Josep M. Guerrero
Professor
AAU Energy
The Faculty of Engineering and Science
Electric Power Systems and Microgrids
Electric Power Systems and Microgrids
Microgrids
Type of address: Visiting address.
Pontoppidanstræde 111
9220
Aalborg Øst
Denmark
Email: joz@energy.aau.dk
Phone: +4599409726

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Activities

Workshop: IoT-driven eNErgy sysTems (INET) - Advances and Applications
Anvari-Moghaddam, A. (Lecturer), Guan, Y. (Lecturer), Quintero, J. C. V. (Lecturer) & Guerrero, J. M. (Lecturer)
30 Jul 2018

Special Issue "IoT and Energy Internet" (Event)
Guerrero, J. M. (Editor), Vasquez, J. C. (Editor) & Guan, Y. (Editor)
26 Jul 2018 → 9 Sept 2019

Tutorial: Advances in Microgrids Control and Management
Anvari-Moghaddam, A. (Lecturer), Shafiee, Q. (Lecturer), Bevrani , H. (Lecturer) & Guerrero, J. M. (Lecturer)
20 Feb 2018 → 21 Feb 2018

Tutorial: The Internet of Energy - The Building Block for the Future Smart Grids
Savaghebi, M. (Lecturer), Quintero, J. C. V. (Lecturer), Guan, Y. (Lecturer) & Guerrero, J. M. (Lecturer)
29 Oct 2017

Special Section on "Energy Internet" (Event)
Guerrero, J. M. (Editor), Guan, Y. (Editor), Vasquez, J. C. (Editor) & Sun, K. (Editor)
28 Aug 2017 → 31 Dec 2018

Keynote: Advanced Control Architectures of DC Microgrids
Guerrero, J. M. (Lecturer)
10 Jun 2015

Keynote Plenary session: Future challenges on microgrids and DC homes
Guerrero, J. M. (Lecturer)
21 May 2014

Keynote: Microgrid Technologies for Future Electric Vehicle Charging Stations
Guerrero, J. M. (Lecturer)
16 May 2014

Keynote: New technologies and future challenges on MicroGrid Research
Guerrero, J. M. (Speaker)
26 Mar 2014

Invited presentation: Advanced Control Architectures for Intelligent Microgrids
Guerrero, J. M. (Lecturer)
25 Aug 2011

Press clippings

40 nye medlemmer optaget i ATV i 2021
Wæhrens, B. V., Guerrero, J. M., Gram-Hanssen, K., Smedskjær, M. M., Chen, Z., Rosendahl, L. & Hose, K.
21/06/2021
1 item of Media coverage

55 danske forskere er blandt verdens mest citerede
Blaabjerg, F., Guerrero, J. M., Lund, H., Mathiesen, B. V., Nielsen, P. H., Wang, X. & Vasquez, J. C.
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1 item of Media coverage

Computer-professorat med Obelsk Støtte
Pedersen, G. F., Guerrero, J. M., Birkelund, S. & Grimshaw, M.
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16 items of Media coverage

Dansk forsker kåret som verdens bedste inden for elektroingeniørvidenskab
Blaabjerg, F., Guerrero, J. M., Teodorescu, R., Chen, Z., Vasquez, J. C., E. Mogensen, P., Pedersen, K. I. & Popovski, P.
31/03/2023 → 04/04/2023
3 items of Media coverage

Fornem hæder til AAU-professor
Guerrero, J. M.
06/12/2014
12 items of Media coverage

Forskning i fremtidens el-systemer
Guerrero, J. M.
03/01/2014
5 items of Media coverage

Mikroanlæg skal sikre bæredygtig energiforsyning
Guerrero, J. M.
28/05/2019
1 item of Media coverage

NAVNE I NOTER
Guerrero, J. M.
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1 item of Media coverage

NAVNE I NOTER
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Navne i noter
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14/12/2014
1 item of Media coverage

Svinghjul kan give billigere strøm til søs
Guerrero, J. M.
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10 items of Media coverage

Syv forskere fra Aalborg Universitet på Clarivates "Highly Cited Researchers List 2017"
Blaabjerg, F., Guerrero, J. M., Lund, H., Mathiesen, B. V., Teodorescu, R., Torp-Pedersen, C. & Quintero, J. C. V.
21/11/2017
1 item of Media coverage

Villum Fonden udvælger 11 nye investigators
Guerrero, J. M.
02/05/2019
1 item of Media coverage

Aalborgprofessor skal udvikle bæredygtig energiforsyning
Guerrero, J. M.
02/04/2019
12 items of Media coverage

Projects

Active filter functionalities for power converters in wind power plants
Guerrero, J. M. (Project Manager), Chaudhary, S. (Project Participant), Teodorescu, R. (Project Participant), Bak, C. L. (Project Participant), Freijedo Fernandez, F. D. (Project Participant), Hoseinzadeh, B. (Project Participant) & Lascu, C. V. (Project Participant)
01/04/2014 → 31/03/2016

A Digital Twin framework in Microgrids including Renewable Generation and Energy Storage
Safavi, V. (PI), Guerrero, J. M. (Supervisor), Vasquez, J. C. (Supervisor) & Bazmohammadi, N. (Supervisor)
01/08/2021 → 22/02/2025

ASSET: A holistic and Scalable Solution for Research, Innovation and Education in Energy Transition
Guerrero, J. M. (PI), Vasquez, J. C. (Project Participant), Akhavan, A. (Project Participant), Nasir, M. (Project Participant) & Guldbæk, B. K. (Project Coordinator)
Horizon Europe
01/05/2019 → 30/04/2021

Analysis and Optimization of VSG Stability in Microgrids under Large-Signal Disturbances
Jiang, B. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
01/04/2021 → 21/12/2024

DiCyPS: Center for Data-Intensive Cyber-Physical Systems
Larsen, K. G. (PI), Skou, A. (CoI), Pedersen, T. B. (CoI), Jensen, C. S. (CoI), Kjeldskov, J. (CoI), Skov, M. B. (CoI), Nielsen, B. (CoI), Lahrmann, H. (CoI), Bak-Jensen, B. (CoI), Guerrero, J. M. (CoI) & Raptis, D. (Project Participant)
Innovation Fund Denmark
01/01/2015 → 31/12/2020

CROM: Center for Research on Microgrids
Guerrero, J. M. (PI), Vasquez, J. C. (Project Participant), Tinajero, G. D. A. (Project Participant), Akhavan, A. (Project Participant), Barrios Flores, M. A. (Project Participant) & Pugliese, A. A. (Project Coordinator)
Villum Foundation
01/08/2019 → 31/12/2025

MMGrid: Control and Management of Multi-Microgrid Clusters in Taiwan
Guerrero, J. M. (Project Manager), Dragicevic, T. (Project Participant), Vasquez, J. C. (Project Participant) & Wu, D. (Project Participant)
01/01/2013 → 31/12/2013

Control Strategies of Power Electronic Converters for MVDC Shipboard Microgrids
Xu, L. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
15/02/2019 → 14/02/2022

Cyber-resilient Control Structures in DC Microgrids with Cyber-Physical Threats
Basati, A. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
01/11/2019 → 31/10/2023

Cyber Security based Distributed Control for DC Microgrids and Multiple Microgrids Clusters
Tan, S. (PI), Guerrero, J. M. (PI) & Vasquez, J. C. (PI)
15/12/2018 → 14/12/2021

SALICRU: DC Voltage Railways Catenary - DCVOLTA
Guerrero, J. M. (PI), Vasquez, J. C. (CoI), Barrios Flores, M. A. (Project Participant), Golestan, S. (Project Participant) & Guldbæk, B. K. (Project Coordinator)
Salicru S.A.
01/07/2021 → 31/12/2022

Decentralized Adaptive Protection Schemes in Micro Grid Clusters
De La Cruz, J. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
01/11/2021 → 31/10/2024

Design, Control, and Power Management of Small Satellite Microgrids
Yaqoob, M. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
01/03/2019 → 28/02/2022

Distributed Converter And MicroGrid Advanced Control Algorithm Project
Guerrero, J. M. (PI), Vasquez, J. C. (CoPI), Akhavan, A. (Project Participant), Wei, B. (Project Participant) & Guldbæk, B. K. (Project Coordinator)
Huawei Technologies Co., Ltd.
25/09/2018 → 31/05/2020

Dynamic Performance and Power Quality of Large-Scale Grid-Connected Wind Power Plants
Ullah, M. (PI), Guerrero, J. M. (Supervisor), Vasquez, J. C. (Supervisor) & Guan, Y. (Supervisor)
01/03/2023 → 28/02/2026

Efficiensea
Guerrero, J. M. (Project Manager), Dragicevic, T. (Project Participant), Meng, L. (Project Participant), Vasquez, J. C. (Project Participant) & Miltersen, A. H. (Project Coordinator)
Innovation Fund Denmark
16/03/2015 → 15/03/2018

Energy Management System for Renewable Energy Sources Integrated Microgrids
Wu, J. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
15/02/2021 → 14/02/2024

Energy Management System in Shipboard Microgrid
Othman, M. B. (PI), Anvari-Moghaddam, A. (Supervisor) & Guerrero, J. M. (Supervisor)
20/04/2016 → 01/05/2019

Energy Management Systems based on Internet of Things/ Energy Internet for Smart Homes
Arbab Zavar, B. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
01/10/2018 → 30/09/2021

Flexible electric vehicle charging infrastructure (Flex-ChEV)
Guerrero, J. M. (Project Manager), Dragicevic, T. (Project Participant), SUN, B. (Project Participant), Schaltz, E. (Project Participant), Vasquez, J. C. (Project Participant) & Shafiee, Q. (Project Participant)
01/03/2014 → 29/02/2016

Future Residential LVDC Power Distribution Architectures
Vasquez, J. C. (Project Manager) & Guerrero, J. M. (Project Participant)
01/01/2014 → 31/12/2014

HeatReFlex: Green and Flexible District Heating/Cooling
Anvari-Moghaddam, A. (PI), Guerrero, J. M. (Project Participant), Nami, H. (Project Participant) & Mohammadiivatloo, B. (Project Participant)
Danida Fellowship Centre

01/05/2019 → 30/04/2022

Harmonic Control Architectures for Virtual Synchronous Generator-based Distributed Generation Systems
Li, S. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
01/04/2021 → 30/09/2024

HECATE: HECATE - Hybrid Electric Regional Aircraft Distribution Technologies
Guerrero, J. M. (PI), Vasquez, J. C. (CoPI), Wei, B. (Project Participant), Bazmohammadi, N. (Project Participant), Lashab, A. (Project Participant) & Pugliese, A. A. (Project Coordinator)
Horizon JU Innvation Action
01/01/2023 → 31/12/2025

Holistic Optimization and Control of Green Fuel-Powered Heavy Microgrids: A Sustainable Solution for Enhanced Energy Efficiency
Shao, J. (PI), Guerrero, J. M. (Supervisor) & Wei, B. (Supervisor)
01/07/2023 → 30/06/2026

iDClab: Intelligent DC Microgrid Living Lab
Guerrero, J. M. (PI), Vasquez, J. C. (Project Participant), Diaz, E. R. (Project Participant) & Golestan, S. (Project Participant)
Det Strategiske Forskningsråd
01/01/2014 → 31/12/2017

DiCyPS: IT-Infrastructures for Control, Optimization and Management in Energy Systems
Guerrero, J. M. (Project Participant), Anvari-Moghaddam, A. (Project Participant), Vasquez, J. C. (Project Participant), Bak-Jensen, B. (Project Manager) & Guldbæk, B. K. (Project Coordinator)
Innovation Fund Denmark
01/01/2015 → 31/12/2020

Large-Scale Integration of Renewable Energy Power Plants and Flexible Demand in the Egyptian Electric Grid
Ali, H. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
01/04/2021 → 30/09/2024

LastWind: Large-Scale Integration of Wind Power Generation in Ethiopia - LastWind
Guan, Y. (PI), Guerrero, J. M. (Project Participant), Vasquez, J. C. (Project Participant), Javidsharifi, M. (Project Participant), Yu, Y. (CoPI), Kang, W. (Project Participant) & Pugliese, A. A. (Project Coordinator)
Danida Fellowship Centre
01/08/2023 → 31/07/2026

MICROGRID TECHNOLOGIES FOR FUTURE OFFSHORE WIND POWER PLANTS
Yu, Y. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
01/02/2020 → 31/01/2023

TECH-IN: Microgrid Technologies for Remote Indonesian Islands
Vasquez, J. C. (PI), Guan, Y. (Project Participant), Vasquez, J. C. (Supervisor), Guerrero, J. M. (Project Participant) & Pugliese, A. A. (Project Coordinator)
Danida Fellowship Centre
01/05/2021 → 30/11/2024

MeTER_Demo: Microgrid Technology Research and Demonstration
Guerrero, J. M. (Project Manager), Wu, D. (Project Participant), Guan, Y. (Project Participant), Vasquez, J. C. (Project Participant) & Savaghebi, M. (Project Participant)
01/04/2014 → 31/03/2017

HyMG: Microgrid technology research based on wind/PV/storage hybrid system
Guerrero, J. M. (Project Manager), Vasquez, J. C. (Project Participant) & Wu, D. (Project Participant)

01/01/2013 → 31/12/2013

Modeling of Solar Cells and Environmental Conditions for Space Microgrids
Raya-Armenta, J. M. (PI), Guerrero, J. M. (Supervisor), Vasquez, J. C. (Supervisor) & Saez, D. (Supervisor)
01/01/2019 → 31/12/2021

NEST: National Research Infrastructure Roadmap
Sahlin, S. L. (PI), Vasquez, J. C. (CoPI), Barrios Flores, M. A. (Project Applicant), Tinajero, G. D. A. (Project Participant), Arbab Zavar, B. (Project Participant), Guerrero, J. M. (Project Participant) & Pugliese, A. A. (Project Coordinator)
Nationalt Udvalg for Forskningsinfrastruktur (NUFI)
01/01/2024 → 31/12/2026

Flywheel : Off-Shore Application of the Flywheel Energy Storage
Guerrero, J. M. (Project Manager), Dragicevic, T. (Project Participant) & Anvari-Moghaddam, A. (Project Participant)
Den Danske Maritime Fond
13/11/2014 → 28/02/2016

OFFSHORE WIND FARMS LARGE-SCALE INTEGRATION IN TURKEY
Chaudhary, S. (Project Participant), Guerrero, J. M. (PI), Vasquez, J. C. (Project Coordinator), Tinajero, G. D. A. (Project Participant) & Høyer, M. (Project Participant)
01/06/2020 → 31/05/2023

VICINITY: Open virtual neighbourhood network to connect IoT infrastructures and smart objects
Guan, Y. (Project Participant), Vasquez, J. C. (Project Participant), Guerrero, J. M. (Project Coordinator) & Miltersen, A. H. (Project Coordinator)
European Commision
01/01/2016 → 31/12/2019

Photovoltaic Energy Supply for future Energy Neutral Base Stations
Javidsharifi, M. (PI), Kerekes, T. (Supervisor) & Guerrero, J. M. (Supervisor)
01/07/2019 → 03/07/2022

Planning and Operational Management Systems for Resilient Microgrids in Remote and Islanded Communities Under Natural Disasters (TECH-IN: Microgrid Technologies for Remote and Island Communities under Natural Disasters)
Ali, M. (PI), Guerrero, J. M. (Supervisor), Vasquez, J. C. (Supervisor) & Guan, Y. (Supervisor)
01/01/2022 → 01/02/2025

PLANNING, CONTROL, AND ENERGY MANAGEMENT OF SPACE MULTI-MICROGRID CLUSTERS FOR SPACE LUNAR BASES
Saha, D. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
01/02/2020 → 31/07/2023

Power management systems for shipboard ZED-based Multi-Microgrid Clusters
Xie, P. (PI), Guerrero, J. M. (Supervisor) & Vasquez, J. C. (Supervisor)
15/12/2018 → 14/12/2021

REMCE: Renewable Energy based Minigrid Clusters in Ethiopia
Chaudhary, S. (PI), Golestan, S. (Project Participant), Guan, Y. (Project Participant), Wu, Y. (Project Participant), Vasquez, J. C. (Supervisor), Guerrero, J. M. (Supervisor) & Pugliese, A. A. (Project Coordinator)
Danida Fellowship Centre
01/05/2021 → 31/12/2024

REConnect: Renewable Energy Converters Connected in Parallel
Guerrero, J. M. (PI), Vasquez, J. C. (CoI), Guan, Y. (Project Applicant) & Guldbæk, B. K. (Project Coordinator)
ReConvert BV
01/08/2020 → 15/12/2020

REConnect: Renewable Energy Converters Connected to Grid
Guan, Y. (PI), Guerrero, J. M. (Project Coordinator), Vasquez, J. C. (Project Manager), Zwam, A. V. (Project Coordinator), Meersman, B. (Project Participant) & Oostveen, B. (Project Participant)
01/08/2020 → 31/12/2020

SYNCHRONY: SYNCHRONY - Synchronization of Parallel Single-Phase Inverters with Power Sharing Control
Guerrero, J. M. (PI), Vasquez, J. C. (CoPI), Golestan, S. (Project Participant), Akhavan, A. (Project Participant), Barrios Flores, M. A. (Project Participant), Guldbæk, B. K. (Project Coordinator) & Pugliese, A. A. (Project Coordinator)
Private funding
01/06/2020 → 31/05/2024

The Energy Internet - Integrating Internet of Things into the Smart Grid
Vasquez, J. C. (PI), Guerrero, J. M. (CoI), Gui, Y. (Project Participant), Diaz, E. R. (Project Participant) & Garcia, E. J. P. (Project Participant)
Aalborg University
01/01/2017 → 31/12/2019

To Enhance the Fault Ride Through Capability of Doubly Fed Induction Generator using Direct Matrix Converter for Wind Turbines
Asim, A. (PI), Vasquez, J. C. (Supervisor), Guan, Y. (Supervisor) & Guerrero, J. M. (Supervisor)
01/10/2023 → 30/09/2026

TROY: UPS SLC-TROY Project
Guerrero, J. M. (Project Manager), Vasquez, J. C. (Project Participant), Zhang, C. (Project Participant), Wei, B. (Project Participant) & Gui, Y. (Project Participant)
Others
01/04/2015 → 01/06/2017