Ruiyong Chen

List of Publications by Year in descending order

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47 papers	1,857 citations	186265 28 h-index	265206 42 g-index
49 all docs	49 docs citations	49 times ranked	2521 citing authors

#	Article	IF	Citations
1	Disordered Lithiumâ€Rich Oxyfluoride as a Stable Host for Enhanced Li⁺ Intercalation Storage. Advanced Energy Materials, 2015, 5, 1401814.	19.5	162
2	Novel SnO2@ZnO hierarchical nanostructures for highly sensitive and selective NO2 gas sensing. Sensors and Actuators B: Chemical, 2018, 257, 714-727.	7.8	157
3	Redox Flow Batteries for Energy Storage: A Technology Review. Journal of Electrochemical Energy Conversion and Storage, 2018, 15, .	2.1	123
4	Microstructural impact of anodic coatings on the electrochemical chlorine evolution reaction. Physical Chemistry Chemical Physics, 2012, 14, 7392.	2.8	70
5	Li⁺ intercalation in isostructural Li₂VO₃ and Li₂VO₂F with O^{2â^'} and mixed O^{2â^'}/F^{â^'} anions. Physical Chemistry Chemical Physics, 2015, 17, 17288-17295.	2.8	67
6	First-principles calculations and experimental investigation on SnO2@ZnO heterojunction photocatalyst with enhanced photocatalytic performance. Journal of Colloid and Interface Science, 2019, 553, 613-621.	9.4	67
7	A Comparative Review of Electrolytes for Organicâ€Materialâ€Based Energyâ€Storage Devices Employing Solid Electrodes and Redox Fluids. ChemSusChem, 2020, 13, 2205-2219.	6.8	64
8	Oneâ€Step Cationic Grafting of 4â€Hydroxyâ€TEMPO and its Application in a Hybrid Redox Flow Battery with a Crosslinked PBI Membrane. ChemSusChem, 2017, 10, 3193-3197.	6.8	62
9	Structural Evolution of Li₂Fe_{1-y}Mn_ySiO₄ (y = 0, 0.2, 0.5, 1) Cathode Materials for Li-Ion Batteries upon Electrochemical Cycling. Journal of Physical Chemistry C, 2013, 117, 884-893.	3.1	56
10	Improved Voltage and Cycling for Li⁺ Intercalation in Highâ€Capacity Disordered Oxyfluoride Cathodes. Advanced Science, 2015, 2, 1500128.	11.2	56
11	A facile synthesis of encapsulated CoFe2O4 into carbon nanofibres and its application as conversion anodes for lithium ion batteries. Journal of Power Sources, 2014, 260, 205-210.	7.8	55
12	Growth mechanism and photoluminescence property of hydrothermal oriented ZnO nanostructures evolving from nanorods to nanoplates. Journal of Alloys and Compounds, 2017, 718, 161-169.	5.5	53
13	Enhanced radar and infrared compatible stealth properties in hierarchical SnO2@ZnO nanostructures. Ceramics International, 2017, 43, 3443-3447.	4.8	52
14	Ionic liquid-mediated aqueous redox flow batteries for high voltage applications. Electrochemistry Communications, 2016, 70, 56-59.	4.7	48
15	Shifting redox potential of nitroxyl radical by introducing an imidazolium substituent and its use in aqueous flow batteries. Journal of Power Sources, 2019, 418, 11-16.	7.8	44
16	â€œWater-in-ionic liquidâ€•solutions towards wide electrochemical stability windows for aqueous rechargeable batteries. Electrochimica Acta, 2018, 263, 47-52.	5.2	43
17	Anodic Electrocatalytic Coatings for Electrolytic Chlorine Production: A Review. Zeitschrift Fur Physikalische Chemie, 2013, 227, 651-666.	2.8	41
18	Toward Highâ€Voltage, Energyâ€Dense, and Durable Aqueous Organic Redox Flow Batteries: Role of the Supporting Electrolytes. ChemElectroChem, 2019, 6, 603-612.	3.4	41

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19	Microwave-assistant hydrothermal synthesis of SnO 2 @ZnO hierarchical nanostructures enhanced photocatalytic performance under visible light irradiation. Materials Research Bulletin, 2018, 106, 74-80.	5.2	38
20	Reversible Li⁺ Storage in a LiMnTiO₄ Spinel and Its Structural Transition Mechanisms. Journal of Physical Chemistry C, 2014, 118, 12608-12616.	3.1	37
21	Highâ€Voltage and Lowâ€Temperature Aqueous Supercapacitor Enabled by â€œWaterâ€inâ€Imidazolium Chlorideâ€• Electrolytes. ChemSusChem, 2018, 11, 3899-3904.	6.8	37
22	Nanoscale spinel LiFeTiO₄for intercalation pseudocapacitive Li⁺storage. Physical Chemistry Chemical Physics, 2015, 17, 1482-1488.	2.8	35
23	Charge separation and strong adsorption-enhanced MoO3 visible light photocatalytic performance. Journal of Materials Science, 2020, 55, 5808-5822.	3.7	33
24	Highâ€Performance Lowâ€Temperature Li⁺ Intercalation in Disordered Rockâ€Salt Liâ€“Crâ€“V Oxyfluorides. ChemElectroChem, 2016, 3, 892-895.	3.4	32
25	Improved All-Vanadium Redox Flow Batteries using Catholyte Additive and a Cross-linked Methylated Polybenzimidazole Membrane. ACS Applied Energy Materials, 2018, 1, 6047-6055.	5.1	32
26	Unlocking Simultaneously the Temperature and Electrochemical Windows of Aqueous Phthalocyanine Electrolytes. ACS Applied Energy Materials, 2019, 2, 3773-3779.	5.1	32
27	Element selection for crystalline inorganic solid discovery guided by unsupervised machine learning of experimentally explored chemistry. Nature Communications, 2021, 12, 5561.	12.8	32
28	Redox flow batteries for energy storage: Recent advances in using organic active materials. Current Opinion in Electrochemistry, 2020, 21, 40-45.	4.8	31
29	Advances in electrode materials for Li-based rechargeable batteries. RSC Advances, 2017, 7, 33789-33811.	3.6	30
30	An â€œinteraction-mediatingâ€•strategy towards enhanced solubility and redox properties of organics for aqueous flow batteries. Nano Energy, 2020, 69, 104464.	16.0	29
31	Redox Flow Batteries: Fundamentals and Applications. , 0, , .		27
32	Identifying the redox activity of cation-disordered Liâ€“Feâ€“Vâ€“Ti oxide cathodes for Li-ion batteries. Physical Chemistry Chemical Physics, 2016, 18, 7695-7701.	2.8	25
33	High-performance protonic ceramic fuel cell cathode using protophilic mixed ion and electron conducting material. Journal of Materials Chemistry A, 2022, 10, 2559-2566.	10.3	25
34	In situ Supported Nanoscale Ru_xTi_{1â^'x}O₂ on Anatase TiO₂ with Improved Electroactivity. Chemistry of Materials, 2010, 22, 6215-6217.	6.7	20
35	Lithiation-driven structural transition of VO2F into disordered rock-salt LixVO2F. RSC Advances, 2016, 6, 65112-65118.	3.6	19
36	Wavelet analysis of chlorine bubble evolution on electrodes with different surface morphologies. Electrochemistry Communications, 2012, 22, 16-20.	4.7	16

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37	Enhanced reaction kinetics of an aqueous Znâ€“Fe hybrid flow battery by optimizing the supporting electrolytes. Journal of Energy Storage, 2019, 25, 100883.	8.1	16
38	Imidazolium cation enabled reversibility of a hydroquinone derivative for designing aqueous redox electrolytes. Sustainable Energy and Fuels, 2020, 4, 2998-3005.	4.9	13
39	Effect of Molecular Structure and Coordinating Ions on the Solubility and Electrochemical Behavior of Quinone Derivatives for Aqueous Redox Flow Batteries. Journal of the Electrochemical Society, 2020, 167, 160502.	2.9	8
40	Polymorph of LiAlP₂O₇: Combined Computational, Synthetic, Crystallographic, and Ionic Conductivity Study. Inorganic Chemistry, 2021, 60, 14083-14095.	4.0	7
41	Extended Condensed Ultraphosphate Frameworks with Monovalent Ions Combine Lithium Mobility with High Computed Electrochemical Stability. Journal of the American Chemical Society, 2021, 143, 18216-18232.	13.7	7
42	Enhanced Longâ€Term Cathode Stability by Tuning Interfacial Nanocomposite for Intermediate Temperature Solid Oxide Fuel Cells. Advanced Materials Interfaces, 2022, 9, .	3.7	3
43	Cation Disorder and Large Tetragonal Supercell Ordering in the Li-Rich Argyrodite Li₇Zn_{0.5}SiS₆. Chemistry of Materials, 2022, 34, 4073-4087.	6.7	3
44	(De)lithiation-Induced Phase Transitions of LiMTiO4 Spinels. ECS Transactions, 2014, 61, 19-28.	0.5	1
45	Carbon-Nanofibers Encapsulated Metal Oxide Nanocomposite and Its Application as Conversion Anode Material for Lithium Ion Batteries. ECS Transactions, 2015, 64, 155-164.	0.5	1
46	Emerging Investigators in Electrochemical Energy Conversion and Storage 2018. Journal of Electrochemical Energy Conversion and Storage, 2018, 15, .	2.1	0
47	Ionic Liquids-Promoted Utilization of Redox-Active Organic Materials for Flow Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0