Hui-Ming Cheng

List of Publications by Year
in descending order

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790	131,809	86	123
papers	citations	169 h-index	340 g-index

826	826	826	81863
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The reduction of graphene oxide. Carbon, 2012, 50, 3210-3228.	5.4	4,247
2	Advanced Materials for Energy Storage. Advanced Materials, 2010, 22, E28-62.	11.1	4,168
3	Three-dimensional flexible and conductive interconnected graphene networks grown by chemical vapour deposition. Nature Materials, 2011, 10, 424-428.	13.3	3,493
4	Grapheneâ€Like Carbon Nitride Nanosheets for Improved Photocatalytic Activities. Advanced Functional Materials, 2012, 22, 4763-4770.	7.8	3,009
5	Graphene Anchored with Co₃O₄ Nanoparticles as Anode of Lithium Ion Batteries with Enhanced Reversible Capacity and Cyclic Performance. ACS Nano, 2010, 4, 3187-3194.	7.3	2,358
6	Doped Graphene Sheets As Anode Materials with Superhigh Rate and Large Capacity for Lithium Ion Batteries. ACS Nano, 2011, 5, 5463-5471.	7.3	1,904
7	Unique Electronic Structure Induced High Photoreactivity of Sulfur-Doped Graphitic C₃N₄. Journal of the American Chemical Society, 2010, 132, 11642-11648.	6.6	1,856
8	Hydrogen Storage in Single-Walled Carbon Nanotubes at Room Temperature. Science, 1999, 286, 1127-1129.	6.0	1,795
9	Graphene-Wrapped Fe₃O₄ Anode Material with Improved Reversible Capacity and Cyclic Stability for Lithium Ion Batteries. Chemistry of Materials, 2010, 22, 5306-5313.	3.2	1,773
10	3D Aperiodic Hierarchical Porous Graphitic Carbon Material for Highâ€Rate Electrochemical Capacitive Energy Storage. Angewandte Chemie - International Edition, 2008, 47, 373-376.	7.2	1,747
11	Lightweight and Flexible Graphene Foam Composites for Highâ€Performance Electromagnetic Interference Shielding. Advanced Materials, 2013, 25, 1296-1300.	11.1	1,703
12	Graphene/metal oxide composite electrode materials for energy storage. Nano Energy, 2012, 1, 107-131.	8.2	1,669
13	Fabrication of Graphene/Polyaniline Composite Paper via In Situ Anodic Electropolymerization for High-Performance Flexible Electrode. ACS Nano, 2009, 3, 1745-1752.	7.3	1,464
14	Direct reduction of graphene oxide films into highly conductive and flexible graphene films by hydrohalic acids. Carbon, 2010, 48, 4466-4474.	5.4	1,459
15	High-Energy MnO₂ Nanowire/Graphene and Graphene Asymmetric Electrochemical Capacitors. ACS Nano, 2010, 4, 5835-5842.	7.3	1,448
16	More Reliable Lithiumâ€Sulfur Batteries: Status, Solutions and Prospects. Advanced Materials, 2017, 29, 1606823.	11.1	1,414
17	Progress in flexible lithium batteries and future prospects. Energy and Environmental Science, 2014, 7, 1307-1338.	15.6	1,312
18	Fluorographene: A Twoâ€Dimensional Counterpart of Teflon. Small, 2010, 6, 2877-2884.	5.2	1,146

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19	Anchoring Hydrous RuO₂ on Graphene Sheets for Highâ€Performance Electrochemical Capacitors. Advanced Functional Materials, 2010, 20, 3595-3602.	7.8	1,122
20	On the True Photoreactivity Order of {001}, {010}, and {101} Facets of Anatase TiO₂ Crystals. Angewandte Chemie - International Edition, 2011, 50, 2133-2137.	7.2	1,106
21	Large-area high-quality 2D ultrathin Mo2C superconducting crystals. Nature Materials, 2015, 14, 1135-1141.	13.3	1,045
22	Titania-based photocatalystsâ€"crystal growth, doping and heterostructuring. Journal of Materials Chemistry, 2010, 20, 831-843.	6.7	1,028
23	Chemical Vapor Deposition Growth and Applications of Two-Dimensional Materials and Their Heterostructures. Chemical Reviews, 2018, 118, 6091-6133.	23.0	1,000
24	Repeated growth and bubbling transfer of graphene with millimetre-size single-crystal grains using platinum. Nature Communications, 2012, 3, 699.	5.8	985
25	Oxygen Bridges between NiO Nanosheets and Graphene for Improvement of Lithium Storage. ACS Nano, 2012, 6, 3214-3223.	7.3	977
26	Reversible calcium alloying enables a practical room-temperature rechargeable calcium-ion battery with a high discharge voltage. Nature Chemistry, 2018, 10, 667-672.	6.6	971
27	Titanium Dioxide Crystals with Tailored Facets. Chemical Reviews, 2014, 114, 9559-9612.	23.0	922
28	Conductive porous vanadium nitride/graphene composite as chemical anchor of polysulfides for lithium-sulfur batteries. Nature Communications, 2017, 8, 14627.	5.8	912
29	A Grapheneâ€"Pureâ€Sulfur Sandwich Structure for Ultrafast, Longâ€Life Lithiumâ€"Sulfur Batteries. Advanced Materials, 2014, 26, 625-631.	11.1	908
30	Efficient Preparation of Large-Area Graphene Oxide Sheets for Transparent Conductive Films. ACS Nano, 2010, 4, 5245-5252.	7.3	869
31	Selfâ€Assembled Freeâ€Standing Graphite Oxide Membrane. Advanced Materials, 2009, 21, 3007-3011.	11.1	868
32	Crystal facet engineering of semiconductor photocatalysts: motivations, advances and unique properties. Chemical Communications, 2011, 47, 6763.	2.2	867
33	Grapheneâ€"Cellulose Paper Flexible Supercapacitors. Advanced Energy Materials, 2011, 1, 917-922.	10.2	831
34	Synthesis of Graphene Sheets with High Electrical Conductivity and Good Thermal Stability by Hydrogen Arc Discharge Exfoliation. ACS Nano, 2009, 3, 411-417.	7.3	807
35	An Amorphous Carbon Nitride Photocatalyst with Greatly Extended Visibleâ€Lightâ€Responsive Range for Photocatalytic Hydrogen Generation. Advanced Materials, 2015, 27, 4572-4577.	11.1	771
36	Carbonâ€"sulfur composites for Liâ€"S batteries: status and prospects. Journal of Materials Chemistry A, 2013, 1, 9382.	5.2	757

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37	Flexible graphene-based lithium ion batteries with ultrafast charge and discharge rates. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17360-17365.	3.3	728
38	Fibrous Hybrid of Graphene and Sulfur Nanocrystals for High-Performance Lithiumâ€“Sulfur Batteries. ACS Nano, 2013, 7, 5367-5375.	7.3	722
39	Large-scale and low-cost synthesis of single-walled carbon nanotubes by the catalytic pyrolysis of hydrocarbons. Applied Physics Letters, 1998, 72, 3282-3284.	1.5	678
40	Purification of carbon nanotubes. Carbon, 2008, 46, 2003-2025.	5.4	660
41	Increasing the Visible Light Absorption of Graphitic Carbon Nitride (Melon) Photocatalysts by Homogeneous Selfâ€Modification with Nitrogen Vacancies. Advanced Materials, 2014, 26, 8046-8052.	11.1	658
42	Synthesis of high-quality graphene with a pre-determined number of layers. Carbon, 2009, 47, 493-499.	5.4	650
43	Field Emission of Singleâ€Layer Graphene Films Prepared by Electrophoretic Deposition. Advanced Materials, 2009, 21, 1756-1760.	11.1	624
44	Battery Performance and Photocatalytic Activity of Mesoporous Anatase TiO₂ Nanospheres/Graphene Composites by Templateâ€Free Selfâ€Assembly. Advanced Functional Materials, 2011, 21, 1717-1722.	7.8	601
45	Carbon Nanotubes and Graphene for Flexible Electrochemical Energy Storage: from Materials to Devices. Advanced Materials, 2016, 28, 4306-4337.	11.1	595
46	Visible Light Responsive Nitrogen Doped Anatase TiO₂ Sheets with Dominant {001} Facets Derived from TiN. Journal of the American Chemical Society, 2009, 131, 12868-12869.	6.6	570
47	Nitrogen Vacancy-Promoted Photocatalytic Activity of Graphitic Carbon Nitride. Journal of Physical Chemistry C, 2012, 116, 11013-11018.	1.5	570
48	Chemical vapor deposition of layered two-dimensional MoSi ₂ N ₄ materials. Science, 2020, 369, 670-674.	6.0	556
49	A Flexible Sulfurâ€Grapheneâ€Polypropylene Separator Integrated Electrode for Advanced Liâ€“S Batteries. Advanced Materials, 2015, 27, 641-647.	11.1	545
50	The Fabrication, Properties, and Uses of Graphene/Polymer Composites. Macromolecular Chemistry and Physics, 2012, 213, 1060-1077.	1.1	537
51	Hydrogen storage in carbon nanotubes. Carbon, 2001, 39, 1447-1454.	5.4	532
52	A graphene foam electrode with high sulfur loading for flexible and high energy Li-S batteries. Nano Energy, 2015, 11, 356-365.	8.2	526
53	Synthesis and Electrochemical Property of Boron-Doped Mesoporous Carbon in Supercapacitor. Chemistry of Materials, 2008, 20, 7195-7200.	3.2	511
54	Selective Breaking of Hydrogen Bonds of Layered Carbon Nitride for Visible Light Photocatalysis. Advanced Materials, 2016, 28, 6471-6477.	11.1	507

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55	Hollow Nanostructures for Photocatalysis: Advantages and Challenges. Advanced Materials, 2019, 31, e1801369.	11.1	506
56	Carbon materials for Liâ€“S batteries: Functional evolution and performance improvement. Energy Storage Materials, 2016, 2, 76-106.	9.5	504
57	High Sensitivity Gas Detection Using a Macroscopic Three-Dimensional Graphene Foam Network. Scientific Reports, 2011, 1, 166.	1.6	503
58	3D Grapheneâ€Foamâ€“Reducedâ€Grapheneâ€Oxide Hybrid Nested Hierarchical Networks for Highâ€Performance Liâ€“S Batteries. Advanced Materials, 2016, 28, 1603-1609.	11.1	497
59	3D Interconnected Electrode Materials with Ultrahigh Areal Sulfur Loading for Liâ€“S Batteries. Advanced Materials, 2016, 28, 3374-3382.	11.1	488
60	Synergistic Effects of B/N Doping on the Visibleâ€Light Photocatalytic Activity of Mesoporous TiO₂. Angewandte Chemie - International Edition, 2008, 47, 4516-4520.	7.2	484
61	Graphene sponge for efficient and repeatable adsorption and desorption of water contaminations. Journal of Materials Chemistry, 2012, 22, 20197.	6.7	478
62	Enhanced photocatalytic hydrogen evolution by prolonging the lifetime of carriers in ZnO/CdS heterostructures. Chemical Communications, 2009, , 3452.	2.2	476
63	Incorporation of Graphenes in Nanostructured TiO₂ Films via Molecular Grafting for Dye-Sensitized Solar Cell Application. ACS Nano, 2010, 4, 3482-3488.	7.3	471
64	A flexible nanostructured sulphurâ€“carbon nanotube cathode with high rate performance for Li-S batteries. Energy and Environmental Science, 2012, 5, 8901.	15.6	468
65	Green synthesis of graphene oxide byÂseconds timescale water electrolytic oxidation. Nature Communications, 2018, 9, 145.	5.8	468
66	Atomically Dispersed Transition Metals on Carbon Nanotubes with Ultrahigh Loading for Selective Electrochemical Carbon Dioxide Reduction. Advanced Materials, 2018, 30, e1706287.	11.1	459
67	Preparation of 2D material dispersions and their applications. Chemical Society Reviews, 2018, 47, 6224-6266.	18.7	459
68	Hierarchical porous nickel oxide and carbon as electrode materials for asymmetric supercapacitor. Journal of Power Sources, 2008, 185, 1563-1568.	4.0	439
69	Morphology and surface chemistry engineering toward pH-universal catalysts for hydrogen evolution at high current density. Nature Communications, 2019, 10, 269.	5.8	431
70	Highly stable graphene-oxide-based membranes with superior permeability. Nature Communications, 2018, 9, 1486.	5.8	428
71	Biological technologies for the remediation of co-contaminated soil. Critical Reviews in Biotechnology, 2017, 37, 1062-1076.	5.1	423
72	Î±-Sulfur Crystals as a Visible-Light-Active Photocatalyst. Journal of the American Chemical Society, 2012, 134, 9070-9073.	6.6	422

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73	Ligand-assisted cation-exchange engineering for high-efficiency colloidal Cs1â^'xFAxPbI3 quantum dot solar cells with reduced phase segregation. Nature Energy, 2020, 5, 79-88.	19.8	412
74	Nanosized anatase TiO2 single crystals for enhanced photocatalytic activity. Chemical Communications, 2010, 46, 755-757.	2.2	403
75	Facile Hydrothermal Synthesis of Z-Scheme Bi₂Fe₄O₉/Bi₂WO₆ Heterojunction Photocatalyst with Enhanced Visible Light Photocatalytic Activity. ACS Applied Materials & Interfaces, 2018, 10, 18824-18836.	4.0	397
76	The global growth of graphene. Nature Nanotechnology, 2014, 9, 726-730.	15.6	391
77	Carbon Nanotubes and Related Nanomaterials: Critical Advances and Challenges for Synthesis toward Mainstream Commercial Applications. ACS Nano, 2018, 12, 11756-11784.	7.3	388
78	A red anatase TiO2 photocatalyst for solar energy conversion. Energy and Environmental Science, 2012, 5, 9603.	15.6	379
79	CdSâ€“mesoporous ZnS coreâ€“shell particles for efficient and stable photocatalytic hydrogen evolution under visible light. Energy and Environmental Science, 2014, 7, 1895.	15.6	379
80	Enhanced Photoactivity of Oxygen-Deficient Anatase TiO₂ Sheets with Dominant {001} Facets. Journal of Physical Chemistry C, 2009, 113, 21784-21788.	1.5	376
81	Air-stable and freestanding lithium alloy/graphene foil as an alternative to lithium metal anodes. Nature Nanotechnology, 2017, 12, 993-999.	15.6	376
82	Nitrogenâ€Doped Carbon Monolith for Alkaline Supercapacitors and Understanding Nitrogenâ€Induced Redox Transitions. Chemistry - A European Journal, 2012, 18, 5345-5351.	1.7	358
83	Crystal facet-dependent photocatalytic oxidation and reduction reactivity of monoclinic WO3 for solar energy conversion. Journal of Materials Chemistry, 2012, 22, 6746.	6.7	356
84	Two-Dimensional Materials for Thermal Management Applications. Joule, 2018, 2, 442-463.	11.7	353
85	Overview of the synthesis of MXenes and other ultrathin 2D transition metal carbides and nitrides. Current Opinion in Solid State and Materials Science, 2019, 23, 149-163.	5.6	353
86	25th Anniversary Article: Carbon Nanotubeâ€and Grapheneâ€Based Transparent Conductive Films for Optoelectronic Devices. Advanced Materials, 2014, 26, 1958-1991.	11.1	350
87	Ultra-thick graphene bulk supercapacitor electrodes for compact energy storage. Energy and Environmental Science, 2016, 9, 3135-3142.	15.6	347
88	Understanding the interactions between lithium polysulfides and N-doped graphene using density functional theory calculations. Nano Energy, 2016, 25, 203-210.	8.2	347
89	The Regulating Role of Carbon Nanotubes and Graphene in Lithiumâ€ion and Lithiumâ€“Sulfur Batteries. Advanced Materials, 2019, 31, e1800863.	11.1	339
90	Large-area synthesis of high-quality and uniform monolayer WS2 on reusable Au foils. Nature Communications, 2015, 6, 8569.	5.8	336

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91	Scalable Clean Exfoliation of Highâ€Quality Fewâ€Layer Black Phosphorus for a Flexible Lithium Ion Battery. Advanced Materials, 2016, 28, 510-517.	11.1	336
92	Carbon-Based Fibers for Advanced Electrochemical Energy Storage Devices. Chemical Reviews, 2020, 120, 2811-2878.	23.0	334
93	Flexible layer-structured Bi2Te3 thermoelectric on a carbon nanotube scaffold. Nature Materials, 2019, 18, 62-68.	13.3	316
94	One-Step Device Fabrication of Phosphorene and Graphene Interdigital Micro-Supercapacitors with High Energy Density. ACS Nano, 2017, 11, 7284-7292.	7.3	312
95	Megamerger in photocatalytic field: 2D g-C3N4 nanosheets serve as support of 0D nanomaterials for improving photocatalytic performance. Applied Catalysis B: Environmental, 2019, 240, 153-173.	10.8	310
96	Superhigh Electromagnetic Interference Shielding of Ultrathin Aligned Pristine Graphene Nanosheets Film. Advanced Materials, 2020, 32, e1907411.	11.1	310
97	Vertically Aligned Carbon Nanotubes Grown on Graphene Paper as Electrodes in Lithiumâ€Ion Batteries and Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2011, 1, 486-490.	10.2	309
98	Tensile strength of single-walled carbon nanotubes directly measured from their macroscopic ropes. Applied Physics Letters, 2000, 77, 3161-3163.	1.5	306
99	Nanosized Li4Ti5O12/graphene hybrid materials with low polarization for high rate lithium ion batteries. Journal of Power Sources, 2011, 196, 8610-8617.	4.0	306
100	Two-Dimensional MoS₂ Confined Co(OH)₂ Electrocatalysts for Hydrogen Evolution in Alkaline Electrolytes. ACS Nano, 2018, 12, 4565-4573.	7.3	302
101	Vertically Aligned p-Type Single-Crystalline GaN Nanorod Arrays on n-Type Si for Heterojunction Photovoltaic Cells. Nano Letters, 2008, 8, 4191-4195.	4.5	298
102	Recent advances in graphene-based planar micro-supercapacitors for on-chip energy storage. National Science Review, 2014, 1, 277-292.	4.6	298
103	Self-assembled CdS/Au/ZnO heterostructure induced by surface polar charges for efficient photocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2013, 1, 2773.	5.2	294
104	Phosphorene as a Polysulfide Immobilizer and Catalyst in Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Materials, 2017, 29, 1602734.	11.1	289
105	Fabrication of novel magnetic MnFe2O4/bio-char composite and heterogeneous photo-Fenton degradation of tetracycline in near neutral pH. Chemosphere, 2019, 224, 910-921.	4.2	287
106	Band-to-Band Visible-Light Photon Excitation and Photoactivity Induced by Homogeneous Nitrogen Doping in Layered Titanates. Chemistry of Materials, 2009, 21, 1266-1274.	3.2	284
107	The Rechargeable Aluminum Battery: Opportunities and Challenges. Angewandte Chemie - International Edition, 2019, 58, 11978-11996.	7.2	276
108	A microporousâ€“mesoporous carbon with graphitic structure for a high-rate stable sulfur cathode in carbonate solvent-based Liâ€“S batteries. Physical Chemistry Chemical Physics, 2012, 14, 8703.	1.3	273

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109	A Review of Carbon Nanotubeâ€•and Grapheneâ€Based Flexible Thinâ€Film Transistors. Small, 2013, 9, 1188-1205.	5.2	268
110	Graphitic Carbon Nitride-Based Heterojunction Photoactive Nanocomposites: Applications and Mechanism Insight. ACS Applied Materials & Interfaces, 2018, 10, 21035-21055.	4.0	266
111	Artificial Z-scheme photocatalytic system: What have been done and where to go?. Coordination Chemistry Reviews, 2019, 385, 44-80.	9.5	265
112	A 3D bi-functional porous N-doped carbon microtube sponge electrocatalyst for oxygen reduction and oxygen evolution reactions. Energy and Environmental Science, 2016, 9, 3079-3084.	15.6	260
113	Graphene-based materials for high-voltage and high-energy asymmetric supercapacitors. Energy Storage Materials, 2017, 6, 70-97.	9.5	260
114	Metal-Catalyst-Free Growth of Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2009, 131, 2082-2083.	6.6	258
115	Key Aspects of Lithium Metal Anodes for Lithium Metal Batteries. Small, 2019, 15, e1900687.	5.2	253
116	Semiconductor-based photocatalysts for photocatalytic and photoelectrochemical water splitting: will we stop with photocorrosion?. Journal of Materials Chemistry A, 2020, 8, 2286-2322.	5.2	251
117	In Situ Grown AgI/Bi₁₂O₁₇Cl₂ Heterojunction Photocatalysts for Visible Light Degradation of Sulfamethazine: Efficiency, Pathway, and Mechanism. ACS Sustainable Chemistry and Engineering, 2018, 6, 4174-4184.	3.2	249
118	Stabilized Nanoscale Zerovalent Iron Mediated Cadmium Accumulation and Oxidative Damage of Boehmeria nivea (L.) Gaudich Cultivated in Cadmium Contaminated Sediments. Environmental Science & Technology, 2017, 51, 11308-11316.	4.6	248
119	Toward More Reliable Lithiumâ€“Sulfur Batteries: An All-Graphene Cathode Structure. ACS Nano, 2016, 10, 8676-8682.	7.3	246
120	Metalâ€“Organic Frameworks (MOFs)â€Derived Nitrogenâ€Doped Porous Carbon Anchored on Graphene with Multifunctional Effects for Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2018, 28, 1707592.	7.8	246
121	Homogeneous and Fast Ion Conduction of PEOâ€Based Solidâ€State Electrolyte at Low Temperature. Advanced Functional Materials, 2020, 30, 2007172.	7.8	246
122	Tunable Band Gaps and p-Type Transport Properties of Boron-Doped Graphenes by Controllable Ion Doping Using Reactive Microwave Plasma. ACS Nano, 2012, 6, 1970-1978.	7.3	244
123	Strategies towards Lowâ€Cost Dualâ€Ion Batteries with High Performance. Angewandte Chemie - International Edition, 2020, 59, 3802-3832.	7.2	242
124	Elemental superdoping of graphene and carbon nanotubes. Nature Communications, 2016, 7, 10921.	5.8	238
125	Visible Light Photocatalyst:Â Iodine-Doped Mesoporous Titania with a Bicrystalline Framework. Journal of Physical Chemistry B, 2006, 110, 20823-20828.	1.2	236
126	Metal/Oxide Interface Nanostructures Generated by Surface Segregation for Electrocatalysis. Nano Letters, 2015, 15, 7704-7710.	4.5	233

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127	An Unusual Strong Visibleâ€Light Absorption Band in Red Anatase TiO₂ Photocatalyst Induced by Atomic Hydrogenâ€Occupied Oxygen Vacancies. Advanced Materials, 2018, 30, 1704479.	11.1	231
128	Nitrogenâ€Superdoped 3D Graphene Networks for Highâ€Performance Supercapacitors. Advanced Materials, 2017, 29, 1701677.	11.1	230
129	Stable photocatalytic hydrogen evolution from water over ZnOâ€“CdS coreâ€“shell nanorods. International Journal of Hydrogen Energy, 2010, 35, 8199-8205.	3.8	229
130	Mass production and industrial applications of graphene materials. National Science Review, 2018, 5, 90-101.	4.6	222
131	Polarized Raman Study of Single-Wall Semiconducting Carbon Nanotubes. Physical Review Letters, 2000, 85, 2617-2620.	2.9	221
132	Simultaneous Production and Functionalization of Boron Nitride Nanosheets by Sugarâ€Assisted Mechanochemical Exfoliation. Advanced Materials, 2019, 31, e1804810.	11.1	220
133	Adsorption and capillarity of nitrogen in aggregated multi-walled carbon nanotubes. Chemical Physics Letters, 2001, 345, 18-24.	1.2	213
134	Edge-controlled growth and kinetics of single-crystal graphene domains by chemical vapor deposition. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20386-20391.	3.3	213
135	Engineering dâ€p Orbital Hybridization in Singleâ€Atom Metalâ€Embedded Threeâ€Dimensional Electrodes for Liâ€“S Batteries. Advanced Materials, 2021, 33, e2105947.	11.1	209
136	Repeated and Controlled Growth of Monolayer, Bilayer and Few-Layer Hexagonal Boron Nitride on Pt Foils. ACS Nano, 2013, 7, 5199-5206.	7.3	206
137	Hydrogen adsorption behavior of graphene above critical temperature. International Journal of Hydrogen Energy, 2009, 34, 2329-2332.	3.8	203
138	A Sulfurâ€Rich Copolymer@CNT Hybrid Cathode with Dualâ€Confinement of Polysulfides for Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Materials, 2017, 29, 1603835.	11.1	202
139	Intercalated architecture of MA2Z4 family layered van der Waals materials with emerging topological, magnetic and superconducting properties. Nature Communications, 2021, 12, 2361.	5.8	199
140	Graphene: a promising 2D material for electrochemical energy storage. Science Bulletin, 2017, 62, 724-740.	4.3	198
141	A flexible ultrasensitive optoelectronic sensor array for neuromorphic vision systems. Nature Communications, 2021, 12, 1798.	5.8	198
142	Synthesis of anatase TiO2 rods with dominant reactive {010} facets for the photoreduction of CO2 to CH4 and use in dye-sensitized solar cells. Chemical Communications, 2011, 47, 8361.	2.2	196
143	Comparison of the rate capability of nanostructured amorphous and anatase TiO₂for lithium insertion using anodic TiO₂nanotube arrays. Nanotechnology, 2009, 20, 225701.	1.3	194
144	Novel Boron Nitride Hollow Nanoribbons. ACS Nano, 2008, 2, 2183-2191.	7.3	192

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145	Switching the selectivity of the photoreduction reaction of carbon dioxide by controlling the band structure of a g-C₃N₄photocatalyst. Chemical Communications, 2014, 50, 10837.	2.2	192
146	Ultrahigh-voltage integrated micro-supercapacitors with designable shapes and superior flexibility. Energy and Environmental Science, 2019, 12, 1534-1541.	15.6	192
147	ZnOâ€“CdS@Cd Heterostructure for Effective Photocatalytic Hydrogen Generation. Advanced Energy Materials, 2012, 2, 42-46.	10.2	191
148	Hydrogen storage in carbon nanotubes revisited. Carbon, 2010, 48, 452-455.	5.4	190
149	Carbonâ€Based Metalâ€Free Catalysts for Energy Storage and Environmental Remediation. Advanced Materials, 2019, 31, e1806128.	11.1	188
150	An Anionâ€Tuned Solid Electrolyte Interphase with Fast Ion Transfer Kinetics for Stable Lithium Anodes. Advanced Energy Materials, 2020, 10, 1903843.	10.2	186
151	Rosin-enabled ultraclean and damage-free transfer of graphene for large-area flexible organic light-emitting diodes. Nature Communications, 2017, 8, 14560.	5.8	184
152	Ammonia Borane Destabilized by Lithium Hydride: An Advanced Onâ€Board Hydrogen Storage Material. Advanced Materials, 2008, 20, 2756-2759.	11.1	183
153	Superhydrophobic Graphene Foams. Small, 2013, 9, 75-80.	5.2	183
154	Enhanced Photocatalytic H₂ Production in Coreâ€“Shell Engineered Rutile TiO₂. Advanced Materials, 2016, 28, 5850-5856.	11.1	183
155	Single-wall carbon nanotube network enabled ultrahigh sulfur-content electrodes for high-performance lithium-sulfur batteries. Nano Energy, 2017, 42, 205-214.	8.2	183
156	CuS Microspheres with Tunable Interlayer Space and Micropore as a Highâ€Rate and Longâ€Life Anode for Sodiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1800930.	10.2	183
157	Amorphous cobaltâ€“boron/nickel foam as an effective catalyst for hydrogen generation from alkaline sodium borohydride solution. Journal of Power Sources, 2008, 177, 17-23.	4.0	181
158	The Chemistry and Promising Applications of Graphene and Porous Graphene Materials. Advanced Functional Materials, 2020, 30, 1909035.	7.8	181
159	A highly reversible Co3S4 microsphere cathode material for aluminum-ion batteries. Nano Energy, 2019, 56, 100-108.	8.2	179
160	Amorphous TiO₂nanotube arrays for low-temperature oxygen sensors. Nanotechnology, 2008, 19, 405504.	1.3	178
161	Ultrahigh-performance transparent conductive films of carbon-welded isolated single-wall carbon nanotubes. Science Advances, 2018, 4, eaap9264.	4.7	178
162	Unique physicochemical properties of two-dimensional light absorbers facilitating photocatalysis. Chemical Society Reviews, 2018, 47, 6410-6444.	18.7	178

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163	Efficient growth of high-quality graphene films on Cu foils by ambient pressure chemical vapor deposition. Applied Physics Letters, 2010, 97, .	1.5	176
164	Scalable Fabrication of Photochemically Reduced Graphene-Based Monolithic Micro-Supercapacitors with Superior Energy and Power Densities. ACS Nano, 2017, 11, 4283-4291.	7.3	176
165	Hydrogen uptake in vapor-grown carbon nanofibers. Carbon, 1999, 37, 1649-1652.	5.4	173
166	Synthesis and upconversion luminescence of N-doped graphene quantum dots. Applied Physics Letters, 2012, 101, .	1.5	173
167	Synergistic Effect of Aligned Graphene Nanosheets in Graphene Foam for Highâ€Performance Thermally Conductive Composites. Advanced Materials, 2019, 31, e1900199.	11.1	173
168	Hollow Anatase TiO₂ Single Crystals and Mesocrystals with Dominant {101} Facets for Improved Photocatalysis Activity and Tuned Reaction Preference. ACS Catalysis, 2012, 2, 1854-1859.	5.5	172
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