Wei Chen

List of Publications by Year
in descending order

60 papers	5,421 citations	147801 31 h-index	138484 58 g-index
60 all docs	60 docs citations	60 times ranked	8189 citing authors

#	Article	IF	Citations
1	High-Index Faceted Ni₃S₂ Nanosheet Arrays as Highly Active and Ultrastable Electrocatalysts for Water Splitting. Journal of the American Chemical Society, 2015, 137, 14023-14026.	13.7	1,622
2	Wafer-Scale Growth and Transfer of Highly-Oriented Monolayer MoS₂ Continuous Films. ACS Nano, 2017, 11, 12001-12007.	14.6	397
3	Modulating Electronic Structures of Inorganic Nanomaterials for Efficient Electrocatalytic Water Splitting. Angewandte Chemie - International Edition, 2019, 58, 4484-4502.	13.8	340
4	Oxygen-Assisted Chemical Vapor Deposition Growth of Large Single-Crystal and High-Quality Monolayer MoS₂. Journal of the American Chemical Society, 2015, 137, 15632-15635.	13.7	301
5	Scalable Growth of High-Quality Polycrystalline MoS₂ Monolayers on SiO₂ with Tunable Grain Sizes. ACS Nano, 2014, 8, 6024-6030.	14.6	263
6	Boundary activated hydrogen evolution reaction on monolayer MoS2. Nature Communications, 2019, 10, 1348.	12.8	263
7	Observation of Strong Interlayer Coupling in MoS₂/WS₂ Heterostructures. Advanced Materials, 2016, 28, 1950-1956.	21.0	225
8	Electrochemical tuning of olivine-type lithium transition-metal phosphates as efficient water oxidation catalysts. Energy and Environmental Science, 2015, 8, 1719-1724.	30.8	167
9	Holey Ni-Cu phosphide nanosheets as a highly efficient and stable electrocatalyst for hydrogen evolution. Applied Catalysis B: Environmental, 2019, 243, 537-545.	20.2	128
10	Bimetallic iron-iridium alloy nanoparticles supported on nickel foam as highly efficient and stable catalyst for overall water splitting at large current density. Applied Catalysis B: Environmental, 2020, 278, 119327.	20.2	125
11	In situ engineering bi-metallic phospho-nitride bi-functional electrocatalysts for overall water splitting. Applied Catalysis B: Environmental, 2019, 254, 414-423.	20.2	107
12	Trimetallic Moâ€“Niâ€“Co selenides nanorod electrocatalysts for highly-efficient and ultra-stable hydrogen evolution. Nano Energy, 2020, 71, 104637.	16.0	100
13	Precisely Aligned Monolayer MoS₂ Epitaxially Grown on hâ€BN basal Plane. Small, 2017, 13, 1603005.	10.0	91
14	Wafer-scale and deterministic patterned growth of monolayer MoS₂via vaporâ€“liquidâ€“solid method. Nanoscale, 2019, 11, 16122-16129.	5.6	76
15	Bi-metallic nitroxide nanodot-decorated tri-metallic sulphide nanosheets by on-electrode plasma-hydrothermal sprouting for overall water splitting. Applied Catalysis B: Environmental, 2020, 261, 118254.	20.2	72
16	Multiphase nanosheet-nanowire cerium oxide and nickel-cobalt phosphide for highly-efficient electrocatalytic overall water splitting. Applied Catalysis B: Environmental, 2022, 316, 121678.	20.2	67
17	Rolling Up a Monolayer MoS₂Sheet. Small, 2016, 12, 3770-3774.	10.0	60
18	Plasma-heteroatom-doped Ni-V-Fe trimetallic phospho-nitride as high-performance bifunctional electrocatalyst. Applied Catalysis B: Environmental, 2020, 268, 118440.	20.2	60

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19	Water-sprouted, plasma-enhanced Ni-Co phospho-nitride nanosheets boost electrocatalytic hydrogen and oxygen evolution. Chemical Engineering Journal, 2020, 402, 126257.	12.7	60
20	Multiphase Ni-Fe-selenide nanosheets for highly-efficient and ultra-stable water electrolysis. Applied Catalysis B: Environmental, 2020, 277, 119220.	20.2	52
21	Dielectric barrier discharge plasma in Ar/O2 promoting apoptosis behavior in A549 cancer cells. Applied Physics Letters, 2011, 99, .	3.3	49
22	Treatment of Streptococcus mutans bacteria by a plasma needle. Journal of Applied Physics, 2009, 105, .	2.5	48
23	Treatment of enterococcus faecalis bacteria by a helium atmospheric cold plasma brush with oxygen addition. Journal of Applied Physics, 2012, 112, .	2.5	47
24	Cross-linked trimetallic nanopetals for electrocatalytic water splitting. Journal of Power Sources, 2018, 390, 224-233.	7.8	47
25	Nb-doped layered FeNi phosphide nanosheets for highly efficient overall water splitting under high current densities. Journal of Materials Chemistry A, 2021, 9, 9918-9926.	10.3	47
26	Plasma-doping-enhanced overall water splitting: case study of NiCo hydroxide electrocatalyst. Catalysis Today, 2019, 337, 147-154.	4.4	41
27	Integrated Flexible and Highâ€Quality Thin Film Transistors Based on Monolayer MoS₂. Advanced Electronic Materials, 2016, 2, 1500379.	5.1	40
28	Deactivation of A549 cancer cells in vitro by a dielectric barrier discharge plasma needle. Journal of Applied Physics, 2011, 109, .	2.5	38
29	Just add water to split water: ultrahigh-performance bifunctional electrocatalysts fabricated using eco-friendly heterointerfacing of NiCo diselenides. Journal of Materials Chemistry A, 2020, 8, 12035-12044.	10.3	38
30	Hollow Niâ€“Vâ€“Mo Chalcogenide Nanopetals as Bifunctional Electrocatalyst for Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2019, 7, 1622-1632.	6.7	36
31	Compositional and crystallographic design of Ni-Co phosphide heterointerfaced nanowires for high-rate, stable hydrogen generation at industry-relevant electrolysis current densities. Nano Energy, 2022, 95, 106989.	16.0	36
32	Patterned Peeling 2D MoS₂ off the Substrate. ACS Applied Materials & Interfaces, 2016, 8, 16546-16550.	8.0	30
33	Mulberryâ€Inspired Nickelâ€Niobium Phosphide on Plasmaâ€Defectâ€Engineered Carbon Support for Highâ€Performance Hydrogen Evolution. Small, 2020, 16, e2004843.	10.0	30
34	In-Situ-Engineered 3D Cu₃Se₂@CoSe₂â€“NiSe₂ Nanostructures for Highly Efficient Electrocatalytic Water Splitting. ACS Sustainable Chemistry and Engineering, 2020, 8, 17215-17224.	6.7	30
35	W-Doped MoP Nanospheres as Electrocatalysts for pH-Universal Hydrogen Evolution Reaction. ACS Applied Nano Materials, 2021, 4, 5992-6001.	5.0	28
36	One-step in-situ sprouting high-performance NiCoSxSey bifunctional catalysts for water electrolysis at low cell voltages and high current densities. Chemical Engineering Journal, 2022, 435, 134859.	12.7	24

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37	In-situ engineered heterostructured nickel tellur-selenide nanosheets for robust overall water splitting. Chemical Engineering Journal, 2022, 446, 137297.	12.7	22
38	Trimetallic Octahedral Niâ€“Coâ€“W Phosphoxide Sprouted from Plasma-Defect-Engineered Niâ€“Co Support for Ultrahigh-Performance Electrocatalytic Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2021, 9, 7454-7465.	6.7	21
39	High-performance CoNb phosphide water splitting electrocatalyst on plasma-defect-engineered carbon cloth. Chemical Engineering Journal, 2022, 446, 137419.	12.7	19
40	Non-equilibrium plasma prevention of Schistosoma japonicum transmission. Scientific Reports, 2016, 6, 35353.	3.3	17
41	Electrocatalysis enabled transformation of earth-abundant water, nitrogen and carbon dioxide for a sustainable future. Materials Advances, 2022, 3, 1359-1400.	5.4	17
42	Focused Plasma- and Pure Water-Enabled, Electrode-Emerged Nanointerfaced NiCo Hydroxideâ€“Oxide for Robust Overall Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 45566-45577.	8.0	15
43	High-efficiency oxygen evolution catalyzed by Snâ€“Coâ€“Ni phosphide with oriented crystal phases. Journal of Materials Chemistry A, 2022, 10, 13448-13455.	10.3	15
44	Characteristics of NOx removal combining dielectric barrier discharge plasma with selective catalytic reduction by C2H5OH. Journal of Applied Physics, 2009, 106, .	2.5	12
45	Characteristics of NO_x Removal Combining Dielectric Barrier Discharge Plasma with Selective Catalytic Reduction by C₃H₆. Japanese Journal of Applied Physics, 2010, 49, 086201.	1.5	11
46	Additiveâ€Assisted Growth of Scaled and Quality 2D Materials. Small, 2022, 18, e2107241.	10.0	11
47	Oxygen-Assisted Anisotropic Chemical Etching of MoSe₂ for Enhanced Phototransistors. Chemistry of Materials, 2022, 34, 4212-4223.	6.7	10
48	Deactivation of Enterococcus Faecalis Bacteria by an Atmospheric Cold Plasma Brush. Chinese Physics Letters, 2012, 29, 075203.	3.3	8
49	Characterization of Zrâ€“Siâ€“N films deposited by cathodic vacuum arc with different N2/SiH4 flow rates. Applied Surface Science, 2012, 258, 3674-3678.	6.1	8
50	Degradation of high-concentration simulated organic wastewater by DBD plasma. Water Science and Technology, 2019, 80, 1413-1420.	2.5	8
51	Treatment of Enterococcus faecalis bacteria using a plasma needle at atmospheric pressure. Wuli Xuebao/Acta Physica Sinica, 2009, 58, 1595.	0.5	8
52	Heterostructured Palladiumâ€“Nickel Sulfide on Plasma-Activated Nickel Foil for Robust Hydrogen Evolution. ACS Sustainable Chemistry and Engineering, 2022, 10, 8064-8074.	6.7	7
53	Surface modification of polytetrafluoroethylene film using single liquid electrode atmospheric-pressure glow discharge. Chinese Physics B, 2011, 20, 065206.	1.4	6
54	Sterilization of mycete attached on the unearthed silk fabrics by an atmospheric pressure plasma jet. Chinese Physics B, 2018, 27, 055207.	1.4	6

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55	Feâ€“Niâ€“Co trimetallic oxide hierarchical nanospheres as high-performance bifunctional electrocatalysts for water electrolysis. New Journal of Chemistry, 2022, 46, 13296-13302.	2.8	6
56	Inactivation of Hela cancer cells by an atmospheric pressure cold plasma jet. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 065201.	0.5	5
57	Effect of pulsed bias on the properties of ZrN/TiZrN films deposited by a cathodic vacuum arc. Chinese Physics B, 2013, 22, 035204.	1.4	3
58	A half-bridge IGBT drive and protection circuit in dielectric barrier discharge power supply. Circuit World, 2021, ahead-of-print, .	0.9	1
59	A Temperature-Measurable Dielectric Barrier Discharge Plasma Cooperating with the Catalysis Device for Nitric Oxides Removal. Advanced Materials Research, 2013, 718-720, 196-201.	0.3	0
60	Inactivation of A549 cancer cells by a helium-oxygen plasma needle. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 185203.	0.5	0