

Kevin L Tomsovic

List of Publications by Year in descending order

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125
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5,155
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docs citations

125
times ranked

3670
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Disturbance Propagation in Power Grids With High Converter Penetration. Proceedings of the IEEE, 2023, 111, 873-890. | 21.3 | 5 |
| 2 | Robust Scheduling of Networked Microgrids for Economics and Resilience Improvement. Energies, 2022, 15, 2249. | 3.1 | 14 |
| 3 | Robust Microgrid Scheduling Considering Unintentional Islanding Conditions. IEEE Access, 2022, 10, 48836-48848. | 4.2 | 1 |
| 4 | A dwell time approach for the stabilization of mixed Continuous/Discrete switched systems. Automatica, 2022, 142, 110386. | 5.0 | 8 |
| 5 | Microgrid Assisted Design for Remote Areas. Energies, 2022, 15, 3725. | 3.1 | 3 |
| 6 | Power <sc>electronicsâ€interfaced cyberâ€physical</sc> power systems: A review on modeling, simulation, and cybersecurity. Wiley Interdisciplinary Reviews: Energy and Environment, 2022, 11, . | 4.1 | 0 |
| 7 | Profit-Oriented False Data Injection on Electricity Market: Reviews, Analyses, and Insights. IEEE Transactions on Industrial Informatics, 2021, 17, 5876-5886. | 11.3 | 18 |
| 8 | Hybrid Symbolic-Numeric Framework for Power System Modeling and Analysis. IEEE Transactions on Power Systems, 2021, 36, 1373-1384. | 6.5 | 30 |
| 9 | Robust Output Feedback Control Design for Inertia Emulation by Wind Turbine Generators. IEEE Transactions on Power Systems, 2021, 36, 5056-5067. | 6.5 | 9 |
| 10 | Inertia Emulation Control using Demand Response via 5G Communications. , 2021, , . | | 1 |
| 11 | Stability of Nonlinear Switched Systems on Non-uniform Time Domains with Application to Multi-Agents Consensus. , 2020, , . | | 2 |
| 12 | Reconfigurable Real-Time Power Grid Emulator for Systems With High Penetration of Renewables. IEEE Open Access Journal of Power and Energy, 2020, 7, 489-500. | 3.4 | 26 |
| 13 | Robust Microgrid Scheduling With Resiliency Considerations. IEEE Access, 2020, 8, 153169-153182. | 4.2 | 22 |
| 14 | A Large-Scale Testbed as a Virtual Power Grid: For Closed-Loop Controls in Research and Testing. IEEE Power and Energy Magazine, 2020, 18, 60-68. | 1.6 | 20 |
| 15 | Cyberâ€physical system testbed for power system monitoring and wideâ€area control verification. IET Energy Systems Integration, 2020, 2, 32-39. | 1.8 | 24 |
| 16 | Resilient distribution system leveraging distributed generation and microgrids: a review. IET Energy Systems Integration, 2020, 2, 289-304. | 1.8 | 27 |
| 17 | Model predictive control for voltage restoration in microgrids using temporal logic specifications. IET Energy Systems Integration, 2020, 2, 207-214. | 1.8 | 4 |
| 18 | Review on set-theoretic methods for safety verification and control of power system. IET Energy Systems Integration, 2020, 2, 226-234. | 1.8 | 8 |

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| 19 | Distributed energy management for community microgrids considering phase balancing and peak shaving. IET Generation, Transmission and Distribution, 2019, 13, 1612-1620. | 2.5 | 23 |
| 20 | Secondary Voltage Control Via Demand-Side Energy Storage with Temporal Logic Specifications. , 2019, , . | | 3 |
| 21 | Distributed energy management for community microgrids considering network operational constraints and building thermal dynamics. Applied Energy, 2019, 239, 83-95. | 10.1 | 90 |
| 22 | Stability of Wide-Area Power System Controls With Intermittent Information Transmission. IEEE Transactions on Power Systems, 2019, 34, 3494-3503. | 6.5 | 8 |
| 23 | Fast Frequency Support From Wind Turbine Generators With Auxiliary Dynamic Demand Control. IEEE Transactions on Power Systems, 2019, 34, 3340-3348. | 6.5 | 57 |
| 24 | Stability analysis of a class of switched nonlinear systems using the time scale theory. Nonlinear Analysis: Hybrid Systems, 2019, 33, 195-210. | 3.5 | 12 |
| 25 | Robust Scheduling of Microgrids With Resiliency Constraints. , 2019, , . | | 2 |
| 26 | Stabilization of Switched Systems on Non-Uniform Time Domain with Dwell Time. , 2019, , . | | 2 |
| 27 | Set Theory-Based Safety Supervisory Control for Wind Turbines to Ensure Adequate Frequency Response. IEEE Transactions on Power Systems, 2019, 34, 680-692. | 6.5 | 23 |
| 28 | Evaluation of residential customer elasticity for incentive based demand response programs. Electric Power Systems Research, 2018, 158, 26-36. | 3.6 | 85 |
| 29 | Provision for Guaranteed Inertial Response in Diesel-Wind Systems via Model Reference Control. IEEE Transactions on Power Systems, 2018, 33, 6557-6568. | 6.5 | 42 |
| 30 | A Novel Active Power Control Framework for Wind Turbine Generators to Improve Frequency Response. IEEE Transactions on Power Systems, 2018, 33, 6579-6589. | 6.5 | 97 |
| 31 | Coordinated distribution network control of tap changer transformers, capacitors and PV inverters. Electrical Engineering, 2018, 100, 1133-1146. | 2.0 | 23 |
| 32 | CXsparse-Based Differential Algebraic Equation Framework for Power System Simulation. , 2018, , . | | 0 |
| 33 | Synthesizing Distributed Energy Resources in Microgrids with Temporal Logic Specifications. , 2018, , . | | 9 |
| 34 | Oscillation energy based sensitivity analysis and control for multi-mode oscillation systems. , 2018, , . | | 6 |
| 35 | Networked Microgrids for Improving Economics and Resiliency. , 2018, , . | | 4 |
| 36 | Quantitative Control Approach for Wind Turbine Generators to Provide Fast Frequency Response with Guarantee of Rotor Security. , 2018, , . | | 2 |

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| 37 | Model Enhancements for Real- Time Transient Stability Assessment in Western Interconnection. , 2018, , . | | 4 |
| 38 | Quantifying the synthetic inertia and load-damping effect of a converter-interfaced power source. , 2018, , . | | 8 |
| 39 | Wide Area Hierarchical Voltage Control to Improve Security Margin for Systems With High Wind Penetration. IEEE Transactions on Power Systems, 2018, 33, 6218-6228. | 6.5 | 12 |
| 40 | Battery energy storage scheduling for optimal load variance minimization. , 2018, , . | | 10 |
| 41 | Optimal allocation of series FACTS devices in large-scale systems. IET Generation, Transmission and Distribution, 2018, 12, 1889-1896. | 2.5 | 18 |
| 42 | Optimal Allocation of Series FACTS Devices Under High Penetration of Wind Power Within a Market Environment. IEEE Transactions on Power Systems, 2018, 33, 6206-6217. | 6.5 | 45 |
| 43 | Conservation Voltage Reduction in Secondary Distribution Networks with Distributed Generation and Electric Vehicle Charging Loads. , 2018, , . | | 3 |
| 44 | Three-Phase Power Converter-Based Real-Time Synchronous Generator Emulation. IEEE Transactions on Power Electronics, 2017, 32, 1651-1665. | 7.9 | 81 |
| 45 | Microgrid optimal scheduling with chance-constrained islanding capability. Electric Power Systems Research, 2017, 145, 197-206. | 3.6 | 86 |
| 46 | Security Constrained Multi-Stage Transmission Expansion Planning Considering a Continuously Variable Series Reactor. IEEE Transactions on Power Systems, 2017, 32, 4442-4450. | 6.5 | 53 |
| 47 | Power system supplementary damping controllers in the presence of saturation. , 2017, , . | | 8 |
| 48 | Robust optimisation-based microgrid scheduling with islanding constraints. IET Generation, Transmission and Distribution, 2017, 11, 1820-1828. | 2.5 | 91 |
| 49 | Dynamic Control Allocation for Damping of Inter-Area Oscillations. IEEE Transactions on Power Systems, 2017, 32, 4894-4903. | 6.5 | 42 |
| 50 | Hybrid Controller for Wind Turbine Generators to Ensure Adequate Frequency Response in Power Networks. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2017, 7, 359-370. | 3.6 | 34 |
| 51 | Optimal use of incentive and price based demand response to reduce costs and price volatility. Electric Power Systems Research, 2017, 144, 215-223. | 3.6 | 124 |
| 52 | Optimal sizing of energy storage for community microgrids considering building thermal dynamics. , 2017, , . | | 1 |
| 53 | Wind turbine generator modeling considerations for stability studies of weak systems. , 2017, , . | | 7 |
| 54 | Implementation and testing of remedial action schemes for real-time transient stability studies. , 2017, , . | | 9 |

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| 55 | Guest Editorial: New Trends in Wide-Area Monitoring and Control of Power Systems with Large Scale Renewables. IET Generation, Transmission and Distribution, 2017, 11, 4403-4405. | 2.5 | 10 |
| 56 | Community microgrid scheduling considering building thermal dynamics. , 2017, , . | | 8 |
| 57 | Control allocation for wide area coordinated damping. , 2017, , . | | 4 |
| 58 | Event analysis of pulse-reclosers in distribution systems through sparse representation. , 2017, , . | | 6 |
| 59 | Community Microgrid Scheduling Considering Network Operational Constraints and Building Thermal Dynamics. Energies, 2017, 10, 1554. | 3.1 | 9 |
| 60 | A New Distributed Optimization for Community Microgrids Scheduling. , 2017, , . | | 6 |
| 61 | Optimal reactive power allocation for photovoltaic inverters to limit transformer tap changes. , 2016, , . | | 2 |
| 62 | Impact of Incentive Based Demand Response on large scale renewable integration. , 2016, , . | | 4 |
| 63 | Measurement-based models for wide-area control design in the future power grid. , 2016, , . | | 3 |
| 64 | A Study of Magnetic Amplifier-based Power Flow Controller for Power System Stability Improvement. Electric Power Components and Systems, 2016, 44, 966-973. | 1.8 | 3 |
| 65 | A distributed control design methodology for damping critical modes in power systems. , 2016, , . | | 8 |
| 66 | A robust load shedding strategy for microgrid islanding transition. , 2016, , . | | 5 |
| 67 | Optimal investment on series FACTS device considering contingencies. , 2016, , . | | 9 |
| 68 | A MILP-based distribution optimal power flow model for microgrid operation. , 2016, , . | | 21 |
| 69 | Two-Level Control of Doubly Fed Induction Generator Using Flatness-Based Approach. IEEE Transactions on Power Systems, 2016, 31, 518-525. | 6.5 | 17 |
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| 73 | Static and dynamic power system load emulation in a converter-based reconfigurable power grid emulator. IEEE Transactions on Power Electronics, 2016, 31, 3239-3251. | 7.9 | 77 |
| 74 | Optimal voltage regulation for unbalanced distribution networks considering distributed energy resources. , 2015, , . | | 8 |
| 75 | Examination of incentive based demand response in western connection reduced model. , 2015, , . | | 15 |
| 76 | Parallel harmony search based distributed energy resource optimization. , 2015, , . | | 7 |
| 77 | Application of distributed control to mitigate disturbance propagations in large power networks. , 2015, , . | | 18 |
| 78 | A regression based hourly day ahead solar irradiance forecasting model by labview using cloud cover data. , 2015, , . | | 3 |
| 79 | Study of flatness-based Automatic Generation Control Approach on an NPCC system model. , 2015, , . | | 10 |
| 80 | Robust unit commitment considering uncertain demand response. Electric Power Systems Research, 2015, 119, 126-137. | 3.6 | 47 |
| 81 | Distribution system voltage regulation by distributed energy resources. , 2014, , . | | 16 |
| 82 | A new linearization method of unbalanced electrical distribution networks. , 2014, , . | | 7 |
| 83 | Development of converter based reconfigurable power grid emulator. , 2014, , . | | 37 |
| 84 | A full demand response model in co-optimized energy and reserve market. Electric Power Systems Research, 2014, 111, 62-70. | 3.6 | 78 |
| 85 | Filling the Pipeline: Power System and Energy Curricula for Middle and High School Students Through Summer Programs. IEEE Transactions on Power Systems, 2014, 29, 1874-1879. | 6.5 | 10 |
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| 87 | Application of wide area measurement systems to islanding detection of bulk power systems. IEEE Transactions on Power Systems, 2013, 28, 2006-2015. | 6.5 | 75 |
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| 92 | Measuring the volatility of wholesale electricity prices caused by wind power uncertainty with a correlation model. IET Renewable Power Generation, 2012, 6, 315-323. | 3.1 | 22 |
| 93 | Prediction of critical load levels for AC optimal power flow dispatch model. International Journal of Electrical Power and Energy Systems, 2012, 42, 635-643. | 5.5 | 4 |
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| 95 | Real-Time Transient Instability Detection Based on Decision Trees. , 2009, , . | | 4 |
| 96 | An interdisciplinary approach to long-term modelling for power system expansion. International Journal of Critical Infrastructures, 2007, 3, 235. | 0.2 | 21 |
| 97 | Optimal distribution power flow for systems with distributed energy resources. International Journal of Electrical Power and Energy Systems, 2007, 29, 260-267. | 5.5 | 76 |
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| 102 | A Directed Graph Formulation of the Multistage Distribution Expansion Problem. IEEE Transactions on Power Delivery, 2004, 19, 1335-1341. | 4.3 | 37 |
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| 105 | The Role of Digital Modeling and Simulation in Power Engineering Education. IEEE Transactions on Power Systems, 2004, 19, 64-72. | 6.5 | 50 |
| 106 | Application of Linear Matrix Inequalities for Load Frequency Control With Communication Delays. IEEE Transactions on Power Systems, 2004, 19, 1508-1515. | 6.5 | 290 |
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| 110 | Development of models for analyzing the load-following performance of microturbines and fuel cells. Electric Power Systems Research, 2002, 62, 1-11. | 3.6 | 397 |
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| 112 | Discovering price-load relationships in California's electricity market. IEEE Transactions on Power Systems, 2001, 16, 280-286. | 6.5 | 66 |
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| 123 | A fuzzy linear programming approach to the reactive power/voltage control problem. IEEE Transactions on Power Systems, 1992, 7, 287-293. | 6.5 | 148 |
| 124 | An Expert System as a Dispatchers' Aid for the Isolation of Line Section Faults. IEEE Transactions on Power Delivery, 1987, 2, 736-743. | 4.3 | 95 |
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