Hui-Ming Cheng

List of Publications by Citations

775 papers	106,138 citations	151 h-index	309 g-index
826 ext. papers	118,739 ext. citations	12.1 avg, IF	8.75 L-index

#	Paper	IF	Citations
775	Advanced materials for energy storage. *Advanced Materials*, **2010**, 22, E28-62	24	3687
774	The reduction of graphene oxide. *Carbon*, **2012**, 50, 3210-3228	10.4	3551
773	Three-dimensional flexible and conductive interconnected graphene networks grown by chemical vapour deposition. *Nature Materials*, **2011**, 10, 424-8	27	3105
772	Graphene-Like Carbon Nitride Nanosheets for Improved Photocatalytic Activities. *Advanced Functional Materials*, **2012**, 22, 4763-4770	15.6	2446
771	Graphene anchored with co(3)o(4) nanoparticles as anode of lithium ion batteries with enhanced reversible capacity and cyclic performance. *ACS Nano*, **2010**, 4, 3187-94	16.7	2201
770	Doped graphene sheets as anode materials with superhigh rate and large capacity for lithium ion batteries. *ACS Nano*, **2011**, 5, 5463-71	16.7	1700
769	Graphene-Wrapped Fe3O4Anode Material with Improved Reversible Capacity and Cyclic Stability for Lithium Ion Batteries. *Chemistry of Materials*, **2010**, 22, 5306-5313	9.6	1660
768	Hydrogen storage in single-walled carbon nanotubes at room temperature. *Science*, **1999**, 286, 1127-9	33.3	1649
767	3D aperiodic hierarchical porous graphitic carbon material for high-rate electrochemical capacitive energy storage. *Angewandte Chemie - International Edition*, **2008**, 47, 373-6	16.4	1604
766	Unique electronic structure induced high photoreactivity of sulfur-doped graphitic C3N4. *Journal of the American Chemical Society*, **2010**, 132, 11642-8	16.4	1597
765	Graphene/metal oxide composite electrode materials for energy storage. *Nano Energy*, **2012**, 1, 107-131	17.1	1507
764	Lightweight and flexible graphene foam composites for high-performance electromagnetic interference shielding. *Advanced Materials*, **2013**, 25, 1296-300	24	1389
763	Fabrication of Graphene/Polyaniline Composite Paper via In Situ Anodic Electropolymerization for High-Performance Flexible Electrode. *ACS Nano*, **2009**, 3, 1745-52	16.7	1355
762	High-energy MnO2 nanowire/graphene and graphene asymmetric electrochemical capacitors. *ACS Nano*, **2010**, 4, 5835-42	16.7	1331
761	Direct reduction of graphene oxide films into highly conductive and flexible graphene films by hydrohalic acids. *Carbon*, **2010**, 48, 4466-4474	10.4	1305
760	Progress in flexible lithium batteries and future prospects. *Energy and Environmental Science*, **2014**, 7, 1307-1338	35.4	1103
759	More Reliable Lithium-Sulfur Batteries: Status, Solutions and Prospects. *Advanced Materials*, **2017**, 29, 1606823	24	1054

758	Anchoring Hydrous RuO2 on Graphene Sheets for High-Performance Electrochemical Capacitors. *Advanced Functional Materials*, **2010**, 20, 3595-3602	15.6	1033
757	On the true photoreactivity order of {001}, {010}, and {101} facets of anatase TiO2 crystals. *Angewandte Chemie - International Edition*, **2011**, 50, 2133-7	16.4	1004
756	Fluorographene: a two-dimensional counterpart of Teflon. *Small*, **2010**, 6, 2877-84	11	979
755	Titania-based photocatalysts□rystal growth, doping and heterostructuring. *Journal of Materials Chemistry*, **2010**, 20, 831-843		953
754	Repeated growth and bubbling transfer of graphene with millimetre-size single-crystal grains using platinum. *Nature Communications*, **2012**, 3, 699	17.4	884
753	Oxygen bridges between NiO nanosheets and graphene for improvement of lithium storage. *ACS Nano*, **2012**, 6, 3214-23	16.7	866
752	A graphene-pure-sulfur sandwich structure for ultrafast, long-life lithium-sulfur batteries. *Advanced Materials*, **2014**, 26, 625-31, 664	24	842
751	Titanium dioxide crystals with tailored facets. *Chemical Reviews*, **2014**, 114, 9559-612	68.1	796
750	Self-Assembled Free-Standing Graphite Oxide Membrane. *Advanced Materials*, **2009**, 21, 3007-3011	24	788
749	Efficient preparation of large-area graphene oxide sheets for transparent conductive films. *ACS Nano*, **2010**, 4, 5245-52	16.7	775
748	Conductive porous vanadium nitride/graphene composite as chemical anchor of polysulfides for lithium-sulfur batteries. *Nature Communications*, **2017**, 8, 14627	17.4	757
747	Crystal facet engineering of semiconductor photocatalysts: motivations, advances and unique properties. *Chemical Communications*, **2011**, 47, 6763-83	5.8	753
746	Graphene□ellulose Paper Flexible Supercapacitors. *Advanced Energy Materials*, **2011**, 1, 917-922	21.8	745
745	Synthesis of graphene sheets with high electrical conductivity and good thermal stability by hydrogen arc discharge exfoliation. *ACS Nano*, **2009**, 3, 411-7	16.7	702
744	Large-area high-quality 2D ultrathin Mo2C superconducting crystals. *Nature Materials*, **2015**, 14, 1135-41	27	674
743	Fibrous hybrid of graphene and sulfur nanocrystals for high-performance lithium-sulfur batteries. *ACS Nano*, **2013**, 7, 5367-75	16.7	670
742	Carbon□ulfur composites for Li□ batteries: status and prospects. *Journal of Materials Chemistry A*, **2013**, 1, 9382	13	664
741	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, 17360-5	11.5	653

740	Chemical Vapor Deposition Growth and Applications of Two-Dimensional Materials and Their Heterostructures. *Chemical Reviews*, **2018**, 118, 6091-6133	68.1	643
739	An Amorphous Carbon Nitride Photocatalyst with Greatly Extended Visible-Light-Responsive Range for Photocatalytic Hydrogen Generation. *Advanced Materials*, **2015**, 27, 4572-7	24	599
738	Large-scale and low-cost synthesis of single-walled carbon nanotubes by the catalytic pyrolysis of hydrocarbons. *Applied Physics Letters*, **1998**, 72, 3282-3284	3.4	591
737	Synthesis of high-quality graphene with a pre-determined number of layers. *Carbon*, **2009**, 47, 493-499	10.4	584
736	Purification of carbon nanotubes. *Carbon*, **2008**, 46, 2003-2025	10.4	570
735	Field Emission of Single-Layer Graphene Films Prepared by Electrophoretic Deposition. *Advanced Materials*, **2009**, 21, 1756-1760	24	562
734	Battery Performance and Photocatalytic Activity of Mesoporous Anatase TiO2 Nanospheres/Graphene Composites by Template-Free Self-Assembly. *Advanced Functional Materials*, **2011**, 21, 1717-1722	15.6	558
733	Visible light responsive nitrogen doped anatase TiO2 sheets with dominant {001} facets derived from TiN. *Journal of the American Chemical Society*, **2009**, 131, 12868-9	16.4	544
732	Increasing the visible light absorption of graphitic carbon nitride (melon) photocatalysts by homogeneous self-modification with nitrogen vacancies. *Advanced Materials*, **2014**, 26, 8046-52	24	521
731	Carbon Nanotubes and Graphene for Flexible Electrochemical Energy Storage: from Materials to Devices. *Advanced Materials*, **2016**, 28, 4306-37	24	481
730	Reversible calcium alloying enables a practical room-temperature rechargeable calcium-ion battery with a high discharge voltage. *Nature Chemistry*, **2018**, 10, 667-672	17.6	477
729	A graphene foam electrode with high sulfur loading for flexible and high energy Li-S batteries. *Nano Energy*, **2015**, 11, 356-365	17.1	476
728	A flexible sulfur-graphene-polypropylene separator integrated electrode for advanced Li-S batteries. *Advanced Materials*, **2015**, 27, 641-7	24	466
727	Nitrogen Vacancy-Promoted Photocatalytic Activity of Graphitic Carbon Nitride. *Journal of Physical Chemistry C*, **2012**, 116, 11013-11018	3.8	464
726	High sensitivity gas detection using a macroscopic three-dimensional graphene foam network. *Scientific Reports*, **2011**, 1, 166	4.9	457
725	Synergistic effects of B/N doping on the visible-light photocatalytic activity of mesoporous TiO2. *Angewandte Chemie - International Edition*, **2008**, 47, 4516-20	16.4	456
724	The Fabrication, Properties, and Uses of Graphene/Polymer Composites. *Macromolecular Chemistry and Physics*, **2012**, 213, 1060-1077	2.6	454
723	Hydrogen storage in carbon nanotubes. *Carbon*, **2001**, 39, 1447-1454	10.4	453

722	Synthesis and Electrochemical Property of Boron-Doped Mesoporous Carbon in Supercapacitor. *Chemistry of Materials*, **2008**, 20, 7195-7200	9.6	451
721	3D Aperiodic Hierarchical Porous Graphitic Carbon Material for High-Rate Electrochemical Capacitive Energy Storage. *Angewandte Chemie*, **2008**, 120, 379-382	3.6	441
720	3D Interconnected Electrode Materials with Ultrahigh Areal Sulfur Loading for Li-S Batteries. *Advanced Materials*, **2016**, 28, 3374-82	24	433
719	Enhanced photocatalytic hydrogen evolution by prolonging the lifetime of carriers in ZnO/CdS heterostructures. *Chemical Communications*, **2009**, 3452-4	5.8	433
718	Incorporation of graphenes in nanostructured TiO(2) films via molecular grafting for dye-sensitized solar cell application. *ACS Nano*, **2010**, 4, 3482-8	16.7	431
717	3D Graphene-Foam-Reduced-Graphene-Oxide Hybrid Nested Hierarchical Networks for High-Performance Li-S Batteries. *Advanced Materials*, **2016**, 28, 1603-9	24	430
716	Graphene sponge for efficient and repeatable adsorption and desorption of water contaminations. *Journal of Materials Chemistry*, **2012**, 22, 20197		430
715	A flexible nanostructured sulphur–carbon nanotube cathode with high rate performance for Li-S batteries. *Energy and Environmental Science*, **2012**, 5, 8901	35.4	422
714	Carbon materials for Li–S batteries: Functional evolution and performance improvement. *Energy Storage Materials*, **2016**, 2, 76-106	19.4	406
713	Hierarchical porous nickel oxide and carbon as electrode materials for asymmetric supercapacitor. *Journal of Power Sources*, **2008**, 185, 1563-1568	8.9	398
712	Selective Breaking of Hydrogen Bonds of Layered Carbon Nitride for Visible Light Photocatalysis. *Advanced Materials*, **2016**, 28, 6471-7	24	390
711	Nanosized anatase TiO2 single crystals for enhanced photocatalytic activity. *Chemical Communications*, **2010**, 46, 755-7	5.8	375
710	–Sulfur crystals as a visible-light-active photocatalyst. *Journal of the American Chemical Society*, **2012**, 134, 9070-3	16.4	370
709	Atomically Dispersed Transition Metals on Carbon Nanotubes with Ultrahigh Loading for Selective Electrochemical Carbon Dioxide Reduction. *Advanced Materials*, **2018**, 30, e1706287	24	352
708	Biological technologies for the remediation of co-contaminated soil. *Critical Reviews in Biotechnology*, **2017**, 37, 1062-1076	9.4	341
707	Enhanced Photoactivity of Oxygen-Deficient Anatase TiO2 Sheets with Dominant {001} Facets. *Journal of Physical Chemistry C*, **2009**, 113, 21784-21788	3.8	341
706	A red anatase TiO2 photocatalyst for solar energy conversion. *Energy and Environmental Science*, **2012**, 5, 9603	35.4	332
705	CdS–mesoporous ZnS core–shell particles for efficient and stable photocatalytic hydrogen evolution under visible light. *Energy and Environmental Science*, **2014**, 7, 1895	35.4	331

704	Green synthesis of graphene oxide by´seconds timescale water electrolytic oxidation. *Nature Communications*, **2018**, 9, 145	17.4	326
703	The global growth of graphene. *Nature Nanotechnology*, **2014**, 9, 726-30	28.7	323
702	Nitrogen-doped carbon monolith for alkaline supercapacitors and understanding nitrogen-induced redox transitions. *Chemistry - A European Journal*, **2012**, 18, 5345-51	4.8	317
701	25th anniversary article: carbon nanotube- and graphene-based transparent conductive films for optoelectronic devices. *Advanced Materials*, **2014**, 26, 1958-91	24	310
700	Hollow Nanostructures for Photocatalysis: Advantages and Challenges. *Advanced Materials*, **2019**, 31, e1801369	24	305
699	Crystal facet-dependent photocatalytic oxidation and reduction reactivity of monoclinic WO3 for solar energy conversion. *Journal of Materials Chemistry*, **2012**, 22, 6746		303
698	Preparation of 2D material dispersions and their applications. *Chemical Society Reviews*, **2018**, 47, 6224-6266	39.9	291
697	Air-stable and freestanding lithium alloy/graphene foil as an alternative to lithium metal anodes. *Nature Nanotechnology*, **2017**, 12, 993-999	28.7	290
696	Scalable Clean Exfoliation of High-Quality Few-Layer Black Phosphorus for a Flexible Lithium Ion Battery. *Advanced Materials*, **2016**, 28, 510-7	24	289
695	Ultra-thick graphene bulk supercapacitor electrodes for compact energy storage. *Energy and Environmental Science*, **2016**, 9, 3135-3142	35.4	284
694	Facile Hydrothermal Synthesis of Z-Scheme BiFeO/BiWO Heterojunction Photocatalyst with Enhanced Visible Light Photocatalytic Activity. *ACS Applied Materials & Interfaces*, **2018**, 10, 18824-18836	9.5	284
693	Vertically Aligned Carbon Nanotubes Grown on Graphene Paper as Electrodes in Lithium-Ion Batteries and Dye-Sensitized Solar Cells. *Advanced Energy Materials*, **2011**, 1, 486-490	21.8	279
692	Vertically aligned p-type single-crystalline GaN nanorod arrays on n-type Si for heterojunction photovoltaic cells. *Nano Letters*, **2008**, 8, 4191-5	11.5	279
691	Highly stable graphene-oxide-based membranes with superior permeability. *Nature Communications*, **2018**, 9, 1486	17.4	278
690	Nanosized Li4Ti5O12/graphene hybrid materials with low polarization for high rate lithium ion batteries. *Journal of Power Sources*, **2011**, 196, 8610-8617	8.9	277
689	Understanding the interactions between lithium polysulfides and N-doped graphene using density functional theory calculations. *Nano Energy*, **2016**, 25, 203-210	17.1	274
688	Large-area synthesis of high-quality and uniform monolayer WS2 on reusable Au foils. *Nature Communications*, **2015**, 6, 8569	17.4	273
687	Self-assembled CdS/Au/ZnO heterostructure induced by surface polar charges for efficient photocatalytic hydrogen evolution. *Journal of Materials Chemistry A*, **2013**, 1, 2773	13	270

686	Tensile strength of single-walled carbon nanotubes directly measured from their macroscopic ropes. *Applied Physics Letters*, **2000**, 77, 3161-3163	3.4	265
685	Band-to-Band Visible-Light Photon Excitation and Photoactivity Induced by Homogeneous Nitrogen Doping in Layered Titanates. *Chemistry of Materials*, **2009**, 21, 1266-1274	9.6	259
684	A microporous-mesoporous carbon with graphitic structure for a high-rate stable sulfur cathode in carbonate solvent-based Li-S batteries. *Physical Chemistry Chemical Physics*, **2012**, 14, 8703-10	3.6	258
683	One-Step Device Fabrication of Phosphorene and Graphene Interdigital Micro-Supercapacitors with High Energy Density. *ACS Nano*, **2017**, 11, 7284-7292	16.7	251
682	Phosphorene as a Polysulfide Immobilizer and Catalyst in High-Performance Lithium-Sulfur Batteries. *Advanced Materials*, **2017**, 29, 1602734	24	249
681	Recent advances in graphene-based planar micro-supercapacitors for on-chip energy storage. *National Science Review*, **2014**, 1, 277-292	10.8	249
680	Carbon Nanotubes and Related Nanomaterials: Critical Advances and Challenges for Synthesis toward Mainstream Commercial Applications. *ACS Nano*, **2018**, 12, 11756-11784	16.7	239
679	Ligand-assisted cation-exchange engineering for high-efficiency colloidal Cs1−xFAxPbI3 quantum dot solar cells with reduced phase segregation. *Nature Energy*, **2020**, 5, 79-88	62.3	237
678	A review of carbon nanotube- and graphene-based flexible thin-film transistors. *Small*, **2013**, 9, 1188-205	11	237
677	Metal-catalyst-free growth of single-walled carbon nanotubes. *Journal of the American Chemical Society*, **2009**, 131, 2082-3	16.4	235
676	The Regulating Role of Carbon Nanotubes and Graphene in Lithium-Ion and Lithium-Sulfur Batteries. *Advanced Materials*, **2019**, 31, e1800863	24	234
675	Morphology and surface chemistry engineering toward pH-universal catalysts for hydrogen evolution at high current density. *Nature Communications*, **2019**, 10, 269	17.4	229
674	Two-Dimensional MoS Confined Co(OH) Electrocatalysts for Hydrogen Evolution in Alkaline Electrolytes. *ACS Nano*, **2018**, 12, 4565-4573	16.7	225
673	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	21.8	221
672	Visible light photocatalyst: iodine-doped mesoporous titania with a bicrystalline framework. *Journal of Physical Chemistry B*, **2006**, 110, 20823-8	3.4	220
671	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	35.4	212
670	Toward More Reliable Lithium-Sulfur Batteries: An All-Graphene Cathode Structure. *ACS Nano*, **2016**, 10, 8676-82	16.7	212
669	Tunable band gaps and p-type transport properties of boron-doped graphenes by controllable ion doping using reactive microwave plasma. *ACS Nano*, **2012**, 6, 1970-8	16.7	206

668	Stable photocatalytic hydrogen evolution from water over ZnO□CdS core□shell nanorods. *International Journal of Hydrogen Energy*, **2010**, 35, 8199-8205	6.7	205
667	Graphene-based materials for high-voltage and high-energy asymmetric supercapacitors. *Energy Storage Materials*, **2017**, 6, 70-97	19.4	201
666	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	8.3	200
665	Metal□Organic Frameworks (MOFs)-Derived Nitrogen-Doped Porous Carbon Anchored on Graphene with Multifunctional Effects for Lithium□Sulfur Batteries. *Advanced Functional Materials*, **2018**, 28, 1707592	15.6	198
664	Chemical vapor deposition of layered two-dimensional MoSiN materials. *Science*, **2020**, 369, 670-674	33.3	198
663	Polarized raman study of single-wall semiconducting carbon nanotubes. *Physical Review Letters*, **2000**, 85, 2617-20	7.4	196
662	Two-Dimensional Materials for Thermal Management Applications. *Joule*, **2018**, 2, 442-463	27.8	190
661	Elemental superdoping of graphene and carbon nanotubes. *Nature Communications*, **2016**, 7, 10921	17.4	190
660	Flexible layer-structured BiTe thermoelectric on a carbon nanotube scaffold. *Nature Materials*, **2019**, 18, 62-68	27	188
659	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	10.3	187
658	Metal/Oxide Interface Nanostructures Generated by Surface Segregation for Electrocatalysis. *Nano Letters*, **2015**, 15, 7704-10	11.5	186
657	Nitrogen-Superdoped 3D Graphene Networks for High-Performance Supercapacitors. *Advanced Materials*, **2017**, 29, 1701677	24	186
656	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, 8361-3	5.8	185
655	Adsorption and capillarity of nitrogen in aggregated multi-walled carbon nanotubes. *Chemical Physics Letters*, **2001**, 345, 18-24	2.5	185
654	Repeated and controlled growth of monolayer, bilayer and few-layer hexagonal boron nitride on Pt foils. *ACS Nano*, **2013**, 7, 5199-206	16.7	182
653	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, 20386-91	11.5	180
652	Graphitic Carbon Nitride-Based Heterojunction Photoactive Nanocomposites: Applications and Mechanism Insight. *ACS Applied Materials & Interfaces*, **2018**, 10, 21035-21055	9.5	179
651	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	12	178

650	Novel boron nitride hollow nanoribbons. *ACS Nano*, **2008**, 2, 2183-91	16.7	173
649	Comparison of the rate capability of nanostructured amorphous and anatase TiO2 for lithium insertion using anodic TiO2 nanotube arrays. *Nanotechnology*, **2009**, 20, 225701	3.4	172
648	Ammonia borane destabilized by lithium hydride: an advanced on-board hydrogen storage material. *Advanced Materials*, **2008**, 20, 2756-9	24	172
647	ZnO□dS@Cd Heterostructure for Effective Photocatalytic Hydrogen Generation. *Advanced Energy Materials*, **2012**, 2, 42-46	21.8	170
646	Amorphous cobalt□boron/nickel foam as an effective catalyst for hydrogen generation from alkaline sodium borohydride solution. *Journal of Power Sources*, **2008**, 177, 17-23	8.9	169
645	Artificial Z-scheme photocatalytic system: What have been done and where to go?. *Coordination Chemistry Reviews*, **2019**, 385, 44-80	23.2	169
644	The Rechargeable Aluminum Battery: Opportunities and Challenges. *Angewandte Chemie - International Edition*, **2019**, 58, 11978-11996	16.4	168
643	Fabrication of novel magnetic MnFeO/bio-char composite and heterogeneous photo-Fenton degradation of tetracycline in near neutral pH. *Chemosphere*, **2019**, 224, 910-921	8.4	168
642	A Sulfur-Rich Copolymer@CNT Hybrid Cathode with Dual-Confinement of Polysulfides for High-Performance Lithium-Sulfur Batteries. *Advanced Materials*, **2017**, 29, 1603835	24	167
641	Hydrogen adsorption behavior of graphene above critical temperature. *International Journal of Hydrogen Energy*, **2009**, 34, 2329-2332	6.7	166
640	Switching the selectivity of the photoreduction reaction of carbon dioxide by controlling the band structure of a g-C3N4 photocatalyst. *Chemical Communications*, **2014**, 50, 10837-40	5.8	165
639	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	13.1	162
638	Superhydrophobic graphene foams. *Small*, **2013**, 9, 75-80	11	161
637	Mass production and industrial applications of graphene materials. *National Science Review*, **2018**, 5, 90-101	10.8	158
636	Hydrogen uptake in vapor-grown carbon nanofibers. *Carbon*, **1999**, 37, 1649-1652	10.4	156
635	Carbon-Based Fibers for Advanced Electrochemical Energy Storage Devices. *Chemical Reviews*, **2020**, 120, 2811-2878	68.1	156
634	Efficient growth of high-quality graphene films on Cu foils by ambient pressure chemical vapor deposition. *Applied Physics Letters*, **2010**, 97, 183109	3.4	155
633	Strategies towards Low-Cost Dual-Ion Batteries with High Performance. *Angewandte Chemie - International Edition*, **2020**, 59, 3802-3832	16.4	155

632	Hydrogen storage in carbon nanotubes revisited. *Carbon*, **2010**, 48, 452-455	10.4	154
631	Amorphous TiO(2) nanotube arrays for low-temperature oxygen sensors. *Nanotechnology*, **2008**, 19, 405504	3.4	154
630	Synthesis and upconversion luminescence of N-doped graphene quantum dots. *Applied Physics Letters*, **2012**, 101, 103107	3.4	153
629	Scalable Fabrication of Photochemically Reduced Graphene-Based Monolithic Micro-Supercapacitors with Superior Energy and Power Densities. *ACS Nano*, **2017**, 11, 4283-4291	16.7	152
628	An Unusual Strong Visible-Light Absorption Band in Red Anatase TiO Photocatalyst Induced by Atomic Hydrogen-Occupied Oxygen Vacancies. *Advanced Materials*, **2018**, 30, 1704479	24	152
627	Enhanced Photocatalytic H2 Production in Core-Shell Engineered Rutile TiO2. *Advanced Materials*, **2016**, 28, 5850-6	24	152
626	Scalable non-liquid-crystal spinning of locally aligned graphene fibers for high-performance wearable supercapacitors. *Nano Energy*, **2015**, 15, 642-653	17.1	151
625	Hydrogen adsorption/desorption behavior of multi-walled carbon nanotubes with different diameters. *Carbon*, **2003**, 41, 2471-2476	10.4	151
624	Lithium-Catalyzed Dehydrogenation of Ammonia Borane within Mesoporous Carbon Framework for Chemical Hydrogen Storage. *Advanced Functional Materials*, **2009**, 19, 265-271	15.6	148
623	A nanosized Fe2O3 decorated single-walled carbon nanotube membrane as a high-performance flexible anode for lithium ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 17942		143
622	Electrochemical interfacial capacitance in multilayer graphene sheets: Dependence on number of stacking layers. *Electrochemistry Communications*, **2009**, 11, 1729-1732	5.1	143
621	Hydrogen generation from sodium borohydride solution using a ruthenium supported on graphite catalyst. *International Journal of Hydrogen Energy*, **2010**, 35, 3023-3028	6.7	143
620	Controlled electrochemical charge injection to maximize the energy density of supercapacitors. *Angewandte Chemie - International Edition*, **2013**, 52, 3722-5	16.4	142
619	Graphene: a promising 2D material for electrochemical energy storage. *Science Bulletin*, **2017**, 62, 724-740	10.6	140
618	Single-wall carbon nanotube network enabled ultrahigh sulfur-content electrodes for high-performance lithium-sulfur batteries. *Nano Energy*, **2017**, 42, 205-214	17.1	140
617	Superhigh Electromagnetic Interference Shielding of Ultrathin Aligned Pristine Graphene Nanosheets Film. *Advanced Materials*, **2020**, 32, e1907411	24	140
616	Purification of Single-Wall Carbon Nanotubes by Electrochemical Oxidation. *Chemistry of Materials*, **2004**, 16, 5744-5750	9.6	137
615	Rosin-enabled ultraclean and damage-free transfer of graphene for large-area flexible organic light-emitting diodes. *Nature Communications*, **2017**, 8, 14560	17.4	135

614	Effect of pore packing defects in 2-d ordered mesoporous carbons on ionic transport. *Journal of Physical Chemistry B*, **2006**, 110, 8570-5	3.4	135
613	Key Aspects of Lithium Metal Anodes for Lithium Metal Batteries. *Small*, **2019**, 15, e1900687	11	134
612	Polar interface-induced improvement in high photocatalytic hydrogen evolution over ZnO□dS heterostructures. *Energy and Environmental Science*, **2011**, 4, 3976	35.4	133
611	Polysulfide immobilization and conversion on a conductive polar MoC@MoOx material for lithium-sulfur batteries. *Energy Storage Materials*, **2018**, 10, 56-61	19.4	132
610	Positive temperature coefficient effect in multiwalled carbon nanotube/high-density polyethylene composites. *Applied Physics Letters*, **2005**, 86, 062112	3.4	131
609	Simultaneous Production and Functionalization of Boron Nitride Nanosheets by Sugar-Assisted Mechanochemical Exfoliation. *Advanced Materials*, **2019**, 31, e1804810	24	130
608	Ultrahigh-voltage integrated micro-supercapacitors with designable shapes and superior flexibility. *Energy and Environmental Science*, **2019**, 12, 1534-1541	35.4	129
607	Efficient synthesis of graphene nanoribbons sonochemically cut from graphene sheets. *Nano Research*, **2010**, 3, 16-22	10	127
606	CuS Microspheres with Tunable Interlayer Space and Micropore as a High-Rate and Long-Life Anode for Sodium-Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1800930	21.8	127
605	Unique physicochemical properties of two-dimensional light absorbers facilitating photocatalysis. *Chemical Society Reviews*, **2018**, 47, 6410-6444	58.5	126
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603	Morphology, diameter distribution and Raman scattering measurements of double-walled carbon nanotubes synthesized by catalytic decomposition of methane. *Chemical Physics Letters*, **2002**, 359, 196-202	2.5	125
602	Monolithic Fe2O3/graphene hybrid for highly efficient lithium storage and arsenic removal. *Carbon*, **2014**, 67, 500-507	10.4	124
601	Semiconductor-based photocatalysts for photocatalytic and photoelectrochemical water splitting: will we stop with photocorrosion?. *Journal of Materials Chemistry A*, **2020**, 8, 2286-2322	13	123
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