

# Jun Xu

## List of Publications by Year in descending order

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234  
papers

9,013  
citations

38742

50  
h-index

56724

83  
g-index

235  
all docs

235  
docs citations

235  
times ranked

5972  
citing authors

#	ARTICLE	IF	CITATIONS
1	Safety issues and mechanisms of lithium-ion battery cell upon mechanical abusive loading: A review. <i>Energy Storage Materials</i> , 2020, 24, 85-112.	18.0	395
2	Energy Management for a Power-Split Plug-in Hybrid Electric Vehicle Based on Dynamic Programming and Neural Networks. <i>IEEE Transactions on Vehicular Technology</i> , 2014, 63, 1567-1580.	6.3	274
3	A new method to estimate the state of charge of lithium-ion batteries based on the battery impedance model. <i>Journal of Power Sources</i> , 2013, 233, 277-284.	7.8	254
4	The State of Charge Estimation of Lithium-Ion Batteries Based on a Proportional-Integral Observer. <i>IEEE Transactions on Vehicular Technology</i> , 2014, 63, 1614-1621.	6.3	249
5	Online battery state of health estimation based on Genetic Algorithm for electric and hybrid vehicle applications. <i>Journal of Power Sources</i> , 2013, 240, 184-192.	7.8	237
6	Energy management of a power-split plug-in hybrid electric vehicle based on genetic algorithm and quadratic programming. <i>Journal of Power Sources</i> , 2014, 248, 416-426.	7.8	203
7	Computational model of 18650 lithium-ion battery with coupled strain rate and SOC dependencies. <i>Applied Energy</i> , 2016, 172, 180-189.	10.1	193
8	Safety issues caused by internal short circuits in lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21475-21484.	10.3	181
9	Lithium ion capacitors (LICs): Development of the materials. <i>Energy Storage Materials</i> , 2019, 19, 314-329.	18.0	180
10	Cooling capacity of a novel modular liquid-cooled battery thermal management system for cylindrical lithium ion batteries. <i>Applied Thermal Engineering</i> , 2020, 178, 115591.	6.0	175
11	Additive Manufacturing as a Method to Design and Optimize Bioinspired Structures. <i>Advanced Materials</i> , 2018, 30, e1800940.	21.0	158
12	Crushing resistance and energy absorption of pomelo peel inspired hierarchical honeycomb. <i>International Journal of Impact Engineering</i> , 2019, 125, 163-172.	5.0	154
13	Integrated computation model of lithium-ion battery subject to nail penetration. <i>Applied Energy</i> , 2016, 183, 278-289.	10.1	145
14	Dynamic mechanical integrity of cylindrical lithium-ion battery cell upon crushing. <i>Engineering Failure Analysis</i> , 2015, 53, 97-110.	4.0	135
15	Constitutive behavior and progressive mechanical failure of electrodes in lithium-ion batteries. <i>Journal of Power Sources</i> , 2017, 357, 126-137.	7.8	133
16	A detailed computational model for cylindrical lithium-ion batteries under mechanical loading: From cell deformation to short-circuit onset. <i>Journal of Power Sources</i> , 2019, 413, 284-292.	7.8	131
17	Component sizing optimization of plug-in hybrid electric vehicles. <i>Applied Energy</i> , 2011, 88, 799-804.	10.1	127
18	Coupled effect of strain rate and solvent on dynamic mechanical behaviors of separators in lithium ion batteries. <i>Materials and Design</i> , 2016, 95, 319-328.	7.0	105

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19	State of Charge Dependent Mechanical Integrity Behavior of 18650 Lithium-ion Batteries. Scientific Reports, 2016, 6, 21829.	3.3	104
20	Experimental study on mechanical behavior of PVB laminated glass under quasi-static and dynamic loadings. Composites Part B: Engineering, 2011, 42, 302-308.	12.0	100
21	A novel multimode hybrid energy storage system and its energy management strategy for electric vehicles. Journal of Power Sources, 2015, 281, 432-443.	7.8	100
22	Introducing composite lattice core sandwich structure as an alternative proposal for engine hood. Composite Structures, 2018, 201, 131-140.	5.8	99
23	Multiphysics computational framework for cylindrical lithium-ion batteries under mechanical abusive loading. Electrochimica Acta, 2017, 256, 172-184.	5.2	94
24	Adaptive Sliding-Mode With Hysteresis Control Strategy for Simple Multimode Hybrid Energy Storage System in Electric Vehicles. IEEE Transactions on Industrial Electronics, 2017, 64, 1404-1414.	7.9	93
25	Reconstruction model of vehicle impact speed in pedestrian-vehicle accident. International Journal of Impact Engineering, 2009, 36, 783-788.	5.0	92
26	Mechanical characterization and modeling for anodes and cathodes in lithium-ion batteries. Journal of Power Sources, 2018, 392, 265-273.	7.8	85
27	Characteristics of windshield cracking upon low-speed impact: Numerical simulation based on the extended finite element method. Computational Materials Science, 2010, 48, 582-588.	3.0	84
28	Unlocking the coupling mechanical-electrochemical behavior of lithium-ion battery upon dynamic mechanical loading. Energy, 2019, 166, 951-960.	8.8	80
29	Experimental investigation on constitutive behavior of PVB under impact loading. International Journal of Impact Engineering, 2011, 38, 106-114.	5.0	77
30	Thermal runaway propagation behavior within 18,650 lithium-ion battery packs: A modeling study. Journal of Energy Storage, 2020, 31, 101668.	8.1	77
31	Compressive properties of hollow lattice truss reinforced honeycombs (Honeytubes) by additive manufacturing: Patterning and tube alignment effects. Materials and Design, 2018, 156, 446-457.	7.0	75
32	State-of-health estimation of lithium-ion battery based on fractional impedance model and interval capacity. International Journal of Electrical Power and Energy Systems, 2020, 119, 105883.	5.5	75
33	An online state of charge estimation method with reduced prior battery testing information. International Journal of Electrical Power and Energy Systems, 2014, 63, 178-184.	5.5	73
34	Strong and Tough Bioinspired Additive-Manufactured Dual-Phase Mechanical Metamaterial Composites. Journal of the Mechanics and Physics of Solids, 2021, 149, 104341.	4.8	72
35	Evaluation of Model Based State of Charge Estimation Methods for Lithium-Ion Batteries. Energies, 2014, 7, 5065-5082.	3.1	71
36	A Unitized Multiwinding Transformer-Based Equalization Method for Series-Connected Battery Strings. IEEE Transactions on Power Electronics, 2019, 34, 11981-11989.	7.9	69

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37	Solution-Processed Monolithic All-Perovskite Triple-Junction Solar Cells with Efficiency Exceeding 20%. ACS Energy Letters, 2020, 5, 2819-2826.	17.4	69
38	A Fast Impedance Calculation-Based Battery State-of-Health Estimation Method. IEEE Transactions on Industrial Electronics, 2022, 69, 7019-7028.	7.9	67
39	Dynamic behaviors of bio-inspired structures: Design, mechanisms, and models. Engineering Structures, 2022, 265, 114490.	5.3	65
40	Evaluation strategy of regenerative braking energy for supercapacitor vehicle. ISA Transactions, 2015, 55, 234-240.	5.7	63
41	Mechanical integrity of 18650 lithium-ion battery module: Packing density and packing mode. Engineering Failure Analysis, 2018, 91, 315-326.	4.0	62
42	Generalized separator failure criteria for internal short circuit of lithium-ion battery. Journal of Power Sources, 2020, 467, 228360.	7.8	61
43	Honeytubes: Hollow lattice truss reinforced honeycombs for crushing protection. Composite Structures, 2017, 160, 1147-1154.	5.8	58
44	Highly efficient solar steam generation via mass-produced carbon nanosheet frameworks. Carbon, 2019, 145, 352-358.	10.3	57
45	Mechanical properties and impact performance of silk-epoxy resin composites modulated by flax fibres. Composites Part A: Applied Science and Manufacturing, 2019, 117, 357-368.	7.6	56
46	Experimental investigation on the radial and circular crack propagation of PVB laminated glass subject to dynamic out-of-plane loading. Engineering Fracture Mechanics, 2013, 112-113, 26-40.	4.3	55
47	Comparing the microstructure and mechanical properties of Bombyx mori and Antheraea pernyi cocoon composites. Acta Biomaterialia, 2017, 47, 60-70.	8.3	55
48	Safety issues of defective lithium-ion batteries: identification and risk evaluation. Journal of Materials Chemistry A, 2020, 8, 12472-12484.	10.3	55
49	Data-Driven Safety Risk Prediction of Lithium-Ion Battery. Advanced Energy Materials, 2021, 11, 2003868.	19.5	55
50	Modeling of contact stress among compound particles in high energy lithium-ion battery. Energy Storage Materials, 2019, 18, 23-33.	18.0	54
51	A Relative State of Health Estimation Method Based on Wavelet Analysis for Lithium-Ion Battery Cells. IEEE Transactions on Industrial Electronics, 2021, 68, 6973-6981.	7.9	54
52	Adaptive mode switch strategy based on simulated annealing optimization of a multi-mode hybrid energy storage system for electric vehicles. Applied Energy, 2017, 194, 596-608.	10.1	53
53	Constant current charging time based fast state-of-health estimation for lithium-ion batteries. Energy, 2022, 247, 123556.	8.8	53
54	Thermal performance of a liquid-immersed battery thermal management system for lithium-ion pouch batteries. Journal of Energy Storage, 2022, 46, 103835.	8.1	52

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55	Unlocking the Electrochemical-Mechanical Coupling Behaviors of Dendrite Growth and Crack Propagation in All-Solid-State Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2101807.	19.5	51
56	Coupled crack propagation and dendrite growth in solid electrolyte of all-solid-state battery. <i>Nano Energy</i> , 2021, 86, 106057.	16.0	51
57	Effects of architecture level on mechanical properties of hierarchical lattice materials. <i>International Journal of Mechanical Sciences</i> , 2019, 157-158, 282-292.	6.7	49
58	Multiphysics coupled computational model for commercialized Si/graphite composite anode. <i>Journal of Power Sources</i> , 2020, 450, 227667.	7.8	49
59	SOC Based Battery Cell Balancing with a Novel Topology and Reduced Component Count. <i>Energies</i> , 2013, 6, 2726-2740.	3.1	46
60	A Method to Simultaneously Detect the Current Sensor Fault and Estimate the State of Energy for Batteries in Electric Vehicles. <i>Sensors</i> , 2016, 16, 1328.	3.8	45
61	Experimental and macroscopic investigation of dynamic crack patterns in PVB laminated glass sheets subject to light-weight impact. <i>Engineering Failure Analysis</i> , 2011, 18, 1605-1612.	4.0	43
62	Implementation of an estimator-based adaptive sliding mode control strategy for a boost converter based battery/supercapacitor hybrid energy storage system in electric vehicles. <i>Energy Conversion and Management</i> , 2017, 151, 562-572.	9.2	43
63	Different driving mechanisms of in-plane cracking on two brittle layers of laminated glass. <i>International Journal of Impact Engineering</i> , 2014, 69, 80-85.	5.0	42
64	Unlocking the significant role of shell material for lithium-ion battery safety. <i>Materials and Design</i> , 2018, 160, 601-610.	7.0	42
65	Planar Growth, Integration, and Applications of Semiconducting Nanowires. <i>Advanced Materials</i> , 2020, 32, e1903945.	21.0	42
66	Highly Sensitive Ammonia Gas Detection at Room Temperature by Integratable Silicon Nanowire Field-Effect Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 14377-14384.	8.0	42
67	Are electric self-balancing scooters safe in vehicle crash accidents?. <i>Accident Analysis and Prevention</i> , 2016, 87, 102-116.	5.7	41
68	Crack analysis in PVB laminated windshield impacted by pedestrian head in traffic accident. <i>International Journal of Crashworthiness</i> , 2009, 14, 63-71.	1.9	40
69	Unlocking multiphysics design guidelines on Si/C composite nanostructures for high-energy-density and robust lithium-ion battery anode. <i>Nano Energy</i> , 2021, 81, 105591.	16.0	40
70	Quantifying and modeling of stress-driven short-circuits in lithium-ion batteries in electrified vehicles. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7102-7113.	10.3	40
71	Simulative investigation on head injuries of electric self-balancing scooter riders subject to ground impact. <i>Accident Analysis and Prevention</i> , 2016, 89, 128-141.	5.7	39
72	A simplified fractional order impedance model and parameter identification method for lithium-ion batteries. <i>PLoS ONE</i> , 2017, 12, e0172424.	2.5	39

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73	Modeling framework for multiphysics-multiscale behavior of Si/C composite anode. <i>Journal of Power Sources</i> , 2020, 449, 227501.	7.8	39
74	Toughening mechanism of coelacanth-fish-inspired double-helicoidal composites. <i>Composites Science and Technology</i> , 2021, 205, 108650.	7.8	39
75	A candidate of mechanical energy mitigation system: Dynamic and quasi-static behaviors and mechanisms of zeolite H <sub>2</sub> O/water system. <i>Materials &amp; Design</i> , 2015, 66, 545-551.	5.1	38
76	Investigation of dynamic multi-cracking behavior in PVB laminated glass plates. <i>International Journal of Impact Engineering</i> , 2017, 100, 62-74.	5.0	38
77	A multiphysics understanding of internal short circuit mechanisms in lithium-ion batteries upon mechanical stress abuse. <i>Energy Storage Materials</i> , 2022, 45, 667-679.	18.0	38
78	A Multiphysics Computational Framework for Cylindrical Battery Behavior upon Mechanical Loading Based on LS-DYNA. <i>Journal of the Electrochemical Society</i> , 2019, 166, A1160-A1169.	2.9	36
79	Energy-harvesting variable/constant damping suspension system with motor based electromagnetic damper. <i>Energy</i> , 2019, 189, 116199.	8.8	35
80	Deformation and failure behaviors of anode in lithium-ion batteries: Model and mechanism. <i>Journal of Power Sources</i> , 2020, 448, 227468.	7.8	35
81	Systematic experimental study on mechanical behavior of PVB (polyvinyl butyral) material under various loading conditions. <i>Polymer Engineering and Science</i> , 2012, 52, 1137-1147.	3.1	34
82	Flax fiber-reinforced composite lattice cores: A low-cost and recyclable approach. <i>Materials and Design</i> , 2017, 133, 444-454.	7.0	34
83	A Sliding Mode Observer SOC Estimation Method Based on Parameter Adaptive Battery Model. <i>Energy Procedia</i> , 2016, 88, 619-626.	1.8	33
84	The Adaptive Fading Extended Kalman Filter SOC Estimation Method for Lithium-ion Batteries. <i>Energy Procedia</i> , 2018, 145, 357-362.	1.8	33
85	A Simultaneous Multiscale and Multiphysics Model and Numerical Implementation of a Core-Shell Model for Lithium-Ion Full-Cell Batteries. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2019, 86, .	2.2	33
86	A Hybrid Self-Heating Method for Batteries Used at Low Temperature. <i>IEEE Transactions on Industrial Informatics</i> , 2021, 17, 4714-4723.	11.3	33
87	Computation modeling of laminated crack glass windshields subjected to headform impact. <i>Computers and Structures</i> , 2017, 193, 139-154.	4.4	31
88	Exploring the mechanisms of vehicle front-end shape on pedestrian head injuries caused by ground impact. <i>Accident Analysis and Prevention</i> , 2017, 106, 285-296.	5.7	30
89	A High Power Low-Cost Balancing System for Battery Strings. <i>Energy Procedia</i> , 2019, 158, 2948-2953.	1.8	30
90	Cracks of Silicon Nanoparticles in Anodes: Mechanics-Electrochemical-Coupled Modeling Framework Based on the Phase-Field Method. <i>ACS Applied Energy Materials</i> , 2020, 3, 10931-10939.	5.1	30

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91	Multi-scale short circuit resistance estimation method for series connected battery strings. <i>Energy</i> , 2020, 202, 117647.	8.8	30
92	Investigation of effects of design parameters on the internal short-circuit in cylindrical lithium-ion batteries. <i>RSC Advances</i> , 2017, 7, 14360-14371.	3.6	29
93	Dynamic compressive behavior of woven flax-epoxy-laminated composites. <i>International Journal of Impact Engineering</i> , 2018, 117, 63-74.	5.0	29
94	Multiscale topology optimization for non-uniform microstructures with hybrid cellular automata. <i>Structural and Multidisciplinary Optimization</i> , 2020, 62, 757-770.	3.5	28
95	Tough Nature-Inspired Helicoidal Composites with Printing-Induced Voids. <i>Cell Reports Physical Science</i> , 2020, 1, 100109.	5.6	27
96	Insights into the Li Diffusion Mechanism in Si/C Composite Anodes for Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 21362-21370.	8.0	27
97	State-of-health Estimation of Lithium-ion Battery Based on Interval Capacity. <i>Energy Procedia</i> , 2017, 105, 2342-2347.	1.8	26
98	Vibration analysis of complex fractional viscoelastic beam structures by the wave method. <i>International Journal of Mechanical Sciences</i> , 2020, 167, 105204.	6.7	26
99	Firmly standing three-dimensional radial junctions on soft aluminum foils enable extremely low cost flexible thin film solar cells with very high power-to-weight performance. <i>Nano Energy</i> , 2018, 53, 83-90.	16.0	25
100	Simplification of finite element modeling for plates structures with constrained layer damping by using single-layer equivalent material properties. <i>Composites Part B: Engineering</i> , 2019, 157, 283-288.	12.0	25
101	Uncover the underlying mechanisms of topology and structural hierarchy in energy absorption performances of bamboo-inspired tubular honeycomb. <i>Extreme Mechanics Letters</i> , 2022, 52, 101640.	4.1	25
102	A Comparison Study of the Model Based SOC Estimation Methods for Lithium-Ion Batteries. , 2013, , .		24
103	Carbon corrosion behaviors and the mechanical properties of proton exchange membrane fuel cell cathode catalyst layer. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 23519-23525.	7.1	24
104	Wavelet Based Denoising for the Estimation of the State of Charge for Lithium-Ion Batteries. <i>Energies</i> , 2018, 11, 1144.	3.1	23
105	Light but tough bio-inherited materials: Luffa sponge based nickel-plated composites. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 94, 10-18.	3.1	23
106	Experimental Study on Energy Dissipation Characteristics of ZSM-5 Zeolite/Water System. <i>Advanced Engineering Materials</i> , 2013, 15, 740-746.	3.5	22
107	Effective thermo-electro-mechanical modeling framework of lithium-ion batteries based on a representative volume element approach. <i>Journal of Energy Storage</i> , 2021, 33, 102090.	8.1	22
108	A fast state-of-health estimation method using single linear feature for lithium-ion batteries. <i>Energy</i> , 2022, 256, 124652.	8.8	22

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109	Fabrication of fly ash cenospheres-hollow glass microspheres/borosilicate glass composites for high temperature application. <i>Ceramics International</i> , 2018, 44, 1147-1155.	4.8	21
110	Fabrication and multiphysics modeling of modified carbon fiber as structural anodes for lithium-ion batteries. <i>Journal of Power Sources</i> , 2020, 476, 228532.	7.8	21
111	Quantity Effect of Radial Cracks on the Cracking Propagation Behavior and the Crack Morphology. <i>PLoS ONE</i> , 2014, 9, e98196.	2.5	21
112	A novel design of a damping failure free energy-harvesting shock absorber system. <i>Mechanical Systems and Signal Processing</i> , 2019, 132, 640-653.	8.0	20
113	Design and Optimization of a Novel Microchannel Battery Thermal Management System Based on Digital Twin. <i>Energies</i> , 2022, 15, 1421.	3.1	20
114	Design of composite lattice materials combined with fabrication approaches. <i>Journal of Composite Materials</i> , 2019, 53, 393-404.	2.4	19
115	A centimeter scale self-standing two-dimensional ultra-thin mesoporous platinum nanosheet. <i>Materials Horizons</i> , 2020, 7, 489-494.	12.2	19
116	Low-speed impact mitigation of recoverable DNA-inspired double helical metamaterials. <i>International Journal of Mechanical Sciences</i> , 2019, 161-162, 105050.	6.7	18
117	Deformation and fracture behaviors of cylindrical battery shell during thermal runaway. <i>Journal of Power Sources</i> , 2022, 539, 231607.	7.8	18
118	Mechanical logic switches based on DNA-inspired acoustic metamaterials with ultrabroad low-frequency band gaps. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 465601.	2.8	17
119	Unprecedented Uniform 3D Growth Integration of 10-Layer Stacked Si Nanowires on Tightly Confined Sidewall Grooves. <i>Nano Letters</i> , 2020, 20, 7489-7497.	9.1	17
120	Fabrication and anti-crushing performance of hollow honeytubes. <i>Composites Part B: Engineering</i> , 2019, 179, 107522.	12.0	16
121	Structural integrity analysis of transmission structure in flapping-wing micro aerial vehicle via 3D printing. <i>Engineering Failure Analysis</i> , 2019, 96, 18-30.	4.0	16
122	Cylindrical Line-Feeding Growth of Free-Standing Silicon Nanohelices as Elastic Springs and Resonators. <i>Nano Letters</i> , 2020, 20, 5072-5080.	9.1	16
123	Dynamic response of internally nested hemispherical shell system to impact loading. <i>Thin-Walled Structures</i> , 2017, 120, 29-37.	5.3	15
124	Rapid Estimation Method for State of Charge of Lithium-Ion Battery Based on Fractional Continual Variable Order Model. <i>Energies</i> , 2018, 11, 714.	3.1	15
125	Dynamic mechanical behavior and pedestrian safety characteristics of toughened laminated windshield. <i>Composites Part B: Engineering</i> , 2019, 163, 740-751.	12.0	15
126	Design, Shaping, and Assembly of Free-Standing Silicon Nanoprobes. <i>Nano Letters</i> , 2021, 21, 2773-2779.	9.1	15



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127	A stack pressure based equivalent mechanical model of lithium-ion pouch batteries. <i>Energy</i> , 2021, 221, 119804.	8.8	15
128	Germanium quantum dot infrared photodetectors addressed by self-aligned silicon nanowire electrodes. <i>Nanotechnology</i> , 2020, 31, 145602.	2.6	14
129	Design and performance analysis of human walking induced energy recovery system by means of hydraulic energy conversion and storage. <i>Energy Conversion and Management</i> , 2020, 217, 113008.	9.2	14
130	Compound-Type Hybrid Energy Storage System and Its Mode Control Strategy for Electric Vehicles. <i>Journal of Power Electronics</i> , 2015, 15, 849-859.	1.5	14
131	A Lightweight Multichannel Direct Contact Liquid-Cooling System and Its Optimization for Lithium-Ion Batteries. <i>IEEE Transactions on Transportation Electrification</i> , 2022, 8, 2334-2345.	7.8	14
132	The Research of Memory Fault Simulation and Fault Injection Method for BIT Software Test. , 2012, , .		13
133	Constitutive Investigation on Viscoelasticity of PolyVinyl Butyral: Experiments Based on Dynamic Mechanical Analysis Method. <i>Advances in Materials Science and Engineering</i> , 2014, 2014, 1-10.	1.8	13
134	Stress Wave Propagation in Two-dimensional Buckyball Lattice. <i>Scientific Reports</i> , 2016, 6, 37692.	3.3	13
135	Enhanced up-conversion red light emission from rare earth titanium oxide nanocrystals with pyrochlore phase. <i>Optical Materials Express</i> , 2018, 8, 2643.	3.0	13
136	A soft chemistry-based route to enhanced photoluminescence of terbium ions and tin oxide nanocrystals codoped silica thin films. <i>Applied Surface Science</i> , 2018, 452, 96-101.	6.1	13
137	Novel mechanical behaviors of DNA-inspired helical structures with chirality. <i>International Journal of Mechanical Sciences</i> , 2019, 161-162, 105025.	6.7	13
138	H $\infty$ Control for Battery/Supercapacitor Hybrid Energy Storage System Used in Electric Vehicles. <i>International Journal of Automotive Technology</i> , 2019, 20, 1287-1296.	1.4	13
139	Advanced radial junction thin film photovoltaics and detectors built on standing silicon nanowires. <i>Nanotechnology</i> , 2019, 30, 302001.	2.6	13
140	Correlation between electrochemical performance degradation and catalyst structural parameters on polymer electrolyte membrane fuel cell. <i>Nanotechnology Reviews</i> , 2019, 8, 493-502.	5.8	13
141	Analytical modeling framework for performance degradation of PEM fuel cells during startup/shutdown cycles. <i>RSC Advances</i> , 2020, 10, 2216-2226.	3.6	13
142	Composite structural batteries with Co <sub>3</sub> O <sub>4</sub> /CNT modified carbon fibers as anode: Computational insights on the interfacial behavior. <i>Composites Science and Technology</i> , 2021, 201, 108495.	7.8	13
143	A Three-Heat-Source Electro-Thermal Coupled Model for Fast Estimation of the Temperature Distribution of a Lithium-Ion Battery Cell. <i>IEEE Transactions on Transportation Electrification</i> , 2022, 8, 288-297.	7.8	13
144	Investigation of energy transfer mechanisms in rare-earth doped amorphous silica films embedded with tin oxide nanocrystals. <i>Optics Express</i> , 2019, 27, 2783.	3.4	13

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145	Molecular dynamics simulation of impact response of buckyballs. <i>Mechanics Research Communications</i> , 2013, 49, 8-12.	1.8	12
146	A Hybrid Criterion Based Balancing Strategy for Battery Energy Storage Systems. <i>Energy Procedia</i> , 2016, 103, 225-230.	1.8	12
147	Solitary Wave in One-dimensional Buckyball System at Nanoscale. <i>Scientific Reports</i> , 2016, 6, 21052.	3.3	12
148	Quantitative tuning nanoscale solitary waves. <i>Carbon</i> , 2017, 111, 62-66.	10.3	12
149	Numerical Investigation on Head and Brain Injuries Caused by Windshield Impact on Riders Using Electric Self-Balancing Scooters. <i>Applied Bionics and Biomechanics</i> , 2018, 2018, 1-15.	1.1	12
150	Doping effect in Si nanocrystals. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 233002.	2.8	12
151	Doping-Free Titanium Nitride Carrier Selective Contacts for Efficient Organic-Inorganic Hybrid Solar Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 9208-9215.	5.1	12
152	Enhanced Near-Infrared Perovskite Light-Emitting Devices by Introducing Choline Chloride Layer. <i>Advanced Optical Materials</i> , 2021, 9, 2100636.	7.3	12
153	Digital Twin-Based Automated Guided Vehicle Scheduling: A Solution for Its Charging Problems. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 3354.	2.5	12
154	Failure assessment of a hard brittle coating on a ductile substrate subjected to cyclic contact loading. <i>Engineering Failure Analysis</i> , 2015, 57, 118-128.	4.0	11
155	The impact mitigation of a heterojunction nanotube-water system: behavior and mechanism. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 7395-7403.	2.8	11
156	Enhanced Broadband Plasmonic Absorbers with Tunable Light Management on Flexible Tapered Metasurface. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 56178-56185.	8.0	11
157	Safety probability based multi-objective optimization of energy-harvesting suspension system. <i>Energy</i> , 2020, 209, 118362.	8.8	11
158	Achieving a Record Open-Circuit Voltage for Organic/Si Hybrid Solar Cells by Improving Junction Quality. <i>Solar Rrl</i> , 2021, 5, 2100255.	5.8	11
159	Mechanism of Water Infiltration and Defiltration through ZSM-5 Zeolite: Heating and Sodium Chloride Concentration Effect. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-7.	2.7	10
160	Exploring high-energy and mechanically robust anode materials based on doped graphene for lithium-ion batteries: a first-principles study. <i>RSC Advances</i> , 2020, 10, 13662-13668.	3.6	10
161	Tunable traveling wave properties in one-dimensional chains composed from hollow cylinders: From compression to rarefaction waves. <i>International Journal of Mechanical Sciences</i> , 2021, 191, 106073.	6.7	10
162	Coupling Effect of State-of-Charge and Strain Rate on the Mechanical Behavior of Electrodes of 21700 Lithium-Ion Battery. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2021, 18, .	2.1	10

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163	Low power consumption light emitting device containing $\text{TiO}_2:\text{Er}^{3+}$ thin film prepared by sol-gel method. <i>Optics Express</i> , 2020, 28, 6064.	3.4	10
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