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Applied Power Electronic Systems
Electric Power Systems and Microgrids
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Research profile

Amjad Anvari-Moghaddam (S'10–M'14–SM'17) received the Ph.D. degree (Hons.) from University of Tehran in 2015 in Energy & Power Systems Engineering. Currently, he is an Associate Professor and Leader of iGRIDS Research Group at the Department of Energy (AAU Energy), Aalborg University where he is also acting as the Vice-Leader of PESYS and the coordinator of Integrated Energy Systems Laboratory (IES-Lab).

Research interests:

- Renewable/Hybrid Power Systems Planning, Operation, and Control
- Energy Systems Economics and Markets
- Microgrids and Active Energy Networks
- Sector Coupling, Integrated Energy Systems and Energy Hubs
- Modeling, Control, and Optimization of Power Electronic Systems
- Grid Interconnection of Renewable Energy Sources and Energy Storage Systems
- Operations Research and its applications to Energy Systems:

- Mathematical modeling
- Linear and non-linear optimization
- Risk modeling and management
- Sensitivity analysis
- System identification

He serves as the Vice-Chair of IEEE Denmark and IEEE-PES Danish Chapter, Associate Editor of the IEEE Transactions on Power Systems, IEEE Access, IEEE Systems Journal, IEEE Open Access Journal of Power and Energy, IEEE Power Engineering Letters, IET Renewable Power Generation, IET Smart Grid, and e-Prime Elsevier. He is a member of IEEE-CTSoc Consumer Power and Energy Technical Stream Committee and a Technical Committee Member of IEEE-PELS Sustainable Energy Systems, IEEE-PES/SBLC WG P2418.5 for Blockchain in Energy, IEEE-IES Renewable Energy Systems (RES), IEEE-IES Energy Storage (ESTC), IEEE-IES Resilience and Security for Industrial Applications (ReSia), IEEE-IES Smart Grids (TCSG), IEEE-PEL/SC WG P2004, IEEE-PES Energy Development and Power Generation (ED&PG), IEEE-PES Power System Operation, Planning and Economics (PSOPE) as well as CIGRE WG on Rural Electrification (TOR C6.38), Joint WG on the Impact of Electricity Market Interventions by System Operators during Emergency Situations (JWG C2/C5.06) and WG on Distributed Energy Resources Aggregation Platforms for the Provision of Flexibility Services (TOR C6.35). He also serves as the Technical Program/Advisory Committee Member of several international conferences.

He was awarded as the top 2% of Highly-Cited Scientists in the world (according to 2020 and 2021 Stanford University list) and was the recipient of 2020 DUO – India Fellowship Award, DANIDA Research Fellowship grant from the Ministry of Foreign Affairs of Denmark in 2018 and 2021, IEEE-CS Outstanding Leadership Award 2018 (Halifax, Nova Scotia, Canada), and the 2017 IEEE-CS Outstanding Service Award (Exeter-UK).

Research outputs

IoT Enabled Multi-Energy Systems: From Isolated Energy Grids to Modern Interconnected Networks

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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

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)).

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

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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.

Optimal Cooperative Management of Energy Storage Systems to Deal with Over- and Under-Voltages

Mokhtari, G., Nourbakhsh, G., Anvari-Moghaddam, A., Ghasemi, N. & Saberian, A., Feb 2017, In: *Energies*. 10, 3, p. 1-17 17 p., 293.

Multi-Level Energy Management and Optimal Control of a Residential DC Microgrid

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Vahedipour-Dahraie, M., Rashidizaheh-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.

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Optimal Design of a Wide Area Measurement System for Improvement of Power Network Monitoring Using a Dynamic Multiobjective Shortest Path Algorithm

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Kanellos, F. D., Anvari-Moghaddam, A. & Guerrero, J. M., Nov 2016, In: *Inventions*. 1, 4, p. 1-14 22.

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.

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Distributed Control and Management of Renewable Electric Energy Resources for Future Grid Requirements

Mokhtari, G., Anvari-Moghaddam, A. & Nourbakhsh, G., Jul 2016, *Energy Management of Distributed Generation Systems*. Mihet, D. E. L. (ed.). InTechOpen, 24 p.

Optimal Real-time Dispatch for Integrated Energy Systems: An Ontology-Based Multi-Agent Approach

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Load Shifting Control and Management of Domestic Microgeneration Systems for Improved Energy Efficiency and Comfort

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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.

Cost-Effective and Comfort-Aware Residential Energy Management under Different Pricing Schemes and Weather Conditions

Anvari-Moghaddam, A., Monsef, H. & Rahimi-Kian, A., Jan 2015, In: *Energy and Buildings*. 86, p. 782–793 12 p.

Optimal Smart Home Energy Management Considering Energy Saving and a Comfortable Lifestyle

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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.

A multi-objective algorithm for siting and sizing renewable resources in distribution network considering load model

Parvizi-Mosaed, M., Farmani, F., Anvari-Moghaddam, A., Rahimi-Kian, A. & Monsef, H., 2014, In: *Journal of Iranian Association of Electrical and Electronics Engineers*. p. 1-10 10 p.

Analytical Design and Power Density Assessment of Slotted Double-Sided AFPM Disc Motors

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Feasibility Study of a Novel Methodology for Solar Radiation Prediction on an Hourly Time Scale: A Case Study in Plymouth, UK

Anvari-Moghaddam, A., Monsef, H., Rahimi-Kian, A. & Nance, H., 2014, In: *Journal of Renewable and Sustainable Energy*. 6, 3, p. 1-19 19 p.

Multi-objective dispatch of distributed generations in a gridconnected micro-grid considering demand response actions
Parvizimosaed, M., Anvari-Moghaddam, A., Ghasemkhani, A. & Rahimi-Kian, A., Jun 2013, *Proceedings of the 22nd International Conference and Exhibition on Electricity Distribution (CIRED 2013)*. 615 CP ed. Institution of Engineering and Technology, Vol. 2013. 4 p. 0547

A Decision Maker for Energy Management in Residential Micro-grids

Farmani, F., Parvizi-Mosaed, M., Monsef, H., Rahimi-Kian, A., Ghasemkhani, A. & Anvari-Moghaddam, A., 2013, *Proceedings of the 28th International Power System Conference (PSC)*. p. 1-7 7 p.

A Multi-Objective Dispatch of Distributed Generations in a Grid-Connected Micro-Grid Considering Demand Response Actions

Parvizi-Mosaed, M., Anvari-Moghaddam, A., Ghasemkhani, A. & Rahimi-Kian, A., 2013, *Proceedings of the 22nd International Conference on Electricity Distribution(CIRED)*. p. 1-5 5 p.

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Parvizi-Mosaed, M., Farmani, F., Ghasemkhani, A., Anvari-Moghaddam, A., Rahimi-Kian, A. & Monsef, H., 2013, *Proceedings of the 28th International Power System Conference (PSC)*. p. 1-8 8 p.

Multi-Attribute Distributed Generation Planning in a Micro-Grid Considering Uncertainty Conditions

Ghasemkhani, A., Setareh, M., Anvari-Moghaddam, A., Parvizi-Mosaed, M. & Rahimi-Kian, A., 2013, *Proceedings of the 21st Iranian Conference on Electrical Engineering (ICEE)*. p. 1-6 6 p.

Optimal Energy Management of a Micro-Grid with Renewable Energy Resources and Demand Response

Parvizi-Mosaed, M., Farmani, F. & Anvari-Moghaddam, A., 2013, In: *Journal of Renewable and Sustainable Energy*. 5, p. 1-15 15 p.

Global Warming - Impacts and Future Perspective

Anvari-Moghaddam, A., 2012, *InTech*. p. 119-134 16 p.

Multi-Operation Management of a Typical Micro Grid Using Particle Swarm Optimization: A Comparative Study

Anvari-Moghaddam, A., Seifi, A. & Niknam, T., 2012, In: *Renewable & Sustainable Energy Reviews*. 16, 2, p. 1268 – 1281 14 p.

Smart Energy Management in a Micro-Grid Considering Demand Response Program

Parvizi-Mosaed, M., Anvari-Moghaddam, A., Ghasemkhani, A., Setareh, M. & Rahimi-Kian, A., 2012, *Proceedings of the 27th International Power System Conference (PSC)*. p. 1-8 8 p.

A Comprehensive Study on Future Smart Grids: Definitions, Strategies and Recommendations

Anvari-Moghaddam, A. & Seifi, A., 2011, In: *Journal of the North Carolina Academy of Science*. 127, 1, p. 28-34 8 p.

A Novel Approach for Wind Speed Forecasting Using Image Processing Techniques and 2D-Digital Filtering

Anvari-Moghaddam, A. & Seifi, A., 2011, *Proceedings of the 19th Iranian Conference on Electrical Engineering(ICEE)*. p. 1-6 6 p.

Environmental/Economic Operation Management of a Micro-Grid Using a Multi-Objective Algorithm

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Multi-objective Operation Management of a Renewable Micro Grid with Back-up Micro Turbine/Fuel Cell/Battery Hybrid Power Source

Anvari-Moghaddam, A., Seifi, A., Niknam, T. & Alizadeh Pahlavani, M., 2011, In: *Energy*. 36, 11, p. 6490-6507 18 p.

Study of Forecasting Renewable Energies in Smart Grids Using Linear predictive filters and Neural Networks

Anvari-Moghaddam, A. & Seifi, A., 2011, In: *IET Renewable Power Generation*. 5, 6, p. 470 – 480 10 p.

An advanced strategy for wind speed forecasting using expert 2-D FIR filters

Anvari-Moghaddam, A. & Seifi, A., 2010, In: *Advances in Electrical and Computer Engineering* . 10, 4, p. 103-110 8 p.

A New Way of Solar Radiation Forecasting Using Digital FIR Filters

Anvari-Moghaddam, A. & Seifi, A., 2010, *Proceedings of the 25th International Power System Conference (PSC)*. p. 1-8 8 p.

Improvement of Power Systems Operation Using Smart Grid Technology

Anvari-Moghaddam, A. & Seifi, A., 2010, *Proceedings of the 1st Iranian Conference on Renewable Energies and Distributed Generation (ICREDG)*. p. 1-9 9 p.

Smart Grid: An Intelligent Way to Empower Energy Choices

Anvari-Moghaddam, A. & Seifi, A., 2010, *Proceedings of the IEEE International Conference and Exhibition (EnergyCon)* . p. 1-6 6 p.

Intelligent Vibration Control of Structures Against Earthquakes Using Hybrid Damper

Anvari-Moghaddam, A. & Shabani Nia, F., Aug 2009, *Proceedings of International Conference on Mechanical and Electrical Technology 2009 (ICMET 2009)*. American Society of Mechanical Engineers, p. 1-5 5 p.

Activities

Organizing Committee Member of the 25th Conference on Power Electronics and Applications and Exhibition (Event)

Amjad Anvari-Moghaddam (Member)
2023

Program Co-Chair of the 7th International Conference on Power Energy Systems and Applications (Event)

Amjad Anvari-Moghaddam (Chairperson)
2023

Technical Program Chair of the 2023 IEEE 41st International Conference on Consumer Electronics (Event)

Amjad Anvari-Moghaddam (Chairperson)
2023

Technical Program Chair of the 2023 International Conference on Advances in Networking, Informatics and Education (Event)

Amjad Anvari-Moghaddam (Chairperson)
2023

Keynote Speaker: "Operation and Control of Renewable Energy Systems"

Amjad Anvari-Moghaddam (Speaker)
21 Oct 2022

Keynote Speaker: "The Energy Shift: Towards A Renewable Future"

Amjad Anvari-Moghaddam (Speaker)
14 Oct 2022

Keynote Speaker: "Modern Energy Markets and Integrated Energy Systems: Opportunities and Challenges"

Amjad Anvari-Moghaddam (Speaker)
27 Feb 2022

Invited Speaker: "Perspectives for the Clean Energy Transition"

Amjad Anvari-Moghaddam (Speaker)
26 Feb 2022

Vice-Chair of IEEE Denmark (Event)

Amjad Anvari-Moghaddam (Vice chairperson)
Feb 2022 → ...

Program Chair of the 2022 International Conference on Power Systems and Electrical Technology (Event)

Amjad Anvari-Moghaddam (Chairperson)
2022

Program Chair of the 5th International Conference on Electrical Engineering and Green Energy (Event)

Amjad Anvari-Moghaddam (Chairperson)
2022

Program Chair of the 6th International Conference on Power Electronics Systems and Application (Event)

Amjad Anvari-Moghaddam (Chairperson)
2022

Publication Chair of the 2022 Asia Conference on Electrical, Power and Computer Engineering (Event)

Amjad Anvari-Moghaddam (Chairperson)
2022

Publication Chair of the 2022 International Conference on Advanced Electronics, Electrical and Green Energy (Event)

Amjad Anvari-Moghaddam (Chairperson)
2022

Session Chair: "Electricity Load Forecasting and Calculation" (Event)

Amjad Anvari-Moghaddam (Chairperson)
2022

Sustainable Energy Technologies and Assessments (Journal)

Amjad Anvari-Moghaddam (Editor)
2022

Technical Committee Member of the 10th International Conference on Smart Energy Grid Engineering (Event)

Amjad Anvari-Moghaddam (Member)
2022

Technical Committee Member of the 10th International Conference on Smart Energy Grid Engineering (Event)

Amjad Anvari-Moghaddam (Member)
2022

Technical Committee Member of the 7th International Conference on Renewable Energy and Conservation (Event)

Amjad Anvari-Moghaddam (Member)
2022

Technical Program Committee of the 6th International Conference on Energy Economics and Energy Policy (Event)

Amjad Anvari-Moghaddam (Member)
2022

Technical Program Committee of the 7th International Conference on Advances on Clean Energy Research (Event)

Amjad Anvari-Moghaddam (Member)
2022

Technical Program Committee of the 7th International Conference on Renewable Energy and Conservation (Event)
Amjad Anvari-Moghaddam (Member)
2022

Track Chair of the IEEE 40th International Conference on Consumer Electronics (Event)
Amjad Anvari-Moghaddam (Vice chairperson)
2022

Keynote Speaker: "Green Energy Transition – Opportunities and Challenges"
Amjad Anvari-Moghaddam (Speaker)
13 Jun 2021

CIGRE Working Group on the Impact of Electricity Market Interventions by System Operators during Emergency Situations (Event)
Amjad Anvari-Moghaddam (Member)
2021

Co-Chair of 2021 International Conference on Electrical Engineering and Computer Technology (Event)
Amjad Anvari-Moghaddam (Chairperson)
2021

e-Prime: Advances in Electrical Engineering, Electronics and Energy (Journal)
Amjad Anvari-Moghaddam (Editor)
2021 → 2024

Expert Evaluation Committee - European Coordinated Research on Long-term ICT and ICT-based Scientific Challenges (Event)
Amjad Anvari-Moghaddam (Member)
2021 → ...

Expert Evaluation Committee - Italian Ministry of University and Research REPRISÉ– PRIN (Event)
Amjad Anvari-Moghaddam (Member)
2021 → ...

Expert Evaluation Committee - National Science Centre Poland (Event)
Amjad Anvari-Moghaddam (Member)
2021 → ...

Expert Panels and Evaluation Committee - Science Fund of the Republic of Serbia (Event)
Amjad Anvari-Moghaddam (Member)
2021 → ...

I E E Systems Journal (Journal)
Amjad Anvari-Moghaddam (Editor)
2021 → 2024

IET Energy Conversion and Economics (Journal)
Amjad Anvari-Moghaddam (Editor)
2021 → ...

Invited Talk: "Renewable Energy Transition and Living Sustainably"
Amjad Anvari-Moghaddam (Speaker)
2021

Keynote Speaker: "Flexible and Resilient Energy Networks for a Low-Carbon Future"

Amjad Anvari-Moghaddam (Speaker)

2021

Regional Chair of 2021 IEEE the 4th International Conference on Power and Energy Applications (Event)

Amjad Anvari-Moghaddam (Chairperson)

2021

Scientific Evaluation Committee LEAP-RE (Event)

Amjad Anvari-Moghaddam (Member)

2021 → ...

SDIA Steering Group on Data Centre Power Flexibility (Event)

Amjad Anvari-Moghaddam (Member)

2021 → ...

SDIA Steering Group on Excess Heat Utilization from Data Centers (Event)

Amjad Anvari-Moghaddam (Chairperson)

2021 → ...

Session Chair: "Active Consumers in Energy Communities" (Event)

Amjad Anvari-Moghaddam (Chairperson)

2021

Session Chair: "Low-Inertia Power Grids: Challenges and Solutions" (Event)

Amjad Anvari-Moghaddam (Chairperson)

2021 → ...

Session Chair: "Smart Grid and Micro Grid"

Amjad Anvari-Moghaddam (Organizer)

2021

Technical Program Committee of the 14th International Conference on Advances in Circuits, Electronics and Micro-electronics (Event)

Amjad Anvari-Moghaddam (Member)

2021

Technical Program Committee of the 5th International Conference on Energy Economics and Energy Policy – ICEEEP 2021 (Event)

Amjad Anvari-Moghaddam (Member)

2021

Technical Program Committee of the 6th International Conference on Advances on Clean Energy Research – ICACER 2021 (Event)

Amjad Anvari-Moghaddam (Member)

2021

Webinar: "The Fundamentals of Electronics for Energy Generation, Conversion, Distribution, and Storage"

Amjad Anvari-Moghaddam (Guest lecturer)

2021

Keynote Speaker: "New Energy Outlook and Future Energy Markets"

Amjad Anvari-Moghaddam (Speaker)

4 Dec 2020

Energies (Journal)

Amjad Anvari-Moghaddam (Editor)
2020

Expert Evaluation Committee - Qatar National Research Fund (Event)

Amjad Anvari-Moghaddam (Member)
2020 → ...

IEEE Open Access Journal of Power and Energy (Journal)

Amjad Anvari-Moghaddam (Editor)
2020

IEEE Power Engineering Letters (Journal)

Amjad Anvari-Moghaddam (Editor)
2020

IEEE Transactions on Power Systems (Journal)

Amjad Anvari-Moghaddam (Editor)
2020

IET Smart Grid (Journal)

Amjad Anvari-Moghaddam (Editor)
2020 → 2023

International Journal of Electrical Power & Energy Systems (Journal)

Amjad Anvari-Moghaddam (Editor)
2020

International Transactions on Electrical Energy Systems (Journal)

Amjad Anvari-Moghaddam (Editor)
2020

Inventions (Journal)

Amjad Anvari-Moghaddam (Editor)
2020

Member of Technical Stream Committee of IEEE CTSoc Consumer Power and Energy – CPE (Event)

Amjad Anvari-Moghaddam (Member)
2020 → ...

Program Committee Member of the First International Conference on Electrical Energy and Power Engineering (Event)

Amjad Anvari-Moghaddam (Member)
2020

Session Chair: "Coordinated Operation and Planning of Hybrid Energy Systems" (Event)

Amjad Anvari-Moghaddam (Chairperson)
2020

Session Chair: "Decision Making Approaches for Integrated Energy Systems" (Event)

Amjad Anvari-Moghaddam (Chairperson)
2020

Session Chair: "Energy Storage Systems and Charging Technologies for Electric Vehicles" (Event)

Amjad Anvari-Moghaddam (Chairperson)

2020

Technical Committee Member IEEE-PES/SBLC WG for Blockchain in Energy – IEEE SA P2418.5 (Event)

Amjad Anvari-Moghaddam (Member)

2020 → ...

Technical Committee Member of IEEE CES Energy Management of CE Hardware and Software Systems –EMC (Event)

Amjad Anvari-Moghaddam (Member)

2020

Technical Committee Member of IEEE IES Smart Grids (Event)

Amjad Anvari-Moghaddam (Member)

2020

Technical Program Committee of the 3rd International Conference on Smart Energy Systems and Technologies – SEST 2020 (Event)

Amjad Anvari-Moghaddam (Member)

2020

Track Chair of the 3rd International Conference on Electrical Engineering and Applications (Event)

Amjad Anvari-Moghaddam (Vice chairperson)

2020

Session Chair: "Energy Risks and Assessment Policies" (Event)

Amjad Anvari-Moghaddam (Chairperson)

27 Aug 2019

Session Chair: "Advanced Power Electronics for Resilient Active Networks and Microgrids" (Event)

Amjad Anvari-Moghaddam (Chairperson)

Jun 2019

International Advisory Board of the 2019 IEEE International Conference on Electrical, Computer and Communication Technologies (Event)

Amjad Anvari-Moghaddam (Member)

20 Feb 2019 → 22 Feb 2019

Applied Thermal Engineering (Journal)

Amjad Anvari-Moghaddam (Editor)

2019

Electrical Engineering Open Access Open Journal (Journal)

Amjad Anvari-Moghaddam (Editor)

2019

Electronics (Journal)

Amjad Anvari-Moghaddam (Editor)

2019

IEEE Access (Journal)

Amjad Anvari Moghaddam (Editor)

2019 → 2022

Invited Talk: "The Role of Demand Side Management in Smart Energy"

Amjad Anvari-Moghaddam (Speaker)

2019

Session Chair: "Demand Response I" (Event)

Amjad Anvari-Moghaddam (Chairperson)

2019

Session Chair: "Energy Storage for Future Power and Energy Systems" (Event)

Amjad Anvari-Moghaddam (Chairperson)

2019

Sustainability (Journal)

Amjad Anvari-Moghaddam (Editor)

2019 → 2020

Technical Committee Member of IEEE IES Energy Storage – ESTC (External organisation)

Amjad Anvari-Moghaddam (Member)

2019 → ...

Technical Committee Member of IEEE PES Energy Development and Power Generation Committee – ED&PG (Event)

Amjad Anvari-Moghaddam (Member)

2019

Technical Committee Member of IEEE PES Power System Operation, Planning and Economics - PSOPE (Event)

Amjad Anvari-Moghaddam (Member)

2019

Technical Program Committee of the 19th IEEE International Conference on Scalable Computing and Communications (Event)

Amjad Anvari Moghaddam (Member)

2019

Technical Program Committee of the 1st International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (Event)

Amjad Anvari-Moghaddam (Member)

2019

Technical Program Committee of the 1st International Conference on Emerging Electrical Energy, Electronics and Computing Technologies (Event)

Amjad Anvari-Moghaddam (Member)

2019

Technical Program Committee of the 8th IET International Conference on Renewable Power Generation (Event)

Amjad Anvari-Moghaddam (Member)

2019

Vice-Chair of IEEE-PES Denmark Chapter (Event)

Amjad Anvari-Moghaddam (Vice chairperson)

2019 → ...

Technical Program Committee of the 4th International Symposium on Dependability in Sensor, Cloud, and Big Data Systems and Applications (Event)

Amjad Anvari-Moghaddam (Member)

11 Dec 2018 → 13 Dec 2018

IET Renewable Power Generation (Journal)

Amjad Anvari-Moghaddam (Editor)
Oct 2018 → 2021

International Scientific Committee of the 3rd International Conference on Computer Technology, Mechanical and Electrical Engineering (Event)

Amjad Anvari-Moghaddam (Member)
17 Aug 2018 → 19 Aug 2018

Workshop: IoT Solutions for Smart Healthcare

Amjad Anvari-Moghaddam (Lecturer), Po Yang (Lecturer) & Afshin Samani (Lecturer)
31 Jul 2018 → 1 Aug 2018

Session Chair: "IoT Networks and Communications" (Event)

Amjad Anvari-Moghaddam (Member)
30 Jul 2018

Technical Program Committee of the 2018 IEEE International Conference on Internet of Things (Event)

Amjad Anvari-Moghaddam (Member)
30 Jul 2018 → 3 Aug 2018

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

CIGRE Working Group on Rural Electrification (Event)

Amjad Anvari-Moghaddam (Member)
13 Jul 2018 → Dec 2020

Technical Program Committee of the 16th IEEE International Conference on Smart City (Event)

Amjad Anvari-Moghaddam (Member)
28 Jun 2018 → 30 Jun 2018

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

Applied Sciences (Journal)

Amjad Anvari-Moghaddam (Editor)
2018 → ...

CIGRE Working Group on Distributed Energy Resources Aggregation Platforms for the Provision of Flexibility Services (Event)

Amjad Anvari-Moghaddam (Member)
2018 → ...

Energies (OA Journal) (Journal)

Amjad Anvari-Moghaddam (Editor)
2018 → ...

Future Generation Computer Systems (Journal)

Amjad Anvari-Moghaddam (Editor)

2018

IEEE Working Group Smart Buildings, Loads and Customer Systems (Event)

Amjad Anvari-Moghaddam (Secretary)

2018 → ...

Invited Talk: "Advanced Architectures and Control Concepts for Microgrids"

Amjad Anvari-Moghaddam (Speaker)

2018

Invited Talk: "Advances in Control and Management of AC/DC Microgrids"

Amjad Anvari-Moghaddam (Speaker)

2018

Technical Program Committee of the Second EAI International Conference on Smart Grid and Internet of Things (SGIoT 2018) (Event)

Amjad Anvari-Moghaddam (Member)

2018

Technical Program Committee of the 2017 IEEE International Conference on Internet of Things (Event)

Amjad Anvari-Moghaddam (Member)

22 Jun 2017

Workshop: The Energy Internet-Integrating Internet of Things into the Smart Energy Systems

Amjad Anvari-Moghaddam (Panel member)

21 Jun 2017

Keynote Speaker: Research Challenges and Future Directions in Industrial and Residential Microgrids

Amjad Anvari-Moghaddam (Speaker)

23 Feb 2017

SCIREA Journal of Electrical Engineering (Journal)

Amjad Anvari-Moghaddam (Editor)

Feb 2017

IEEE Internet of Things Community (External organisation)

Amjad Anvari-Moghaddam (Member)

2017

IEEE Internet of Things Journal (Journal)

Amjad Anvari-Moghaddam (Editor)

2017

IEEE-Senior Member (External organisation)

Amjad Anvari-Moghaddam (Member)

2017

IEEE Transactions on Industrial Informatics (Journal)

Amjad Anvari-Moghaddam (Editor)

2017

Technical committee member of IEEE Working Group P2004 (HIL Simulation and Testing) (External organisation)

Amjad Anvari-Moghaddam (Member)

2017

Technical committee member of the Second International Conference on Intelligent Information Technologies (ICIIT 2017) (Event)
Amjad Anvari-Moghaddam (Member)
2017

AAU Certification in English as a Medium of Instruction
Amjad Anvari-Moghaddam (Other)
2017

Microgrid Symposium 2016: "Shipboard Microgrids-Advances in Control, Operation and Management"
Amjad Anvari-Moghaddam (Speaker)
20 Oct 2016 → 21 Oct 2016

Applied Sciences (Journal)
Amjad Anvari-Moghaddam (Editor)
1 Oct 2016

Plenary Talk: "Energy Management Solutions for Sustainable Homes and Microgrids"
Amjad Anvari-Moghaddam (Speaker)
29 Sep 2016

I-EMS Group at Center for Urban Energy (iCUE)-Ryerson University (External organisation)
Amjad Anvari-Moghaddam (Member)
1 Sep 2016

Invited Talk: "Smart Grids- A Way to Enable Cost-Effective and Comfort-Aware Energy Management Solutions"
Amjad Anvari-Moghaddam (Speaker)
3 Apr 2016

Session Chair: "Advanced Technology Applications in Smart Power Grids"
Amjad Anvari-Moghaddam (Panel member)
Apr 2016

Invited Talk: "Microgrids- Recent Activities, Research, Development, and Demonstration Projects"
Amjad Anvari-Moghaddam (Speaker)
14 Feb 2016 → 15 Feb 2016

OPAL-RT Certificate of Training
Amjad Anvari-Moghaddam (Participant)
2016

Technical committee member of IES Resilience and Security for Industrial Applications – ReSia (External organisation)
Amjad Anvari-Moghaddam (Member)
2016

Session Chair: "Distributed Systems"
Amjad Anvari-Moghaddam (Panel member)
Sep 2015

Technical committee member of Renewable Energy Systems-IEEE Industrial Electronics Society (External organisation)
Amjad Anvari-Moghaddam (Member)
1 Aug 2015

IEEE Smart Grid Community (Event)

Amjad Anvari-Moghaddam (Member)
2015

IEEE Young Professionals (Event)

Amjad Anvari-Moghaddam (Member)
2015

MOHANIR Eng. Consulting Company A/S (External organisation)

Amjad Anvari-Moghaddam (Vice chairperson)
2015

One-Day Seminar for PhD Supervisors

Amjad Anvari-Moghaddam (Participant)
2015

IEEE Power Electronic Society (Event)

Amjad Anvari-Moghaddam (Member)
2014

Program Co-Chair of the 2023 the 7th International Conference on Power Energy Systems and Applications (Event)

Amjad Anvari-Moghaddam (Chairperson)
2013 → ...

Iran National Elite Foundation (External organisation)

Amjad Anvari-Moghaddam (Member)
Jul 2011

Organization for Engineering Order of Buildings-Electrical Installations (External organisation)

Amjad Anvari-Moghaddam (Member)
2011

Prizes

2016 Otto Mønstedts Travel Award

Anvari-Moghaddam, Amjad (Recipient), 2016

2018 Otto Mønstedts Travel Award

Anvari-Moghaddam, Amjad (Recipient), 2018

2019 Otto Mønstedts Travel Award

Anvari-Moghaddam, Amjad (Recipient), 2019

2020 ET-AAU Supervisory Award

Anvari-Moghaddam, Amjad (Recipient), 2020

2020 ITEES Outstanding Editor Award

Anvari-Moghaddam, Amjad (Recipient), 2020

Best Paper Award - Renewable Energy Global (REG) Innovations Ltd.

Anvari-Moghaddam, Amjad (Recipient), 2011

DANIDA Research Fellowship Grant
Anvari-Moghaddam, Amjad (Recipient), 2019

DUO – India Fellowship Award
Anvari-Moghaddam, Amjad (Recipient), 2020

IEEE-CS Outstanding Leadership Award 2018
Anvari-Moghaddam, Amjad (Recipient), 2018

IEEE-CS Outstanding Service Award
Anvari-Moghaddam, Amjad (Recipient), 2017

Inventions 2017 Best Paper Award
Anvari-Moghaddam, Amjad (Recipient), 2017

Outstanding Review Award (International Journal of Electrical Power & Energy Systems - Elsevier)
Anvari-Moghaddam, Amjad (Recipient), 2018

Outstanding Review Award (Journal of Applied Energy - Elsevier)
Anvari-Moghaddam, Amjad (Recipient), 2017

Outstanding Review Award (Journal of Cleaner Production - Elsevier)
Anvari-Moghaddam, Amjad (Recipient), 2018

Outstanding Review Award (Journal of Energy - Elsevier)
Anvari-Moghaddam, Amjad (Recipient), 2016

Outstanding Review Award (Journal of Energy Storage - Elsevier)
Anvari-Moghaddam, Amjad (Recipient), 2018

Outstanding Review Award (Sustainable Cities and Society - Elsevier)
Anvari-Moghaddam, Amjad (Recipient), 2018

Recognized Review Award (Energy and Buildings - Elsevier)
Anvari-Moghaddam, Amjad (Recipient), 2018

Recognized Review Award (Journal of Energy Storage - Elsevier)
Anvari-Moghaddam, Amjad (Recipient), 2017

World's Top 1% Highly-Cited Researcher
Anvari-Moghaddam, Amjad (Recipient), 20 Apr 2019

Awards

MARGIN: Market-driven Multi-Energy Operational Planning in Indonesia
Anvari-Moghaddam, A., Blaabjerg, F., Hajizadeh, A. & Frøstrup, S.
Danida Fellowship Centre: DKK4,966,260.00
01/04/2022 → 31/05/2025

Projects

A High-Fidelity PHIL-based Platform for Real-Time Simulation and Testing of Power and Energy Systems

Anvari-Moghaddam, A., Oshnoei, A. & Ribeiro, R. L. D. A.

01/08/2021 → 28/02/2022

Cognitive Control and Operation Management of Islanded Microgrids

Li, S., Anvari-Moghaddam, A. & Blaabjerg, F.

01/09/2022 → 30/09/2025

Continuous-time Modeling of Integrated Energy Systems

Nourollahi, R., Zare, K., Mohammadi-Ivatloo, B., Vahidinasab, V. & Anvari-Moghaddam, A.

01/09/2019 → 01/07/2023

Coordinated Control of Distributed Virtual Inertia Units to Improve Frequency Stability of Islanded Microgrids

Jafari, M., B. Gharehpetian, G. & Anvari-Moghaddam, A.

23/09/2019 → 29/02/2024

Energy Expenditure Estimates in Smart Homes

Hedegaard, M., Anvari-Moghaddam, A. & Samani, A.

01/08/2018 → 31/12/2018

Energy Management System in Shipboard Microgrid

Othman, M. B., Anvari-Moghaddam, A. & Guerrero, J. M.

20/04/2016 → 01/05/2019

HeatReFlex: Green and Flexible District Heating/Cooling

Anvari-Moghaddam, A., Guerrero, J. M., Nami, H. & Mohammadiivatloo, B.

Danida Fellowship Centre

01/05/2019 → 30/04/2022

Hybrid Generation Solution for Mining Site

Murkowska, M. I., Rey, P. Z., Reitich, G. A. C., Anvari-Moghaddam, A. & Leite, G.

01/02/2020 → 30/05/2020

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

Long-term Distribution System Planning in Presence of Regional Energy Networks

Dehghani Sanij, M., Mirzaei, A. & Anvari-Moghaddam, A.

01/09/2018 → 30/04/2022

MARGIN: Market-driven Multi-Energy Operational Planning in Indonesia

Anvari-Moghaddam, A., Blaabjerg, F., Hajizadeh, A. & Frøstrup, S.

Danida Fellowship Centre

01/04/2022 → 31/05/2025

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

Optimal Allocation of Hybrid Energy Storage Systems for Stackable Applications in Distribution Grid

Zhang, Y., Blaabjerg, F., Peyghami, S., Dragicevic, T. & Anvari-Moghaddam, A.

01/05/2021 → 30/04/2024

Optimal Energy Management of Hybrid Electric Ships Considering Load Uncertainty

Vahabzad, N., Mohammadi-Ivatloo, B., Tohidi, S. & Anvari-Moghaddam, A.
01/09/2018 → 01/10/2020

Optimal Energy Management of Local Industrial Energy Hubs

Zare Oskouei, M., Mohammadi-Ivatloo, B., Abapour, M., Shafiee, M. & Anvari-Moghaddam, A.
23/09/2018 → 28/02/2021

Optimal Operation of Multiple Energy Distribution Companies Integrated with Emerging Energy Resources

Mirzaei, M. A., Mohammadi-Ivatloo, B., Marzband, M. & Anvari-Moghaddam, A.
23/09/2018 → 22/05/2021

Optimal Operation of Natural Gas and Reconfigurable Electricity Networks in presence of Connected Energy Hubs

Hemmati, M., Mohammadi-Ivatloo, B., Abapour, M. & Anvari-Moghaddam, A.
01/09/2018 → 30/06/2021

Resilient Frequency and Voltage Control of Isolated Microgrids for an Improved Performance Against FDI Cyber-Attacks Using Coordinated SoC of Batteries

Solat, A., B. Gharehpetian, G., Salay Naderi, M. & Anvari-Moghaddam, A.
01/09/2019 → 29/02/2024

Short Term Scheduling of Decentralized Peer-To-Peer Energy Trading in an Industrial Microgrid Considering the Central Shared Energy

Aminlou, A., Mohammadi-Ivatloo, B., Zare, K., Anvari-Moghaddam, A. & Razzaghi, R.
01/09/2018 → 01/12/2022

Stochastic Coordinated Charging Scheduling of Electric Vehicles with Multiple Charging Stations in Multi-Region Transportation System

Alaee, P., Anvari-Moghaddam, A. & Bems, J.
01/07/2021 → 01/07/2025

Voltage and Frequency Issues of Distributed Grids with Highly-Penetrated Photovoltaic Systems

Gao, X., Zhou, D., Anvari-Moghaddam, A. & Blaabjerg, F.
01/02/2021 → 31/01/2024