Bin Xu

List of Publications by Year
in descending order

77 papers	2,449 citations	201674 27 h-index	223800 46 g-index
82 all docs	82 docs citations	82 times ranked	2547 citing authors

#	Article	IF	Citations
1	Q-Learning-Based Supervisory Control Adaptability Investigation for Hybrid Electric Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 6797-6806.	8.0	20
2	A review of reinforcement learning based energy management systems for electrified powertrains: Progress, challenge, and potential solution. Renewable and Sustainable Energy Reviews, 2022, 154, 111833.	16.4	88
3	Energy management strategy for battery/supercapacitor hybrid electric city bus based on driving pattern recognition. Energy, 2022, 243, 122752.	8.8	34
4	A Study of Vehicle Driving Condition Recognition Using Supervised Learning Methods. IEEE Transactions on Transportation Electrification, 2022, 8, 1665-1673.	7.8	11
5	Hierarchical Q-learning network for online simultaneous optimization of energy efficiency and battery life of the battery/ultracapacitor electric vehicle. Journal of Energy Storage, 2022, 46, 103925.	8.1	9
6	Emerging hot spot analysis and the spatial–temporal trends of NDVI in the Jing River Basin of China. Environmental Earth Sciences, 2022, 81, 1.	2.7	18
7	A cloud-based energy management strategy for hybrid electric city bus considering real-time passenger load prediction. Journal of Energy Storage, 2022, 45, 103749.	8.1	11
8	Active Metamaterial Antenna With Beam Scanning Manipulation Based on a Digitally Modulated Array Factor Method. IEEE Transactions on Antennas and Propagation, 2021, 69, 1198-1203.	5.1	11
9	Learning Time Reduction Using Warm-Start Methods for a Reinforcement Learning-Based Supervisory Control in Hybrid Electric Vehicle Applications. IEEE Transactions on Transportation Electrification, 2021, 7, 626-635.	7.8	12
10	A Q-learning based transient power optimization method for organic Rankine cycle waste heat recovery system in heavy duty diesel engine applications. Applied Energy, 2021, 286, 116532.	10.1	26
11	Optimal Wireless Information and Power Transfer Using Deep Q-Network. Wireless Power Transfer, 2021, 2021, 1-12.	1.1	6
12	Rosmarinic Acid Potently Detoxifies Amylin Amyloid and Ameliorates Diabetic Pathology in a Transgenic Rat Model of Type 2 Diabetes. ACS Pharmacology and Translational Science, 2021, 4, 1322-1337.	4.9	14
13	Comparative analysis of hybrid vehicle energy management strategies with optimization of fuel economy and battery life. Energy, 2021, 228, 120604.	8.8	34
14	Energy consumption and battery aging minimization using a Q-learning strategy for a battery/ultracapacitor electric vehicle. Energy, 2021, 229, 120705.	8.8	42
15	A machine learning approach to quality monitoring of injection molding process using regression models. International Journal of Computer Integrated Manufacturing, 2021, 34, 1223-1236.	4.6	9
16	Towards a novel holistic design of organic Rankine cycle (ORC) systems operating under heat source fluctuations and intermittency. Renewable and Sustainable Energy Reviews, 2021, 147, 111207.	16.4	52
17	Comparative analysis of state of charge based adaptive supervisory control strategies of plug-in Hybrid Electric Vehicles. Energy, 2021, 230, 120856.	8.8	17
18	A Fast Q-learning Energy Management Strategy for Battery/Supercapacitor Electric Vehicles Considering Energy Saving and Battery Aging. , 2021, , .		2

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19	A Rigorous Model Order Reduction Framework for Waste Heat Recovery Systems Based on Proper Orthogonal Decomposition and Galerkin Projection. IEEE Transactions on Control Systems Technology, 2020, 28, 635-643.	5.2	8
20	A comparative analysis of real-time power optimization for organic Rankine cycle waste heat recovery systems. Applied Thermal Engineering, 2020, 164, 114442.	6.0	28
21	A comparative analysis of dynamic evaporator models for organic Rankine cycle waste heat recovery systems. Applied Thermal Engineering, 2020, 165, 114576.	6.0	14
22	Parametric study on reinforcement learning optimized energy management strategy for a hybrid electric vehicle. Applied Energy, 2020, 259, 114200.	10.1	109
23	Ensemble Reinforcement Learning-Based Supervisory Control of Hybrid Electric Vehicle for Fuel Economy Improvement. IEEE Transactions on Transportation Electrification, 2020, 6, 717-727.	7.8	52
24	Hydrogeochemistry and quality assessment of groundwater in Jinghui canal irrigation district of China. Human and Ecological Risk Assessment (HERA), 2020, 26, 2349-2366.	3.4	11
25	Effect of wheat straw derived biochar on immobilization of Cd and Pb in single- and binary-metal contaminated soil. Human and Ecological Risk Assessment (HERA), 2020, 26, 2420-2433.	3.4	6
26	Real-time realization of Dynamic Programming using machine learning methods for IC engine waste heat recovery system power optimization. Applied Energy, 2020, 262, 114514.	10.1	26
27	Experimental Validation of Nonlinear Model Predictive Control for a Heavy-Duty Diesel Engine Waste Heat Recovery System. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, .	1.6	1
28	An experimentally validated, energy focused, optimal control strategy for an Organic Rankine Cycle waste heat recovery system. Applied Energy, 2019, 256, 113991.	10.1	29
29	Soil treatment and crop rotation for *in situ* remediation of heavy metal-contaminated agricultural soil in gold mining areas. Human and Ecological Risk Assessment (HERA), 2019, 25, 374-392.	3.4	18
30	A comprehensive review of organic rankine cycle waste heat recovery systems in heavy-duty diesel engine applications. Renewable and Sustainable Energy Reviews, 2019, 107, 145-170.	16.4	137
31	Human health risk assessment of groundwater arsenic contamination in Jinghui irrigation district, China. Journal of Environmental Management, 2019, 237, 163-169.	7.8	88
32	Dual-Functional MIMO Antenna Array With High Isolation for 5G/WLAN Applications in Smartphones. IEEE Access, 2019, 7, 167470-167480.	4.2	21
33	A Zero-Mode Induced mmWave Patch Antenna With Low-Profile, Wide-Bandwidth and Large-Angle Scanning for 5G Mobile Terminals. IEEE Access, 2019, 7, 177607-177615.	4.2	24
34	A Wide-Angle Beam Scanning Antenna in E-plane for K-band Radar Sensor. IEEE Access, 2019, 7, 171684-171690.	4.2	28
35	Durability testing of electronic textile surface resistivity and textile antenna performance. Textile Reseach Journal, 2019, 89, 3708-3721.	2.2	29
36	Hydrogeochemistry and human health risks of groundwater fluoride in Jinhuiqu irrigation district of Wei river basin, China. Human and Ecological Risk Assessment (HERA), 2019, 25, 230-249.	3.4	21

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37	An enhanced evaporator model for working fluid phase length prediction, validated with experimental thermal imaging data. International Journal of Heat and Mass Transfer, 2019, 132, 194-208.	4.8	7
38	Estimation and Predictive Control of a Parallel Evaporator Diesel Engine Waste Heat Recovery System. IEEE Transactions on Control Systems Technology, 2019, 27, 282-295.	5.2	14
39	Insights into the Impact of a Membrane-Anchoring Moiety on the Biological Activities of Bivalent Compounds As Potential Neuroprotectants for Alzheimer's Disease. Journal of Medicinal Chemistry, 2018, 61, 777-790.	6.4	14
40	Modeling for Organic Rankine Cycle Waste Heat Recovery System Development. , 2018, , .		2
41	Phytonutrient genistein is a survival factor for pancreatic β-cells via GPR30-mediated mechanism. Journal of Nutritional Biochemistry, 2018, 58, 59-70.	4.2	27
42	Using Thermogenic Beige Cells to Identify Biologically Active Small Molecules and Peptides. Methods in Molecular Biology, 2017, 1566, 203-212.	0.9	8
43	Natural product-based amyloid inhibitors. Biochemical Pharmacology, 2017, 139, 40-55.	4.4	155
44	Classification of Finger Movements Based on Reflection Coefficient Variations of a Body-Worn Electrically Small Antenna. IEEE Antennas and Wireless Propagation Letters, 2017, , 1-1.	4.0	11
45	Development of Autologous C5 Vaccine Nanoparticles to Reduce Intravascular Hemolysis <i>in Vivo</i>. ACS Chemical Biology, 2017, 12, 539-547.	3.4	17
46	Model Predictive Control of an Organic Rankine Cycle System. Energy Procedia, 2017, 129, 184-191.	1.8	21
47	Olive Component Oleuropein Promotes β-Cell Insulin Secretion and Protects β-Cells from Amylin Amyloid-Induced Cytotoxicity. Biochemistry, 2017, 56, 5035-5039.	2.5	46
48	Transient dynamic modeling and validation of an organic Rankine cycle waste heat recovery system for heavy duty diesel engine applications. Applied Energy, 2017, 205, 260-279.	10.1	61
49	Physics-Based Modeling and Transient Validation of an Organic Rankine Cycle Waste Heat Recovery System for a Heavy-Duty Diesel Engine. , 2016, , .		5
50	Predict failures in production lines: A two-stage approach with clustering and supervised learning. , 2016, , .		22
51	Nonlinear Model Predictive Control Strategies for a Parallel Evaporator Diesel Engine Waste Heat Recovery System. , 2016, , .		6
52	Power Maximization of a Heavy Duty Diesel Organic Rankine Cycle Waste Heat Recovery System Utilizing Mechanically Coupled and Fully Electrified Turbine Expanders. , 2016, , .		8
53	Amylin Amyloid Inhibition by Flavonoid Baicalein: Key Roles of Its Vicinal Dihydroxyl Groups of the Catechol Moiety. Biochemistry, 2016, 55, 4255-4258.	2.5	62
54	A Rapid Method for Refolding Cell Surface Receptors and Ligands. Scientific Reports, 2016, 6, 26482.	3.3	8

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55	Natural product-based nanomedicine: recent advances and issues. International Journal of Nanomedicine, 2015, 10, 6055.	6.7	189
56	Analysis of receptor-ligand binding by photoaffinity cross-linking. Science China Chemistry, 2014, 57, 232-242.	8.2	4
57	Crystal structure of a γδ T-cell receptor specific for the human MHC class I homolog MICA. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 2414-2419.	7.1	133
58	An Achilles' Heel in an Amyloidogenic Protein and Its Repair. Journal of Biological Chemistry, 2010, 285, 10806-10821.	3.4	49
59	Design of an Insulin Analog with Enhanced Receptor Binding Selectivity. Journal of Biological Chemistry, 2009, 284, 32178-32187.	3.4	13
60	Decoding the Cryptic Active Conformation of a Protein by Synthetic Photoscanning. Journal of Biological Chemistry, 2009, 284, 14597-14608.	3.4	43
61	Enhancing the Activity of a Protein by Stereospecific Unfolding. Journal of Biological Chemistry, 2009, 284, 14586-14596.	3.4	40
62	Diabetes-Associated Mutations in Human Insulin: Crystal Structure and Photo-Cross-Linking Studies of A-Chain Variant InsulinWakayama†,‡. Biochemistry, 2005, 44, 5000-5016.	2.5	47
63	Diabetes-Associated Mutations in Insulin:‰ Consecutive Residues in the B Chain Contact Distinct Domains of the Insulin Receptor,. Biochemistry, 2004, 43, 8356-8372.	2.5	58
64	Enhancing the Activity of Insulin at the Receptor Interface: Crystal Structure and Photo-Cross-Linking of A8 Analogues†. Biochemistry, 2004, 43, 16119-16133.	2.5	37
65	Diabetes-Associated Mutations in Insulin Identify Invariant Receptor Contacts. Diabetes, 2004, 53, 1599-1602.	0.6	29
66	How Insulin Binds: the B-Chain α-Helix Contacts the L1 β-Helix of the Insulin Receptor. Journal of Molecular Biology, 2004, 341, 529-550.	4.2	74
67	Crystal Structure ofallo-IleA2-Insulin, an Inactive Chiral Analogue: Implications for the Mechanism of Receptor Binding†,‡. Biochemistry, 2003, 42, 12770-12783.	2.5	20
68	Protein Structure and the Spandrels of San Marco: Insulin's Receptor-Binding Surface Is Buttressed by an Invariant Leucine Essential for Its Stability†. Biochemistry, 2002, 41, 809-819.	2.5	35
69	Chiral mutagenesis of insulin's hidden receptor-binding surface: structure of an Allo-isoleucineA2 analogue. Journal of Molecular Biology, 2002, 316, 435-441.	4.2	43
70	Transient Power Optimization of an Organic Rankine Cycle Waste Heat Recovery System for Heavy-Duty Diesel Engine Applications. SAE International Journal of Alternative Powertrains, 0, 6, 25-33.	0.8	21
71	Experimental Evaluation of Evaporator Thermal Inertia for an Optimal Control Strategy of an Organic Rankine Cycle Waste Heat Recovery System. SAE International Journal of Engines, 0, 13, .	0.4	2
72	A Heuristic Supervisory Controller for a 48V Hybrid Electric Vehicle Considering Fuel Economy and Battery Aging. , 0, , .		6

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73	A Look-Ahead Model Predictive Optimal Control Strategy of a Waste Heat Recovery-Organic Rankine Cycle for Automotive Application. , 0, , .		3
74	Real-Time Reinforcement Learning Optimized Energy Management for a 48V Mild Hybrid Electric Vehicle. , 0, , .		24
75	Optimization of Energy Management Strategy for Range-Extended Electric Vehicle Using Reinforcement Learning and Neural Network. , 0, , .		2
76	Cooperative Mandatory Lane Change for Connected Vehicles on Signalized Intersection Roads. , 0, , .		1
77	Machine Learning Based Optimal Energy Storage Devices Selection Assistance for Vehicle Propulsion Systems. , 0, , .		5