Alex Yong Sheng Eng

List of Publications by Year
in descending order

44 papers	3,957 citations	159358 30 h-index	264894 42 g-index
48 all docs	48 docs citations	48 times ranked	6388 citing authors

#	Article	IF	Citations
1	Rechargeable magnesium batteries enabled by conventional electrolytes with multifunctional organic chloride additives. Energy Storage Materials, 2022, 45, 1120-1132.	9.5	40
2	Comparative Study of Conventional Electrolytes for Rechargeable Magnesium Batteries. Batteries and Supercaps, 2022, 5, .	2.4	11
3	Theory-guided experimental design in battery materials research. Science Advances, 2022, 8, eabm2422.	4.7	52
4	Material design strategies to improve the performance of rechargeable magnesiumâ€“sulfur batteries. Materials Horizons, 2021, 8, 830-853.	6.4	55
5	Roomâ€Temperature Sodiumâ€“Sulfur Batteries and Beyond: Realizing Practical High Energy Systems through Anode, Cathode, and Electrolyte Engineering. Advanced Energy Materials, 2021, 11, 2003493.	10.2	114
6	Tunable Nitrogen-Doping of Sulfur Host Nanostructures for Stable and Shuttle-Free Room-Temperature Sodiumâ€“Sulfur Batteries. Nano Letters, 2021, 21, 5401-5408.	4.5	36
7	Using a Chloride-Free Magnesium Battery Electrolyte to Form a Robust Anodeâ€“Electrolyte Nanointerface. Nano Letters, 2021, 21, 8220-8228.	4.5	51
8	Sulfurized Cyclopentadienyl Nanocomposites for Shuttle-Free Room-Temperature Sodiumâ€“Sulfur Batteries. Nano Letters, 2021, 21, 10538-10546.	4.5	11
9	Enhanced Chemical Immobilization and Catalytic Conversion of Polysulfide Intermediates Using Metallic Mo Nanoclusters for High-Performance Liâ€“S Batteries. ACS Nano, 2020, 14, 1148-1157.	7.3	125
10	Metal/LiF/Li₂O Nanocomposite for Battery Cathode Prelithiation: Trade-off between Capacity and Stability. Nano Letters, 2020, 20, 546-552.	4.5	72
11	Tailoring binderâ€“cathode interactions for long-life room-temperature sodiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2020, 8, 22983-22997.	5.2	47
12	A High-Performance Magnesium Triflate-based Electrolyte for Rechargeable Magnesium Batteries. Cell Reports Physical Science, 2020, 1, 100265.	2.8	48
13	An artificial metal-alloy interphase for high-rate and long-life sodiumâ€“sulfur batteries. Energy Storage Materials, 2020, 29, 1-8.	9.5	91
14	Catalytic Polysulfide Conversion and Physiochemical Confinement for Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2020, 10, 1904010.	10.2	165
15	A Biphasic Interphase Design Enabling High Performance in Room Temperature Sodium-Sulfur Batteries. Cell Reports Physical Science, 2020, 1, 100044.	2.8	47
16	Controlled synthesis of transition metal disulfides (MoS2 and WS2) on carbon fibers: Effects of phase and morphology toward lithiumâ€“sulfur battery performance. Applied Materials Today, 2019, 16, 529-537.	2.3	42
17	Engineering stable electrode-separator interfaces with ultrathin conductive polymer layer for high-energy-density Li-S batteries. Energy Storage Materials, 2019, 23, 261-268.	9.5	149
18	Synthesis of Carboxylated-Graphenes by the Kolbeâ€“Schmitt Process. ACS Nano, 2017, 11, 1789-1797.	7.3	45

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19	Nearâ€Stoichiometric Bulk Graphane from Halogenated Graphenes (X = Cl/Br/I) by the Birch Reduction for High Density Energy Storage. Advanced Functional Materials, 2017, 27, 1605797.	7.8	20
20	Layered Metal Thiophosphite Materials: Magnetic, Electrochemical, and Electronic Properties. ACS Applied Materials & Interfaces, 2017, 9, 12563-12573.	4.0	179
21	Electrochemistry of Layered Graphitic Carbon Nitride Synthesised from Various Precursors: Searching for Catalytic Effects. ChemPhysChem, 2016, 17, 481-488.	1.0	16
22	WS2Nanoparticles: Bipolar Electrochemical Synthesis of WS2Nanoparticles and Their Application in Magneto-Immunosandwich Assay (Adv. Funct. Mater. 23/2016). Advanced Functional Materials, 2016, 26, 4231-4231.	7.8	0
23	Graphene and its electrochemistry â€" an update. Chemical Society Reviews, 2016, 45, 2458-2493.	18.7	366
24	Black Phosphorus Nanoparticle Labels for Immunoassays via Hydrogen Evolution Reaction Mediation. Analytical Chemistry, 2016, 88, 10074-10079.	3.2	142
25	Negative Electrocatalytic Effects of p-Doping Niobium and Tantalum on MoS₂ and WS₂ for the Hydrogen Evolution Reaction and Oxygen Reduction Reaction. ACS Catalysis, 2016, 6, 5724-5734.	5.5	174
26	Bipolar Electrochemical Synthesis of WS₂ Nanoparticles and Their Application in Magnetoâ€Immunosandwich Assay. Advanced Functional Materials, 2016, 26, 4094-4098.	7.8	43
27	Facile labelling of graphene oxide for superior capacitive energy storage and fluorescence applications. Physical Chemistry Chemical Physics, 2016, 18, 9673-9681.	1.3	20
28	Metallic 1Tâ€WS₂ for Selective Impedimetric Vapor Sensing. Advanced Functional Materials, 2015, 25, 5611-5616.	7.8	122
29	Ternary Transition Metal Oxide Nanoparticles with Spinel Structure for the Oxygen Reduction Reaction. ChemElectroChem, 2015, 2, 982-987.	1.7	46
30	Hydrogenated Graphenes by Birch Reduction: Influence of Electron and Proton Sources on Hydrogenation Efficiency, Magnetism, and Electrochemistry. Chemistry - A European Journal, 2015, 21, 16828-16838.	1.7	26
31	Frontispiece: Hydrogenated Graphenes by Birch Reduction: Influence of Electron and Proton Sources on Hydrogenation Efficiency, Magnetism, and Electrochemistry. Chemistry - A European Journal, 2015, 21, .	1.7	0
32	Intrinsic electrochemical performance and precise control of surface porosity of graphene-modified electrodes using the drop-casting technique. Electrochemistry Communications, 2015, 59, 86-90.	2.3	28
33	Iridiumâ€•and Osmiumâ€decorated Reduced Graphenes as Promising Catalysts for Hydrogen Evolution. ChemPhysChem, 2015, 16, 1898-1905.	1.0	29
34	Transition metal dichalcogenides (MoS2, MoSe2, WS2 and WSe2) exfoliation technique has strong influence upon their capacitance. Electrochemistry Communications, 2015, 56, 24-28.	2.3	129
35	Electrochemistry of Nanostructured Layered Transition-Metal Dichalcogenides. Chemical Reviews, 2015, 115, 11941-11966.	23.0	719
36	Refinements to the structure of graphite oxide: absolute quantification of functional groups via selective labelling. Nanoscale, 2015, 7, 20256-20266.	2.8	76

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37	Electrochemistry of Transition Metal Dichalcogenides: Strong Dependence on the Metal-to-Chalcogen Composition and Exfoliation Method. ACS Nano, 2014, 8, 12185-12198.	7.3	288
38	Iridiumâ€Catalystâ€Based Autonomous Bubbleâ€Propelled Graphene Micromotors with Ultralow Catalyst Loading. Chemistry - A European Journal, 2014, 20, 14946-14950.	1.7	25
39	Direct voltammetry of colloidal graphene oxides. Electrochemistry Communications, 2014, 43, 87-90.	2.3	17
40	Frontispiece: Iridium-Catalyst-Based Autonomous Bubble-Propelled Graphene Micromotors with Ultralow Catalyst Loading. Chemistry - A European Journal, 2014, 20, n/a-n/a.	1.7	0
41	Potassium assisted reduction and doping of graphene oxides: towards faster electron transfer kinetics. RSC Advances, 2013, 3, 10900.	1.7	7
42	Highly Hydrogenated Graphene through Microwave Exfoliation of Graphite Oxide in Hydrogen Plasma: Towards Electrochemical Applications. Chemistry - A European Journal, 2013, 19, 15583-15592.	1.7	48
43	Unusual Inherent Electrochemistry of Graphene Oxides Prepared Using Permanganate Oxidants. Chemistry - A European Journal, 2013, 19, 12673-12683.	1.7	86
44	Searching for Magnetism in Hydrogenated Graphene: Using Highly Hydrogenated Graphene Prepared <i>via</i> Birch Reduction of Graphite Oxides. ACS Nano, 2013, 7, 5930-5939.	7.3	149