

Zhikun Wu

List of Publications by Year in descending order

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112
papers

9,792
citations

41344

49
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34986

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121
all docs

121
docs citations

121
times ranked

5722
citing authors

#	ARTICLE	IF	CITATIONS
1	On the Ligand's Role in the Fluorescence of Gold Nanoclusters. <i>Nano Letters</i> , 2010, 10, 2568-2573.	9.1	1,179
2	Quantum Sized Gold Nanoclusters with Atomic Precision. <i>Accounts of Chemical Research</i> , 2012, 45, 1470-1479.	15.6	837
3	Size Focusing: A Methodology for Synthesizing Atomically Precise Gold Nanoclusters. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2903-2910.	4.6	402
4	One-pot synthesis of atomically monodisperse, thiol-functionalized Au ₂₅ nanoclusters. <i>Journal of Materials Chemistry</i> , 2009, 19, 622-626.	6.7	334
5	Ag Nanoparticle Decorated Nanoporous ZnO Microrods and Their Enhanced Photocatalytic Activities. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 6030-6037.	8.0	292
6	High Yield, Large Scale Synthesis of Thiolate-Protected Ag ₇ Clusters. <i>Journal of the American Chemical Society</i> , 2009, 131, 16672-16674.	13.7	274
7	Probing the Structure and Charge State of Glutathione-Capped Au ₂₅ (SG) ₁₈ Clusters by NMR and Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2009, 131, 6535-6542.	13.7	271
8	Unraveling the long-pursued Au ₁₄₄ structure by x-ray crystallography. <i>Science Advances</i> , 2018, 4, eaat7259.	10.3	267
9	Structural isomerism in gold nanoparticles revealed by X-ray crystallography. <i>Nature Communications</i> , 2015, 6, 8667.	12.8	258
10	Discovery, Mechanism, and Application of Antigalvanic Reaction. <i>Accounts of Chemical Research</i> , 2018, 51, 2774-2783.	15.6	227
11	Mono-cadmium vs Mono-mercury Doping of Au ₂₅ Nanoclusters. <i>Journal of the American Chemical Society</i> , 2015, 137, 15350-15353.	13.7	211
12	Kinetic Control and Thermodynamic Selection in the Synthesis of Atomically Precise Gold Nanoclusters. <i>Journal of the American Chemical Society</i> , 2011, 133, 9670-9673.	13.7	209
13	Mono-Mercury Doping of Au ₂₅ and the HOMO/LUMO Energies Evaluation Employing Differential Pulse Voltammetry. <i>Journal of the American Chemical Society</i> , 2015, 137, 9511-9514.	13.7	206
14	Anti-Galvanic Reduction of Thiolate-Protected Gold and Silver Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 2934-2938.	13.8	195
15	Well-Defined Nanoclusters as Fluorescent Nanosensors: A Case Study on Au ₂₅ (SG) ₁₈ . <i>Small</i> , 2012, 8, 2028-2035.	10.0	185
16	Adding Two Active Silver Atoms on Au ₂₅ Nanoparticle. <i>Nano Letters</i> , 2015, 15, 1281-1287.	9.1	171
17	Chiral Au ₂₅ Nanospheres and Nanorods: Synthesis and Insight into the Origin of Chirality. <i>Nano Letters</i> , 2011, 11, 3963-3969.	9.1	167
18	Fluorescent Gold Nanoclusters with Interlocked Staples and a Fully Thiolate-Bound Kernel. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 11567-11571.	13.8	159

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19	The fourth crystallographic closest packing unveiled in the gold nanocluster crystal. <i>Nature Communications</i> , 2017, 8, 14739.	12.8	151
20	Structure of Chiral Au ₄₄ (2,4-DMBT) ₂₆ Nanocluster with an 18-Electron Shell Closure. <i>Journal of the American Chemical Society</i> , 2016, 138, 10425-10428.	13.7	149
21	Hard-Sphere Random Close-Packed Au ₄₇ Cd ₂ (TBBT) ₃₁ Nanoclusters with a Faradaic Efficiency of Up to 96% for Electrocatalytic CO ₂ Reduction to CO. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3073-3077.	13.8	139
22	One-Pot Synthesis of Au ₂₅ (SG) ₁₈ and 4-nm Gold Nanoparticles and Comparison of Their Size-Dependent Properties. <i>Advanced Functional Materials</i> , 2011, 21, 177-183.	14.9	127
23	Ratiometric Zn ²⁺ Sensor and Strategy for Hg ²⁺ Selective Recognition by Central Metal Ion Replacement. <i>Inorganic Chemistry</i> , 2006, 45, 3140-3142.	4.0	125
24	Structures and magnetism of mono-palladium and mono-platinum doped Au ₂₅ (PET) ₁₈ nanoclusters. <i>Chemical Communications</i> , 2016, 52, 9873-9876.	4.1	120
25	Crystal and Solution Photoluminescence of MAg ₂₄ (SR) ₁₈ (M = Ag/Pd/Pt/Au) Nanoclusters and Some Implications for the Photoluminescence Mechanisms. <i>Journal of Physical Chemistry C</i> , 2017, 121, 13848-13853.	3.1	120
26	Stability of the Two Au-S Binding Modes in Au ₂₅ (SG) ₁₈ Nanoclusters Probed by NMR and Optical Spectroscopy. <i>ACS Nano</i> , 2009, 3, 2036-2042.	14.6	118
27	A Dual Purpose Strategy to Endow Gold Nanoclusters with Both Catalysis Activity and Water Solubility. <i>Journal of the American Chemical Society</i> , 2020, 142, 973-977.	13.7	109
28	Exploring stereoselectivity of Au ₂₅ nanoparticle catalyst for hydrogenation of cyclic ketone. <i>Journal of Catalysis</i> , 2010, 271, 155-160.	6.2	95
29	Bimetal Doping in Nanoclusters: Synergistic or Counteractive?. <i>Chemistry of Materials</i> , 2016, 28, 8240-8247.	6.7	90
30	Au ₂₅ (SG) ₁₈ as a fluorescent iodide sensor. <i>Nanoscale</i> , 2012, 4, 4087.	5.6	89
31	The Fourth Alloying Mode by Way of Anti-Galvanic Reaction. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4500-4504.	13.8	81
32	Kernel Tuning and Nonuniform Influence on Optical and Electrochemical Gaps of Bimetal Nanoclusters. <i>Journal of the American Chemical Society</i> , 2018, 140, 3487-3490.	13.7	81
33	Double-Stranded Helicates, Triangles, and Squares Formed by the Self-Assembly of Pyrrol-2-ylmethyleneamines and ZnII Ions. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 3271-3274.	13.8	79
34	One-pot one-cluster synthesis of fluorescent and bio-compatible Ag ₁₄ nanoclusters for cancer cell imaging. <i>Nanoscale</i> , 2015, 7, 18464-18470.	5.6	68
35	Cu ²⁺ induced formation of Au ₄₄ (SC ₂ H ₄ Ph) ₃₂ and its high catalytic activity for the reduction of 4-nitrophenol at low temperature. <i>Chemical Communications</i> , 2015, 51, 4433-4436.	4.1	66
36	Quasi-Dual-Packed-Kernelled Au ₄₉ (2,4-DMBT) ₂₇ Nanoclusters and the Influence of Kernel Packing on the Electrochemical Gap. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12644-12648.	13.8	66

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37	Fast, high-yield synthesis of amphiphilic Ag nanoclusters and the sensing of Hg ²⁺ in environmental samples. <i>Nanoscale</i> , 2015, 7, 10013-10020.	5.6	63
38	The fcc structure isomerization in gold nanoclusters. <i>Nanoscale</i> , 2017, 9, 14809-14813.	5.6	62
39	Wavelength Dependence of the Fluorescence Quenching Efficiency of Nearby Dyes by Gold Nanoclusters and Nanoparticles: The Roles of Spectral Overlap and Particle Size. <i>Journal of Physical Chemistry C</i> , 2011, 115, 20105-20112.	3.1	61
40	Peeling the Core-Shell Au ₂₅ Nanocluster by Reverse Ligand-Exchange. <i>Chemistry of Materials</i> , 2016, 28, 1022-1025.	6.7	60
41	Fcc versus Non-fcc Structural Isomerism of Gold Nanoparticles with Kernel Atom Packing Dependent Photoluminescence. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4510-4514.	13.8	59
42	A novel double-helical-kernel evolution pattern of gold nanoclusters: alternate single-stranded growth at both ends. <i>Nanoscale</i> , 2017, 9, 3742-3746.	5.6	58
43	Alternating Array Stacking of Ag ₂₆ Au and Ag ₂₄ Au Nanoclusters. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9897-9901.	13.8	58
44	Improving the Catalytic Activity of Au ₂₅ Nanocluster by Peeling and Doping. <i>Chinese Journal of Chemistry</i> , 2017, 35, 567-571.	4.9	57
45	A Silver Nanocluster Containing Interstitial Sulfur and Unprecedented Chemical Bonds. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11273-11277.	13.8	57
46	Transition-sized Au ₉₂ nanoparticle bridging non-fcc-structured gold nanoclusters and fcc-structured gold nanocrystals. <i>Chemical Communications</i> , 2016, 52, 12036-12039.	4.1	54
47	Chemical-Free Physical Synthesis of Surfactant- and Ligand-Free Gold Nanoparticles and Their Anti-Galvanic Reduction Property. <i>Chemistry - an Asian Journal</i> , 2014, 9, 1006-1010.	3.3	52
48	Surface Single-Atom Tailoring of a Gold Nanoparticle. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 204-208.	4.6	51
49	Structural Oscillation Revealed in Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , 2020, 142, 12140-12145.	13.7	51
50	Controlling ultrasmall gold nanoparticles with atomic precision. <i>Chemical Science</i> , 2021, 12, 2368-2380.	7.4	50
51	Quantitatively Monitoring the Size-Focusing of Au Nanoclusters and Revealing What Promotes the Size Transformation from Au ₄₄ (TBBT) ₂₈ to Au ₃₆ (TBBT) ₂₄ . <i>Analytical Chemistry</i> , 2016, 88, 11297-11301.	6.5	48
52	Is the kernel "staples match a key" lock match?. <i>Chemical Science</i> , 2018, 9, 2437-2442.	7.4	48
53	Two-Way Transformation between fcc- and Nonfcc-Structured Gold Nanoclusters. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5338-5343.	4.6	47
54	Excited-State Behaviors of M ₁ Au ₂₄ (SR) ₁₈ Nanoclusters: The Number of Valence Electrons Matters. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13435-13442.	3.1	44

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55	Traceless Removal of Two Kernel Atoms in a Gold Nanocluster and Its Impact on Photoluminescence. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 8668-8672.	13.8	43
56	Fluorescent Gold Nanoclusters with Interlocked Staples and a Fully Thiolate-Bound Kernel. <i>Angewandte Chemie</i> , 2016, 128, 11739-11743.	2.0	42
57	Synthesis of fluorescent phenylethanethiolated gold nanoclusters via pseudo-AGR method. <i>Nanoscale</i> , 2015, 7, 16200-16203.	5.6	41
58	Ultrafast Relaxation Dynamics of Au ₃₈ (SC ₂ H ₄ Ph) ₂₄ Nanoclusters and Effects of Structural Isomerism. <i>Journal of Physical Chemistry C</i> , 2017, 121, 10686-10693.	3.1	41
59	One-step fabrication of high performance micro/nanostructured Fe ₃ S ₄ magnetic adsorbent with easy recovery and regeneration properties. <i>CrystEngComm</i> , 2013, 15, 2956.	2.6	40
60	Novel fluorescent sensor for Zn(II) based on bis(pyrrol-2-yl-methyleneamine) ligands. <i>Sensors and Actuators B: Chemical</i> , 2004, 99, 511-515.	7.8	39
61	Distance makes a difference in crystalline photoluminescence. <i>Nature Communications</i> , 2020, 11, 5572.	12.8	37
62	Sequential Observation of Ag _n S ₄ ⁺ (1 ≤ n ≤ 7) Gas Phase Clusters in MS/MS and Prediction of Their Structures. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 1423-1427.	4.6	35
63	Ion-precursor and ion-dose dependent anti-galvanic reduction. <i>Chemical Communications</i> , 2015, 51, 11773-11776.	4.1	35
64	Sensitivity of Structural and Electronic Properties of Gold-Thiolate Nanoclusters to the Atomic Composition: A Comparative X-ray Study of Au ₁₉ (SR) ₁₃ and Au ₂₅ (SR) ₁₈ . <i>Journal of Physical Chemistry C</i> , 2012, 116, 25137-25142.	3.1	34
65	Reversible Control of Chemoselectivity in Au ₃₈ (SR) ₂₄ Nanocluster-Catalyzed Transfer Hydrogenation of Nitrobenzaldehyde Derivatives. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 7173-7179.	4.6	34
66	Reduction-resistant and reduction-catalytic double-crown nickel nanoclusters. <i>Nanoscale</i> , 2014, 6, 14195-14199.	5.6	33
67	An Unprecedented Kernel Growth Mode and Layer-Number-Dependent Properties in Gold Nanoclusters. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 731-734.	13.8	33
68	Hard-Sphere Random Close-Packed Au ₄₇ Cd ₂ (TBBT) ₃₁ Nanoclusters with a Faradaic Efficiency of Up to 96% for Electrocatalytic CO ₂ Reduction to CO. <i>Angewandte Chemie</i> , 2020, 132, 3097-3101.	2.0	33
69	Synthesis and Properties Evolution of a Family of Tiara-like Phenylethanethiolated Palladium Nanoclusters. <i>Scientific Reports</i> , 2015, 5, 16628.	3.3	32
70	Catalyzed formation of α,β -unsaturated ketones or aldehydes from propargylic acetates by a recoverable and recyclable nanocluster catalyst. <i>Nanoscale</i> , 2014, 6, 5714.	5.6	30
71	Synthesizing Photoluminescent Au ₂₈ (SCH ₂ Ph) ₂₂ Nanoclusters with Structural Features by Using a Combined Method. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17932-17936.	13.8	30
72	Gold-Doping of Double-Crown Pd Nanoclusters. <i>Chemistry - A European Journal</i> , 2017, 23, 18187-18192.	3.3	29

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73	Two-Way Alloying and Dealloying of Cadmium in Metalloid Gold Clusters. <i>Inorganic Chemistry</i> , 2019, 58, 5388-5392.	4.0	29
74	Metal Nanoparticles Confronted with Foreign Ligands: Mere Ligand Exchange or Further Structural Transformation?. <i>Small</i> , 2021, 17, e2000609.	10.0	29
75	Kernel Homology in Gold Nanoclusters. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 15450-15454.	13.8	26
76	Doping Au ₂₅ nanoparticles using ultrasmall silver or copper nanoparticles as the metal source. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4125-4128.	5.5	24
77	A Silver Nanocluster Containing Interstitial Sulfur and Unprecedented Chemical Bonds. <i>Angewandte Chemie</i> , 2018, 130, 11443-11447.	2.0	24
78	PPh ₃ Converts Thiolated Gold Nanoparticles to [Au ₂₅ (PPh ₃) ₁₀ (SR) ₅ Cl ₂] ²⁺ . <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , 2018, 34, 792-798.	4.9	24
79	The Observation of Gaseous Gold Superions Induced from Monodispersed Nanoparticles. <i>Chemistry - A European Journal</i> , 2011, 17, 13966-13970.	3.3	22
80	Quasi-Dual-Packed-Kernelled Au ₄₉ (2,4-DMBT) ₂₇ Nanoclusters and the Influence of Kernel Packing on the Electrochemical Gap. <i>Angewandte Chemie</i> , 2017, 129, 12818-12822.	2.0	20
81	The Fourth Alloying Mode by Way of Anti-Galvanic Reaction. <i>Angewandte Chemie</i> , 2018, 130, 4590-4594.	2.0	20
82	One-pot synthesis and self-assembly of double stranded helical metal complexes. <i>Inorganic Chemistry Communication</i> , 2004, 7, 249-252.	3.9	19
83	Module Replacement of Gold Nanoparticles by a Pseudo-AGR Process. <i>Acta Chimica Sinica</i> , 2020, 78, 407.	1.4	17
84	Exclusive synthesis of Au ₁₁ (PPh ₃) ₈ Br ₃ against the Cl Analogue and the Electronic Interaction between Cluster Metal Core and Surface Ligands. <i>Chemistry - A European Journal</i> , 2013, 19, 12259-12263.	3.3	15
85	The Synthesis of Chiral Ag ₄ Pd ₂ (SR) ₈ by Nonreplaced Galvanic Reaction. <i>Particle and Particle Systems Characterization</i> , 2019, 36, 1900003.	2.3	14
86	Unravelling the Structure of a Medium-Sized Metalloid Gold Nanocluster and its Filming Property. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11184-11189.	13.8	14
87	An efficient nanocluster catalyst for Sonogashira reaction. <i>Journal of Catalysis</i> , 2021, 401, 206-213.	6.2	12
88	The reactivity of phenylethanethiolated gold nanoparticles with acetic acid. <i>Chemical Communications</i> , 2017, 53, 11646-11649.	4.1	11
89	Kernel Homology in Gold Nanoclusters. <i>Angewandte Chemie</i> , 2018, 130, 15676-15680.	2.0	10
90	Partial Phosphorization: A Strategy to Improve Some Performance(s) of Thiolated Metal Nanoclusters Without Notable Reduction of Stability. <i>Chemistry - A European Journal</i> , 2022, 28, .	3.3	10

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91	Fcc versus Non-fcc Structural Isomerism of Gold Nanoparticles with Kernel Atom Packing Dependent Photoluminescence. <i>Angewandte Chemie</i> , 2019, 131, 4558-4562.	2.0	9
92	Alternating Array Stacking of Ag ₂₆ Au and Ag ₂₄ Au Nanoclusters. <i>Angewandte Chemie</i> , 2019, 131, 10002-10006.	2.0	8
93	Compression-Driven Internanocluster Reaction for Synthesis of Unconventional Gold Nanoclusters. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 12253-12257.	13.8	8
94	Traceless Removal of Two Kernel Atoms in a Gold Nanocluster and Its Impact on Photoluminescence. <i>Angewandte Chemie</i> , 2021, 133, 8750-8754.	2.0	7
95	Fluorescent Probes: Well-Defined Nanoclusters as Fluorescent Nanosensors: A Case Study on Au ₂₅ (SC) ₁₈ (Small 13/2012). <i>Small</i> , 2012, 8, 2027-2027.	10.0	6
96	Synthesizing Photoluminescent Au ₂₈ (SCH ₂) ₂ Ph ^t Bu ₂₂ Nanoclusters with Structural Features by Using a Combined Method. <i>Angewandte Chemie</i> , 2021, 133, 18076-18080.	2.0	5
97	Title is missing!. <i>Angewandte Chemie</i> , 2003, 115, 3393-3396.	2.0	4
98	Size-Dependent Cytotoxicity of Thiolated Silver Nanoparticles Rapidly Probed by using Differential Pulse Voltammetry. <i>ChemElectroChem</i> , 2016, 3, 1197-1200.	3.4	3
99	Correction: One-pot one-cluster synthesis of fluorescent and bio-compatible Ag ₁₄ nanoclusters for cancer cell imaging. <i>Nanoscale</i> , 2016, 8, 13078-13078.	5.6	2
100	An Unprecedented Kernel Growth Mode and Layer Number-Dependent Properties in Gold Nanoclusters. <i>Angewandte Chemie</i> , 2020, 132, 741-744.	2.0	2
101	Unravelling the Structure of a Medium-Sized Metalloid Gold Nanocluster and its Filming Property. <i>Angewandte Chemie</i> , 2021, 133, 11284-11289.	2.0	2
102	Morphological evolution of nanostructures: From molecules to metallosupramolecules to nanoscale structures. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008, 329, 44-50.	4.7	1
103	Single, Self-Born RP-Au-PR Motif Boosts 19-Fold Photoluminescence Quantum Yield of Metal Nanocluster. <i>Acta Chimica Sinica</i> , 2022, 80, 1.	1.4	1
104	Chirality in Gold Nanoclusters. , 2017, , 99-119.		0
105	Frontispiz: The Fourth Alloying Mode by Way of Anti-Galvanic Reaction. <i>Angewandte Chemie</i> , 2018, 130, .	2.0	0
106	Frontispiece: The Fourth Alloying Mode by Way of Anti-Galvanic Reaction. <i>Angewandte Chemie - International Edition</i> , 2018, 57, .	13.8	0
107	Innentitelbild: Fcc versus Non-fcc Structural Isomerism of Gold Nanoparticles with Kernel Atom Packing Dependent Photoluminescence (Angew. Chem. 14/2019). <i>Angewandte Chemie</i> , 2019, 131, 4460-4460.	2.0	0
108	Atomically Precise Metal Nanoclusters. <i>Synthesis Lectures on Materials and Optics</i> , 2020, 1, 1-139.	0.2	0

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109	Frontispiz: Traceless Removal of Two Kernel Atoms in a Gold Nanocluster and Its Impact on Photoluminescence. <i>Angewandte Chemie</i> , 2021, 133, .	2.0	0
110	Compressionâ€Driven Internanocluster Reaction for Synthesis of Unconventional Gold Nanoclusters. <i>Angewandte Chemie</i> , 2021, 133, 12361-12365.	2.0	0
111	Frontispiece: Traceless Removal of Two Kernel Atoms in a Gold Nanocluster and Its Impact on Photoluminescence. <i>Angewandte Chemie - International Edition</i> , 2021, 60, .	13.8	0
112	Ligand Exchange: Metal Nanoparticles Confronted with Foreign Ligands: Mere Ligand Exchange or Further Structural Transformation? (<i>Small</i> 27/2021). <i>Small</i> , 2021, 17, 2170141.	10.0	0