Importance of Size and Contact Structure of Gold Nano Unique Catalytic Processes

Chemical Reviews 120, 464-525

DOI: 10.1021/acs.chemrev.9b00551

Citation Report

#	Article	IF	CITATIONS
1	Synthesis and NMR study of trimethylphosphine gold(<scp>i</scp>)-appended calix[8]arenes as precursors of gold nanoparticles. Inorganic Chemistry Frontiers, 2020, 7, 953-960.	6.0	5
2	Dynamics of Pd Dopant Atoms inside Au Nanoclusters during Catalytic CO Oxidation. Journal of Physical Chemistry C, 2020, 124, 23626-23636.	3.1	28
3	Steric Effects of Mesoporous Silica Supported Bimetallic Au-Pt Catalysts on the Selective Aerobic Oxidation of Aromatic Alcohols. Catalysts, 2020, 10, 1192.	3.5	3
4	The direct synthesis of hydrogen peroxide over Au and Pd nanoparticles: A DFT study. Catalysis Today, 2021, 381, 76-85.	4.4	11
5	Supported metal and metal oxide particles with proximity effect for catalysis. RSC Advances, 2020, 10, 35449-35472.	3.6	32
6	A strong hydrangea-like Au–TiO ₂ catalyst for round-the-clock degradation of oxalic acid in the presence of ozone. Catalysis Science and Technology, 2020, 10, 7481-7485.	4.1	5
7	Engineering ultrafine Pd clusters on laminar polyamide: A promising catalyst for benzyl alcohol oxidation under air in water. Molecular Catalysis, 2020, 497, 111203.	2.0	2
8	Elucidation of Active Sites of Gold Nanoparticles on Acidic Ta ₂ O ₅ Supports for CO Oxidation. ACS Catalysis, 2020, 10, 9328-9335.	11.2	17
9	Physical and Chemical Synthesis of Au/CeO2 Nanoparticle Catalysts for Room Temperature CO Oxidation: A Comparative Study. Catalysts, 2020, 10, 1351.	3.5	10
10	Conversion of Au(III)-polluted waste eggshell into functional CaO/Au nanocatalyst for biodiesel production. Green Energy and Environment, 2022, 7, 352-359.	8.7	25
11	Au-Decorated Ce–Ti Mixed Oxides for Efficient CO Preferential Photooxidation. ACS Applied Materials & Interfaces, 2020, 12, 38019-38030.	8.0	12
12	Synthesis of Ag-Doped Polyoxotitanium Nanoclusters for Efficient Electrocatalytic CO ₂ Reduction. Inorganic Chemistry, 2020, 59, 11442-11448.	4.0	23
13	Functional Mesoporous Silica Nanomaterials for Catalysis and Environmental Applications. Bulletin of the Chemical Society of Japan, 2020, 93, 1459-1496.	3.2	114
14	A DFT study of chemical ordering and oxygen adsorption in AuPtPd ternary nanoalloys. Materials Today Communications, 2020, 25, 101545.	1.9	4
15	Supported Metal Clusters: Fabrication and Application in Heterogeneous Catalysis. ACS Catalysis, 2020, 10, 11011-11045.	11.2	260
16	Crystal Phase Control of Gold Nanomaterials by Wet-Chemical Synthesis. Accounts of Chemical Research, 2020, 53, 2106-2118.	15.6	75
17	Catalytic Hydrodeoxygenation of Lignin-Derived Feedstock Into Arenes and Phenolics. Frontiers in Chemical Engineering, 2020, 2, .	2.7	7
18	Gold catalysts containing interstitial carbon atoms boost hydrogenation activity. Nature Communications, 2020, 11, 4600.	12.8	38

		CITATION R	EPORT	
#	Article		IF	CITATIONS
19	Lights and Shadows of Gold Introduction into Beta Zeolite. Molecules, 2020, 25, 5781		3.8	5
20	Polysulfone Influence on Au Selective Adsorbent Imprinted Membrane Synthesis with S Polyeugenol as Functional Polymer. Membranes, 2020, 10, 390.	sulfonated	3.0	7
21	Homogeneous and Heterogeneous Gold Catalysis for Materials Science. Chemical Revi 9113-9163.	ews, 2021, 121,	47.7	139
22	Thermal Deactivation of Pd/CeO ₂ –ZrO ₂ Three-Way Cataly Engine Aging: Analysis by a Surface plus Peripheral Site Model. ACS Omega, 2020, 5, 2		3.5	19
23	DECAY DYNAMICS IN MOLECULAR BEAMS. Mass Spectrometry Reviews, 2020, 40, 72	5-740.	5.4	9
24	A Review on Particle Size Effect in <scp>Metal atalyzed</scp> Heterogeneous Reac Journal of Chemistry, 2020, 38, 1422-1444.	tions. Chinese	4.9	69
25	Oxygen vacancies in metal oxides: recent progress towards advanced catalyst design. Materials, 2020, 63, 2089-2118.	Science China	6.3	208
26	New insights into the size and support effects of γ-Al2O3 supported Au catalysts for F room temperature. Catalysis Science and Technology, 2020, 10, 4571-4579.	CHO oxidation at	4.1	10
27	There's no place like real-space: elucidating size-dependent atomic structure of nanom pair distribution function analysis. Nanoscale Advances, 2020, 2, 2234-2254.	aterials using	4.6	71
28	Ultrastable and Highly Catalytically Active Nâ€Heterocyclicâ€Carbeneâ€Stabilized Golo Confined Spaces. Angewandte Chemie, 2020, 132, 16826.	Nanoparticles in	2.0	17
29	Electron-Rich Gold Clusters Stabilized by Poly(vinylpyridines) as Robust and Active Oxic Catalysts. Langmuir, 2020, 36, 7844-7849.	lation	3.5	13
30	Size-Dependent Structures and Catalytic Performances of Au/TiO ₂ -{001} Propene Epoxidation. Journal of Physical Chemistry C, 2020, 124, 15264-15274.	Catalysts for	3.1	8
31	Ultrastable and Highly Catalytically Active Nâ€Heterocyclicâ€Carbeneâ€Stabilized Gold Confined Spaces. Angewandte Chemie - International Edition, 2020, 59, 16683-16689		13.8	92
32	Assembly of RGO composite aerogels embedded with ultrasmall Au nanoparticles as ar recyclable catalyst for reduction of 4-nitrophenol. Journal of Environmental Chemical E 2020, 8, 103835.	n active and ngineering,	6.7	11
33	Oxidation of β-Nicotinamide Adenine Dinucleotide (NADH) by Au Cluster and Nanopar Aiming for Coenzyme Regeneration in Enzymatic Glucose Oxidation. ACS Sustainable (Engineering, 2020, 8, 10413-10422.	ticle Catalysts Chemistry and	6.7	20
34	Influence of Local Environments in Pores of Different Size on the Catalytic Liquid-Phase <scp>d</scp> -Glucose by Au Nanoparticles Supported on Nanoporous Carbon. ACS Ap Materials, 2020, 3, 7695-7703.		5.0	8
35	Synthesis and Immobilization of Metal Nanoparticles Using Photoactive Polymerâ€Dec Crystals and Their Application in Catalysis. Advanced Synthesis and Catalysis, 2020, 36		4.3	2
36	The Basic Properties of Gold Nanoparticles and their Applications in Tumor Diagnosis a International Journal of Molecular Sciences, 2020, 21, 2480.	nd Treatment.	4.1	200

#	Article	IF	CITATIONS
37	Coinage metal clusters: From superatom chemistry to genetic materials. Coordination Chemistry Reviews, 2021, 429, 213643.	18.8	57
38	Cucurbiturilsâ€Mediated Noble Metal Nanoparticles for Applications in Sensing, SERS, Theranostics, and Catalysis. Advanced Functional Materials, 2021, 31, .	14.9	79
39	Controlling the morphology of poly(ethyleneimine)/gold nanoassemblies through the variation of pH and electrolyte additives. Journal of Molecular Liquids, 2021, 322, 114559.	4.9	7
40	Effect of surface interactions on spin contamination errors of homogeneous spin dimers, chains, and films: model calculations of Au/MgO and Au/BaO systems. Molecular Physics, 2021, 119, e1791989.	1.7	10
41	Electrocatalytic and photocatalytic applications of atomically precise gold-based nanoclusters. Science China Chemistry, 2021, 64, 1065-1075.	8.2	18
42	Immobilization of Goldâ€on arbon Catalysts Onto Perfluorocarbon Emulsion Droplets to Promote Oxygen Delivery in Aqueous Phase D â€Glucose Oxidation. ChemCatChem, 2021, 13, 196-201.	3.7	3
43	Correlations between the fundamentals and applications of ultrasmall metal nanoclusters: Recent advances in catalysis and biomedical applications. Nano Today, 2021, 36, 101053.	11.9	86
44	Core–Shell–Satellite Plasmonic Photocatalyst for Broad-Spectrum Photocatalytic Water Splitting. , 2021, 3, 69-76.		59
45	Role and behavior of ultra-thin gold films on the fiber materials surface in the CO oxidation process. Journal of Alloys and Compounds, 2021, 852, 157042.	5.5	3
46	Toward Active-Site Tailoring in Heterogeneous Catalysis by Atomically Precise Metal Nanoclusters with Crystallographic Structures. Chemical Reviews, 2021, 121, 567-648.	47.7	361
47	Influence of hematite morphology on the CO oxidation performance of Au/α-Fe2O3. Chinese Journal of Catalysis, 2021, 42, 658-665.	14.0	13
48	<i>N</i> -Heterocyclic carbene–carbodiimide (NHC–CDI) betaine adducts: synthesis, characterization, properties, and applications. Chemical Science, 2021, 12, 2699-2715.	7.4	8
49	Colloidal synthesis of Au nanomaterials with a controlled morphology and crystal phase <i>via</i> the [Au(<scp>i</scp>)-oleylamine] complex. Journal of Materials Chemistry A, 2021, 9, 19534-19553.	10.3	11
50	Gold nanoparticles with tailored size through ligand modification for catalytic applications. Chemical Communications, 2021, 57, 10775-10778.	4.1	17
51	Electrocatalytic fixation of N ₂ into NO ₃ ^{â^'} : electron transfer between oxygen vacancies and loaded Au in Nb ₂ O _{5â^'<i>x</i>} nanobelts to promote ambient nitrogen oxidation. Journal of Materials Chemistry A, 2021, 9, 17442-17450.	10.3	33
52	Bottom-up formation of gold truncated pyramids smaller than 10 nm on SrTiO3 nanocubes: an application for plasmonic water oxidation. Chemical Communications, 2021, 57, 7232-7235.	4.1	3
53	Deposition of highly dispersed gold nanoparticles onto metal phosphates by deposition–precipitation with aqueous ammonia. Catalysis Science and Technology, 2021, 11, 7141-7150.	4.1	5
54	Hierarchical iron molybdate nanostructure array for efficient water oxidation through optimizing electron density. Chemical Communications, 2021, 57, 3563-3566.	4.1	19

ARTICLE IF CITATIONS # Tuning the shape and crystal phase of TiO₂ nanoparticles for catalysis. Chemical 55 4.1 21 Communications, 2021, 57, 6838-6850. Gold nanoparticles endowed with low-temperature colloidal stability by cyclic polyethylene glycol in 2.7 ethanol. Soft Matter, 2021, 17, 7792-7801. $1.\hat{a} \in Particle Characteristics and Measurement \hat{a} \in f 1.12 \hat{a} \in Particle Size Effect of Physical Properties \hat{a} \in f 1.12.3 \hat{a} \in Solid Properties and Measurement <math>\hat{a} \in f 1.12 \hat{a} \in Particle Size Effect of Physical Properties and Measurement and Physical Properties and Measurement and Physical Properties and Measurement and Physical Physical Properties and Physical PhysicaPhysicaPhysicaPhysicaPhysicaP$ 57 0 Catalysts. Journal of the Society of Powder Technology, Japan, 2021, 58, 73-78. Plasmonic Gold Nanoparticles (AuNPs): Properties, Synthesis and their Advanced Energy Environmental and Biomedical Applications. Chemistry - an Asian Journal, 2021, 16, 720-742. Concerted Catalysis of Pd and Au on Alloy Nanoparticles for Efficient Heterogeneous Molecular 59 1.37 Transformations. Chemistry Letters, 2021, 50, 346-352. Rationally Designed Metal Cocatalyst for Selective Photosynthesis of Bibenzyls via Dehalogenative C–C Homocoupling. ACS Catalysis, 2021, 11, 4338-4348. 11.2 Electronic and structural engineering of NiCo2O4/Ti electrocatalysts for efficient oxygen evolution 61 7.1 20 reaction. International Journal of Hydrogen Energy, 2021, 46, 10259-10267. Modulating electron density of vacancy site by single Au atom for effective CO2 photoreduction. 12.8 Nature Communications, 2021, 12, 1675. Exploring Novel Catalysis Using Polymer-Stabilized Metal Clusters. Bulletin of the Chemical Society of 63 3.2 12 Japan, 2021, 94, 1036-1044. One-Step Construction of a Hollow Au@Bimetal–Organic Framework Core–Shell Catalytic Nanoreactor for Selective Alcohol Oxidation Reaction. ACS Applied Materials & amp; Interfaces, 2021, 8.0 13, 12463-12471. Asymmetries in the Electronic Properties of Spheroidal Metallic Nanoparticles, Revealed by 14.6 3 65 Conduction Electron Spin Resonance and Surface Plasmon Resonance. ACS Nano, 2021, 15, 4490-4503. Catalytic oxidation of CO on noble metal-based catalysts. Environmental Science and Pollution 5.3 46 Research, 2021, 28, 24847-24871. Recent Progress in Heterogeneous Catalysis by Atomically and Structurally Precise Metal 67 5.8 44 Nanoclusters. Chemical Record, 2021, 21, 879-892. Markedly improved performance of oxide-supported catalysts in hot basic water by three facile ways in synergy. Molecular Catalysis, 2021, 505, 111497. Quantitative Analysis of the UVâ \in 'Vis Spectra for Gold Nanoparticles Powered by Supervised Machine Learning. Journal of Physical Chemistry C, 2021, 125, 8656-8666. 69 19 3.1New Magic Au₂₄ Cluster Stabilized by PVP: Selective Formation, Atomic Structure, and Oxidation Catalysis. Jacs Au, 2021, 1, 660-668. Competition of propylene hydrogenation and epoxidation over Au-Pd/TS-1 bimetallic catalysts for 71 4.3 13 gas-phase epoxidation of propylene with O2 and H2. Applied Catalysis A: General, 2021, 615, 118060. AgAu nanoclusters supported on zeolites: Structural dynamics during CO oxidation. Catalysis Today, 4.4 2022, 384-386, 166-176.

#	Article	IF	CITATIONS
73	Mesoporogen-Free Strategy to Construct Hierarchical TS-1 in a Highly Concentrated System for Gas-Phase Propene Epoxidation with H ₂ and O ₂ . ACS Applied Materials & Interfaces, 2021, 13, 26134-26142.	8.0	22
74	Manganese supported on controlled dealumination Y-zeolite for ozone catalytic oxidation of low concentration toluene at low temperature. Chemosphere, 2021, 271, 129604.	8.2	23
75	Chiral Gold(III) Complexes: Synthesis, Structure, and Potential Applications. Chemistry - A European Journal, 2021, 27, 9218-9240.	3.3	23
76	Influence of Co-Precipitation Agent on the Structure, Texture and Catalytic Activity of Au-CeO2 Catalysts in Low-Temperature Oxidation of Benzyl Alcohol. Catalysts, 2021, 11, 641.	3.5	8
77	Patchy Micelles with a Crystalline Core: Self-Assembly Concepts, Properties, and Applications. Polymers, 2021, 13, 1481.	4.5	20
78	Oxygen Electrocatalysis by [Au ₂₅ (SR) ₁₈]: Charge, Doping, and Ligand Removal Effect. ACS Catalysis, 2021, 11, 7957-7969.	11.2	20
79	Generation of Catalytically Active Gold Nanocrystals in Water Induced with Ferrocene Carboxylate. European Journal of Inorganic Chemistry, 2021, 2021, 2471-2479.	2.0	1
80	Gold-containing Beta zeolite in base-free glucose oxidation – The role of Au deposition procedure and zeolite dopants. Catalysis Today, 2021, 382, 48-60.	4.4	10
81	Synergistic Effects of Bimetallic AuPd and La2O3 in the Catalytic Reduction of NO with CO. Catalysts, 2021, 11, 916.	3.5	0
82	Single-Particle Catalytic Analysis by a Photon Burst Counting Technique Combined with a Microfluidic Chip. Analytical Chemistry, 2021, 93, 9752-9759.	6.5	3
83	Precisely Engineered Supported Gold Clusters as a Stable Catalyst for Propylene Epoxidation. Angewandte Chemie - International Edition, 2021, 60, 18185-18193.	13.8	41
84	Adsorption of Keggin-Type Polyoxometalates on Rh Metal Particles under Reductive Conditions. Inorganic Chemistry, 2021, 60, 12413-12424.	4.0	4
85	Coordination-Dependent Kinetics in the Catalysis of Gold Nanoclusters. ACS Catalysis, 2021, 11, 9073-9085.	11.2	8
86	Detection of a real heterogeneous catalyst with an inactive oxygen-covered surface: Au/Li4Ti5O12. Applied Surface Science, 2021, 554, 149624.	6.1	5
87	Promoting electron transfer of surface oxygen vacancies in Pd/CeO2-RE via doping engineering for enhancing catalytic activity in Suzuki coupling reaction. Journal of Catalysis, 2021, 399, 15-23.	6.2	16
88	Porous Materials Confining Single Atoms for Catalysis. Frontiers in Chemistry, 2021, 9, 717201.	3.6	9
89	Extension of the Linear Response Function of Electron Density to a Plane-wave Basis and the First Application to Periodic Surface Systems. Chemistry Letters, 2021, 50, 1801-1805.	1.3	2
90	Recent development of Au arched Pt nanomaterials as promising electrocatalysts for methanol oxidation reaction. Nano Research, 2022, 15, 18-37.	10.4	58

#	Article	IF	CITATIONS
91	Precisely Engineered Supported Gold Clusters as a Stable Catalyst for Propylene Epoxidation. Angewandte Chemie, 2021, 133, 18333-18341.	2.0	7
92	Highly Heterogeneous Polarization and Solvation of Gold Nanoparticles in Aqueous Electrolytes. ACS Nano, 2021, 15, 13155-13165.	14.6	9
93	Preparation and modification of Au/TS-1 catalyst in the direct epoxidation of propylene with H2 and O2. Applied Catalysis A: General, 2021, 624, 118329.	4.3	11
94	Au ³⁺ Species Boost the Catalytic Performance of Au/ZnO for the Semi-hydrogenation of Acetylene. ACS Applied Materials & amp; Interfaces, 2021, 13, 40429-40440.	8.0	19
95	On the Roles of Electron Transfer in Catalysis by Nanoclusters and Nanoparticles. Chemistry - A European Journal, 2021, 27, 16291-16308.	3.3	8
96	Capillaryâ€bound dense micelle brush supports for continuous flow catalysis. Angewandte Chemie, 2021, 133, 24842.	2.0	1
97	Nanoarchitectonics for Hierarchical Fullerene Nanomaterials. Nanomaterials, 2021, 11, 2146.	4.1	21
98	Electrochemical catalysts to meet the challenge for sustainable fuel production from renewable energy. Current Opinion in Green and Sustainable Chemistry, 2021, 30, 100492.	5.9	4
99	Prediction Descriptor for Catalytic Activity of Platinum Nanoparticles/Metal–Organic Framework Composites. ACS Applied Materials & Interfaces, 2021, 13, 38325-38332.	8.0	14
100	Capillaryâ€Bound Dense Micelle Brush Supports for Continuous Flow Catalysis. Angewandte Chemie - International Edition, 2021, 60, 24637-24643.	13.8	18
101	Catalytically Active Gold Nanomaterials Stabilized by <i>N</i> â€heterocyclic Carbenes. Chemistry - an Asian Journal, 2021, 16, 3026-3037.	3.3	16
102	High-performance red@green core-shell emitting nitride phosphor with monodisperse Eu2+ luminescence centers for solid state lighting. Journal of Alloys and Compounds, 2021, 875, 160076.	5.5	5
103	Visible-Light-Driven Dehydrogenative Coupling of Primary Alcohols with Phenols Forming Aryl Carboxylates. Organic Letters, 2021, 23, 7683-7687.	4.6	10
104	Nanowires as a versatile catalytic platform for facilitating chemical transformations. Journal of Alloys and Compounds, 2022, 892, 162158.	5.5	9
105	Adsorption/Desorption Behaviors and SERS Chemical Enhancement of 6-Mercaptopurine on a Nanostructured Gold Surface: The Au20 Cluster Model. Molecules, 2021, 26, 5422.	3.8	8
106	Modification of Gold Zeolitic Supports for Catalytic Oxidation of Glucose to Gluconic Acid. Materials, 2021, 14, 5250.	2.9	7
107	Designing magnetic nanoparticles for in vivo applications and understanding their fate inside human body. Coordination Chemistry Reviews, 2021, 445, 214082.	18.8	28
108	Metal nanoparticles in ionic liquids: Synthesis and catalytic applications. Coordination Chemistry Reviews, 2021, 445, 213982.	18.8	56

# 109	ARTICLE Hyperporous magnetic catalyst foam for highly efficient and stable adsorption and reduction of aqueous organic contaminants. Journal of Hazardous Materials, 2021, 420, 126622.	IF 12.4	CITATIONS
110	Unsupported gold nanocones as sonocatalytic agents with enhanced catalytic properties. Ultrasonics Sonochemistry, 2021, 79, 105753.	8.2	7
111	An electron donor-acceptor organic photoactive composite with Schottky heterojunction induced photoelectrochemical immunoassay. Biosensors and Bioelectronics, 2021, 191, 113475.	10.1	13
112	Effects of atom-to-defect ratio on the thermostability of dispersed Au atoms on reduced TiO2(1 0 1) surface. Applied Surface Science, 2021, 565, 150519.	6.1	2
113	Gold nanostructure-related non-plasmon resonance absorption band as a fingerprint of ortho-alkyl substituted phenolic compounds. Microchemical Journal, 2021, 171, 106788.	4.5	1
114	Analysis of gold nanoparticles in a hydrocarbon solvent by single particle-inductively coupled plasma mass spectrometry (spICP-MS) and TEM. SN Applied Sciences, 2021, 3, 1.	2.9	2
115	Bimetallic Au–Pd nanoparticles supported on silica with a tunable core@shell structure: enhanced catalytic activity of Pd(core)–Au(shell) over Au(core)–Pd(shell). Nanoscale Advances, 2021, 3, 5399-5416.	4.6	4
116	Plasmon-assisted photocatalytic CO ₂ reduction on Au decorated ZrO ₂ catalysts. Dalton Transactions, 2021, 50, 6076-6082.	3.3	16
117	Ferrocenyl-terminated polyphenylene-type "click―dendrimers as supports for efficient gold and palladium nanocatalysis. Dalton Transactions, 2021, 50, 11852-11860.	3.3	8
118	One-pot synthesis of Ag@silicalite-1 using different silver amine complexes and their performance for styrene oxidation. New Journal of Chemistry, 2021, 45, 21293-21298.	2.8	2
119	Thiol-functionalized UiO-66 anchored atomically dispersed metal ions for the photocatalytic selective oxidation of benzyl alcohol. Chemical Communications, 2021, 57, 12151-12154.	4.1	9
120	Rapid synthesis of supported single metal nanoparticles and effective removal of stabilizing ligands. Journal of Materials Chemistry A, 2021, 9, 24283-24289.	10.3	7
121	Material Evolution with Nanotechnology, Nanoarchitectonics, and Materials Informatics: What will be the Next Paradigm Shift in Nanoporous Materials?. Advanced Materials, 2022, 34, e2107212.	21.0	81
122	Kinetic analysis of nitrophenol reduction and colourimetric detection of hydrogen peroxide based on gold nanoparticles catalyst biosynthesised from Cynomorium songaricum. Journal of Environmental Chemical Engineering, 2021, 9, 106590.	6.7	8
123	Hierarchical N-Doped CuO/Cu Composites Derived from Dual-Ligand Metal–Organic Frameworks as Cost-Effective Catalysts for Low-Temperature CO Oxidation. ACS Omega, 2021, 6, 29596-29608.	3.5	5
124	Size control of Au nanoparticles from the scalable and solvent-free matrix assembly cluster source. Journal of Nanoparticle Research, 2020, 22, 1.	1.9	27
125	Deoxygenation of Epoxides with Hexamethyldigermane Catalyzed by Au Nanoparticles on TiO2. Asian Journal of Organic Chemistry, 0, , .	2.7	0
126	Low-Temperature Heterogeneous Oxidation Catalysis and Molecular Oxygen Activation. Catalysis Reviews - Science and Engineering, 2023, 65, 239-425.	12.9	26

#	Article	IF	CITATIONS
127	The self-assembly of gold nanoparticles in large-pore ordered mesoporous carbons. Chinese Journal of Chemical Engineering, 2022, 41, 420-429.	3.5	0
129	Precise evaluation of adsorption behavior of cationic porphyrin on monolayer of perovskite-type niobia nanosheet by absorption spectroscopy. Journal of Physics and Chemistry of Solids, 2022, 161, 110423.	4.0	3
130	Size Distributions of Gold Nanoparticles in Solution Measured by Single-Particle Mass Photometry. Journal of Physical Chemistry B, 2021, 125, 12466-12475.	2.6	4
131	Facile Synthesis of Large Wrinkled Gold Nanoparticles Using Anthraceneâ€Terminated Tripodal Amine Ligand and their Catalytic Efficiency. European Journal of Inorganic Chemistry, 2020, 2020, 4516-4522.	2.0	0
132	Noble metal enhanced photocatalytic activity of heterostructured TiO ₂ spheres with tunable interiors and shells. Functional Materials Letters, 2020, 13, 2050039.	1.2	2
133	The different evolution behaviors of carbonate-like species on Pt/CeO2 and Pt/Al2O3 by in situ DRIFTS-MS study. Catalysis Today, 2022, 400-401, 82-88.	4.4	4
134	Revealing Size Dependent Structural Transitions in Supported Gold Nanoparticles in Hydrogen at Atmospheric Pressure. Small, 2021, 17, e2104571.	10.0	13
135	Anti-inflammatory effect of gold nanoparticles supported on metal oxides. Scientific Reports, 2021, 11, 23129.	3.3	7
136	Improvement of PROX-CO catalytical performance by modulation of the pore structure of CeO2 nanorods decorated with Au nanoparticles. Microporous and Mesoporous Materials, 2022, 330, 111574.	4.4	4
137	Water-Assisted Low-Temperature Oxidation of CO at the Au–Fe ₂ O ₃ Interface. Journal of Physical Chemistry C, 2021, 125, 26031-26038.	3.1	11
138	Au/CeO2 Photocatalyst for the Selective Oxidation of Aromatic Alcohols in Water under UV, Visible and Solar Irradiation. Catalysts, 2021, 11, 1467.	3.5	9
139	Alcohols electrooxidation coupled with H2 production at high current densities promoted by a cooperative catalyst. Nature Communications, 2022, 13, 147.	12.8	133
141	Synthesis of active, robust and cationic Au ₂₅ cluster catalysts on double metal hydroxide by long-term oxidative aging of Au ₂₅ (SR) ₁₈ . Nanoscale, 2022, 14, 3031-3039.	5.6	10
142	Architecture engineering of nanostructured catalyst via layer-by-layer adornment of multiple nanocatalysts on silica nanorod arrays for hydrogenation of nitroarenes. Scientific Reports, 2022, 12, 2.	3.3	10
143	Conductive gold nanoparticle assembly linked through interactions between the radical cations of ethylene- and propylene-3,4-dioxythiophene mixed tetramer thiolate. Materials Advances, 2022, 3, 2056-2062.	5.4	0
144	Photocatalytic H2 Production on Au/TiO2: Effect of Au Photodeposition on Different TiO2 Crystalline Phases. J, 2022, 5, 92-104.	0.9	1
145	Boosting the catalytic behavior and stability of a gold catalyst with structure regulated by ceria. RSC Advances, 2022, 12, 1384-1392.	3.6	1
146	Reversible down-regulation and up-regulation of catalytic activity of poly(N-isopropylacrylamide)-anchored gold nanoparticles. Nanotechnology, 2022, 33, 165601.	2.6	10

#	Article	IF	CITATIONS
147	Theoretical Study on Carbon Monoxide Adsorption on Unsupported and γ-Al ₂ O ₃ -Supported Silver Nanoparticles: Size, Shape, and Support Effects. ACS Omega, 2022, 7, 4405-4412.	3.5	8
148	Electron Energy Loss Spectroscopy for Single Atom Catalysis. Topics in Catalysis, 2022, 65, 1609-1619.	2.8	13
149	Polymer brush-assisted preparation of magnetic Au nanocatalyst for highly efficient reduction of organic pollutants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 639, 128338.	4.7	6
150	Functionalization of Gold Nanoparticles with Ru-Porphyrin and Their Selectivity in the Oligomerization of Alkynes. Materials, 2022, 15, 1207.	2.9	5
151	CO Oxidation Activity of Au on Spinel Titanate Supports: Improvement of Catalytic Activity via Alkali Cation Substitution from Li4Ti5O12 to Na3LiTi5O12. Chemistry Letters, 2022, 51, 157-161.	1.3	1
152	Hydrogen Adsorption at the Au/TiO ₂ Interface: Quantitative Determination and Spectroscopic Signature of the Reactive Interface Hydroxyl Groups at the Active Site. ACS Catalysis, 2021, 11, 15194-15202.	11.2	16
153	Gold nanostructures: synthesis, properties, and neurological applications. Chemical Society Reviews, 2022, 51, 2601-2680.	38.1	43
154	Synthesis of silver and gold nanoparticles–enzyme–polymer conjugate hybrids as dual-activity catalysts for chemoenzymatic cascade reactions. Nanoscale, 2022, 14, 5701-5715.	5.6	17
155	Titania-supported molybdenum oxide combined with Au nanoparticles as a hydrogen-driven deoxydehydration catalyst of diol compounds. Catalysis Science and Technology, 2022, 12, 2146-2161.	4.1	14
156	Anisotropic growth of gold nanocrystals induced by concerted adsorption using a photochemical approach. Nano Structures Nano Objects, 2022, 29, 100845.	3.5	0
157	Enhancing CO Oxidation Activity <i>via</i> Tuning a Charge Transfer Between Gold Nanoparticles and Supports. Journal of Physical Chemistry C, 2022, 126, 4836-4844.	3.1	1
158	The rod-like CeO2 supported by the low-loading Au nanoparticles for the efficient catalytic oxidation of CO at room temperature. International Journal of Hydrogen Energy, 2022, 47, 11813-11826.	7.1	15
159	Mechanoâ€Nanoarchitectonics: Design and Function. Small Methods, 2022, 6, e2101577.	8.6	23
160	Designing Sites in Heterogeneous Catalysis: Are We Reaching Selectivities Competitive With Those of Homogeneous Catalysts?. Chemical Reviews, 2022, 122, 8594-8757.	47.7	118
161	Development of Solid Acid-supported Gold Nanoparticle Catalysts for Air Purification at Room Temperature. Journal of the Japan Petroleum Institute, 2022, 65, 58-66.	0.6	0
162	Heterogeneous Trimetallic Nanoparticles as Catalysts. Chemical Reviews, 2022, 122, 6795-6849.	47.7	61
163	The radiation-induced preparation of ultrasmall gold nanoparticles in Au(III) complexes with units of poly(1-vinyl-1,2,4-triazole) and poly(1-vinyl-1,2,4-triazole) – poly(acrylic acid). Colloids and Interface Science Communications, 2022, 47, 100602.	4.1	6
164	A cellulose nanocrystal templating approach to synthesize size-controlled gold nanoparticles with high catalytic activity. International Journal of Biological Macromolecules, 2022, 209, 464-471.	7.5	7

ARTICLE IF CITATIONS Micropore blocking strategy for mitigating adsorption and diffusion limitations in the direct 3.8 5 165 epoxidation of propylene. Chemical Engineering Science, 2022, 253, 117574. Sizeâ€Dependent Catalytic Behavior of Gold Nanoparticles. Advanced Materials Interfaces, 2022, 9, . 3.7 Titania-Carbon Nitride Interfaces in Gold-Catalyzed CO Oxidation. ACS Applied Materials & amp; 167 8.0 4 Interfaces, 2021, 13, 61015-61026. Au₂₅ Nanoclusters Incorporating Three-Dimensionally Ordered Macroporous In₂O₃ for Highly Sensitive and Selective Formaldehyde Sensing. ACS Applied Materials & amp; Interfaces, 2022, 14, 564-573. 168 8.0 Recent Advances in the Marriage of Catalyst Nanoparticles and Mesoporous Supports. Advanced 169 3.7 10 Materials Interfaces, 2022, 9, . ACTIVATION OF Auâ€"CeO2 COMPOSITES PREPARED BY PULSED LASER ABLATION IN THE REACTION OF 1.0 LOW-TEMPERATURE CO OXIDATION. Journal of Structural Chemistry, 2021, 62, 1918-1934. Facile Fabrication of Gold Nanorods@Polystyrenesulfonate Yolkâ€"Shell Nanoparticles for Spaser 171 5.0 4 Applications. ACS Applied Nano Materials, 2022, 5, 4629-4633. Supported Subâ€Nanometer Clusters for Electrocatalysis Applications. Advanced Functional Materials, 14.9 2022, 32, . Control in Local Coordination Environment Boosting Activating Molecular Oxygen with an 173 Atomically Dispersed Binary Mnâ€"Co Catalyst. ACS Applied Materials & amp; Interfaces, 2022, 14, 8.0 12 18539-18549. The Factors Dictating Properties of Atomically Precise Metal Nanocluster Electrocatalysts. Small, 174 10.0 2022, 18, e2200812 Enhancement effect of strong metal-support interaction (SMSI) on the catalytic activity of 175 6.2 13 substituted-hydroxyapatite supported Au clusters. Journal of Catalysis, 2022, 410, 194-205. Atomic Layer Deposition of Gold Nanoparticles with Controlled Size and Distribution on Titania 2.8 Support. ĆhemNanoMat, 0, , . Efficient Photocatalytic Oxidation of Vocs Using Zno@Au Nanoparticles. SSRN Electronic Journal, 0, , 177 0.4 0 $\label{eq:schemested} \mbox{Enhancement Effect of Strong Metal-Support Interaction (Smsi) on Catalytic Activity of Substituted-Hydroxyapatite Supported AU Clusters. SSRN Electronic Journal, 0, , .$ 178 0.4 CeO₂ Supported Gold Nanocluster Catalysts for CO Oxidation: Surface Evolution 179 3.7 6 Influenced by the Ligand Shell. ChemCatChem, 2022, 14, . Electrochemical Detection of Ethanol in Air Using Graphene Oxide Nanosheets Combined with Au-WO3. Sensors, 2022, 22, 3194. Molecular Dynamics Study of Laser Interaction with Nanoparticles in Liquids and Its Potential 181 4.1 10 Application. Nanomaterials, 2022, 12, 1524. Identification of Active Sites in HCHO Oxidation over TiO₂-Supported Pt Catalysts. ACS 11.2 24 Catalysis, 2022, 12, 5565-5573.

#	Article	IF	CITATIONS
183	Construction of ternary Z-scheme covalent triazine framework@Au@TiO2 for enhanced visible-light-driven hydrogen evolution activity. International Journal of Hydrogen Energy, 2022, 47, 18334-18346.	7.1	7
184	Mesoporous Gold Nanostructures: Synthesis and Beyond. Journal of Physical Chemistry Letters, 2022, 13, 4410-4418.	4.6	5
185	Defective NiO as a Stabilizer for Au Single-Atom Catalysts. ACS Catalysis, 2022, 12, 6149-6158.	11.2	30
186	Surface Functionalization of Organosilica Nanoparticles With Au Nanoparticles Inhibits Cell Proliferation and Induces Cell Death in 4T1 Mouse Mammary Tumor Cells for DNA and Mitochondrial-Synergized Damage in Radiotherapy. Frontiers in Chemistry, 2022, 10, .	3.6	4
187	One-pot synthesis of finely-dispersed Au nanoparticles on ZnO hexagonal sheet for base-free aerobic oxidation of vanillyl alcohol. Catalysis Science and Technology, 0, , .	4.1	7
188	Gold nanoparticles supported on poly (aniline-co-pyrrole) as the efficient catalysts for the reduction of 4-nitrophenol. Molecular Catalysis, 2022, 525, 112362.	2.0	3
189	Synergistic effect of photo-thermal catalytic glycerol reforming hydrogen production over 2D Au/TiO2 nanoflakes. Chemical Engineering Journal, 2022, 446, 137063.	12.7	21
190	Supported Anionic Gold Nanoparticle Catalysts Modified Using Highly Negatively Charged Multivacant Polyoxometalates. Angewandte Chemie, 0, , .	2.0	4
191	Ultrasmall Nanodiamonds: Perspectives and Questions. ACS Nano, 2022, 16, 8513-8524.	14.6	19
192	Supported Anionic Gold Nanoparticle Catalysts Modified Using Highly Negatively Charged Multivacant Polyoxometalates. Angewandte Chemie - International Edition, 2022, 61, .	13.8	16
193	Facile fabrication and SERS performance of polymer/Ag core-shell microspheres via the reverse breath figure accompanied by in situ reduction. Polymer, 2022, 253, 125003.	3.8	3
194	Floating synthesis with enhanced catalytic performance via acoustic levitation processing. Ultrasonics Sonochemistry, 2022, 87, 106051.	8.2	6
195	Polymer-assisted Au@PDA nanoparticles lyophilized powder with high stability and low adsorption and its application in colorimetric biosensing. Analytica Chimica Acta, 2022, 1220, 339995.	5.4	5
196	Chapter 8. Nanocatalysis With Sustainability. RSC Nanoscience and Nanotechnology, 2022, , 220-254.	0.2	1
197	Restructuring of the gold-carbide interface for low-temperature water-gas shift. Chemical Communications, 2022, 58, 7313-7316.	4.1	4
198	Photothermal Catalytic Oxidation of Cinnamyl Alcohol with Hydrogen Peroxide by Gold Nanoparticle/Antimonyâ€Đoped Tin Oxide Nanocrystals. Chemistry - A European Journal, 0, , .	3.3	3
199	Metal nanoclusters for catalytic applications: synthesis and characterization. , 2022, , 589-623.		1
200	Antimony-Doped Tin Oxide Catalysts for Green and Sustainable Chemistry. Journal of Physical Chemistry C, 2022, 126, 13539-13547.	3.1	6

#	Article	IF	CITATIONS
201	Enhanced CO oxidation by reversible structural variation of supported Ag nanoparticle catalyst from single to twin by CO treatment. Catalysis Today, 2022, , .	4.4	1
202	Preventive effect of silver nanowires (Ag NWs) on oral implant repair infection. Micro and Nano Letters, 0, , .	1.3	0
203	Single-atom gold species within zeolite for efficient hydroformylation. Chem Catalysis, 2022, 2, 2006-2076.	6.1	10
204	Multichalcogen-Integrated Cathodes for Novel Lithium-Chalcogenide Batteries in Ether and Ester Electrolytes. ACS Applied Materials & amp; Interfaces, 2022, 14, 32112-32123.	8.0	3
205	Effective and reproducible biosynthesis of nanogold-composite catalyst for paracetamol oxidation. Environmental Science and Pollution Research, 2022, 29, 87764-87774.	5.3	1
206	Quantifying interactions on interfaces between metal particles and oxide supports in catalytic nanomaterials. NPG Asia Materials, 2022, 14, .	7.9	12
207	Variation in spin contamination and diradical character with distance between a singlet biradical molecule and surface. Surfaces and Interfaces, 2022, 33, 102206.	3.0	3
208	Intramolecular cyclization of alkynoic acid catalyzed by Na-salt-modified Au nanoparticles supported on metal oxides. Applied Catalysis A: General, 2022, 643, 118765.	4.3	4
209	The preparation of ultrastable Al3+ doped CeO2 supported Au catalysts: Strong metal-support interaction for superior catalytic activity towards CO oxidation. Journal of Colloid and Interface Science, 2022, 627, 53-63.	9.4	8
210	Spectroscopic Evidence for the Involvement of Interfacial Sites in O–O Bond Activation over Gold Catalysts. ACS Catalysis, 2022, 12, 9549-9558.	11.2	8
211	Super Stability of Cu-Mn/Y Bimetallic Catalyst for Ozone-assisted Catalytic Oxidation of Toluene. Water, Air, and Soil Pollution, 2022, 233, .	2.4	2
212	Size and Coverage Effects of Ni and Pt Co-Catalysts in the Photocatalytic Hydrogen Evolution from Methanol on TiO ₂ (110). ACS Catalysis, 2022, 12, 9579-9588.	11.2	17
213	Plasmon-Based Tapered-in-Tapered Fiber Structure for p-Cresol Detection: From Human Healthcare to Aquaculture Application. IEEE Sensors Journal, 2022, 22, 18493-18500.	4.7	73
214	Adsorption and Activation of O ₂ on Small Gold Oxide Clusters: the Reactivity Dominated by Site-Specific Factors. Journal of Physical Chemistry A, 2022, 126, 5594-5603.	2.5	2
215	Lowâ€Coordination Single Au Atoms on Ultrathin ZnIn ₂ S ₄ Nanosheets for Selective Photocatalytic CO ₂ Reduction towards CH ₄ . Angewandte Chemie, 2022, 134, .	2.0	11
216	Insights into Heterogeneous Catalysts under Reaction Conditions by In Situ/Operando Electron Microscopy. Advanced Energy Materials, 2022, 12, .	19.5	13
217	Tailoring the nanostructure of plasma-deposited CoOX-based thin films for catalytic applications – A step forward in designing nanocatalysts. Materials and Design, 2022, 222, 111095.	7.0	2
218	Polymer–assisted preparation of porous wood–based metallic composites for efficient catalytic reduction of organic pollutants. Industrial Crops and Products, 2022, 187, 115387.	5.2	6

#	Article	IF	CITATIONS
219	Preparation, Characterization and Stability Studies of Gold Nanoparticles Capped by 1,2,3â€Triazoleâ€Based Mesoionic Carbenes. ChemistrySelect, 2022, 7, .	1.5	4
220	Efficient photocatalytic oxidation of VOCs using ZnO@Au nanoparticles. Journal of Photochemistry and Photobiology A: Chemistry, 2023, 434, 114232.	3.9	7
221	A biomimetic all-inorganic photocatalyst for the artificial photosynthesis of hydrogen peroxide. Catalysis Science and Technology, 0, , .	4.1	1
222	Confinement of nano-gold in 3D hierarchically structured gadolinium-doped ceria mesocrystal: synergistic effect of chemical composition and structural hierarchy in CO and propane oxidation Catalysis Science and Technology, 0, , .	4.1	0
223	Synthesis of High-Loading Pt/C Electrocatalysts Using a Surfactant-Assisted Microwave Discharge Method for Oxygen Reduction Reactions. ACS Applied Materials & Interfaces, 2022, 14, 41079-41085.	8.0	8
224	Particle-Size-Dependent Electronic Metal–Support Interaction in Pd/TiO ₂ Catalysts for Selective Hydrogenation of 3-Nitrostyrene. Journal of Physical Chemistry C, 2022, 126, 15167-15174.	3.1	4
225	A highly efficient bi-functional zeolite catalyst for low temperature catalytic cracking of n-octane to produce propylene: Joint contribution of nanogold and dealumination. Applied Catalysis A: General, 2022, 646, 118862.	4.3	1
226	Nanohybrid Photocatalysts with Heteroepitaxial Junction for Solar Chemical Transformations. Journal of the Japan Society of Colour Material, 2022, 95, 275-281.	0.1	0
227	Unusual Role of the Surfactant in the Self-Assembly of Pt Alloy in Ordered Mesoporous Carbon: Tuning the Nanocluster Size. ACS Applied Materials & Interfaces, 2022, 14, 42347-42355.	8.0	3
228	Valence State Tuning of Gold Nanoparticles in the Dewetting Process: An X-ray Photoelectron Spectroscopy Study. ACS Omega, 2022, 7, 34521-34527.	3.5	5
229	Structural Engineering toward Gold Nanocluster Catalysis. Angewandte Chemie, 2022, 134, .	2.0	2
230	Structural Engineering toward Gold Nanocluster Catalysis. Angewandte Chemie - International Edition, 2022, 61, .	13.8	49
231	NO Bond Cleavage on Gas-Phase Ir _{<i>n</i>} ⁺ Clusters Investigated by Infrared Multiple Photon Dissociation Spectroscopy. Journal of Physical Chemistry A, 2022, 126, 6668-6677.	2.5	5
232	Confining Gold Nanoparticles in Preformed Zeolites by Post-Synthetic Modification Enhances Stability and Catalytic Reactivity and Selectivity. Jacs Au, 2022, 2, 2327-2338.	7.9	9
233	Cu–Au nanoparticles produced by the aggregation of gasâ€phase metal atoms for CO oxidation. Aggregate, 2022, 3, .	9.9	9
234	Lowâ€Coordination Single Au Atoms on Ultrathin ZnIn ₂ S ₄ Nanosheets for Selective Photocatalytic CO ₂ Reduction towards CH ₄ . Angewandte Chemie - International Edition, 2022, 61, .	13.8	66
235	Insight into the transient inactivation effect on Au/TiO2 catalyst by in-situ DRIFT and UV–vis spectroscopy. Nature Communications, 2022, 13, .	12.8	6
236	Shedding Light on Solid Sorbents: Evaluation of Supported Potassium Carbonate Particle Size and Its Effect on CO ₂ Capture from Air. Industrial & Engineering Chemistry Research, 2022, 61, 14211-14221.	3.7	4

		CITATION R	EPORT	
#	Article		IF	CITATIONS
237	Single-Atom Catalysis: Insights from Model Systems. Chemical Reviews, 2022, 122, 149	911-14939.	47.7	26
238	Do We Really Need Quantum Mechanics to Describe Plasmonic Properties of Metal Nar ACS Photonics, 2022, 9, 3025-3034.	nostructures?.	6.6	9
239	Functional catalytic nanoparticles (nanozymes) for sensing. Biosensors and Bioelectror 114768.	nics, 2022, 218,	10.1	35
240	Synergistically Activated Pd Atom in Polymer-Stabilized Au ₂₃ Pd _{1Nano, 2022, 16, 16932-16940.}	sub> Cluster. ACS	14.6	9
241	Bimetallic single atom promoted α-MnO ₂ for enhanced catalytic oxidatio 5-hydroxymethylfurfural. Green Chemistry, 2022, 24, 8424-8433.	n of	9.0	12
242	Crystalline Support. , 2022, , 197-218.			0
243	Plasmonic photothermal activation of an organosilica shielded cold-adapted lipase co-ir with gold nanoparticles on silica particles. Nanoscale Advances, 0, , .	nmobilised	4.6	1
244	The Rise of Catalysts Informatics. , 2022, , 349-371.			0
245	Diversity and Tailorability of Photoelectrochemical Properties of Carbon Dots. Accounts Research, 2022, 55, 3110-3124.	s of Chemical	15.6	31
246	Tuning the Properties of Metalâ€Organic Cages through Platinum Nanoparticle Encaps ChemistrySelect, 2022, 7, .	ulation.	1.5	0
247	Discerning the Contributions of Gold Species in Butadiene Hydrogenation: From Single Nanoparticles. Angewandte Chemie - International Edition, 2022, 61, .	Atoms to	13.8	7
248	Assembling of Metal-Polymer Nanocomposites in Irradiated Solutions of 1-Vinyl-1,2,4-tr Au(III) Ions: Features of Polymerization and Nanoparticles Formation. Polymers, 2022, 1	iazole and 14, 4601.	4.5	0
249	Three-way metal cluster catalysts confined in zeolites produced by pulsed laser ablatior Applied Physics A: Materials Science and Processing, 2022, 128, .	ı in liquid.	2.3	1
250	Discerning the Contributions of Gold Species in Butadiene Hydrogenation: From Single Nanoparticles. Angewandte Chemie, 0, , .	Atoms to	2.0	0
251	Metal Affinity of Support Dictates Sintering of Gold Catalysts. Journal of the American (Society, 2022, 144, 20601-20609.	Chemical	13.7	26
252	Supported Gold Clusters as a Stable Catalyst for Propylene Epoxidation. Springer These	s, 2022, , 87-111.	0.1	0
253	Synthesis of Gold Cluster-Based Catalyst and the Effect of Pre-Treatments on Its Cataly Performance. Springer Theses, 2022, , 59-86.	tic	0.1	0
254	Fundamentals and applications of N-heterocyclic carbene functionalized gold surfaces a nanoparticles. Chemical Communications, 2022, 58, 13188-13197.	and	4.1	22

#	Article	IF	CITATIONS
255	Controlled Engineering of Supported Metal Nanoparticles Using Electrospraying: Robust Removal of Stabilising Ligands. Springer Theses, 2022, , 157-181.	0.1	0
256	Propylene Epoxidation on Au/Ti-Containing Supports: The Effect of the Support. Springer Theses, 2022, , 131-155.	0.1	0
257	Tailoring Gold Nanoparticles with Tunable Core Size and Their Catalytic Applications. Springer Theses, 2022, , 113-129.	0.1	0
258	Modulating the water gas shift reaction <i>via</i> strong interfacial interaction between a defective oxide matrix and exsolved metal nanoparticles. Journal of Materials Chemistry A, 2022, 10, 24995-25008.	10.3	1
260	A Highly loaded, excellent recyclable nanosheet catalyst Au@mesoporous SiO ₂ . Applied Organometallic Chemistry, 0, , .	3.5	1
261	Evaluation of Machine Learning Interatomic Potentials for the Properties of Gold Nanoparticles. Nanomaterials, 2022, 12, 3891.	4.1	7
262	Chemical modification of graphene for atomic-scale catalyst supports. Nano Express, 2022, 3, 042001.	2.4	1
263	Nanoceria as an Electron Reservoir: Spontaneous Deposition of Metal Nanoparticles on Oxides and Their Anti-inflammatory Activities. ACS Nano, 2022, 16, 20567-20576.	14.6	25
264	Gold nanoparticles supported on carbon coated magnetic nanoparticles; a robustness and effective catalyst for aerobic alcohols oxidation in water. Molecular Catalysis, 2023, 534, 112772.	2.0	1
265	Airborne Preparation of Small Gold Nanoparticles Dispersed on Mesoporous Silica for the Catalytic Oxidation of Glycerol to Dihydroxyacetone. ACS Applied Nano Materials, 2022, 5, 18977-18985.	5.0	6
266	A Simple Label-Free Aptamer-Based Electrochemical Biosensor for the Sensitive Detection of C-Reactive Proteins. Biosensors, 2022, 12, 1180.	4.7	2
267	Atomic-Scale Engineering of CuO _x –Au Interfaces over AuCu Single-Nanoparticles. ACS Applied Materials & Interfaces, 2022, 14, 55644-55652.	8.0	2
268	Near Infrared Lightâ€toâ€Heat Conversion for Liquidâ€Phase Oxidation Reactions by Antimonyâ€Doped Tin Oxide Nanocrystals. ChemPhysChem, 2023, 24, .	2.1	1
269	Gold Atomic Layers and Isolated Atoms on MoC for the Low-Temperature Water Gas Shift Reaction. ACS Catalysis, 2022, 12, 15648-15657.	11.2	3
270	Gold photocatalysis in sustainable hydrogen peroxide generation. Materials Today Chemistry, 2023, 27, 101322.	3.5	4
271	Functional confinement of a zinc-oxide-supported gold catalyst enhances the direct synthesis of hydrogen peroxide. Cell Reports Physical Science, 2023, 4, 101236.	5.6	0
272	Spatially confined (Au core)/CeO2–(Au nanoclusters) hierarchical nanostructures as highly active and stable catalysts for CO oxidation. Journal of Alloys and Compounds, 2023, 938, 168655.	5.5	1
273	Heterogeneous selective oxidation over supported metal catalysts: From nanoparticles to single atoms. Applied Catalysis B: Environmental, 2023, 325, 122384.	20.2	20

#	Article	IF	CITATIONS
274	Oxidation Catalysis of Au Nano-Particles Immobilized on Titanium(IV)- and Alkylthiol-Functionalized SBA-15 Type Mesoporous Silicate Supports. Catalysts, 2023, 13, 35.	3.5	1
275	Geometric and Electronic Effects in Hydrogenation Reactions. ACS Catalysis, 2023, 13, 974-1019.	11.2	11
276	Recent advances on catalysts for preferential oxidation of CO. Nano Research, 2023, 16, 4399-4410.	10.4	2
277	Therapeutic effect and mechanism of silver nanowires on radiation pneumonitis by inhibiting the excessive inflammatory response of epithelial cells. Materials Express, 2022, 12, 1555-1559.	0.5	0
278	Pore confined time-of-flight secondary ion electrochemical mass spectrometry. Chemical Society Reviews, 2023, 52, 2596-2616.	38.1	5
279	Hydrogen Peroxide Production by Inorganic Photocatalysts Consisting of Gold Nanoparticle and Metal Oxide toward Oxygen Cycle Chemistry. Journal of Physical Chemistry C, 2023, 127, 5199-5209.	3.1	4
280	Partially Thiolated Au ₂₅ Cluster Anchored on Carbon Support via Noncovalent Ligand–Support Interactions: Active and Robust Catalyst for Aerobic Oxidation of Alcohols. ACS Catalysis, 2023, 13, 3263-3271.	11.2	8
281	N-Heterocyclic carbene-stabilized platinum nanoparticles within a porphyrinic nanocage for selective photooxidation. Science China Chemistry, 0, , .	8.2	2
282	Modeling the Photo-Absorption Properties of Noble Metal Nanoclusters: A Challenge for Density-Functional Theory. Journal of Physical Chemistry C, 2023, 127, 7718-7729.	3.1	2
283	Large-scale production of ZnO nanoparticles by high energy ball milling. Physica B: Condensed Matter, 2023, 656, 414776.	2.7	6
284	Influence of gold nanoparticles size for photocatalytic NO oxidation in low loading Au/TiO <mml:math <br="" display="inline" id="d1e1158" xmlns:mml="http://www.w3.org/1998/Math/MathML">altimg="si56.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:mrow </mml:msub></mml:math> catalysts. Environmental	6.1	3
285	Technology and Innovation, 2023, 30, 103070. Atomically dispersed nano Au clusters stabilized by Zr on the TS-1 surface: Significant enhancement of catalytic oxidation ability using H2 and O2. Applied Surface Science, 2023, 619, 156733.	6.1	2
286	Morphological Evolution of Gold Nanoparticles Synthesized via Solution Plasma Sputtering: Effect of Sodium Chloride Concentration and Storage Time. Journal of Physical Chemistry C, 2023, 127, 3184-3193.	3.1	3
287	N, O-dual coordination regulation directs the design of active sites on nanoclusters for highly efficient catalytic water purification. Applied Catalysis B: Environmental, 2023, 328, 122510.	20.2	5
288	In Situ Observations Reveal the Five-fold Twin-Involved Growth of Gold Nanorods by Particle Attachment. Nanomaterials, 2023, 13, 796.	4.1	1
289	Surfactant-Free Colloidal Syntheses of Gold-Based Nanomaterials in Alkaline Water and Mono-alcohol Mixtures. Chemistry of Materials, 2023, 35, 2173-2190.	6.7	8
290	<i>In situ</i> SERS reveals the route regulation mechanism mediated by bimetallic alloy nanocatalysts for the catalytic hydrogenation reaction. Chemical Science, 2023, 14, 3554-3561.	7.4	1
291	Gold(III) Chloride-Mediated Transformation of Furfural to the trans-N,N-4,5-Diaminocyclopent-2-enones in the Presence of Anilines. Chemistry, 2023, 5, 393-405.	2.2	0

		CITATION REPORT		
#	Article		IF	Citations
292	Opportunities in the design of metal@oxide core-shell nanoparticles. Advances in Phys	sics: X, 2023, 8, .	4.1	0
293	Effects of Au States in Thiol-Organosilica Nanoparticles on Enzyme-like Activity for X-ra Application: Focus on Reactive Oxygen Species Generation in Radiotherapy. ACS Omeg 9569-9582.		3.5	0
294	A Xylosideâ€Based Ligand to Stabilize Gold Nanoparticles: Preparation and Applicatior of Inorganic Chemistry, 2023, 26, .	ı. European Journal	2.0	0
295	Investigation of the Interaction Between Au and Brookite TiO2 Using Transmission Ele Microscopy and Density Functional Theory. Bulletin of the Chemical Society of Japan, 2		3.2	3
296	Nanomaterials in Catalysis Applications. Catalysts, 2023, 13, 627.		3.5	1
297	Size-selective preparation of gold nanoparticles stabilized on chitosan using the matrix method. Journal of Nanoparticle Research, 2023, 25, .	k-transfer	1.9	2
298	Design of gold catalysts for activation of H2 and H-donor molecules: transfer hydroger CO ₂ hydrogenation. Catalysis Science and Technology, 0, , .	nation and	4.1	0
299	Uncovering Origin of Chirality of Gold Nanoparticles Prepared through the Convention Reduction Method. Analytical Chemistry, 2023, 95, 6107-6114.	al Citrate	6.5	4
300	Au Nanoparticle Catalysts on NiO-Decorated MgO–Al ₂ O ₃ Efficient Oxidative Esterification of Methylacrolein to Methyl Methacrylate. ACS Applie Materials, 2023, 6, 5469-5478.		5.0	0
301	Acceleration of Stepwise Carbon-Polygold Bonding Cleavage in Hypercoordinated Carl Gold(I) Clusters. Inorganic Chemistry, 2023, 62, 6147-6154.	oon-Centered	4.0	0
302	Synthesis of LiTiO ₂ Nanocrystals/Ordered Mesoporous Carbon Composit Highâ€Performance Lithium–Sulfur Batteries. Small Science, 2023, 3, .	e Hosts for	9.9	3
303	Systematic Investigation on Supported Gold Catalysts Prepared by Fluorine-Free Basic in Selective Oxidation of Aromatic Alcohols to Aldehydes. Materials, 2023, 16, 3139.	Etching Ti3AlC2	2.9	1
304	General Method to Synthesize Highly Stable Nanoclusters via Pickering-Stabilized Micr Langmuir, 0, , .	oemulsions.	3.5	0
305	Identifying the Activity Origin of a Single-Atom Au ₁ /Nb ₂ O <s Catalyst for Hydrodeoxygenation of Methylcatechol: A Stable Substitutional Au^{- ACS Catalysis, 2023, 13, 6093-6103.}</s 		11.2	3
306	TS-1 with Abundant Micropore Channel-Supported Au Catalysts toward Improved Perf Gas-Phase Epoxidation of Propylene. ACS Sustainable Chemistry and Engineering, 202		6.7	3
307	BP@Au undergoes rapid degradation and releases singlet oxygen under dark conditior and detrimental effects on superoxide-producing marine algae. Journal of Hazardous N 454, 131502.		12.4	2
308	Electrocatalysis at Individual Colloidal Nanoparticles: A Quantitative Survey of Four Ge Electrochemical Cell Microscopy. Journal of Physical Chemistry C, 2023, 127, 9059-900	ometries via 56.	3.1	2
309	Synthesis and characterization of tetraphenylethylene-functionalized <i>N</i> -heteroc carbene-stabilized gold nanoparticles with aggregation-induced emission. Canadian Jo Chemistry, 2023, 101, 477-486.		1.1	0

#	Article	IF	CITATIONS
310	Generalized Rapid Synthesis of Supported Nanocluster Catalyst for Mild Hydrogenation of Phenol toward KA Oil. Small, 0, , .	10.0	0
311	Understanding the complexity in bridging thermal and electrocatalytic methanation of CO ₂ . Chemical Society Reviews, 2023, 52, 3627-3662.	38.1	15
313	Leveraging machine learning engineering to uncover insights into heterogeneous catalyst design for oxidative coupling of methane. Catalysis Science and Technology, 0, , .	4.1	0
314	QM/Classical Modeling of Surface Enhanced Raman Scattering Based on Atomistic Electromagnetic Models. Journal of Chemical Theory and Computation, 2023, 19, 3616-3633.	5.3	4
315	Electrochemical CO2 reduction versus CO reduction over Au/Ti electrocatalyts in phosphate buffer condition. Chemical Engineering Journal, 2023, 470, 143970.	12.7	7
316	Metal particle size effects over the Ni/SAPO-11 bifunctional catalyst. Applied Surface Science, 2023, 636, 157736.	6.1	5
317	Engineering Shewanella-reduced graphene oxide aerogel biohybrid to efficiently synthesize Au nanoparticles. Journal of Materials Science and Technology, 2024, 168, 50-61.	10.7	0
319	Tunable-wavelength nanosecond laser tailoring of plasmon resonance spectra of gold nanoparticle colloids. Nanoscale Advances, 2023, 5, 3697-3704.	4.6	1
320	Hetero-interface Engineering of NiFe (oxy)hydroxides/CNTs by In situ Anchoring of sub-nano Au for Efficient Water Oxidation. Nanoscale, 0, , .	5.6	0
321	Breaking the activity-stability trade-off of Au catalysts by depth-controlled TiO2 nanotraps. Journal of Catalysis, 2023, 423, 145-153.	6.2	0
322	Selectivity Regulation of Au/Titanate by Biochar Modification for Selective Oxidation of Benzyl Alcohol. Catalysts, 2023, 13, 864.	3.5	4
323	Intrinsic Descriptor Guided Noble Metal Cathode Design for Liâ€CO ₂ Battery. Advanced Materials, 2023, 35, .	21.0	7
324	Probing the binding and activation of small molecules by gas-phase transition metal clusters <i>via</i> IR spectroscopy. Chemical Society Reviews, 2023, 52, 3778-3841.	38.1	9
325	Dispersion Function of a Protein, DPâ€1, Identified in <i>Collimonas sp</i> . Dâ€25, for the Synthesis of Gold Nanoparticles. ChemBioChem, 2023, 24, .	2.6	1
326	Effect of Aspect Ratio on the Catalytic Activities of Gold Nanorods. Catalysis Letters, 2024, 154, 1018-1025.	2.6	2
327	Dualâ€ S ite Activation Coupling with a Schottky Junction Boosts the Electrochemiluminescence of Carbon Nitride. Angewandte Chemie - International Edition, 2023, 62, .	13.8	4
328	Dualâ \in Site Activation Coupling with a Schottky Junction Boosts the Electrochemiluminescence of Carbon Nitride. Angewandte Chemie, O, , .	2.0	1
329	The Molecular Mechanism of H2O2 Decomposition in a Reaction with an Au25(SCH3)12 Cluster. Russian Journal of Physical Chemistry A, 2023, 97, 1212-1221.	0.6	0

#	Article	IF	CITATIONS
330	Facile Oneâ€Pot Synthesis of Uniquely Designed Auâ^'Cu ₂ O Nanocomposites for Effective Catalytic Degradation of Azo Dyes. ChemistrySelect, 2023, 8, .	1.5	1
331	Gold/Substituted Hydroxyapatites for Oxidative Esterification: Control of Thin Apatite Layer on Gold Based on Strong Metal–Support Interaction (SMSI) Results in High Activity. ACS Applied Materials & Interfaces, 2023, 15, 34290-34302.	8.0	1
332	Supported Noble Metal Catalysts and Adsorbents with Soft Lewis Acid Functions. Chemical Record, 0, , .	5.8	0
333	Harnessing Supported Gold Nanoparticle as a Singleâ€Electron Transfer Catalyst for Decarboxylative Crossâ€Coupling. Advanced Synthesis and Catalysis, 0, , .	4.3	1
334	CO Oxidation Catalyzed by Au Dispersed on SBA-15 Modified with TiO2 Films Grown via Atomic Layer Deposition (ALD). Catalysts, 2023, 13, 1106.	3.5	1
335	Synthesis strategy of atomically dispersed Au clusters induced by NH3 on TS-1: Significantly improve the epoxidation activity of propylene. Chemical Engineering Journal, 2023, 472, 144895.	12.7	1
336	Properties and attributes. , 2023, , 61-96.		0
337	Review on CO terminal treatment technologies in steel industry. Journal of Cleaner Production, 2023, 418, 138231.	9.3	2
338	Au Clusters Supported on Defect-Rich Ni-Ti Oxides Derived from Ultrafine Layered Double Hydroxides (LDHs) for CO Oxidation at Ambient Temperature. Catalysts, 2023, 13, 1155.	3.5	0
339	Multimodal microscope system for hyperspectral imaging of scattering directionality and Raman excitation spectroscopy. Journal of Raman Spectroscopy, 0, , .	2.5	0
340	Controlled preparation of ordered dendritic nanoclusters at Au fractal biointerfaces. Chemical Physics Letters, 2023, 829, 140750.	2.6	2
341	Nanoparticleâ€Based Photothermal Therapy for Breast Cancer Noninvasive Treatment. Advanced Materials, 0, , .	21.0	9
342	Facile preparation of highly active zirconia-supported gold nanoparticle catalyst. Catalysis Science and Technology, 2023, 13, 6662-6667.	4.1	1
343	Supported gold nanoparticles prepared from NHC-Au complex precursors as reusable heterogeneous catalysts. Molecular Catalysis, 2023, 549, 113460.	2.0	0
344	Palladium cluster complex [Pd ₁₃ (1¼ ₄ -C ₇ H ₇) ₆] ²⁺ (C ₇ H ₇ = Tropylium) with fcc-close-packed cuboctahedral Pd ₁₃ core and isomers: Theoretical insight into ligand-control of Pd ₁₃ core structure.	2.8	0
345	Physical Chemistry Chemical Physics, 0, , . Effects of metal size on supported catalysts for CO ₂ hydrogenation. Materials Chemistry Frontiers, 0, , .	5.9	0
347	Surface coverage and adsorption properties of 1-vinyl-1,2,4-triazole on Au(111) surface: a molecular dynamics study. Journal of Molecular Modeling, 2023, 29, .	1.8	0
348	Surface-dependent CO oxidation over Au/ZnO nanopyramids and nanorods. Applied Catalysis A: General, 2023, 666, 119436.	4.3	0

#	Article	IF	CITATIONS
349	Tuning Oxygen Vacancies in Oxides by Configurational Entropy. ACS Applied Materials & Interfaces, 2023, 15, 45774-45789.	8.0	3
350	Small Gold Clusters: Structure, Energetics and Biomedical Applications. , 2024, , 523-567.		0
351	Unveiling sizeâ€fluorescence correlation of organic nanoparticles and its use in nanoparticle size determination. Aggregate, 2024, 5, .	9.9	1
352	Synthesis of Silver Nanowires with Different Morphologies for Lung Cancer Treatment. Science of Advanced Materials, 2023, 15, 942-946.	0.7	0
353	Structural Analyses of DPâ€1, a Protein with the Ability To Bind Gold Nanoparticles, by Using Nuclear Magnetic Resonance Spectroscopy. ChemBioChem, 2024, 25, .	2.6	0
354	Au/Nb ₂ O ₅ -Catalyzed <i>N</i> Formylation of Amines Utilizing High Selectivity to Formate Intermediate in CO ₂ Hydrogenation. Chemistry Letters, 0, , .	1.3	0
355	The role of metal accessibility on carbon dioxide electroreduction in atomically precise nanoclusters. Chemical Science, 0, , .	7.4	0
356	The Role of <i>In Situ</i> / <i>Operando</i> IR Spectroscopy in Unraveling Adsorbate-Induced Structural Changes in Heterogeneous Catalysis. Chemical Reviews, 2023, 123, 12135-12169.	47.7	1
357	Fractal-like gold nanonetworks formed by templated electrodeposition through 3D-mesoporous silica films. RSC Advances, 2023, 13, 32660-32671.	3.6	0
358	Nanoarchitectonics and Catalytic Performance of Au-Pd Nanoflowers Supported on Fe ₂ O ₃ . Journal of Oleo Science, 2023, 72, 1055-1061.	1.4	0
359	Molecular Selfâ€Assembly of Au Nanoparticles on a Porous Cellulose Membrane Template for Highly Sensitive Colorimetric Detection of Glucose. ChemistrySelect, 2023, 8, .	1.5	0
360	Engineering the Interface Between Au Nanoparticles and CoO-Ov to Enhance the Catalytic Performance of 5-Hydroxymethylfurfural (HMF) to 2,5-Dimethylfuran (DMF). Chemical Research in Chinese Universities, 0, , .	2.6	0
361	Atomicâ€Scale 3D Structure of a Supported Pd Nanoparticle Revealed by Electron Tomography with Convolution Neural Networkâ€Based Image Inpainting. Small Methods, 0, , .	8.6	0
362	Increased Range of Catalytic Activities of Immobilized Compared to Colloidal Gold Nanoparticles. Molecules, 2023, 28, 7558.	3.8	0
363	Partially Thiolated Au _{<i>n</i>} (<i>n</i> = 25, 102) Clusters on Layered Double Hydroxides Anchored by Electrostatic Interactions: Size Effect on 5-Hydroxymethylfurfural Oxidation Catalysis. ACS Catalysis, 0, , 16179-16187.	11.2	0
364	金@介å²ç¢³æ¸å£³å'Œç©ºè…"结构纳米ææ−™å^¶å¤åŠå…¶å,¬åŒ−æ°§åŒ−性胹⁄₂ç"ç©¶. Chinese Scier	ncecB12ılletir	ı, 2 023, , .
365	Selective photocatalytic oxidation of methane to C1 oxygenates by regulating sizes and facets over Au/ZnO. Nano Research, O, , .	10.4	1
366	Large-size gold-aluminum alloy cluster Al ₁₂ Au ₆₀ stabilized by encapsulating B ₁₂ icosahedron: A first-principles study. Journal Physics D: Applied Physics, 0, , .	2.8	0

	CITATION	CITATION REPORT	
# 367	ARTICLE Fabrication of gold nanoparticles supported on hollow microsphere of nanosized TS-1 for the epoxidation of propylene with H2 and O2. Chemical Engineering Journal, 2024, 481, 148676.	IF 12.7	CITATIONS 0
368	Selective Photocatalytic Oxidation of Methane to Methanol by Constructing a Rapid O ₂ Conversion Pathway over Au–Pd/ZnO. ACS Catalysis, 2024, 14, 955-964.	11.2	1
369	Enhanced catalysis of Au/TiO2 for transfer hydrogenation of unsaturated nitro compounds by surface engineering. Applied Surface Science, 2024, 654, 159503.	6.1	0
370	Cold Nanoparticles for CO ₂ Electroreduction: An Optimum Defined by Size and Shape. Journal of the American Chemical Society, 2024, 146, 2015-2023.	13.7	0
371	Decoration of Gold and Platinum Nanoparticle Catalysts by 1 nm Thick Metal Oxide Overlayer and Its Effect on the CO Oxidation Activity. ACS Applied Materials & Interfaces, 2024, 16, 4570-4580.	8.0	0
372	Selective Hydrogenation of Alkyne by Atomically Precise Pd ₆ Nanocluster Catalysts: Accurate Construction of the Coplanar and Specific Active Sites. ACS Catalysis, 2024, 14, 2463-2472.	11.2	0
373	Fabrication and Characterization of an Electrochemical Platform for Formaldehyde Oxidation, Based on Glassy Carbon Modified with Multi-Walled Carbon Nanotubes and Electrochemically Generated Palladium Nanoparticles. Materials, 2024, 17, 841.	2.9	0
374	Quantitative Characterization of Thermodynamic/Kinetic Parameters to Reveal the Nanosize Effect on Surface Adsorption. Journal of Physical Chemistry C, 2024, 128, 3026-3032.	3.1	0
375	Distinct Site Motifs Activate O ₂ and H ₂ on Supported Au Nanoparticles in Liquid Water. ACS Catalysis, 2024, 14, 3248-3265.	11.2	0
376	Beyond the promise: Exploring the complex interactions of nanoparticles within biological systems. Journal of Hazardous Materials, 2024, 468, 133800.	12.4	0
377	Element specific atom counting for heterogeneous nanostructures: Combining multiple ADF STEM images for simultaneous thickness and composition determination. Ultramicroscopy, 2024, 259, 113941.	1.9	0
378	Manipulation of the electronic state of Au to boost the catalytic efficiency of Au/polyaniline by doping engineering. Molecular Catalysis, 2024, 557, 113963.	2.0	0
379	Constructing Heterointerfaces in Dual-Phase High-Entropy Oxides to Boost O ₂ Activation and SO ₂ Resistance for Mercury Removal in Flue Gas. ACS Applied Materials & Interfaces, 2024, 16, 12534-12543.	8.0	0
380	Stable mass-selected AuTiO _{<i>x</i>} nanoparticles for CO oxidation. Physical Chemistry Chemical Physics, 2024, 26, 9253-9263.	2.8	0
381	Mesoporous Ag@WO3 core–shell, an investigation at different concentrated environment employing laser ablation in liquid. Scientific Reports, 2024, 14, .	3.3	0
382	Computational insights into the zeolite-supported gold nanocluster-catalyzed ethanol dehydrogenation to acetaldehyde. Physical Chemistry Chemical Physics, 2024, 26, 9593-9600.	2.8	0
383	Functionalisation of alkali-resistant nanoporous glass <i>via</i> Au nanoparticle decoration using alkaline impregnation: catalytic activity for CO removal. RSC Advances, 2024, 14, 8214-8221.	3.6	0
385	Top-down fabrication of active interface between TiO2 and Pt nanoclusters. Part 2: Catalytic performance and reaction mechanism in CO oxidation. Chinese Journal of Catalysis, 2024, 58, 247-254.	14.0	Ο

#	Article	IF	CITATIONS
386	Top-down fabrication of active interface between TiO2 and Pt nanoclusters. Part 1: Redispersion process and mechanism. Chinese Journal of Catalysis, 2024, 58, 237-246.	14.0	0