Yan Zhu

List of Publications by Citations

85	3,684	24	60
papers	citations	h-index	g-index
94	4,276	8.2	5.53
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
85	Total structure determination of thiolate-protected Au38 nanoparticles. *Journal of the American Chemical Society*, **2010**, 132, 8280-1	16.4	871
84	Atomically precise Au25(SR)18 nanoparticles as catalysts for the selective hydrogenation of alpha,beta-unsaturated ketones and aldehydes. *Angewandte Chemie - International Edition*, **2010**, 49, 1295-8	16.4	426
83	Size Focusing: A Methodology for Synthesizing Atomically Precise Gold Nanoclusters. *Journal of Physical Chemistry Letters*, **2010**, 1, 2903-2910	6.4	348
82	Thiolate-protected Au(n) nanoclusters as catalysts for selective oxidation and hydrogenation processes. *Advanced Materials*, **2010**, 22, 1915-20	24	207
81	Catalysis opportunities of atomically precise gold nanoclusters. *Journal of Materials Chemistry*, **2011**, 21, 6793		179
80	Quantum-sized gold nanoclusters: bridging the gap between organometallics and nanocrystals. *Chemistry - A European Journal*, **2011**, 17, 6584-93	4.8	125
79	An atomic-level strategy for unraveling gold nanocatalysis from the perspective of Au(n)(SR)m nanoclusters. *Chemistry - A European Journal*, **2010**, 16, 11455-62	4.8	122
78	Central Doping of a Foreign Atom into the Silver Cluster for Catalytic Conversion of CO toward C-C Bond Formation. *Angewandte Chemie - International Edition*, **2018**, 57, 9775-9779	16.4	109
77	Atomically Precise Au25(SR)18 Nanoparticles as Catalysts for the Selective Hydrogenation of ,-Unsaturated Ketones and Aldehydes. *Angewandte Chemie*, **2010**, 122, 1317-1320	3.6	95
76	Exploring stereoselectivity of Au25 nanoparticle catalyst for hydrogenation of cyclic ketone. *Journal of Catalysis*, **2010**, 271, 155-160	7.3	90
75	Conversion of Polydisperse Au Nanoparticles into Monodisperse Au25 Nanorods and Nanospheres. *Journal of Physical Chemistry C*, **2009**, 113, 17599-17603	3.8	89
74	The Fourth Alloying Mode by Way of Anti-Galvanic Reaction. *Angewandte Chemie - International Edition*, **2018**, 57, 4500-4504	16.4	57
73	Exploring the Effect of Co3O4 Nanocatalysts with Different Dimensional Architectures on Methane Combustion. *ChemCatChem*, **2016**, 8, 540-545	5.2	54
72	Modulating the hierarchical fibrous assembly of Au nanoparticles with atomic precision. *Nature Communications*, **2018**, 9, 3871	17.4	48
71	CO2 Hydrogenation to Ethanol over Cu@Na-Beta. *CheM*, **2020**, 6, 2673-2689	16.2	46
70	Noncrystalline metal-boron nanotubes: synthesis, characterization, and catalytic-hydrogenation properties. *Angewandte Chemie - International Edition*, **2006**, 45, 7211-4	16.4	41
69	La2O3 catalysts with diverse spatial dimensionality for oxidative coupling of methane to produce ethylene and ethane. *RSC Advances*, **2016**, 6, 34872-34876	3.7	41

68	Reversible Switching of Catalytic Activity by Shuttling an Atom into and out of Gold Nanoclusters. *Angewandte Chemie - International Edition*, **2019**, 58, 9964-9968	16.4	40
67	Online Kinetics Study of Oxidative Coupling of Methane over La2O3 for Methane Activation: What Is Behind the Distinguished Light-off Temperatures?. *ACS Catalysis*, **2018**, 8, 11761-11772	13.1	37
66	Atomically precise Au25 superatoms immobilized on CeO2 nanorods for styrene oxidation. *Nanoscale*, **2013**, 5, 3668-72	7.7	33
65	Structural Relaxation Enabled by Internal Vacancy Available in a 24-Atom Gold Cluster Reinforces Catalytic Reactivity. *Journal of the American Chemical Society*, **2020**, 142, 4141-4153	16.4	29
64	Au@PdO with a PdO-rich shell and Au-rich core embedded in CoO nanorods for catalytic combustion of methane. *Nanoscale*, **2017**, 9, 2123-2128	7.7	28
63	Controllable Conversion of CO on Non-Metallic Gold Clusters. *Angewandte Chemie - International Edition*, **2020**, 59, 1919-1924	16.4	28
62	Central Doping of a Foreign Atom into the Silver Cluster for Catalytic Conversion of CO2 toward C□ Bond Formation. *Angewandte Chemie*, **2018**, 130, 9923-9927	3.6	26
61	Excitonic AuRu(PPh)(SCHPh) cluster for light-driven dinitrogen fixation. *Chemical Science*, **2020**, 11, 2440-2447	9.4	23
60	Crystal-Facet Effect of □Al2O3 on Supporting CrOx for Catalytic Semihydrogenation of Acetylene. *ACS Catalysis*, **2018**, 8, 6419-6425	13.1	23
59	Ternary Heterostructural Pt/CN/Ni as a Supercatalyst for Oxygen Reduction. *IScience*, **2019**, 11, 388-397	6.1	22
58	De novo design of Au(SR) nanoclusters. *Nature Communications*, **2020**, 11, 3349	17.4	21
57	The Evolution in Catalytic Activity Driven by Periodic Transformation in the Inner Sites of Gold Clusters. *Advanced Functional Materials*, **2019**, 29, 1904242	15.6	21
56	Designing axial growth of Co-Ni bimetallic nanowires with hexagon-like caps and their catalytic hydrogenation for nitrobenzene. *Nanoscale*, **2016**, 8, 3949-53	7.7	20
55	Controllable synthesis of CuS nanotubes and nanobelts using lyotropic liquid crystal templates. *Journal of Materials Science*, **2007**, 42, 1042-1045	4.3	20
54	Ag Au (PET) Nanocluster: Dimeric Assembly of Au (PET) Enabled by Silver Atoms. *Angewandte Chemie - International Edition*, **2020**, 59, 13941-13946	16.4	18
53	A facial strategy to synthesize Pd/Co3O4 nanosheets with enhanced performance for methane catalytic oxidation. *Molecular Catalysis*, **2018**, 452, 28-35	3.3	17
52	3D charged grid induces a high performance catalyst: ruthenium clusters enclosed in X-zeolite for hydrogenation of phenol to cyclohexanone. *Catalysis Science and Technology*, **2017**, 7, 5953-5963	5.5	17
51	Precisely Constructed Silver Active Sites in Gold Nanoclusters for Chemical Fixation of CO. *Angewandte Chemie - International Edition*, **2021**, 60, 10573-10576	16.4	16

50	Morphology-Reserved Synthesis of Discrete Nanosheets of CuO@SAPO-34 and Pore Mouth Catalysis for One-Pot Oxidation of Cyclohexane. *Angewandte Chemie - International Edition*, **2020**, 59, 2606-2611	16.4	15
49	Reversible Switching of Catalytic Activity by Shuttling an Atom into and out of Gold Nanoclusters. *Angewandte Chemie*, **2019**, 131, 10069-10073	3.6	14
48	One-Dimensional Heterostructured Palladium Oxide-Cobalt Oxide Catalyst for the Catalytic Oxidation of Methane. *ChemCatChem*, **2017**, 9, 738-745	5.2	14
47	Reactivity and Lability Modulated by a Valence Electron Moving in and out of 25-Atom Gold Nanoclusters. *Angewandte Chemie - International Edition*, **2020**, 59, 21135-21142	16.4	14
46	Ultrasmall Au10 clusters anchored on pyramid-capped rectangular TiO2 for olefin oxidation. *Nano Research*, **2016**, 9, 1182-1192	10	13
45	Exclusively catalytic oxidation of toluene to benzaldehyde in an O/W emulsion stabilized by hexadecylphosphate acid terminated mixed-oxide nanoparticles. *Chinese Journal of Catalysis*, **2020**, 41, 341-349	11.3	13
44	Cd-driven surface reconstruction and photodynamics in gold nanoclusters. *Chemical Science*, **2021**, 12, 3290-3294	9.4	13
43	Structure-Specific Catalytic Oxidation with O2 by Isomers in Au28(SR)20 Nanoclusters. *ChemistrySelect*, **2018**, 3, 6165-6169	1.8	11
42	Precisely modulating the surface sites on atomically monodispersed gold-based nanoclusters for controlling their catalytic performances. *Nanoscale*, **2020**, 12, 18004-18012	7.7	11
41	The precise editing of surface sites on a molecular-like gold catalyst for modulating regioselectivity. *Chemical Science*, **2020**, 11, 8000-8004	9.4	10
40	Active-Site Tailoring of Gold Cluster Catalysts for Electrochemical CO2 Reduction. *ACS Catalysis*, **2021**, 11, 11551-11560	13.1	10
39	Tuning the collective switching behavior of azobenzene/Au hybrid materials: flexible versus rigid azobenzene backbones and Au(111) surfaces versus curved Au nanoparticles. *Nanoscale*, **2017**, 9, 16700-16710	7.7	9
38	Structural Effect of One-Dimensional Samarium Oxide Catalysts on Oxidative Coupling of Methane. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 3398-3404	1.3	9
37	The effect of electrostatic field on the catalytic properties of platinum clusters confined in zeolite for hydrogenation. *Catalysis Science and Technology*, **2018**, 8, 6384-6395	5.5	9
36	Selectivity switch in transformation of CO2 from ethanol to methanol on Cu embedded in the defect carbon. *Science China Chemistry*, **2020**, 63, 722-730	7.9	8
35	Unlocking the catalytic activity of an eight-atom gold cluster with a Pd atom. *Nanoscale*, **2020**, 12, 6020-6028	7.7	8
34	Structure-Dependent Selective Hydrogenation of α,β-Unsaturated Aldehydes over Platinum Nanocrystals Decorated with Nickel. *ChemPlusChem*, **2014**, 79, 1258-1262	2.8	8
33	An Au Cluster Fortified by Four Ferrocenes. *Journal of Physical Chemistry A*, **2020**, 124, 6061-6067	2.8	7

32	Electrochemical Aziridination of Tetrasubstituted Alkenes with Ammonia. *CCS Chemistry*,872-882	7.2	7
31	The shape evolution from PtxCoy@Co cubes to PtxCoy multicubes for selective hydrogenation of unsaturated aldehyde. *Nanoscale*, **2016**, 8, 6451-5	7.7	6
30	In situ synthesis of horizontally aligned metal-boron alloy nanotubes on a silicon substrate with liquid crystal template. *Nanotechnology*, **2008**, 19, 405602	3.4	6
29	Precisely Constructed Silver Active Sites in Gold Nanoclusters for Chemical Fixation of CO2. *Angewandte Chemie*, **2021**, 133, 10667-10670	3.6	6
28	Selective Hydrogenation of CO Dictated by Isomers in Au (SR) Nanoclusters: Which One is Better?. *Chemistry - A European Journal*, **2019**, 25, 9185-9190	4.8	5
27	Carbon nitride with encapsulated nickel for semi-hydrogenation of acetylene: pyridinic nitrogen is responsible for hydrogen dissociative adsorption. *Science China Chemistry*, **2018**, 61, 1014-1019	7.9	5
26	One-core-atom loss in a gold nanocluster promotes hydroamination reaction of alkynes. *Nanoscale*, **2019**, 11, 13767-13772	7.7	5
25	Noncrystalline Metal–Boron Nanotubes: Synthesis, Characterization, and Catalytic-Hydrogenation Properties. *Angewandte Chemie*, **2006**, 118, 7369-7372	3.6	5
24	Morphology-Reserved Synthesis of Discrete Nanosheets of CuO@SAPO-34 and Pore Mouth Catalysis for One-Pot Oxidation of Cyclohexane. *Angewandte Chemie*, **2020**, 132, 2628-2633	3.6	5
23	Suppressing the active site-blocking impact of ligands of Ni(SR) clusters with the assistance of NH on catalytic hydrogenation of nitriles. *Nanoscale*, **2018**, 10, 19375-19382	7.7	5
22	Planar versus Nonplanar Pd Clusters: Stability and CO Oxidation Activity of Pd Clusters with and without TiO2(110) Substrate. *Journal of Physical Chemistry C*, **2019**, 123, 13739-13747	3.8	4
21	Distinct structure assembly driven by metal-ligand binding in Au nanoclusters and its relation to photocatalysis. *Chemical Communications*, **2021**, 57, 2176-2179	5.8	4
20	Tuning Selectivity in Catalytic Conversion of CO 2 by One-Atom-Switching of Au 9 and Au 8 Pd 1 Catalysts. *CCS Chemistry*,408-420	7.2	4
19	Enhanced stability of Pd/Al2O3 during aqueous oxidation reaction via SiH4 treatment. *Journal of Materials Science*, **2018**, 53, 15795-15803	4.3	3
18	Ligand-protected AuRu and AuRu nanoclusters: distinct structures and implications for site-cooperation catalysis. *Chemical Communications*, **2020**, 56, 12833-12836	5.8	3
17	Role of Graphite Felt Electrode and Electron Delocalization of Cinnamate Ester in Electrochemical Hydrogenation Reaction. *Journal of Physical Chemistry C*, **2021**, 125, 13871-13879	3.8	3
16	Electrocatalytic and photocatalytic applications of atomically precise gold-based nanoclusters. *Science China Chemistry*, **2021**, 64, 1065-1075	7.9	3
15	Evolution from superatomic AuAg monomers into molecular-like AuAg dimeric nanoclusters.. *Chemical Science*, **2022**, 13, 2778-2782	9.4	3

14	Ag2Au50(PET)36 Nanocluster: Dimeric Assembly of Au25(PET)18 Enabled by Silver Atoms. *Angewandte Chemie*, **2020**, 132, 14045-14050	3.6	2
13	Controllable Conversion of CO2 on Non-Metallic Gold Clusters. *Angewandte Chemie*, **2020**, 132, 1935-1940	3.6	2
12	Reactivity and Lability Modulated by a Valence Electron Moving in and out of 25-Atom Gold Nanoclusters. *Angewandte Chemie*, **2020**, 132, 21321-21328	3.6	2
11	Contributions of Internal Atoms of Atomically Precise Metal Nanoclusters to Catalytic Performances. *Chemistry - A European Journal*, **2021**, 27, 11539-11547	4.8	2
10	The on-and-off dynamics of thiophene on a nickel cluster enables efficient hydrodesulfurization and excellent stability at high temperatures. *Nanoscale*, **2019**, 11, 4369-4375	7.7	2
9	Selective CO2 conversion tuned by periodicities in Au8n+4(TBBT)4n+8 nanoclusters. *Nano Research*, **2021**, 14, 807-813	10	2
8	Predictable Catalysis of Electron-Rich Palladium Catalyst toward Aldehydes Hydrogenation. *ChemCatChem*, **2019**, 11, 3770-3775	5.2	1
7	On the photocatalysis evolution of heteroatom-doped AgM nanoclusters.. *RSC Advances*, **2021**, 11, 32526-32532	3.7	2
6	Evolution of catalytic activity driven by structural fusion of icosahedral gold cluster cores. *Chinese Journal of Catalysis*, **2021**, 42, 245-250	11.3	1
5	Intramolecular hydroamination of alkynes driven by isomeric Au36(SR)24 nanocluster catalysts. *Nano Research*,1	10	1
4	Crystal-Facet Modulated CrO/□AlO: Quasi-Liquid Surface Modification by Bonded Polydimethylsiloxane for Catalytic Oxidation of Propene. *Langmuir*, **2020**, 36, 10404-10411	4	0
3	Distinct chemical fixation of CO enabled by exotic gold nanoclusters. *Journal of Chemical Physics*, **2021**, 155, 054305	3.9	0
2	Catalytic Conversion of C 1 Molecules on Atomically Precise Metal Nanoclusters. *CCS Chemistry*,2771-2799	7.2	0
1	Visible-Light-Driven Methane Conversion with Oxygen Enabled by Atomically Precise Nickel Catalyst. *CCS Chemistry*, **2021**, 3, 2509-2519	7.2	0