

Ben Liu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7805922/publications.pdf>

Version: 2024-02-01

94
papers

4,218
citations

94433

37
h-index

128289

60
g-index

98
all docs

98
docs citations

98
times ranked

4505
citing authors

#	ARTICLE	IF	CITATIONS
1	Ligand-Free Noble Metal Nanocluster Catalysts on Carbon Supports via SO_2 -Nitriding. <i>Journal of the American Chemical Society</i> , 2016, 138, 4718-4721.	13.7	204
2	Polymer-guided assembly of inorganic nanoparticles. <i>Chemical Society Reviews</i> , 2020, 49, 465-508.	38.1	196
3	Synthesis of chiral TiO ₂ nanofibre with electron transition-based optical activity. <i>Nature Communications</i> , 2012, 3, 1215.	12.8	149
4	Ultrathin PdAg single-crystalline nanowires enhance ethanol oxidation electrocatalysis. <i>Applied Catalysis B: Environmental</i> , 2019, 249, 116-125.	20.2	135
5	Ultrathin PdPt bimetallic nanowires with enhanced electrocatalytic performance for hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2018, 238, 525-532.	20.2	111
6	Multimetallic Hollow Mesoporous Nanospheres with Synergistically Structural and Compositional Effects for Highly Efficient Ethanol Electrooxidation. <i>ACS Central Science</i> , 2018, 4, 1412-1419.	11.3	109
7	Ternary Palladium-Boron-Phosphorus Alloy Mesoporous Nanospheres for Highly Efficient Electrocatalysis. <i>ACS Nano</i> , 2019, 13, 12052-12061.	14.6	108
8	Hierarchically porous Cu/Zn bimetallic catalysts for highly selective CO ₂ electroreduction to liquid C ₂ products. <i>Applied Catalysis B: Environmental</i> , 2020, 269, 118800.	20.2	108
9	Au-Carbon Electronic Interaction Mediated Selective Oxidation of Styrene. <i>ACS Catalysis</i> , 2017, 7, 3483-3488.	11.2	92
10	Ultrathin palladium nanosheets with selectively controlled surface facets. <i>Chemical Science</i> , 2018, 9, 4451-4455.	7.4	89
11	A Polymer Solution To Prevent Nanoclustering and Improve the Selectivity of Metal Nanoparticles for Electrocatalytic CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15834-15840.	13.8	87
12	Silica Biomineralization via the Self-Assembly of Helical Biomolecules. <i>Advanced Materials</i> , 2015, 27, 479-497.	21.0	82
13	Templated Growth of Crystalline Mesoporous Materials: From Soft/Hard Templates to Colloidal Templates. <i>Frontiers in Chemistry</i> , 2019, 7, 22.	3.6	82
14	Size-dependent synthesis and catalytic activities of trimetallic PdAgCu mesoporous nanospheres in ethanol electrooxidation. <i>Chemical Science</i> , 2019, 10, 1986-1993.	7.4	79
15	Asymmetric Multimetallic Mesoporous Nanospheres. <i>Nano Letters</i> , 2019, 19, 3379-3385.	9.1	76
16	Encapsulation of Metal Nanoparticle Catalysts Within Mesoporous Zeolites and Their Enhanced Catalytic Performances: A Review. <i>Frontiers in Chemistry</i> , 2018, 6, 550.	3.6	74
17	When ternary PdCuP alloys meet ultrathin nanowires: Synergic boosting of catalytic performance in ethanol electrooxidation. <i>Applied Catalysis B: Environmental</i> , 2019, 253, 271-277.	20.2	70
18	Ultrafine Co-based Nanoparticle@Mesoporous Carbon Nanospheres toward High-Performance Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 1746-1758.	8.0	69

#	ARTICLE	IF	CITATIONS
19	A Tunable Multivariate Metal-Organic Framework as a Platform for Designing Photocatalysts. <i>Journal of the American Chemical Society</i> , 2021, 143, 6333-6338.	13.7	69
20	One-pot aqueous synthesis of ultrathin trimetallic PdPtCu nanosheets for the electrooxidation of alcohols. <i>Green Chemistry</i> , 2019, 21, 2367-2374.	9.0	68
21	Ligand-Assisted Co-Assembly Approach toward Mesoporous Hybrid Catalysts of Transition-Metal Oxides and Noble Metals: Photochemical Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 9061-9065.	13.8	66
22	Promoting Effect of Heterostructured NiO/Ni on Pt Nanocatalysts toward Catalytic Hydrolysis of Ammonia Borane. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 7374-7382.	4.6	65
23	Synthesis of Mesoporous Co ₂ and Ni _x CoS ₂ with Superior Supercapacitive Performance Using a Facile Solid-Phase Sulfurization. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 36837-36848.	8.0	64
24	Highly efficient hydrogen production from hydrolysis of ammonia borane over nanostructured Cu@CuCoOx supported on graphene oxide. <i>Journal of Hazardous Materials</i> , 2020, 391, 122199.	12.4	63
25	Concurrent self-assembly of amphiphiles into nanoarchitectures with increasing complexity. <i>Nano Today</i> , 2015, 10, 278-300.	11.9	62
26	Formation of Enantiomeric Impeller-Like Helical Architectures by DNA Self-Assembly and Silica Mineralization. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 923-927.	13.8	60
27	Ultrasmall Au nanocatalysts supported on nitrated carbon for electrocatalytic CO ₂ reduction: the role of the carbon support in high selectivity. <i>Nanoscale</i> , 2018, 10, 14678-14686.	5.6	57
28	A facile synthesis of Fe ₃ C@mesoporous carbon nitride nanospheres with superior electrocatalytic activity. <i>Nanoscale</i> , 2016, 8, 5441-5445.	5.6	53
29	Mesoporous palladium-boron alloy nanospheres. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24877-24883.	10.3	52
30	Engineering Surface Ligands of Noble Metal Nanocatalysts in Tuning the Product Selectivity. <i>Catalysts</i> , 2017, 7, 44.	3.5	50
31	Ternary metal-metalloid-nonmetal alloy nanowires: a novel electrocatalyst for highly efficient ethanol oxidation electrocatalysis. <i>Science Bulletin</i> , 2020, 65, 1823-1831.	9.0	50
32	Crystalline Facet-Directed Generation Engineering of Ultrathin Platinum Nanodendrites. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 663-671.	4.6	49
33	One-step fabrication of trimetallic core-shell Au@PdAuCu mesoporous nanospheres for ethanol electrooxidation. <i>Green Chemistry</i> , 2019, 21, 2043-2051.	9.0	46
34	Mesoporous gold nanospheres via thiolate-Au(scp) intermediates. <i>Chemical Science</i> , 2019, 10, 6423-6430.	7.4	45
35	Noble-Metal-Based Hollow Mesoporous Nanoparticles: Synthesis Strategies and Applications. <i>Advanced Materials</i> , 2022, 34, .	21.0	44
36	Direct growth of ultrasmall bimetallic AuPd nanoparticles supported on nitrated carbon towards ethanol electrooxidation. <i>Electrochimica Acta</i> , 2018, 269, 441-451.	5.2	41

#	ARTICLE	IF	CITATIONS
37	Unveiling Synergistic Effects of Interstitial Boron in Palladium-Based Nanocatalysts for Ethanol Oxidation Electrocatalysis. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6632-6639.	4.6	41
38	Synergistic Catalysis of Binary RuP Nanoclusters on Nitrogen-Functionalized Hollow Mesoporous Carbon in Hydrogen Production from the Hydrolysis of Ammonia Borane. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 696-703.	4.6	40
39	Unconventional structural and morphological transitions of nanosheets, nanoflakes and nanorods of AuNP@MnO ₂ . <i>Journal of Materials Chemistry A</i> , 2016, 4, 6447-6455.	10.3	39
40	Single-Crystalline Mesoporous Palladium and Palladium-Copper Nanocubes for Highly Efficient Electrochemical CO ₂ Reduction. <i>CCS Chemistry</i> , 2022, 4, 1376-1385.	7.8	39
41	Highly Curved, Quasi-Single-Crystalline Mesoporous Metal Nanoplates Promote C≡C Bond Cleavage in Ethanol Oxidation Electrocatalysis. <i>Advanced Materials</i> , 2022, 34, .	21.0	39
42	Insights into Compositional and Structural Effects of Bimetallic Hollow Mesoporous Nanospheres toward Ethanol Oxidation Electrocatalysis. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5490-5498.	4.6	38
43	Template-free Synthesis of Mesoporous and Crystalline Transition Metal Oxide Nanoplates with Abundant Surface Defects. <i>Matter</i> , 2020, 2, 1244-1259.	10.0	38
44	Synthesis and Crystal-Phase Engineering of Mesoporous Palladium-Boron Alloy Nanoparticles. <i>ACS Central Science</i> , 2020, 6, 2347-2353.	11.3	36
45	Ordered Mesoporous Intermetallic Trimetals for Efficient and pH-Universal Hydrogen Evolution Electrocatalysis. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	36
46	A General Concurrent Template Strategy for Ordered Mesoporous Intermetallic Nanoparticles with Controllable Catalytic Performance. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	35
47	Mesoporosity-Enabled Selectivity of Mesoporous Palladium-Based Nanocrystals Catalysts in Semihydrogenation of Alkynes. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202114539.	13.8	33
48	Template-Assisted Self-Assembly: Alignment, Placement, and Arrangement of Two-Dimensional Mesostructured DNA-Silica Platelets. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 14186-14190.	13.8	31
49	Surface Engineering of Spherical Metal Nanoparticles with Polymers toward Selective Asymmetric Synthesis of Nanobowls and Janus-Type Dimers. <i>Small</i> , 2017, 13, 1700091.	10.0	31
50	Ultrafine RhNi Nanocatalysts Confined in Hollow Mesoporous Carbons for a Highly Efficient Hydrogen Production from Ammonia Borane. <i>Inorganic Chemistry</i> , 2021, 60, 6820-6828.	4.0	31
51	Colloidal Amphiphile-Templated Growth of Highly Crystalline Mesoporous Nonsiliceous Oxides. <i>Chemistry of Materials</i> , 2015, 27, 6173-6176.	6.7	30
52	Ultrafine and Ligand-Free Precious Metal (Ru, Ag, Au, Rh and Pd) Nanoclusters Supported on Phosphorus-Doped Carbon. <i>Chemistry - A European Journal</i> , 2018, 24, 2565-2569.	3.3	30
53	Ultrasml Ru Nanoclusters on Nitrogen-Enriched Hierarchically Porous Carbon Support as Remarkably Active Catalysts for Hydrolysis of Ammonia Borane. <i>ChemCatChem</i> , 2018, 10, 4910-4916.	3.7	30
54	A Polymer Solution To Prevent Nanoclustering and Improve the Selectivity of Metal Nanoparticles for Electrocatalytic CO ₂ Reduction. <i>Angewandte Chemie</i> , 2019, 131, 15981-15987.	2.0	29

#	ARTICLE	IF	CITATIONS
55	Porous Metal Nanocrystal Catalysts: Can Crystalline Porosity Enable Catalytic Selectivity?. CCS Chemistry, 2022, 4, 1829-1842.	7.8	29
56	Surfactant Design Strategy for One-Pot Seedless Synthesis of Hollow Mesoporous AuAg Alloy Nanospheres. Journal of Physical Chemistry Letters, 2020, 11, 5777-5784.	4.6	28
57	Mesoporous Noble Metal–Metalloid/Nonmetal Alloy Nanomaterials: Designing Highly Efficient Catalysts. ACS Nano, 2021, 15, 18661-18670.	14.6	28
58	Hierarchically Hollow and Porous NiO/NiCo ₂ O ₄ Nanoprisms Encapsulated in Graphene Oxide for Lithium Storage. Langmuir, 2020, 36, 9668-9674.	3.5	27
59	A sequential template strategy toward hierarchical hetero-metal phosphide hollow nanoboxes for electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2021, 9, 3482-3491.	10.3	26
60	Highly branched and defect-rich PdP nanosheets for ethanol oxidation electrocatalysis. Chemical Communications, 2020, 56, 15667-15670.	4.1	25
61	Amphiphilic Hybrid Nano Building Blocks with Surfactant-Mimicking Structures. ACS Macro Letters, 2015, 4, 736-740.	4.8	24
62	Nanoengineering of aggregation-free and thermally-stable gold nanoparticles in mesoporous frameworks. Nanoscale, 2017, 9, 6380-6390.	5.6	24
63	Highly Crystalline Mesoporous Titania Loaded with Monodispersed Gold Nanoparticles: Controllable Metal–Support Interaction in Porous Materials. ACS Applied Materials & Interfaces, 2020, 12, 9617-9627.	8.0	24
64	Precise Synthesis of Hollow Mesoporous Palladium–Sulfur Alloy Nanoparticles for Selective Catalytic Hydrogenation. CCS Chemistry, 2022, 4, 2854-2863.	7.8	23
65	Synthesis and characterization of multi-helical DNA–silica fibers. Chemical Communications, 2013, 49, 1097.	4.1	22
66	Enzymatic–Photoreduction of Carbon Dioxide using Polymeric Metallofoldamers Containing Nickel–Thiolate Cofactors. ChemCatChem, 2017, 9, 1157-1162.	3.7	22
67	Asymmetric PdPtCu mesoporous hemispheres on nitrogen-functionalized graphene for methanol oxidation electrocatalysis. Journal of Materials Chemistry A, 2020, 8, 15706-15714.	10.3	22
68	Ultrathin and Wavy PdB Alloy Nanowires with Controlled Surface Defects for Enhanced Ethanol Oxidation Electrocatalysis. ACS Applied Materials & Interfaces, 2021, 13, 17599-17607.	8.0	21
69	Self-limiting growth of ligand-free ultrasmall bimetallic nanoparticles on carbon through under temperature reduction for highly efficient methanol electrooxidation and selective hydrogenation. Applied Catalysis B: Environmental, 2020, 264, 118553.	20.2	20
70	DNA–Silica Mineralization: The Formation of Exceptional Two Dimensional-Square $4 \mu\text{m}$ Symmetry by a Structural Transformation. Chemistry of Materials, 2012, 24, 504-511.	6.7	19
71	Engineering porous architectures in multicomponent PdCuBP mesoporous nanospheres for electrocatalytic ethanol oxidation. Nano Research, 2021, 14, 3274-3281.	10.4	19
72	Growth of Optically Active Chiral Inorganic Films through DNA Self-Assembly and Silica Mineralisation. Scientific Reports, 2014, 4, 4866.	3.3	18

#	ARTICLE	IF	CITATIONS
73	Co ^{II} -Template Directed Synthesis of Gold Nanoparticles in Mesoporous Titanium Dioxide. Chemistry - A European Journal, 2018, 24, 9651-9657.	3.3	18
74	Formation of impeller-like helical DNA ^{II} -silica complexes by polyamines induced chiral packing. Interface Focus, 2012, 2, 608-616.	3.0	17
75	Silica mineralisation of DNA chiral packing: helicity control and formation mechanism of impeller-like DNA ^{II} -silica helical architectures. Journal of Materials Chemistry B, 2013, 1, 2843.	5.8	17
76	A universal strategy for fast, scalable, and aqueous synthesis of multicomponent palladium alloy ultrathin nanowires. Science China Chemistry, 2021, 64, 245-252.	8.2	16
77	Mesoporous Palladium-Boron-Sulfur Alloy Nanospheres for Efficient Hydrogen Evolution. Inorganic Chemistry, 2021, 60, 4380-4384.	4.0	15
78	Formation of hybrid core ^{II} -shell microgels induced by autonomous unidirectional migration of nanoparticles. Materials Horizons, 2016, 3, 78-82.	12.2	14
79	Plasmonic mesoporous AuAg nanospheres with controllable nanostructures. Chemical Communications, 2020, 56, 9679-9682.	4.1	14
80	Electrocatalytic Oxidation of Alcohols, Tripropylamine, and DNA with Ligand ^{II} -Free Gold Nanoclusters on Nitrided Carbon. ChemElectroChem, 2016, 3, 2100-2109.	3.4	12
81	Template-Assisted Self-Sulfuration Formation of MoS ₂ Nanosheets Embedded in Ordered Mesoporous Carbon for Lithium Storage. ACS Applied Energy Materials, 2019, 2, 6158-6162.	5.1	12
82	“Dual-Template”-Directed Synthesis of Bowl-Shaped Mesoporous Platinum Nanostructures. Inorganic Chemistry, 2019, 58, 11195-11201.	4.0	11
83	Supported Pt Nanoparticles on Mesoporous Titania for Selective Hydrogenation of Phenylacetylene. Frontiers in Chemistry, 2020, 8, 581512.	3.6	11
84	Atomically ordered Rh ₂ P catalysts anchored within hollow mesoporous carbon for efficient hydrogen production. Chemical Communications, 2021, 57, 12345-12348.	4.1	11
85	Oxidative nucleation and growth of Janus-type MnO _x -Ag and MnO _x -AgI nanoparticles. Nanoscale, 2019, 11, 15147-15155.	5.6	10
86	Polymer-Assisted Co ^{II} -Assembly towards Synthesis of Mesoporous Titania Encapsulated Monodisperse PdAu for Highly Selective Hydrogenation of Phenylacetylene. ChemCatChem, 2020, 12, 1476-1482.	3.7	8
87	An Electrochemical Non-Enzymatic Glucose Sensor Based on Ultrathin PdAg Single-Crystalline Nanowires. ChemPlusChem, 2020, 85, 970-976.	2.8	7
88	Water-Dependent Optical Activity Inversion of Chiral DNA ^{II} -Silica Assemblies. Chemistry - A European Journal, 2013, 19, 16382-16388.	3.3	6
89	Mesoporosity-Enabled Selectivity of Mesoporous Palladium-Based Nanocrystals Catalysts in Semihydrogenation of Alkynes. Angewandte Chemie, 2022, 134, .	2.0	6
90	Mesoporous Gold Nanostructures: Synthesis and Beyond. Journal of Physical Chemistry Letters, 2022, 13, 4410-4418.	4.6	5

#	ARTICLE	IF	CITATIONS
91	Fluorochromic polymer films containing ultrasmall silver nanoclusters. <i>Nanotechnology</i> , 2020, 31, 245703.	2.6	3
92	A General Concurrent Template Strategy for Ordered Mesoporous Intermetallic Nanoparticles with Controllable Catalytic Performance. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	3
93	Frontispiece: A Polymer Solution To Prevent Nanoclustering and Improve the Selectivity of Metal Nanoparticles for Electrocatalytic CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, .	13.8	1
94	Frontispiz: A Polymer Solution To Prevent Nanoclustering and Improve the Selectivity of Metal Nanoparticles for Electrocatalytic CO ₂ Reduction. <i>Angewandte Chemie</i> , 2019, 131, .	2.0	0