, L., Shafiee, Q., Ferrari-Trecate, G., Karimi, H., Fulwani, D., Lu, X. & Guerrero, J. M., Sep 2017, In : *IEEE Journal of Emerging and Selected Topics in Power Electronics*. 5, 3, p. 928 - 948 21 p.

Second Ripple Current Suppression by Two Bandpass Filters and Current Sharing Method for Energy Storage Converters in DC Microgrid

Yang, L., Chen, Y., Luo, A., Wu, W., Huai, K., Zhou, X., Zhou, L., Xu, Q. & Guerrero, J. M., Sep 2017, In : *IEEE Journal of Emerging and Selected Topics in Power Electronics*. 5, 3, p. 1031-1044 14 p.

An intelligent droop control for improve voltage regulation and equal power sharing in islanded DC microgrids

Basati, A., Fakharian, A. & Guerrero, J. M., 7 Aug 2017, *5th Iranian Joint Congress on Fuzzy and Intelligent Systems - 16th Conference on Fuzzy Systems and 14th Conference on Intelligent Systems, CFIS 2017*. IEEE, p. 190-195 6 p. 8003681

An optimal power management system for automatic connection of DC and AC resources of hybrid-microgrid systems

Rahmani, R., Fakharian, A. & Guerrero, J. M., 3 Aug 2017, *2017 IEEE 2nd International Conference on Direct Current Microgrids, ICDCM 2017*. IEEE, p. 181-187 7 p. 8001041

A DC Microgrid Coordinated Control Strategy Based on Integrator Current-Sharing

Gao, L., Liu, Y., Ren, H. & Guerrero, J. M., Aug 2017, In : *Energies*. 10, 8, 17 p., 1116.

Analysis and Comparison of Modular Railway Power Conditioner for High-Speed Railway Traction System

Xu, Q., Ma, F., He, Z., Chen, Y., Guerrero, J. M., Luo, A., Li, Y. & Yue, Y., Aug 2017, In : *IEEE Transactions on Power Electronics*. 32, 8, p. 6031 - 6048 18 p.

Angle Stability Analysis for Voltage-Controlled Converters

Lin, H., Jia, C., Guerrero, J. M. & Quintero, J. C. V., Aug 2017, In : *IEEE Transactions on Industrial Electronics*. 64, 8, p. 6265 - 6275 11 p.

Decentralized Method for Load Sharing and Power Management in a Hybrid Single/Three-Phase-Islanded Microgrid Consisting of Hybrid Source PV/Battery Units

Karimi, Y., Oraee, H. & Guerrero, J. M., Aug 2017, In : *IEEE Transactions on Power Electronics*. 32, 8, p. 6135 - 6144 10 p.

Efficient Energy Management for a Grid-Tied Residential Microgrid

Anvari-Moghaddam, A., Guerrero, J. M., Quintero, J. C. V., Monsef, H. & Rahimi-Kian, A., Aug 2017, In : IET Generation, Transmission & Distribution. 11, 11, p. 2752 – 2761 10 p.

A Circulating-Current Suppression Method for Parallel-Connected Voltage-Source Inverters With Common DC and AC Buses

Wei, B., Guerrero, J. M., Quintero, J. C. V. & Guo, X., Jul 2017, In : IEEE Transactions on Industry Applications. 53, 4, p. 3758-3769 12 p., 7876828.

A Circulating-Current Suppression Method for Parallel-Connected Voltage-Source Inverters With Common DC and AC Buses

Wei, B., Guerrero, J. M., Vasquez, J. C. & Guo, X., Jul 2017, In : IEEE Transactions on Industry Applications. 53, 4, p. 3758-3769 12 p.

A GPS-Based Control Framework for Accurate Current Sharing and Power Quality Improvement in Microgrids

Golsorkhi, M., Savaghebi, M., Lu, D., Guerrero, J. M. & Quintero, J. C. V., Jul 2017, In : IEEE Transactions on Power Electronics. 32, 7, p. 5675 - 5687 12 p.

An Islanding Detection Method by Using Frequency Positive Feedback Based on FLL for Single-Phase Microgrid

Sun, Q., Guerrero, J. M., Jing, T., Quintero, J. C. V. & Yang, R., Jul 2017, In : IEEE Transactions on Smart Grid. 8, 4, p. 1821 - 1830 10 p.

A Virtual Inertia Control Strategy for DC Microgrids Analogized with Virtual Synchronous Machines

Wu, W., Chen, Y., Luo, A., Zhou, L., Zhou, X., Yang, L., Dong, Y. & Guerrero, J. M., Jul 2017, In : IEEE Transactions on Industrial Electronics. 64, 7, p. 6005 - 6016 12 p.

Grid-Connected Inverter for Distributed Generation in Microgrid: Design of Current Control Strategy of Grid-Connected Inverter for Distributed Generation Sources under Nonlinear Load

Naderipour, A., Miveh, M. R. & Guerrero, J. M., Jul 2017, Saarbrücken: LAP Lambert Academic Publishing. 64 p.

Improving Frequency Stability Based on Distributed Control of Multiple Load Aggregators

Hu, J., Cao, J., Guerrero, J. M., Yong, T. & Yu, J., Jul 2017, In : IEEE Transactions on Smart Grid. 8, 4, p. 1553 - 1567 15 p.

New Perspectives on Droop Control in AC MicroGrid

Sun, Y., Hou, X., Yang, J., Han, H., Su, M. & Guerrero, J. M., Jul 2017, In : IEEE Transactions on Industrial Electronics. 64, 7, p. 5741 - 5745 5 p.

Optimal Scheduling of a Battery-Based Energy Storage System for a Microgrid with High Penetration of Renewable Sources

Dulout, J., Hernández, A. C. L., Anvari-Moghaddam, A., Alonso, C., Guerrero, J. M. & Jammes, B., Jul 2017, *Proceedings of ELECTRIMACS 2017*. IMACS, p. 1-6

Optimum power quality service in multi-bus microgrid systems

Meng, L. & Guerrero, J. M., Jul 2017, *Proceedings of the 2017 IEEE Power and Energy Society General Meeting, PESGM*. IEEE Press, p. 1-5 5 p.

Plug-and-play control and consensus algorithms for current sharing in DC microgrids

Tucci, M., Meng, L., Guerrero, J. M. & Ferrari-Trecate, G., Jul 2017, In : IFAC-PapersOnLine. 50, 1, p. 12440-12445 6 p.

Special Issue on Advances in Integrated Energy Systems Design, Control and Optimization

Anvari-Moghaddam, A. & Guerrero, J. M., Jul 2017, In : Applied Sciences. 7, 7, p. 1-3 3 p.

A novel decentralized economic operation in islanded AC microgrids

Han, H., Li, L., Wang, L., Su, M., Zhao, Y. & Guerrero, J. M., 1 Jun 2017, In : *Energies*. 10, 6, 18 p., 804.

Active load sharing technique for on-line efficiency optimization in DC microgrids

Sanseverino, E. R., Zizzo, G., Boscaino, V., Guerrero, J. M. & Meng, L., Jun 2017, *Proceedings of the 2017 IEEE International Conference on Environment and Electrical Engineering and 2017 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe)*. IEEE Press, 5 p. 7977568

Adaptive control of energy storage systems for power smoothing applications

Meng, L., Dragicevic, T. & Guerrero, J. M., Jun 2017, *Proceedings of 2017 IEEE 3rd International Future Energy Electronics Conference and ECCE Asia (IFEEEC 2017 - ECCE Asia)*. IEEE Press, p. 1014-1018 5 p.

An enhanced hierarchical control strategy for the Internet of Things-based home scale microgrid

Guan, Y., Quintero, J. C. V. & Guerrero, J. M., Jun 2017, *Proceedings of 2017 IEEE 26th International Symposium on Industrial Electronics (ISIE)*. IEEE Press, p. 51-56 6 p.

An Open Virtual Neighbourhood Network to Connect IoT Infrastructures and Smart Objects – VICINITY: IoT enables interoperability as a service

Guan, Y., Quintero, J. C. V., Guerrero, J. M., Samovich, N., Vanya, S., Oravec, V., Garcia-Castro, R., Serena, F., Poveda-Villalon, M., Rodijicic, C., Heinz, C., Grimm, C., Tryferidis, A., Tzovaras, D., Dickerson, K., Paralic, M., Skokan, M. & Sabol, T., Jun 2017, *Proceedings of 2017 Global Internet of Things Summit (GIoTS)*. IEEE Press, 6 p.

Combined Solar Charging Stations and Energy Storage Units Allocation for Electric Vehicles by Considering Uncertainties

Yousefi Khanghah, B., Anvari-Moghaddam, A., Guerrero, J. M. & Quintero, J. C. V., Jun 2017, *Proceedings of the 2017 IEEE International Conference on Environment and Electrical Engineering and 2017 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe)*. IEEE Press, p. 1-6 6 p.

Comparative Admittance-based Analysis for Different Droop Control Approaches in DC Microgrids

Jin, Z., Meng, L. & Guerrero, J. M., Jun 2017, *Proceedings of 2017 IEEE Second International Conference on DC Microgrids (ICDCM)*. IEEE Press, 8 p.

Coordinated Active Power Dispatch for a Microgrid via Distributed Lambda Iteration

Hu, J., Z. Q. Chen, M., Cao, J. & Guerrero, J. M., Jun 2017, In : *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*. 7, 2, p. 250-261 12 p.

Economic Power Schedule and Transactive Energy through Intelligent Centralized Energy Management System for DC Residential Distribution System

Yue, J., Hu, Z., Li, C., Vasquez, J. C. & Guerrero, J. M., Jun 2017, 13 p.

Effect of placement of droop based generators in distribution network on small signal stability margin and network loss

Dheer, D. K., Doolla, S., Bandyopadhyay, S. & Guerrero, J. M., Jun 2017, In : *International Journal of Electrical Power & Energy Systems*. 88, p. 108–118 11 p.

Guest Editorial Energy Conversion in Next-generation Electric Ships

Guerrero, J., Davoudi, A., Belkhat, M., Benbouzid, M. E. H., Corzine, K. A., Cramer, A. M., Dougal, R., Gamini, S., Khersonsky, Y., Kouros, S., Molinas, M., Monti, A., Tang, Y., Opila, D., Hennie, E., Sorensen, A. J., Sulligoi, G., Sudhoff, S. D., Sun, K. & Tarasiuk, T., Jun 2017, In : *IEEE Transactions on Energy Conversion*. 32, 2, p. 735-736 2 p., 7931765.

Hierarchical Delay-Dependent Distributed Coordinated Control for DC Ring-Bus Microgrids

Dou, C., Yue, D., Zhang, Z. & Guerrero, J. M., Jun 2017, In : *IEEE Access*. 5, p. 10130-10140 11 p., 7944537.

Multirate Fractional-Order Repetitive Control of Shunt Active Power Filter Suitable for Microgrid Applications

Xie, C., Zhao, X., Savaghebi, M., Meng, L., Guerrero, J. M. & Quintero, J. C. V., Jun 2017, In : *IEEE Journal on Emerging and Selected Topics in Power Electronics*. 5, 2, p. 809 - 819 11 p.

Optimal Scheduling of a Multi-Carrier Energy Hub Supplemented By Battery Energy Storage Systems

Javadi, M. S., Anvari-Moghaddam, A. & Guerrero, J. M., Jun 2017, *Proceedings of 2017 IEEE International Conference on Environment and Electrical Engineering and 2017 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe)*. IEEE Press, p. 1-6 6 p.

Optimal Sizing of a Lithium Battery Energy Storage System for Grid-Connected Photovoltaic Systems

Dulout, J., Jammes, B., Alonso, C., Anvari-Moghaddam, A., Luna, A. & Guerrero, J. M., Jun 2017, *Proceedings of 2017 IEEE Second International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 582-587 6 p. 8001106

Optimization scheduling in intelligent Energy Management System for the DC residential distribution system

Yue, J., Hu, Z., Li, C., Vasquez, J. C. & Guerrero, J. M., Jun 2017, *Proceedings of 2017 IEEE Second International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 558-563 6 p. 8001102

Optimizing droop coefficients for minimum cost operation of islanded micro-grids

Sanseverino, E. R., Tran, Q. T. T., Zizzo, G., Di Silvestre, M. L., Doan, B. V., Nguyen, N. Q. & Guerrero, J. M., Jun 2017, *Proceedings of the 2017 IEEE International Conference on Environment and Electrical Engineering and 2017 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe)*. IEEE Press, 7977712

Potential energy savings by using direct current for residential applications: A Danish household study case

Diaz, E. R., Quintero, J. C. V. & Guerrero, J. M., Jun 2017, *Proceedings of 2017 IEEE Second International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 547-552 6 p. (IEEE International Conference on DC Microgrids (ICDCM), Vol. 2017).

Principle and Control Design of Active Ground-Fault Arc Suppression Device for Full Compensation of Ground Current

Wang, W., Zeng, X., Yan, L., Xu, X. & Guerrero, J. M., Jun 2017, In : *IEEE Transactions on Industrial Electronics*. 64, 6, p. 4561 - 4570 10 p.

Reactive Power Strategy of Cascaded Delta-connected STATCOM Under Asymmetrical Voltage Conditions

He, Z., Ma, F., Xu, Q., Chen, Y., Li, C., Li, M., Guerrero, J. M. & Luo, A., Jun 2017, In : *IEEE Journal of Emerging and Selected Topics in Power Electronics*. 5, 2, p. 784 - 795 12 p.

Real-Time Energy Management System for a Hybrid AC/DC Residential Microgrid

Diaz, E. R., Palacios-Garcia, E. J., Anvari-Moghaddam, A., Quintero, J. C. V. & Guerrero, J. M., Jun 2017, *Proceedings of 2017 IEEE Second International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 1-6 6 p. (IEEE International Conference on DC Microgrids (ICDCM)).

Single-Phase Phase-Locked Loop Based on Derivative Elements

Guan, Q., Zhang, Y., Kang, Y. & Guerrero, J. M., Jun 2017, In : *IEEE Transactions on Power Electronics*. 32, 6, p. 4411-4420 10 p., 7549036.

Using Smart Meters Data for Energy Management Operations and Power Quality Monitoring in a Microgrid

Palacios-Garcia, E. J., Diaz, E. R., Anvari-Moghaddam, A., Savaghebi, M., Quintero, J. C. V., Guerrero, J. M. & Moreno-Munoz, A., Jun 2017, *Proceedings of the 2017 IEEE 26th International Symposium on Industrial Electronics (ISIE)*. IEEE Press, 6 p. (IEEE International Symposium on Industrial Electronics (ISIE), Vol. 2017).

Selective Sharing of Load Current Components Among Parallel Power Electronic Interfaces in Three-phase Four-wire Stand-alone Microgrid

Mortezaei, A., Simões, M. G., Marafão, F. P., Guerrero, J. M., Durra, A. A. & Busarello, T. D. C., 9 May 2017, In : *Electric Power Components and Systems*. 45, 8, p. 864-880 17 p.

Control Strategies for Islanded Microgrid using Enhanced Hierarchical Control Structure with Multiple Current-Loop Damping Schemes

Han, Y., Shen, P., Zhao, X. & Guerrero, J. M., May 2017, In : *IEEE Transactions on Smart Grid*. 8, 3, p. 1139 - 1153 15 p.

Decentralized Method for Load Sharing and Power Management in a PV/Battery Hybrid Source Islanded Microgrid

Karimi, Y., Oraee, H., Golsorkhi, M. & Guerrero, J. M., May 2017, In : I E E E Transactions on Power Electronics. 32, 5, p. 3525 - 3535 11 p.

Energy trading and pricing in microgrids with uncertain energy supply: A three-stage hierarchical game approach

Ma, K., Hu, S., Yang, J., Dou, C. & Guerrero, J. M., May 2017, In : Energies. 10, 5, 16 p., 670.

High-Order Frequency-Locked Loops: A Critical Analysis

Golestan, S., Guerrero, J. M. & Quintero, J. C. V., May 2017, In : I E E E Transactions on Power Electronics. 32, 5, p. 3285-3291 7 p.

Multiagent-Based Distributed State of Charge Balancing Control for Distributed Energy Storage Units in AC Microgrids

Li, C., Coelho, E. A. A., Dragicevic, T., Guerrero, J. M. & Quintero, J. C. V., May 2017, In : I E E E Transactions on Industry Applications. 53, 3, p. 2369 - 2381 13 p.

New Integrated Multilevel Converter for Switched Reluctance Motor Drives in Plug-in Hybrid Electric Vehicles with Flexible Energy Conversion

Gan, C., Wu, J., Hu, Y., Yang, S., Cao, W. & Guerrero, J. M., May 2017, In : I E E E Transactions on Power Electronics. 32, 5, p. 3754 - 3766 13 p.

Stochastic analysis of residential micro combined heat and power system

Karami, H., Sanjari, M. J., Gooi, H. B., Gharehpetian, G. B. GHAREHPETIAN. & Guerrero, J. M., 15 Apr 2017, In : Energy Conversion and Management. 138, p. 190-198 9 p.

An Adaptive Quadrature Signal Generation Based Single-Phase Phase-Locked Loop for Grid-Connected Applications

Golestan, S., Guerrero, J. M., Abusorrah, A., Al-Hindawi, M. M. & Al-Turki, Y., Apr 2017, In : IEEE Transactions on Industrial Electronics. 64, 4, p. 2848 - 2854 7 p.

A Robot-Soccer-Coordination Inspired Control Architecture Applied to Islanded Microgrids

Aldana, N. L. D., Guarnizo, J. G., Mellado, M., Quintero, J. C. V. & Guerrero, J. M., Apr 2017, In : I E E E Transactions on Power Electronics. 32, 4, p. 2728 - 2742 15 p.

A Robust and Fast Synchronization Technique for Adverse Grid Conditions

Golestan, S., Guerrero, J. M. & Vasquez, J. C., Apr 2017, In : IEEE Transactions on Industrial Electronics. 64, 4, p. 3188-3194 7 p., 7775057.

Distributed Secondary Voltage and Frequency Control for Islanded Microgrids with Uncertain Communication Links

Lu, X., Yu, X., Lai, J., Guerrero, J. M. & Zhou, H., Apr 2017, In : I E E E Transactions on Industrial Informatics. 13, 2, p. 448 - 460 13 p.

Double-Carrier Phase-Disposition Pulse Width Modulation Method for Modular Multilevel Converters

Zhou, F., Luo, A., Li, Y., Xu, Q., He, Z. & Guerrero, J. M., Apr 2017, In : Energies. 10, 4, 23 p., 581.

Low-Voltage Ride-Through Operation of Power Converters in Grid-Interactive Microgrids by Using Negative-Sequence Droop Control

Zhao, X., Guerrero, J. M., Savaghebi, M., Quintero, J. C. V., Wu, X. & Sun, K., Apr 2017, In : I E E E Transactions on Power Electronics. 32, 4, p. 3128 - 3142 15 p.

Mixed-Integer-Linear-Programming-Based Energy Management System for Hybrid PV-Wind-Battery Microgrids: Modeling, Design, and Experimental Verification

Hernández, A. C. L., Aldana, N. L. D., Graells, M., Quintero, J. C. V. & Guerrero, J. M., Apr 2017, In : I E E E Transactions on Power Electronics. 32, 4, p. 2769-2783 15 p.

Mixed-Integer-Linear- Programming-Based Energy Management System for Hybrid PV-Wind-Battery Microgrids: Modeling, Design, and Experimental Verification

Luna, A. C., Diaz, N. L., Graells, M., Vasquez, J. C. & Guerrero, J. M., Apr 2017, In : IEEE Transactions on Power Electronics. 32, 4, p. 2769-2783 15 p.

Multi-Agent System based Event-Triggered Hybrid Controls for High-Security Hybrid Energy Generation Systems

Dou, C-X., Yue, D. & Guerrero, J. M., Apr 2017, In : IEEE Transactions on Industrial Informatics. 13, 2, p. 584 - 594 11 p.

Study of the Effect of Time-Based Rate Demand Response Programs on Stochastic Day-Ahead Energy and Reserve Scheduling in Islanded Residential Microgrids

Vahedipour-Dahraie, M., Najafi, H. R., Anvari-Moghaddam, A. & Guerrero, J. M., Apr 2017, In : Applied Sciences. 7, 4, p. 1-19 378.

A generalized discontinuous PWM based neutral point voltage balancing method for three-level NPC voltage source inverter with switching losses reduction

Li, K., Wei, M., Xie, C., Deng, F., Guerrero, J. M. & Vasquez, J. C., Mar 2017, *Proceedings of the 2017 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 1816-1820 5 p. 7930945

Containment and Consensus-based Distributed Coordination Control for Voltage Bound and Reactive Power Sharing in AC Microgrid

Han, R., Meng, L., Ferrari-Trecate, G., Coelho, E. A. A., Quintero, J. C. V. & Guerrero, J. M., Mar 2017, *Proceedings of the 2017 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 3549-3556 7 p. (IEEE Applied Power Electronics Conference and Exposition (APEC)).

Data-Driven Control for Interlinked AC/DC Microgrids via Model-Free Adaptive Control and Dual-Droop Control

Zhang, H., Zhou, J., Sun, Q., Guerrero, J. M. & Ma, D., Mar 2017, In : IEEE Transactions on Smart Grid. 8, 2, p. 557 - 571 15 p.

Discharge rate balancing control strategy based on dynamic consensus algorithm for energy storage units in AC microgrids

Guan, Y., Meng, L., Li, C., Vasquez, J. C. & Guerrero, J. M., Mar 2017, *Proceedings of the 2017 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 2788-2794 7 p. 7931093. (IEEE Applied Power Electronics Conference and Exposition (APEC)).

Distributed cooperative synchronization strategy for multi-bus microgrids

Sun, Y., Zhong, C., Hou, X., Yang, J., Han, H. & Guerrero, J. M., Mar 2017, In : International Journal of Electrical Power & Energy Systems. 86, p. 18-28 11 p.

Droop-Free Distributed Control with Event-Triggered Communication in DC Micro-Grid

Han, R., Aldana, N. L. D., Meng, L., Guerrero, J. M. & Sun, Q., Mar 2017, *Proceedings of the 2017 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 1160-1166 7 p.

Economic Dispatch for Operating Cost Minimization under Real Time Pricing in Droop Controlled DC Microgrid

Li, C., Federico, D. B., Chen, F., Chaudhary, S. K., Quintero, J. C. V. & Guerrero, J. M., Mar 2017, In : IEEE Journal of Emerging and Selected Topics in Power Electronics. 5, 1, p. 587 - 595 9 p.

Enhanced fractional-order repetitive control for three-phase active power filter

Xie, C., Li, K., Zhao, X., Vasquez, J. C. & Guerrero, J. M., Mar 2017, *Proceedings of the 2017 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 3329-3336 8 p. 7931174

Frequency-Division Power Sharing and Hierarchical Control Design for DC Shipboard Microgrids with Hybrid Energy Storage Systems

Jin, Z., Meng, L., Quintero, J. C. V. & Guerrero, J. M., Mar 2017, *Proceedings of 2017 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, 8 p. 1594

Mitigation of Harmonics in Grid-Connected and Islanded Microgrids via Virtual Admittances and Impedances

Micallef, A., Apap, M., Spiteri-Staines, C. & Guerrero, J. M., Mar 2017, In : I E E E Transactions on Smart Grid. 8, 2, p. 651 - 661 11 p.

Reduced order generalized integrators with phase compensation for three-phase active power filter

Xie, C., Li, K., Zhao, X., Vasquez, J. C. & Guerrero, J. M., Mar 2017, *Proceedings of the 2017 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 2759-2766 8 p. 7931089

Reputation-based Joint Scheduling of Households Appliances and Storage in a Microgrid with a Shared Battery

AlSkaif, T., Hernández, A. C. L., Guerrero Zapata, M., Guerrero, J. M. & Bellalta, B., Mar 2017, In : Energy and Buildings. 138, p. 228–239 12 p.

Review of Active and Reactive Power Sharing Strategies in Hierarchical Controlled Microgrids

Han, Y., Li, H., Shen, P., Coelho, E. A. A. & Guerrero, J. M., Mar 2017, In : I E E E Transactions on Power Electronics. 32, 3, p. 2427 - 2451 25 p.

Three-Phase PLLs: A Review of Recent Advances

Golestan, S., Guerrero, J. M. & Vasquez, J. C., Mar 2017, In : I E E E Transactions on Power Electronics. 32, 3, p. 1894 - 1907

A GPS-Based Decentralized Control Method for Islanded Microgrids

Golsorkhi, M., Lu, D. & Guerrero, J. M., Feb 2017, In : I E E E Transactions on Power Electronics. 32, 2, p. 1615-1625

An improved synchronous reference frame current control strategy for a photovoltaic grid-connected inverter under unbalanced and nonlinear load conditions

Naderipour, A., Asuhaimi Mohd Zin, A., Bin Habibuddin, M. H., Miveh, M. R. & Guerrero, J. M., Feb 2017, In : PLOS ONE. 12, 2, 17 p., e0164856.

Energy modelling towards low carbon development of Beijing in 2030

Zhao, G., Guerrero, J. M., Jiang, K. & Chen, S., Feb 2017, In : Energy. 121, p. 107-113 7 p.

Principle and Design of a Single-phase Inverter-Based Grounding System for Neutral-to-ground Voltage Compensation in Distribution Networks

Wang, W., Yan, L., Zeng, X., Fan, B. & Guerrero, J. M., Feb 2017, In : I E E E Transactions on Industrial Electronics. 64, 2, p. 1204 - 1213 10 p.

Review of Ship Microgrids: System Architectures, Storage Technologies and Power Quality Aspects

Gamini, S., Meegahapola, L., Fernando, N., Jin, Z. & Guerrero, J. M., Feb 2017, In : Inventions . 2, 1, 19 p., 4.

An Adaptive Least-Error Squares Filter-Based Phase-Locked Loop for Synchronization and Signal Decomposition Purposes

Golestan, S., Ebrahimzadeh, E., Guerrero, J. M., Quintero, J. C. V. & Blaabjerg, F., Jan 2017, In : IEEE Transactions on Industrial Electronics. 64, 1, p. 336-346 11 p.

Cost-Based Droop Schemes for Economic Dispatch in Islanded Microgrids

Chen, F., Chen, M., Li, Q., Meng, K., Zheng, Y., Guerrero, J. M. & Abbott, D., Jan 2017, In : I E E E Transactions on Smart Grid. 8, 1, p. 63 - 74 12 p.

Grid impedance estimation based hybrid islanding detection method for AC microgrids

Ghzaiel, W., Jebali-Ben Ghorbal, M., Slama-Belkhdja, I. & Guerrero, J. M., Jan 2017, In : Mathematics and Computers in Simulation. 131, p. 142–156 9 p.

Guest Editorial Special Issue on Power Quality in Smart Grids

Guerrero, J. M., Jan 2017, In : I E E E Transactions on Smart Grid. 8, 1, p. 379-381 3 p.

Hybrid Adaptive/Nonadaptive Delayed Signal Cancellation-Based Phase-Locked Loop

Golestan, S., Guerrero, J. M. & Quintero, J. C. V., Jan 2017, In : I E E E Transactions on Industrial Electronics. 64, 1, p. 470-479 10 p.

Multi-Level Energy Management and Optimal Control of a Residential DC Microgrid

Diaz, E. R., Anvari-Moghaddam, A., Quintero, J. C. V. & Guerrero, J. M., Jan 2017, *Proceedings of the 2017 IEEE International Conference on Consumer Electronics (ICCE)*. IEEE Press, p. 312-313 2 p. (IEEE International Conference on Consumer Electronics, (ICCE) , Vol. 2017).

Networked and Distributed Control Method with Optimal Power Dispatch for Islanded Microgrids

Li, Q., Peng, C., Chen, M., Chen, F., Kang, W., Guerrero, J. M. & Abbott, D., Jan 2017, In : I E E E Transactions on Industrial Electronics. 64, 1, p. 493 - 504 12 p.

Real-Time Reactive Power Distribution in Microgrids by Dynamic Programming

Levron, Y., Beck, Y., Katzir, L. & Guerrero, J. M., Jan 2017, In : IET Generation, Transmission & Distribution. 11, 2, p. 530 - 539 10 p.

Thermal Impact Analysis of Circulating Current in High Power Modular Online Uninterruptible Power Supplies Application

Zhang, C., Guerrero, J. M. & Quintero, J. C. V., Jan 2017, In : Energies. 10, 1, 11 p., 50.

Centralized Control Architecture for Coordination of Distributed Renewable Generation and Energy Storage in Islanded AC Microgrids

Aldana, N. L. D., Hernández, A. C. L., Quintero, J. C. V. & Guerrero, J. M., 2017, In : I E E E Transactions on Power Electronics. 32, 7, p. 5202-5213 12 p., 7564412.

Containment-based Distributed Coordination Control to Achieve Both Bounded Voltage and Precise Current Sharing in Reverse-Droop-based DC Microgrid

Han, R., Wang, H., Jin, Z., Meng, L. & Guerrero, J. M., 2017, *Proceedings of 2017 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, 7 p. (IEEE Energy Conversion Congress and Exposition).

Coordination of EVs Participation for Load Frequency Control in Isolated Microgrids

Vahedipour-Dahraie, M., Rashidizadeh-Kermani, H., Najafi, H. R., Anvari-Moghaddam, A. & Guerrero, J. M., 2017, In : Applied Sciences. 7, 6, 16 p., 539.

DC Distribution Systems and Microgrids

Dragicevic, T., Anvari-Moghaddam, A., Quintero, J. C. V. & Guerrero, J. M., 2017, *Large Scale Grid Integration of Renewable Energy Sources*. 1 ed. Institution of Engineering and Technology, p. 211-244 34 p.

Distributed power quality improvement in residential microgrids

Naderi Zarnaghi, Y., Hosseini, S. H., Ghassem Zadeh, S., Mohammadi-Ivatlo, B., Quintero, J. C. V. & Guerrero, J. M., 2017, *2017 10th International Conference on Electrical and Electronics Engineering (ELECO)*. IEEE, 5 p.

Economic power schedule and transactive energy through an intelligent centralized energy management system for a DC residential distribution system

Yue, J., Hu, Z., Li, C., Vasquez, J. C. & Guerrero, J. M., 2017, In : Energies. 10, 7, 14 p., 916.

Multi-agent system-based event-triggered hybrid control scheme for energy internet

Dou, C., Yue, D., Han, Q. L. & Guerrero, J. M., 2017, In : IEEE Access. 5, p. 3263-3272 10 p., 7858692.

On the Impact of Wireless Jamming on the Distributed Secondary Microgrid Control

Danzi, P., Stefanovic, C., Meng, L., Guerrero, J. M. & Popovski, P., 2017, *2016 IEEE Globecom Workshops (GC Wkshps)*. IEEE, 6 p. (GLOBECOM - conference record / IEEE Global Telecommunications Conference).

Optimal Design and Operation Management of Battery-Based Energy Storage Systems (BESS) in Microgrids

Anvari-Moghaddam, A., Dulout, J., Alonso, C., Jammes, B. & Guerrero, J. M., 2017, *Advancements in Energy Storage Technologies*. Cao, W. & Chen, X-P. (eds.). InTechOpen, p. 145-165 22 p.

含不对称负荷的微电网黑启动控制策略研究

Xiao, Z. X., Zhu, M. & Guerrero, J. M., 2017, *2017 年中国电工技术学会学术年会*. China Electrotechnical Society

A decentralized scalable approach to voltage control of DC islanded microgrids

Tucci, M., Rivero, S., Quintero, J. C. V., Guerrero, J. M. & Ferrari-Trecate, G., Nov 2016, In : *IEEE Transactions on Control Systems Technology*. 24, 6, p. 1965 - 1979 15 p.

An advanced current control compensation scheme to improve the microgrid power quality without using dedicated compensation devices

Naderipour, A., Zin, A. A. M., Habibuddin, M. H. & Guerrero, J. M., Nov 2016, *Proceedings of the 2016 IEEE International Conference on Power and Energy (PECon)*. IEEE Press, p. 160-165 6 p. 7951552

Conventional P- ω /Q-V Droop Control in Highly Resistive Line of Low-Voltage Converter-Based AC Microgrid

Hou, X., Sun, Y., Yuan, W., Han, H., Zhong, C. & Guerrero, J. M., Nov 2016, In : *Energies*. 9, 11, 19 p., 943.

Coordinated Secondary Control for Balanced Discharge Rate of Energy Storage System in Islanded AC Microgrids

Guan, Y., Quintero, J. C. V. & Guerrero, J. M., Nov 2016, In : *IEEE Transactions on Industry Applications*. 52, 6, p. 5019 - 5028 10 p.

Robust Droop Control of Grid-Connected Inverters

Elkayam, M., Kuperman, A. & Guerrero, J. M., Nov 2016, *Proceedings of International Conference on the Science of Electrical Engineering (ICSEE), 2016*. IEEE Press, 4 p.

Robust Two Degrees-of-freedom Single-current Control Strategy for LCL-type Grid-Connected DG System under Grid-Frequency Fluctuation and Grid-impedance Variation

Zhou, L., Chen, Y., Luo, A., Guerrero, J. M., Zhou, X., Chen, Z. & Wu, W., Nov 2016, In : *IET Power Electronics*. 9, 14, p. 2682 - 2691 10 p.

Smart Shipboard Power System Operation and Management

Kanellos, F. D., Anvari-Moghaddam, A. & Guerrero, J. M., Nov 2016, In : *Inventions*. 1, 4, p. 1-14 22.

A comprehensive study and analysis of second order harmonic ripple in DC microgrid feeding single phase PWM inverter loads

Gautam, A. R., Fulwani, D. & Guerrero, J. M., Oct 2016, *IECON 2016: 42nd Annual Conference of the IEEE Industrial Electronics Society*. IEEE Press, p. 3648 - 3653 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Adaptive Overcurrent Protection for Microgrids in Extensive Distribution Systems

Lin, H., Guerrero, J. M., Jia, C., Tan, Z-H., Quintero, J. C. V. & Liu, C., Oct 2016, *Proceedings of IECON 2016: The 42nd Annual Conference of IEEE Industrial Electronics Society*. IEEE Press, p. 4042 - 4047 6 p.

A Dynamic Consensus Algorithm based Low-Voltage Ride-Through Operation of Power Converters in Grid-Interactive Microgrids

Zhao, X., Meng, L., Savaghebi, M., Quintero, J. C. V., Guerrero, J. M. & Wu, X., Oct 2016, *Proceedings of IECON 2016: The 42nd Annual Conference of IEEE Industrial Electronics Society*. IEEE Press, p. 3660 - 3665 6 p.

A Modified Droop Control Method for Parallel-Connected Current Source Inverters

Wei, B., Guerrero, J. M., Quintero, J. C. V. & Guo, X., Oct 2016, *Proceedings of IECON 2016: The 42nd Annual Conference of IEEE Industrial Electronics Society*. IEEE Press, p. 5195 - 5200 6 p.

An Efficient Multi-objective Approach for Designing of Communication Interfaces in Smart Grids

Ghasemkhani, A., Anvari-Moghaddam, A., Guerrero, J. M. & Bak-Jensen, B., Oct 2016, *Proceedings of IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe), 2016*. IEEE Press, p. 1-6 6 p.

Cooperative Energy Management for a Cluster of Households Prosumers

Hernández, A. C. L., Aldana, N. L. D., Graells, M., Quintero, J. C. V. & Guerrero, J. M., Oct 2016, In : *IEEE Transactions on Consumer Electronics*. 62, 3, p. 235 - 242 8 p.

Coupling/Tradeoff Analysis and Novel Containment Control for Reactive Power, Output Voltage in Islanded Micro-Grid

Han, R., Meng, L., Guerrero, J. M., Sun, Q. & Quintero, J. C. V., Oct 2016, *Proceedings of the 42nd Annual Conference of IEEE Industrial Electronics Society, IECON 2016*. IEEE Press, p. 5205 - 5210 6 p.

Decentralized control for renewable DC Microgrid with composite energy storage system and UC voltage restoration connected to the grid

Bastos, R. F., Dragicevic, T., Guerrero, J. M. & Machado, R. Q., Oct 2016, *Proceedings of the 42nd Annual Conference of the IEEE Industrial Electronics Society, IECON 2016*. IEEE Press, p. 2016-2021 6 p.

Design of Energy Storage Control Strategy to Improve the PV System Power Quality

Lei, M., Yang, Z., Wang, Y., Xu, H., Meng, L., Quintero, J. C. V. & Guerrero, J. M., Oct 2016, *Proceedings of IECON 2016: 42nd Annual Conference of the IEEE Industrial Electronics Society*. IEEE Press, p. 2022 - 2027 6 p.

Droop Control with an Adjustable Complex Virtual Impedance Loop based on Cloud Model Theory

Li, Y., Shuai, Z., Xu, Q. & Guerrero, J. M., Oct 2016, *Proceedings of IECON 2016: 42nd Annual Conference of the IEEE Industrial Electronics Society*. IEEE Press, p. 3223 - 3228 6 p.

Elimination of zero sequence circulating current between parallel operating three-level inverters

Li, K., Wang, X., Dong, Z., Wang, X., Guerrero, J. M., Quintero, J. C. V. & Wang, Q., Oct 2016, *Proceedings of IECON 2016: 42nd Annual Conference of the IEEE Industrial Electronics Society*. IEEE Press, p. 2277 - 2282 6 p.

Energy Management System Based on Fuzzy fractional order PID Controller for Transient Stability Improvement in Microgrids with Energy Storage

Moafi, M., Marzband, M., Savaghebi, M. & Guerrero, J. M., Oct 2016, In : *International Transactions on Electrical Energy Systems*. 26, 10, p. 2087-2106 20 p.

Enhanced current and voltage regulators for stand-alone applications

Federico, D. B., Pastorelli, M., Antonio DeSouza Ribeiro, L., Freijedo Fernandez, F. D. & Guerrero, J. M., Oct 2016, *Proceedings of IEEE Telecommunications Energy Conference (INTELEC), 2016*. IEEE Press, 6 p.

Four-quadrant bidirectional operation of charging station upgraded with flywheel energy storage system

Sun, B., Dragicevic, T., Meng, L., Vasquez, J. C. & Guerrero, J. M., Oct 2016, *Proceedings of the IECON 2016 - 42nd Annual Conference of the Industrial Electronics Society*. IEEE Computer Society Press, p. 2052-2057 6 p. 7793405

Harmonic Damping in DG-Penetrated Distribution Network

Lu, J., Savaghebi, M. & Guerrero, J. M., Oct 2016, *IECON 2016: The 42nd Annual Conference of IEEE Industrial Electronics Society*. IEEE Press, p. 3715 - 3720 6 p.

Linear Active Disturbance Rejection Control for LCL Type Grid-connected Converter

Lu, J., Savaghebi, M., Guerrero, J. M., Quintero, J. C. V. & Xie, C., Oct 2016, *IECON 2016: The 42nd Annual Conference of IEEE Industrial Electronics Society*. IEEE Press, p. 3458 - 3463 6 p.

Optimal Adaptive Droop Control for Effective Load Sharing in AC Microgrids

Anvari-Moghaddam, A., Shafiee, Q., Quintero, J. C. V. & Guerrero, J. M., Oct 2016, *Proceedings of 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON), 2016*. IEEE Press, p. 3872 - 3877 6 p.

Optimal Planning and Operation Management of a Ship Electrical Power System with Energy Storage System

Anvari-Moghaddam, A., Dragicevic, T., Meng, L., Sun, B. & Guerrero, J. M., Oct 2016, *Proceedings of 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON), 2016*. IEEE Press, p. 2095 - 2099 5 p.

Small-Signal Analysis of the Microgrid Secondary Control Considering a Communication Time Delay

Coelho, E. A. A., Wu, D., Guerrero, J. M., Vasquez, J. C., Dragičević, T., Stefanović, Č. & Popovski, P., Oct 2016, In : *IEEE Transactions on Industrial Electronics*. 63, 10, p. 6257-6269 13 p., 7492603.

State Feedback Decoupling with In-Loop Lead Compensator in Stand-Alone VSIs

Federico, D. B., Pastorelli, M., de Sousa Ribeiro, L. A., Freijedo Fernandez, F. D. & Guerrero, J. M., Oct 2016, *Proceedings of IECON 2016: The 42nd Annual Conference of IEEE Industrial Electronics Society*. IEEE Press, p. 4241 - 4246 6 p.

Variable flow controls of closed system pumps for energy savings in maritime power systems

Su, C-L., Liao, C-H., Chou, T-C., Chou, M-H. & Guerrero, J. M., Oct 2016, *Proceedings of Industry Applications Society Annual Meeting, 2016 IEEE*. IEEE Press, 8 p. (Industry Applications Society. I E E E - I A S Annual Meeting. Conference Record).

A Circulating Current Suppression Method for Parallel Connected Voltage-Source-Inverters (VSI) with Common DC and AC Buses

Wei, B., Guerrero, J. M., Quintero, J. C. V. & Guo, X., Sep 2016, *Proceedings of 8th IEEE Energy Conversion Congress and Exposition (ECCE), 2016*. IEEE Press, 6 p.

A Control Algorithm for Electric Vehicle Fast Charging Stations Equipped with Flywheel Energy Storage Systems

Sun, B., Dragicevic, T., Freijedo Fernandez, F. D., Quintero, J. C. V. & Guerrero, J. M., Sep 2016, In : *IEEE Transactions on Power Electronics*. 31, 9, p. 6674 - 6685 12 p.

A Control Architecture to Coordinate Distributed Generators and Active Power Filters Coexisting in a Microgrid

Hashempour, M. M., Firoozabadi, M. S., Quintero, J. C. V. & Guerrero, J. M., Sep 2016, In : *IEEE Transactions on Smart Grid*. 7, 5, p. 2325 - 2336 12 p.

A Hybrid Algorithm for Fault Locating in Looped Microgrids

Beheshtaein, S., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., Sep 2016, *Proceedings of 8th Annual IEEE Energy Conversion Congress & Exposition (ECCE), 2016*. IEEE Press, 6 p.

Analysis and Damping of Harmonic Propagation in DG-Penetrated Distribution Networks

Lu, J., Savaghebi, M. & Guerrero, J. M., Sep 2016, *Proceedings of 8th Annual IEEE Energy Conversion Congress & Exposition (ECCE), 2016*. IEEE Press, 8 p. 0751

Analysis and distributed control of power flow in DC microgrids to improve system efficiency

Chen, F., Burgos, R., Boroyevich, D., Diaz, E. R., Meng, L., Quintero, J. C. V. & Guerrero, J. M., Sep 2016, *Proceedings of IEEE 2016 4th International Symposium on Environment Friendly Energies and Applications (EFEA)*. IEEE Press, 6 p.

Analysis and Improvement of the Energy Management of an Isolated Microgrid in Lencois Island based on a Linear Optimization Approach

Federico, D. B., Hernández, A. C. L., de Sousa Ribeiro, L. A., Graells, M., Saavedra, O. & Guerrero, J. M., Sep 2016, *Proceedings of 8th IEEE Energy Conversion Congress and Exposition (ECCE), 2016*. IEEE Press, 7 p.

Analysis, Design and Implementation of a Quasi-Proportional-Resonant Controller for a Multifunctional Capacitive-Coupling Grid-Connected Inverter

Ye, T., Dai, N-Y., Lam, C-S., Wong, M-C. & Guerrero, J. M., Sep 2016, In : *IEEE Transactions on Industry Applications*. 52, 5, p. 4269 - 4280 12 p.

An Embedded Voltage Harmonic Compensation Strategy for Current Controlled DG Interfacing Converters

Zhao, X., Meng, L., Guerrero, J. M., Savaghebi, M., Quintero, J. C. V., Xie, C. & Wu, X., Sep 2016, *Proceedings of 8th Annual IEEE Energy Conversion Congress and Exposition (ECCE) 2016*. IEEE Press, 7 p.

An Enhanced Power Sharing Scheme for Voltage unbalance and harmonics compensation in an islanded AC microgrid

Han, Y., Shen, P., Zhao, X. & Guerrero, J. M., Sep 2016, In : *IEEE Transactions on Energy Conversion*. 31, 3, p. 1037 - 1050 14 p.

A Repetitive Control Scheme Aimed at Compensating the 6k + 1 Harmonics for a Three-Phase Hybrid Active Filter

Luo, Z., Su, M., Yang, J., Sun, Y., Hou, X. & Guerrero, J. M., Sep 2016, In : *Energies*. 9, 10, 17 p., 787.

A Riding-through Technique for Seamless Transition between Islanded and Grid-Connected Modes of Droop-Controlled Inverters

Hu, S., Lee, T-L., Kuo, C-Y. & Guerrero, J. M., Sep 2016, In : *Energies*. 9, 9, 15 p., 732.

A Root-Locus Design Methodology Derived from the Impedance Stability Criterion and Its Application for LCL Grid-Connected Converters

Diaz, E. R., Freijedo Fernandez, F. D., Golsorkhi, M., Quintero, J. C. V. & Guerrero, J. M., Sep 2016, *Proceedings of 18th European Conference on Power Electronics and Applications (EPE'16 ECCE Europe), 2016*. IEEE Press, 10 p.

Control Design of VSIs to Enhance Transient Performance in Microgrids

Federico, D. B., Antonio DeSouza Ribeiro, L., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., Sep 2016, *Proceedings of 18th European Conference on Power Electronics and Applications (EPE'16 - ECCE Europe)*. IEEE, 8 p.

Control Method of Single-phase Inverter Based Grounding System in Distribution Networks

Wang, W., Yan, L., Zeng, X., Zhao, X., Wei, B. & Guerrero, J. M., Sep 2016, *Proceedings of 8th IEEE Energy Conversion Congress and Exposition (ECCE), 2016*. IEEE Press, 6 p.

Distributed Coordination of Electric Vehicle Charging in a Community Microgrid Considering Real-Time Price

Li, C., Schaltz, E., Quintero, J. C. V. & Guerrero, J. M., Sep 2016, *Proceedings of the 18th European Conference on Power Electronics and Applications (EPE'16 ECCE-Europe), 2016*. IEEE Press, 8 p.

Effect of state feedback coupling on the transient performance of voltage source inverters with LC filter

Federico, D. B., Pastorelli, M., Antonio DeSouza Ribeiro, L., Freijedo Fernandez, F. D. & Guerrero, J. M., Sep 2016, *Proceedings of 18th European Conference on Power Electronics and Applications (EPE'16 ECCE Europe), 2016*. IEEE Press, 8 p.

Enhanced Power Quality and Minimized Peak Current Control in An Inverter based Microgrid under Unbalanced Grid Faults

Liu, W., Guo, X., Sulligoi, G., Guan, Y., Zhao, X., Wei, B., Savaghebi, M. & Guerrero, J. M., Sep 2016, *Proceedings of 8th Annual IEEE Energy Conversion Congress & Exposition (ECCE), 2016*. IEEE Press, 6 p.

Enhancement of Current and Voltage Controllers Performance by Means of Lead Compensation and Anti-Windup for Islanded Microgrids

Federico, D. B., de Sousa Ribeiro, L. A., Freijedo Fernandez, F. D., Guerrero, J. M. & Pastorelli, M., Sep 2016, *Proceedings of 8th IEEE Energy Conversion Congress and Exposition (ECCE), 2016*. IEEE Press, 7 p.

Harmonic currents Compensator Grid-Connected Inverter at the Microgrid

Asuhaimi Mohd Zin, A., Naderipour, A., Habibuddin, M. H. & Guerrero, J. M., Sep 2016, In : *Electronics Letters*. 52, 20, p. 1714 - 1715 2 p.

Implementation issues on the design of current loops based on resonant regulators for isolated microgrids

Federico, D. B., Pastorelli, M., Antonio DeSouza Ribeiro, L., Freijedo Fernandez, F. D. & Guerrero, J. M., Sep 2016, *Proceedings of 18th European Conference on Power Electronics and Applications (EPE'16 ECCE, Europe), 2016*. IEEE Press, 10 p.

Macro Protections for Micro Grids: Toward a New Protection Paradigm Subsequent to Distributed Energy Resource Integration

Teimourzadeh, S., Aminifar, F., Davarpanah, M. & Guerrero, J. M., Sep 2016, In : I E E E Industrial Electronics Magazine. 10, 3, p. 6-18 13 p.

Marginal Generation Technology in the Chinese Power Market towards 2030 Based on Consequential Life Cycle Assessment

Zhao, G., Guerrero, J. M. & Pei, Y., Sep 2016, In : Energies. 9, 10, 14 p., 788.

Open-Switch Fault Diagnosis and Fault Tolerant for Matrix Converter with Finite Control Set-Model Predictive Control

Peng, T., Dan, H., Yang, J., Deng, H., Zhu, Q., Wang, C., Gui, W. & Guerrero, J. M., Sep 2016, In : I E E E Transactions on Industrial Electronics. 63, 9, p. 5953 - 5963 11 p.

Operation Cost Minimization of Droop-Controlled AC Microgrids Using Multiagent-Based Distributed Control

Li, C., Savaghebi, M., Guerrero, J. M., Coelho, E. A. A. & Quintero, J. C. V., Sep 2016, In : Energies. 9, 9, 19 p., 717.

Performance Evaluations of Four MAF-Based PLL Algorithms for Grid-Synchronization of Three-Phase Grid-Connected PWM Inverters and DGs

Han, Y., Luo, M., Chen, C., Jiang, A., Zhao, X. & Guerrero, J. M., Sep 2016, In : Journal of Power Electronics. 16, 5, p. 1904-1917

Power Oscillations Damping in DC Microgrids

Hamzeh, M., Ghafouri, M., Karimi, H., Sheshyekani, K. & Guerrero, J. M., Sep 2016, In : I E E E Transactions on Energy Conversion. 31, 3, p. 970 - 980 11 p.

Small-Signal Modeling of the PVR-Based AD Scheme and Controller Design for Three-Phase Standalone DG System

Shen, P., Han, Y., Lu, C. & Guerrero, J. M., Sep 2016, In : Journal of Electrical Engineering & Technology. 11, 5, p. 1165-1178 14 p.

Voltage and Current Regulators Design of Power Converters in Islanded Microgrids based on State Feedback Decoupling

Federico, D. B., de Sousa Ribeiro, L. A., Freijedo Fernandez, F. D., Guerrero, J. M. & Pastorelli, M., Sep 2016, *Proceedings of 8th IEEE Energy Conversion Congress and Exposition, 2016: ECCE 2016*. IEEE Press, 7 p.

A Coordinated Control for Photovoltaic Generators and Energy Storages in Low-Voltage AC/DC Hybrid Microgrids under Islanded Mode

Liu, Y., Hou, X., Wang, X., Lin, C. & Guerrero, J. M., Aug 2016, In : Energies. 9, 8, 15 p., 651.

Capacitor Current Feedback-Based Active Resonance Damping Strategies for Digitally-Controlled Inductive-Capacitive-Inductive-Filtered Grid-Connected Inverters

Lorzadeh, I., Askarian Abyaneh, H., Savaghebi, M., Bakhshai, A. & Guerrero, J. M., Aug 2016, In : Energies. 9, 8, 32 p., 642.

Comparative studies on control systems for a two-blade variable-speed wind turbine with a speed exclusion zone

Yang, J., Song, D., Dong, M., Chen, S., Zou, L. & Guerrero, J. M., Aug 2016, In : Energy. 109, p. 294-309 16 p.

DC-Offset Rejection in Phase-Locked Loops: A Novel Approach

Golestan, S., Guerrero, J. M. & Vasquez, J. C., Aug 2016, In : IEEE Transactions on Industrial Electronics. 63, 8, p. 4942-4946 5 p., 7439853.

Effect of State Feedback Coupling and System Delays on the Transient Performance of Stand-Alone VSI with LC Output Filter

Federico, D. B., de Sousa Ribeiro, L. A., Freijedo Fernandez, F. D., Pastorelli, M. & Guerrero, J. M., Aug 2016, In : I E E E Transactions on Industrial Electronics. 63, 8, p. 4909 - 4918 10 p.

Fast Reactive Power Sharing, Circulating Current and Resonance Suppression for Parallel Inverters Using Resistive-Capacitive Output Impedance

Chen, Y., Guerrero, J. M., Shuai, Z., Chen, Z., Zhou, L. & Luo, A., Aug 2016, In : I E E Transactions on Power Electronics. 31, 8, p. 5524-5537 14 p.

Model-independent approach for short-term electric load forecasting with guaranteed error convergence

Shen, Z., Wu, X., Guerrero, J. M. & Song, Y., Aug 2016, In : IET Control Theory and Applications. 10, 12, p. 1365-1373 9 p.

Multiobjective Optimization in Combinatorial Wind Farms System Integration and Resistive SFCL Using Analytical Hierarchy Process

Moghadasi, A., Sarwat, A. & Guerrero, J. M., Aug 2016, In : Renewable Energy. 94, p. 366-382 17 p.

Multiple-Time-Scales Hierarchical Frequency Stability Control Strategy of Medium-Voltage Isolated Microgrid

Zhao, Z., Yang, P., Guerrero, J. M., Xu, Z. & C. Green, T., Aug 2016, In : I E E Transactions on Power Electronics. 31, 8, p. 5974 - 5991 18 p.

Microgrid supervisory controllers and energy management systems: A literature review

Meng, L., Sanseverino, E. R., LUNA HERNANDEZ, ADRIANA. CAROLINA., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., 1 Jul 2016, In : Renewable & Sustainable Energy Reviews. 60, p. 1263-1273 11 p.

A control architecture to coordinate distributed generators and active power filters coexisting in a microgrid

Hashempour, M. M., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., Jul 2016, *2016 IEEE Power and Energy Society General Meeting (PESGM)*. IEEE Press

A Feed-Forward Control Realizing Fast Response for Three-Branch Interleaved DC-DC Converter in DC Microgrid

Wang, H., Han, M., Yan, W., Zhao, G. & Guerrero, J. M., Jul 2016, In : Energies. 9, 7, 12 p., 529.

A knowledge discovery in databases approach for industrial microgrid planning

Gamarra, C., Guerrero, J. M. & Montero, E., Jul 2016, In : Renewable & Sustainable Energy Reviews. 60, p. 615-630 16 p.

Control Architecture for Parallel-Connected Inverters in Uninterruptible Power Systems

Zhang, C., Guerrero, J. M., Quintero, J. C. V. & Coelho, E. A. A., Jul 2016, In : I E E Transactions on Power Electronics. 31, 7, p. 5176 - 5188 13 p.

Coordinated Demand Response and Distributed Generation Management in Residential Smart Microgrids

Anvari-Moghaddam, A., Mokhtari, G. & Guerrero, J. M., Jul 2016, *Energy Management of Distributed Generation Systems*. Mihet, D. E. L. (ed.). InTechOpen, 32 p.

Distributed adaptive droop control for DC distribution systems

Nasirian, V., Davoudi, A., Lewis, F. & Guerrero, J. M., Jul 2016, *Proceedings of IEEE Power and Energy Society General Meeting (PESGM), 2016*. IEEE Press, 1 p.

Evaluation of the hierarchical control of distributed Energy Storage Systems in islanded Microgrids based on Std IEC/ISO 62264

Palizban, O., Kauhaniemi, K. & Guerrero, J. M., Jul 2016, *Proceedings of IEEE Power and Energy Society General Meeting (PESGM), 2016*. IEEE Press, 5 p.

Multiagent-Based Reactive Power Sharing and Control Model for Islanded Microgrids

Chen, F., Chen, M., Li, Q., Meng, K., Guerrero, J. M. & Abbott, D., Jul 2016, In : IEEE Transactions on Sustainable Energy. 7, 3, p. 1232 - 1244 13 p.

Tertiary control of voltage unbalance compensation for optimal power quality in islanded microgrids

Meng, L., Tang, F., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., Jul 2016, *Proceedings of IEEE Power and Energy Society General Meeting (PESGM), 2016*. IEEE Press, 1 p.

Virtual Admittance Loop for Voltage Harmonic Compensation in Microgrids

Blanco, C., Reigosa, D., Quintero, J. C. V., Guerrero, J. M. & Briz, F., Jul 2016, In : *IEEE Transactions on Industry Applications*. 52, 4, p. 3348 - 3356 9 p.

Virtual Admittance Loop for Voltage Harmonic Compensation in Microgrids

Blanco, C., Reigosa, D., Vasquez, J. C., Guerrero, J. M. & Briz, F., Jul 2016, In : *IEEE Transactions on Industry Applications*. 52, 4, p. 3348 - 3356 9 p.

A New Way of Controlling Parallel-Connected Inverters by Using Synchronous-Reference-Frame Virtual Impedance Loop: —Part I: Control Principle

Guan, Y., Guerrero, J. M., Zhao, X., Quintero, J. C. V. & Guo, X., Jun 2016, In : *IEEE Transactions on Power Electronics*. 31, 6, p. 4576 - 4593 18 p.

A True Open-Loop Synchronization Technique

Golestan, S., Vidal, A., Yepes, A. G., Guerrero, J. M., Vasquez, J. C. & Doval-Gandoy, J., Jun 2016, In : *IEEE Transactions on Industrial Informatics*. 12, 3, p. 1093 - 1103 11 p.

Distributed Smart Decision-Making for a Multimicrogrid System Based on a Hierarchical Interactive Architecture

Marzband, M., Parhizi, N., Savaghebi, M. & Guerrero, J. M., Jun 2016, In : *IEEE Transactions on Energy Conversion*. 31, 2, p. 637 - 648 12 p.

Improved grid operation through power smoothing control strategies utilizing dedicated energy storage at an electric vehicle charging station

Martinsen, T., Holjevac, N., Bremdal, B. A., Kuzle, I., Guerrero, J. M., Dragicevic, T., Pavic, I. & Shafiee, Q., Jun 2016, *Proceedings of CIREP Workshop 2016*. Institution of Engineering and Technology, 4 p.

Modular Online Uninterruptible Power System Plug'n'Play Control and Stability Analysis

Zhang, C., Coelho, E. A. A., Guerrero, J. M. & Quintero, J. C. V., Jun 2016, In : *IEEE Transactions on Industrial Electronics*. 63, 6, p. 3765 - 3776 12 p.

Next-Generation Shipboard DC Power System: Introduction Smart Grid and dc Microgrid Technologies into Maritime Electrical Networks

Jin, Z., Sulligoi, G., Cuzner, R., Meng, L., Quintero, J. C. V. & Guerrero, J. M., Jun 2016, In : *IEEE Electrification Magazine*. 4, 2, p. 45-57 13 p.

Optimal Real-time Dispatch for Integrated Energy Systems: An Ontology-Based Multi-Agent Approach

Anvari-Moghaddam, A., Guerrero, J. M., Rahimi-Kian, A. & Mirian, M. S., Jun 2016, *7th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), 2016*. IEEE Press, p. 1-7 7 p. (2016 IEEE 7th International Symposium on Power Electronics for Distributed Generation Systems (PEDG)).

Performance Comparison for Virtual Impedance Techniques Used in Droop Controlled Islanded Microgrids

Micallef, A., Apap, M., Spiteri-Staines, C. & Guerrero, J. M., Jun 2016, *Proceedings of IEEE International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM), 2016*. IEEE Press, p. 695 - 700 6 p.

PLL with MAF-Based Prefiltering Stage: Small-Signal Modeling and Performance Enhancement

Golestan, S., Guerrero, J. M., Vidal, A., Yepes, A. G. & Doval-Gandoy, J., Jun 2016, In : *IEEE Transactions on Power Electronics*. 31, 6, p. 4013 - 4019 7 p.

Shipboard Microgrids: Maritime Islanded Power Systems Technologies

Guerrero, J. M., Jin, Z., Liu, W., Othman, M. B., Savaghebi, M., Anvari-Moghaddam, A., Meng, L. & Vasquez, J. C., Jun 2016, *Proceedings of PCIM ASIA 2016. International Exhibition and Conference for Power Electronics, Intelligent Motion,*

Renewable Energy and Energy Management. VDE Verlag GMBH, p. 135-142 8 p.

Voltage-Level Selection of Future Two-Level LVdc Distribution Grids: A Compromise Between Grid Compatibility, Safety, and Efficiency

Diaz, E. R., Chen, F., Quintero, J. C. V., Guerrero, J. M., Burgos, R. & Boroyevich, D., Jun 2016, In : I E E E Electrification Magazine. 4, 2, p. 20-28

A GPS-Based Control Method for Load Sharing and Power Quality Improvement in Microgrids

Golsorkhi, M., Lu, D., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., May 2016, *Proceedings of 2016 8th International Power Electronics and Motion Control Conference - ECCE Asia (IPEMC 2016-ECCE Asia)*. IEEE, p. 3734 - 3740 7 p.

Comparative Performance Evaluation of Orthogonal-Signal-Generators-Based Single-Phase PLL Algorithms: A Survey

Han, Y., Luo, M., Zhao, X., Guerrero, J. M. & Xu, L., May 2016, In : I E E E Transactions on Power Electronics. 31, 5, p. 3932-3944 13 p.

Comparison of a Synchronous Reference Frame Virtual Impedance-Based Autonomous Current Sharing Control with Conventional Droop Control for Parallel-Connected Inverters

Guan, Y., Guerrero, J. M., Zhao, X. & Quintero, J. C. V., May 2016, *2016 8th International Power Electronics and Motion Control Conference - ECCE Asia (IPEMC 2016-ECCE Asia)*. IEEE Press, p. 3419 - 3426 8 p. 7512844

Control architecture for paralleled current-source-inverter (CSI) based uninterruptible power systems (UPS)

Wei, B., Vasquez, J. C., Guerrero, J. M. & Guo, X., May 2016, *Proceedings of 2016 IEEE 8th International Power Electronics and Motion Control Conference, IPEMC-ECCE Asia 2016*. IEEE Press, p. 151-156 6 p. 7512278

Control strategy of interlinking converters as the key segment of hybrid AC–DC microgrids

Baharizadeh, M., Karshenas, H. R. & Guerrero, J. M., May 2016, In : IET Generation, Transmission & Distribution. 10, 7, p. 1671 - 1681 11 p.

Coordinated Control for Flywheel Energy Storage Matrix Systems for Wind Farm Based on Charging/Discharging Ratio Consensus Algorithms

Cao, Q., Song, Y. D., Guerrero, J. M. & Tian, S., May 2016, In : I E E E Transactions on Smart Grid. 7, 3, p. 1259 - 1267 9 p.

DC Microgrids—Part II: A Review of Power Architectures, Applications, and Standardization Issues

Dragicevic, T., Lu, X., Quintero, J. C. V. & Guerrero, J. M., May 2016, In : I E E E Transactions on Power Electronics. 31, 5, p. 3528 - 3549 22 p.

Inducverters: PLL-Less Converters with Auto-Synchronization and Emulated Inertia Capability

Ashabani, M., Freijedo Fernandez, F. D., Golestan, S. & Guerrero, J. M., May 2016, In : I E E E Transactions on Smart Grid. 7, 3, p. 1660 - 1674 15 p.

Innovative planning synergies between manufacturing processes and microgrids

Gamarra, C., Ortega, M., Montero, E. & Guerrero, J. M., May 2016, In : Renewable Energy and Power Quality Journal. 1, 14, p. 939-944 6 p.

Maritime DC Microgrids - A Combination of Microgrid Technologies and Maritime Onboard Power System for Future Ships

Jin, Z., Savaghebi, M., Quintero, J. C. V., Meng, L. & Guerrero, J. M., May 2016, *Proceedings of 2016 8th International Power Electronics and Motion Control Conference - ECCE Asia (IPEMC 2016-ECCE Asia)*. IEEE, p. 179 - 184 6 p.

Modeling and Sensitivity Study of Consensus Algorithm-Based Distributed Hierarchical Control for DC Microgrids

Meng, L., Dragicevic, T., Roldan Perez, J., Vasquez, J. C. & Guerrero, J. M., May 2016, In : I E E E Transactions on Smart Grid. 7, 3, p. 1504 - 1515 12 p.

Modular Plug'n'Play Control Architectures for Three-Phase Inverters in UPS Applications

Zhang, C., Guerrero, J. M., Vasquez, J. C. & Seniger, C. M., May 2016, In : IEEE Transactions on Industry Applications. 52, 3, p. 2405-2414 10 p., 7386651.

Optimal Power Scheduling for an Islanded Hybrid Microgrid

Hernández, A. C. L., Aldana, N. L. D., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., May 2016, *Proceedings of 2016 8th International Power Electronics and Motion Control Conference - ECCE Asia (IPEMC 2016-ECCE Asia)*. IEEE, p. 1787 - 1792 7 p.

Resonance Damping and Parameter Design Method for LCL-LC Filter Interfaced Grid-Connected Photovoltaic Inverters

Li, Z., Jiang, A., Shen, P., Han, Y. & Guerrero, J. M., May 2016, *Proceedings of 8th IEEE International Power Electronics and Motion Control Conference (IPEMC-ECCE Asia), 2016*. IEEE Press, 6 p.

Review on the integration of photovoltaic renewable energy in developing countries: Special attention to the Lebanese case

Khoury, J., Mbayed, R., Salloum, G., Monmasson, E. & Guerrero, J. M., May 2016, In : Renewable & Sustainable Energy Reviews. 57, p. 562-575 14 p.

Secondary Control Strategies for Frequency Restoration in Islanded Microgrids with Consideration of Communication Delays

Ahumada, C., Cardenas, R., Saez, D. & Guerrero, J. M., May 2016, In : IEEE Transactions on Smart Grid. 7, 3, p. 1430 - 1441 12 p.

Small-Signal Modeling, Stability Analysis and Design Optimization of Single-Phase Delay-Based PLLs

Golestan, S., Guerrero, J. M., Vidal, A., Yepes, A. G., Doval-Gandoy, J. & Freijedo Fernandez, F. D., May 2016, In : IEEE Transactions on Power Electronics. 31, 5, p. 3517-3527 11 p.

The Frequency Fluctuation Impact Analysis for Droop Controlled Grid-connecting Inverter in Microgrid

Wei, F., Sun, K., Guan, Y., Guerrero, J. M. & Xiao, X., May 2016, *2016 8th International Power Electronics and Motion Control Conference - ECCE Asia (IPEMC 2016-ECCE Asia)*. IEEE Press, p. 3715 - 3722 8 p.

Uninterruptible power supplies

Guerrero, J. M. & Vasquez, J. C., 19 Apr 2016, *Power Electronics and Motor Drives*. CRC Press, p. 18.1-18.22

Convergence Analysis of Distributed Control for Operation Cost Minimization of Droop Controlled DC Microgrid Based on Multiagent

Li, C., Quintero, J. C. V. & Guerrero, J. M., Mar 2016, *Proceedings of the 31st Annual IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE, p. 3459 - 3464 6 p.

Effects and Analysis of Minimum Pulse Width Limitation on Adaptive DC Voltage Control of Grid Converters

Sun, B., Trintis, I., Munk-Nielsen, S. & Guerrero, J. M., Mar 2016, *Proceedings of the 31st Annual IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 1376 - 1380 5 p.

Flexible System Integration and Advanced Hierarchical Control Architectures in the Microgrid Research Laboratory of Aalborg University

Meng, L., Hernández, A. C. L., Diaz, E. R., Sun, B., Dragicevic, T., Savaghebi, M., Quintero, J. C. V., Guerrero, J. M., Graells, M. & Andrade, F., Mar 2016, In : IEEE Transactions on Industry Applications. 52, 2

Inrush Transient Current Analysis and Suppression of Photovoltaic Grid-Connected Inverters During Voltage Sag

Li, Z., Zhao, R., Xin, Z., Guerrero, J. M., Savaghebi, M. & Li, P., Mar 2016, *Proceedings of 2016 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 3697 - 3703 7 p.

Intelligent DC Homes in Future Sustainable Energy Systems: When efficiency and Intelligence Work Together

Diaz, E. R., Quintero, J. C. V. & Guerrero, J. M., Mar 2016, In : IEEE Consumer Electronics Magazine. 5, 1, p. 74 - 80 7 p.

Leakage Current Elimination of Four-Leg Inverter for Transformerless Three-Phase PV Systems

Guo, X., He, R., Jian, J., Lu, Z., Sun, X. & Guerrero, J. M., Mar 2016, In : I E E E Transactions on Power Electronics. 31, 3, p. 1841-1846 6 p.

Optimal Power Scheduling for a Grid-Connected Hybrid PV-Wind-Battery Microgrid System

Hernández, A. C. L., Aldana, N. L. D., Savaghebi, M., Quintero, J. C. V., Guerrero, J. M., Sun, K., Chen, G. & Sun, L., Mar 2016, *Proceedings of the 31st Annual IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE, p. 1227 - 1234 8 p.

Single phase cascaded H5 inverter with leakage current elimination for transformerless photovoltaic system

Guo, X., Jia, X., Lu, Z. & Guerrero, J. M., Mar 2016, *Proceedings of 2016 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 398-401 4 p.

An Efficient Implementation of Generalized Delayed Signal Cancellation PLL

Golestan, S., Fernandez, F. D. F., Vidal, A., Yepes, A. G., Guerrero, J. M. & Doval-Gandoy, J., Feb 2016, In : I E E E Transactions on Power Electronics. 31, 2, p. 1085-1094 10 p.

Droop-free Distributed Control for AC Microgrids

Nasirian, V., Shafiee, Q., Guerrero, J. M., L. Lewis, F. & Davoudi, A., Feb 2016, In : I E E E Transactions on Power Electronics. 31, 2, p. 1600 - 1617 18 p.

Method for Load Sharing and Power Management in a Hybrid PV/Battery Source Islanded Microgrid

Karimi, Y., Oraee, H., Guerrero, J. M., Quintero, J. C. V. & Savaghebi, M., Feb 2016, *Proceedings of IEEE 7th Power Electronics and Drive Systems Technologies Conference (PEDSTC), 2016*. IEEE, p. 652-657 6 p.

Voltage Unbalance and Harmonic Compensation in Microgrids by Cooperation of Distributed Generators and Active Power Filters

Hashempour, M. M., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., Feb 2016, *Proceedings of IEEE 7th Power Electronics and Drive Systems Technologies Conference (PEDSTC), 2016*. IEEE Press, p. 646-651 6 p.

三相LCL 型并网逆变器控制策略与稳定性分析

Shen, P., Han, Y. & Guerrero, J. M., Feb 2016, In : Dianli Dianzi Jishu. 50, 2, p. 66-68

Optimization design of DC micro-grid stability controller based on the autonomous decentralized system

Wang, H., Han, M., Guerrero, J. M. & Luan, W., 20 Jan 2016, In : Zhongguo Dianji Gongcheng Xuebao. 36, 2, p. 360-367 8 p.

Assessing the Potential of Plug-in Electric Vehicles in Active Distribution Networks

Kordheili, R. A., Pourmousavi, S. A., Savaghebi, M., Guerrero, J. M. & Hashem Nehrir, M., Jan 2016, In : Energies. 9, 1, 17 p., 34.

Cooperative Management for a Cluster of Residential Prosumers

Hernández, A. C. L., Aldana, N. L. D., Graells, M., Guerrero, J. M. & Quintero, J. C. V., Jan 2016, *Proceedings of the 2016 IEEE International Conference on Consumer Electronics (ICCE)*. IEEE, p. 593 - 594 2 p.

Development and Integration of a HEMS with an Advanced Smart Metering Infrastructure

Diaz, E. R., Palacios-Garcia, E. J., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., Jan 2016, *2016 IEEE International Conference on Consumer Electronics (ICCE)*. IEEE, p. 544 - 545 2 p.

Distributed Voltage Unbalance Compensation in Islanded Microgrids by Using Dynamic-Consensus-Algorithm

Meng, L., Zhao, X., Tang, F., Savaghebi, M., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., Jan 2016, In : I E E E Transactions on Power Electronics. 31, 1, p. 827 - 838 12 p.

Five Approaches to Deal With Problem of DC Offset in Phase-Locked Loop Algorithms: Design Considerations and Performance Evaluations

Golestan, S., Guerrero, J. M. & Gharehpetian, G. B., Jan 2016, In : I E E E Transactions on Power Electronics. 31, 1, p. 648 - 661 14 p.

Generalized coupling resonance modeling, analysis, and active damping of multi-parallel inverters in microgrid operating in grid-connected mode

Chen, Z., Chen, Y., Guerrero, J. M., Kuang, H., Huang, Y., Zhou, L. & Luo, A., Jan 2016, In : Journal of Modern Power Systems and Clean Energy. 4, 1, p. 63-75 13 p.

General Unified Integral Controller with Zero Steady-State Error for Single-Phase Grid-Connected Inverters

Guo, X. & Guerrero, J. M., Jan 2016, In : I E E E Transactions on Smart Grid. 7, 1, p. 74-83 10 p.

Modular Energy Management System Applicable to Residential Microgrids

Hernández, A. C. L., Aldana, N. L. D., Graells, M., Guerrero, J. M. & Quintero, J. C. V., Jan 2016, *2016 IEEE International Conference on Consumer Electronics (ICCE)*. IEEE, p. 542 - 543 2 p.

Review of Power Sharing Control Strategies for Islanding Operation of AC Microgrids

Han, H., Hou, X., Yang, J., Wu, J., Su, M. & Guerrero, J. M., Jan 2016, In : I E E E Transactions on Smart Grid. 7, 1, p. 200 - 215 16 p.

Stationary Frame Current Control Evaluations for Three-Phase Grid-Connected Inverters with PVR-based Active Damped LCL Filters

Han, Y., Shen, P. & Guerrero, J. M., Jan 2016, In : Journal of Power Electronics. 16, 1, p. 297-309

Abc-frame complex-coefficient filter and controller based current harmonic elimination strategy for three-phase grid connected inverter

Guo, X. & Guerrero, J. M., 2016, In : Journal of Modern Power Systems and Clean Energy. 4, 1, p. 87-93 7 p.

A Circulating Current Suppression Method for Parallel Connected Voltage-Source-Inverters (VSI) with Common DC and AC Buses

Wei, B., Guerrero, J. M., Vasquez, J. C., Guo, X. & IEEE, 2016, *2016 Ieee Energy Conversion Congress and Exposition (Ecce)*.

A Comprehensive Review of Low-Voltage-Ride-Through Methods for Fixed-Speed Wind Power Generators

Moghadasi, A., Sarwat, A. & Guerrero, J. M., 2016, In : Renewable & Sustainable Energy Reviews. 55, p. 823–839 17 p.

Agent-Based Decentralized Control Method for Islanded Microgrids

Li, Q., Chen, F., Chen, M., Guerrero, J. M. & Abbott, D., 2016, In : I E E E Transactions on Smart Grid. 7, 2, p. 637-649 13 p.

A Hybrid Estimator for Active/Reactive Power Control of Single-Phase Distributed Generation Systems with Energy Storage

Pahlevani, M., Eren, S., Guerrero, J. M. & Jain, P., 2016, In : I E E E Transactions on Power Electronics. 31, 4, p. 2919 - 2936 18 p.

DC Microgrids – Part I: A Review of Control Strategies and Stabilization Techniques

Dragicevic, T., Lu, X., Quintero, J. C. V. & Guerrero, J. M., 2016, In : I E E E Transactions on Power Electronics. 31, 7, p. 4876 - 4891

Decentralized method for load sharing and power management in a hybrid single/three-phase islanded microgrid consisting of hybrid source PV/battery units

Karimi, Y., Guerrero, J. M. & Oraee, H., 2016, *Proceedings of the IEEE Energy Conversion Congress and Exposition, (ECCE) 2016*. IEEE, 8 p. 7854997

Distributed voltage control and load sharing for inverter-interfaced microgrid with resistive lines

Golsorkhi, M. S., Lu, D. D. C., Shafiee, Q. & Guerrero, J. M., 2016, *Proceedings of the IEEE Energy Conversion Congress and Exposition, ECCE 2016*. IEEE Press, 7 p. 7855050

Fault Ride Through Control of Photovoltaic Grid-connected Inverter with Current-limited Capability under Offshore Unbalanced Voltage Conditions

Liu, W., Guo, X., Savaghebi, M. & Guerrero, J. M., 2016, *Proceedings of Offshore energy & storage symposium 2016*. University of Malta Press

Optimal power flow for technically feasible Energy Management systems in Islanded Microgrids

Sanseverino, E. R., T. T. Quynh, T., Di Silvestre, M. L., Zizzo, G., Quang, N. N., Hernández, A. C. L. & Guerrero, J. M., 2016, *Proceedings of IEEE 16th International Conference on Environment and Electrical Engineering (EEEIC), 2016*. Italy: IEEE Press, 6 p.

基于SMC的交直流混合微电网接口换流器控制策略

Su, X., Han, M., Guerrero, J. M. & Zhao, X., 2016, In : *Science & Technology Review - Keji Daobao*. 34, 2, p. 299-304

基于自律分散系统的直流微电网稳定控制器优化设计

Wang, H., Han, M., Guerrero, J. M. & Luan, W., 2016, In : *Zhongguo Dianji Gongcheng Xuebao*.

An Analysis of Modified Demodulation-Based Grid Voltage Parameter Estimator

Golestan, S. & Guerrero, J. M., Dec 2015, In : *IEEE Transactions on Power Electronics*. 30, 12, p. 6528-6533 6 p.

Voltage control of DC islanded microgrids: A decentralized scalable approach

Tucci, M., Rivero, S., Quintero, J. C. V., Guerrero, J. M. & Ferrari-Trecate, G., Dec 2015, *54th IEEE Conference on Decision and Control*. IEEE Press, p. 3149 - 3154 6 p.

Zonal protection of DC swarm microgrids using a novel multi-terminal grid interface with decentralized control

Heinbokel, B., Kirchhoff, H., Dragicevic, T. & Guerrero, J. M., 30 Nov 2015, *50th International Universities Power Engineering Conference (UPEC)*. IEEE Press, p. 1-6 6 p. 7339889

A fuzzy-based hybrid PLL scheme for abnormal grid conditions

Beheshtaein, S., Savaghebi, M. & Guerrero, J. M., Nov 2015, *Proceedings of the 41th Annual Conference of IEEE Industrial Electronics Society, IECON 2015*. IEEE Press, p. 005095 - 005100 6 p.

A Multiagent-based Consensus Algorithm for Distributed Coordinated Control of Distributed Generators in the Energy Internet

Sun, Q., Han, R., Zhang, H., Zhou, J. & Guerrero, J. M., Nov 2015, In : *IEEE Transactions on Smart Grid*. 6, 6, p. 3006-3019 14 p.

A robust and fast generic voltage sag detection technique

L. Dantas, J., Lima, F. K. A., Branco, C. G. C., Guerrero, J. M. & Quintero, J. C. V., Nov 2015, *Proceedings of 2015 IEEE 13th Brazilian Power Electronics Conference and 1st Southern Power Electronics Conference (COBEP/SPEC)*. IEEE Press, p. 1 - 6 6 p.

Coordinated Control Based on Bus-Signaling and Virtual Inertia for Islanded DC Microgrids

Wu, D., Tang, F., Dragicevic, T., Guerrero, J. M. & Vasquez, J. C., Nov 2015, In : *IEEE Transactions on Smart Grid*. 6, 6, p. 2627 - 2638 12 p.

Current control loop design and analysis based on resonant regulators for microgrid applications

Federico, D. B., Pastorelli, M., de Sousa Ribeiro, L. A., Soares Lima, M., Freijedo Fernandez, F. D. & Guerrero, J. M., Nov 2015, *Proceedings of the IEEE Industrial Electronics Conference 2015*. IEEE, p. 005322-005327

Distributed Active Synchronization Strategy for Microgrid Seamless Reconnection to the Grid under Unbalance and Harmonic Distortion

Tang, F., Guerrero, J. M., Vasquez, J. C., Wu, D. & Meng, L., Nov 2015, In : I E E E Transactions on Smart Grid. 6, 6, p. 2757-2769 13 p.

Distributed Low Voltage Ride-Through Operation of Power Converters in Grid-Connected Microgrids under Voltage Sags

Zhao, X., Meng, L., Dragicevic, T., Savaghebi, M., Guerrero, J. M., Quintero, J. C. V. & Wu, X., Nov 2015, *Proceedings of the 41th Annual Conference of IEEE Industrial Electronics Society, IECON 2015*. IEEE Press, p. 001909 - 001914

Dynamic Stability Analysis of Autonomous Medium-Voltage Mixed-Source Microgrid

Zhao, Z., Yang, P., Guerrero, J. M., Xu, Z., C. Green, T., Lei, J., Guo, X. & Li, P., Nov 2015, *Proceedings of the 41th Annual Conference of IEEE Industrial Electronics Society, IECON 2015*. IEEE Press, p. 001801 - 001806

Equalization Algorithm for Distributed Energy Storage Systems in Islanded AC Microgrids

Aldana, N. L. D., Hernández, A. C. L., Quintero, J. C. V. & Guerrero, J. M., Nov 2015, *Proceedings of the 41th Annual Conference of IEEE Industrial Electronics Society, IECON 2015*. IEEE Press, p. 004661 - 004666 6 p.

Frequency Stability of Hierarchically Controlled Hybrid Photovoltaic-Battery-Hydropower Microgrids

Guan, Y., Quintero, J. C. V., Guerrero, J. M., Wang, Y. & Feng, W., Nov 2015, In : I E E E Transactions on Industry Applications. 51, 6, p. 4729-4742 13 p.

Inner Current Loop Analysis and Design Based on Resonant Regulators for Isolated Microgrids

Federico, D. B., de Sousa Ribeiro, L. A., Soares Lima, M., Freijedo Fernandez, F. D., Guerrero, J. M. & Pastorelli, M., Nov 2015, *13th Brazilian Power Electronics Conference*. IEEE Press, p. 1-6 6 p.

Load Shifting Control and Management of Domestic Microgeneration Systems for Improved Energy Efficiency and Comfort

Anvari-Moghaddam, A., Quintero, J. C. V. & Guerrero, J. M., Nov 2015, *Proceedings of the 2015 IEEE Industrial Electronics Society (IECON)*. IEEE Press, p. 000096 - 000101 6 p.

Protection of AC and DC Microgrids: Challenges, Solutions and Future Trends

Beheshtaein, S., Savaghebi, M., Quintero, J. C. V. & Guerrero, J. M., Nov 2015, *Proceedings of the 41th Annual Conference of IEEE Industrial Electronics Society, IECON 2015*. IEEE Press, p. 005253 - 005260 8 p.

Secondary Frequency and Voltage Control of Islanded Microgrids via Distributed Averaging

W. Simpson-Porco, J., Shafiee, Q., Dorfler, F., Vasquez, J. C., Guerrero, J. M. & Bullo, F., Nov 2015, In : I E E E Transactions on Industrial Electronics. 62, 11, p. 7025 - 7038 14 p.

Single-Phase Microgrid with Seamless Transition Capabilities between Modes of Operation

Micallef, A., Apap, M., Spiteri-Staines, C. & Guerrero, J. M., Nov 2015, In : I E E E Transactions on Smart Grid. 6, 6, p. 2736-2745 10 p.

Smart Metering System for Microgrids

Palacios-Garcia, E. J., Guan, Y., Savaghebi, M., Quintero, J. C. V., Guerrero, J. M., Moreno-Munoz, A. & Ipsen, B. S., Nov 2015, *IECON 2015, Yokohama, november 2015*. IEEE Press, p. 003289 - 003294 6 p.

Stability Enhancement Based on Virtual Impedance for DC Microgrids with Constant Power Loads

Lu, X., Sun, K., Guerrero, J. M., Quintero, J. C. V., Huang, L. & Wang, J., Nov 2015, In : I E E E Transactions on Smart Grid. 6, 6, p. 2770-2783 14 p.

Tertiary and secondary control levels for efficiency optimization and system damping in droop controlled dc-dc converters

Meng, L., Dragicevic, T., Quintero, J. C. V. & Guerrero, J. M., Nov 2015, In : I E E E Transactions on Smart Grid. 6, 6, p. 2615 - 2626 12 p.

考虑电池储能系统荷电状态的有功功率协调控制

Tang, F., Jiang, J., Wu, D., Zhou, X. & Guerrero, J. M., Nov 2015, In : Dianli Xitong Zidonghua. 39, 22, p. 30-36

Harmonic Analysis and Active Filtering in Offshore Wind Power Plants: R. Teodorescu, C. L. Bak, (Aalborg University, Denmark), Ł. Kocewiak (DONG Energy, Denmark) C. F. Jensen (Energinet.dk, Denmark)

Chaudhary, S. K., Freijedo Fernandez, F. D., Guerrero, J. M., Teodorescu, R., Bak, C. L., Kocewiak, Ł. H. & Jensen, C. F., Oct 2015, *Proceedings of the 14th Wind Integration Workshop: International Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants*. Betancourt, U. & Ackermann, T. (eds.). Energynautics, p. 1-6 6 p.

Hybrid Three-Phase/Single-Phase Microgrid Architecture with Power Management Capabilities

Sun, Q., Zhou, J., Guerrero, J. M. & Zhang, H., Oct 2015, In : I E E E Transactions on Power Electronics. 30, 10, p. 5964 - 5977 14 p.

Methodologies for Wind Turbine and STATCOM Integration in Wind Power Plant Models for Harmonic Resonances Assessment

Freijedo Fernandez, F. D., Chaudhary, S. K., Guerrero, J. M., Teodorescu, R. & Bak, C. L., Oct 2015, *Proceedings of the 14th Wind Integration Workshop: International Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants*. Betancourt, U. & Ackermann, T. (eds.). Brussels (Belgium): Energynautics, p. 1-6 6 p.

Space Vector Modulation for DC-Link Current Ripple Reduction in Back-To-Back Current Source Converters for Microgrid Applications

Guo, X., Xu, D., Guerrero, J. M. & Wu, B., Oct 2015, In : I E E E Transactions on Industrial Electronics. 62, 10, p. 6008 - 6013 6 p.

Active Damping Techniques for LCL-Filtered Inverters-Based Microgrids

Lorzadeh, I., Firoozabadi, M. S., Askarian Abyaneh, H. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 IEEE 10th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED)*. IEEE Press, p. 408 - 414 7 p.

Active Power Regulation based on Droop for AC Microgrid

Li, C., Coelho, E. A. A., Firoozabadi, M. S., Quintero, J. C. V. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 IEEE 10th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED)*. IEEE Press, p. 508 - 512 5 p.

Advanced Smart Metering Infrastructure for Future Smart Homes

Diaz, E. R., Palacios-Garcia, E., Firoozabadi, M. S., Quintero, J. C. V., Guerrero, J. M. & Moreno-Munoz, A., Sep 2015, *Proceedings of the 5th IEEE International Conference on Consumer Electronics*. IEEE Press, p. 29 - 31 3 p. 7391260

A Harmonic Current Suppression Control Strategy for Droop-Controlled Inverter Connected to the Distorted Grid

Wei, F., Sun, K., Guan, Y., Guerrero, J. M. & Xiao, X., Sep 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 525 - 532 8 p.

A Hierarchical Control Scheme for Reactive Power and Harmonic Current Sharing in Islanded Microgrids

Lorzadeh, I., Firoozabadi, M. S., Askarian Abyaneh, H. & Guerrero, J. M., Sep 2015, *Proceedings of the 17th Conference on Power Electronics and Applications, EPE'15-ECCE Europe*. IEEE Press, p. 1-10 10 p.

Analysis, design and implementation of a quasi-proportional-resonant controller for multifunctional capacitive-coupling grid-connected inverter

Ye, T., Dai, N-Y., Lam, C-S., Wong, M-C. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 2506-2513 8 p. 7310012

An Overview of Low Voltage DC Distribution Systems for Residential Applications

Diaz, E. R., Firoozabadi, M. S., Quintero, J. C. V. & Guerrero, J. M., Sep 2015, *Proceedings of the 5th IEEE International Conference on Consumer Electronics (IEEE ICCE-Berlin 2015)*. IEEE Press, p. 318 - 322 5 p.

Control and Modeling of Push-Pull Forward Three-Level Converter for Microgrid

Yao, Z., Xu, J. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 Aegean Conference Electrical Machines and Power Electronics ACEMP*. Ertan, H. B. (ed.). IEEE Press, p. 455 - 461 7 p.

Control of a Multi-Functional Inverter for Grid Integration of PV and Battery Energy Storage System

Mousazadeh, S. Y., Firoozabadi, M. S., Beirami, A., Jalilian, A., Guerrero, J. M. & Li, C., Sep 2015, *Proceedings of the 2015 IEEE 10th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED)*. IEEE Press, p. 474 - 480 7 p.

Cross-Circulating Current Suppression Method for Parallel Three-Phase Two-Level Inverters

Wei, B., Guerrero, J. M. & Guo, X., Sep 2015, *Proceedings of the 5th IEEE International Conference on Consumer Electronics (IEEE ICCE-Berlin 2015)*. IEEE Press, p. 423-427 5 p.

Distributed Cooperative Control of Multi Flywheel Energy Storage System for Electrical Vehicle Fast Charging Stations

Sun, B., Dragicevic, T., Quintero, J. C. V. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 17th European Conference on Power Electronics and Applications (EPE'15 ECCE-Europe)*. IEEE Press, p. 1-8 8 p.

Dynamic Consensus Algorithm based Distributed Voltage Harmonic Compensation in Islanded Microgrids

Meng, L., Tang, F., Firoozabadi, M. S., Dragicevic, T., Quintero, J. C. V. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 17th European Conference on Power Electronics and Applications (EPE'15 ECCE-Europe)*. IEEE Press, p. 1-9 9 p.

Managing high penetration of renewable energy in MV grid by electric vehicle storage

Kordheili, R. A., Bak-Jensen, B., Pillai, J. R., Savaghebi, M. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 International Symposium on Smart Electric Distribution Systems and Technologies (EDST)*. IEEE Press, p. 127 - 132 6 p.

Multiagent based Distributed Control for Operation Cost Minimization of Droop Controlled AC Microgrid Using Incremental Cost Consensus

Li, C., Firoozabadi, M. S., Quintero, J. C. V. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 17th European Conference on Power Electronics and Applications (EPE'15 ECCE-Europe)*. IEEE Press, 9 p.

Negative Sequence Droop Method based Hierarchical Control for Low Voltage Ride-Through in Grid-Interactive Microgrids

Zhao, X., Firoozabadi, M. S., Quintero, J. C. V., Guerrero, J. M., Sun, K., Wu, X., Chen, G. & Sun, L., Sep 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 6896 - 6903 8 p.

Online Energy Management System for Distributed Generators in a Grid-Connected Microgrid

Hernández, A. C. L., Aldana, N. L. D., Graells, M., Quintero, J. C. V. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 4616 - 4623 8 p.

Stability Analysis for Isolated AC Microgrids Based on PV-Active Generators

Aldana, N. L. D., Coelho, E. A. A., Quintero, J. C. V. & Guerrero, J. M., Sep 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 4214 - 4221 8 p. 7310255

Virtual admittance loop for voltage harmonic compensation in microgrids

Blanco, C., Reigosa, D., Quintero, J. C. V., Guerrero, J. M. & Briz, F., Sep 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 745-752 8 p.

Computational optimization techniques applied to microgrids planning: a review

Gamarra, C. & Guerrero, J. M., Aug 2015, In : *Renewable & Sustainable Energy Reviews*. 48, p. 413-424 12 p.

Tuning of Synchronous-Frame PI Current Controllers in Grid-Connected Converters Operating at a Low Sampling Rate by MIMO Root Locus

Fernandez, F. D. F., Vidal, A., Yepes, A. G., Guerrero, J. M., Lopez, O., Malvar, J. & Doval-Gandoy, J., Aug 2015, In : I E E E Transactions on Industrial Electronics. 62, 8, p. 5006 - 5017 12 p.

A flexible five-level cascaded H-bridge inverter for photovoltaic grid-connected systems

Sun, B., Wu, F., Savaghebi, M. & Guerrero, J. M., 27 Jul 2015, *Proceedings of 9th International Conference on Power Electronics and ECCE Asia (ICPE-ECCE Asia): "Green World with Power Electronics"*. IEEE Press, p. 2369-2375 7 p. 7168101. (International Conference on Power Electronics).

A Cell-to-Cell Battery Equalizer With Zero-Current Switching and Zero-Voltage Gap Based on Quasi-Resonant LC Converter and Boost Converter

Shang, Y., Zhang, C., Cui, N. & Guerrero, J. M., Jul 2015, In : I E E E Transactions on Power Electronics. 30, 7, p. 3731 - 3747 17 p.

Adaptive Virtual Impedance Scheme for Selective Compensation of Voltage Unbalance and Harmonics in Microgrids

Savaghebi, M., Shafiee, Q., Vasquez, J. C. & Guerrero, J. M., Jul 2015, *Proceedings of the IEEE Power & Energy Society General Meeting, PES 2015*. IEEE, p. 1-5 5 p.

Control and design of full-bridge three-level converter for renewable energy sources

Yao, Z., Xu, J. & Guerrero, J. M., Jul 2015, *Proceedings of the 2015 IEEE 16th Workshop on Control and Modeling for Power Electronics (COMPEL)*. IEEE Press, p. 1-6 6 p.

Cooperative Frequency Control for Autonomous AC Microgrids

Shafiee, Q., Quintero, J. C. V., Guerrero, J. M., Nasirian, V. & Davoudi, A., Jul 2015, *PowerTech, 2015 IEEE Eindhoven*. IEEE Press, 6 p.

Enhancing the Capacity of the AC Distribution System Using DC Interlinks - A Step Towards Future DC Grid

Chaudhary, S., Guerrero, J. M. & Teodorescu, R., Jul 2015, In : I E E E Transactions on Smart Grid. 6, 4, p. 1722-1729 8 p.

Harmonic Resonances in Wind Power Plants: Modeling, Analysis and Active Mitigation Methods

Fernandez, F. D. F., Chaudhary, S., Teodorescu, R., Guerrero, J. M., Bak, C. L., Kocewiak, Ł. H. & Jensen, C. F., Jul 2015, *PowerTech, 2015 IEEE Eindhoven*. IEEE Press, p. 1-6 6 p.

Model Order Reductions for Stability Analysis of Islanded Microgrids With Droop Control

Mariani, V., Vasca, F., Vásquez, J. C. & Guerrero, J. M., Jul 2015, In : I E E E Transactions on Industrial Electronics. 62, 7, p. 4344-4354 11 p., 6985720.

Optimized Energy Management of a Single-House Residential Micro-Grid With Automated Demand Response

Anvari-Moghaddam, A., Monsef, H., Rahimi-Kian, A., Guerrero, J. M. & Vasquez, J. C., Jul 2015, *PowerTech, 2015 IEEE Eindhoven*. IEEE Press, 6 p.

Provision of Flexible Load Control by Multi-Flywheel-Energy-Storage System in Electrical Vehicle Charging Stations

Sun, B., Dragicevic, T., Andrade, F., Vasquez, J. C. & Guerrero, J. M., Jul 2015, *Proceedings of the 2015 IEEE Power & Energy Society General Meeting*. IEEE Press, p. 1-5 5 p.

Reactive Power Management in Islanded Microgrid – Proportional Power Sharing in Hierarchical Droop Control

Milczarek, A., Malinowski, M. & Guerrero, J. M., Jul 2015, In : I E E E Transactions on Smart Grid. 6, 4, p. 1631 - 1638 8 p.

Reactive Power Support of Electrical Vehicle Charging Station Upgraded with Flywheel Energy Storage System

SUN, BO., Dragicevic, T., Savaghebi, M., Vasquez, J. C. & Guerrero, J. M., Jul 2015, *PowerTech, 2015 IEEE Eindhoven*. IEEE Press, p. 1-6 6 p.

Stored Energy Balance for Distributed PV-Based Active Generators in an AC Microgrid

Aldana, N. L. D., Wu, D., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., Jul 2015, *Proceedings of the 2015 IEEE Power & Energy Society General Meeting*. IEEE Press, p. 1-5 5 p.

Voltage Harmonics Monitoring in a Microgrid Based on Advanced Metering Infrastructure (AMI)

Firoozabadi, M. S., Guan, Y., Quintero, J. C. V., Guerrero, J. M. & Nielsen, C., Jul 2015, *Proceedings of the Seminario Anual de Automática, Electrónica Industrial e Instrumentación 2015 (SAAEI'15)*. 5 p.

An Improved Droop Control Strategy for Reactive Power Sharing in Islanded Microgrid

Han, H., Liu, Y., Sun, Y., Su, M. & Guerrero, J. M., Jun 2015, In : *IEEE Transactions on Power Electronics*. 30, 6, p. 3133 - 3141 9 p.

A Systematic Approach to Design High-Order Phase-Locked Loops

Golestan, S., Fernandez, F. D. F. & Guerrero, J. M., Jun 2015, In : *IEEE Transactions on Power Electronics*. 30, 6, p. 2885 - 2890 6 p.

Dynamic Evaluation of LCL-type Grid-Connected Inverters with Different Current Feedback Control Schemes

Han, Y., Li, Z. & Guerrero, J. M., Jun 2015, *Proceedings of the 2015 9th International Conference on Power Electronics and ECCE Asia (ICPE-ECCE Asia)*. IEEE Press, p. 391 - 396 6 p. 7167816

Dynamics Assessment of Grid-Synchronization Algorithms for Single-Phase Grid-Connected Converters

Han, Y., Luo, M. & Guerrero, J. M., Jun 2015, *Proceedings of the 2015 9th International Conference on Power Electronics and ECCE Asia (ICPE-ECCE Asia)*. IEEE Press, p. 1228 - 1233 6 p. 7167937

Energy Management Systems and tertiary regulation in hierarchical control architectures for islanded micro-grids

Sanseverino, E. R., Di Silvestre, M. L., Quang, N. N., Mineo, L., Guerrero, J. M., Hernández, A. C. L., Vasquez, J. C. & Graells, M., Jun 2015, *Proceedings of the 2015 IEEE 15th International Conference on Environment and Electrical Engineering (EEEIC)*. IEEE Press, p. 144 - 149 6 p.

Generation-Side Power Scheduling in a Grid-Connected DC Microgrid

Hernández, A. C. L., Aldana, N. L. D., Meng, L., Graells, M., Vasquez, J. C. & Guerrero, J. M., Jun 2015, *Proceedings of the 2015 IEEE First International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 327 - 332 6 p.

Phase-lock loop of Grid-connected Voltage Source Converter under non-ideal grid condition

Wang, H., Sun, H., Han, M. & Guerrero, J. M., Jun 2015, *Proceedings of the 2015 IEEE First International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 124-128 5 p.

Stability analysis and design of the improved droop controller on a voltage source inverter

Calabria, M., Schumacher, W., Guerrero, J. M., Quintero, J. C. V. & Zhao, X., Jun 2015, *Proceedings of the IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems, PEDG 2015*. IEEE Press, p. 1-9 9 p.

A Control Architecture to Coordinate Renewable Energy Sources and Energy Storage Systems in Islanded Microgrids

Wu, D., Tang, F., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., 1 May 2015, In : *IEEE Transactions on Smart Grid*. 6, 3, p. 1156-1166 11 p., 6991590.

Voltage and frequency control of wind-powered islanded microgrids based on induction generator and STATCOM

Bouzid, A., Sicard, P., Guerrero, J. M., Chereti, A., Bouhamida, M. & Golsorkhi, M., May 2015, *Proceedings of the 2015 3rd International Conference on Control, Engineering & Information Technology (CEIT)*. IEEE Press, p. 1-6 6 p.

A Survey on Control of Electric Power Distributed Generation Systems for Microgrid Applications

Bouzid, A., Guerrero, J. M., Cheriti, A., Bouhamida, M., Sicard, P. & Benghanem, M., Apr 2015, In : *Renewable & Sustainable Energy Reviews*. 44, p. 751-766 16 p.

Flexible Control Strategy for Grid-Connected Inverter under Unbalanced Grid Faults without PLL

Guo, X., Liu, W., Zhang, X., Sun, X., Lu, Z. & Guerrero, J. M., Apr 2015, In : *IEEE Transactions on Power Electronics*. 30, 4, p. 1773-1778 6 p.

Multi-Functional Distributed Generation Unit for Power Quality Enhancement

Zeng, Z., Yang, H., Guerrero, J. M. & Zhao, R., 1 Mar 2015, In : IET Power Electronics. 8, 3, p. 467–476 10 p.

A Crossed Pack-to-Cell Equalizer Based on Quasi-Resonant LC Converter with Adaptive Fuzzy Logic Equalization Control for Series-connected Lithium-Ion Battery Strings

Shang, Y., Zhang, C., Cui, N., Guerrero, J. M. & Sun, K., Mar 2015, *Proceedings of the 2015 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 1685 - 1692 8 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

A Direct Voltage Unbalance Compensation Strategy for Islanded Microgrids

Zhao, X., Wu, X., Meng, L., Guerrero, J. M. & Vasquez, J. C., Mar 2015, *Proceedings of the 2015 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 3252 - 3259 8 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Conventional Synchronous Reference Frame Phase-Locked Loop Is An Adaptive Complex Filter

Golestan, S. & Guerrero, J. M., Mar 2015, In : I E E E Transactions on Industrial Electronics. 62, 3, p. 1679-1682 4 p.

dq-Frame Cascaded Delayed Signal Cancellation-Based PLL: Analysis, Design, and Comparison With Moving Average Filter-Based PLL

Golestan, S., Ramezani, M., Guerrero, J. M. & Monfared, M., Mar 2015, In : I E E E Transactions on Power Electronics. 30, 3, p. 1618-1632 15 p.

Droop-free Team-oriented Control for AC Distribution Systems

Nasirian, V., Shafiee, Q., Guerrero, J. M., Lewis, F. & Davoudi, A., Mar 2015, *Proceedings of the 2015 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 2911 - 2918 8 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

High-Performance Control of Paralleled Three-Phase Inverters for Residential Microgrid Architectures Based on Online Uninterruptable Power Systems

Zhang, C., Guerrero, J. M., Vasquez, J. C., Coelho, E. A. A. & Seniger, C., Mar 2015, *Proceedings of the 2015 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 3232 - 3239 8 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Improved Droop Control Strategy for Grid-Connected Inverters

Abusara, M., Sharkh, S. & Guerrero, J. M., Mar 2015, In : Sustainable Energy, Grids and Networks. 1, p. 10-19 10 p.

Microgrid Central Controller Development and Hierarchical Control Implementation in the Intelligent MicroGrid Lab of Aalborg University

Meng, L., Savaghebi, M., Andrade, F., Vasquez, J. C., Guerrero, J. M. & Graells, M., Mar 2015, *Proceedings of the 2015 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 2585 - 2592 8 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Microgrid Stability Controller Based on Adaptive Robust Total SMC

Su, X., Han, M., Guerrero, J. M. & Sun, H., Mar 2015, In : Energies. 8, 3, p. 1784-1801

Modeling and sensitivity analysis of consensus algorithm based distributed hierarchical control for dc microgrids

Meng, L., Dragicevic, T., Vasquez, J. C., Guerrero, J. M. & Roldan Perez, J., Mar 2015, *Proceedings of the 2015 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 342 - 349 8 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Multi-Agent-Based Distributed State of Charge Balancing Control for Distributed Energy Storage Units in AC Microgrids

Li, C., Dragicevic, T., Vasquez, J. C., Guerrero, J. M. & Coelho, E. A. A., Mar 2015, *Proceedings of the 2015 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 2967 - 2973 7 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Small-Signal Modeling, Analysis and Testing of Parallel Three-Phase-Inverters with A Novel Autonomous Current Sharing Controller

Guan, Y., Quintero, J. C. V., Guerrero, J. M. & Coelho, E. A. A., Mar 2015, *Proceedings of the 30th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2015*. IEEE Press, p. 571 - 578 8 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Distributed Bus Signaling Control for a DC Charging Station with Multi Paralleled Flywheel Energy Storage System

Sun, B., Dragicevic, T., Vasquez, J. C., Guerrero, J. M. & Savaghebi, M., Feb 2015, *Proceedings of the 2015 6th IEEE Power Electronics, Drives Systems & Technologies Conference (PEDSTC)*. IEEE Press, p. 65 - 70 6 p.

Hybrid Active Filter with Variable Conductance for Harmonic Resonance Suppression in Industrial Power Systems

Lee, T-L., Wang, Y-C., Li, J-C. & Guerrero, J. M., Feb 2015, In : I E E E Transactions on Industrial Electronics. 62, 2, p. 746 - 756 11 p.

Double-Quadrant State-of-Charge-Based Droop Control Method for Distributed Energy Storage Systems in Autonomous DC Microgrids

Lu, X., Sun, K., Guerrero, J. M., Vasquez, J. C. & Huang, L., 1 Jan 2015, In : IEEE Transactions on Smart Grid. 6, 1, p. 147 - 157 11 p.

A Control Scheme to Improve the Power Quality with the Absence of Dedicated Compensation Devices in Microgrid

Naderipour, A., Mohd Zin, A. A., Habibuddin, M. H. & Guerrero, J. M., 2015, *2015 IEEE Student Conference on Research and Development (SCoReD)*. IEEE, p. 239 - 244 6 p.

Adaptive Distance Protection for Microgrids

Lin, H., Guerrero, J. M., Quintero, J. C. V. & Liu, C., 2015, *Proceedings of the 41th Annual Conference of IEEE Industrial Electronics Society, IECON 2015*. IEEE Press, p. 000725 - 000730 6 p.

Analysis, Control and Experimental Verification of a Single-Phase Capacitive-Coupling Grid-Connected Inverter

Dai, N-Y., Zhang, W-C., Wong, M-C., Guerrero, J. M. & Lam, C-S., 2015, In : IET Power Electronics. 8, 5, p. 770 - 782 13 p.

A Simplified Control Architecture for Three-Phase Inverters in Modular UPS Application with Shunt Active Power Filter Embedded

Zhang, C., Guerrero, J. M. & Vasquez, J. C., 2015, *Proceedings of the 2015 9th International Conference on Power Electronics and ECCE Asia (ICPE-ECCE Asia)*. IEEE Press, p. 413 - 420 8 p. 7167819

Coordinated Secondary Control for Balanced Discharge Rate of Energy Storage System in Islanded Microgrids

Guan, Y., Guerrero, J. M. & Quintero, J. C. V., 2015, *Proceedings of the 2015 9th International Conference on Power Electronics and ECCE Asia (ICPE-ECCE Asia)*. IEEE Press, p. 475 - 481 7 p.

Distance Protection for Microgrids in Distribution System

Lin, H., Liu, C., Guerrero, J. M. & Quintero, J. C. V., 2015, *Proceedings of the 41th Annual Conference of IEEE Industrial Electronics Society, IECON 2015*. IEEE Press, p. 000731-000736 6 p.

Dynamic Consensus Algorithm based Distributed Unbalance Compensation in Islanded Microgrids

Meng, L., Zhao, X., Firoozabadi, M. S., Dragicevic, T., Quintero, J. C. V., Guerrero, J. M. & Tang, F., 2015, *Proceedings of the IEEE Power & Energy Society General Meeting, PES 2015*. IEEE Press, p. 1-5 5 p.

Economic Power Dispatch of Distributed Generators in a Grid-Connected Microgrid

Hernández, A. C. L., Aldana, N. L. D., Andrade, F., Graells, M., Guerrero, J. M. & Vasquez, J. C., 2015, *Proceedings of the 2015 9th International Conference on Power Electronics and ECCE Asia (ICPE-ECCE Asia)*. IEEE Press, p. 1161 - 1168 8 p.

Energy Management Systems and Tertiary Regulation in Hierarchical Control Architectures for Islanded Microgrids

Sanseverino, E. R., Di Silvestre, M. L., Quang, N. N., Mineo, L., Guerrero, J. M., Luna, A. C., Vasquez, J. C. & IEEE, 2015, In : 2015 IEEE 15th International Conference on Environment and Electrical Engineering (IEEE EEEIC 2015).

Energy Management System with Equalization Algorithm for Distributed Energy Storage Systems in PV-Active Generator Based Low Voltage DC Microgrids

Aldana, N. L. D., Hernández, A. C. L., Vasquez, J. C. & Guerrero, J. M., 2015, *Proceedings of the 2015 IEEE First International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 293-298 6 p.

Fuzzy droop control loops adjustment for stored energy balance in distributed energy storage system

Aldana, N. L. D., Wu, D., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., 2015, *Proceedings of the 2015 9th International Conference on Power Electronics and ECCE Asia (ICPE-ECCE Asia)*. IEEE Press, p. 728 - 735 8 p.

Hierarchical Control for Voltage Harmonics Compensation in Multi-Area Microgrids

Hashempour, M. M., Firoozabadi, M. S., Quintero, J. C. V. & Guerrero, J. M., 2015, *Proceedings of the 2015 IEEE 10th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED)*. IEEE Press, p. 415 - 420 6 p.

Hierarchical Controlled Grid-Connected Microgrid based on a Novel Autonomous Current Sharing Controller

Guan, Y., Quintero, J. C. V. & Guerrero, J. M., 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 2333 - 2340 8 p.

Hierarchical Control with Virtual Resistance Optimization for Efficiency Enhancement and State-of-Charge Balancing in DC Microgrids

Meng, L., Dragicevic, T., Quintero, J. C. V., Guerrero, J. M. & Sanseverino, E. R., 2015, *Proceedings of the 2015 IEEE First International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 1-6 6 p.

Hybrid Synchronous/Stationary Reference Frame Filtering based PLL

Golestan, S., Guerrero, J. M., Abusorrah, A. & Al-Turki, Y., 2015, In : IEEE Transactions on Industrial Electronics. 62, 8, p. 5018 - 5022 5 p.

Improved control strategy for the three-phase grid-connected inverter

Yao, Z., Xiao, L. & Guerrero, J. M., 2015, In : IET Renewable Power Generation. 9, 6, p. 587 - 592 6 p.

Intelligent DC Microgrid Living Laboratories - A Chinese-Danish Cooperation Project

Diaz, E. R., Su, X., Savaghebi, M., Quintero, J. C. V., Han, M. & Guerrero, J. M., 2015, *Proceedings of the 2015 IEEE First International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 365 - 370 6 p.

Leakage Current Suppression with A Novel Six-Switch Photovoltaic Grid-Connected Inverter

Wei, B., Guo, X., Guerrero, J. M. & Savaghebi, M., 2015, *Proceedings of the 2015 IEEE 10th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED)*. IEEE Press, p. 22-26 5 p.

MAF-PLL With Phase-Lead Compensator

Golestan, S., Guerrero, J. M. & Abusorrah, A., 2015, In : IEEE Transactions on Industrial Electronics. 62, 6, p. 3691 - 3695 5 p.

Modular Plug'n'Play Control Architectures for Three-phase Inverters in UPS Applications

Zhang, C., Guerrero, J. M., Vasquez, J. C. & Seniger, C., 2015, *Proceedings of the 2015 9th International Conference on Power Electronics and ECCE Asia (ICPE-ECCE Asia)*. IEEE Press, p. 659 - 666 7 p.

Multiagent-based Distributed Control for Operation Cost Minimization of Droop Controlled DC Microgrid Using Incremental Cost Consensus

Li, C., Quintero, J. C. V. & Guerrero, J. M., 2015, *41th Annual Conference of IEEE Industrial Electronics Society, IECON 2015*. IEEE Press, p. 005202 - 005205

Operation Cost Minimization of Droop-Controlled DC Microgrids Based on Real-Time Pricing and Optimal Power Flow
Li, C., de Bosio, F., Chaudhary, S. K., Graells, M., Quintero, J. C. V. & Guerrero, J. M., 2015, *Proceedings of the 41th Annual Conference of IEEE Industrial Electronics Society, IECON 2015*. IEEE Press, p. 003905 - 003909

Optimal Power Flow in Islanded Microgrids Using a Simple Distributed Algorithm

Sanseverino, E. R., Di Silvestre, M. L., Badalamenti, R., Quang, N. N., Guerrero, J. M. & Meng, L., 2015, In : *Energies*. 8, 10, p. 11493-11514 22 p.

Optimal Power Flow in three-phase islanded microgrids with inverter interfaced units

Sanseverino, E. R., Quang, N. N., Di Silvestre, M. L., Guerrero, J. M. & Li, C., 2015, In : *Electric Power Systems Research*. 123, p. 48-56 9 p.

Optimal Utilization of Microgrids Supplemented with Battery Energy Storage Systems in Grid Support Applications

Anvari-Moghaddam, A., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., 2015, *Proceedings of the 2015 IEEE First International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 57 - 61 5 p.

Smart Inverters for Utility and Industry Applications

Xue, Y. & Guerrero, J. M., 2015, *Proceedings of PCIM Europe 2015; International Exhibition and Conference for Power Electronics, Intelligent Motion, Renewable Energy and Energy Management*. VDE Verlag GMBH, 8 p.

Thermal Impact Analysis of Circulating Current in High Power Modular Online Uninterruptible Power Supplies Application

Zhang, C., Guerrero, J. M. & Vasquez, J. C., 2015, *Proceedings of the 17th Conference on Power Electronics and Applications, EPE'15-ECCE Europe*. IEEE Press, p. 1-10 10 p.

Two-Level Control for Fast Electrical Vehicle Charging Stations with Multi Flywheel Energy Storage System

SUN, BO., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., 2015, *Proceedings of the 2015 IEEE First International Conference on DC Microgrids (ICDCM)*. IEEE Press, p. 305 - 310 6 p.

A Quasi-Type-1 Phase-Locked Loop Structure

Golestan, S., Fernandez, F. D. F., Vidal, A., Guerrero, J. M. & Doval-Gandoy, J., Dec 2014, In : *IEEE Transactions on Power Electronics*. 29, 12, p. 6264-6270 7 p.

Autonomous Active Power Control for Islanded AC Microgrids with Photovoltaic Generation and Energy Storage System

Wu, D., Tang, F., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., Dec 2014, In : *IEEE Transactions on Energy Conversion*. 29, 4, p. 882-892 11 p.

Distributed Adaptive Droop Control for DC Distribution Systems

Nasirian, V., Davoudi, A., Lewis, F. & Guerrero, J. M., Dec 2014, In : *IEEE Transactions on Energy Conversion*. 29, 4, p. 944-956 13 p.

Flexible Local Load Controller for Fast Electric Vehicle Charging Station Supplemented with Flywheel Energy Storage System

Dragicevic, T., SUN, BO., Schaltz, E. & Guerrero, J. M., Dec 2014, *Proceedings of the IEEE International Electric Vehicle Conference 2014 (IEVC)*. IEEE Press, p. 1-6 6 p.

Guest Editorial Advanced Distributed Control of Energy Conversion Devices and Systems

Davoudi, A., Guerrero, J. M., Lewis, F., Balog, R., Johnson, B., Weaver, W., Wang, L., Edrington, C., Blasco-Gimenez, R., Dominguez-Garcia, A. & Chow, M-Y., Dec 2014, In : *IEEE Transactions on Energy Conversion*. 29, 4, p. 819-822 4 p.

Hierarchical Control for Multiple DC Microgrids Clusters

Shafiee, Q., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., Dec 2014, In : *IEEE Transactions on Energy Conversion*. 29, 4, p. 922-933 12 p.

Microgrids: experiences, barriers and success factors

Soshinskaya, M., Graus, W., Guerrero, J. M. & Vasquez, J. C., Dec 2014, In : Renewable & Sustainable Energy Reviews. 40, p. 659-672 14 p.

Tertiary Control of Voltage Unbalance Compensation for Optimal Power Quality in Islanded Microgrids

Meng, L., Tang, F., Savaghebi, M., Vasquez, J. C. & Guerrero, J. M., Dec 2014, In : I E E E Transactions on Energy Conversion. 29, 4, p. 802-815 14 p.

Dynamic Phasors-Based Modeling and Stability Analysis of Droop-Controlled Inverters for Microgrid Applications

Guo, X., Lu, Z., Wang, B., Sun, X., Wang, L. & Guerrero, J. M., Nov 2014, In : I E E E Transactions on Smart Grid. 5, 6, p. 2980-2987 8 p.

Flywheel-Based Distributed Bus Signalling Strategy for the Public Fast Charging Station

Dragicevic, T., Sucic, S., Vasquez, J. C. & Guerrero, J. M., Nov 2014, In : I E E E Transactions on Smart Grid. 5, 6, p. 2825 - 2835 11 p.

Multiagent Based Distributed Control for State-of-Charge Balance of Distributed Energy Storage in DC microgrids

Li, C., Dragicevic, T., Garcia Plaza, M., Andrade, F., Vasquez, J. C. & Guerrero, J. M., Nov 2014, *Proceedings of the 40th Annual Conference of IEEE Industrial Electronics Society, IECON 2014*. IEEE Press, p. 2180-2184 5 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Capacity Optimization of Renewable Energy Sources and Battery Storage in an Autonomous Telecommunication Facility

Dragicevic, T., Pandžić, H., Škrlec, D., Kuzle, I., Guerrero, J. M. & Kirschen, D., Oct 2014, In : I E E E Transactions on Sustainable Energy. 5, 4, p. 1367-1378 12 p.

Faroe Islands Wind-Powered Space Heating Microgrid Using Self-Excited 220 kW Induction Generator

Thomsen, B., Guerrero, J. M. & Thogersen, P., Oct 2014, In : I E E E Transactions on Sustainable Energy. 5, 4, p. 1361-1366 6 p.

Modeling and Nonlinear Control of Electric Power Stage in Hybrid Electric Vehicle

Tahri, A., El Fadil, H., Guerrero, J. M., Giri, F. & Chaoui, F. Z., Oct 2014, *Proceedings of the 2014 IEEE Multi-Conference on Systems and Control (MSC)*. IEEE Press, p. 641-646 6 p.

Model predictive control of smart microgrids

Hu, J., Zhu, J. & Guerrero, J. M., Oct 2014, *Proceedings of the International Conference on Electrical Machines and Systems, ICEMS 2014*. IEEE Press, p. 2815 - 2820 6 p.

Robust Networked Control Scheme for Distributed Secondary Control of Islanded MicroGrids

Shafiee, Q., Stefanovic, C., Dragicevic, T., Popovski, P., Vasquez, J. C. & Guerrero, J. M., Oct 2014, In : I E E E Transactions on Industrial Electronics. 61, 10, p. 5363-5374 12 p.

Study of Large-Signal Stability of an Inverter-based Generator using a Lyapunov Function

Andrade, F., Kampouropoulos, K., Romeral, L., Vasquez, J. C. & Guerrero, J. M., Oct 2014, *Proceedings of the 40th Annual Conference of IEEE Industrial Electronics Society, IECON 2014*. IEEE Press, p. 1840-1846 7 p. 7048752. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Three-Phase Grid-Connected of Photovoltaic Generator Using Nonlinear Control

Yahya, A., El Fadil, H., Guerrero, J. M., Giri, F. & Erguig, H., Oct 2014, *Proceedings of the 2014 IEEE Conference on Control Applications (CCA)*. IEEE Press, p. 879-884 6 p.

A Systematic Method to Synthesize New Transformerless Full-bridge Grid-tied Inverters

Wang, H., Burton, S., Liu, Y-F., Sen, P. C. & Guerrero, J. M., Sep 2014, *Proceedings of the 2014 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 2760-2766 7 p.

Frequency Stability of Hierarchically Controlled Hybrid Photovoltaic-Battery-Hydropower Microgrids

Guan, Y., Vasquez, J. C., Guerrero, J. M., Wu, D., Feng, W. & Wang, Y., Sep 2014, *Proceedings of the 2014 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 1573-1580 8 p.

Generic inertia emulation controller for multi-terminal voltage-source-converter high voltage direct current systems

Zhu, J., Guerrero, J. M., Hung, W., Booth, C. D. & Adam, G. P., Sep 2014, In : *IET Renewable Power Generation*. 8, 7, p. 740-748 9 p.

Guest Editorial: Special Section on Smart DC Distribution Systems

Guerrero, J. M., Davoudi, A., Aminifar, F., Jatskevich, J. & Kakigano, H., Sep 2014, In : *IEEE Transactions on Smart Grid*. 5, 5, p. 2473-2475 3 p.

Intelligent Distributed Generation and Storage Units for DC Microgrids - A New Concept on Cooperative Control without Communications Beyond Droop Control

Aldana, N. L. D., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., Sep 2014, In : *IEEE Transactions on Smart Grid*. 5, 5, p. 2476-2485 10 p.

Modeling and Nonlinear Control of Fuel Cell / Supercapacitor Hybrid Energy Storage System for Electric Vehicles

El Fadil, H., Giri, F., Guerrero, J. M. & Tahri, A., Sep 2014, In : *IEEE Transactions on Vehicular Technology*. 63, 7, p. 3011-3018 8 p.

Optimal power flow based on glow worm-swarm optimization for three-phase islanded microgrids

Quang, N. N., Sanseverino, E. R., Di Silvestre, M. L., Madonia, A., Li, C. & Guerrero, J. M., Sep 2014, *Proceedings of 2014 AEIT Annual Conference - From Research to Industry: The Need for a More Effective Technology Transfer*. IEEE Press, p. 1-6 6 p.

Power flow analysis for DC voltage droop controlled DC microgrids

Li, C., Chaudhary, S., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., Sep 2014, *Proceedings of the 11th International Multiconference on Systems, Signals & Devices, SSD 2014*. IEEE Press, p. 1-5 5 p.

Secondary Coordinated Control of Islanded Microgrids Based on Consensus Algorithms

Wu, D., Dragicevic, T., Vasquez, J. C., Guerrero, J. M. & Guan, Y., Sep 2014, *Proceedings of the 2014 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 4290-4297 8 p.

Virtual Flux Droop Method – A New Control Strategy of Inverters in Microgrids

Hu, J., Zhu, J., Dorrell, D. & Guerrero, J. M., Sep 2014, In : *IEEE Transactions on Power Electronics*. 29, 9, p. 4704-4711 8 p.

Virtual Impedance Based Stability Improvement for DC Microgrids with Constant Power Loads

Lu, X., Sun, K., Huang, L., Guerrero, J. M., Vasquez, J. C. & Xing, Y., Sep 2014, *Proceedings of the 2014 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 2670-2675 6 p.

Dynamic Performance of Grid Converters using Adaptive DC Voltage Control

Trintis, I., Sun, B., Guerrero, J. M., Munk-Nielsen, S., Abrahamsen, F. & Thøgersen, P. B., 26 Aug 2014, *Proceedings of the 16th Conference on Power Electronics and Applications, EPE'14-ECCE Europe*. IEEE Press, 7 p.

Microgrids in Active Network Management-Part II: System Operation, Power Quality and Protection

Palizban, O., Kauhaniemi, K. & Guerrero, J. M., Aug 2014, In : *Renewable & Sustainable Energy Reviews*. 36, p. 440-451 12 p.

A Distributed Control Strategy for Coordination of an Autonomous LVDC Microgrid Based on Power-Line Signalling

Dragicevic, T., Guerrero, J. M. & Vasquez, J. C., Jul 2014, In : *IEEE Transactions on Industrial Electronics*. 61, 7, p. 3313-3326

Performance Improvement of a Prefiltered Synchronous-Reference-Frame PLL By Using a PID-Type Loop Filter

Golestan, S., Monfared, M., Frejeido, F. & Guerrero, J. M., Jul 2014, In : I E E E Transactions on Industrial Electronics. 61, 7, p. 3469 - 3479

Power flow analysis for droop controlled LV hybrid AC-DC microgrids with virtual impedance

Li, C., Chaudhary, S., Vasquez, J. C. & Guerrero, J. M., Jul 2014, *Proceedings of the IEEE Power & Energy Society General Meeting, PES 2014*. IEEE Press, p. 1-4 4 p.

Event-triggered hybrid control based on multi-Agent systems for Microgrids

Dou, C., Liu, B. & Guerrero, J. M., 16 Jun 2014, In : IET Generation, Transmission & Distribution. 8, 12, p. 1987-1997 11 p.

Agent-based Distributed Unbalance Compensation for Optimal Power Quality in Islanded Microgrids

Meng, L., Dragicevic, T., Guerrero, J. M., Vasquez, J. C., Savaghebi, M. & Tang, F., Jun 2014, *Proceedings of the IEEE 23rd International Symposium on Industrial Electronics, ISIE 2014*. IEEE Press, p. 2535-2540 6 p.

Control Strategy for Microgrid Inverter under Unbalanced Grid Voltage Conditions

Guo, X., Liu, W., Zhang, X., Geng, H. & Guerrero, J. M., Jun 2014, *Proceedings of the IEEE International Symposium on Industrial Electronics, ISIE 2014*. IEEE Press, p. 2354-2358 5 p.

Droop-Control-Based State-of-Charge Balancing Method for Charging and Discharging Process in Autonomous DC Microgrids

Lu, X., Sun, K., Guerrero, J. M., Vasquez, J. C. & Huang, L., Jun 2014, *Proceedings of the IEEE International Symposium on Industrial Electronics, ISIE 2014*. IEEE Press, p. 2359-2364 6 p.

State-of-Charge Balance Using Adaptive Droop Control for Distributed Energy Storage Systems in DC MicroGrid Applications

Lu, X., Sun, K., Guerrero, J. M., Vasquez, J. C. & Huang, L., Jun 2014, In : I E E E Transactions on Industrial Electronics. 61, 6, p. 2804-2815 12 p.

Agent-based distributed hierarchical control of dc microgrid systems

Meng, L., Vasquez, J. C., Guerrero, J. M. & Dragicevic, T., May 2014, *Proceedings of Electrimacs 2014*. IMACS, p. 281-286 6 p.

Analysis of Droop Controlled Parallel Inverters in Islanded Microgrids

Mariani, V., Vasca, F. & Guerrero, J. M., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 1304-1309 6 p. (I E E E International Energy Conference. ENERGYCON proceedings).

A Simple Autonomous Current-Sharing Control Strategy for Fast Dynamic Response of Parallel Inverters in Islanded Microgrids

Guan, Y., Vasquez, J. C. & Guerrero, J. M., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 182-188 7 p. (I E E E International Energy Conference. ENERGYCON proceedings).

A Single Phase Seven-level Grid-connected inverter Based On Three Reference SPWM Strategy

Sun, B., Wu, F., Dragicevic, T., Guerrero, J. M. & Vasquez, J. C., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 222-227 6 p. (I E E E International Energy Conference. ENERGYCON proceedings).

Autonomous Control of Distributed Generation and Storage to Coordinate P/Q Sharing in Islanded Microgrids: An Approach beyond Droop Control

Wu, D., Tang, F., Guerrero, J. M. & Vasquez, J. C., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 983-988 6 p. (I E E E International Energy Conference. ENERGYCON proceedings).

Dynamic Consensus Algorithm Based Distributed Global Efficiency Optimization of a Droop Controlled DC Microgrid
Meng, L., Dragicevic, T., Guerrero, J. M. & Vasquez, J. C., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 1276-1283 8 p. (I E E E International Energy Conference. ENERGYCON proceedings).

Fundamental impedance identification method for grid-connected voltage source inverters

Sun, X., Chen, J., Guerrero, J. M., Li, X. & Wang, L., May 2014, In : *IET Power Electronics*. 7, 5, p. 1099-1105 7 p.

Mas Roig Mini-Grid: A Renewable-Energy-Based Rural Islanded Microgrid

Salas, P. & Guerrero, J. M., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 975-982 8 p. (I E E E International Energy Conference. ENERGYCON proceedings).

Modeling, Stability Analysis and Active Stabilization of Multiple DC-Microgrids Clusters

Shafiee, Q., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 1284-1290 7 p. (I E E E International Energy Conference. ENERGYCON proceedings).

Reactive Power Sharing and Voltage Harmonic Distortion Compensation of Droop Controlled Single Phase Islanded Microgrids

Micallef, A., Apap, M., Spiteri-Staines, C., Guerrero, J. M. & Vasquez, J. C., May 2014, In : *I E E E Transactions on Smart Grid*. 5, 3, p. 1149-1158 10 p.

Resonance Damping Techniques for Grid-Connected Voltage Source Converters with LCL filters – A Review

Zhang, C., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 169-176 8 p. (I E E E International Energy Conference. ENERGYCON proceedings).

Review of Aircraft Electric Power Systems and Architectures

Zhao, X., Guerrero, J. M. & Wu, X., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 949-953 5 p. (I E E E International Energy Conference. ENERGYCON proceedings).

Voltage Scheduling Droop Control for State-of-Charge Balance of Distributed Energy Storage in DC Microgrids

Li, C., Dragicevic, T., Aldana, N. L. D., Vasquez, J. C. & Guerrero, J. M., May 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 1310-1314 5 p. (I E E E International Energy Conference. ENERGYCON proceedings).

An Improved Droop Control Method for DC Microgrids Based on Low Bandwidth Communication with DC Bus Voltage Restoration and Enhanced Current Sharing Accuracy

Lu, X., Guerrero, J. M., Sun, K. & Vasquez, J. C., Apr 2014, In : *I E E E Transactions on Power Electronics*. 29, 4, p. 1800-1812 13 p.

Advanced LVDC Electrical Power Architectures and Microgrids: A Step toward a New Generation of Power Distribution Networks

Dragicevic, T., Vasquez, J. C., Guerrero, J. M. & Skrllec, D., Mar 2014, In : *I E E E Electrification Magazine*. 2, 1, p. 54-65 12 p.

Asymmetrical Grid Fault Ride-Through Strategy of Three-phase Grid-connected Inverter Considering Network Impedance Impact in Low Voltage Grid

Guo, X., Zhang, X., Wang, B., Wu, W. & Guerrero, J. M., Mar 2014, In : *I E E E Transactions on Power Electronics*. 29, 3, p. 1064-1068 5 p.

Autonomous Active and Reactive Power Distribution Strategy in Islanded Microgrids

Wu, D., Tang, F., Guerrero, J. M., Vasquez, J. C., Chen, G. & Sun, L., Mar 2014, *Proceedings of the 29th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2014*. IEEE Press, p. 2126-2131 6 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Fuzzy-Logic-Based Gain-Scheduling Control for State-of-Charge Balance of Distributed Energy Storage Systems for DC Microgrids

Aldana, N. L. D., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., Mar 2014, *2014 IEEE Applied Power Electronics Conference and Exposition (APEC 2014)*. Proceedings of a meeting held 16-20 March 2014, Fort Worth, Texas, USA. . IEEE Press, p. 2171-2176 6 p. (I E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Hierarchical Control of Parallel AC-DC Converter Interfaces for Hybrid Microgrids

Lu, X., Guerrero, J. M., Sun, K., Vasquez, J. C., Teodorescu, R. & Huang, L., Mar 2014, In : I E E Transactions on Smart Grid. 5, 2, p. 683 - 692 10 p.

Line-Interactive UPS for Microgrids

Abusara, M., Guerrero, J. M. & Sharkh, S., Mar 2014, In : I E E Transactions on Industrial Electronics. 61, 3, p. 1292-1300 9 p.

Modular Power Architectures for Microgrid Clusters

Lin, H., Liu, L., Guerrero, J. M., Vasquez, J. C. & Dragicevic, T., Mar 2014, *Proceedings of the 2014 International Conference on Green Energy, ICGE*. IEEE Press, p. 199-206 8 p.

Power Flow Analysis Algorithm for Islanded LV Microgrids Including Distributed Generator Units with Droop Control and Virtual Impedance Loop

Li, C., Chaudhary, S., Vasquez, J. C. & Guerrero, J. M., Mar 2014, *Proceedings of the 2014 29th Annual IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE Press, p. 3181-3185 6 p. (I E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Control and Analysis of Droop and Reverse Droop Controllers for Distributed Generations

Wu, D., Tang, F., Vasquez, J. C. & Guerrero, J. M., Feb 2014, *Proceedings of the 11th International Multiconference on Systems, Signals & Devices, SDD 2014*. IEEE Press, 5 p.

Control of single-phase islanded PV/battery minigrids based on power-line signaling

Quintana, P., Guerrero, J. M., Dragicevic, T. & Vasquez, J. C., Feb 2014, *Proceedings of the 2014 11th International Multi-Conference on Systems, Signals & Devices (SSD)*. IEEE Press, p. 1-6 6 p.

Distributed Secondary Control for Islanded MicroGrids - A Novel Approach

Shafiee, Q., Guerrero, J. M. & Vasquez, J. C., Feb 2014, In : I E E Transactions on Power Electronics. 29, 2, p. 1018-1031 14 p.

Dynamic-Phasor-Based Nonlinear Modelling of AC Islanded Microgrids Under Droop Control

Mariani, V., Vasca, F. & Guerrero, J. M., Feb 2014, *Proceedings of the 11th International Multi-Conference on Systems, Signals & Devices, SSD 2014*. IEEE Press, p. 1-6 6 p. 6

Hierarchical Control for Multiple DC-Microgrids Clusters

Shafiee, Q., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., Feb 2014, *Proceedings of the 11th International Multi-Conference on Systems, Signals and Devices, SSD 2014*. IEEE Press, p. 1-6 6 p.

Modeling and Control of Flexible HEV Charging Station upgraded with Flywheel Energy Storage

Dragicevic, T., Shafiee, Q., Wu, D., Meng, L., Vasquez, J. C. & Guerrero, J. M., Feb 2014, *Proceedings of the 11th International Multi-Conference on Systems, Signals and Devices, SSD 2014*. IEEE Press, p. 1-7 7 p.

Secondary Voltage Unbalance Compensation for Three-Phase Four-Wire Islanded Microgrids

Tang, F., Zhou, X., Meng, L., Guerrero, J. M. & Vasquez, J. C., Feb 2014, *Proceedings of the 11th International Multi-Conference on Systems, Signals and Devices, SSD 2014*. IEEE Press, 5 p.

Supervisory Control of an Adaptive-Droop Regulated DC Microgrid with Battery Management Capability

Dragicevic, T., Guerrero, J. M., Vasquez, J. C. & Skrlac, D., Feb 2014, In : I E E Transactions on Power Electronics. 29, 2, p. 695-706 12 p.

Tertiary Control for Optimal Unbalance Compensation in Islanded Microgrids

Meng, L., Tang, F., Savaghebi, M., Vasquez, J. C. & Guerrero, J. M., Feb 2014, *Proceedings of the 11th International Multiconference on Systems, Signals & Devices, SSD 2014*. IEEE Press, p. 1-6 6 p.

Analysis, Design, and Experimental Verification of A Synchronous Reference Frame Voltage Control for Single-Phase Inverters

Monfared, M., Golestan, S. & Guerrero, J. M., Jan 2014, In : *I E E E Transactions on Industrial Electronics*. 61, 1, p. 258-269 12 p.

An Analysis of the PLLs With Secondary Control Path

Golestan, S., Ramezani, M. & Guerrero, J. M., 2014, In : *I E E E Transactions on Industrial Electronics*. 61, 9, p. 4824-4828 5 p.

Application of a microgrid with renewables for a water treatment plant

Soshinskaya, M., Graus, W., van der Meer, J. & Guerrero, J. M., 2014, In : *Applied Energy*. 134, 29 p.

A Rolling Horizon Rescheduling Strategy for Flexible Energy in a Microgrid

Marietta, M., Graells, M. & Guerrero, J. M., 2014, *Proceedings of the 2014 IEEE International Energy Conference (ENERGYCON)*. IEEE Press, p. 1297-1303 7 p. (I E E E International Energy Conference. ENERGYCON proceedings).

Co-design of the LCL Filter and Control for Grid-Connected Inverters

Zhang, Y., Xue, M., Li, M., Kang, Y. & Guerrero, J. M., 2014, In : *Journal of Power Electronics*. 14, 5, p. 1047-1056 10 p.

Distributed Consensus-Based Control of Multiple DC-Microgrids Clusters

Shafiee, Q., Dragicevic, T., Andrade, F., Vasquez, J. C. & Guerrero, J. M., 2014, *Proceedings of the 40th Annual Conference of IEEE Industrial Electronics Society, IECON 2014*. IEEE Press, p. 2056-2062 7 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Hierarchical Coordinated Control of Distributed Generators and Active Power Filters to Enhance Power Quality of Microgrids

Savaghebi, M., Hashempour, M. M. & Guerrero, J. M., 2014, *Proceedings of the 55th IEEE Int. Scientific Conference of Riga Technical University on Power and Elec. Eng. (RTUCON)*. IEEE Press, p. 259 - 264 6 p. (IEEE Proceedings).

Hybrid islanding detection method by using grid impedance estimation in parallel-inverters-based microgrid

Ghzaiel, W., Jebali-Ben Ghorbal, M., Slama-Belkhdja, I. & Guerrero, J. M., 2014, *Proceedings of ELECTRIMACS 2014*. Valencia, Spain: IMACS, p. 433-438 6 p.

Microgrids in Active Network Management-Part I: Hierarchical Control, Energy Storage, Virtual Power Plants, and Market Participation

Palizban, O., Kauhaniemi, K. & Guerrero, J. M., 2014, In : *Renewable & Sustainable Energy Reviews*. 36, p. 428-439 12 p.

Moving Average Filter-Based Phase-Locked Loops: Performance Analysis and Design Guidelines

Golestan, S., Ramezani, M., Guerrero, J. M., Frejeido, F. & Monfared, M., 2014, In : *I E E E Transactions on Power Electronics*. 29, 6, p. 2750 - 2763 14 p.

Team-oriented Adaptive Droop Control for Autonomous AC Microgrids

Shafiee, Q., Nasirian, V., Guerrero, J. M., L. Lewis, F. & Davoudi, A., 2014, *Proceedings of the 40th Annual Conference of IEEE Industrial Electronics Society, IECON 2014*. IEEE Press, 7 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Tracking Controller for Intrinsic Output Saturated Systems in Presence of Amplitude and Rate Input Saturations

Chater, E., Giri, F., Guerrero, J. M., Chaoui, F. Z. & Haloua, M., 2014, *2014 IEEE Conference on Control Applications (CCA 2014). Part of 2014 IEEE Multi-conference on Systems and Control*. IEEE Press, p. 935-940 6 p.

一种可实现微网系统快速平滑并网的主动同步控制策略

Tang, F., Guerrero, J. M., Zhou, X., Ma, T. & Vasquez, J. C., 2014, In : *Dianli Xitong Zidonghua*. 38, 8, p. 15-22 8 p.

分布式多变流器型微电网无互联线潮流控制

Tang, F., Wu, D., Zhou, X., Guerrero, J. M. & Jia, L., 2014, In : *Dianwang Jishu*. 38, 9, p. 2363-2370 8 p.

A generic Inertia Emulation Controller for Multi-Terminal VSC-HVDC systems

Zhu, J., Guerrero, J. M., Booth, C. D., Zhang, H. & Adam, G. P., 1 Dec 2013, *2nd IET Renewable Power Generation Conference, RPG 2013*. 623 CP ed. (IET Conference Publications; No. 623 CP, Vol. 2013).

A parametric study on unbalanced three phase islanded microgrids with inverter interfaced units

Sanseverino, E. R., Quang, N. N., Zizzo, G., Di Silvestre, M. L. & Guerrero, J. M., 1 Dec 2013, *AEIT Annual Conference 2013: Innovation and Scientific and Technical Culture for Development, AEIT 2013 - Selected Proceedings Papers*. 6666793

Microgrids: Hierarchical Control and an Overview of the Control and Reserve Management Strategies

Vandoorn, T. L., Vasquez, J. C., de Kooning, D. M., Guerrero, J. M. & Vandevelde, L., Dec 2013, In : *I E E E Industrial Electronics Magazine*. 7, 4, p. 42-55 14 p.

What are microgrids?

Guerrero, J. M., Dec 2013, In : *I E E E Industrial Electronics Magazine*. 7, 4, 2 p.

Advantages and Challenges of a Type-3 PLL

Golestan, S., Monfared, M., Freijedo, F. D. & Guerrero, J. M., Nov 2013, In : *I E E E Transactions on Power Electronics*. 28, 11, p. 4985-4997 13 p.

An Islanding Microgrid Power Sharing Approach Using Enhanced Virtual Impedance Control Scheme

He, J., Li, Y. W., Guerrero, J. M., Blaabjerg, F. & Vasquez, J. C., Nov 2013, In : *IEEE Transactions on Power Electronics*. 28, 11, p. 5272-5282 10 p.

Single-Carrier Modulation for Neutral-Point-Clamped Inverters in Three-Phase Transformerless Photovoltaic Systems

Guo, X., Cavalcanti, M. C., Farias, A. M. & Guerrero, J. M., Oct 2013, In : *I E E E Transactions on Power Electronics*. 28, 6, p. 2635-2637 8 p.

Stability, Power Sharing, & Distributed Secondary Control in Droop-Controlled Microgrids

Simpson-Porco, J., Dorfler, F., Bullo, F., Shafiee, Q. & Guerrero, J. M., Oct 2013, *Proceedings of the 2013 IEEE International Conference on Smart Grid Communications (SmartGridComm)*. IEEE Press, p. 672-677 6 p.

Small-signal modeling of digitally controlled grid-connected inverters with LCL filters

Zhang, X., W. Spencer, J. & Guerrero, J. M., Sep 2013, In : *I E E E Transactions on Industrial Electronics*. 60, 9, p. 3752-3765 14 p.

Erratum to Highly efficient distributed generation and high-capacity energy storage

Hemmes, K., Guerrero, J. M. & Zhelev, T., 1 Aug 2013, In : *Chemical Engineering and Processing*. 70, p. 18-31

Supervisory Control for Real Time Reactive Power Flow Optimization in Islanded Microgrids

Milczarek, A., Vasquez, J. C., Malinowski, M., Guerrero, J. M. & Graells, M., 20 Jun 2013, *Proceedings of the 23rd European Symposium on Computer Aided Process Engineering, ESCAPE*. Kraslawski, A. & Turunen, I. (eds.). 2013 ed. Belgium: Elsevier, Vol. 32. p. 325-330 6 p. (Computer Aided Chemical Engineering).

适用于交直流混合微电网的直流分层控制系统

Lu, X., Sun, K., Guerrero, J. M. & Huang, L., 1 Apr 2013, In : *Diangong Jishu Xuebao*. 28, 4, p. 35-42 8 p.

Advanced Control Architectures for Intelligent Microgrids—Part II: Power Quality, Energy Storage, and AC/DC Microgrids
Guerrero, J. M., Chiang Loh, P., Lee, T-L. & Chandorkar, M., Apr 2013, In : I E E E Transactions on Industrial Electronics. 60, 4, p. 1263-1270

Distributed Control to Ensure Proportional Load Sharing and Improve Voltage Regulation in Low-Voltage DC Microgrids
Anand, S., G. Fernandes, B. & Guerrero, J. M., Apr 2013, In : I E E E Transactions on Power Electronics. 28, 4, p. 1900 - 1913 14 p.

Introduction to the special section on distributed generation and microgrids

Guerrero, J. M., Blaabjerg, F., Li, Y. W., Mohamed, Y. A. R. I. & Salama, M. M. A., Apr 2013, In : IEEE Transactions on Industrial Electronics. 60, 4, p. 1251-1253 3 p., 6361319.

Second Order Generalized Integrator Based Reference Current Generation Method for Single-Phase Shunt Active Power Filters Under Adverse Grid Conditions

Golestan, S., Monfared, M. & Guerrero, J. M., Feb 2013, *Proceedings of the 2013 4th Power Electronics, Drive Systems and Technologies Conference (PEDSTC)*. IEEE Press, Vol. 4. p. 510-517 8 p.

孤岛运行交流微电网中分布式储能系统改进下垂控制方法

Lu, X., Sun, K., Huang, L., Xiao, X. & Guerrero, J. M., Jan 2013, In : Dianli Xitong Zidonghua. 37, 1

Adaptive sliding mode control of interleaved parallel boost converter for fuel cell energy generation system

El Fadil, H., Giri, F. & Guerrero, J. M., 2013, In : Mathematics and Computers in Simulation. 91, 2013, p. 193-210 18 p.

Advanced Control Architectures for Intelligent MicroGrids, Part I: Decentralized and Hierarchical Control

Guerrero, J. M., Chandorkar, M., Lee, T-L. & Loh, P. C., 2013, In : I E E E Transactions on Industrial Electronics. 60, 4, p. 1254-1262

A generic inertia emulation controller for multi-terminal VSC-HVDC systems

Zhu, J., Guerrero, J. M., Booth, C., Zhang, H. & Adam, G., 2013, *Proceedings of the 2nd IET Renewable Power Generation Conference (RPG 2013)*. Institution of Engineering and Technology, 6 p.

Analysis, design, and experimental evaluation of power calculation in digital droop-controlled parallel microgrid inverters

Gao, M., Chen, M., Jin, C., Guerrero, J. M. & Qian, Z., 2013, In : Zhejiang University. Journal. Science C: Computers & Electronics. 14, 1, p. 50-64 15 p.

Analysis, Modelling, and Simulation of Droop Control with Virtual Impedance Loop Applied to Parallel UPS Systems

Lima, F. K. A., Branco, C. G. C., Guerrero, J. M., Neto, L. J. C., Carvalho, S. S. & Torrico-Bascope, R. P., 2013, *Proceedings of the 39th Annual Conference of the IEEE Industrial Electronics Society, IECON 2013*. IEEE Press, p. 1524-1529 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

A New Synchronous Reference Frame-Based Method for Single-Phase Shunt Active Power Filters

Monfared, M., Golestan, S. & Guerrero, J. M., 2013, In : Journal of Power Electronics. 13, 4, p. 692-700 9 p.

A new virtual-flux-vector based droop control strategy for parallel connected inverters in microgrids

Hu, J., Zhu, J., Qu, Y. & Guerrero, J. M., 2013, *Proceedings of the 2013 IEEE ECCE Asia DownUnder*. IEEE Press, p. 585-590 6 p.

A Novel Grid Impedance Estimation Technique based on Adaptive Virtual Resistance Control Loop Applied to Distributed Generation Inverters

Ghzaïel, W., Jebali-Ben Ghorbal, M., Slama-Belkhdouja, I. & Guerrero, J. M., 2013, *Proceedings of the 15th European Conference on Power Electronics and Applications, EPE 2013*. IEEE Press, p. 1-10 10 p.

A Novel Robust Communication Algorithm for Distributed Secondary Control of Islanded MicroGrids

Shafiee, Q., Dragicevic, T., Vasquez, J. C., Guerrero, J. M., Stefanovic, C. & Popovski, P., 2013, *Proceedings of the IEEE Energy Conversion Congress and Exposition, ECCE 2013*. IEEE Press, p. 4609-4616 8 p.

A parametric study on unbalanced three phase islanded microgrids with inverter interfaced units

Sanseverino, E. R., Quang, N. N., Zizzo, G., Di Silvestre, M. L. & Guerrero, J. M., 2013, *Proceedings of the 2013 AEIT Annual Conference*. IEEE Press, p. 1-6 6 p.

Autonomous Voltage Unbalance Compensation in an Islanded Droop-Controlled Microgrid

Savaghebi, M., Jalilian, A., Vasquez, J. C. & Guerrero, J. M., 2013, In : *IEEE Transactions on Industrial Electronics*. 60, 4, p. 1390-1402 14 p.

Battery State-of-Charge and Parameter Estimation Algorithm Based on Kalman Filter

Dragicevic, T., Susic, S. & Guerrero, J. M., 2013, *Proceedings of the 2013 IEEE EUROCON*. IEEE Press, p. 1519-1524 6 p.

Control of single-phase islanded PV/battery streetlight cluster based on power-line signaling

Quintana, P., Garcia, J., Guerrero, J. M., Dragicevic, T. & Vasquez, J. C., 2013, *Proceedings of the 2013 International Conference on New Concepts in Smart Cities: Fostering Public and Private Alliances (SmartMILE)*. IEEE Press, p. 1-6 6 p.

Control of single-phase islanded PV/battery streetlight cluster based on power-line signaling

Quintana, P. J., Garcia, J., Guerrero, J. M., Dragicevic, T. & Vasquez, J. C., 2013, *Control of single-phase islanded PV/battery streetlight cluster based on power-line signaling*.

Coordinated Power Control Strategy based on Primary-Frequency-Signaling for Islanded Microgrids

Wu, D., Guerrero, J. M., Vasquez, J. C., Dragicevic, T. & Tang, F., 2013, *2013 IEEE Energy Conversion Congress and Exposition (ECCE 2013)*. IEEE Press, p. 1033-1038 6 p.

Coordinated Primary and Secondary Control with Frequency-Bus-Signaling for Distributed Generation and Storage in Islanded Microgrids

Wu, D., Tang, F., Dragicevic, T., Vasquez, J. C. & Guerrero, J. M., 2013, *Proceedings of the 39th Annual Conference of the IEEE Industrial Electronics Society, IECON 2013*. IEEE Press, p. 7140-7145 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Distributed Cooperative Control of Nonlinear and Non-identical Multi-agent Systems

Bidram, A., Lewis, F., Davoudi, A. & Guerrero, J. M., 2013, *Proceedings of the 2013 21st Mediterranean Conference on Control and Automation (MED)*. IEEE Press, p. 770-775 6 p.

Distributed Cooperative Secondary Control of Microgrids Using Feedback Linearization

Bidram, A., Davoudi, A., Lewis, F. & Guerrero, J. M., 2013, In : *IEEE Transactions on Power Systems*. 28, 3, p. 3462 - 3470 9 p.

Distributed Secondary Control for DC Microgrid Applications with Enhanced Current Sharing Accuracy

Lu, X., Guerrero, J. M. & Sun, K., 2013, *Proceedings of the 2013 IEEE International Symposium on Industrial Electronics (ISIE)*. IEEE Press, p. 1-6 6 p. (Industrial Electronics (ISIE), IEEE International Symposium on).

Dynamics Assessment of Advanced Single-Phase PLL Structures

Golestan, S., Monfarad, M., Freijedo, F. D. & Guerrero, J. M., 2013, In : *IEEE Transactions on Industrial Electronics*. 60, 6, p. 2167-2177 11 p.

Grid simulator for power quality assessment of micro-grids

Carrasco, J. E. G., Vasquez, J. C. & Guerrero, J. M., 2013, In : *IET Power Electronics*. 6, 4, p. 700-709 10 p.

Industrial applications of the Kalman filter: a review

Auger, F., Hilaret, M., Guerrero, J. M., Monmasson, E., Orłowska-Kowalska, T. & Katsura, S., 2013, In : *IEEE Transactions on Industrial Electronics*. 60, 12, 16 p.

MAS Based Event-Triggered Hybrid Control for Smart Microgrids

Dou, C., Liu, B. & Guerrero, J. M., 2013, *Proceedings of the 39th Annual Conference of the IEEE Industrial Electronics Society, IECON 2013*. IEEE Press, p. 1712-1717 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Microgrid Reactive and Harmonic Power Sharing Using Enhanced Virtual Impedance

He, J., Wei Li, Y., Guerrero, J. M., Blaabjerg, F. & Vasquez, J. C., 2013, *28th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2013*. IEEE Press, p. 447-452 6 p. (IEEE Applied Power Electronics Conference and Exposition. Conference Proceedings).

Modeling, analysis, and design of stationary reference frame droop controlled parallel three-phase voltage source inverters

Vasquez, J. C., Guerrero, J. M., Savaghebi, M., Eloy-Garcia, J. & Teodorescu, R., 2013, In : *IEEE Transactions on Industrial Electronics*. 60, 4, p. 1271-1280 10 p.

Modeling, analysis, and design of stationary-reference-frame droop-controlled parallel three-phase voltage source inverters

Vasquez, J. C., Guerrero, J. M., Savaghebi, M., Eloy-Garcia, J. & Teodorescu, R., 2013, In : *IEEE Transactions on Industrial Electronics*. 60, 4

Modelling, Analysis, and Design of a Frequency-Droop-Based Virtual Synchronous Generator for Microgrid Applications

Du, Y., Guerrero, J. M., Chang, L., Su, J. & Mao, M., 2013, *Proceedings of the 2013 IEEE ECCE Asia DownUnder*. IEEE Press, p. 643-649 7 p.

Optimal Power Flow in Microgrids with Energy Storage

Levron, Y., Guerrero, J. M. & Beck, Y., 2013, In : *IEEE Transactions on Power Systems*. 28, 3, p. 3226-3234 9 p.

Optimization with System Damping Restoration for Droop Controlled DC-DC Converters

Meng, L., Dragicevic, T., Guerrero, J. M. & Vasquez, J. C., 2013, *Proceedings of the IEEE Energy Conversion Congress and Exposition, ECCE 2013*. IEEE Press, p. 65-72 9 p.

Selective compensation of voltage harmonics in grid-connected microgrids

Savaghebi, M., Vasquez, J. C., Jalilian, A., Guerrero, J. M. & Lee, T., 2013, In : *Mathematics and Computers in Simulation*. 91, p. 211-228 18 p.

Selective virtual capacitive impedance loop for harmonics voltage compensation in islanded microgrids

Micallef, A., Apap, M., Spiteri-Staines, C. & Guerrero, J. M., 2013, *Proceedings of the 39th Annual Conference of IEEE Industrial Electronics Society, IECON 2013*. IEEE Press, p. 7968-7973 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Stability Constrained Efficiency Optimization for Droop Controlled DC-DC Conversion System

Meng, L., Dragicevic, T., Guerrero, J. M. & Vasquez, J. C., 2013, *Proceedings of the 39th Annual Conference of the IEEE Industrial Electronics Society, IECON 2013*. IEEE Press, p. 7222-7227 6 p. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Voltage-Based Control of a Smart Transformer in a Microgrid

Vandoorn, T. L., De Kooning, J. D. M., Meersman, B., Guerrero, J. M. & Vandeveldel, L., 2013, In : *IEEE Transactions on Industrial Electronics*. 60, 4, p. 1291-1305 15 p.

直流微电网储能系统中带有母线电压跌落补偿功能的负荷功率动态分配方法

Lu, X., Sun, K., Huang, L., Xiao, X. & Guerrero, J. M., 2013, In : *Zhongguo Dianji Gongcheng Xuebao*. 33, 16, p. 37-46 9 p.

Introduction to the special section on industrial applications and implementation issues of the Kalman filter

Auger, F., Guerrero, J. M., Hilairet, M., Katsura, S., Monmasson, E. & Orłowska-Kowalska, T., Nov 2012, In : IEEE Transactions on Industrial Electronics. 59, 11, p. 4165-4168 4 p., 6220916.

Automatic Power-Sharing Modification of P/V Droop Controllers in Low-Voltage Resistive Microgrids

L. Vandoorn, T., D. M. De Koning, J., Meersman, B., Vandevelde, L. & Guerrero, J. M., Oct 2012, In : IEEE Transactions on Power Delivery. 27, 4, p. 2318-2325 8 p.

Comments on "Economic analysis of different supporting policies for the production of electrical energy by solar photovoltaics in western European Union countries" by Luigi Dusonchet and Enrico Telaretti

De la Hoz, J., Martín, H., Martins, B., Matas, J. & Maria Guerrero, J., 1 Sep 2012, In : Energy Policy. 48, p. 846-849 4 p.

Lyapunov based control of hybrid energy storage system in electric vehicles

El Fadil, H., Giri, F. & Guerrero, J. M., 29 Jun 2012, *Proceedings of the American Control Conference (ACC), 2012*. Montreal, QC: IEEE Press, p. 5005-5010 10 p. (American Control Conference).

An islanding microgrid reactive power sharing scheme enhanced by programmed virtual impedances

He, J., Li, Y. W., Guerrero, J. M., Vasquez, J. C. & Blaabjerg, F., 2012, *Proceedings of the 3rd IEEE International Symposium on Power Electronics for Distributed Generation Systems*. IEEE Press, p. 229-235 7 p.

A Review of Power Electronics Based Microgrids

Wang, X., Guerrero, J. M., Blaabjerg, F. & Chen, Z., 2012, In : International Journal of Power Electronics. 12, 1, p. 181-192

Cooperative Control with Virtual Selective Harmonic Capacitance for Harmonic Voltage Compensation in Islanded MicroGrids

Micallef, A., Apap, M., Spitero-Stanies, C. & Guerrero, J. M., 2012, *Proceedings of the 38th Annual Conference of the IEEE Industrial Electronics Society*. IEEE Press, p. 5619 - 5624 (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Design and Tuning of a Modified Power-Based PLL for Single-Phase Grid-Connected Power Conditioning Systems

Golestan, S., Monfared, M., D. Freijedo, F. & Guerrero, J. M., 2012, In : IEEE Transactions on Power Electronics. 27, 8, p. 3639-3650 12 p.

Distributed Secondary Control for Islanded MicroGrids – A Networked Control Systems Approach

Shafiee, Q., Vasquez, J. C. & Guerrero, J. M., 2012, *Proceedings of the 38th Annual Conference of the IEEE Industrial Electronics Society*. IEEE Press, p. 5637-5642

Grid-connected of photovoltaic module using nonlinear control

El Fadil, H., Giri, F. & Guerrero, J. M., 2012, *3rd IEEE International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2012*. IEEE Press, p. 119 - 124 6 p.

Grid Integration of Renewables

Blaabjerg, F. & Guerrero, J. M., 2012, *Proceedings of the International Exhibition and Conference for Power Electronics, Intelligent Motion, Renewable Energy and Energy Management*. VDE Verlag GMBH, p. 33-44

Highly efficient distributed generation and high-capacity energy storage

Hemmes, K., Guerrero, J. M. & Zhelev, T., 2012, In : Chemical Engineering and Processing. 51, p. 18-31 14 p.

Improving the voltage quality of an inverter via by-passing the harmonic current components

Zhong, Q-C., Blaabjerg, F., Guerrero, J. M. & Hornik, T., 2012, *Proceedings of the 4th IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 4037-4041 5 p.

Mitigation of Voltage and Current Harmonics in Grid-Connected Microgrids

Savaghebi, M., Guerrero, J. M., Jalilian, A. & Vasquez, J. C., 2012, *Proceedings of the 21st IEEE International Symposium on Industrial Electronics (ISIE), 2012*. IEEE, p. 1610-1615 6 p. (Industrial Electronics (ISIE), IEEE

International Symposium on).

Multilayer Control for Inverters in Parallel Operation without Intercommunications

Hua, M., Hu, H., Xing, Y. & Guerrero, J. M., 2012, In : I E E E Transactions on Power Electronics. 27, 8, p. 3651-3663 13 p.

Multiple Distributed Smart Microgrids with a Self-Autonomous, Energy Harvesting Wireless Sensor Network

Guerrero, J. M. & Kheng Tan, Y., 2012, *Smart Grid Infrastructure & Networking*. Iniewski, K. (ed.). 1 ed. McGraw-Hill, p. 249-290 42 p.

Online Detection and Estimation of Grid Impedance Variation for Distributed Power Generation

Jebali-Ben Ghorbal, M., Ghzaïel, W., Slama-Belkhdja, I. & Guerrero, J. M., 2012, *Proceedings of the 16th IEEE Mediterranean Electrotechnical Conference (MELECON), 2012*. IEEE Press, p. 555-560 6 p. (IEEE Mediterranean Electrotechnical Conference (MELECON), proceedings, Vol. 16).

Precise Modeling Based on Dynamic Phasors for Droop-Controlled Parallel-Connected Inverters

Wang, L., Guo, X. Q., Gu, H. R., Wu, W. Y. & Guerrero, J. M., 2012, *Proceedings of the 21st IEEE International Symposium on Industrial Electronics (ISIE), 2012*. IEEE, p. 475-480 6 p. (Industrial Electronics (ISIE), IEEE International Symposium on).

Secondary Control for Compensation of Voltage Harmonics and Unbalance in Microgrids

Savaghebi, M., Vasquez, J. C., Jalilian, A. & Guerrero, J. M., 2012, *3rd IEEE International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2012*. IEEE Press, p. 46-53 8 p.

Secondary control for reactive power sharing and voltage amplitude restoration in droop-controlled islanded microgrids

Micallef, A., Apap, M., Spiteri Staines, C. & Guerrero, J. M., 2012, *Proceedings of the 3rd IEEE International Symposium on Power Electronics for Distributed Generation Systems*. Aalborg: IEEE Press, p. 492-498 7 p.

Secondary Control for Reactive Power Sharing in Droop-Controlled Islanded MicroGrids

Micallef, A., Apap, M., Spiteri-Staines, C. & Guerrero, J. M., 2012, *Proceedings of the 21st IEEE International Symposium on Industrial Electronics (ISIE), 2012*. IEEE, p. 1627-1633 7 p. (Industrial Electronics (ISIE), IEEE International Symposium on).

Secondary Control for Voltage Quality Enhancement in Microgrids

Savaghebi, M., Jalilian, A., Vasquez, J. C. & Guerrero, J. M., 2012, In : I E E E Transactions on Smart Grid. 3, 4, p. 1893-1902 10 p.

Secondary Control Scheme for Voltage Unbalance Compensation in an Islanded Droop-Controlled Microgrid

Savaghebi, M., Jalilian, A., Vasquez, J. C. & Guerrero, J. M., 2012, In : IEEE Transactions on Smart Grid. 3, 2, p. 797-807 11 p.

Selective Harmonic Virtual Impedance for Voltage Source Inverters with LCL filter in Microgrids

Savaghebi, M., Vasquez, J. C., Jalilian, A. J., Guerrero, J. M. & Lee, T-L., 2012, *Proceedings of the IEEE Energy Conversion Congress and Exposition (ECCE), 2012*. IEEE Press, p. 1960-1965

SoC-Based Droop Method for Distributed Energy Storage in DC Microgrid Applications

Lu, X., Sun, K., Guerrero, J. M., Vasquez, J. C., Huang, L. & Teodorescu, R., 2012, *Proceedings of the 21st IEEE International Symposium on Industrial Electronics (ISIE)*. IEEE, p. 1640-1645 6 p. (Industrial Electronics (ISIE), IEEE International Symposium on).

SoC-Based Dynamic Power Sharing Method with AC-Bus Voltage Restoration for Microgrid Applications

Lu, X., Sun, K., Guerrero, J. M. & Huang, L., 2012, *Proceedings of the 38th Annual Conference of the IEEE Industrial Electronics Society*. Montreal, QC: IEEE Press, p. 5677-5682 (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Voltage Quality Improvement in Islanded Microgrids Supplying Nonlinear Loads

T. Dehghani, M., Vahedi, A., Savaghebi, M. & Guerrero, J. M., 2012, *Proceedings of the 3rd Power Electronics and Drive Systems Technology (PEDSTC), 2012*. IEEE Press, p. 360-365 6 p.

Advanced control of interleaved boost converter for fuel cell energy generation system

El Fadil, H., Giri, F., Guerrero, J. M., Haloua, M. & Abouloifa, A., 1 Dec 2011, *Proceedings of the 18th IFAC World Congress*. PART 1 ed. Vol. 18. p. 2803-2808 6 p.

Editorial: Special issue on power electronics for microgrids - Part II

Guerrero, J. M., 1 Dec 2011, In : IEEE Transactions on Power Electronics. 26, 3, p. 659-663 5 p., 5873645.

Nonlinear control of single-phase shunt active power filter theoretical analysis of closed-loop performances

Lachkar, I., Giri, F., Abouloifa, A., Guerrero, J. M., Grino, R., Chaoui, F. Z. & Elfadil, H., 1 Dec 2011, *Proceedings of the 18th IFAC World Congress*. PART 1 ed. Vol. 18. p. 4954-4959 6 p.

Intelligent connection agent for three-phase grid-connected microgrids

Rocabert, J., Azevedo, G. M. S., Luna, A., Guerrero, J. M., Candela, J. I. & Rodriguez, P., 21 Oct 2011, In : IEEE Transactions on Power Electronics. 26, 10, p. 2993-3005 13 p., 5714752.

Adaptive control of interleaved boost converter for fuel cell energy

El Fadil, H., Giri, F., Guerrero, J. M. & Salhi, B., 29 Sep 2011, *Proceedings of the 2011 American Control Conference, ACC 2011*. p. 3905-3910 6 p. 5990790

Fuzzy variable structure control for PWM inverters

Chang, E. C. & Guerrero, J. M., 27 Sep 2011, *FUZZ 2011 - 2011 IEEE International Conference on Fuzzy Systems - Proceedings*. p. 609-613 5 p. 6007373

Detailed Operation Scheduling and Control for Renewable Energy Powered Microgrids

Zamarripa, M., Vasquez, J. C., Guerrero, J. M. & Graells, M., 20 Jun 2011, In : *Computer Aided Chemical Engineering*. 29, p. 1819-1823 5 p.

A novel improved variable step-size incremental-resistance MPPT method for PV systems

Mei, Q., Shan, M., Liu, L. & Guerrero, J. M., 1 Jun 2011, In : IEEE Transactions on Industrial Electronics. 58, 6, p. 2427-2434 8 p., 5559432.

Selective compensation of voltage harmonics in an islanded microgrid

Savaghebi, M., Jalilian, A., Vasquez, J. C. & Guerrero, J. M., 11 May 2011, *2011 2nd Power Electronics, Drive Systems and Technologies Conference, PEDSTC 2011*. p. 279-285 7 p. 5742432

Design and analysis of the droop control method for parallel inverters considering the impact of the complex impedance on the power sharing

Yao, W., Chen, M., Matas, J., Guerrero, J. M. & Qian, Z. M., 1 Feb 2011, In : IEEE Transactions on Industrial Electronics. 58, 2, p. 576-588 13 p., 5437251.

Hierarchical control of droop-controlled AC and DC microgrids - A general approach toward standardization

Guerrero, J. M., Vasquez, J. C., Matas, J., De Vicuña, L. G. & Castilla, M., 1 Jan 2011, In : IEEE Transactions on Industrial Electronics. 58, 1, p. 158-172 15 p., 5546958.

A centralized control architecture for harmonic voltage suppression in islanded microgrids

Wang, X., Blaabjerg, F., Chen, Z. & Guerrero, J. M., 2011, *Proceedings of the 37th Annual Conference of IEEE Industrial Electronics Society, IECON 2011*. IEEE Press, p. 3070-3075 6 p.

A Distributed Control Strategy Based on DC Bus Signaling for Modular Photovoltaic Generation Systems With Battery Energy Storage

Sun, K., Zhang, L., Xing, Y. & Guerrero, J. M., 2011, In : I E E E Transactions on Power Electronics. 26, 10, p. 3032-3045 14 p.

Connecting Renewable Energy Sources into the Smartgrid

Guerrero, J. M., 2011, *Proceedings of the 2011 IEEE International Symposium on Industrial Electronics (ISIE)*. IEEE Press , p. 2400-2566 167 p.

Control of parallel-connected bidirectional AC-DC converters in stationary frame for microgrid application

Lu, X., Guerrero, J. M., Teodorescu, R., Kerekes, T., Sun, K. & Huang, L., 2011, *Proceedings of the 3rd IEEE Energy Conversion Congress and Exposition (ECCE 2011)*. IEEE Press, p. 4153-4160 8 p.

Droop-Controlled Inverters with Seamless Transition between Islanding and Grid-Connected Operations

Hu, S-H., Kuo, C-Y., Lee, T-L. & Guerrero, J. M., 2011, *Proceedings of the 3rd IEEE Energy Conversion Congress and Exposition (ECCE 2011)*. IEEE Press, p. 2196-2201 6 p.

Experimental evaluation of voltage unbalance compensation in an islanded microgrid

Savaghebi, M., Guerrero, J. M., Jalilian, A. & Vasquez, J. C., 2011, *Proceedings of the IEEE International Symposium on Industrial Electronics (ISIE 2011)* . IEEE Press, p. 1453-1458 6 p.

Hierarchical Control Scheme for Voltage Harmonics Compensation in an Islanded Droop-Controlled Microgrid

Savaghebi, M., Guerrero, J. M., Jalilian, A., Vasquez, J. C. & Lee, T-L., 2011, *Proceedings of the 9th IEEE International Conference on Power Electronics and Drive Systems, PEDS 2011*. IEEE Press, p. 89-94 6 p.

Hierarchical Control Scheme for Voltage Unbalance Compensation in Islanded Microgrids

Savaghebi, M., Guerrero, J. M., Jalilian, A. & Vasquez, J. C., 2011, *Proceedings of the 37th Annual Conference of IEEE Industrial Electronics Society, IECON 2011*. IEEE Press, p. 3158-3163 6 p.

Modeling, analysis, and design of stationary reference frame droop controlled parallel three-phase voltage source inverters

Vasquez, J. C., Guerrero, J. M., Savaghebi, M. & Teodorescu, R., 2011, *Proceedings of the 8th IEEE International Conference on Power Electronics and ECCE Asia (ICPE & ECCE 2011)*. IEEE Press, p. 272-279 8 p.

Multilayer control for inverters in parallel operation without signal interconnection

Hua, M., Hu, H., Xing, Y. & Guerrero, J. M., 2011, *Proceedings of the 37th Annual Conference of IEEE Industrial Electronics Society, IECON 2011*. IEEE Press, p. 3180-3185 6 p.

Secondary control for voltage unbalance compensation in an islanded microgrid

Savaghebi, M., Guerrero, J. M., Jalilian, A. & Vasquez, J. C., 2011, *Proceedings of the 2nd IEEE International Conference on Smart Grid Communications, SmartGridComm 2011*. IEEE Press, p. 499-504 6 p.

Selective Compensation of Voltage Harmonics in a Grid-Connected Microgrid

Savaghebi, M., Guerrero, J. M., Jalilian, A., Vasquez, J. C. & Lee, T-L., 2011, *Proceedings of ELECTRIMACS 2011*. University of Cergy-Pontoise, 6 p.

Smart grid and renewable energy systems

Blaabjerg, F. & Guerrero, J. M., 2011, *Proceedings of the International Conference on Electrical Machines and Systems, ICEMS 2011*. IEEE Press, p. 1-10 10 p.

Voltage Harmonic Compensation of a Microgrid Operating in Islanded and Grid-Connected Modes

Savaghebi, M., Jalilian, A., Vasquez, J. C., Guerrero, J. M. & Lee, T-L., 2011, *Proceedings of the 19th Iranian Conference on Electrical Engineering, ICEE 2011* . IEEE Press, 6 p.

An integrated multifunction DC/DC converter for PV generation systems

Ma, L., Sun, K., Teodorescu, R., Guerrero, J. M. & Jin, X., 27 Dec 2010, *ISIE 2010 - 2010 IEEE International Symposium on Industrial Electronics*. p. 2205-2210 6 p. 5637648

Intelligent control agent for transient to an island grid

Rocabert, J., Azevedo, G., Vazquez, G., Candela, I., Rodriguez, P. & Guerrero, J. M., 27 Dec 2010, *ISIE 2010 - 2010 IEEE International Symposium on Industrial Electronics*. p. 2223-2228 6 p. 5636844

Microgrids: Integration of distributed energy resources into the smart-grid

Guerrero, J. M., 27 Dec 2010, *ISIE 2010 - 2010 IEEE International Symposium on Industrial Electronics*. p. 4281-4414 134 p. 5637667

Guest editorial: Editorial special issue on power electronics for microgrids - Part I

Guerrero, J. M., 1 Dec 2010, In : *IEEE Transactions on Power Electronics*. 25, 12, p. 2885-2888 4 p., 5613192.

Hierarchical control of intelligent microgrids

Vasquez, J., Guerrero, J., Miret, J., Castilla, M. & Garcia De Vicuna, L., 1 Dec 2010, In : *IEEE Industrial Electronics Magazine*. 4, 4, p. 23-29 7 p., 5663773.

Hierarchical control of power plants with microgrid operation

Guerrero, J. M., Vásquez, J. C., Savaghebi, M., De La Hoz, J. & Martín, H., 1 Dec 2010, *Proceedings - IECON 2010, 36th Annual Conference of the IEEE Industrial Electronics Society*. p. 3006-3011 6 p. 5674954

Resonant current regulation for transformerless hybrid active filter to suppress harmonic resonances in industrial power systems

Lee, T. L., Wang, Y. C. & Guerrero, J. M., 18 May 2010, *APEC 2010 - 25th Annual IEEE Applied Power Electronics Conference and Exposition*. p. 380-386 7 p. 5433644

A simple control algorithm to avoid flux density bias in isolated full-bridge topologies

Hang, L., Hong, X., Guerrero, J. M., Lu, Z. & Fang, W., 1 Dec 2009, p. 100-103. 4 p.

Design of an analog quasi-steady-state nonlinear current-mode controller for single-phase active power filter

Miret, J., De Vicuna, L. G., Castilla, M., Matas, J. & Guerrero, J. M., 1 Dec 2009, In : *IEEE Transactions on Industrial Electronics*. 56, 12, p. 4872-4881 10 p., 5159387.

Control design guidelines for single-phase grid-connected photovoltaic inverters with damped resonant harmonic compensators

Castilla, M., Miret, J., Matas, J., de Vicuña, L. G. & Guerrero, J. M., 2 Nov 2009, In : *IEEE Transactions on Industrial Electronics*. 56, 11, p. 4492-4501 10 p.

Voltage support provided by a droop-controlled multifunctional inverter

Vasquez, J. C., Mastromauro, R. A., Guerrero, J. M. & Liserre, M., 2 Nov 2009, In : *IEEE Transactions on Industrial Electronics*. 56, 11, p. 4510-4519 10 p.

Sliding-mode control for a single-phase AC/AC quantum resonant converter

García de Vicuña, L., Castilla, M., Miret, J., Matas, J. & Guerrero, J. M., 3 Sep 2009, In : *IEEE Transactions on Industrial Electronics*. 56, 9, p. 3496-3504 9 p.

Selective harmonic-compensation control for single-phase active power filter with high harmonic rejection

Miret, J., Castilla, M., Matas, J., Guerrero, J. M. & Vasquez, J. C., 17 Aug 2009, In : *IEEE Transactions on Industrial Electronics*. 56, 8, p. 3117-3127 11 p.

Sharing of active power supply and reactive power compensation for Parallel Inverters

Zhangt, X., Zhangt, H., Mat, X. & Guerrero, J. M., 1 Jun 2009, *24th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2009*. p. 353-357 5 p. 4802681

Control strategy for flexible microgrid based on parallel line-interactive UPS systems

Guerrero, J. M., Vásquez, J. C., Matas, J., Castilla, M. & García de Vicuña, L., 1 Apr 2009, In : IEEE Transactions on Industrial Electronics. 56, 3, p. 726-736 11 p.

Flux DC bias and digital suppression scheme for isolated power factor correction converter

Hang, L. J., Lu, Z. Y. & Guerrero, J. M., 25 Jan 2009, In : Zhongguo Dianji Gongcheng Xuebao/Proceedings of the Chinese Society of Electrical Engineering. 29, 3, p. 14-22 9 p.

Droop control of a multifunctional PV inverter

Mastromauro, R. A., Liserre, M., Dell'Aquila, A., Guerrero, J. M. & Vásquez, J. C., 29 Dec 2008, *2008 IEEE International Symposium on Industrial Electronics, ISIE 2008*. p. 2396-2400 5 p. 4677145

Ride-through improvement of wind-turbines via feedback linearization

Matas, J., Rodríguez, P., Guerrero, J. M. & Vásquez, J. C., 29 Dec 2008, *2008 IEEE International Symposium on Industrial Electronics, ISIE 2008*. p. 2377-2382 6 p. 4677245

Adaptive nonlinear control of multiphase synchronous buck power converters

El Fadil, H., Giri, F. & Guerrero, J. M., 1 Dec 2008, *Proceedings of the 17th World Congress, International Federation of Automatic Control, IFAC*. 1 PART 1 ed. Vol. 17.

Analysis of flux density bias and digital suppression strategy for single-stage power factor corrector converter

Hang, L., Yao, W., Lu, Z., Qian, Z. & Guerrero, J. M., 18 Aug 2008, In : IEEE Transactions on Industrial Electronics. 55, 8, p. 3077-3087 11 p.

Control of distributed uninterruptible power supply systems

Guerrero, J. M., Hang, L. & Uceda, J., 18 Aug 2008, In : IEEE Transactions on Industrial Electronics. 55, 8, p. 2845-2859 15 p.

Guest editorial

Guerrero, J. M. & Uceda, J., 18 Aug 2008, In : IEEE Transactions on Industrial Electronics. 55, 8, p. 2842-2844 3 p.

Linear current control scheme with series resonant harmonic compensator for single-phase grid-connected photovoltaic inverters

Castilla, M., Miret, J., Matas, J., García de Vicuña, L. & Guerrero, J. M., 1 Jul 2008, In : IEEE Transactions on Industrial Electronics. 55, 7, p. 2724-2733 10 p.

Feedback linearization of direct-drive synchronous wind-turbines via a sliding mode approach

Matas, J., Castilla, M., Guerrero, J. M., de Vicuña, L. G. & Miret, J., 1 May 2008, In : IEEE Transactions on Power Electronics. 23, 3, p. 1093-1103 11 p.

Comparative study of hysteretic controllers for single-phase voltage regulators

Castilla, M., Guerrero, J. M., Matas, J., Miret, J. & Sosa, J., 1 Jan 2008, In : IET Power Electronics. 1, 1, p. 132-143 12 p.

Feedback linearization of a single-phase active power filter via sliding mode control

Matas, J., García de Vicuña, L., Miret, J., Guerrero, J. M. & Castilla, M., 1 Jan 2008, In : IEEE Transactions on Power Electronics. 23, 1, p. 116-125 10 p.

Reactive power compensation for parallel inverters without control interconnections in microgrid

Zhang, X., Zhang, H., Guerrero, J. M. & Ma, X., 1 Jan 2008, *Proceedings - 34th Annual Conference of the IEEE Industrial Electronics Society, IECON 2008*. IEEE Computer Society Press, p. 922-925 4 p. 4758076

Control of line-interactive UPS connected in parallel forming a microgrid

Guerrero, J. M., Berbel, N., Matas, J., Sosa, J. L. & De Vicuña, L. G., 1 Dec 2007, *2007 IEEE International Symposium on Industrial Electronics, ISIE 2007, Proceedings*. p. 2667-2672 6 p. 4375029

Droop control method with virtual output impedance for parallel operation of uninterruptible power supply systems in a microgrid

Guerrero, J. M., Berbel, N., Matas, J., Sosa, J. L. & De Vicuña, L. G., 1 Dec 2007, *APEC 2007 - 22nd Annual IEEE Applied Power Electronics Conference and Exposition*. p. 1126-1132 7 p. 4195859

Parallel operation of uninterruptible power supply systems in MicroGrids

Guerrero, J. M., Vásquez, J. C., Matas, J., Sosa, J. L. & De Vicuña, L. G., 1 Dec 2007, *2007 European Conference on Power Electronics and Applications, EPE*. 4417733

Author's reply [2]

Guerrero, J. M., 1 Sep 2007, In : *IEEE Industrial Electronics Magazine*. 1, 3, 1 p.

Simple low-cost hysteretic controller for single-phase synchronous buck converters

Castilla, M., García de Vicuña, L., Guerrero, J. M., Miret, J. & Berbel, N., 1 Jul 2007, In : *IEEE Transactions on Power Electronics*. 22, 4, p. 1232-1241 10 p.

Designing VRM hysteretic controllers For optimal transient response

Castilla, M., De Vicuña, L. G., Guerrero, J. M., Matas, J. & Miret, J., 1 Jun 2007, In : *IEEE Transactions on Industrial Electronics*. 54, 3, p. 1726-1738 13 p.

Decentralized control for parallel operation of distributed generation inverters using resistive output impedance

Guerrero, J. M., Matas, J., de Vicuña, L. G., Castilla, M. & Miret, J., 1 Apr 2007, In : *IEEE Transactions on Industrial Electronics*. 54, 2, p. 994-1004 11 p.

Uninterruptible power supply systems provide protection

Guerrero, J. M., de Vicuña, L. G. & Uceda, J., 1 Mar 2007, In : *IEEE Industrial Electronics Magazine*. 1, 1, p. 28-38 11 p.

Analysis, design and practical evaluation of an input-output linearization controller for the CLL-T dc-dc resonant converter

Sosa, J., Castilla, M., Berbel, N., Guerrero, J. M. & De Vicuña, L. G., 1 Dec 2006, *IECON 2006 - 32nd Annual Conference on IEEE Industrial Electronics*. p. 2593-2598 6 p. 4152959

Decentralized control for parallel operation of distributed generation inverters in microgrids using resistive output impedance

Guerrero, J. M., Berbel, N., Matas, J., De Vicuña, L. G. & Miret, J., 1 Dec 2006, *IECON 2006 - 32nd Annual Conference on IEEE Industrial Electronics*. p. 5149-5154 6 p. 4153715

Droop control method for the parallel operation of online uninterruptible power systems using resistive output impedance

Guerrero, J. M., Berbel, N., De Vicuña, L. G., Matas, J., Miret, J. & Castilla, M., 13 Oct 2006, *Twenty-First Annual IEEE Applied Power Electronics Conference and Exposition, APEC '06*. Vol. 2006. p. 1716-1722 7 p. 1620772

Wireless-control strategy for parallel operation of distributed-generation inverters

Guerrero, J. M., Matas, J., De Vicuña, L. G., Castilla, M. & Miret, J., 1 Oct 2006, In : *IEEE Transactions on Industrial Electronics*. 53, 5, p. 1461-1470 10 p.

Decentralized control for parallel operation of distributed generation inverters using resistive output impedance

Guerrero, J. M., Berbel, N., Matas, J., Sosa, J. L., Cruz, J. & Alentorn, A., 1 Dec 2005, *2005 European Conference on Power Electronics and Applications*. Vol. 2005. 1665636

Decentralized control for parallel operation of distributed generation inverters using resistive output impedance

Guerrero, J. M., Berbel, N., Matas, J., Sosa, J. L., Cruz, J. & Alentorn, A., 1 Dec 2005, *2005 European Conference on Power Electronics and Applications*. Vol. 2005. 1665636

Feedback linearization control with average current sharing for multiphase synchronous buck converter

Berbel, N., Guerrero, J., Matas, J., De Vicuña, L. G., Cruz, J. & Alentorn, A., 1 Dec 2005, *2005 European Conference on Power Electronics and Applications*. Vol. 2005. 1665632

One-cycle control for the parallel operation of synchronous buck converters

Berbel, N., Guerrero, J. M., Cruz, J., Miret, J. & Castilla, M., 1 Dec 2005, *Proceedings of the IEEE International Symposium on Industrial Electronics 2005, ISIE 2005*. Vol. II. p. 795-798 4 p. 1529016

Simple feedback linearizing controller to reduce audiosusceptibility and load disturbance in the full-bridge current doubler synchronous rectifier

Guerrero, J. M., García De Vicuña, L., Berbel, N., Sosa, J. & Castilla, M., 1 Dec 2005, *Twentieth Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2005*. Vol. 2. p. 689-694 6 p. 1453042

Steady-state invariant frequency and amplitude droop control using adaptive output impedance for parallel-connected UPS inverters

Guerrero, J. M., De Vicuña, L. G., Matas, J., Miret, J. & Cruz, J., 1 Dec 2005, *Twentieth Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2005*. Vol. 1. p. 560-566 7 p. 1452997

Wireless-control strategy for parallel operation of distributed generation inverters

Guerrero, J. M., Matas, J., De Vicuña, L. G., Berbel, N. & Sosa, J., 1 Dec 2005, *Proceedings of the IEEE International Symposium on Industrial Electronics 2005, ISIE 2005*. Vol. II. p. 845-850 6 p. 1529025

Design of voltage-mode hysteretic controllers for synchronous buck converters supplying microprocessor loads

Castilla, M., García De Vicuña, L., Guerrero, J. M., Matas, J. & Miret, J., 1 Sep 2005, In : *IEE Proceedings: Electric Power Applications*. 152, 5, p. 1171-1178 8 p.

Output impedance design of parallel-connected UPS inverters with wireless load-sharing control

Guerrero, J. M., García de Vicuña, L., Matas, J., Castilla, M. & Miret, J., 1 Aug 2005, In : *IEEE Transactions on Industrial Electronics*. 52, 4, p. 1126-1135 10 p.

Half-bridge CLL resonant rectifier with quantum mode control

Castilla, M., García De Vicuña, L., Guerrero, J. M., Miret, J. & Matas, J., 1 May 2005, In : *IEE Proceedings: Electric Power Applications*. 152, 3, p. 543-550 8 p.

Sliding-mode control of quantum series-parallel resonant converters via input-output linearization

Castilla, M., de Vicuña, L. G., Guerrero, J. M., Matas, J. & Miret, J., 1 Jan 2005, In : *IEEE Transactions on Industrial Electronics*. 52, 2, p. 566-575 10 p.

Averaged large-signal model of single magnetic push-pull forward converter with built-in input filter

Cruz, J., Castilla, M., Miret, J., Matas, J. & Guerrero, J. M., 1 Dec 2004, p. 1023-1028. 6 p.

Output impedance design of parallel-connected UPS inverters

Guerrero, J. M., De Vicuña, L. G., Matas, J., Miret, J. & Castilla, M., 1 Dec 2004, p. 1123-1128. 6 p.

Parallel operation of Half-Bridge Converters with Current-Doubler Rectifier uUsing feedback linearization control

Guerrero, J. M., De Vicuña, L. G., Matas, J., Cruz, J. & Miret, J., 1 Dec 2004, p. 1159-1164. 6 p.

Simplified feedback linearization of a single-phase active power filter using sliding mode control

Miret, J., De Vicuña, L. G., Matas, J., Guerrero, J. M. & Cruz, J., 1 Dec 2004, p. 869-873. 5 p.

A simple sliding mode control of an active power filter

Miret, J., De Vicuña, L. G., Castilla, M., Cruz, J. & Guerrero, J. M., 29 Nov 2004, *2004 IEEE 35th Annual Power Electronics Specialists Conference, PESC04*. Vol. 2. p. 1052-1056 5 p.

Output impedance performance for parallel operation of UPS inverters using wireless and average current-sharing controllers

Guerrero, J. M., De Vicuña, L. G., Miret, J., Matas, J. & Cruz, J., 29 Nov 2004, *2004 IEEE 35th Annual Power Electronics Specialists Conference, PESC04*. Vol. 4. p. 2482-2488 7 p.

A wireless controller to enhance dynamic performance of parallel inverters in distributed generation systems

Guerrero, J. M., de Vicuna, L. G., Matas, J., Castilla, M. & Miret, J., 1 Sep 2004, In : *IEEE Transactions on Power Electronics*. 19, 5, p. 1205-1213 9 p.

A high-performance DSP-controller for parallel operation of online UPS systems

Guerrero, J. M., De Vicuña, L. G., Matas, J., Miret, J. & Castilla, M., 24 May 2004, p. 463-469. 7 p.

A Sliding Mode Control of an Active Power Filter

Miret, J., López, O., Castilla, M., Matas, J. & Guerrero, J. M., 1 Dec 2003, p. 1056-1060. 5 p.

A Wireless Controller for Parallel Inverters in Distributed Online UPS Systems

Guerrero, J. M., García de Vicuña, L., Matas, J., Miret, J. & Castilla, M., 1 Dec 2003, p. 1637-1642. 6 p.

Non-Linear Control of a Paralleled Half-Bridge Complementary-Control Converter System with a Single-Wire Current Sharing

Matas, J., De Vicuña, L. G., Guerrero, J. M., Miret, J. & Castilla, M., 1 Dec 2003, p. 2586-2590. 5 p.

A wireless load sharing controller to improve dynamic performance of parallel-connected UPS inverters

Guerrero, J. M., García de Vicuña, L., Matas, J., Miret, J. & Castilla, M., 22 Aug 2003, In : *PESC Record - IEEE Annual Power Electronics Specialists Conference*. 3, p. 1408-1413 6 p.

Simple nonlinear controller to reduce line and load disturbances in HBCC converter

García de Vicuña, L., Guerrero, J. M., Matas, J., Castilla, M. & Miret, J., 5 Dec 2002, In : *Electronics Letters*. 38, 25, p. 1751-1752 2 p.

A discrete sliding mode control of a buck-boost inverter

Matas, J., De Vicuña, L. G., Guerrero, J. M., Miret, J. & López, O., 1 Dec 2002, p. 140-145. 6 p.

A nonlinear feed-forward control technique for single-phase UPS inverters

Guerrero, J. M., De Vicuña, L. G., Miret, J. & Matas, J., 1 Dec 2002, p. 257-261. 5 p.

Discrete non-linear control of a PWM inverter

Miret, J., Garcia de Vicuña, J. L., Guerrero, J. M., Matas, J. & Castilla, M., 1 Dec 2002, p. 101-104. 4 p.

Feedback sliding mode control linearization of a single phase active filter

Matas, J., García de Vicuña, L., Guerrero, J. M., Miret, J. & López, O., 1 Dec 2002, p. 2933-2938. 6 p.

Steady-state invariant-frequency control of parallel redundant uninterruptible power supplies

Guerrero, J. M., Garcia de Vicuña, L., Matas, J. & Miret, J., 1 Dec 2002, p. 274-277. 4 p.

Integral control technique for single-phase UPS inverter

Guerrero, J. M., De Vicuña, L. G., Miret, J., Matas, J. & Castilla, M., 1 Jan 2002, *ISIE 2002 - Proceedings of the 2002 IEEE International Symposium on Industrial Electronics*. IEEE, Vol. 4. p. 1043-1048 6 p. 1025931.

Parallel operation of charge-controlled-DC-DC converters

Guerrero, J. M., De Vicuña, L. G., Miret, J., Matas, J. & López, Ó., 1 Jan 2002, *ISIE 2002 - Proceedings of the 2002 IEEE International Symposium on Industrial Electronics*. IEEE, Vol. 4. p. 1086-1090 5 p. 1025939

Activities

Workshop: IoT-driven eNErgy sysTEms (INET) - Advances and Applications

Amjad Anvari-Moghaddam (Lecturer), Yajuan Guan (Lecturer), Juan Carlos Vasquez Quintero (Lecturer), Josep M. Guerrero (Lecturer)
30 Jul 2018

Special Issue "IoT and Energy Internet" (Event)

Josep M. Guerrero (Editor), Juan C. Vasquez (Editor), Yajuan Guan (Editor)
26 Jul 2018 → 9 Sep 2019

Tutorial: Advances in Microgrids Control and Management

Amjad Anvari-Moghaddam (Lecturer), Qobad Shafiee (Lecturer), Hassan Bevrani (Lecturer), Josep M. Guerrero (Lecturer)
20 Feb 2018 → 21 Feb 2018

Tutorial: The Internet of Energy - The Building Block for the Future Smart Grids

Mehdi Savaghebi (Lecturer), Juan Carlos Vasquez Quintero (Lecturer), Yajuan Guan (Lecturer), Josep M. Guerrero (Lecturer)
29 Oct 2017

Special Section on "Energy Internet" (Event)

Josep M. Guerrero (Editor), Yajuan Guan (Editor), Juan C. Vasquez (Editor), Kai Sun (Editor)
28 Aug 2017 → 31 Dec 2018

Keynote: Advanced Control Architectures of DC Microgrids

Josep M. Guerrero (Lecturer)
10 Jun 2015

Keynote Plenary session: Future challenges on microgrids and DC homes

Josep M. Guerrero (Lecturer)
21 May 2014

Keynote: Microgrid Technologies for Future Electric Vehicle Charging Stations

Josep M. Guerrero (Lecturer)
16 May 2014

Keynote: New technologies and future challenges on MicroGrid Research

Josep M. Guerrero (Speaker)
26 Mar 2014

Invited presentation: Advanced Control Architectures for Intelligent Microgrids

Josep M. Guerrero (Lecturer)
25 Aug 2011

Press clippings

Computer-professorat med Obelsk Støtte

Gert Frølund Pedersen, Josep M. Guerrero, Svend Birkelund & Mark Grimshaw
30/04/2012
16 items of Media coverage

Fornem hæder til AAU-professor

Josep M. Guerrero

06/12/2014
12 items of Media coverage

Forskning i fremtidens el-systemer

Josep M. Guerrero
03/01/2014
5 items of Media coverage

Mikroanlæg skal sikre bæredygtig energiforsyning

Josep M. Guerrero
28/05/2019
1 item of Media coverage

NAVNE I NOTER

Josep M. Guerrero
25/12/2013
1 item of Media coverage

NAVNE I NOTER

Josep M. Guerrero
25/12/2013
1 item of Media coverage

Navne i noter

Josep M. Guerrero
14/12/2014
1 item of Media coverage

Svinghjul kan give billigere strøm til søs

Josep M. Guerrero
12/01/2015
10 items of Media coverage

Syv forskere fra Aalborg Universitet på Clarivates "Highly Cited Researchers List 2017"

Frede Blaabjerg, Josep M. Guerrero, Henrik Lund, Brian Vad Mathiesen, Remus Teodorescu, Christian Torp-Pedersen & Juan Carlos Vasquez Quintero
21/11/2017
1 item of Media coverage

Villum Fonden udvælger 11 nye investigators

Josep M. Guerrero
02/05/2019
1 item of Media coverage

Aalborgprofessor skal udvikle bæredygtig energiforsyning

Josep M. Guerrero
02/04/2019
12 items of Media coverage

Projects

Active filter functionalities for power converters in wind power plants

Guerrero, J. M., Chaudhary, S., Teodorescu, R., Bak, C. L., Freijedo Fernandez, F. D., Hoseinzadeh, B. & Lascu, C. V.
01/04/2014 → 31/03/2016

ASSET: A holistic and Scalable Solution for Research, Innovation and Education in Energy Transition

Guerrero, J. M., Vasquez, J. C., Akhavan, A., Nasir, M. & Guldbæk, B. K.

EU - Horizon 2020

01/05/2019 → 30/04/2021

DiCyPS: Center for Data-Intensive Cyber-Physical Systems

Larsen, K. G., Skou, A., Pedersen, T. B., Jensen, C. S., Kjeldskov, J., Skov, M. B., Nielsen, B., Lahrmann, H., Bak-Jensen, B. & Guerrero, J. M.

01/01/2015 → 31/12/2020

CROM: Center for Research on Microgrids

Guerrero, J. M., Vasquez, J. C., Tinajero, G. D. A., Akhavan, A. & Guldbæk, B. K.

Villum Fonden

01/08/2019 → 31/07/2025

MMGrid: Control and Management of Multi-Microgrid Clusters in Taiwan

Guerrero, J. M., Dragicevic, T., Vasquez, J. C. & Wu, D.

01/01/2013 → 31/12/2013

Distributed Converter And MicroGrid Advanced Control Algorithm Project

Guerrero, J. M. & Guldbæk, B. K.

Huawei Technologies Duesseldorf GmbH

25/09/2018 → 31/05/2020

Efficiensea

Guerrero, J. M., Dragicevic, T., Meng, L., Vasquez, J. C. & Miltersen, A. H.

Innovation Fund Denmark

16/03/2015 → 15/03/2018

Flexible electric vehicle charging infrastructure (Flex-ChEV)

Guerrero, J. M., Dragicevic, T., SUN, B., Schaltz, E., Vasquez, J. C. & Shafiee, Q.

01/03/2014 → 29/02/2016

Future Residential LVDC Power Distribution Architectures

Vasquez, J. C. & Guerrero, J. M.

01/01/2014 → 31/12/2014

HeatReFlex: Green and Flexible District Heating/Cooling

Anvari-Moghaddam, A., Guerrero, J. M., Nami, H. & Mohammadiivatloo, B.

Danida Fellowship Centre

01/05/2019 → 31/10/2021

iDClab: Intelligent DC Microgrid Living Lab

Guerrero, J. M., Vasquez, J. C., Diaz, E. R. & Golestan, S.

Det Strategiske Forskningsråd

01/01/2014 → 31/12/2017

DiCyPS: IT-Infrastructures for Control, Optimization and Management in Energy Systems

Guerrero, J. M., Anvari-Moghaddam, A., Vasquez, J. C., Bak-Jensen, B. & Guldbæk, B. K.

Innovation Fund Denmark

01/01/2015 → 31/12/2020

MeTER_Demo: Microgrid Technology Research and Demonstration

Guerrero, J. M., Wu, D., Guan, Y., Vasquez, J. C. & Savaghebi, M.

01/04/2014 → 31/03/2017

HyMG: Microgrid technology research based on wind/PV/storage hybrid system

Guerrero, J. M., Vasquez, J. C. & Wu, D.

01/01/2013 → 31/12/2013

Flywheel : Off-Shore Application of the Flywheel Energy Storage

Guerrero, J. M., Dragicevic, T. & Anvari-Moghaddam, A.

Den Danske Maritime Fond

13/11/2014 → 28/02/2016

VICINITY: Open virtual neighbourhood network to connect IoT infrastructures and smart objects

Guan, Y., Vasquez, J. C., Guerrero, J. M. & Miltersen, A. H.

European Commission

01/01/2016 → 31/12/2019

The Energy Internet - Integrating Internet of Things into the Smart Grid

Vasquez, J. C., Guerrero, J. M., Gui, Y., Diaz, E. R. & Garcia, E. J. P.

Aalborg University

01/01/2017 → 31/12/2019

TROY: UPS SLC-TROY Project

Guerrero, J. M., Vasquez, J. C., Zhang, C., Wei, B. & Gui, Y.

Others

01/04/2015 → 01/06/2017