

Wenxin Niu

List of Publications by Year in descending order

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82
papers

6,974
citations

93792

39
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75989

78
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86
all docs

86
docs citations

86
times ranked

11288
citing authors

#	ARTICLE	IF	CITATIONS
1	Suppressing photoinduced charge recombination at the BiVO ₄ NiOOH junction by sandwiching an oxygen vacancy layer for efficient photoelectrochemical water oxidation. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 1116-1125.	5.0	19
2	Surface Molecular Functionalization of Unusual Phase Metal Nanomaterials for Highly Efficient Electrochemical Carbon Dioxide Reduction under Industry-Relevant Current Density. <i>Small</i> , 2022, 18, e2106766.	5.2	30
3	Non-centrosymmetric Hollow BiOCl Nanocaps with Tailored Openings for the Photocatalytic Degradation of Rhodamine B. <i>ACS Applied Nano Materials</i> , 2022, 5, 2326-2334.	2.4	11
4	Designer Gold-Framed Palladium Nanocubes for Plasmon-Enhanced Electrocatalytic Oxidation of Ethanol. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	5
5	Synthesis of Chiral Au Nanocrystals with Precise Homochiral Facets for Enantioselective Surface Chemistry. <i>Nano Letters</i> , 2022, 22, 2915-2922.	4.5	42
6	Highly enantioselective electrochemical sensing based on helicoid Au nanoparticles with intrinsic chirality. <i>Sensors and Actuators B: Chemical</i> , 2022, 362, 131757.	4.0	16
7	Lead-free hybrid perovskite photocatalysts: surface engineering, charge-carrier behaviors, and solar-driven applications. <i>Journal of Materials Chemistry A</i> , 2022, 10, 12296-12316.	5.2	29
8	Surface engineering of Rh-modified Pd nanocrystals by colloidal underpotential deposition for electrocatalytic methanol oxidation. <i>Nanoscale</i> , 2021, 13, 5284-5291.	2.8	13
9	Boosting chiral amplification in plasmon-coupled circular dichroism using discrete silver nanorods as amplifiers. <i>Chemical Communications</i> , 2021, 57, 7390-7393.	2.2	6
10	Selective Epitaxial Growth of Rh Nanorods on 2H/fcc Heterophase Au Nanosheets to Form 1D/2D Rh-Au Heterostructures for Highly Efficient Hydrogen Evolution. <i>Journal of the American Chemical Society</i> , 2021, 143, 4387-4396.	6.6	56
11	Unconventional-Phase Crystalline Materials Constructed from Multiscale Building Blocks. <i>Chemical Reviews</i> , 2021, 121, 5830-5888.	23.0	57
12	A trace ppb-level electrochemical H ₂ S sensor based on ultrathin Pt nanotubes. <i>Talanta</i> , 2021, 233, 122539.	2.9	19
13	Unveiling the Actual Catalytic Sites in Nanozyme-Catalyzed Oxidation of o-Phenylenediamine. <i>Small</i> , 2021, 17, e2104083.	5.2	21
14	Facet-Dependent Catalytic Performance of Au Nanocrystals for Electrochemical Nitrogen Reduction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 41613-41619.	4.0	42
15	Dual roles of underpotential deposition in the synthesis of tetrahedral Pd-Ag alloy nanocrystals. <i>Chemical Communications</i> , 2020, 56, 14849-14852.	2.2	7
16	Unveiling One-Pot Template-Free Fabrication of Exquisite Multidimensional PtNi Multicube Nanoarchitectonics for the Efficient Electrochemical Oxidation of Ethanol and Methanol with a Great Tolerance for CO. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 31309-31318.	4.0	73
17	Ethylene Selectivity in Electrocatalytic CO ₂ Reduction on Cu Nanomaterials: A Crystal Phase-Dependent Study. <i>Journal of the American Chemical Society</i> , 2020, 142, 12760-12766.	6.6	183
18	In-Situ Probing of Crystal-Phase-Dependent Photocatalytic Activities of Au Nanostructures by Surface-Enhanced Raman Spectroscopy. , 2020, 2, 409-414.		22

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19	Heterophase fcc-2H-fcc gold nanorods. <i>Nature Communications</i> , 2020, 11, 3293.	5.8	92
20	Unusual 4H-phase twinned noble metal nanokites. <i>Nature Communications</i> , 2019, 10, 2881.	5.8	25
21	PtCu@O highly excavated octahedral nanostructures built with nanodendrites for superior alcohol electrooxidation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 8568-8572.	5.2	32
22	Highly Excavated Octahedral Nanostructures Integrated from Ultrathin Mesoporous PtCu ₃ Nanosheets: Construction of Three-Dimensional Open Surfaces for Enhanced Electrocatalysis. <i>Small</i> , 2019, 15, e1804407.	5.2	19
23	Modulating the oxophilic properties of inorganic nanomaterials for electrocatalysis of small carbonaceous molecules. <i>Nano Today</i> , 2019, 29, 100802.	6.2	20
24	Atomic origins of high electrochemical CO ₂ reduction efficiency on nanoporous gold. <i>Nanoscale</i> , 2018, 10, 8372-8376.	2.8	46
25	Hierarchical concave layered triangular PtCu alloy nanostructures: rational integration of dendritic nanostructures for efficient formic acid electrooxidation. <i>Nanoscale</i> , 2018, 10, 9369-9375.	2.8	28
26	Tip-Selective Growth of Silver on Gold Nanostars for Surface-Enhanced Raman Scattering. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 14850-14856.	4.0	46
27	Crystal phase-based epitaxial growth of hybrid noble metal nanostructures on 4H/fcc Au nanowires. <i>Nature Chemistry</i> , 2018, 10, 456-461.	6.6	220
28	Pressure-Induced Phase Engineering of Gold Nanostructures. <i>Journal of the American Chemical Society</i> , 2018, 140, 15783-15790.	6.6	68
29	Two-Dimensional Metal Nanomaterials: Synthesis, Properties, and Applications. <i>Chemical Reviews</i> , 2018, 118, 6409-6455.	23.0	711
30	A Novel Photochemical Method for the Synthesis of Au Triangular Nanoplates inside Nanocavity of Mesoporous Silica Shells. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9572-9578.	1.5	18
31	Shaping Gold Nanocrystals in Dimethyl Sulfoxide: Toward Trapezohedral and Bipyramidal Nanocrystals Enclosed by {311} Facets. <i>Journal of the American Chemical Society</i> , 2017, 139, 5817-5826.	6.6	48
32	Ultrathin Two-Dimensional Organic-Inorganic Hybrid Perovskite Nanosheets with Bright, Tunable Photoluminescence and High Stability. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 4252-4255.	7.2	206
33	A Generalized Method for the Synthesis of Ligand-Free M@SiO ₂ (M = Ag, Au, Pd, Pt) Yolk-Shell Nanoparticles. <i>Langmuir</i> , 2017, 33, 3281-3286.	1.6	22
34	Iodide-Switched Deposition for the Synthesis of Segmented Pd@Au@Pd Nanorods: Crystal Facet Matters. <i>Langmuir</i> , 2017, 33, 12254-12259.	1.6	5
35	New electrochemiluminescence catalyst: Cu ₂ O semiconductor crystal and the enhanced activity of octahedra synthesized by iodide ions coordination. <i>Materials Research Express</i> , 2017, 4, 115021.	0.8	3
36	Submonolayered Ru Deposited on Ultrathin Pd Nanosheets used for Enhanced Catalytic Applications. <i>Advanced Materials</i> , 2016, 28, 10282-10286.	11.1	148

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37	Concave and duck web-like platinum nanopentagons with enhanced electrocatalytic properties for formic acid oxidation. <i>Journal of Materials Chemistry A</i> , 2016, 4, 807-812.	5.2	27
38	Pd@Pb Alloy Nanocrystals with Tailored Composition for Semihydrogenation: Taking Advantage of Catalyst Poisoning. <i>Angewandte Chemie</i> , 2015, 127, 8389-8392.	1.6	27
39	Pd@Pb Alloy Nanocrystals with Tailored Composition for Semihydrogenation: Taking Advantage of Catalyst Poisoning. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 8271-8274.	7.2	125
40	A Platinum Highly Concave Cube with one Leg on each Vertex as an Advanced Nanocatalyst for Electrocatalytic Applications. <i>ChemCatChem</i> , 2015, 7, 1064-1069.	1.8	24
41	Tuning Interior Nanogaps of Double-shelled Au/Ag Nanoboxes for Surface-Enhanced Raman Scattering. <i>Scientific Reports</i> , 2015, 5, 8382.	1.6	35
42	A Platinum Highly Concave Cube with one Leg on each Vertex as an Advanced Nanocatalyst for Electrocatalytic Applications. <i>ChemCatChem</i> , 2015, 7, 1033-1033.	1.8	0
43	Solvothermal synthesis of metal nanocrystals and their applications. <i>Nano Today</i> , 2015, 10, 240-267.	6.2	206
44	Highly Symmetric Gold Nanostars: Crystallographic Control and Surface-Enhanced Raman Scattering Property. <i>Journal of the American Chemical Society</i> , 2015, 137, 10460-10463.	6.6	261
45	Sandwich-structured Fe ₂ O ₃ @SiO ₂ @Au nanoparticles with magnetoplasmonic responses. <i>Journal of Materials Chemistry C</i> , 2015, 3, 11645-11652.	2.7	13
46	Metallic Nanostructures: Fundamentals. , 2015, , 1-47.		2
47	Controlled Synthesis of Palladium Concave Nanocubes with Sub-10-Nanometer Edges and Corners for Tunable Plasmonic Property. <i>Chemistry of Materials</i> , 2014, 26, 2180-2186.	3.2	72
48	Volume-confined synthesis of ligand-free gold nanoparticles with tailored sizes for enhanced catalytic activity. <i>Chemical Physics Letters</i> , 2014, 613, 95-99.	1.2	15
49	Dodecahedral Gold Nanocrystals: The Missing Platonic Shape. <i>Journal of the American Chemical Society</i> , 2014, 136, 3010-3012.	6.6	39
50	Surface Plasmon-Driven Water Reduction: Gold Nanoparticle Size Matters. <i>Journal of the American Chemical Society</i> , 2014, 136, 9842-9845.	6.6	301
51	One-pot synthesis of gold nanorods using binary surfactant systems with improved monodispersity, dimensional tunability and plasmon resonance scattering properties. <i>Nanotechnology</i> , 2014, 25, 125601.	1.3	23
52	Synthesis of Convex Hexoctahedral Palladium@Gold Core@Shell Nanocrystals with {431} High-Index Facets with Remarkable Electrochemiluminescence Activities. <i>ACS Nano</i> , 2014, 8, 5953-5958.	7.3	76
53	Pd@Au core@shell nanocrystals with concave cubic shapes: kinetically controlled synthesis and electrocatalytic properties. <i>Faraday Discussions</i> , 2013, 164, 175.	1.6	18
54	Synthesis and electrocatalytic properties of tetrahedral, polyhedral, and branched Pd@Au core@shell nanocrystals. <i>Chemical Communications</i> , 2013, 49, 8836.	2.2	23

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55	A Template-Free and Surfactant-Free Method for High-Yield Synthesis of Highly Monodisperse 3-Aminophenol-Formaldehyde Resin and Carbon Nano/Microspheres. <i>Macromolecules</i> , 2013, 46, 140-145.	2.2	155
56	Facet-dependent electrocatalytic activities of Pd nanocrystals toward the electro-oxidation of hydrazine. <i>Electrochemistry Communications</i> , 2013, 37, 57-60.	2.3	26
57	Seed-mediated growth of noble metal nanocrystals: crystal growth and shape control. <i>Nanoscale</i> , 2013, 5, 3172.	2.8	173
58	Halide Anions as Shape-Directing Agents for Obtaining High-Quality Anisotropic Gold Nanostructures. <i>Chemistry of Materials</i> , 2013, 25, 1392-1399.	3.2	181
59	Synthesis and applications of noble metal nanocrystals with high-energy facets. <i>Nano Today</i> , 2012, 7, 586-605.	6.2	224
60	Seed-mediated growth method for high-quality noble metal nanocrystals. <i>Science China Chemistry</i> , 2012, 55, 2311-2317.	4.2	26
61	Facile synthesis and electrochemiluminescence application of concave trisoctahedral Pd@Au core-shell nanocrystals bound by {311} high-index facets. <i>Chemical Communications</i> , 2011, 47, 10353.	2.2	54
62	Seed-mediated growth of palladium nanocrystals: The effect of pseudo-halide thiocyanate ions. <i>Nanoscale</i> , 2011, 3, 678-682.	2.8	37
63	Crystallographic control of noble metal nanocrystals. <i>Nano Today</i> , 2011, 6, 265-285.	6.2	175
64	Shape-Controlled Synthesis of Single-Crystalline Palladium Nanocrystals. <i>ACS Nano</i> , 2010, 4, 1987-1996.	7.3	380
65	Effect of hydroxyl and amino groups on electrochemiluminescence activity of tertiary amines at low tris(2,2'-bipyridyl)ruthenium(II) concentrations. <i>Talanta</i> , 2010, 81, 44-47.	2.9	40
66	Determination of isocyanates by capillary electrophoresis with tris(2,2'-bipyridine)ruthenium(II) electrochemiluminescence. <i>Electrophoresis</i> , 2009, 30, 3926-3931.	1.3	20
67	Hydrogen peroxide biosensor based on direct electrochemistry of soybean peroxidase immobilized on single-walled carbon nanohorn modified electrode. <i>Biosensors and Bioelectronics</i> , 2009, 24, 1159-1163.	5.3	64
68	Simultaneous electrochemical determination of uric acid, dopamine, and ascorbic acid at single-walled carbon nanohorn modified glassy carbon electrode. <i>Biosensors and Bioelectronics</i> , 2009, 25, 940-943.	5.3	214
69	Selective Synthesis of Single-Crystalline Rhombic Dodecahedral, Octahedral, and Cubic Gold Nanocrystals. <i>Journal of the American Chemical Society</i> , 2009, 131, 697-703.	6.6	316
70	Electrochemiluminescence from tris(2,2'-bipyridyl)ruthenium(II)-graphene-Nafion modified electrode. <i>Talanta</i> , 2009, 79, 165-170.	2.9	129
71	Single-walled carbon nanohorn as new solid-phase extraction adsorbent for determination of 4-nitrophenol in water sample. <i>Talanta</i> , 2009, 79, 1441-1445.	2.9	91
72	CEC with tris(2,2'-bipyridyl) ruthenium(II) electrochemiluminescent detection. <i>Electrophoresis</i> , 2008, 29, 4475-4481.	1.3	13

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73	Carbon-supported Pd nanocatalyst modified by non-metal phosphorus for the oxygen reduction reaction. <i>Journal of Power Sources</i> , 2008, 182, 91-94.	4.0	46
74	Amperometric glucose biosensor based on single-walled carbon nanohorns. <i>Biosensors and Bioelectronics</i> , 2008, 23, 1887-1890.	5.3	188
75	Glucose biosensor based on gold nanoparticle-catalyzed luminol electrochemiluminescence on a three-dimensional sol-gel network. <i>Electrochemistry Communications</i> , 2008, 10, 1250-1253.	2.3	97
76	Seed-Mediated Growth of Nearly Monodisperse Palladium Nanocubes with Controllable Sizes. <i>Crystal Growth and Design</i> , 2008, 8, 4440-4444.	1.4	230
77	Environmentally Friendly and Highly Sensitive Ruthenium(II) Tris(2,2'-bipyridyl) Electrochemiluminescent System Using 2-(Dibutylamino)ethanol as Co-Reactant. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 421-424.	7.2	288
78	Rotating minidisk-disk electrodes. <i>Electrochemistry Communications</i> , 2007, 9, 1434-1438.	2.3	10
79	Tris(2,2'-bipyridyl)ruthenium(II) electrochemiluminescent detection of coreactants containing aromatic diol group by the interaction between diol and borate anion. <i>Electrochemistry Communications</i> , 2007, 9, 2666-2670.	2.3	18
80	Application of Ceramic Carbon Materials for Solid-Phase Extraction of Organic Compounds. <i>Analytical Chemistry</i> , 2006, 78, 1345-1348.	3.2	24
81	Copper and iron mediated growth of surfactant-free PtCu and PtFe advanced electrocatalysts for water oxidation and oxygen reduction. <i>Electrochemical Science Advances</i> , 0, , e2100033.	1.2	1
82	Hard nanocrystalline gold materials prepared via high-pressure phase transformation. <i>Nano Research</i> , 0, , .	5.8	3