Steven B Leeb

List of Publications by Year
in descending order

77	1,317	567281 15	395702 33
papers	citations	h-index	g-index

77	77	77	1010
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Adaptation for Automated Drift Detection in Electromechanical Machine Monitoring. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 6768-6782.	11.3	4
2	Constant Power Load Modeling for a Programmable Impedance Control Strategy. IEEE Transactions on Industrial Electronics, 2022, 69, 293-301.	7.9	5
3	Power Monitoring Beyond Radial Distribution Networks. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	4.7	0
4	A Sensor Topology for Noncontact AC Voltage Measurement of Polyphase Cables. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10.	4.7	3
5	Passive Probe: Mechanically-Modulated Field Sensing for Motion Tracking and Flow Estimation. IEEE Sensors Journal, 2022, 22, 4591-4600.	4.7	0
6	Resolution Analysis for Power System Measurement and Transient Identification. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10.	4.7	2
7	Distributed Load Control Using Reliable Low-Data-Rate Power Line Communication. IEEE Access, 2022, 10, 50242-50253.	4.2	4
8	Sub Line-Frequency Stability Analysis of Single-Phase Constant Power Loads Using Envelope Impedance. IEEE Transactions on Power Electronics, 2022, 37, 13310-13318.	7.9	2
9	Know the Flow: Non-Contact Magnetic Flow Rate Sensing for Water Meters. IEEE Sensors Journal, 2021, 21, 802-811.	4.7	3
10	Automatic Power Frequency Rejection Instrumentation for Nonintrusive Frequency Signature Tracking. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	4.7	4
11	Inrush Current Measurement for Transient Space Characterization and Fault Detection. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	6
12	Stretched Sensing Strategies for IEPE. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	1
13	Behavioral Modeling for Microgrid Simulation. IEEE Access, 2021, 9, 35633-35645.	4.2	1
14	Line Impedance Estimation. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	4
15	Nonintrusive Ventilation System Diagnostics. IEEE Sensors Journal, 2021, 21, 19268-19278.	4.7	4
16	Chasing the Cut: A Measurement Approach for Machine Tool Condition Monitoring. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	11
17	Demand Smoothing in Military Microgrids Through Coordinated Direct Load Control. IEEE Transactions on Smart Grid, 2020, 11, 1917-1927.	9.0	14
18	A MultiScale Framework for Nonintrusive Load Identification. IEEE Transactions on Industrial Informatics, 2020, 16, 992-1002.	11.3	21

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19	Autonomous Demand Smoothing for Efficiency Improvements on Military Forward Operating Bases. IEEE Transactions on Power Delivery, 2020, 35, 2243-2251.	4.3	2
20	Diagnostics for Periodically Excited Actuators. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 4145-4153.	4.7	2
21	Nonintrusive Load Monitoring of Variable Speed Drive Cooling Systems. IEEE Access, 2020, 8, 211451-211463.	4.2	6
22	Inrush Current Testing. , 2020, , .		3
23	A 3-D Field Solution for Axially Polarized Multi-Pole Ring Permanent Magnets and its Application in Position Measurement. IEEE Transactions on Magnetics, 2020, 56, 1-9.	2.1	3
24	NILM Dashboard: A Power System Monitor for Electromechanical Equipment Diagnostics. IEEE Transactions on Industrial Informatics, 2019, 15, 1405-1414.	11.3	48
25	Voltage Waveform Transient Identification for Autonomous Load Coordination. IEEE Access, 2019, 7, 123128-123137.	4.2	4
26	An Energy Buffer for Controllable Input Impedance of Constant Power Loads. IEEE Transactions on Industry Applications, 2019, 55, 2910-2921.	4.9	9
27	Shipboard Fault Detection Through Nonintrusive Load Monitoring: A Case Study. IEEE Sensors Journal, 2018, 18, 8986-8995.	4.7	32
28	Microgrid Modeling and Fuel Savings Opportunities Through Direct Load Control. , 2018, , .		4
29	Controlling the input impedance of constant power loads. , 2018, , .		2
30	Autonomous Calibration of Non-Contact Power Monitors. IEEE Sensors Journal, 2018, 18, 5376-5385.	4.7	3
31	Nonintrusive monitoring for shipboard fault detection. , 2017, , .		15
32	Self-Sensing Induction Motors for Condition Monitoring. IEEE Sensors Journal, 2017, 17, 3735-3743.	4.7	9
33	A Transmitterâ€”Receiver System for Long-Range Capacitive Sensing Applications. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 2412-2423.	4.7	11
34	Performance comparison of transfer switch topologies in switched-doubly-fed machine drives. , 2016, , .		1
35	Utilizing Spin-Down Transients for Vibration-Based Diagnostics of Resiliently Mounted Machines. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1641-1650.	4.7	14
36	Solid-State Transfer Switch Topologies for a Switched Doubly Fed Machine Drive. IEEE Transactions on Power Electronics, 2016, 31, 5709-5720.	7.9	9

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37	Energy Applications for an Energy Box. IEEE Internet of Things Journal, 2016, 3, 787-795.	8.7	22
38	Power Electronic Circuits for Magnetic Energy Harvesters. IEEE Transactions on Power Electronics, 2016, 31, 270-279.	7.9	42
39	Seamless grid interaction for a switched doubly-fed machine propulsion drive. , 2015, , .		3
40	Bumpless Automatic Transfer for a Switched-Doubly-Fed-Machine Propulsion Drive. IEEE Transactions on Industry Applications, 2015, 51, 3147-3158.	4.9	8
41	Transient performance comparison of switched doubly-fed machine propulsion drives. , 2015, , .		3
42	A comparison of switched doubly-fed machine drive topologies for high power applications. , 2015, , .		4
43	Design of resonance damping via control synthesis. , 2015, , .		1
44	Smart Metering of Variable Power Loads. IEEE Transactions on Smart Grid, 2015, 6, 189-198.	9.0	60
45	Analysis Model for Magnetic Energy Harvesters. IEEE Transactions on Power Electronics, 2015, 30, 4302-4311.	7.9	45
46	Nonâ€intrusive induction motor speed detection. IET Electric Power Applications, 2015, 9, 388-396.	1.8	11
47	Quad-switch push-pull (QSPP) RF amplifier with direct, simultaneous modulation of phase and pulse position for spread-spectrum power applications. , 2015, , .		4
48	Control Architecture for a Switched Doubly Fed Machine Propulsion Drive. IEEE Transactions on Industry Applications, 2015, 51, 1538-1550.	4.9	15
49	Power loss analysis with high primary current in magnetic energy harvesters. , 2015, , .		10
50	Enhancement on energy extraction from magnetic energy harvesters. , 2015, , .		8
51	Noncontact Power Meter. IEEE Sensors Journal, 2015, 15, 1161-1169.	4.7	46
52	Load Modeling For Power System Requirement and Capability Assessment. IEEE Transactions on Power Systems, 2015, 30, 1415-1423.	6.5	13
53	The Sinefit Spectral Envelope Preprocessor. IEEE Sensors Journal, 2014, 14, 4385-4394.	4.7	26
54	Differential diffusion charge redistribution for photovoltaic cell-level power balancing. , 2014, , .		8

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55	Energy Accountability Using Nonintrusive Load Monitoring. IEEE Sensors Journal, 2014, 14, 1923-1931.	4.7	10
56	Teaching modeling, control, and simulation in a modular kit for power electronics. , 2014, , .		1
57	Capacitor-less photovoltaic (PV) cell-level power balancing using diffusion charge redistribution. , 2014, , .		8
58	Power flow control and regulation circuits for magnetic energy harvesters. , 2014, , .		5
59	Optimization of spread-spectrum MSK sequences and passive, multi-resonant bandpass rectifiers for wireless power transfer with low electromagnetic interference. , 2014, , .		3
60	NilmDB: The Non-Intrusive Load Monitor Database. IEEE Transactions on Smart Grid, 2014, 5, 2459-2467.	9.0	39
61	Uniform single-sided induction heating using multiphase, multi-resonant halbach windings. , 2014, , .		7
62	Switched doubly-fed machine propulsion drive. , 2014, , .		1
63	VAMPIRE: A magnetically self-powered sensor node capable of wireless transmission. , 2013, , .		18
64	Design of DC system protection. , 2013, , .		34
65	Control architecture for a Doubly-fed Induction Machine propulsion drive. , 2013, , .		3
66	Electric Load Transient Recognition With a Cluster Weighted Modeling Method. IEEE Transactions on Smart Grid, 2013, 4, 2182-2190.	9.0	3
67	Improved transient response control strategy and design considerations for switched-capacitor (SC) energy buffer architectures. , 2013, , .		2
68	Power converter sizing considerations for a doubly-fed machine propulsion drive. , 2013, , .		1
69	A Retrofit Capacitive Sensing Occupancy Detector Using Fluorescent Lamps. IEEE Transactions on Industrial Electronics, 2012, 59, 1898-1911.	7.9	4
70	Dimmable Solid State Ballast With Integral Capacitive Occupancy Sensor. IEEE Transactions on Industrial Electronics, 2012, 59, 1739-1750.	7.9	7
71	Per panel photovoltaic energy extraction with multilevel output DC-DC switched capacitor converters. , 2011, , .		21
72	A waveform-based power estimator for variable power loads. , 2011, , .		0

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73	Nonresonant and Resonant Frequency-Selectable Induction-Heating Targets. IEEE Transactions on Industrial Electronics, 2010, 57, 3095-3108.	7.9	40
74	A two-step method for estimating the parameters of induction machine models. , 2009, , .		5
75	Nonintrusive Load Monitoring and Diagnostics in Power Systems. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 1445-1454.	4.7	207
76	Detection of Rooftop Cooling Unit Faults Based on Electrical Measurements. HVAC and R Research, 2006, 12, 151-175.	0.6	46
77	Non-intrusive electrical load monitoring in commercial buildings based on steady-state and transient load-detection algorithms. Energy and Buildings, 1996, 24, 51-64.	6.7	257