

Shengnan He

List of Publications by Year in descending order

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64
papers

3,184
citations

172207

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149479

56
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all docs

64
docs citations

64
times ranked

4612
citing authors

#	ARTICLE	IF	CITATIONS
1	Sustainably powering wearable electronics solely by biomechanical energy. <i>Nature Communications</i> , 2016, 7, 12744.	5.8	483
2	All-Plastic Materials Based Self-Charging Power System Composed of Triboelectric Nanogenerators and Supercapacitors. <i>Advanced Functional Materials</i> , 2016, 26, 1070-1076.	7.8	190
3	Stretchable and Waterproof Self-Charging Power System for Harvesting Energy from Diverse Deformation and Powering Wearable Electronics. <i>ACS Nano</i> , 2016, 10, 6519-6525.	7.3	182
4	Template-free prepared micro/nanostructured polypyrrole with ultrafast charging/discharging rate and long cycle life. <i>Journal of Power Sources</i> , 2011, 196, 2373-2379.	4.0	141
5	The effect of various electrolyte cations on electrochemical performance of polypyrrole/RGO based supercapacitors. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 28666-28673.	1.3	140
6	Synthesis and electrochemical characterization of multi-cations doped spinel LiMn ₂ O ₄ used for lithium ion batteries. <i>Journal of Power Sources</i> , 2012, 199, 214-219.	4.0	135
7	Electrochemical in situ polymerization of reduced graphene oxide/polypyrrole composite with high power density. <i>Journal of Power Sources</i> , 2012, 208, 138-143.	4.0	118
8	Morphology controllable nano-sheet polypyrrole-graphene composites for high-rate supercapacitor. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 19885-19894.	1.3	100
9	Graphene oxide sheets-induced growth of nanostructured Fe ₃ O ₄ for a high-performance anode material of lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 12938-12946.	5.2	98
10	Low-Cost Al ₂ O ₃ Coating Layer As a Preformed SEI on Natural Graphite Powder To Improve Coulombic Efficiency and High-Rate Cycling Stability of Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 6512-6519.	4.0	89
11	Self-Powered Electrochemical Synthesis of Polypyrrole from the Pulsed Output of a Triboelectric Nanogenerator as a Sustainable Energy System. <i>Advanced Functional Materials</i> , 2016, 26, 3542-3548.	7.8	87
12	Electrochemical properties of tetravalent Ti-doped spinel LiMn ₂ O ₄ . <i>Journal of Solid State Electrochemistry</i> , 2011, 15, 1263-1269.	1.2	80
13	Facile strategy of hollow polyaniline nanotubes supported on Ti ₃ C ₂ -MXene nanosheets for High-performance symmetric supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2020, 580, 601-613.	5.0	76
14	Electrochemically exfoliated high-yield graphene in ambient temperature molten salts and its application for flexible solid-state supercapacitors. <i>Carbon</i> , 2018, 127, 392-403.	5.4	75
15	High charge/discharge rate polypyrrole films prepared by pulse current polymerization. <i>Synthetic Metals</i> , 2010, 160, 1826-1831.	2.1	72
16	Microwave-Assisted Synthesis of SnO ₂ @polypyrrole Nanotubes and Their Pyrolyzed Composite as Anode for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15598-15606.	4.0	65
17	Polyaniline with high crystallinity degree: Synthesis, structure, and electrochemical properties. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	1.3	63
18	Simultaneous Electrochemical Dual-Electrode Exfoliation of Graphite toward Scalable Production of High-Quality Graphene. <i>Advanced Functional Materials</i> , 2019, 29, 1902171.	7.8	63

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19	High performance $\text{LiV}_{0.96}\text{Mn}_{0.04}\text{PO}_4/\text{C}$ cathodes for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 2501.	5.2	62
20	Fluorophosphates from Solid-State Synthesis and Electrochemical Ion Exchange: NaVPO_4F or $\text{Na}_3\text{V}_2(\text{PO}_4)_2\text{F}_3$?. <i>Advanced Energy Materials</i> , 2018, 8, 1801064.	10.2	57
21	Toward a high specific power and high stability polypyrrole supercapacitors. <i>Synthetic Metals</i> , 2011, 161, 1141-1144.	2.1	55
22	Enhanced ionic conductivity of an $\text{F}^{\text{•}}$ -assisted $\text{Na}_3\text{Zr}_2\text{Si}_2\text{PO}_{12}$ solid electrolyte for solid-state sodium batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12594-12602.	5.2	52
23	Sodium substitution for partial lithium to significantly enhance the cycling stability of Li_2MnO_3 cathode material. <i>Journal of Power Sources</i> , 2013, 243, 78-87.	4.0	50
24	Excellent stability of spinel LiMn_2O_4 -based composites for lithium ion batteries. <i>Journal of Materials Chemistry</i> , 2012, 22, 24563.	6.7	48
25	The composite rods of MnO and multi-walled carbon nanotubes as anode materials for lithium ion batteries. <i>Journal of Power Sources</i> , 2013, 244, 690-694.	4.0	47
26	Towards low-cost, high energy density Li_2MnO_3 cathode materials. <i>Journal of Materials Chemistry A</i> , 2015, 3, 670-679.	5.2	44
27	Double roles of aluminium ion on surface-modified spinel $\text{LiMn}_{1.97}\text{Ti}_{0.03}\text{O}_4$. <i>Journal of Materials Chemistry</i> , 2011, 21, 4937.	6.7	34
28	ZnO nanorod arrays grown on $\text{g-C}_3\text{N}_4$ micro-sheets for enhanced visible light photocatalytic H_2 evolution. <i>RSC Advances</i> , 2019, 9, 24483-24488.	1.7	32
29	Polymer-derived carbon nanofiber network supported SnO_2 nanocrystals: a superior lithium secondary battery material. <i>Journal of Materials Chemistry</i> , 2011, 21, 19302.	6.7	30
30	Electrochemical capacitance of the composite of poly (3,4-ethylenedioxythiophene) and functionalized single-walled carbon nanotubes. <i>Journal of Solid State Electrochemistry</i> , 2008, 12, 947-952.	1.2	28
31	Electropolymerized composite film of polypyrrole and functionalized multi-walled carbon nanotubes: effect of functionalization time on capacitive performance. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 1781-1789.	1.2	28
32	One-step Preparation of Nanoarchitected TiO_2 on Porous Al as Integrated Anode for High-performance Lithium-ion Batteries. <i>Scientific Reports</i> , 2016, 6, 20138.	1.6	27
33	Electrochemical co-deposition and characterization of MnO_2/SWNT composite for supercapacitor application. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 1913-1920.	1.1	26
34	Surface Modification of Al Foils for Aluminum Electrolytic Capacitor. <i>Advanced Functional Materials</i> , 2017, 27, 1606042.	7.8	22
35	Enhanced redox kinetics of polysulfides by nano-rod FeOOH for ultrastable lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 19544-19554.	5.2	22
36	$\text{Mg}^{2+}/\text{F}^{\text{•}}$ Synergy to Enhance the Ionic Conductivity of $\text{Na}_3\text{Zr}_2\text{Si}_2\text{PO}_{12}$ Solid Electrolyte for Solid-State Sodium Batteries. <i>ChemElectroChem</i> , 2020, 7, 2087-2094.	1.7	21

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37	Li ₂ MnO ₃ stabilized LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode with improved performance for lithium ion batteries. Applied Surface Science, 2013, 285, 235-240.	3.1	20
38	Study of TiO ₂ -Coated Fe ₂ O ₃ Composites and the Oxygen-Defects Effect on the Application as the Anode Materials of High-Performance Li-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 11666-11673.	2.5	19
39	Capacitive characteristics of nanocomposites of conducting polypyrrole and functionalized carbon nanotubes: effects of in situ dopant and film thickness. Journal of Solid State Electrochemistry, 2010, 14, 1565-1575.	1.2	17
40	Formation of Al ₂ O ₃ /BaTiO ₃ nanocomposite oxide films on etched aluminum foil by sol-gel coating and anodizing. Journal of Sol-Gel Science and Technology, 2008, 45, 57-61.	1.1	16
41	Enhanced capacitance performance of Al ₂ O ₃ /TiO ₂ composite thin film via sol-gel using double chelators. Journal of Colloid and Interface Science, 2015, 443, 170-176.	5.0	15
42	In situ fabrication of Ni(OH) ₂ nanofibers on polypyrrole-based carbon nanotubes for high-capacitance supercapacitors. Materials Research Bulletin, 2013, 48, 1342-1345.	2.7	14
43	Double Donors Tuning Conductivity of LiVPO ₄ F for Advanced Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 38849-38858.	4.0	13
44	Biomimetic Synthesis of Wheat-shaped Manganese Oxide Nanoparticles on Carbon Nanotubes for High-capacity Lithium Storage. Energy and Environmental Materials, 2021, 4, 399-406.	7.3	13
45	Elevated Energy Density and Cyclic Stability of LiVPO ₄ F Cathode Material for High-rate Lithium Ion Batteries. ACS Applied Energy Materials, 2020, 3, 3553-3561.	2.5	13
46	Corrosion behavior of different tantalum crystal faces in NH ₄ Br ethanol solution and DFT calculation. Applied Surface Science, 2013, 280, 247-255.	3.1	12
47	The electrochemical performance of sodium-ion-modified spinel LiMn ₂ O ₄ used for lithium-ion batteries. Journal of Solid State Electrochemistry, 2014, 18, 713-719.	1.2	12
48	Graphene: Simultaneous Electrochemical Dual-Electrode Exfoliation of Graphite toward Scalable Production of High-Quality Graphene (Adv. Funct. Mater. 37/2019). Advanced Functional Materials, 2019, 29, 1970257.	7.8	11
49	Efficient Anion Fluoride-Doping Strategy to Enhance the Performance in Garnet-Type Solid Electrolyte Li ₇ La ₃ Zr ₂ O ₁₂ . ACS Applied Materials & Interfaces, 2022, 14, 2939-2948.	4.0	10
50	All-in-One Stainless Steel Mesh Oxide Composites Anode for Flexible Li-Ion Battery. Advanced Materials Technologies, 2020, 5, 2000376.	3.0	8
51	A pH-Tailored Anodic Deposition of Hydrous RuO ₂ for Supercapacitors. ChemistrySelect, 2019, 4, 8122-8128.	0.7	7
52	The effect of K-Ion on the electrochemical performance of spinel LiMn ₂ O ₄ . Electronic Materials Letters, 2015, 11, 138-142.	1.0	6
53	Suppressing Fe/Li, Ni/Li Antisite Defects in LiFePO ₄ and LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ by Optimized Synthesis Methods. ACS Applied Energy Materials, 2020, 3, 5893-5901.	2.5	6
54	Preparation and Application of Nanorod FeOOH/CNT@S Composites for High-Performance Lithium-Sulfur Batteries. ACS Applied Energy Materials, 2021, 4, 8368-8376.	2.5	5

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55	Three-dimensional embroidered ball-like Fe_2O_3 synthesised by a microwave hydrothermal method as a sulfur immobilizer for high-performance Li-S batteries. <i>Journal of Materials Chemistry C</i> , 2022, 10, 7066-7075.	2.7	5
56	Nb, F-codoped TiO_2 hollow spheres with high visible light photocatalytic activity. <i>Nanoscale Research Letters</i> , 2013, 8, 508.	3.1	4
57	Simple thermal decomposition method to synthesize $\text{LiTi}_2(\text{PO}_4)_3/\text{C}$ core-shell composite for lithium ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 1889-1894.	1.2	4
58	Synthesis and characterization of Nb, F-codoped titania nanoparticles for dye-sensitized solar cells. <i>Journal of Materials Research</i> , 2014, 29, 230-238.	1.2	3
59	Capacitive characteristics of nanocomposites of conducting polypyrrole and functionalized carbon nanotubes: pulse current synthesis and tailoring. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 1413-1420.	1.2	3
60	Facile synthesis of foamed-nickel supporting MnO_2 as binder-less electrodes for high electrochemical performance supercapacitors. <i>Journal of Nanoparticle Research</i> , 2019, 21, 1.	0.8	3
61	First-principles study on the structural stability and electronic properties of AlN/GaN heterostructure nanoribbons. <i>Superlattices and Microstructures</i> , 2013, 57, 37-43.	1.4	2
62	The effect of $\text{Na}_{0.44}\text{MnO}_2$ formation in Na^+ -modified spinel LiMn_2O_4 . <i>Electronic Materials Letters</i> , 2014, 10, 787-790.	1.0	1
63	Towards ultrafine TiO_2 nanocrystal at room temperature. <i>Journal of Sol-Gel Science and Technology</i> , 2014, 72, 310-313.	1.1	0
64	Electrochemically Prepared Poly(3,4-ethylenedioxythiophene)/Polypyrrole Films with Hollow Micro/Nanohorn Arrays as High-Efficiency Counter Electrodes for Dye-Sensitized Solar Cells. <i>ChemElectroChem</i> , 2016, 3, 1376-1383.	1.7	0