

Wen Xiao

List of Publications by Year in descending order

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60
papers

4,704
citations

147801

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138484

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61
all docs

61
docs citations

61
times ranked

7176
citing authors

#	ARTICLE	IF	CITATIONS
1	Hollow Mo-doped CoP nanoarrays for efficient overall water splitting. Nano Energy, 2018, 48, 73-80.	16.0	608
2	In Situ Grown Epitaxial Heterojunction Exhibits High-Performance Electrocatalytic Water Splitting. Advanced Materials, 2018, 30, e1705516.	21.0	375
3	Oxygen Vacancy Promoted O ₂ Activation over Perovskite Oxide for Low-Temperature CO Oxidation. ACS Catalysis, 2019, 9, 9751-9763.	11.2	296
4	Dual-Functional N Dopants in Edges and Basal Plane of MoS ₂ Nanosheets Toward Efficient and Durable Hydrogen Evolution. Advanced Energy Materials, 2017, 7, 1602086.	19.5	286
5	Metallic Ni ₃ N nanosheets with exposed active surface sites for efficient hydrogen evolution. Journal of Materials Chemistry A, 2016, 4, 17363-17369.	10.3	233
6	Activating and Optimizing Activity of CoS ₂ for Hydrogen Evolution Reaction through the Synergic Effect of N Dopants and S Vacancies. ACS Energy Letters, 2017, 2, 1022-1028.	17.4	229
7	Bimetallic Nickel Cobalt Sulfide as Efficient Electrocatalyst for Zn-Air Battery and Water Splitting. Nano-Micro Letters, 2019, 11, 2.	27.0	179
8	Low temperature propane oxidation over Co ₃ O ₄ based nano-array catalysts: Ni dopant effect, reaction mechanism and structural stability. Applied Catalysis B: Environmental, 2016, 180, 150-160.	20.2	174
9	Self-Powered Water-Splitting Devices by Core-Shell NiFe@N-Graphite-Based Zn-Air Batteries. Advanced Functional Materials, 2018, 28, 1706928.	14.9	155
10	Interfacial sp ² -d Mo Hybridization Originated High-Current Density Hydrogen Evolution. Journal of the American Chemical Society, 2021, 143, 8720-8730.	18.7	152
11	Enhanced oxygen evolution reaction by Co-O-C bonds in rationally designed Co ₃ O ₄ /graphene nanocomposites. Nano Energy, 2017, 33, 445-452.	16.0	131
12	Activating Basal Planes and S-Terminated Edges of MoS ₂ toward More Efficient Hydrogen Evolution. Advanced Functional Materials, 2017, 27, 1604943.	14.9	131
13	Orientation Mediated Enhancement on Magnetic Hyperthermia of Fe ₃ O ₄ Nanodisc. Advanced Functional Materials, 2015, 25, 812-820.	14.9	121
14	Synthesis of nonstoichiometric zinc ferrite nanoparticles with extraordinary room temperature magnetism and their diverse applications. Journal of Materials Chemistry C, 2013, 1, 2875.	5.5	115
15	Dual-Native Vacancy Activated Basal Plane and Conductivity of MoSe ₂ with High-Efficiency Hydrogen Evolution Reaction. Small, 2018, 14, e1704150.	10.0	114
16	Boosting catalytic propane oxidation over PGM-free Co ₃ O ₄ nanocrystal aggregates through chemical leaching: A comparative study with Pt and Pd based catalysts. Applied Catalysis B: Environmental, 2018, 226, 585-595.	20.2	113
17	Electronic structure modulation of NiS ₂ by transition metal doping for accelerating the hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 4971-4976.	10.3	93
18	Robust 3-D configured metal oxide nano-array based monolithic catalysts with ultrahigh materials usage efficiency and catalytic performance tunability. Nano Energy, 2013, 2, 873-881.	16.0	76

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19	Synthesis of Ferromagnetic Fe _{0.6} Mn _{0.4} O Nanoflowers as a New Class of Magnetic Theranostic Platform for In Vivo T ₁ -T ₂ Dual-Mode Magnetic Resonance Imaging and Magnetic Hyperthermia Therapy. <i>Advanced Healthcare Materials</i> , 2016, 5, 2092-2104.	7.6	75
20	Ar ²⁺ Beam Irradiation-Induced Multivacancies in MoSe ₂ Nanosheet for Enhanced Electrochemical Hydrogen Evolution. <i>ACS Energy Letters</i> , 2018, 3, 2167-2172.	17.4	73
21	Transition-metal-doped NiSe ₂ nanosheets towards efficient hydrogen evolution reactions. <i>Nano Research</i> , 2018, 11, 6051-6061.	10.4	72
22	Size dependent magnetic hyperthermia of octahedral Fe ₃ O ₄ nanoparticles. <i>RSC Advances</i> , 2015, 5, 76764-76771.	3.6	64
23	Extremely low frequency alternating magnetic field-triggered and MRI-traced drug delivery by optimized magnetic zeolitic imidazolate framework-90 nanoparticles. <i>Nanoscale</i> , 2016, 8, 3259-3263.	5.6	63
24	Copper dopants improved the hydrogen evolution activity of earth-abundant cobalt pyrite catalysts by activating the electrocatalytically inert sulfur sites. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17601-17608.	10.3	61
25	Nanoscale Magnetization Reversal Caused by Electric Field-Induced Ion Migration and Redistribution in Cobalt Ferrite Thin Films. <i>ACS Nano</i> , 2015, 9, 4210-4218.	14.6	60
26	Elucidating the Nature of the Cu(I) Active Site in CuO/TiO ₂ for Excellent Low-Temperature CO Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 7091-7101.	8.0	51
27	Intrinsic and interfacial effect of electrode metals on the resistive switching behaviors of zinc oxide films. <i>Nanotechnology</i> , 2014, 25, 425204.	2.6	49
28	Solar-driven efficient methane catalytic oxidation over epitaxial ZnO/La _{0.8} Sr _{0.2} CoO ₃ heterojunctions. <i>Applied Catalysis B: Environmental</i> , 2020, 265, 118469.	20.2	44
29	Bifunctional Electrocatalytic Activity of Nitrogen-Doped NiO Nanosheets for Rechargeable Zinc-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 30865-30871.	8.0	41
30	IMPROVED CAPACITIVE BEHAVIOR OF MnO ₂ THIN FILMS PREPARED BY ELECTRODEPOSITION ON THE PT SUBSTRATE WITH A MnO _x BUFFER LAYER. <i>Functional Materials Letters</i> , 2009, 02, 13-18.	1.2	36
31	High catalytic activity of oxygen-induced (200) surface of Ta ₂ O ₅ nanolayer towards durable oxygen evolution reaction. <i>Nano Energy</i> , 2016, 25, 60-67.	16.0	36
32	Controllable and Stable Quantized Conductance States in a Pt/HfO _x /ITO Memristor. <i>Advanced Electronic Materials</i> , 2020, 6, 1901055.	5.1	31
33	Controllable synthesis of ZnO nanoparticles with high intensity visible photoemission and investigation of its mechanism. <i>Nanotechnology</i> , 2013, 24, 175702.	2.6	29
34	Mechanical-Agitation-Assisted Growth of Large-Scale and Uniform ZnO Nanorod Arrays within 3D Multichannel Monolithic Substrates. <i>Crystal Growth and Design</i> , 2013, 13, 3657-3664.	3.0	27
35	Pre-surface leached cordierite honeycombs for Mn _x Co _{3-x} O ₄ nano-sheet array integration with enhanced hydrocarbons combustion. <i>Catalysis Today</i> , 2019, 320, 196-203.	4.4	26
36	Phase-transfer induced room temperature ferromagnetic behavior in 1T@2H-MoSe ₂ nanosheets. <i>Scientific Reports</i> , 2017, 7, 45307.	3.3	23

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37	Molecular O ₂ Activation over Cu(I)-Mediated C-N Bond for Low-Temperature CO Oxidation. ACS Applied Materials & Interfaces, 2018, 10, 17167-17174.	8.0	22
38	Hydrogen Evolution Catalyzed by a Molybdenum Sulfide Two-Dimensional Structure with Active Basal Planes. ACS Applied Materials & Interfaces, 2018, 10, 22042-22049.	8.0	22
39	Magnetic-field-assisted synthesis of magnetite nanoparticles via thermal decomposition and their hyperthermia properties. CrystEngComm, 2015, 17, 3652-3658.	2.6	21
40	Achieving a high magnetization in sub-nanostructured magnetite films by spin-flipping of tetrahedral Fe ³⁺ cations. Nano Research, 2015, 8, 2935-2945.	10.4	21
41	Oxygen deficiency and cooling field driven vertical hysteretic shift in epitaxial SrRuO ₃ /SrTiO ₃ heterostructures. Applied Physics Letters, 2017, 111, .	3.3	20
42	Magnetic anisotropy modulation of epitaxial Fe ₃ O ₄ films on MgO substrates. Journal of Applied Physics, 2015, 117, .	2.5	19
43	Molecular Insights into NO-Promoted Sulfate Formation on Model TiO ₂ Nanoparticles with Different Exposed Facets. Environmental Science & Technology, 2018, 52, 14110-14118.	10.0	19
44	High Lithium Insertion Voltage Single-Crystal H ₂ Ti ₁₂ O ₂₅ Nanorods as a High-Capacity and High-Rate Lithium-Ion Battery Anode Material. ChemSusChem, 2018, 11, 299-310.	6.8	18
45	Electrode-controlled confinement of conductive filaments in a nanocolumn embedded symmetric-asymmetric RRAM structure. Journal of Materials Chemistry C, 2020, 8, 1577-1582.	5.5	16
46	Mesoporous Perovskite Nanotube-Array Enhanced Metallic-State Platinum Dispersion for Low Temperature Propane Oxidation. ChemCatChem, 2018, 10, 2184-2189.	3.7	14
47	Stable zinc-blende ZnO thin films: formation and physical properties. Journal of Materials Science, 2015, 50, 28-33.	3.7	13
48	Shape-dependent microwave permeability of Fe ₃ O ₄ nanoparticles: a combined experimental and theoretical study. Nanotechnology, 2015, 26, 265704.	2.6	11
49	Novel room-temperature spin-valve-like magnetoresistance in magnetically coupled nano-column Fe ₃ O ₄ /Ni heterostructure. Nanoscale, 2016, 8, 15737-15743.	5.6	9
50	Realization of single-atom ferromagnetism in graphene by Cu-N ₄ moieties anchoring. Applied Physics Letters, 2020, 116, .	3.3	9
51	High-Magnetization Tetragonal Ferrite-Based Films Induced by Carbon and Oxygen Vacancy Pairs. ACS Applied Materials & Interfaces, 2019, 11, 1049-1056.	8.0	5
52	One-dimensional fossil-like Fe ₂ O ₃ @carbon nanostructure: preparation, structural characterization and application as adsorbent for fast and selective recovery of gold ions from aqueous solution. Nanotechnology, 2016, 27, 415701.	2.6	4
53	SrRuO_3 and Li	2.4	4
54	Magnetic and optical studies of hydrogenated Cu-doped ZnO film. Journal of the Korean Physical Society, 2013, 62, 1738-1743.	0.7	3

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55	Facile synthesis of water-dispersible magnetite nanorings from surfactant-free hematite nanorings. <i>Micro and Nano Letters</i> , 2016, 11, 814-818.	1.3	3
56	Economical Fe-doped Ta ₂ O ₅ electrocatalyst toward efficient oxygen evolution: a combined experimental and first-principles study. <i>MRS Communications</i> , 2017, 7, 563-569.	1.8	3
57	A Facile Chemical Solution-Based Method for Epitaxial Growth of Thick Ferrite Films. <i>Advanced Electronic Materials</i> , 2015, 1, 1500102.	5.1	2
58	L10-FePt films fabricated by wet-chemical route. <i>Thin Solid Films</i> , 2015, 589, 649-654.	1.8	1
59	Nano-Array Catalysts for Energy and Environmental Catalysis. , 2015, , 339-370.		1
60	7. Recovery of valuable metals from e-waste via applications of nanomaterials. , 2019, , 234-260.		1