

Peng Diao

List of Publications by Year in descending order

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136740

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80
docs citations

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times ranked

6957
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxygen Reduction Electrocatalyst Based on Strongly Coupled Cobalt Oxide Nanocrystals and Carbon Nanotubes. <i>Journal of the American Chemical Society</i> , 2012, 134, 15849-15857.	6.6	747
2	Hydrothermal growth of well-aligned ZnO nanorod arrays: Dependence of morphology and alignment ordering upon preparing conditions. <i>Journal of Solid State Chemistry</i> , 2005, 178, 1864-1873.	1.4	424
3	Cu ₂ O/CuO Bilayered Composite as a High-Efficiency Photocathode for Photoelectrochemical Hydrogen Evolution Reaction. <i>Scientific Reports</i> , 2016, 6, 35158.	1.6	338
4	The effect of hydrothermal growth temperature on preparation and photoelectrochemical performance of ZnO nanorod array films. <i>Journal of Solid State Chemistry</i> , 2005, 178, 3210-3215.	1.4	198
5	Studies of structural disorder of self-assembled thiol monolayers on gold by cyclic voltammetry and ac impedance. <i>Journal of Electroanalytical Chemistry</i> , 1999, 464, 61-67.	1.9	130
6	Hydrothermal growth of perpendicularly oriented ZnO nanorod array film and its photoelectrochemical properties. <i>Applied Surface Science</i> , 2005, 249, 71-75.	3.1	129
7	Highly hydrophilic and superhydrophobic ZnO nanorod array films. <i>Thin Solid Films</i> , 2007, 515, 7162-7166.	0.8	116
8	Photoelectrochemical studies of nanocrystalline TiO ₂ co-sensitized by novel cyanine dyes. <i>Solar Energy Materials and Solar Cells</i> , 2005, 88, 23-35.	3.0	113
9	CuO/Pd composite photocathodes for photoelectrochemical hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 7686-7696.	3.8	110
10	Iridium Oxide Nanoparticles and Iridium/Iridium Oxide Nanocomposites: Photochemical Fabrication and Application in Catalytic Reduction of 4-Nitrophenol. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 16738-16749.	4.0	106
11	Characterization of defects in the formation process of self-assembled thiol monolayers by electrochemical impedance spectroscopy. <i>Journal of Electroanalytical Chemistry</i> , 2001, 495, 98-105.	1.9	101
12	Chemically Assembled Single-Wall Carbon Nanotubes and their Electrochemistry. <i>ChemPhysChem</i> , 2002, 3, 898-991.	1.0	100
13	WO ₃ nanoneedles/±-Fe ₂ O ₃ /cobalt phosphate composite photoanode for efficient photoelectrochemical water splitting. <i>Applied Catalysis B: Environmental</i> , 2014, 148-149, 304-310.	10.8	88
14	Nickel foam supported Cr-doped NiCo ₂ O ₄ /FeOOH nanoneedle arrays as a high-performance bifunctional electrocatalyst for overall water splitting. <i>Nano Research</i> , 2020, 13, 3299-3309.	5.8	88
15	Sulfur-Doped CoSe ₂ Porous Nanosheets as Efficient Electrocatalysts for the Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 28288-28297.	4.0	86
16	Vertically Aligned Single-Walled Carbon Nanotubes by Chemical Assembly: Methodology, Properties, and Applications. <i>Advanced Materials</i> , 2010, 22, 1430-1449.	11.1	84
17	Gold/WO ₃ nanocomposite photoanodes for plasmonic solar water splitting. <i>Nano Research</i> , 2016, 9, 1735-1751.	5.8	83
18	Surface-Enhanced Raman Scattering of p-Aminothiophenol on a Au(core)/Cu(shell) Nanoparticle Assembly. <i>ChemPhysChem</i> , 2005, 6, 913-918.	1.0	82

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19	Copper(Cu) tungstate nanoflake array films: sacrificial template synthesis, hydrogen treatment, and their application as photoanodes in solar water splitting. <i>Nanoscale</i> , 2016, 8, 5892-5901.	2.8	78
20	Electrochemistry at Chemically Assembled Single-Wall Carbon Nanotube Arrays. <i>Journal of Physical Chemistry B</i> , 2005, 109, 20906-20913.	1.2	77
21	Composite of Few-Layered MoS_2 Grown on Carbon Black: Tuning the Ratio of Terminal to Total Sulfur in MoS_2 for Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14413-14425.	1.5	58
22	Sulfur and selenium doped nickel chalcogenides as efficient and stable electrocatalysts for hydrogen evolution reaction: The importance of the dopant atoms in and beneath the surface. <i>Nano Energy</i> , 2020, 74, 104787.	8.2	52
23	Assessing the apparent effective thickness of alkanethiol self-assembled monolayers in different concentrations of $\text{Fe}(\text{CN})_6^{3-}/\text{Fe}(\text{CN})_6^{4-}$ by ac impedance spectroscopy. <i>Journal of Electroanalytical Chemistry</i> , 1999, 470, 9-13.	1.9	51
24	Kinetically Controlled Pt Deposition onto Self-Assembled Au Colloids: Preparation of Au (Core)Pt (Shell) Nanoparticle Assemblies. <i>Chemistry of Materials</i> , 2004, 16, 3239-3245.	3.2	50
25	Molybdenum doped CuWO_4 nanoflake array films as an efficient photoanode for solar water splitting. <i>Electrochimica Acta</i> , 2019, 308, 195-205.	2.6	47
26	Fractional coverage of defects in self-assembled thiol monolayers on gold. <i>Journal of Electroanalytical Chemistry</i> , 2000, 480, 59-63.	1.9	46
27	Cyclic voltammetry and a.c. impedance studies of Ca^{2+} -induced ion channels on Pt-BLM. <i>Bioelectrochemistry</i> , 1998, 45, 173-179.	1.0	40
28	Electrocatalytic oxidation of CO on supported gold nanoparticles and submicroparticles: Support and size effects in electrochemical systems. <i>Journal of Catalysis</i> , 2007, 250, 247-253.	3.1	37
29	Raman spectra in a broad frequency region of p-type porous silicon. <i>Journal of Applied Physics</i> , 1994, 76, 3016-3019.	1.1	36
30	Draining the photoinduced electrons away from an anode: the preparation of $\text{Ag}/\text{Ag}_3\text{PO}_4$ composite nanoplate photoanodes for highly efficient water splitting. <i>Journal of Materials Chemistry A</i> , 2015, 3, 18991-18999.	5.2	36
31	Electrodeposition of Vertically Aligned Silver Nanoplate Arrays on Indium Tin Oxide Substrates. <i>Journal of Physical Chemistry C</i> , 2015, 119, 20709-20720.	1.5	34
32	How Does the Particle Density Affect the Electrochemical Behavior of Gold Nanoparticle Assembly?. <i>Journal of Physical Chemistry C</i> , 2008, 112, 7036-7046.	1.5	33
33	High-aspect-ratio WO_3 nanoneedles modified with nickel-borate for efficient photoelectrochemical water oxidation. <i>Electrochimica Acta</i> , 2013, 114, 271-277.	2.6	33
34	Unmodified supported thiol/lipid bilayers: studies of structural disorder and conducting mechanism by cyclic voltammetry and AC impedance. <i>Bioelectrochemistry</i> , 1999, 48, 469-475.	1.0	32
35	Effect of solvent polarity on the assembly behavior of PVP coated rhodium nanoparticles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 417, 32-38.	2.3	29
36	Molybdenum Diselenide Nanolayers Prepared on Carbon Black as an Efficient and Stable Electrocatalyst for Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2017, 121, 26686-26697.	1.5	28

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37	Hybrids of iridium-cobalt phosphates as a highly efficient electrocatalyst for the oxygen evolution reaction in neutral solution. <i>Chemical Communications</i> , 2019, 55, 3000-3003.	2.2	25
38	Nickel foam supported NiFe ₂ O ₄ -NiO hybrid: A novel 3D porous catalyst for efficient heterogeneous catalytic ozonation of azo dye and nitrobenzene. <i>Applied Surface Science</i> , 2021, 541, 148683.	3.1	25
39	Nickel-foam-supported Ni(OH) ₂ as a green anodic catalyst for energy efficient electrooxidative degradation of azo-dye wastewater. <i>RSC Advances</i> , 2018, 8, 19776-19785.	1.7	24
40	CuO/CuBi ₂ O ₄ bilayered heterojunction as an efficient photocathode for photoelectrochemical hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 11607-11620.	3.8	24
41	Potential-Induced Shape Evolution of Gold Nanoparticles Prepared on ITO Substrate. <i>Journal of Physical Chemistry C</i> , 2009, 113, 15796-15800.	1.5	23
42	Electrodeposition of Vertically Aligned Palladium Nanoneedles and Their Application as Active Substrates for Surface-Enhanced Raman Scattering. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9758-9768.	1.5	23
43	Step-like behavior of photoluminescence peak energy and formation of porous silicon. <i>Applied Physics Letters</i> , 1993, 62, 642-644.	1.5	22
44	Ca ²⁺ induced Fe(CN) ₆ ^{3-/4-} electron transfer at Pt supported BLM electrode. <i>Bioelectrochemistry</i> , 1998, 44, 285-288.	1.0	21
45	Direct electrochemical detection of pyruvic acid by cobalt oxyhydroxide modified indium tin oxide electrodes. <i>Electrochimica Acta</i> , 2011, 56, 10159-10165.	2.6	21
46	Electrochemically Partitioned Assembly of Organosulfur Monolayers and Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2006, 110, 20386-20391.	1.2	20
47	Dual detection strategy for electrochemical analysis of glucose and nitrite using a partitionally modified electrode. <i>Analyst</i> , 2012, 137, 145-152.	1.7	20
48	Tailored preparation of WO ₃ nano-grassblades on FTO substrate for photoelectrochemical water splitting. <i>CrystEngComm</i> , 2016, 18, 6798-6808.	1.3	20
49	Shape-controlled electrodeposition of standing Rh nanoplates on indium tin oxide substrates and their electrocatalytic activity toward formic acid oxidation. <i>Electrochimica Acta</i> , 2012, 83, 146-154.	2.6	19
50	Nernst-ping-pong model for evaluating the effects of the substrate concentration and anode potential on the kinetic characteristics of bioanode. <i>Bioresource Technology</i> , 2013, 136, 610-616.	4.8	19
51	Dendritic CuBi ₂ O ₄ Array Photocathode Coated with Conformal TiO ₂ Protection Layer for Efficient and Stable Photoelectrochemical Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1890-1901.	1.5	19
52	Effect of substrate potentials on the structural disorders of alkanethiol monolayers prepared by electrochemically directed assembly. <i>Journal of Electroanalytical Chemistry</i> , 2006, 597, 103-110.	1.9	17
53	Simultaneous detection of ammonia and nitrate using a modified electrode with two regions. <i>Microchemical Journal</i> , 2020, 154, 104649.	2.3	17
54	Electrocatalytic activity of supported gold nanoparticles toward CO oxidation: The perimeter effect of gold-support interface. <i>Electrochemistry Communications</i> , 2010, 12, 1622-1625.	2.3	16

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55	The effect of halide ions on the electrooxidation of CO on gold particles supported by indium tin oxide. <i>Journal of Electroanalytical Chemistry</i> , 2009, 630, 81-90.	1.9	15
56	Network Structured CuWO ₄ /BiVO ₄ /Co-Pi Nanocomposite for Solar Water Splitting. <i>Catalysts</i> , 2018, 8, 663.	1.6	14
57	Uniform Electrochemical Deposition of Copper onto Self-Assembled Gold Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2004, 108, 3535-3539.	1.2	12
58	Electrochemical Identification of Metallic and Semiconducting Single-Walled Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2008, 112, 13346-13348.	1.5	12
59	Photo-catalyzed surface hydrolysis of iridium(ⁱⁱⁱ) ions on semiconductors: a facile method for the preparation of semiconductor/IrO _x composite photoanodes toward oxygen evolution reaction. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 145-154.	1.3	12
60	Fluorine doped copper tungsten nanoflakes with enhanced charge separation for efficient photoelectrochemical water oxidation. <i>Electrochimica Acta</i> , 2020, 352, 136471.	2.6	12
61	Electrochemical sensing of CO by gold particles electrodeposited on indium tin oxide substrate. <i>Electrochemistry Communications</i> , 2009, 11, 1069-1072.	2.3	11
62	A Composite of Pyrrole-Doped Carbon Black Modified with Co ₃ O ₄ for Efficient Electrochemical Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2017, 4, 2260-2268.	1.7	11
63	Photochemical synthesis of iridium submicroparticles and their application in catalytic reduction of methylene blue. <i>Applied Catalysis A: General</i> , 2016, 516, 109-116.	2.2	9
64	Studies of Adsorption Kinetics and Defects of Self-Assembled Thiol Monolayers on Gold by Capacitance Plane Plot. <i>Journal of the Chinese Chemical Society</i> , 2000, 47, 1197-1203.	0.8	8
65	Electrochemical studies for the formation of sodium lauryl sulfate monolayer on an octadecanethiol-coated gold electrode. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2000, 175, 141-145.	2.3	8
66	Photoinduced electron transfer across a gold supported octadecanethiol/phosphatidylcholine hybrid bilayer membrane mediated by C60 in different redox species solution. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2000, 132, 219-224.	2.0	8
67	Boosting the Activity and Stability of Copper Tungsten Nanoflakes toward Solar Water Oxidation by Iridium-Cobalt Phosphates Modification. <i>Catalysts</i> , 2020, 10, 913.	1.6	8
68	Activity and stability of supported gold nano- and submicro-particles toward the electrocatalytic oxidation of carbon monoxide. <i>Applied Catalysis A: General</i> , 2014, 469, 65-73.	2.2	7
69	Construction of the Fe ³⁺ -O-Mn ^{3+/2+} hybrid bonds on the surface of porous silica as active centers for efficient heterogeneous catalytic ozonation. <i>Journal of Solid State Chemistry</i> , 2021, 300, 122266.	1.4	7
70	Electron transfer between ferrocene-modified Au/octadecanethiol/lipid BLM electrode and redox couples in solution. <i>Bioelectrochemistry</i> , 1999, 48, 243-247.	1.0	6
71	Comments on "Electric-Field-Assisted Growth of Highly Uniform and Oriented Gold Nanotriangles on Conducting Glass Substrates". <i>Advanced Materials</i> , 2009, 21, 1317-1319.	11.1	6
72	Polyazulene-Based Materials for Heavy Metal Ion Detection. 2. (E)-5-(azulen-1-yl-diaz-enyl)-1H-Tetrazole-Modified Electrodes for Heavy Metal Sensing. <i>Coatings</i> , 2020, 10, 869.	1.2	6

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73	Preparation and Characterization of Highly Oriented ZnO Single Crystal Submicrorod Arrays. <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , 2003, 19, 478-480.	2.2	6
74	Preparation of iridium nano- and submicroparticles on solid substrates by direct surface growth and drop-drying assembly. <i>Rare Metals</i> , 2012, 31, 523-530.	3.6	4
75	A.c. impedance studies of the mechanism of electron transfer across TCNQ modified Au/thiol/lipid bilayer. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2000, 175, 203-206.	2.3	3
76	Size-controlled electrochemical synthesis of hemispherical gold nanoparticles on ITO substrates. <i>Journal of Electroanalytical Chemistry</i> , 2015, 755, 174-181.	1.9	3
77	Photoluminescence Studies on Porous Silicon Quantum Confinement Mechanism. <i>Materials Research Society Symposia Proceedings</i> , 1993, 298, 123.	0.1	1
78	Assessing the Apparent Effective Thickness of the Supported Hybrid Bilayer Membranes Consisting of Octadecanethiol and Phospholipid by ac Impedance Spectroscopy. <i>Journal of the Chinese Chemical Society</i> , 1999, 46, 571-576.	0.8	1
79	Studies of Structural Disorder of Gold Supported Thiol-Lipid Bilayers. <i>Molecular Crystals and Liquid Crystals</i> , 1999, 337, 169-172.	0.3	0