Bryan P Rasmussen

List of Publications by Year
in descending order

65	786	759233	580821
papers	citations	12 h-index	25 g-index

65	65	65	508
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multivariate fault detection for residential HVAC systems using cloud-based thermostat data, part II: Case studies. Science and Technology for the Built Environment, 2022, 28, 121-136.	1.7	3
2	Multivariate fault detection for residential HVAC systems using cloud-based thermostat data, part I: Methodology. Science and Technology for the Built Environment, 2022, 28, 109-120.	1.7	4
3	An Equilibrium Prediction Method for Control and Fault Detection of Energy Systems. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2021, 7, .	1.1	1
4	Uncertainty analysis and field implementation of a fault detection method for residential HVAC systems. Science and Technology for the Built Environment, 2020, 26, 320-333.	1.7	4
5	Steady-State Predictive Optimal Control of Integrated Building Energy Systems Using a Mixed Economic and Occupant Comfort Focused Objective Function. Energies, 2020, 13, 2922.	3.1	5
6	A review of fault detection and diagnosis methods for residential air conditioning systems. Building and Environment, 2019, 161, 106236.	6.9	71
7	Optimization of the Cool-Down Process for a System of Sintering Furnaces. Smart and Sustainable Manufacturing Systems, 2019, 2, 20170015.	0.7	0
8	Multi-zone Temperature Modeling and Control. Advances in Industrial Control, 2018, , 139-166.	0.5	2
9	HVAC System Modeling and Control: Vapor Compression System Modeling and Control. Advances in Industrial Control, 2018, , 73-103.	0.5	5
10	Opportunities for consumer-driven load shifting in commercial and industrial buildings. Sustainable Energy, Grids and Networks, 2018, 16, 243-258.	3.9	12
11	Soft Implementation of Cascaded Control Architectures Using the Youla Parameterization. , 2018, , .		1
12	Autonomous lighting assessments in buildings: part 1 â€“ robotic navigation and mapping. Advances in Building Energy Research, 2017, 11, 260-281.	2.3	1
13	Optimal tuning of cascaded control architectures for nonlinear HVAC systems. Science and Technology for the Built Environment, 2017, 23, 1190-1202.	1.7	8
14	A comparison of static and dynamic fault detection techniques for transcritical refrigeration. International Journal of Refrigeration, 2017, 80, 212-224.	3.4	9
15	Decoupling of MIMO systems using cascaded control architectures with application for HVAC systems. , 2017, , .		1
16	Non-intrusive gas flow measurement using thermal signatures with online dynamic parameter estimation. , 2017, , .		0
17	Limited-Communication Distributed Model Predictive Control for Coupled and Constrained Subsystems. IEEE Transactions on Control Systems Technology, 2017, 25, 1807-1815.	5.2	17
18	A comparison of modeling paradigms for dynamic evaporator simulations with variable fluid phases. Applied Thermal Engineering, 2017, 112, 1326-1342.	6.0	14

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19	Autonomous lighting assessments in buildings: part 2 â€“ light identification and energy analysis. Advances in Building Energy Research, 2017, 11, 227-244.	2.3	1
20	Exploring controls education: A re-configurable ball and plate platform kit. , 2016, , .		12
21	An evaluation of HVAC energy usage and occupant comfort in religious facilities. Energy and Buildings, 2016, 128, 224-235.	6.7	22
22	Long-term experimental analysis of occupancy and lighting in religious facilities. Building and Environment, 2016, 98, 1-10.	6.9	3
23	A nonlinear reduced-order modeling method for dynamic two-phase flow heat exchanger simulations. Science and Technology for the Built Environment, 2016, 22, 164-177.	1.7	8
24	Chapter 6 Heating, Ventilating, and Air-Conditioning Control Systems. Mechanical and Aerospace Engineering, 2016, , 123-178.	0.0	0
25	Simulation and validation of interior and exterior navigational strategies for autonomous robotic assessments of energy. , 2015, , .		1
26	Effective Tuning of Cascaded Control Loops for Nonlinear HVAC Systems. , 2015, , .		5
27	Neighbor-communication distributed model predictive control for coupled and constrained subsystems in networks. , 2015, , .		2
28	Energy analysis of religious facilities in different climates through a long-term energy study. Energy and Buildings, 2015, 108, 72-81.	6.7	10
29	Emulation of semi-active flow control for evaporator superheat regulation. Applied Thermal Engineering, 2015, 89, 51-61.	6.0	3
30	Optimal Setpoints for HVAC Systems via Iterative Cooperative Neighbor Communication. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	5
31	Compensation of HVAC System Nonlinearities Using Cascaded Control Architecture. , 2014, , .		0
32	Automated Modeling of Building HVAC Systems for MPC. , 2014, , .		2
33	Distributed Model Predictive Control for networks with limited control communication. , 2014, , .		4
34	Autonomous Lighting Audits: Part 1 â€” Building Navigation and Mapping. , 2014, , .		2
35	Autonomous Lighting Audits: Part 2 â€” Light Identification and Analysis. , 2014, , .		2
36	Decentralized model predictive control of a multi-evaporator air conditioning system. Control Engineering Practice, 2013, 21, 1665-1677.	5.5	55

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37	Pareto Optimal Setpoints for HVAC Networks via Iterative Nearest Neighbor Communication. , 2013, , .		2
38	Multi-Parametric Tuning of Dynamic Air Conditioning Models Using Experimental Data. , 2012, , .		0
39	A Wavelet Decomposition Method for Tuning Thermal Models to Aperiodic Transient Test Data. , 2012, , .		0
40	Cascaded superheat control with a multiple evaporator refrigeration system. , 2011, , .		7
41	On reducing evaporator superheat nonlinearity with control architecture. International Journal of Refrigeration, 2010, 33, 607-614.	3.4	46
42	Parameter estimation for dynamic HVAC models with limited sensor information. , 2010, , .		8
43	Gain Scheduled Control of an Air Conditioning System Using the Youla Parameterization. IEEE Transactions on Control Systems Technology, 2010, 18, 1216-1225.	5.2	42
44	A control architecture solution to superheat nonlinearity. , 2010, , .		6
45	Stable Controller Interpolation and Controller Switching for LPV Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2010, 132, .	1.6	13
46	Evaporator Superheat Regulation via Emulation of Semi-Active Flow Control. , 2009, , .		2
47	Superheat Control: A Hybrid Approach. HVAC and R Research, 2009, 15, 1021-1043.	0.6	13
48	Selecting PID Control Gains for Nonlinear HVAC&R Systems. HVAC and R Research, 2009, 15, 991-1019.	0.6	15
49	Model-based predictive control of a multi-evaporator vapor compression cooling cycle. , 2008, , .		28
50	Moving-Boundary Heat Exchanger Models With Variable Outlet Phase. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2008, 130, .	1.6	38
51	Parameter tuning of reduced order evaporator models via numerical model reduction. , 2008, , .		1
52	Stable controller interpolation for LPV systems. , 2008, , .		16
53	Advances in Energy Systems Modeling and Control. Proceedings of the American Control Conference, 2007, , .	0.0	11
54	Improving Energy Efficiency in Automotive Vapor Compression Cycles through Advanced Control Design. , 2006, , .		4

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55	Gain scheduled control of an air conditioning system using the Youla parameterization. , 2006, , .		11
56	Parametric Sensitivity Analysis and Model Tuning Applied to Vapor Compression Systems. , 2005, , 1203.		1
57	Vapor Compression Cycles: Control-Oriented Modeling and Validation. , 2005, , 1213.		4
58	Model-driven system identification of transcritical vapor compression systems. IEEE Transactions on Control Systems Technology, 2005, 13, 444-451.	5.2	55
59	Control-Oriented Modeling of Transcritical Vapor Compression Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2004, 126, 54-64.	1.6	101
60	Application of a multivariable adaptive control strategy to automotive air conditioning systems. International Journal of Adaptive Control and Signal Processing, 2004, 18, 199-221.	4.1	50
61	Iterative Modeling and Identification of a CO2 Air Conditioning System. , 2004, , 813.		0
62	Application of Multivariable Adaptive Control to Automotive Air Conditioning Systems. , 2003, , .		7
63	A Control-Oriented Model of Transcritical Air-Conditioning System Dynamics. , 2002, , .		7
64	Evaluation of Control Strategies for Compressor Rapid Cycling. , 0, , .		1
65	Automotive Vapor Compression Cycles: Validation of Control- Oriented Models. , 0, , .		2