Lamine Mili

List of Publications by Year
in descending order

102	3,735	172457	144013
papers	citations	29 h-index	57 g-index

122	122	122	2770
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Power System Dynamic State Estimation: Motivations, Definitions, Methodologies, and Future Work. IEEE Transactions on Power Systems, 2019, 34, 3188-3198.	6.5	417
2	A Robust Iterated Extended Kalman Filter for Power System Dynamic State Estimation. IEEE Transactions on Power Systems, 2017, 32, 3205-3216.	6.5	321
3	Robust Kalman Filter Based on a Generalized Maximum-Likelihood-Type Estimator. IEEE Transactions on Signal Processing, 2010, 58, 2509-2520.	5.3	281
4	GECO: Global Event-Driven Co-Simulation Framework for Interconnected Power System and Communication Network. IEEE Transactions on Smart Grid, 2012, 3, 1444-1456.	9.0	259
5	Robust Unscented Kalman Filter for Power System Dynamic State Estimation With Unknown Noise Statistics. IEEE Transactions on Smart Grid, 2019, 10, 1215-1224.	9.0	151
6	A Generalized False Data Injection Attacks Against Power System Nonlinear State Estimator and Countermeasures. IEEE Transactions on Power Systems, 2018, 33, 4868-4877.	6.5	132
7	Roles of Dynamic State Estimation in Power System Modeling, Monitoring and Operation. IEEE Transactions on Power Systems, 2021, 36, 2462-2472.	6.5	104
8	A Robust Generalized-Maximum Likelihood Unscented Kalman Filter for Power System Dynamic State Estimation. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 578-592.	10.8	97
9	Composite Power System Vulnerability Evaluation to Cascading Failures Using Importance Sampling and Antithetic Variates. IEEE Transactions on Power Systems, 2013, 28, 2321-2330.	6.5	93
10	A Robust Data-Driven Koopman Kalman Filter for Power Systems Dynamic State Estimation. IEEE Transactions on Power Systems, 2018, 33, 7228-7237.	6.5	77
11	A Framework for Robust Hybrid State Estimation With Unknown Measurement Noise Statistics. IEEE Transactions on Industrial Informatics, 2018, 14, 1866-1875.	11.3	75
12	Power system and communication network co-simulation for smart grid applications. , 2011, , .		73
13	A Decentralized H-Infinity Unscented Kalman Filter for Dynamic State Estimation Against Uncertainties. IEEE Transactions on Smart Grid, 2019, 10, 4870-4880.	9.0	70
14	Sustainability and reliability assessment of microgrids in a regional electricity market. Energy, 2012, 41, 192-202.	8.8	68
15	A Planning-Oriented Resilience Assessment Framework for Transmission Systems Under Typhoon Disasters. IEEE Transactions on Smart Grid, 2020, 11, 5431-5441.	9.0	67
16	Dynamic State Estimation for Power System Control and Protection. IEEE Transactions on Power Systems, 2021, 36, 5909-5921.	6.5	66
17	Propagating Uncertainty in Power System Dynamic Simulations Using Polynomial Chaos. IEEE Transactions on Power Systems, 2019, 34, 338-348.	6.5	65
18	A Theoretical Framework of Robust H-Infinity Unscented Kalman Filter and Its Application to Power System Dynamic State Estimation. IEEE Transactions on Signal Processing, 2019, 67, 2734-2746.	5.3	65

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19	A Short-Term Nodal Voltage Phasor Forecasting Method Using Temporal and Spatial Correlation. IEEE Transactions on Power Systems, 2016, 31, 3881-3890.	6.5	54
20	A Robust GM-Estimator for the Automated Detection of External Defects on Barked Hardwood Logs and Stems. IEEE Transactions on Signal Processing, 2007, 55, 3568-3576.	5.3	44
21	Probabilistic Power Flow Calculation and Variance Analysis Based on Hierarchical Adaptive Polynomial Chaos-ANOVA Method. IEEE Transactions on Power Systems, 2019, 34, 3316-3325.	6.5	43
22	A Robust State Estimation Framework Considering Measurement Correlations and Imperfect Synchronization. IEEE Transactions on Power Systems, 2018, 33, 4604-4613.	6.5	40
23	Power System Robust Decentralized Dynamic State Estimation Based on Multiple Hypothesis Testing. IEEE Transactions on Power Systems, 2018, 33, 4553-4562.	6.5	39
24	Cyber security impacts on all-PMU state estimator - a case study on co-simulation platform GECO. , 2012, , .		38
25	Constrained Robust Unscented Kalman Filter for Generalized Dynamic State Estimation. IEEE Transactions on Power Systems, 2019, 34, 3637-3646.	6.5	38
26	A resilience assessment approach for power system from perspectives of system and component levels. International Journal of Electrical Power and Energy Systems, 2020, 118, 105837.	5.5	38
27	Response-Surface-Based Bayesian Inference for Power System Dynamic Parameter Estimation. IEEE Transactions on Smart Grid, 2019, 10, 5899-5909.	9.0	36
28	Robust estimation in structured linear regression. Annals of Statistics, 1996, 24, .	2.6	35
29	Vulnerability of the Largest Normalized Residual Statistical Test to Leverage Points. IEEE Transactions on Power Systems, 2018, 33, 4643-4646.	6.5	34
30	Communication network modeling and simulation for Wide Area Measurement applications. , 2012, , .		33
31	An Adaptive Bayesian Parameter Estimation of a Synchronous Generator Under Gross Errors. IEEE Transactions on Industrial Informatics, 2020, 16, 5088-5098.	11.3	33
32	Analysis and design of virtual synchronous machine based STATCOM controller. , 2014, , .		30
33	Robust Frequency Divider for Power System Online Monitoring and Control. IEEE Transactions on Power Systems, 2018, 33, 4414-4423.	6.5	30
34	Data-Driven Participation Factors for Nonlinear Systems Based on Koopman Mode Decomposition. , 2019, 3, 198-203.		29
35	Constrained Robust Estimation of Power System State Variables and Transformer Tap Positions Under Erroneous Zero-Injections. IEEE Transactions on Power Systems, 2014, 29, 1144-1152.	6.5	27
36	Unscented Kalman Filter-Based Unbiased Minimum-Variance Estimation for Nonlinear Systems With Unknown Inputs. IEEE Signal Processing Letters, 2019, 26, 1162-1166.	3.6	27

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37	A robust extended Kalman filter for power system dynamic state estimation using PMU measurements. , 2016, , .		26
38	Robust Data Filtering for Estimating Electromechanical Modes of Oscillation via the Multichannel Prony Method. IEEE Transactions on Power Systems, 2018, 33, 4134-4143.	6.5	26
39	Correlation-Aided Robust Decentralized Dynamic State Estimation of Power Systems With Unknown Control Inputs. IEEE Transactions on Power Systems, 2020, 35, 2443-2451.	6.5	26
40	Probabilistic Power Flow Based on a Gaussian Process Emulator. IEEE Transactions on Power Systems, 2020, 35, 3278-3281.	6.5	26
41	Robust Parameter Estimation of the French Power System Using Field Data. IEEE Transactions on Smart Grid, 2019, 10, 5334-5344.	9.0	23
42	A Data-Driven Nonparametric Approach for Probabilistic Load-Margin Assessment Considering Wind Power Penetration. IEEE Transactions on Power Systems, 2020, 35, 4756-4768.	6.5	23
43	A Bayesian Approach to Real-Time Dynamic Parameter Estimation Using Phasor Measurement Unit Measurement. IEEE Transactions on Power Systems, 2020, 35, 1109-1119.	6.5	22
44	Risk-based composite power system vulnerability evaluation to cascading failures using importance sampling. , 2011, , .		21
45	Evaluation and control design of virtual-synchronous-machine-based STATCOM for grids with high penetration of renewable energy. , 2014, , .		21
46	Statistical and Numerical Robust State Estimator for Heavily Loaded Power Systems. IEEE Transactions on Power Systems, 2018, 33, 6904-6914.	6.5	21
47	Robust complex-valued Levenberg-Marquardt algorithm as applied to power flow analysis. International Journal of Electrical Power and Energy Systems, 2019, 113, 383-392.	5.5	18
48	Hierarchical Decentralized Control for Enhanced Rotor Angle and Voltage Stability of Large-Scale Power Systems. IEEE Transactions on Power Systems, 2017, 32, 4783-4793.	6.5	16
49	A study of communication and power system infrastructure interdependence on PMU-based wide area monitoring and protection. , 2012, , .		15
50	Robust dynamic state estimator to outliers and cyber attacks. , 2017, , .		15
51	Risk Assessment of Rare Events in Probabilistic Power Flow via Hybrid Multi-Surrogate Method. IEEE Transactions on Smart Grid, 2020, 11, 1593-1603.	9.0	15
52	Sparse State Recovery Versus Generalized Maximum-Likelihood Estimator of a Power System. IEEE Transactions on Power Systems, 2018, 33, 1104-1106.	6.5	14
53	Real-Time LCC-HVDC Maximum Emergency Power Capacity Estimation Based on Local PMUs. IEEE Transactions on Power Systems, 2021, 36, 1049-1058.	6.5	14
54	A Bayesian Approach for Estimating Uncertainty in Stochastic Economic Dispatch Considering Wind Power Penetration. IEEE Transactions on Sustainable Energy, 2021, 12, 671-681.	8.8	14

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55	A Novel Polynomial-Chaos-Based Kalman Filter. IEEE Signal Processing Letters, 2019, 26, 9-13.	3.6	13
56	Observability Analysis of a Power System Stochastic Dynamic Model Using a Derivative-Free Approach. IEEE Transactions on Power Systems, 2021, 36, 5834-5845.	6.5	13
57	Robust Medium-Voltage Distribution System State Estimation using Multi-Source Data. , 2020, , .		12
58	An Analytical Method for Disturbance Propagation Investigation Based on the Electromechanical Wave Approach. IEEE Transactions on Power Systems, 2021, 36, 991-1001.	6.5	12
59	An Iterative Response-Surface-Based Approach for Chance-Constrained AC Optimal Power Flow Considering Dependent Uncertainty. IEEE Transactions on Smart Grid, 2021, 12, 2696-2707.	9.0	12
60	Cooperative decentralized intersection collision avoidance using Extended Kalman Filtering. , 2009, , .		11
61	Residential microgrid model for disaster recovery operations. , 2013, , .		11
62	Robust Unscented Unbiased Minimum-Variance Estimator for Nonlinear System Dynamic State Estimation With Unknown Inputs. IEEE Signal Processing Letters, 2020, 27, 376-380.	3.6	11
63	Co-simulating power systems and communication network for accurate modeling and simulation of PMU based wide area measurement systems using a global event scheduling technique. , 2013, , .		9
64	New Robust Estimators of Correlation and Weighted Basis Pursuit. IEEE Transactions on Signal Processing, 2015, 63, 882-894.	5.3	8
65	Sparse-Prior-Based Projection Distance Optimization Method for Joint CT-MRI Reconstruction. IEEE Access, 2017, 5, 20099-20110.	4.2	8
66	Robust Koopman Operator-based Kalman Filter for Power Systems Dynamic State Estimation. , 2018, , .		8
67	An Adaptive-Importance-Sampling-Enhanced Bayesian Approach for Topology Estimation in an Unbalanced Power Distribution System. IEEE Transactions on Power Systems, 2022, 37, 2220-2232.	6.5	8
68	Robustness Analysis of the Phase-Phase Correlator to White Impulsive Noise With Applications to Autoregressive Modeling. IEEE Transactions on Signal Processing, 2012, 60, 6053-6058.	5.3	7
69	Probabilistic Power Flow Analysis based on the Adaptive Polynomial Chaos-ANOVA Method. , 2018, , .		7
70	Environomic-Based Social Demand Response in Cyber-Physical-Social Power Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 1302-1306.	3.0	6
71	Robust Dynamic Mode Decomposition. IEEE Access, 2022, 10, 65473-65484.	4.2	6
72	Short-term forecasting of power flows over major transmission interties: Using Box and Jenkins ARIMA methodology. , 2010, , .		5

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73	A hierarchical decentralized coordinated voltage instability detection scheme for SVC. , 2015, , .		5
74	Beamforming for Simultaneous Energy and Information Transfer and Physical-Layer Secrecy. IEEE Transactions on Wireless Communications, 2017, 16, 8026-8036.	9.2	5
75	A Hybrid Framework Combining Model-Based and Data-Driven Methods for Hierarchical Decentralized Robust Dynamic State Estimation. , 2019, , .		5
76	A New Multi-Scale State Estimation Framework for the Next Generation of Power Grid EMS. , 2019, , .		5
77	Propagating Parameter Uncertainty in Power System Nonlinear Dynamic Simulations Using a Koopman Operator-Based Surrogate Model. IEEE Transactions on Power Systems, 2022, 37, 3157-3160.	6.5	5
78	Multifractal analysis of geomagnetically induced currents using wavelet leaders. Journal of Applied Geophysics, 2020, 173, 103920.	2.1	4
79	Measurement placement in electric power transmission and distribution grids: Review of concepts, methods, and research needs. IET Generation, Transmission and Distribution, 2022, 16, 805-838.	2.5	4
80	Multi-Dimensional Output-Oriented Power System Resilience based on Degraded Functionality. , 2021, , .		4
81	Design, analysis and experimental evaluation of a virtual-synchronous-machine-based STATCOM with LCL filter. , 2015, , .		3
82	Effects of Producer and Transmission Reliability on the Sustainability Assessment of Power System Networks. Energies, 2019, 12, 546.	3.1	3
83	Uncertainty Quantification in Stochastic Economic Dispatch using Gaussian Process Emulation. , 2020, , .		3
84	Derivative-Free Observability Analysis of a Stochastic Dynamical System. IEEE Transactions on Network Science and Engineering, 2021, 8, 2426-2437.	6.4	3
85	Wavelet-based joint CT-MRI reconstruction. Journal of X-Ray Science and Technology, 2018, 26, 379-393.	1.0	2
86	Polynomial-Chaos-Based Decentralized Dynamic Parameter Estimation Using Langevin MCMC. , 2019, , .		2
87	Alleviating Fractal and Ill-Conditioning Problems of the AC Power Flow Using a Polynomial Form. IEEE Transactions on Network Science and Engineering, 2021, 8, 2495-2505.	6.4	2
88	Enhanced power flow solution in complex plane. International Journal of Electrical Power and Energy Systems, 2022, 135, 107501.	5.5	2
89	Assessing the impacts of microgrids on composite power system reliability. , 2013, , .		1
90	Robust Speech Filter and Voice Encoder Parameter Estimation Using the Phaseâ€“Phase Correlator. IEEE/ACM Transactions on Audio Speech and Language Processing, 2020, 28, 592-604.	5.8	1

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91	Real-Time Modal Analysis of Electric Power Gridsâ€“ The Need for Dynamic State Estimation. , 2020, , .		1
92	A Real-Time Enhanced Thevenin Equivalent Parameter Estimation Method for PLL Synchronization Stability Control in VSC. IEEE Transactions on Power Delivery, 2022, 37, 2650-2660.	4.3	1
93	A Framework for Interdisciplinary Research and Education. , 2009, , 1-19.		0
94	Books in the IEEE Press Series on Power Engineering. , 2009, , 293-293.		0
95	A Framework for Interdisciplinary Research and Education. , 2010, , 1-14.		0
96	Books in the IEEE Press Series on Power Engineering. , 2010, , 186-187.		0
97	Constrained robust estimation of power system state variables and transformer tap positions under erroneous zero-injections. , 2014, , .		0
98	State Estimation for Heavily Loaded System: A Comparative Study. , 2018, , .		0
99	Robust regression-based estimation of isocenter offset with subpixel precision in tomographic image reconstruction. Journal of Medical Imaging, 2019, 6, 1.	1.5	0
100	A Surrogate-Enhanced Scheme in Decision Making under Uncertainty in Power Systems. , 2021, , .		0
101	A Power Flow Method for Power Distribution Systems Based on a Sinusoidal Transformation to a Convex Quadratic Form. , 2021, , .		0
102	A Derivative-Free Observability Analysis Method of Stochastic Power Systems. , 2021, , .		0