

Pei-Yu Hou

List of Publications by Year in descending order

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51
papers

2,367
citations

201674

27
h-index

206112

48
g-index

52
all docs

52
docs citations

52
times ranked

2637
citing authors

#	ARTICLE	IF	CITATIONS
1	Designing flexible asymmetric supercapacitor with high energy density by electrode engineering and charge matching mechanism. <i>Chemical Engineering Journal</i> , 2022, 429, 132406.	12.7	42
2	Boosting the Redox Kinetics of High-Voltage P2-Type Cathode by Radially Oriented {010} Exposed Nanoplates for High-Power Sodium-Ion Batteries. <i>Small Structures</i> , 2022, 3, 2100123.	12.0	29
3	Amorphous Ni-Co-S nanocages assembled with nanosheet arrays as cathode for high-performance zinc ion battery. <i>Chinese Chemical Letters</i> , 2022, 33, 3272-3276.	9.0	10
4	Suppressing the P2 \rightarrow P2O ₂ phase transformation and Na ⁺ /vacancy ordering of high-voltage manganese-based P2-type cathode by cationic codoping. <i>Journal of Colloid and Interface Science</i> , 2022, 611, 752-759.	9.4	18
5	An integrated approach to configure rGO/VS ₄ /S composites with improved catalysis of polysulfides for advanced lithium-sulfur batteries. <i>Chinese Chemical Letters</i> , 2022, 33, 3909-3915.	9.0	22
6	A review of interfaces within solid-state electrolytes: fundamentals, issues and advancements. <i>Chemical Engineering Journal</i> , 2022, 437, 135179.	12.7	27
7	Defect engineering in Co-doped Ni ₃ S ₂ nanosheets as cathode for high-performance aqueous zinc ion battery. <i>Journal of Materials Science and Technology</i> , 2022, 118, 190-198.	10.7	22
8	General flux-free synthesis of single crystal Ni-rich layered cathodes by employing a Li-containing spinel transition phase for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2022, 10, 16420-16429.	10.3	14
9	Research progress on the interfaces of solid-state lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9481-9505.	10.3	19
10	Boosting the electrochemical properties of Fe-based anode by the formation multiphase nanocomposite for lithium-ion batteries. <i>Chinese Chemical Letters</i> , 2021, 32, 2169-2173.	9.0	18
11	Design of Multilayered Porous Aluminum Nitride for Supercapacitor Applications. <i>Energy & Fuels</i> , 2021, 35, 12628-12636.	5.1	16
12	A new CoO/Co ₂ B/rGO nanocomposite anode with large capacitive contribution for high-efficiency and durable lithium storage. <i>Applied Surface Science</i> , 2020, 508, 144698.	6.1	12
13	Stabilizing the cationic/anionic redox chemistry of Li-rich layered cathodes by tuning the upper cut-off voltage for high energy-density lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14214-14222.	10.3	25
14	Modified Co ₄ N by B-doping for high-performance hybrid supercapacitors. <i>Nanoscale</i> , 2020, 12, 18400-18408.	5.6	28
15	Thermodynamically Metal Atom Trapping in Van der Waals Layers Enabling Multifunctional 3D Carbon Network. <i>Advanced Functional Materials</i> , 2020, 30, 2002626.	14.9	15
16	Hierarchical Li-rich oxide microspheres assembled from {010} exposed primary grains for high-rate lithium-ion batteries. <i>New Journal of Chemistry</i> , 2020, 44, 8486-8493.	2.8	9
17	Mitigating the Microcracks of High-Ni Oxides by <i>In Situ</i> Formation of Binder between Anisotropic Grains for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 13923-13930.	8.0	10
18	Hierarchically hollow structured NiCo ₂ S ₄ @NiS for high-performance flexible hybrid supercapacitors. <i>Nanoscale</i> , 2020, 12, 4686-4694.	5.6	80

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19	Construction of ZnCo ₂ S ₄ @Ni(OH) ₂ core-shell nanostructures for asymmetric supercapacitors with high energy densities. Inorganic Chemistry Frontiers, 2019, 6, 2135-2141.	6.0	41
20	High-rate and long-life lithium-ion batteries coupling surface-Al ³⁺ -enriched LiNi _{0.7} Co _{0.15} Mn _{0.15} O ₂ cathode with porous Li ₄ Ti ₅ O ₁₂ anode. Chemical Engineering Journal, 2019, 378, 122057.	12.7	21
21	A high energy-density P ₂ -Na _{2/3} [Ni _{0.3} Co _{0.1} Mn _{0.6}]O ₂ cathode with mitigated P ₂ →O ₂ transition for sodium-ion batteries. Nanoscale, 2019, 11, 2787-2794.	5.6	33
22	Mitigating the P ₂ →O ₂ phase transition of high-voltage P ₂ -Na _{2/3} [Ni _{1/3} Mn _{2/3}]O ₂ cathodes by cobalt gradient substitution for high-rate sodium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 4705-4713.	10.3	39
23	Nickel-cobalt based aqueous flexible solid state supercapacitors with high energy density by controllable surface modification. Journal of Power Sources, 2019, 427, 56-61.	7.8	62
24	Construction of Longan-like hybrid structures by anchoring nickel hydroxide on yolk-shell polypyrrole for asymmetric supercapacitors. Nano Energy, 2019, 56, 207-215.	16.0	132
25	A Carbon-Free Li ₂ TiO ₃ /Li ₂ MTi ₃ O ₈ (M=Zn ^{1/3} Co ^{2/3}) Nanocomposite as High-Rate and Long-Life Anode for Lithium-Ion Batteries. Energy Technology, 2019, 7, 1800960.	3.8	6
26	A stable layered P ₃ /P ₂ and spinel intergrowth nanocomposite as a long-life and high-rate cathode for sodium-ion batteries. Nanoscale, 2018, 10, 6671-6677.	5.6	65
27	Improving Li ⁺ Kinetics and Structural Stability of Nickel-Rich Layered Cathodes by Heterogeneous Inactive-Al ³⁺ Doping. ACS Sustainable Chemistry and Engineering, 2018, 6, 5653-5661.	6.7	60
28	Multishell Precursors Facilitated Synthesis of Concentration-Gradient Nickel-Rich Cathodes for Long-Life and High-Rate Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 24508-24515.	8.0	38
29	Micron-sized monocrystalline LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ as high-volumetric-energy-density cathode for lithium-ion batteries. Journal of Materials Chemistry A, 2018, 6, 12344-12352.	10.3	99
30	Enhanced Dye-Sensitized Solar Cell Efficiency by Insertion of a H ₃ PW ₁₂ O ₄₀ Layer Between the Transparent Conductive Oxide Layer and the Compact TiO ₂ Layer. Science of Advanced Materials, 2018, 10, 867-871.	0.7	4
31	Fabrication of ZnO/ZnFe ₂ O ₄ hollow nanocages through metal organic frameworks route with enhanced gas sensing properties. Sensors and Actuators B: Chemical, 2017, 251, 27-33.	7.8	113
32	Core-shell and concentration-gradient cathodes prepared via co-precipitation reaction for advanced lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 4254-4279.	10.3	163
33	Hierarchical flowerlike metal/metal oxide nanostructures derived from layered double hydroxides for catalysis and gas sensing. Journal of Materials Chemistry A, 2017, 5, 23999-24010.	10.3	43
34	Surface/Interfacial Structure and Chemistry of High-Energy Nickel-Rich Layered Oxide Cathodes: Advances and Perspectives. Small, 2017, 13, 1701802.	10.0	228
35	One-Step Synthesis of 3D Network-like Ni _x Co _{1-x} MoO ₄ Porous Nanosheets for High Performance Battery-type Hybrid Supercapacitors. ACS Sustainable Chemistry and Engineering, 2017, 5, 10139-10147.	6.7	66
36	Stabilizing the Electrode/Electrolyte Interface of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ through Tailoring Aluminum Distribution in Microspheres as Long-Life, High-Rate, and Safe Cathode for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 29643-29653.	8.0	133

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37	Hierarchical CuCo ₂ O ₄ @nickel-cobalt hydroxides core/shell nanoarchitectures for high-performance hybrid supercapacitors. <i>Science Bulletin</i> , 2017, 62, 1122-1131.	9.0	111
38	Mitigating the capacity and voltage decay of lithium-rich layered oxide cathodes by fabricating Ni/Mn graded surface. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24758-24766.	10.3	40
39	Li-ion batteries: Phase transition. <i>Chinese Physics B</i> , 2016, 25, 016104.	1.4	27
40	Tailoring atomic distribution in micron-sized and spherical Li-rich layered oxides as cathode materials for advanced lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7689-7699.	10.3	55
41	Understanding the Origin of Enhanced Performances in Core-Shell and Concentration-Gradient Layered Oxide Cathode Materials. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 12864-12872.	8.0	61
42	Pre-heat treatment of carbonate precursor firstly in nitrogen and then oxygen atmospheres: A new procedure to improve tap density of high-performance cathode material Li _{1.167} (Ni _{0.139} Co _{0.139} Mn _{0.556})O ₂ for lithium ion batteries. <i>Journal of Power Sources</i> , 2015, 292, 58-65.	7.8	41
43	A stable Li-deficient oxide as high-performance cathode for advanced lithium-ion batteries. <i>Chemical Communications</i> , 2015, 51, 3231-3234.	4.1	17
44	Synthesis and electrochemical characteristics of Li _{1.2} (Ni _{0.2} Mn _{0.6}) _x (Co _{0.4} Mn _{0.4}) _y (Ni _{0.2}) _z (0 ≤ x + y ≤ 1) cathode materials for lithium ion batteries. <i>RSC Advances</i> , 2015, 5, 36015-36021.	4.5	15
45	A high energy density Li-rich positive-electrode material with superior performances via a dual chelating agent co-precipitation route. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9427-9431.	10.3	36
46	Carbonate coprecipitation preparation of Li-rich layered oxides using the oxalate anion ligand as high-energy, high-power and durable cathode materials for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21219-21226.	10.3	33
47	A novel core-concentration gradient-shelled LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ as high-performance cathode for lithium-ion batteries. <i>RSC Advances</i> , 2014, 4, 15923.	3.6	31
48	Core-shell structured Li[(Ni _{0.8} Co _{0.1} Mn _{0.1}) _{0.7} (Ni _{0.45} Co _{0.1} Mn _{0.45}) _{0.3}]O ₂ cathode material for high-energy lithium ion batteries. <i>Journal of Alloys and Compounds</i> , 2014, 587, 710-716.	5.5	40
49	Design, synthesis, and performances of double-shelled LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ as cathode for long-life and safe Li-ion battery. <i>Journal of Power Sources</i> , 2014, 265, 174-181.	7.8	72
50	Design, preparation and properties of core-shelled Li{[Ni _y Co _{1-2y} Mn _y](1-x)}core{[Ni _{1/2} Mn _{1/2}] _x }shellO ₂ (0 ≤ x ≤ 0.3, 6y + 3x - 6xy = 2) as high-performance cathode for Li-ion battery. <i>Electrochimica Acta</i> , 2014, 133, 589-596.	5.2	12
51	A Novel Double-shelled LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ Cathode Material for Li-ion Batteries. <i>Chemistry Letters</i> , 2012, 41, 1712-1714.	1.3	16