

Michael Short

List of Publications by Year in descending order

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Version: 2024-02-01

78
papers

811
citations

471371

17
h-index

610775

24
g-index

80
all docs

80
docs citations

80
times ranked

728
citing authors

#	ARTICLE	IF	CITATIONS
1	Fault-Tolerant Time-Triggered Communication Using CAN. IEEE Transactions on Industrial Informatics, 2007, 3, 131-142.	7.2	54
2	Assessment of high-integrity embedded automotive control systems using hardware in the loop simulation. Journal of Systems and Software, 2008, 81, 1163-1183.	3.3	40
3	Electricity demand forecasting for decentralised energy management. Energy and Built Environment, 2020, 1, 178-186.	2.9	40
4	Load forecasting and dispatch optimisation for decentralised co-generation plant with dual energy storage. Applied Energy, 2017, 186, 304-320.	5.1	35
5	An Industrial Digitalization Platform for Condition Monitoring and Predictive Maintenance of Pumping Equipment. Sensors, 2019, 19, 3781.	2.1	32
6	Reducing message-length variations in resource-constrained embedded systems implemented using the Controller Area Network (CAN) protocol. Journal of Systems Architecture, 2009, 55, 344-354.	2.5	29
7	Adaptive and Nonlinear Fuzzy Force Control Techniques Applied to Robots Operating in Uncertain Environments. Journal of Field Robotics, 2003, 20, 391-400.	0.7	28
8	Two novel shared-clock scheduling algorithms for use with "Controller Area Network" and related protocols. Microprocessors and Microsystems, 2007, 31, 326-334.	1.8	28
9	Calorimeters and Techniques Used for Power Loss Measurements in Electrical Machines. IEEE Instrumentation and Measurement Magazine, 2010, 13, 26-33.	1.2	28
10	Heuristic Optimization of Consumer Electricity Costs Using a Generic Cost Model. Energies, 2016, 9, 6.	1.6	27
11	Demand Response Technology Readiness Levels for Energy Management in Blocks of Buildings. Buildings, 2018, 8, 13.	1.4	26
12	Strategies for Controlling Microgrid Networks with Energy Storage Systems: A Review. Energies, 2021, 14, 7234.	1.6	25
13	Near-optimal scheduling of residential smart home appliances using heuristic approach. , 2015, , .		23
14	Time-Frequency Image Analysis and Transfer Learning for Capacity Prediction of Lithium-Ion Batteries. Energies, 2020, 13, 5447.	1.6	23
15	On the use of thermal inertia in building stock to leverage decentralised demand side frequency regulation services. Applied Thermal Engineering, 2018, 133, 97-106.	3.0	22
16	Improved Inequalities for the Poisson and Binomial Distribution and Upper Tail Quantile Functions. ISRN Probability and Statistics, 2013, 2013, 1-6.	0.2	20
17	Optimal Dispatch of Aggregated HVAC Units for Demand Response: An Industry 4.0 Approach. Energies, 2019, 12, 4320.	1.6	20
18	Degradation Cost Analysis of Li-Ion Batteries in the Capacity Market with Different Degradation Models. Electronics (Switzerland), 2020, 9, 90.	1.8	20

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19	Demand response in blocks of buildings: opportunities and requirements. <i>Entrepreneurship and Sustainability Issues</i> , 2017, 4, 271-281.	0.4	17
20	Assessment of performance and dependability in embedded control systems: Methodology and case study. <i>Control Engineering Practice</i> , 2008, 16, 1293-1307.	3.2	15
21	Experimental study of electrical heating to enhance oil production from oil-wet carbonate reservoirs. <i>Fuel</i> , 2022, 324, 124559.	3.4	14
22	Towards Self-Sustainable Island Grids through Optimal Utilization of Renewable Energy Potential and Community Engagement. <i>Energies</i> , 2020, 13, 3386.	1.6	13
23	Tunneling Horizontal IEC 61850 Traffic through Audio Video Bridging Streams for Flexible Microgrid Control and Protection. <i>Energies</i> , 2016, 9, 204.	1.6	12
24	A Microcontroller-Based Adaptive Model Predictive Control Platform for Process Control Applications. <i>Electronics (Switzerland)</i> , 2017, 6, 88.	1.8	12
25	A generic controller architecture for intelligent robotic systems. <i>Robotics and Computer-Integrated Manufacturing</i> , 2011, 27, 292-305.	6.1	10
26	Towards Efficient Probabilistic Scheduling Guarantees for Real-Time Systems Subject to Random Errors and Random Bursts of Errors. , 2013, , .		10
27	On the Role of Regulatory Policy on the Business Case for Energy Storage in Both EU and UK Energy Systems: Barriers and Enablers. <i>Energies</i> , 2020, 13, 1080.	1.6	9
28	Improved schedulability analysis of implicit deadline tasks under limited preemption EDF scheduling. , 2011, , .		8
29	An Integrated Approach to Adaptive Control and Supervisory Optimisation of HVAC Control Systems for Demand Response Applications. <i>Energies</i> , 2021, 14, 2078.	1.6	8
30	Development guidelines for dependable real-time embedded systems. , 2008, , .		7
31	Exploring the Impact of Task Preemption on Dependability in Time-Triggered Embedded Systems: A Pilot Study. , 2008, , .		7
32	Improved Task Management Techniques for Enforcing EDF Scheduling on Recurring Tasks. , 2010, , .		7
33	Dependable Control for Wireless Distributed Control Systems. <i>Electronics (Switzerland)</i> , 2015, 4, 857-878.	1.8	7
34	An improved CMOS-based inductor simulator with simplified structure for low-frequency applications. <i>Journal of Computational Electronics</i> , 2016, 15, 1017-1022.	1.3	7
35	RTE-SIM: A Simple, Low-Cost and Flexible Environment to Support the Teaching of Real-Time and Embedded Control. <i>International Journal of Electrical Engineering and Education</i> , 2011, 48, 339-358.	0.4	6
36	Simple bounds on deadline failure probabilities in fault-tolerant real-time networks. , 2014, , .		6

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37	A Decentralized Informatics, Optimization, and Control Framework for Evolving Demand Response Services. <i>Energies</i> , 2020, 13, 4191.	1.6	6
38	Smooth particle filter-based likelihood approximations for remaining useful life prediction of Lithium-ion batteries. <i>IET Smart Grid</i> , 2021, 4, 151-161.	1.5	6
39	Tools to support sustainable entrepreneurship in energy positive neighbourhoods. <i>Entrepreneurship and Sustainability Issues</i> , 2014, 2, 49-59.	0.4	6
40	Improving information throughput and transmission predictability in Controller Area Networks. , 2010, , .		5
41	Current State of Developing Creep Damage Constitutive Equation for 0.5Cr0.5Mo0.25V Ferritic Steel. <i>Advanced Materials Research</i> , 0, 510, 812-816.	0.3	5
42	A transmission window technique for CAN networks. <i>Journal of Systems Architecture</i> , 2016, 69, 15-28.	2.5	5
43	Lifetime Degradation Cost Analysis for Li-Ion Batteries in Capacity Markets using Accurate Physics-Based Models. <i>Energies</i> , 2020, 13, 2816.	1.6	5
44	Transitioning to Society 5.0 in Africa: Tools to Support ICT Infrastructure Sharing. <i>Data</i> , 2021, 6, 69.	1.2	5
45	A Qualitative Based Causal-Loop Diagram for Understanding Policy Design Challenges for a Sustainable Transition Pathway: The Case of Tees Valley Region, UK. <i>Sustainability</i> , 2022, 14, 4462.	1.6	5
46	A software tool for automating the design of robot fuzzy force controllers. <i>Robotica</i> , 2005, 23, 247-256.	1.3	4
47	Bandwidth-efficient burst error tolerance in TDMA-based CAN networks. , 2011, , .		4
48	A hybrid EDF algorithm for implementing resource-constrained real-time control applications. , 2012, , .		4
49	Fast online identification of low-order time-delayed industrial processes. <i>Electronics Letters</i> , 2012, 48, 152.	0.5	4
50	Analysis and redesign of the "TTC"™ and "TTH"™ schedulers. <i>Journal of Systems Architecture</i> , 2012, 58, 384-397.		4
51	Move Suppression Calculations for Well-Conditioned MPC. <i>ISA Transactions</i> , 2017, 67, 371-381.	3.1	4
52	Eligible earliest deadline first: Server-based scheduling for master-slave industrial wireless networks. <i>Computers and Electrical Engineering</i> , 2017, 64, 305-321.	3.0	4
53	A note on "Efficient scheduling of periodic information monitoring requests"™. <i>European Journal of Operational Research</i> , 2010, 201, 329-335.	3.5	3
54	An experimental HIL study on the jitter sensitivity of an adaptive control system. , 2013, , .		3

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55	Fault-tolerant generator telecontrol over a microgrid IP network. , 2015, , .		3
56	A Note on the Suboptimality of Nonpreemptive Real-time Scheduling. IEEE Embedded Systems Letters, 2015, 7, 69-72.	1.3	3
57	Heuristic scheduling of multiple smart home appliances: Utility planning perspective. , 2016, , .		3
58	An embedded prototype of a residential smart appliance scheduling system. , 2016, , .		3
59	On the Implementation of Dependable Real-Time Systems with Non-Preemptive EDF. Lecture Notes in Electrical Engineering, 2011, , 183-196.	0.3	3
60	On binomial quantile and proportion bounds: With applications in engineering and informatics. Communications in Statistics - Theory and Methods, 2023, 52, 4183-4199.	0.6	3
61	Review of Creep Cavitation and Rupture of Low Cr Alloy and its Weldment. Advanced Materials Research, 0, 744, 407-411.	0.3	2
62	Evaluation of a heuristic approach for efficient scheduling of residential smart home appliances. , 2015, , .		2
63	Timing analysis for embedded systems using non-preemptive EDF scheduling under bounded error arrivals. Applied Computing and Informatics, 2017, 13, 130-139.	3.7	2
64	Electrical and Mechanical Sensor-Based Mass Flow Rate Measurement System: A Comparative Approach. , 2020, , .		2
65	Assessing the Impact of Redundancy on Performance and Reliability in a Drive-By-Wire System. , 2006, , .		1
66	Timely Recovery from Task Failures in Non-preemptive, Deadline-driven Schedulers. , 2010, , .		1
67	Real-time infinite horizon adaptive/predictive control for Smart home HVAC applications. , 2012, , .		1
68	A test facility for experimental HIL analysis of industrial embedded control systems. , 2012, , .		1
69	Application level compensation for burst errors in wireless control networks. , 2012, , .		1
70	Jitter sensitivity of a self-tuning input-constrained predictive controller. , 2014, , .		1
71	Exact and Heuristic Algorithms for Thrift Cyclic Scheduling. Algorithms, 2009, 2, 1449-1472.	1.2	0
72	Analysis of overclocked controller area network. , 2010, , .		0

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73	Optimised implementation of adaptive GPC for low-order systems with time delays. Electronics Letters, 2012, 48, 485.	0.5	0
74	A first qualitative evaluation of star replication schemes for FTT-CAN. , 2012, , .		0
75	Bounds on Worst-Case Deadline Failure Probabilities in Controller Area Networks. Journal of Computer Networks and Communications, 2016, 2016, 1-12.	1.2	0
76	Scheduling master-slave wireless networks in the presence of interference. , 2016, , .		0
77	Conformance Testing of Soft-Core Can Controllers: A Low-Cost and Practical Approach. Lecture Notes in Electrical Engineering, 2011, , 129-141.	0.3	0
78	Optimal Battery Dispatch Using Finite-Input Set Non-Linear Model Predictive Control: Algorithm Development and Case Study. Electronics (Switzerland), 2022, 11, 101.	1.8	0