Hamid Reza Shaker

List of Publications by Year
in descending order

125 papers	1,416 citations	304743 22 h-index	477307 29 g-index
125 all docs	125 docs citations	125 times ranked	1000 citing authors

#	Article	IF	Citations
1	A Novel Fault Location Methodology for Smart Distribution Networks. IEEE Transactions on Smart Grid, 2021, 12, 1277-1288.	9.0	60
2	Optimal energy management in the smart microgrid considering the electrical energy storage system and the demand-side energy efficiency program. Journal of Energy Storage, 2020, 28, 101229.	8.1	47
3	A survey of fault prediction and location methods in electrical energy distribution networks. Measurement: Journal of the International Measurement Confederation, 2021, 184, 109947.	5.0	47
4	Predictive Maintenance for Pump Systems and Thermal Power Plants: State-of-the-Art Review, Trends and Challenges. Sensors, 2020, 20, 2425.	3.8	40
5	A Method for Fault Detection and Diagnostics in Ventilation Units Using Virtual Sensors. Sensors, 2018, 18, 3931.	3.8	38
6	Impedance-Based Fault Location Method for Four-Wire Power Distribution Networks. IEEE Access, 2018, 6, 1342-1349.	4.2	37
7	Frequency-Interval Model Reduction of Bilinear Systems. IEEE Transactions on Automatic Control, 2014, 59, 1948-1953.	5.7	36
8	Fault detection and diagnosis for smart buildings: State of the art, trends and challenges. , 2016, , .		35
9	Distributed Strategy for Optimal Dispatch of Unbalanced Three-Phase Islanded Microgrids. IEEE Transactions on Smart Grid, 2019, 10, 3210-3225.	9.0	35
10	High dimensional very short-term solar power forecasting based on a data-driven heuristic method. Energy, 2021, 219, 119647.	8.8	35
11	Control configuration selection for bilinear systems via generalised Hankel interaction index array. International Journal of Control, 2015, 88, 30-37.	1.9	33
12	Optimal sensor and actuator location for unstable systems. JVC/Journal of Vibration and Control, 2013, 19, 1915-1920.	2.6	31
13	Time-interval model reduction of bilinear systems. International Journal of Control, 2014, 87, 1487-1495.	1.9	31
14	Wind Power Forecasting Using Machine Learning: State of the Art, Trends and Challenges. , 2020, , .		31
15	A Generalized Model for the Optimal Operation of Microgrids in Grid-Connected and Islanded Droop-Based Mode. IEEE Transactions on Smart Grid, 2019, 10, 5032-5045.	9.0	30
16	Novel real-time model-based fault detection method for automatic identification of abnormal energy performance in building ventilation units. Energy and Buildings, 2019, 183, 238-251.	6.7	30
17	A stochastic programming model for the optimal operation of unbalanced three-phase islanded microgrids. International Journal of Electrical Power and Energy Systems, 2020, 115, 105446.	5.5	28
18	Fault Detection and Efficiency Assessment for HVAC Systems Using Non-Intrusive Load Monitoring: A Review. Energies, 2022, 15, 341.	3.1	28

#	Article	IF	Citations
19	Distribution network fault section identification and fault location using artificial neural network. , 2018, , .		26
20	Generalised gramian framework for model/controller order reduction of switched systems. International Journal of Systems Science, 2011, 42, 1277-1291.	5.5	25
21	Linear and Nonlinear Fault Location in Smart Distribution Network Under Line Parameter Uncertainty. IEEE Transactions on Industrial Informatics, 2021, 17, 8308-8318.	11.3	25
22	Model reduction via time-interval balanced stochastic truncation for linear time invariant systems. International Journal of Systems Science, 2013, 44, 493-501.	5.5	24
23	Lyapunov stability for continuous-time multidimensional nonlinear systems. Nonlinear Dynamics, 2014, 75, 717-724.	5.2	24
24	Fault Location in Double Circuit Medium Power Distribution Networks Using an Impedance-Based Method. Applied Sciences (Switzerland), 2018, 8, 1034.	2.5	23
25	Stability analysis for a class of discrete-time two-dimensional nonlinear systems. Multidimensional Systems and Signal Processing, 2010, 21, 293-299.	2.6	22
26	Control Configuration Selection for Multivariable Nonlinear Systems. Industrial & Engineering Chemistry Research, 2012, 51, 8583-8587.	3.7	22
27	A probabilistic sequence classification approach for early fault prediction in distribution grids using long short-term memory neural networks. Measurement: Journal of the International Measurement Confederation, 2021, 170, 108691.	5.0	21
28	Machine Learning-Based Fault Location for Smart Distribution Networks Equipped with Micro-PMU. Sensors, 2022, 22, 945.	3.8	21
29	Reliability of cyber physical systems with focus on building management systems. , 2016, , .		18
30	An interaction measure for control configuration selection for multivariable bilinear systems. Nonlinear Dynamics, 2013, 72, 165-174.	5.2	17
31	Frequency Interval Cross Gramians for Linear and Bilinear Systems. Asian Journal of Control, 2017, 19, 22-34.	3.0	17
32	Frequency-interval control configuration selection for multivariable bilinear systems. Journal of Process Control, 2013, 23, 894-904.	3.3	16
33	Real Fault Section Estimation in Electrical Distribution Networks Based on the Fault Frequency Component Analysis. Energies, 2019, 12, 1145.	3.1	16
34	Reliability modeling of cyber-physical systems: A holistic overview and challenges. , 2017, , .		14
35	Online Energy Simulator for building fault detection and diagnostics using dynamic energy performance model. International Journal of Low-Carbon Technologies, 2018, 13, 231-239.	2.6	14
36	A stair-step probabilistic approach for automatic anomaly detection in building ventilation system operation. Building and Environment, 2019, 157, 165-171.	6.9	14

#	Article	IF	Citations
37	Optimal Outage Management Model Considering Emergency Demand Response Programs for a Smart Distribution System. Applied Sciences (Switzerland), 2020, 10, 7406.	2.5	14
38	Real Fault Location in a Distribution Network Using Smart Feeder Meter Data. Energies, 2021, 14, 3242.	3.1	14
39	Fault location in distribution networks based on SVM and impedance-based method using online databank generation. Neural Computing and Applications, 2022, 34, 2375-2391.	5.6	14
40	Gas composition modeling in a reformed Methanol Fuel Cell system using adaptive Neuro-Fuzzy Inference Systems. International Journal of Hydrogen Energy, 2013, 38, 10577-10584.	7.1	13
41	Challenge. , 2015, , .		13
42	High Impedance Fault Detection and Location in Combined Overhead Line and Underground Cable Distribution Networks Equipped with Data Loggers. Energies, 2020, 13, 2331.	3.1	13
43	Commercial Buildings Energy Performance within Context - Occupants in Spotlight. , 2015, , .		13
44	Stability analysis for class of switched nonlinear systems. , 2010, , .		12
45	Control configuration selection for linear stochastic systems. Journal of Process Control, 2014, 24, 146-151.	3.3	11
46	A new data-driven controllability measure with application in intelligent buildings. Energy and Buildings, 2017, 138, 526-529.	6.7	11
47	Fault Isolability Analysis and Optimal Sensor Placement for Fault Diagnosis in Smart Buildings. Energies, 2019, 12, 1601.	3.1	11
48	Effects of mixed electronic loads on the electrical energy systems considering different loading conditions with focus on power quality and billing issues. Applied Energy, 2020, 277, 115558.	10.1	11
49	Accuracy and efficiency enhanced non-linear model order reduction. International Journal of Modelling, Identification and Control, 2007, 2, 147.	0.2	10
50	Control configuration selection for multivariable descriptor systems. , 2012, , .		10
51	Generalized cross-gramian for linear systems. , 2012, , .		9
52	A new fault-location method for HVDC transmission-line based on DC components of voltage and current under line parameter uncertainty. Electrical Engineering, 2017, 99, 573-582.	2.0	9
53	Determining an accurate fault location in electrical energy distribution networks in the presence of DGs using transient analysis. Measurement: Journal of the International Measurement Confederation, 2020, 151, 107270.	5.0	9
54	Predictive maintenance within combined heat and power plants based on a novel virtual sample generation method. Energy Conversion and Management, 2021, 227, 113621.	9.2	9

#	Article	IF	Citations
55	Spacecraft attitude control: Application of fine trajectory linearization control. Advances in Space Research, 2021, 68, 3663-3676.	2.6	9
56	Switched Systems Reduction Framework Based on Convex Combination of Generalized Gramians. Journal of Control Science and Engineering, 2009, 2009, 1-11.	1.0	8
57	Control reconfigurability of bilinear systems. Journal of Mechanical Science and Technology, 2013, 27, 1117-1123.	1.5	8
58	Frequency interval balanced truncation of discrete-time bilinear systems. Cogent Engineering, 2016, 3, 1203082.	2.2	8
59	Monitoring and evaluation of building ventilation system fans operation using performance curves. Energy and Built Environment, 2020, 1, 307-318.	5.9	8
60	Dynamic Modeling of a Reformed Methanol Fuel Cell System Using Empirical Data and Adaptive Neuro-Fuzzy Inference System Models. Journal of Fuel Cell Science and Technology, 2014, 11, .	0.8	7
61	A Parameter-Free Approach for Fault Section Detection on Distribution Networks Employing Gated Recurrent Unit. Energies, 2021, 14, 6361.	3.1	7
62	A Practical Approach to Validation of Buildings' Sensor Data: A Commissioning Experience Report. , 2017, , .		6
63	Optimal trajectory tracking solution: Fractional order viewpoint. Journal of the Franklin Institute, 2019, 356, 1590-1603.	3.4	6
64	Fault detection in ventilation units using dynamic energy performance models. Journal of Building Engineering, 2020, 32, 101635.	3.4	6
65	Relative fault vulnerability prediction for energy distribution networks. Applied Energy, 2022, 322, 119449.	10.1	6
66	Generalized time-limited balanced reduction method. , 2013, , .		5
67	Analysis of the Electrical Quantities Measured by Revenue Meters Under Different Voltage Distortions and the Influences on the Electrical Energy Billing. Energies, 2019, 12, 4757.	3.1	5
68	A New Model Predictive Control Based Method for Control of Grid Connected Inverter Using Predictive Functional Control. , 2020, , .		5
69	An intelligent and cost-effective method for single-phase fault location in conventional distribution systems. Electrical Engineering, 2020, 102, 1975-1991.	2.0	5
70	H 2 optimal filtering for bilinear systems. Nonlinear Dynamics, 2012, 70, 999-1005.	5.2	4
71	Generalized Hankel Interaction Index Array for control structure selection for discrete-time MIMO bilinear processes and plants. , 2014, , .		4
72	Multifunctional control of an NPC converter for the grid integration of renewable energy sources. , 2015, , .		4

#	Article	IF	Citations
73	Optimal sensors and actuators placement for large-scale unstable systems via restricted genetic algorithm. Engineering Computations, 2017, 34, 2582-2597.	1.4	4
74	The Optimal Energy Management in the Smart Microgrid Considering Demand Response Program and Energy Storage. , 2019, , .		4
75	Consensus-Based Method for Anomaly Detection in VAV Units. Energies, 2019, 12, 468.	3.1	4
76	Transient and steady-state faults location in intelligent distribution networks compensated with D-STATCOM using time-domain equations and distributed line model. Electrical Engineering, 2021, 103, 3033-3048.	2.0	4
77	Machine learning-based very short-term load forecasting in microgrid environment: evaluating the impact of high penetration of PV systems. Electrical Engineering, 2022, 104, 2667-2677.	2.0	4
78	A novel enviro-economic three-stage market-based energy management considering energy storage systems and demand response programs for networked smart microgrids. Electrical Engineering, 0, , 1.	2.0	4
79	A Localized Transient-Based Fault Location Scheme for Distribution Systems. Sensors, 2022, 22, 2723.	3.8	4
80	Generalized gramian framework for model reduction of switched systems. , 2009, , .		3
81	Discussion: â€œModel Reduction of Large-Scale Discrete Plants With Specified Frequency Domain Balanced Structureâ€•(Zadegan, A., and Zilouchian, A., 2005, ASME J. Dyn. Syst. Meas., Control, 127, pp.) Tj ETQq1 1 0.7843 14 rgBT /		
82	Control reconfigurability of bilinear hydraulic drive systems. , 2011, , .		3
83	Frequency-interval interaction measure for control configuration selection for multivariable processes. , 2013, , .		3
84	Lyapunov stability for continuous-time 2D nonlinear systems. , 2013, , .		3
85	Protection coordination assessment and improvement of electrical network of an industrial complex in connection to power grid: An experience report. , 2018, , .		3
86	A New Practical Approach for Discrimination between Inrush Currents and Internal Faults in Power Transformers. Technology and Economics of Smart Grids and Sustainable Energy, 2020, 5, 1.	2.6	3
87	Relative error model reduction via time-weighted balanced stochastic singular perturbation. JVC/Journal of Vibration and Control, 2012, 18, 2006-2016.	2.6	2
88	Frequency-interval control reconfigurability for automated processes. Natural Hazards, 2014, 72, 1021-1027.	3.4	2
89	Stability analysis and output feedback control for a class of switched nonlinear systems. International Journal of Modelling, Identification and Control, 2014, 22, 328.	0.2	2
90	Integration of DG sources for compensation of unbalanced loads in the power grid. , 2015, , .		2

#	Article	IF	Citations
91	A new method presentation for locating fault in power distribution networks. , 2016, , .		2
92	Adaptive Control for Revolute Joints Robot Manipulator with Uncertain/Unknown Dynamic Parameters and in Presence of Disturbance in Control Input. , 2017, , .		2
93	On the existence of frequency-interval gramians for bilinear systems. European Journal of Control, 2017, 38, 47-51.	2.6	2
94	Distributed consensus-based economic dispatch considering grid operation. , 2017, , .		2
95	Adverse Condition and Critical Event Prediction in Cranfield Multiphase Flow Facility. , 2017, , .		2
96	A new computationally efficient algorithm for optimal sensors and actuators placement for large-scale systems. , 2017, , .		2
97	A New Matching Algorithm for Fault Section Estimation in Power Distribution Networks. , 2018, , .		2
98	Fault Detection and Diagnostics in Ventilation Units Using Linear Regression Virtual Sensors. , 2018, , .		2
99	A new operational characteristic for diagnosing the healthy and faulty currents of power transformers. Electric Power Systems Research, 2022, 203, 107649.	3.6	2
100	A Novel Fault Location Algorithm for Electrical Networks Considering Distributed Line Model and Distributed Generation Resources. , 2020, , .		2
101	Frequency-domain generelaized perterubation method for relative error model order reduction. Journal of Control Theory and Applications, 2009, 7, 57-62.	0.8	1
102	Time-weighted balanced stochastic model reduction. , 2011, , .		1
103	Upper and Lower Bounds of Frequency Interval Gramians for a Class of Perturbed Linear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 713-716.	0.4	1
104	Generalized frequency-interval balanced model reduction method. , 2013, , .		1
105	Dynamic Modeling of a Reformed Methanol Fuel Cell System Using Empirical Data and Adaptive Neuro-Fuzzy Inference System Models. , 2013, , .		1
106	Control configuration selection for multivariable switched dynamical systems and processes. , 2015, , .		1
107	Towards systematic reliability modeling of smart buildings. , 2017, , .		1
108	A Holistic Fuzzy Measure for Load Priority in Under Frequency Load Shedding Schemes. , 2018, , .		1

#	Article	IF	Citations
109	Adverse condition and critical event prediction in commercial buildings: Danish case study. Energy Informatics, 2018, 1, .	2.3	1
110	Optimal sensors and actuators placement for large-scale switched systems. International Journal of Dynamics and Control, 2019, 7, 147-156.	2.5	1
111	Fault Area Location in Electrical Distribution System Using Smart Meter Data. , 2021, , .		1
112	Accuracy and Efficiency Enhancement in Model Order Reduction of Large Circuits. Midwest Symposium on Circuits and Systems, 2006, , .	1.0	0
113	A New Mixed Method for Relative Error Model Order Reduction. Midwest Symposium on Circuits and Systems, 2006, , .	1.0	0
114	Switched controller order reduction. , 2009, , .		0
115	Optimal Filtering Scheme for Bilinear Discrete-Time Systems: a Linear Matrix Inequality Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 302-306.	0.4	0
116	A brief note on the generalized singular perturbation approximation. , 2015, , .		0
117	Generalization of the Î»-method for decentralized economic dispatch considering reactive resources. , 2017, , .		0
118	Harmonic Interaction Effects on Power Quality and Electrical Energy Measurement System. , 2019, , .		0
119	A Mixed of Nonlinear Loads and their Effects on the Electrical Energy Billing. , 2020, , .		0
120	Harmonic Interaction among Electronic Loads and Its Effects on the Electrical Quantities and Billing: Case Study with Lighting Devices. , 2020, , .		0
121	Transient Analysis of Tidal Power Plant Connected to Network When Faced with Symmetrical and Unsymmetrical Faults. , 2020, , .		0
122	A Novel Probabilistic Risk-Based Energy Management Model in the Smart MicroGrids. , 2021, , .		0
123	Wind Power Forecasting for the Danish Transmission System Operator Using Machine Learning. , 2021, , .		0
124	Fault Recoverability Analysis via Cross-Gramian. Lecture Notes in Mechanical Engineering, 2017, , 377-386.	0.4	0
125	A Multi-Objective Constrained Robust Optimization Based on NSGA-II Algorithm. , 2021, , .		0