



Research profile

Industry-Driven Research

Modeling and control of grid-interactive power electronic converters

Stability and power quality of power-electronic-based power systems

Data-driven approach to dynamics analysis and control of power electronics

Professional Services

Executive Editor (Editor in Chief), IEEE Transactions on Power Electronics Letters

Associate Editor, IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE)

Vice Chair, IEEE Power Electronics Society (PELS) Technical Committee (TC 8) on Electronic Power Grid Systems

Guest EiC/Co-EiC for 5 Special Issues in the IEEE Transactions on Industry Applications, IEEE Transactions on Energy

Conversion, IEEE JESTPE, and IEEE Electrification Magazine

Awards and Honors

2023 IEEE Fellow

2022 Isao Takahashi Power Electronics Award

2021 Outstanding Paper Award, IEEE Transactions on Smart Grid

2020 Star Associate Editor for IEEE JESTPE

2020 IEEE PES Prize Paper Award, IEEE Power & Energy Society (PES)

2019 IEEE PELS Sustainable Energy Systems Technical Achievement Award

2018 Richard M. Bass Outstanding Young Power Electronics Engineer Award

2017 Second Prize Paper Award, IEEE Industry Applications Society-Industrial Power Converter Committee (IAS-IPCC)

2016 Outstanding Reviewer Award, IEEE Transactions on Power Electronics

2016 Aalborg University Talent Management Program (AAU Talent)

2014 Second Prize Paper Award, IEEE Transactions on Power Electronics

6 IEEE/IET Conference Best Paper Awards (IEEE COMPEL2021, IEEE PEDG2016, IEEE SPEC2018, IEEE PEAC2018, IEEE PES GM2017, IET RPG2017)

Prizes

1. **IEEE PES Prize Paper Award 2020**
Wang, X. (Recipient) & Blaabjerg, F. (Recipient), 2020
2. **Highly Cited Researcher in Web of Science**
Wang, X. (Recipient), 2019
3. **IEEE PELS Sustainable Energy Systems Technical Achievement Award**
Wang, X. (Recipient), 2019
4. **IEEE PELS Richard M. Bass Outstanding Young Engineer Award**
Wang, X. (Recipient), 2018
5. **The Institution of Engineering and Technology 2017 the 2nd Prize**
Yang, D. (Recipient), Wu, H. (Recipient), Wang, X. (Recipient) & Blaabjerg, F. (Recipient), Oct 2017
6. **IEEE PEDG 2016 Best Paper Award**
Ebrahimzadeh, E. (Recipient), Blaabjerg, F. (Recipient), Wang, X. (Recipient) & Bak, C. L. (Recipient), Jun 2016

7. **Outstanding Reveiwer of IEEE Transactions on Power Electronics**
Wang, X. (Recipient), 2016
8. **AAU Talent**
Wang, X. (Recipient), 2016

Projects

1. **Edge AI for High Stability-Robustness of Power Electronics in Modern Power Systems**
Christensen, M. G. (Project Licensee) & Wang, X. (PI)
Villum Foundation
07/09/2021 → 28/09/2025
2. **Development of Grid Supporting Functionalities for Fast Charging Stations**
Ibrahim, A. (PI), Wang, X. (Supervisor), Wu, H. (Supervisor) & De Falco, G. (Supervisor)
01/11/2023 → 31/10/2026
3. **OEH: Offshore Energy Hubs**
Blaabjerg, F. (Project Participant), Wang, X. (Project Participant), Huang, L. (Project Participant) & Frøstrup, S. (Project Coordinator)
EUDP
01/09/2022 → 31/08/2026
4. **Development of Methodology for Small-Signal Stability Assessment in Energy Island Type Systems**
Bollerslev, J. (PI), Wang, X. (Supervisor), Kwon, J. (Supervisor), Wu, H. (Supervisor) & Liao, Y. (Supervisor)
01/06/2023 → 31/05/2026
5. **Universal Fast Charger with Wide Output Voltage**
Cinik, S. (PI), Wang, X. (Supervisor) & Zhao, F. (Supervisor)
01/08/2023 → 31/07/2026
6. **Coordinated converter-control and grid-protection for HVDC-connected offshore wind farms**
Li, Y. (PI), Wang, X. (Supervisor) & Wu, H. (Supervisor)
01/01/2023 → 31/12/2025
7. **Reliable Control of Power Electronic based Power Systems**
Steinkohl, J. (PI), Wang, X. (Supervisor), Davari, P. (Supervisor) & Blaabjerg, F. (Supervisor)
01/04/2018 → 07/07/2021
8. **Synchronization Stability of Grid-Connected Converters under Grid Faults**
Taul, M. G. (PI), Blaabjerg, F. (Supervisor), Wang, X. (Supervisor) & Davari, P. (Supervisor)
01/09/2017 → 11/08/2020
9. **Real-Time Impedance Identification and Control for Three-Phase Power Electronic Systems**
Zhang, M. (PI), Wang, X. (Supervisor) & Christensen, M. G. (Supervisor)
01/09/2018 → 31/08/2021
10. **Multi-Sampled Current Control of Grid-Connected Voltage Source Converters**
He, S. (PI), Blaabjerg, F. (Supervisor), Zhou, D. (Supervisor) & Wang, X. (Supervisor)
01/01/2019 → 30/06/2022
11. **Probabilistic Assessment and Robustness Analysis of Power Electronic Sub-System for Grid Applications**
Gholami-Khesht, H. (PI), Blaabjerg, F. (Supervisor), Davari, P. (Supervisor) & Wang, X. (Supervisor)
01/06/2019 → 31/05/2022
12. **STABILITY AND CONTROL OF MULTI-PARALLELED SINGLE-PHASE TRACTION CONVERTERS**
Zhao, L. (PI), Wang, X. (Supervisor) & Jin, Z. (Supervisor)
01/10/2020 → 31/03/2024
13. **MODELING AND CONTROL OF SCALABLE VERSATILE GRID EMULATION SYSTEM**
Li, Z. (PI), Wang, X. (Supervisor), Munk-Nielsen, S. (Supervisor) & Zhao, F. (Supervisor)
15/10/2020 → 14/04/2024
14. **OWF System Integration Enhancement Functions**
Wang, X. (PI), Zhou, Z. (Project Participant), Zhao, F. (Project Participant) & Steffensen, B. (Project Coordinator)
SHELL GLOBAL SOLUTIONS INTERNATIONAL B.V.
06/10/2021 → 31/03/2022
15. **AI-Stability: Automated Impedance Measurement Toolbox for Power System Stability Analysis**
Wang, X. (PI), Wu, H. (Col), Gong, H. (Project Participant), Zhou, Z. (Project Participant) & Steffensen, B. (Project Coordinator)
Innovation Fund Denmark
01/07/2021 → 30/06/2022

16. **FRESLING: FREquency Security of Low-INertia electrical Grids**
Fan, B. (PI), Wang, X. (Col) & Steffensen, B. (Project Coordinator)
European Commission
01/07/2021 → 30/06/2023
17. **Frequency Security of Low-Inertia Power Grids**
Wang, X. (PI) & Steffensen, B. (Project Coordinator)
Independent Research Fund Denmark
01/07/2021 → 30/06/2024
18. **Stability Analysis of Wind Turbines under Small and Large Disturbances**
Dimitropoulos, D. (PI), Blaabjerg, F. (Supervisor) & Wang, X. (Supervisor)
01/10/2020 → 30/09/2023
19. **Dynamic Model Reduction of Offshore Wind Power Plants**
Liu, S. (PI), Wang, X. (Supervisor), van der Burgt, J. (Supervisor) & Wu, H. (Supervisor)
01/06/2021 → 31/05/2024
20. **Grid-Forming Power Electronic Systems**
Wang, X. (PI) & Gong, H. (Col)
15/08/2021 → 14/08/2023
21. **Coordinated Control and Protection of Wind Turbine Converters and Grid Interface**
Gao, G. (PI), Wang, X. (Supervisor), Blaabjerg, F. (Supervisor) & Wu, H. (Supervisor)
01/05/2021 → 30/04/2024
22. **Small-Signal Stability of Power Electronics Dominant Grid**
Wang, X. (PI), Zhou, Z. (Project Participant) & Steffensen, B. (Project Coordinator)
01/10/2020 → 30/09/2021
23. **Advanced Control of Power Supply Systems for Data Centers**
Wang, X. (PI), Zhu, T. (Project Participant), Gao, G. (Project Participant) & Steffensen, B. (Project Coordinator)
01/09/2020 → 31/08/2022
24. **Small-Signal Stability of Multi-Terminal MMC-HVDC Systems**
Wang, X. (PI), Wu, H. (Col) & Steffensen, B. (Project Coordinator)
01/10/2020 → 31/03/2021
25. **Metro-Power : Multi-timescale Modeling of Metro Power Supply System**
Wang, X. (PI), Jin, Z. (Col), Wang, D. (Project Participant) & Steffensen, B. (Project Coordinator)
01/03/2020 → 28/02/2022
26. **MERGE: Megawatt Scalable Versatile Grid Emulation System**
Wang, X. (PI), Bak-Jensen, B. (Col), Blaabjerg, F. (Col), Munk-Nielsen, S. (Col), Zhao, F. (Project Participant), Taul, M. G. (Project Participant), Ponnaganti, P. (Project Participant) & Steffensen, B. (Project Coordinator)
EUDP
01/08/2020 → 31/07/2023
27. **Aalborg University-Huawei Energy Joint Innovation Center (AHEIC)**
Wang, X. (PI), Blaabjerg, F. (Col), Munk-Nielsen, S. (Col) & Steffensen, B. (Project Coordinator)
01/01/2020 → 31/12/2022
28. **Wind farm – grid interactions: exploration and development (WinGrid)**
Blaabjerg, F. (PI), Wang, X. (Col) & Steffensen, B. (Project Coordinator)
Maria Skłodowska-Curie Innovative Training Network
01/09/2019 → 31/08/2023
29. **Medium Voltage Based on SiC (MV-BASIC)**
Munk-Nielsen, S. (PI), Uhrenfeldt, C. (Project Participant), Beczkowski, S. M. (Project Participant), Bech, M. M. (Project Coordinator), Wang, X. (Project Participant), Dalal, D. N. (Project Participant), Jørgensen, J. K. (Project Participant), Zhao, H. (Project Participant), Mishra, P. (Project Participant), Jørgensen, A. B. (Project Participant) & Steffensen, B. (Project Coordinator)
Department of Energy Technology
01/07/2018 → 30/06/2022
30. **Maximizing the impact of innovation energy approaches in the EU (INSULAE)**
Wang, X. (PI), Wang, X. (Project Participant) & Steffensen, B. (Project Coordinator)
Horizon Europe
01/04/2019 → 31/03/2023
31. **Small-Signal Stability of MMC-HVDC Power Station**
Wang, X. (PI), Wu, H. (Project Participant) & Steffensen, B. (Project Coordinator)
01/06/2019 → 31/12/2020

32. **IBESS: Integrated Battery Energy Storage and STATCOM for the Optimal Operation and Control of WPP in Power System**
Chaudhary, S. (Project Coordinator), Teodorescu, R. (PI), Wang, X. (Project Participant), Yang, D. (Project Participant), Chen, C. Y. (Project Manager) & Kocewiak, L. (Project Coordinator)
01/10/2018 → 30/09/2021
33. **Control Strategies of Distributed Generation (DG) Clusters**
Wang, X. (PI), Liao, Y. (Project Participant), Pan, D. (Project Participant) & Steffensen, B. (Project Coordinator)
Huawei Technologies Co., Ltd.
01/09/2018 → 31/12/2019
34. **High-Frequency Small-Signal Stability of MMC-HVDC Transmission Systems with Grid Resonance**
Wang, X. (PI) & Yang, D. (Project Participant)
Tennet TSB B.V.
01/09/2018 → 31/12/2019
35. **Stability of Clustered PV Inverters under Different Grid Conditions**
Wang, X. (PI), Yang, D. (Project Participant) & Blaabjerg, F. (Col)
01/04/2016 → 31/03/2017
36. **Multi-Timescale Stability of Modular Cascaded Power Electronic Systems**
Wang, X. (PI) & Wu, H. (Project Participant)
01/05/2017 → 30/04/2020
37. **Power & Synchronization Control of PV Power Systems Connected to Weak Grids**
Wang, X. (PI) & Yang, D. (Col)
01/09/2017 → 31/08/2018
38. **Highly Efficient and Reliable SiC based Power Electronic Systems (HER-SiC)**
Blaabjerg, F. (PI), Wang, H. (Col), Wang, X. (Col), Chen, M. (Project Participant) & Qin, Z. (Project Participant)
01/12/2016 → 31/12/2020
39. **REPEPS: RELIABLE Power Electronic based Power System**
Blaabjerg, F. (PI), Iannuzzo, F. (Col), Davari, P. (Col), Wang, H. (Col), Wang, X. (Col) & Yang, Y. (Col)
01/08/2017 → 01/12/2023
40. **HARMONY: HARMONY - Harmonic identification, mitigation and control in power electronics based power systems**
Blaabjerg, F. (PI), Bak, C. L. (Col), Wang, X. (Col), Beres, R. N. (Project Participant), Kwon, J. (Project Participant), Gui, Y. (Project Participant), Yoon, C. (Project Participant) & Ebrahimzadeh, E. (Project Participant)
European Research Council
01/02/2013 → 28/02/2018

Journal Papers

1. Editorial: Special Section on Highly Robust Power Electronics in the Era of DC Grid
Wang, X., Zhao, B., Li, H., Dijkhuizen, F. & Sano, K., Sept 2025, In: IEEE Transactions on Power Electronics . 40, 9, p. 12031-12032 2 p.
2. **Guest Editorial Special Section on Power Electronics Technologies for Transforming Electrical Grids**
Wang, X., Agarwal, V., Mcgrath, B. & Wu, X., 2024, In: IEEE Transactions on Power Electronics . 39, 10, p. 12072-12075 4 p.
3. **Editorial for the PES/PELS Joint Special Section on Modeling and Control of Converter-Based Resources in Modern Power Systems**
Wang, X. & Jatskevich, J., Dec 2022, In: IEEE Transactions on Energy Conversion. 37, 4, p. 2693-2695 3 p.
4. **Grid-Synchronization Stability of Converter-Based Resources - An Overview**
Wang, X., Taul, M. G., Wu, H., Liao, Y., Blaabjerg, F. & Harnefors, L., Aug 2020, In: IEEE Open Journal of Industry Applications. 1, p. 115-134 20 p., 9181463.
5. **Harmonic Stability in Power Electronic Based Power Systems: Concept, Modeling, and Analysis**
Wang, X. & Blaabjerg, F., 1 May 2019, In: IEEE Transactions on Smart Grid. 10, 3, p. 2858 - 2870 13 p., 8323197.
6. **Unified Impedance Model of Grid-Connected Voltage-Source Converters**
Wang, X., Harnefors, L. & Blaabjerg, F., Feb 2018, In: IEEE Transactions on Power Electronics. 33, 2, p. 1775 - 1787 13 p., 7913725.
7. **Passivity-Based Stability Analysis and Damping Injection for Multiparalleled VSCs with LCL Filters**
Wang, X., Blaabjerg, F. & Loh, P. C., Nov 2017, In: IEEE Transactions on Power Electronics. 32, 11, p. 8922 - 8935 14 p.
8. **Stability Analysis and Controller Synthesis for Single-Loop Voltage-Controlled VSIs**
Wang, X., Loh, P. C. & Blaabjerg, F., Sept 2017, In: IEEE Transactions on Power Electronics. 32, 9, p. 7394 - 7404 11 p.

9. **Grid-Current-Feedback Active Damping for LCL Resonance in Grid-Connected Voltage-Source Converters**
Wang, X., Blaabjerg, F. & Loh, P. C., Jan 2016, In: I E E E Transactions on Power Electronics. 31, 1, p. 213-223 11 p.
10. **A Series-LC-Filtered Active Damper with Grid Disturbance Rejection for AC Power-Electronics-Based Power Systems**
Wang, X., Pang, Y., Loh, P. C. & Blaabjerg, F., Aug 2015, In: I E E E Transactions on Power Electronics. 30, 8, p. 4037-4041 5 p.
11. **Virtual-Impedance-Based Control for Voltage-Source and Current-Source Converters**
Wang, X., Li, Y., Blaabjerg, F. & Loh, P. C., Dec 2015, In: I E E E Transactions on Power Electronics. 30, 12, p. 7019 - 7037 19 p.
12. **Virtual RC Damping of LCL-Filtered Voltage Source Converters with Extended Selective Harmonic Compensation**
Wang, X., Blaabjerg, F. & Loh, P. C., Sept 2015, In: I E E E Transactions on Power Electronics. 30, 9, p. 4726 - 4737 12 p.
13. **Modeling and Analysis of Harmonic Stability in an AC Power-Electronics-Based Power System**
Wang, X., Blaabjerg, F. & Wu, W., Dec 2014, In: I E E E Transactions on Power Electronics. 29, 12, p. 6421-6432 12 p.
14. **Autonomous Control of Inverter-Interfaced Distributed Generation Units for Harmonic Current Filtering and Resonance Damping in an Islanded Microgrid**
Wang, X., Blaabjerg, F. & Chen, Z., Jan 2014, In: I E E E Transactions on Industry Applications. 50, 1, p. 452-461 10 p.
15. **An active damper for stabilizing power-electronics-based AC systems**
Wang, X., Blaabjerg, F., Liserre, M., Chen, Z., He, J. & Li, Y., Jul 2014, In: I E E E Transactions on Power Electronics. 29, 7, p. 3318-3329 12 p.
16. **Synthesis of Variable Harmonic Impedance in Inverter-Interfaced Distributed Generation Unit for Harmonic Damping Throughout a Distribution Network**
Wang, X., Blaabjerg, F. & Chen, Z., 2012, In: I E E E Transactions on Industry Applications. 48, 4, p. 1407-1417
17. **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

Conference Papers

1. **Harmonic current control for LCL-filtered VSCs connected to ultra-weak grids**
Wang, X., Yang, D. & Blaabjerg, F., Oct 2017, *Proceedings of 2017 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press
2. **A Unified Impedance Model of Voltage-Source Converters with Phase-Locked Loop Effect**
Wang, X., Harnefors, L., Blaabjerg, F. & Loh, P. C., Sept 2016, *Proceedings of the 2016 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, 8 p. 1677
3. **Stability Analysis and Controller Synthesis for Digital Single-Loop Voltage-Controlled Inverters**
Wang, X., Loh, P. C. & Blaabjerg, F., Mar 2016, *Proceedings of the 31st Annual IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE (Institute of Electrical and Electronics Engineers), p. 2011-2018 8 p.
4. **High-performance feedback-type active damping of LCL-filtered voltage source converters**
Wang, X., Blaabjerg, F. & Loh, P. C., Sept 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 2629-2636 8 p. 7310029
5. **Influence of modulation method on using LC-traps with single-phase voltage source converters**
Wang, X., Min, H., Bai, H., Loh, P. C. & Blaabjerg, F., Sept 2015, *Proceedings of the 2015 17th European Conference on Power Electronics and Applications (EPE'15 ECCE-Europe)*. Geneva, Switzerland: IEEE Press, p. 1-9 9 p.
6. **Passivity-based design of robust passive damping for LCL-filtered voltage source converters**
Wang, X., Blaabjerg, F. & Loh, P. C., Sept 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 3718-3725 8 p.
7. **A unified grid current control for grid-interactive DG inverters in microgrids**
Wang, X., Loh, P. C. & Blaabjerg, F., Jun 2015, *Proceedings of the 2015 9th International Conference on Power Electronics and ECCE Asia (ICPE-ECCE Asia)*. IEEE Press, p. 1483 - 1490 8 p.
8. **A Series-LC-Filtered Active Damper for AC Power Electronics Based Power Systems**
Wang, X., Blaabjerg, F., Loh, P. C. & Pang, Y., Mar 2015, *Proceedings of the 30th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2015*. IEEE Press, p. 506-512 7 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

9. **Current Control of Grid Converters Connected with Series AC Capacitor**
Wang, X., Blaabjerg, F., Loh, P. C. & Pang, Y., Mar 2015, *Proceedings of the 30th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2015*. IEEE Press, p. 1800-1806 7 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).
10. **Analysis and design of grid-current-feedback active damping for LCL resonance in grid-connected voltage source converters**
Wang, X., Blaabjerg, F. & Loh, P. C., Sept 2014, *Proceedings of the 2014 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 373-380 8 p.
11. **Proportional derivative based stabilizing control of paralleled grid converters with cables in renewable power plants**
Wang, X., Blaabjerg, F. & Loh, P. C., Sept 2014, *Proceedings of the 2014 IEEE Energy Conversion Congress and Exposition (ECCE)*. IEEE Press, p. 4917-4924 8 p.
12. **Design-Oriented Analysis of Resonance Damping and Harmonic Compensation for LCL-Filtered Voltage Source Converters**
Wang, X., Blaabjerg, F. & Loh, P. C., May 2014, *Proceedings of the 2014 International Power Electronics Conference (IPEC-Hiroshima 2014 - ECCE-Asia)*. IEEE Press, p. 216-223 8 p.
13. **An active damper to suppress multiple resonances with unknown frequencies**
Wang, X., Blaabjerg, F. & Liserre, M., 2014, *Proceedings of the 29th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2014*. IEEE Press, p. 2184-2191 8 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).
14. **An Impedance-Based Stability Analysis Method for Paralleled Voltage Source Converters**
Wang, X., Blaabjerg, F. & Loh, P. C., 2014, *Proceedings of the 2014 International Power Electronics Conference (IPEC-Hiroshima 2014 - ECCE-Asia)*. IEEE Press, p. 1529-1535 7 p.
15. **Modeling and analysis of harmonic resonance in a power electronics based AC power system**
Wang, X., Blaabjerg, F., Chen, Z. & Wu, W., Sept 2013, *Proceedings of the 2013 IEEE Energy Conversion Congress and Exposition (ECCE): ECCE 2013*. IEEE Press, p. 5229-5236 8 p.
16. **An active damper for stabilizing power electronics-based AC systems**
Wang, X., Blaabjerg, F., Liserre, M., Chen, Z., He, J. & Li, Y., 2013, *28th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2013*. IEEE Press, p. 1131-1138 8 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).
17. **Resonance analysis in parallel voltage-controlled Distributed Generation inverters**
Wang, X., Blaabjerg, F., Chen, Z. & Wu, W., 2013, *28th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2013*. IEEE Press, p. 2977 - 2983 7 p. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).
18. **An improved design of virtual output impedance loop for droop-controlled parallel three-phase Voltage Source Inverters**
Wang, X., Blaabjerg, F. & Chen, Z., 2012, *Proceedings of the IEEE Energy Conversion Congress and Exposition 2012*. Raleigh, NC: IEEE Press, p. 2466-2473
19. **Autonomous control of inverter-interfaced Distributed Generation units for harmonic current filtering and resonance damping in an islanded microgrid**
Wang, X., Blaabjerg, F. & Chen, Z., 2012, *Proceedings of the IEEE Energy Conversion Congress and Exposition 2012*. IEEE Press, p. 211-218
20. **Synthesis of variable harmonic impedance in inverter-interfaced distributed generation unit for harmonic damping throughout a distribution network**
Wang, X., Blaabjerg, F. & Chen, Z., 2012, *Proceedings of the 27th Annual IEEE Applied Power Electronics Conference and Exposition*. IEEE Press, p. 775-782
21. **Secondary Voltage Control for Harmonics Suppression in Islanded Microgrids**
Wang, X., Guerrero, J. M., Blaabjerg, F. & Chen, Z., Jul 2011, *Proceedings of the IEEE Power and Energy Society General Meeting 2011*. IEEE Press, p. 1-8 8 p.
22. **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.
23. **A current controller of grid-connected converter for harmonic damping in a distribution network**
Wang, X., Blaabjerg, F. & Chen, Z., 2011, *Proceedings of the International Conference on Electrical Machines and Systems, ICEMS 2011*. IEEE Press, p. 1-6 6 p.
24. **Control of grid interactive AC microgrids**
Wang, X., Guerrero, J. M. & Chen, Z., Jul 2010, *Proceedings of the IEEE International Symposium on Industrial Electronics, ISIE 2010*. IEEE Press, p. 2211-2216 6 p.
25. **Distributed energy resources in grid interactive AC microgrids**
Wang, X., Guerrero, J., Chen, Z. & Blaabjerg, F., 2010, *2nd IEEE International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2010*. IEEE Press, p. 806-812 7 p.

26. A three-port bidirectional modular circuit for Li-Ion battery strings charge/discharge equalization applications
Wang, X., Yang, S., Park, N. J., Lee, K. J. & Hyun, D. S., 29 Sept 2008, *PESC '08 - 39th IEEE Annual Power Electronics Specialists Conference*. p. 4695-4698 4 p.