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Microgrid

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Guerrero, J. M. 2011 *Proceedings of the 2011 IEEE International Symposium on Industrial Electronics (ISIE)*. IEEE Press, p. 2400-2566 167 p.

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### Hierarchical Control Scheme for Voltage Harmonics Compensation in an Islanded Droop-Controlled Microgrid

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#### Hierarchical Control Scheme for Voltage Unbalance Compensation in Islanded Microgrids

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### 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.

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### Secondary control for voltage unbalance compensation in an islanded microgrid

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### 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.

### **Activities**

### Workshop: IoT-driven eNErgy sysTems (INET) - Advances and Applications

Anvari-Moghaddam, A. (Lecturer), Guan, Y. (Lecturer), Vasquez, J. C. (Lecturer), Guerrero, J. M. (Lecturer) 30 Jul 2018

### Tutorial: Advances in Microgrids Control and Management

Anvari-Moghaddam, A. (Lecturer), Qobad Shafiee (Lecturer), Hassan Bevrani (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), Vasquez, J. C. (Lecturer), Guan, Y. (Lecturer), Guerrero, J. M. (Lecturer) 29 Oct 2017

### Keynote: Advanced Control Architectures of DC Microgrids

Guerrero, J. M. (Lecturer)

### 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**

### Computer-professorat med Obelsk Støtte

Gert Frølund Pedersen, Josep M. Guerrero, Svend Birkelund & Mark Nicholas Grimshaw-Aagaard 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

### **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

#### Svv 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 C. Vasquez 21/11/2017

1 item 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.  $01/04/2014 \rightarrow 31/03/2016$ 

### 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.  $01/01/2015 \rightarrow 31/12/2020$ 

### MMGrid: Control and Management of Multi-Microgrid Clusters in Taiwan

Guerrero, J. M., Dragicevic, T., Vasquez, J. C. & Wu, D.  $01/01/2013 \rightarrow 31/12/2013$ 

#### Efficiensea

Guerrero, J. M., Dragicevic, T. & Meng, L. Innovation Fund Denmark  $16/03/2015 \rightarrow 15/03/2018$ 

### Flexible electric vehicle charging infrastructure (Flex-ChEV)

Guerrero, J. M., Dragicevic, T., SUN, B., Schaltz, E., Vasquez, J. C. & Shafiee, Q.  $01/03/2014 \rightarrow 29/02/2016$ 

### **Future Residential LVDC Power Distribution Architectures**

Vasquez, J. C. & Guerrero, J. M. 01/01/2014 → 31/12/2014

### iDClab: Intelligent DC Microgrid Living Lab

Guerrero, J. M., Vasquez, J. C., Diaz, E. R. & Golestan, S. Det Strategiske Forskningsråd  $01/01/2014 \rightarrow 31/12/2017$ 

### 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. Innovationsfonden  $01/01/2015 \rightarrow 31/12/2020$ 

### MeTER\_Demo: Microgrid Technology Research and Demonstration

Guerrero, J. M., Wu, D., Guan, Y., Vasquez, J. C. & Savaghebi, M.  $01/04/2014 \rightarrow 31/03/2017$ 

### HyMG: Microgrid technology research based on wind/PV/storage hybrid system

Guerrero, J. M., Vasquez, J. C. & Wu, D.  $01/01/2013 \rightarrow 31/12/2013$ 

### Flywheel: Off-Shore Application of the Flywheel Energy Storage

Guerrero, J. M., Dragicevic, T. & Anvari-Moghaddam, A. Den Danske Maritime Fond  $13/11/2014 \rightarrow 28/02/2016$ 

### VICINITY: Open virtual neighbourhood network to connect IoT infrastructures and smart objects

Guerrero, J. M. & Vasquez, J. C. European Commision 01/01/2016 → 31/12/2019

### The Energy Internet - Integrating Internet of Things into the Smart Grid

Vasquez, J. C., Guerrero, J. M., Savaghebi, M., Anvari-Moghaddam, A. & Gui, Y. Aalborg University  $01/01/2017 \rightarrow 31/12/2019$ 

### TROY: UPS SLC-TROY Project

Guerrero, J. M., Vasquez, J. C., Zhang, C., Wei, B. & Gui, Y. Others  $01/04/2015 \rightarrow 01/06/2017$