Di-Yan Wang

List of Publications by Year
in descending order

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62 papers	8,467 citations	126907 33 h-index	114465 63 g-index
65 all docs	65 docs citations	65 times ranked	12416 citing authors

#	Article	IF	Citations
1	An ultrafast rechargeable aluminium-ion battery. Nature, 2015, 520, 324-328.	27.8	1,970
2	Nanoscale nickel oxide/nickel heterostructures for active hydrogen evolution electrocatalysis. Nature Communications, 2014, 5, 4695.	12.8	1,413
3	Highly Active and Stable Hybrid Catalyst of Cobalt-Doped FeS₂ Nanosheetsâ€“Carbon Nanotubes for Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2015, 137, 1587-1592.	13.7	800
4	A mini review on nickel-based electrocatalysts for alkaline hydrogen evolution reaction. Nano Research, 2016, 9, 28-46.	10.4	773
5	Advanced rechargeable aluminium ion battery with a high-quality natural graphite cathode. Nature Communications, 2017, 8, 14283.	12.8	453
6	3D Graphitic Foams Derived from Chloroaluminate Anion Intercalation for Ultrafast Aluminumâ€Ion Battery. Advanced Materials, 2016, 28, 9218-9222.	21.0	302
7	FeS₂ Nanocrystal Ink as a Catalytic Electrode for Dyeâ€Sensitized Solar Cells. Angewandte Chemie - International Edition, 2013, 52, 6694-6698.	13.8	227
8	Blending Cr₂O₃ into a NiOâ€“Ni Electrocatalyst for Sustained Water Splitting. Angewandte Chemie - International Edition, 2015, 54, 11989-11993.	13.8	172
9	Cleanâ€Lifting Transfer of Largeâ€area Residualâ€Free Graphene Films. Advanced Materials, 2013, 25, 4521-4526.	21.0	157
10	Intermixing-seeded growth for high-performance planar heterojunction perovskite solar cells assisted by precursor-capped nanoparticles. Energy and Environmental Science, 2016, 9, 1282-1289.	30.8	157
11	Solutionâ€Processable Pyrite FeS₂ Nanocrystals for the Fabrication of Heterojunction Photodiodes with Visible to NIR Photodetection. Advanced Materials, 2012, 24, 3415-3420.	21.0	112
12	Simple Replacement Reaction for the Preparation of Ternary Fe_{1â€“x}PtRu_x Nanocrystals with Superior Catalytic Activity in Methanol Oxidation Reaction. Journal of the American Chemical Society, 2012, 134, 10011-10020.	13.7	111
13	Extended red light harvesting in a poly(3-hexylthiophene)/iron disulfide nanocrystal hybrid solar cell. Nanotechnology, 2009, 20, 405207.	2.6	91
14	Grapheneâ€Based Integrated Photovoltaic Energy Harvesting/Storage Device. Small, 2015, 11, 2929-2937.	10.0	90
15	Exploration and Investigation of Periodic Elements for Electrocatalytic Nitrogen Reduction. Small, 2020, 16, e2002885.	10.0	88
16	Phase-Dependent MoS₂ Nanoflowers for Light-Driven Antibacterial Application. ACS Sustainable Chemistry and Engineering, 2021, 9, 7904-7912.	6.7	77
17	Extended visible to near-infrared harvesting of earth-abundant FeS₂â€“TiO₂ heterostructures for highly active photocatalytic hydrogen evolution. Green Chemistry, 2018, 20, 1640-1647.	9.0	75
18	Fluorescence-Guided Probes of Aptamer-Targeted Gold Nanoparticles with Computed Tomography Imaging Accesses for in Vivo Tumor Resection. Scientific Reports, 2015, 5, 15675.	3.3	73

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19	Chemical doping of a coreâ€“shell silicon nanoparticles@polyaniline nanocomposite for the performance enhancement of a lithium ion battery anode. Nanoscale, 2016, 8, 1280-1287.	5.6	69
20	Improving Hydrogen Evolution Activity of Earthâ€Abundant Cobaltâ€Doped Iron Pyrite Catalysts by Surface Modification with Phosphide. Small, 2017, 13, 1603356.	10.0	68
21	Enhanced Luminescence and Stability of Cesium Lead Halide Perovskite CsPbX₃ Nanocrystals by Cu²⁺-Assisted Anion Exchange Reactions. Journal of Physical Chemistry C, 2019, 123, 2353-2360.	3.1	65
22	Freestanding Cathode Electrode Design for High-Performance Sodium Dual-Ion Battery. Journal of Physical Chemistry C, 2017, 121, 24463-24469.	3.1	64
23	Facile synthesis of two-dimensional Ruddlesdenâ€“Popper perovskite quantum dots with fine-tunable optical properties. Nanoscale Research Letters, 2018, 13, 247.	5.7	55
24	A Quinone-Based Electrode for High-Performance Rechargeable Aluminum-Ion Batteries with a Low-Cost AlCl₃/Urea Ionic Liquid Electrolyte. ACS Applied Materials & Interfaces, 2020, 12, 25853-25860.	8.0	55
25	Solution processable nanocarbon platform for polymer solar cells. Energy and Environmental Science, 2011, 4, 3521.	30.8	47
26	Low operation voltage macromolecular composite memory assisted by graphene nanoflakes. Journal of Materials Chemistry C, 2013, 1, 552-559.	5.5	46
27	Light-Activated Heterostructured Nanomaterials for Antibacterial Applications. Nanomaterials, 2020, 10, 643.	4.1	45
28	Enhanced N₂affinity of 1T-MoS₂with a unique pseudo-six-membered ring consisting of Nâ€“Liâ€“Sâ€“Moâ€“Sâ€“Mo for high ambient ammonia electrosynthesis performance. Journal of Materials Chemistry A, 2021, 9, 1230-1239.	10.3	44
29	Insights into dynamic molecular intercalation mechanism for Al C battery by operando synchrotron X-ray techniques. Carbon, 2019, 146, 528-534.	10.3	42
30	Chemical Transformation from FePt to Fe1-xPtMx(M = Ru, Ni, Sn) Nanocrystals by a Cation Redox Reaction:Â X-ray Absorption Spectroscopic Studies. Journal of the American Chemical Society, 2007, 129, 1538-1540.	13.7	41
31	Electrocatalytic Reduction of NO₃^{â€“} to Ultrapure Ammonia on {200} Facet Dominant Cu Nanodendrites with High Conversion Faradaic Efficiency. Journal of Physical Chemistry Letters, 2021, 12, 8121-8128.	4.6	39
32	High UV-Vis-NIR Light-Induced Antibacterial Activity by Heterostructured TiO₂-FeS₂ Nanocomposites . International Journal of Nanomedicine, 2020, Volume 15, 8911-8920.	6.7	37
33	Quantitative Analysis of Glucose Metabolic Cleavage in Glucose Transporters Overexpressed Cancer Cells by Target-Specific Fluorescent Gold Nanoclusters. Analytical Chemistry, 2018, 90, 3974-3980.	6.5	34
34	Photoactive Earthâ€Abundant Iron Pyrite Catalysts for Electrocatalytic Nitrogen Reduction Reaction. Small, 2019, 15, e1904723.	10.0	33
35	Plasmon-Enhanced Hydrogen Evolution on Specific Facet of Silver Nanocrystals. Chemistry of Materials, 2019, 31, 3722-3728.	6.7	33
36	Highly oriented Langmuirâ€“Blodgett film of silver cuboctahedra as an effective matrix-free sample plate for surface-assisted laser desorption/ionization mass spectrometry. Nanoscale, 2017, 9, 11119-11125.	5.6	32

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37	Real-Time Observation of Anion Reaction in High Performance Al Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 2572-2580.	8.0	30
38	Unravelling the origin of the photocarrier dynamics of fullerene-derivative passivation of SnO₂ electron transporters in perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 23607-23616.	10.3	30
39	Layer-by-layer thin film of reduced graphene oxide and gold nanoparticles as an effective sample plate in laser-induced desorption/ionization mass spectrometry. Analytica Chimica Acta, 2014, 809, 97-103.	5.4	28
40	Flexible Hybrid Znâ€“Ag/Air Battery with Long Cycle Life. ACS Sustainable Chemistry and Engineering, 2019, 7, 2860-2866.	6.7	28
41	Iron Pyrite/Titanium Dioxide Photoanode for Extended Near Infrared Light Harvesting in a Photoelectrochemical Cell. Scientific Reports, 2016, 6, 20397.	3.3	27
42	Unveiling the Nanoparticleâ€Seeded Catalytic Nucleation Kinetics of Perovskite Solar Cells by Timeâ€Resolved GIXS. Advanced Functional Materials, 2019, 29, 1902582.	14.9	27
43	Osteoporosis risk assessment using multilayered gold-nanoparticle thin film via SALDI-MS measurement. Analytical and Bioanalytical Chemistry, 2019, 411, 2793-2802.	3.7	27
44	Highly stable cycling of a lead oxide/copper nanocomposite as an anode material in lithium ion batteries. RSC Advances, 2015, 5, 50245-50252.	3.6	22
45	Creation of 3D Textured Graphene/Si Schottky Junction Photocathode for Enhanced Photoâ€Electrochemical Efficiency and Stability. Advanced Energy Materials, 2019, 9, 1901022.	19.5	21
46	Enhanced infrared light harvesting of inorganic nanocrystal photovoltaic and photodetector on graphene electrode. Applied Physics Letters, 2011, 98, 263509.	3.3	20
47	In situ Scanning Electron Microscopy Observation of MoS₂ Nanosheets during Lithiation in Lithium Ion Batteries. ACS Applied Energy Materials, 2020, 3, 7066-7072.	5.1	20
48	Enhanced charge extraction in inverted hybrid photovoltaic cells assisted by graphene nanoflakes. Journal of Materials Chemistry, 2011, 21, 17462.	6.7	18
49	Challenges and prospects of polyatomic ionsâ€™ intercalation in the graphite layer for energy storage applications. Physical Chemistry Chemical Physics, 2020, 22, 24842-24855.	2.8	18
50	Quantum-assisted photoelectric gain effects in perovskite solar cells. NPG Asia Materials, 2020, 12, .	7.9	12
51	Strong Excitonic Magneto-Optic Effects in Two-Dimensional Organicâ€“Inorganic Hybrid Perovskites. ACS Applied Materials & Interfaces, 2021, 13, 10279-10286.	8.0	11
52	Facile Fabrication of Highly Stable and Wavelength-Tunable Tin Based Perovskite Materials with Enhanced Quantum Yield via the Cation Transformation Reaction. Journal of Physical Chemistry Letters, 2021, 12, 8763-8769.	4.6	10
53	Enhanced Hydrogen Evolution Efficiency Achieved by Atomically Controlled Platinum Deposited on Gold Nanodendrites with High-Index Surfaces. Journal of Materials Chemistry A, 0, , .	10.3	8
54	Stabilized Highâ€Membered and Phaseâ€Pure 2D All Inorganic Ruddlesdenâ€“Popper Halide Perovskites Nanocrystals as Photocatalysts for the CO₂ Reduction Reaction. Small, 2022, 18, e2107881.	10.0	7

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55	Electrochemical reactions towards the formation of heteroatomic bonds beyond CO₂ and N₂ reduction. Sustainable Energy and Fuels, 2022, 6, 3283-3303.	4.9	7
56	Accelerated Formation of 2D Ruddlesdenâ€"Popper Perovskite Thin Films by Lewis Bases for High Efficiency Solar Cell Applications. Nanomaterials, 2022, 12, 1816.	4.1	5
57	Studies of high-membered two-dimensional Ruddlesdenâ€"Popper Cs₇Pb₆I₁₉ perovskite nanosheets via kinetically controlled reactions. Materials Horizons, 2022, 9, 2433-2442.	12.2	5
58	Water Splitting: Creation of 3D Textured Graphene/Si Schottky Junction Photocathode for Enhanced Photoâ€Electrochemical Efficiency and Stability (Adv. Energy Mater. 29/2019). Advanced Energy Materials, 2019, 9, 1970115.	19.5	4
59	Cost-Effective 1T-MoS2 Grown on Graphite Cathode Materials for High-Temperature Rechargeable Aluminum Ion Batteries and Hydrogen Evolution in Water Splitting. Catalysts, 2021, 11, 1547.	3.5	4
60	Enhanced performance of photodetector and photovoltaic based on carrier reflector and back surface field generated by doped graphene. Applied Physics Letters, 2012, 101, 073906.	3.3	2
61	Nitrogen Reduction: Photoactive Earthâ€Abundant Iron Pyrite Catalysts for Electrocatalytic Nitrogen Reduction Reaction (Small 49/2019). Small, 2019, 15, 1970265.	10.0	1
62	Work function evolution of graphene oxide by utilizing hydrothermal treatment. , 2010, , .		0