Saverio Bolognani

List of Publications by Year
in descending order

66 papers	2,491 citations	516710 16 h-index	414414 32 g-index
66 all docs	66 docs citations	66 times ranked	1943 citing authors

#	ARTICLE	IF	CITATIONS
1	Design and Implementation of Model Predictive Control for Electrical Motor Drives. IEEE Transactions on Industrial Electronics, 2009, 56, 1925-1936.	7.9	362
2	On the Existence and Linear Approximation of the Power Flow Solution in Power Distribution Networks. IEEE Transactions on Power Systems, 2016, 31, 163-172.	6.5	303
3	A Distributed Control Strategy for Reactive Power Compensation in Smart Microgrids. IEEE Transactions on Automatic Control, 2013, 58, 2818-2833.	5.7	218
4	Distributed Reactive Power Feedback Control for Voltage Regulation and Loss Minimization. IEEE Transactions on Automatic Control, 2015, 60, 966-981.	5.7	194
5	Optimal Placement of Virtual Inertia in Power Grids. IEEE Transactions on Automatic Control, 2017, 62, 6209-6220.	5.7	178
6	Identification of power distribution network topology via voltage correlation analysis. , 2013, , .		150
7	Fast power system analysis via implicit linearization of the power flow manifold. , 2015, , .		111
8	Projected gradient descent on Riemannian manifolds with applications to online power system optimization. , 2016, , .		63
9	Consensus‐based distributed sensor calibration and least‐square parameter identification in WSNs. International Journal of Robust and Nonlinear Control, 2010, 20, 176-193.	3.7	53
10	Data-Driven Continuous-Set Predictive Current Control for Synchronous Motor Drives. IEEE Transactions on Power Electronics, 2022, 37, 6637-6646.	7.9	53
11	On the Need for Communication for Voltage Regulation of Power Distribution Grids. IEEE Transactions on Control of Network Systems, 2019, 6, 1111-1123.	3.7	45
12	Online optimization in closed loop on the power flow manifold. , 2017, , .		43
13	Timescale Separation in Autonomous Optimization. IEEE Transactions on Automatic Control, 2021, 66, 611-624.	5.7	42
14	Wasserstein Distributionally Robust Look-Ahead Economic Dispatch. IEEE Transactions on Power Systems, 2021, 36, 2010-2022.	6.5	36
15	The value of communication in the voltage regulation problem. , 2016, , .		32
16	Distributed Control and Optimization for Autonomous Power Grids. , 2019, , .		30
17	A Randomized Linear Algorithm for Clock Synchronization in Multi-Agent Systems. IEEE Transactions on Automatic Control, 2016, 61, 1711-1726.	5.7	28
18	Engineering Stable Discrete-Time Quantum Dynamics via a Canonical QR Decomposition. IEEE Transactions on Automatic Control, 2010, 55, 2721-2734.	5.7	26

#	Article	IF	Citations
19	Experimental validation of feedback optimization in power distribution grids. Electric Power Systems Research, 2020, 189, 106782.	3.6	26
20	Reactive Power Ancillary Service by Constant Power Loads in Distributed AC Systems. IEEE Transactions on Power Delivery, 2013, 28, 920-927.	4.3	25
21	Stability of Dynamic Feedback optimization with Applications to Power Systems. , 2018, , .		25
22	Combined speed and current Model Predictive Control with inherent field-weakening features for PMSM Drives. , 2008, , .		24
23	Distributed control for optimal reactive power compensation in smart microgrids. , 2011, , .		22
24	A Market Mechanism for Virtual Inertia. IEEE Transactions on Smart Grid, 2020, 11, 3570-3579.	9.0	22
25	Time-varying Projected Dynamical Systems with Applications to Feedback Optimization of Power Systems. , 2018, , .		21
26	Fully distributed peer-to-peer optimal voltage control with minimal model requirements. Electric Power Systems Research, 2020, 189, 106717.	3.6	19
27	State estimation in power distribution networks with poorly synchronized measurements. , 2014, , .		18
28	Data-driven predictive current control for synchronous motor drives. , 2020, , .		18
29	Hierarchical and Distributed Monitoring of Voltage Stability in Distribution Networks. IEEE Transactions on Power Systems, 2018, 33, 6705-6714.	6.5	17
30	Stability Analysis and Design of Local Control Schemes in Active Distribution Grids. IEEE Transactions on Power Systems, 2021, 36, 1900-1909.	6.5	16
31	A gossip-like distributed optimization algorithm for reactive power flow control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 5700-5705.	0.4	15
32	Generic Existence of Unique Lagrange Multipliers in AC Optimal Power Flow. , 2018, 2, 791-796.		15
33	Urban Driving Games With Lexicographic Preferences and Socially Efficient Nash Equilibria. IEEE Robotics and Automation Letters, 2021, 6, 4978-4985.	5.1	15
34	Distributed multi-hop reactive power compensation in smart micro-grids subject to saturation constraints. , 2012, , .		14
35	Closing the loop: Dynamic state estimation and feedback optimization of power grids. Electric Power Systems Research, 2020, 189, 106753.	3.6	14
36	A distributed control strategy for optimal reactive power flow with power and voltage constraints. , 2013, , .		13

#	Article	IF	Citations
37	Placing Rotational Inertia in Power Grids. , 2016, , .		12
38	A linear dynamic model for microgrid voltages in presence of distributed generation. , 2011, , .		11
39	A distributed voltage stability margin for power distribution networks. IFAC-PapersOnLine, 2017, 50, 13240-13245.	0.9	11
40	Projected Dynamical Systems on Irregular, Non-Euclidean Domains for Nonlinear Optimization. SIAM Journal on Control and Optimization, 2021, 59, 635-668.	2.1	11
41	A Fast Method for Real-Time Chance-Constrained Decision With Application to Power Systems. , 2017, 1, 152-157.		11
42	A PI consensus controller with gossip communication for clock synchronization in wireless sensors networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 78-83.	0.4	10
43	A distributed control strategy for optimal reactive power flow with power constraints. , 2013, , .		10
44	Sampled-Data Online Feedback Equilibrium Seeking: Stability and Tracking. , 2021, , .		10
45	Distributed Quasi-Newton Method and its Application to the Optimal Reactive Power Flow Problem. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 305-310.	0.4	9
46	A randomized linear algorithm for clock synchronization in multi-agent systems. , 2012, , .		9
47	Non-Convex Feedback Optimization with Input and Output Constraints. , 2020, , 1-1.		9
48	Fast scenario-based decision making in unbalanced distribution networks. , 2016, , .		8
49	A Distributed Feedback Control Approach to the Optimal Reactive Power Flow Problem. Lecture Notes in Control and Information Sciences, 2013, , 259-277.	1.0	8
50	Adaptive output feedback control for complex-valued reaction-advection-diffusion systems. , 2008, , .		7
51	Posetal Games: Efficiency, Existence, and Refinement of Equilibria in Games With Prioritized Metrics. IEEE Robotics and Automation Letters, 2022, 7, 1292-1299.	5.1	6
52	Optimal Consumption Policies for Power-Constrained Flexible Loads Under Dynamic Pricing. IEEE Transactions on Smart Grid, 2015, 6, 1884-1892.	9.0	5
53	Virtual Inertia Placement in Electric Power Grids. The IMA Volumes in Mathematics and Its Applications, 2018, , 281-305.	0.5	5
54	Performance analysis of a distributed algorithm for dynamic reactive power compensation. , 2012, , .		4

#	Article	IF	Citations
55	Convergence analysis of a distributed voltage support strategy for optimal reactive power compensation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 145-150.	0.4	4
56	Deferrable loads in an energy market: Coordination under congestion constraints. , 2014, , .		4
57	Grid Topology Identification via Distributed Statistical Hypothesis Testing. , 2018, , 281-301.		4
58	Pure state stabilization with discrete-time quantum feedback. , 2010, , .		3
59	Linear implicit AC PF cascading failure analysis with power system operations and automation. , 2016, , .		3
60	Distributed sensor calibration and least-square parameter identification in WSNs using consensus algorithms. , 2008, , .		2
61	Deferrable loads in energy markets: Optimal consumption policies. , 2014, , .		2
62	An efficient partial-order representation of feasible schedules for online decisions. , 2017, , .		2
63	Corrigendum to:â€œTimescale Separation in Autonomous Optimizationâ€•[Feb 21 611-624]. IEEE Transactions on Automatic Control, 2021, 66, 6197-6198.	5.7	2
64	A separation principle for optimal IaaS cloud computing distribution. , 2016, , .		1
65	Limit Behavior and the Role of Augmentation in Projected Saddle Flows for Convex Optimization. IFAC-PapersOnLine, 2020, 53, 5511-5517.	0.9	1
66	Wasserstein Distributionally Robust Look-Ahead Economic Dispatch. , 2021, , .		1