Michael Short

List of Publications by Year
in descending order

78 papers	811 citations	471061 17 h-index	610482 24 g-index
80 all docs	80 docs citations	80 times ranked	728 citing authors

#	Article	IF	Citations
1	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
2	A Qualitative Based Causal-Loop Diagram for Understanding Policy Design Challenges for a Sustainable Transition Pathway: The Case of Tees Valley Region, UK. Sustainability, 2022, 14, 4462.	1.6	5
3	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
4	Experimental study of electrical heating to enhance oil production from oil-wet carbonate reservoirs. Fuel, 2022, 324, 124559.	3.4	14
5	Smooth particle filter-based likelihood approximations for remaining useful life prediction of Lithium-ion batteries. IET Smart Grid, 2021, 4, 151-161.	1.5	6
6	An Integrated Approach to Adaptive Control and Supervisory Optimisation of HVAC Control Systems for Demand Response Applications. Energies, 2021, 14, 2078.	1.6	8
7	Transitioning to Society 5.0 in Africa: Tools to Support ICT Infrastructure Sharing. Data, 2021, 6, 69.	1.2	5
8	Strategies for Controlling Microgrid Networks with Energy Storage Systems: A Review. Energies, 2021, 14, 7234.	1.6	25
9	Towards Self-Sustainable Island Grids through Optimal Utilization of Renewable Energy Potential and Community Engagement. Energies, 2020, 13, 3386.	1.6	13
10	Electrical and Mechanical Sensor-Based Mass Flow Rate Measurement System: A Comparative Approach. , 2020, , .		2
11	A Decentralized Informatics, Optimization, and Control Framework for Evolving Demand Response Services. Energies, 2020, 13, 4191.	1.6	6
12	Time-Frequency Image Analysis and Transfer Learning for Capacity Prediction of Lithium-Ion Batteries. Energies, 2020, 13, 5447.	1.6	23
13	On the Role of Regulatory Policy on the Business Case for Energy Storage in Both EU and UK Energy Systems: Barriers and Enablers. Energies, 2020, 13, 1080.	1.6	9
14	Lifetime Degradation Cost Analysis for Li-Ion Batteries in Capacity Markets using Accurate Physics-Based Models. Energies, 2020, 13, 2816.	1.6	5
15	Electricity demand forecasting for decentralised energy management. Energy and Built Environment, 2020, 1, 178-186.	2.9	40
16	Degradation Cost Analysis of Li-Ion Batteries in the Capacity Market with Different Degradation Models. Electronics (Switzerland), 2020, 9, 90.	1.8	20
17	An Industrial Digitalization Platform for Condition Monitoring and Predictive Maintenance of Pumping Equipment. Sensors, 2019, 19, 3781.	2.1	32
18	Optimal Dispatch of Aggregated HVAC Units for Demand Response: An Industry 4.0 Approach. Energies, 2019, 12, 4320.	1.6	20

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19	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
20	Demand Response Technology Readiness Levels for Energy Management in Blocks of Buildings. Buildings, 2018, 8, 13.	1.4	26
21	Load forecasting and dispatch optimisation for decentralised co-generation plant with dual energy storage. Applied Energy, 2017, 186, 304-320.	5.1	35
22	Move Suppression Calculations for Well-Conditioned MPC. ISA Transactions, 2017, 67, 371-381.	3.1	4
23	Eligible earliest deadline first: Server-based scheduling for master-slave industrial wireless networks. Computers and Electrical Engineering, 2017, 64, 305-321.	3.0	4
24	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
25	A Microcontroller-Based Adaptive Model Predictive Control Platform for Process Control Applications. Electronics (Switzerland), 2017, 6, 88.	1.8	12
26	Demand response in blocks of buildings: opportunities and requirements. Entrepreneurship and Sustainability Issues, 2017, 4, 271-281.	0.4	17
27	Bounds on Worst-Case Deadline Failure Probabilities in Controller Area Networks. Journal of Computer Networks and Communications, 2016, 2016, 1-12.	1.2	0
28	Heuristic Optimization of Consumer Electricity Costs Using a Generic Cost Model. Energies, 2016, 9, 6.	1.6	27
29	Tunneling Horizontal IEC 61850 Traffic through Audio Video Bridging Streams for Flexible Microgrid Control and Protection. Energies, 2016, 9, 204.	1.6	12
30	Scheduling master-slave wireless networks in the presence of interference. , 2016, , .		0
31	An improved CMOS-based inductor simulator with simplified structure for low-frequency applications. Journal of Computational Electronics, 2016, 15, 1017-1022.	1.3	7
32	Heuristic scheduling of multiple smart home appliances: Utility planning perspective. , 2016, , .		3
33	A transmission window technique for CAN networks. Journal of Systems Architecture, 2016, 69, 15-28.	2.5	5
34	An embedded prototype of a residential smart appliance scheduling system. , 2016, , .		3
35	Dependable Control for Wireless Distributed Control Systems. Electronics (Switzerland), 2015, 4, 857-878.	1.8	7
36	Fault-tolerant generator telecontrol over a microgrid IP network. , 2015, , .		3

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37	A Note on the Suboptimality of Nonpreemptive Real-time Scheduling. IEEE Embedded Systems Letters, 2015, 7, 69-72.	1.3	3
38	Evaluation of a heuristic approach for efficient scheduling of residential smart home appliances. , 2015, , .		2
39	Near-optimal scheduling of residential smart home appliances using heuristic approach. , 2015, , .		23
40	Simple bounds on deadline failure probabilities in fault-tolerant real-time networks. , 2014, , .		6
41	Jitter sensitivity of a self-tuning input-constrained predictive controller. , 2014, , .		1
42	Tools to support sustainable entrepreneurship in energy positive neighbourhoods. Entrepreneurship and Sustainability Issues, 2014, 2, 49-59.	0.4	6
43	Towards Efficient Probabilistic Scheduling Guarantees for Real-Time Systems Subject to Random Errors and Random Bursts of Errors. , 2013, , .		10
44	An experimental HIL study on the jitter sensitivity of an adaptive control system. , 2013, , .		3
45	Improved Inequalities for the Poisson and Binomial Distribution and Upper Tail Quantile Functions. ISRN Probability and Statistics, 2013, 2013, 1-6.	0.2	20
46	Optimised implementation of adaptive GPC for low-order systems with time delays. Electronics Letters, 2012, 48, 485.	0.5	0
47	A first qualitative evaluation of star replication schemes for FTT-CAN. , 2012, , .		0
48	A hybrid EDF algorithm for implementing resource-constrained real-time control applications. , 2012, , .		4
49	Real-time infinite horizon adaptive/predictive control for Smart home HVAC applications. , 2012, , .		1
50	A test facility for experimental HIL analysis of industrial embedded control systems. , 2012, , .		1
51	Application level compensation for burst errors in wireless control networks. , 2012, , .		1
52	Fast online identification of low-order time-delayed industrial processes. Electronics Letters, 2012, 48, 152.	0.5	4
53	Analysis and redesign of the â€˜TTCâ€™ and â€˜TTHâ€™ schedulers. Journal of Systems Architecture, 2012, 58, 382-47.		4
54	Improved schedulability analysis of implicit deadline tasks under limited preemption EDF scheduling. , 2011, , .		8

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55	A generic controller architecture for intelligent robotic systems. Robotics and Computer-Integrated Manufacturing, 2011, 27, 292-305.	6.1	10
56	Bandwidth-efficient burst error tolerance in TDMA-based CAN networks. , 2011, , .		4
57	RTE-SIM: A Simple, Low-Cost and Flexible Environment to Support the Teaching of Real-Time and Embedded Control. International Journal of Electrical Engineering and Education, 2011, 48, 339-358.	0.4	6
58	On the Implementation of Dependable Real-Time Systems with Non-Preemptive EDF. Lecture Notes in Electrical Engineering, 2011, , 183-196.	0.3	3
59	Conformance Testing of Soft-Core Can Controllers: A Low-Cost and Practical Approach. Lecture Notes in Electrical Engineering, 2011, , 129-141.	0.3	0
60	A note on 'Efficient scheduling of periodic information monitoring requests'. European Journal of Operational Research, 2010, 201, 329-335.	3.5	3
61	Timely Recovery from Task Failures in Non-preemptive, Deadline-driven Schedulers. , 2010, , .		1
62	Analysis of overclocked controller area network. , 2010, , .		0
63	Calorimeters and Techniques Used for Power Loss Measurements in Electrical Machines. IEEE Instrumentation and Measurement Magazine, 2010, 13, 26-33.	1.2	28
64	Improving information throughput and transmission predictability in Controller Area Networks. , 2010, , .		5
65	Improved Task Management Techniques for Enforcing EDF Scheduling on Recurring Tasks. , 2010, , .		7
66	Exact and Heuristic Algorithms for Thrift Cyclic Scheduling. Algorithms, 2009, 2, 1449-1472.	1.2	0
67	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
68	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
69	Assessment of performance and dependability in embedded control systems: Methodology and case study. Control Engineering Practice, 2008, 16, 1293-1307.	3.2	15
70	Development guidelines for dependable real-time embedded systems. , 2008, , .		7
71	Exploring the Impact of Task Preemption on Dependability in Time-Triggered Embedded Systems: A Pilot Study. , 2008, , .		7
72	Fault-Tolerant Time-Triggered Communication Using CAN. IEEE Transactions on Industrial Informatics, 2007, 3, 131-142.	7.2	54

#	ARTICLE	IF	CITATIONS
73	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
74	Assessing the Impact of Redundancy on Performance and Reliability in a Drive-By-Wire System. , 2006, , .		1
75	A software tool for automating the design of robot fuzzy force controllers. Robotica, 2005, 23, 247-256.	1.3	4
76	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
77	Current State of Developing Creep Damage Constitutive Equation for 0.5Cr0.5Mo0.25V Ferritic Steel. Advanced Materials Research, 0, 510, 812-816.	0.3	5
78	Review of Creep Cavitation and Rupture of Low Cr Alloy and its Weldment. Advanced Materials Research, 0, 744, 407-411.	0.3	2