

Chunnian He

List of Publications by Year in descending order

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103
papers

7,870
citations

53660

45
h-index

49773

87
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104
all docs

104
docs citations

104
times ranked

9295
citing authors

#	ARTICLE	IF	CITATIONS
1	Carbon-Encapsulated Fe ₃ O ₄ Nanoparticles as a High-Rate Lithium Ion Battery Anode Material. ACS Nano, 2013, 7, 4459-4469.	7.3	937
2	Graphene Networks Anchored with Sn@Graphene as Lithium Ion Battery Anode. ACS Nano, 2014, 8, 1728-1738.	7.3	615
3	2D Space-Confined Synthesis of Few-Layer MoS ₂ Anchored on Carbon Nanosheet for Lithium-Ion Battery Anode. ACS Nano, 2015, 9, 3837-3848.	7.3	552
4	Ultrathin Nanosheet-Induced Synthesis of 3D Transition Metal Oxides Networks for Lithium Ion Battery Anodes. Advanced Functional Materials, 2017, 27, 1605017.	7.8	284
5	Effect of amorphous FePO ₄ coating on structure and electrochemical performance of Li _{1.2} Ni _{0.13} Co _{0.13} Mn _{0.54} O ₂ as cathode material for Li-ion batteries. Journal of Power Sources, 2013, 236, 25-32.	4.0	198
6	Thermal decomposition-reduced layer-by-layer nitrogen-doped graphene/MoS ₂ /nitrogen-doped graphene heterostructure for promising lithium-ion batteries. Nano Energy, 2017, 41, 154-163.	8.2	191
7	A Top-Down Strategy toward SnSb In-Plane Nanoconfined 3D N-Doped Porous Graphene Composite Microspheres for High Performance Na-ion Battery Anode. Advanced Materials, 2018, 30, 1704670.	11.1	183
8	The superior mechanical and physical properties of nanocarbon reinforced bulk composites achieved by architecture design – A review. Progress in Materials Science, 2020, 113, 100672.	16.0	163
9	Rational design of Co ₉ S ₈ /CoO heterostructures with well-defined interfaces for lithium sulfur batteries: A study of synergistic adsorption-electrocatalysis function. Nano Energy, 2019, 60, 332-339.	8.2	156
10	Porous Graphitic Carbon Nanosheets as a High-Rate Anode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2013, 5, 9537-9545.	4.0	154
11	2D sandwich-like carbon-coated ultrathin TiO ₂ @defect-rich MoS ₂ hybrid nanosheets: Synergistic-effect-promoted electrochemical performance for lithium ion batteries. Nano Energy, 2016, 26, 541-549.	8.2	146
12	Controllable graphene incorporation and defect engineering in MoS ₂ -TiO ₂ based composites: Towards high-performance lithium-ion batteries anode materials. Nano Energy, 2017, 33, 247-256.	8.2	130
13	Achieving high strength and high ductility in metal matrix composites reinforced with a discontinuous three-dimensional graphene-like network. Nanoscale, 2017, 9, 11929-11938.	2.8	126
14	Effect of carbon nanotube (CNT) content on the properties of in-situ synthesis CNT reinforced Al composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 660, 11-18.	2.6	121
15	Metal-organic frameworks-derived honeycomb-like Co ₃ O ₄ /three-dimensional graphene networks/Ni foam hybrid as a binder-free electrode for supercapacitors. Journal of Alloys and Compounds, 2017, 693, 16-24.	2.8	120
16	1D Sub-Nanotubes with Anatase/Bronze TiO ₂ Nanocrystal Wall for High-Rate and Long-Life Sodium-Ion Batteries. Advanced Materials, 2018, 30, e1804116.	11.1	109
17	In-situ synthesis of graphene decorated with nickel nanoparticles for fabricating reinforced 6061Al matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 699, 185-193.	2.6	108
18	Sandwiched C@SnO ₂ @C hollow nanostructures as an ultralong-lifespan high-rate anode material for lithium-ion and sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 10946-10956.	5.2	107

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19	One-pot synthesis of uniform Fe ₃ O ₄ nanocrystals encapsulated in interconnected carbon nanospheres for superior lithium storage capability. <i>Carbon</i> , 2013, 57, 130-138.	5.4	106
20	Cycle performance improvement of Li-rich layered cathode material Li[Li _{0.2} Mn _{0.54} Ni _{0.13} Co _{0.13}]O ₂ by ZrO ₂ coating. <i>Surface and Coatings Technology</i> , 2013, 235, 570-576.	2.2	99
21	Effect of Interface Structure on the Mechanical Properties of Graphene Nanosheets Reinforced Copper Matrix Composites. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 37586-37601.	4.0	99
22	Soluble salt self-assembly-assisted synthesis of three-dimensional hierarchical porous carbon networks for supercapacitors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22266-22273.	5.2	98
23	Salt-template-assisted synthesis of robust 3D honeycomb-like structured MoS ₂ and its application as a lithium-ion battery anode. <i>Journal of Materials Chemistry A</i> , 2016, 4, 8734-8741.	5.2	96
24	Three-Dimensional Network of N-Doped Carbon Ultrathin Nanosheets with Closely Packed Mesopores: Controllable Synthesis and Application in Electrochemical Energy Storage. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 11720-11728.	4.0	93
25	Preparation of reduced graphene oxide/Fe ₃ O ₄ nanocomposite and its microwave electromagnetic properties. <i>Materials Letters</i> , 2013, 91, 209-212.	1.3	92
26	Fabrication of carbon nanotube reinforced Al composites with well-balanced strength and ductility. <i>Journal of Alloys and Compounds</i> , 2013, 563, 216-220.	2.8	89
27	Salt-assisted synthesis of 3D open porous g-C ₃ N ₄ decorated with cyano groups for photocatalytic hydrogen evolution. <i>Nanoscale</i> , 2018, 10, 3008-3013.	2.8	87
28	Facile synthesis of 3D few-layered MoS ₂ coated TiO ₂ nanosheet core-shell nanostructures for stable and high-performance lithium-ion batteries. <i>Nanoscale</i> , 2015, 7, 12895-12905.	2.8	85
29	Scalable synthesis of high-quality transition metal dichalcogenide nanosheets and their application as sodium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17370-17380.	5.2	72
30	A hybrid energy storage mechanism of carbonous anodes harvesting superior rate capability and long cycle life for sodium/potassium storage. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3673-3681.	5.2	70
31	Fabrication and growth mechanism of carbon nanotubes by catalytic chemical vapor deposition. <i>Materials Letters</i> , 2006, 60, 159-163.	1.3	68
32	Anomalous Interfacial Lithium Storage in Graphene/TiO ₂ for Lithium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 18147-18151.	4.0	65
33	Monodisperse multicore-shell SnSb@SnOx/SbOx@C nanoparticles space-confined in 3D porous carbon networks as high-performance anode for Li-ion and Na-ion batteries. <i>Chemical Engineering Journal</i> , 2019, 371, 356-365.	6.6	65
34	Hard-template synthesis of three-dimensional interconnected carbon networks: Rational design, hybridization and energy-related applications. <i>Nano Today</i> , 2019, 29, 100796.	6.2	64
35	Three-dimensional core-shell Fe ₂ O ₃ @ carbon/carbon cloth as binder-free anode for the high-performance lithium-ion batteries. <i>Applied Surface Science</i> , 2016, 390, 350-356.	3.1	63
36	Enhanced electrochemical performance of LiFePO ₄ cathode with in-situ chemical vapor deposition synthesized carbon nanotubes as conductor. <i>Journal of Power Sources</i> , 2012, 220, 264-268.	4.0	57

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37	Synthesis of uniformly dispersed carbon nanotube reinforcement in Al powder for preparing reinforced Al composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011, 42, 1833-1839.	3.8	56
38	Yolk-shelled Sb@C nanoconfined nitrogen/sulfur co-doped 3D porous carbon microspheres for sodium-ion battery anode with ultralong high-rate cycling. <i>Nano Energy</i> , 2019, 66, 104133.	8.2	56
39	Fabrication of Nanocarbon Composites Using In Situ Chemical Vapor Deposition and Their Applications. <i>Advanced Materials</i> , 2015, 27, 5422-5431.	11.1	55
40	Thermogravimetric analysis and TEM characterization of the oxidation and defect sites of carbon nanotubes synthesized by CVD of methane. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 473, 355-359.	2.6	54
41	Effectively reinforced load transfer and fracture elongation by forming Al ₄ C ₃ for in-situ synthesizing carbon nanotube reinforced Al matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 718, 182-189.	2.6	54
42	In-situ synthesis of graphene nanosheets coated copper for preparing reinforced aluminum matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 709, 65-71.	2.6	52
43	Mechanical properties and interfacial analysis of aluminum matrix composites reinforced by carbon nanotubes with diverse structures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 577, 120-124.	2.6	51
44	Elevated temperature compressive properties and energy absorption response of in-situ grown CNT-reinforced Al composite foams. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 690, 294-302.	2.6	51
45	Facile synthesis and electrochemical properties of continuous porous spheres assembled from defect-rich, interlayer-expanded, and few-layered MoS ₂ /C nanosheets for reversible lithium storage. <i>Journal of Power Sources</i> , 2018, 387, 16-23.	4.0	51
46	Synergistic effect of CNTs reinforcement and precipitation hardening in in-situ CNTs/Al@Cu composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 633, 103-111.	2.6	50
47	Heterostructure Engineering of Core@Shelled Sb@Sb ₂ O ₃ Encapsulated in 3D N-Doped Carbon Hollow Spheres for Superior Sodium/Potassium Storage. <i>Small</i> , 2021, 17, e2006824.	5.2	49
48	In-situ grown CNTs modified SiO ₂ /C composites as anode with improved cycling stability and rate capability for lithium storage. <i>Applied Surface Science</i> , 2018, 433, 428-436.	3.1	47
49	Carbon-coated Fe ₂ O ₃ nanocrystals with enhanced lithium storage capability. <i>Applied Surface Science</i> , 2015, 347, 178-185.	3.1	45
50	Hierarchical porous carbon with graphitic structure synthesized by a water soluble template method. <i>Materials Letters</i> , 2012, 87, 77-79.	1.3	43
51	Spatially uniform Li deposition realized by 3D continuous duct-like graphene host for high energy density Li metal anode. <i>Carbon</i> , 2020, 161, 198-205.	5.4	43
52	Space-Confined Synthesis of Three-Dimensional Boron/Nitrogen-Doped Carbon Nanotubes/Carbon Nanosheets Line-in-Wall Hybrids and Their Electrochemical Energy Storage Applications. <i>Electrochimica Acta</i> , 2016, 212, 621-629.	2.6	42
53	ZnO nanoconfined 3D porous carbon composite microspheres to stabilize lithium nucleation/growth for high-performance lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19442-19452.	5.2	42
54	An in-plane Co ₉ S ₈ @MoS ₂ heterostructure for the hydrogen evolution reaction in alkaline media. <i>Nanoscale</i> , 2019, 11, 21479-21486.	2.8	42

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55	Graphene Oxide-Assisted Synthesis of Microsized Ultrathin Single-Crystalline Anatase TiO ₂ Nanosheets and Their Application in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 2495-2504.	4.0	40
56	In situ synthesis of copper-modified graphene-reinforced aluminum nanocomposites with balanced strength and ductility. Journal of Materials Science, 2019, 54, 5498-5512.	1.7	40
57	Three-dimensional graphene anchored Fe ₂ O ₃ @C core-shell nanoparticles as supercapacitor electrodes. Journal of Alloys and Compounds, 2017, 696, 956-963.	2.8	39
58	In situ preparation of interconnected networks constructed by using flexible graphene/Sn sandwich nanosheets for high-performance lithium-ion battery anodes. Journal of Materials Chemistry A, 2015, 3, 23170-23179.	5.2	38
59	Bio-inspired three-dimensional carbon network with enhanced mass-transfer ability for supercapacitors. Carbon, 2019, 143, 728-735.	5.4	38
60	Synthesis of SiO ₂ /3D porous carbon composite as anode material with enhanced lithium storage performance. Chemical Physics Letters, 2016, 651, 19-23.	1.2	37
61	Ball-in-cage nanocomposites of metal-organic frameworks and three-dimensional carbon networks: synthesis and capacitive performance. Nanoscale, 2017, 9, 6478-6485.	2.8	37
62	Ultras-small Fe ₂ GeO ₄ nanodots anchored on interconnected carbon nanosheets as high-performance anode materials for lithium and sodium ion batteries. Applied Surface Science, 2018, 427, 670-679.	3.1	36
63	Synthesis of three-dimensional carbon networks decorated with Fe ₃ O ₄ nanoparticles as lightweight and broadband electromagnetic wave absorber. Journal of Alloys and Compounds, 2019, 776, 691-701.	2.8	36
64	Damping characteristics of Al matrix composite foams reinforced by in-situ grown carbon nanotubes. Materials Letters, 2017, 209, 68-70.	1.3	35
65	Strongly coupled hollow-oxide/phosphide hybrid coated with nitrogen-doped carbon as highly efficient electrocatalysts in alkaline for hydrogen evolution reaction. Journal of Catalysis, 2019, 377, 582-588.	3.1	35
66	Three-dimensionally hierarchical Co ₃ O ₄ /Carbon composites with high pseudocapacitance contribution for enhancing lithium storage. Electrochimica Acta, 2018, 283, 1269-1276.	2.6	34
67	Synergistic strengthening effect of in-situ synthesized WC _{1-x} nanoparticles and graphene nanosheets in copper matrix composites. Composites Part A: Applied Science and Manufacturing, 2020, 133, 105891.	3.8	34
68	The influences of synthesis temperature and Ni catalyst on the growth of carbon nanotubes by chemical vapor deposition. Materials Letters, 2008, 62, 1472-1475.	1.3	33
69	One-step synthesis of SnCo nanoconfined in hierarchical carbon nanostructures for lithium ion battery anode. Nanoscale, 2017, 9, 15856-15864.	2.8	33
70	Nitrogen-doped graphene network supported copper nanoparticles encapsulated with graphene shells for surface-enhanced Raman scattering. Nanoscale, 2015, 7, 17079-17087.	2.8	32
71	Synthesis of carbon nanostructures with different morphologies by CVD of methane. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 460-461, 255-260.	2.6	30
72	High strain rate dynamic compressive properties and deformation behavior of Al matrix composite foams reinforced by in-situ grown carbon nanotubes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 729, 487-495.	2.6	28

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73	Carbon-coated Ni ₃ Sn ₂ nanoparticles embedded in porous carbon nanosheets as a lithium ion battery anode with outstanding cycling stability. RSC Advances, 2014, 4, 49247-49256.	1.7	27
74	Interfacial effect on the electrochemical properties of the layered graphene/metal sulfide composites as anode materials for Li-ion batteries. Surface Science, 2016, 651, 10-15.	0.8	27
75	Three-dimensional porous bowl-shaped carbon cages interspersed with carbon coated Ni-Sn alloy nanoparticles as anode materials for high-performance lithium-ion batteries. New Journal of Chemistry, 2017, 41, 393-402.	1.4	26
76	Preparation of Fe ₃ O ₄ /rebar graphene composite via solvothermal route as binder free anode for lithium ion batteries. Journal of Alloys and Compounds, 2016, 661, 448-454.	2.8	25
77	Hierarchically structured carbon-coated SnO ₂ -Fe ₃ O ₄ microparticles with enhanced lithium storage performance. Applied Surface Science, 2016, 361, 1-10.	3.1	24
78	Multi-functional integration of pore P25@C@MoS ₂ core-double shell nanostructures as robust ternary anodes with enhanced lithium storage properties. Applied Surface Science, 2017, 401, 232-240.	3.1	24
79	Exceptional mechanical properties of aluminum matrix composites with heterogeneous structure induced by in-situ graphene nanosheet-Cu hybrids. Composites Part B: Engineering, 2022, 234, 109731.	5.9	24
80	Smart hybridization of Sn ₂ Nb ₂ O ₇ /SnO ₂ @3D carbon nanocomposites with enhanced sodium storage performance through self-buffering effects. Journal of Materials Chemistry A, 2017, 5, 13052-13061.	5.2	23
81	Two Birds with One Stone: A NaCl-Assisted Strategy toward MoTe ₂ Nanosheets Nanoconfined in 3D Porous Carbon Network for Sodium-Ion Battery Anode. Energy Storage Materials, 2022, 47, 591-601.	9.5	23
82	Compressive responses and strengthening mechanisms of aluminum composite foams reinforced with graphene nanosheets. Carbon, 2019, 153, 396-406.	5.4	22
83	Bismuth-antimony alloy nanoparticles encapsulated in 3D carbon framework: Synergistic effect for enhancing interfacial potassium storage. Chemical Engineering Journal, 2022, 430, 132906.	6.6	20
84	Study of aluminum powder as transition metal catalyst carrier for CVD synthesis of carbon nanotubes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 441, 266-270.	2.6	17
85	Compression-compression fatigue performance of aluminium matrix composite foams reinforced by carbon nanotubes. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 744-756.	1.7	16
86	Graphite Carbon Nanosheet-Coated Cobalt-Doped Molybdenum Carbide Nanoparticles for Efficient Alkaline Hydrogen Evolution Reaction. ACS Applied Nano Materials, 2021, 4, 372-380.	2.4	16
87	Carbon onion growth enhanced by nitrogen incorporation. Scripta Materialia, 2006, 54, 1739-1743.	2.6	15
88	In-situ space-confined catalysis for fabricating 3D mesoporous graphene and their capacitive properties. Applied Surface Science, 2018, 433, 568-574.	3.1	15
89	Fabrication of Sn-core/CNT-shell nanocable anchored interconnected carbon networks as anode material for lithium ion batteries. Materials Letters, 2018, 212, 94-97.	1.3	15
90	Recent Developments of Antimony-Based Anodes for Sodium- and Potassium-Ion Batteries. Transactions of Tianjin University, 2022, 28, 6-32.	3.3	14

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91	Preparation and mechanical properties of in-situ synthesized nano-MgAl ₂ O ₄ particles and Mg _x Al _(1-x) B ₂ whiskers co-reinforced Al matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 735, 236-242.	2.6	13
92	Octopus-Inspired Design of Apical NiS ₂ Nanoparticles Supported on Hierarchical Carbon Composites as an Efficient Host for Lithium Sulfur Batteries with High Sulfur Loading. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 17528-17537.	4.0	12
93	Simultaneously optimizing pore morphology and enhancing mechanical properties of Al-Si alloy composite foams by graphene nanosheets. <i>Journal of Materials Science and Technology</i> , 2022, 101, 60-70.	5.6	12
94	Synthesis of interconnected carbon nanosheets anchored with Fe ₃ O ₄ nanoparticles as broadband electromagnetic wave absorber. <i>Chemical Physics Letters</i> , 2019, 716, 221-226.	1.2	11
95	Ultrafine Fe ₃ N nanocrystals coupled with N doped 3D porous carbon networks induced atomically dispersed Fe for superior sodium ion storage. <i>Carbon</i> , 2022, 196, 795-806.	5.4	11
96	Self-anchored catalysts for substrate-free synthesis of metal-encapsulated carbon nano-onions and study of their magnetic properties. <i>Nano Research</i> , 2016, 9, 1159-1172.	5.8	10
97	Copper-Coated Graphene Nanoplatelets-Reinforced Al-Si Alloy Matrix Composites Fabricated by Stir Casting Method. <i>Acta Metallurgica Sinica (English Letters)</i> , 2021, 34, 111-124.	1.5	10
98	Chemical vapor deposition synthesis of carbon nanospheres over Fe-based glassy alloy particles. <i>Journal of Alloys and Compounds</i> , 2014, 617, 816-822.	2.8	9
99	Data-driven design and controllable synthesis of Pt/carbon electrocatalysts for H ₂ evolution. <i>IScience</i> , 2021, 24, 103430.	1.9	8
100	Bi-functional modular graphene network with high rate and cycling performance. <i>Journal of Power Sources</i> , 2021, 504, 230075.	4.0	5
101	Compressive Response and Energy Absorption Characteristics of In Situ Grown CNT-Reinforced Al Composite Foams. <i>Advanced Engineering Materials</i> , 2017, 19, 1700431.	1.6	4
102	NaCl Pinning Induced Ultrafine Sn Nanoparticles Anchored on Three-Dimensional Porous Carbon for Na Storage. <i>ACS Applied Energy Materials</i> , 0, , .	2.5	4
103	NaCl-pinned antimony nanoparticles combined with ion-shuttle-induced graphitized 3D carbon to boost sodium storage. <i>Cell Reports Physical Science</i> , 2022, 3, 100891.	2.8	2