Meng Zhou

List of Publications by Year
in descending order

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71 papers	6,538 citations	94269 37 h-index	88477 70 g-index
71 all docs	71 docs citations	71 times ranked	5542 citing authors

#	Article	IF	Citations
1	Atomically Precise Colloidal Metal Nanoclusters and Nanoparticles: Fundamentals and Opportunities. Chemical Reviews, 2016, 116, 10346-10413.	23.0	2,450
2	Manipulating Aggregation and Molecular Orientation in Allâ€Polymer Photovoltaic Cells. Advanced Materials, 2015, 27, 6046-6054.	11.1	264
3	Crystal structure of a luminescent thiolated Ag nanocluster with an octahedral Ag₆⁴⁺core. Chemical Communications, 2013, 49, 300-302.	2.2	244
4	Evolution from the plasmon to exciton state in ligand-protected atomically precise gold nanoparticles. Nature Communications, 2016, 7, 13240.	5.8	205
5	Crystal Structure and Optical Properties of the [Ag₆₂S₁₂(SBu^t)₃₂]²⁺ Nanocluster with a Complete Face-Centered Cubic Kernel. Journal of the American Chemical Society, 2014, 136, 15559-15565.	6.6	176
6	Toward the Tailoring Chemistry of Metal Nanoclusters for Enhancing Functionalities. Accounts of Chemical Research, 2018, 51, 2764-2773.	7.6	163
7	Tailoring the Structure of 58-Electron Gold Nanoclusters: Au₁₀₃S₂(S-Nap)₄₁ and Its Implications. Journal of the American Chemical Society, 2017, 139, 9994-10001.	6.6	159
8	Sharp Transition from Nonmetallic Au₂₄₆ to Metallic Au₂₇₉ with Nascent Surface Plasmon Resonance. Journal of the American Chemical Society, 2018, 140, 5691-5695.	6.6	157
9	Silicon Nanoparticles with Surface Nitrogen: 90% Quantum Yield with Narrow Luminescence Bandwidth and the Ligand Structure Based Energy Law. ACS Nano, 2016, 10, 8385-8393.	7.3	154
10	A Mono-cuboctahedral Series of Gold Nanoclusters: Photoluminescence Origin, Large Enhancement, Wide Tunability, and Structureâ€“Property Correlation. Journal of the American Chemical Society, 2019, 141, 5314-5325.	6.6	149
11	Three-orders-of-magnitude variation of carrier lifetimes with crystal phase of gold nanoclusters. Science, 2019, 364, 279-282.	6.0	149
12	Double-helical assembly of heterodimeric nanoclusters into supercrystals. Nature, 2021, 594, 380-384.	13.7	138
13	Three-Stage Evolution from Nonscalable to Scalable Optical Properties of Thiolate-Protected Gold Nanoclusters. Journal of the American Chemical Society, 2019, 141, 19754-19764.	6.6	110
14	The tetrahedral structure and luminescence properties of Bi-metallic Pt₁Ag₂₈(SR)₁₈(PPh₃)₄ nanocluster. Chemical Science, 2017, 8, 2581-2587.	3.7	105
15	Ultrabright Au@Cu ₁₄ nanoclusters: 71.3% phosphorescence quantum yield in non-degassed solution at room temperature. Science Advances, 2021, 7, .	4.7	89
16	Evolution of Excited-State Dynamics in Periodic Au₂₈, Au₃₆, Au₄₄, and Au₅₂ Nanoclusters. Journal of Physical Chemistry Letters, 2017, 8, 4023-4030.	2.1	77
17	Ultrafast Relaxation Dynamics of Luminescent Rod-Shaped, Silver-Doped Ag_xAu_{25â€“x} Clusters. Journal of Physical Chemistry C, 2015, 119, 18790-18797.	1.5	75
18	Large-Scale Synthesis, Crystal Structure, and Optical Properties of the Ag₁₄₆Br₂(SR)₈₀ Nanocluster. ACS Nano, 2018, 12, 9318-9325.	7.3	72

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19	A Correlated Series of Au/Ag Nanoclusters Revealing the Evolutionary Patterns of Asymmetric Ag Doping. Journal of the American Chemical Society, 2018, 140, 14235-14243.	6.6	63
20	On the Nonâ€Metallicity of 2.2â€...nm Au₂₄₆(SR)₈₀ Nanoclusters. Angewandte Chemie - International Edition, 2017, 56, 16257-16261.	7.2	61
21	Intramolecular Charge Transfer and Solvation Dynamics of Thiolate-Protected Au₂₀(SR)₁₆ Clusters Studied by Ultrafast Measurement. Journal of Physical Chemistry A, 2013, 117, 10294-10303.	1.1	60
22	Programmable Metal Nanoclusters with Atomic Precision. Advanced Materials, 2021, 33, e2006591.	11.1	60
23	Luminescence and Electron Dynamics in Atomically Precise Nanoclusters with Eight Superatomic Electrons. Journal of the American Chemical Society, 2019, 141, 18715-18726.	6.6	59
24	Electron localization in rod-shaped triicosahedral gold nanocluster. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4697-E4705.	3.3	56
25	Origins of Visible and Near-Infrared Emissions in [Au₂₅(SR)₁₈]^{â^'} Nanoclusters. Journal of Physical Chemistry Letters, 2021, 12, 1514-1519.	2.1	56
26	Effects of single atom doping on the ultrafast electron dynamics of M1Au24(SR)18(M = Pd, Pt) nanoclusters. Nanoscale, 2016, 8, 7163-7171.	2.8	55
27	The Critical Number of Gold Atoms for a Metallic State Nanocluster: Resolving a Decades-Long Question. ACS Nano, 2021, 15, 13980-13992.	7.3	49
28	Effect of Composition on the Spin Relaxation of Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2020, 11, 1502-1507.	2.1	47
29	Manipulating the Phase Distributions and Carrier Transfers in Hybrid Quasiâ€Twoâ€Dimensional Perovskite Films. Solar Rrl, 2019, 3, 1800359.	3.1	46
30	Ultrafast relaxation dynamics of phosphine-protected, rod-shaped Au20 clusters: interplay between solvation and surface trapping. Physical Chemistry Chemical Physics, 2014, 16, 18288-18293.	1.3	45
31	Excited-State Behaviors of M₁Au₂₄(SR)₁₈ Nanoclusters: The Number of Valence Electrons Matters. Journal of Physical Chemistry C, 2018, 122, 13435-13442.	1.5	44
32	Controlling Ag-doping in [Ag_xAu_{25â^'x}(SC₆H₁₁)₁₈]^{â^'}nanoclusters: cryogenic optical, electronic and electrocatalytic properties. Nanoscale, 2017, 9, 19183-19190.	2.8	43
33	Isomerization-induced enhancement of luminescence in Au₂₈(SR)₂₀ nanoclusters. Chemical Science, 2020, 11, 8176-8183.	3.7	42
34	Ultrafast Relaxation Dynamics of Au₃₈(SC₂H₄Ph)₂₄ Nanoclusters and Effects of Structural Isomerism. Journal of Physical Chemistry C, 2017, 121, 10686-10693.	1.5	41
35	Self-assembled propylammonium cations at grain boundaries and the film surface to improve the efficiency and stability of perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 23739-23746.	5.2	41
36	Solvent-dependent intramolecular charge transfer delocalization/localization in multibranched push-pull chromophores. Journal of Chemical Physics, 2015, 143, 034309.	1.2	40

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37	Optical Properties and Excited-State Dynamics of Atomically Precise Gold Nanoclusters. Annual Review of Physical Chemistry, 2021, 72, 121-142.	4.8	40
38	On the functional role of the cerium oxide support in the Au38(SR)24/CeO2 catalyst for CO oxidation. Catalysis Today, 2017, 280, 239-245.	2.2	39
39	Surface Engineering of Au₃₆(SR)₂₄ Nanoclusters for Photoluminescence Enhancement. Particle and Particle Systems Characterization, 2017, 34, 1600388.	1.2	39
40	Thermally Stable Pyrochlore <scp><scp>Y₂Ti₂O₇</scp></scp>: <scp><scp>Eu³⁺</scp></scp> Orangeâ€“Red Emitting Phosphors. Journal of the American Ceramic Society, 2012, 95, 658-662.	1.9	36
41	Atom-by-Atom Evolution of the Same Ligand-Protected Au₂₁, Au₂₂, Au₂₂Cd₁, and Au₂₄ Nanocluster Series. Journal of the American Chemical Society, 2020, 142, 20426-20433.	6.6	36
42	Two Electron Reduction: From Quantum Dots to Metal Nanoclusters. Chemistry of Materials, 2016, 28, 7905-7911.	3.2	35
43	Reversible Control of Chemoselectivity in Au₃₈(SR)₂₄ Nanocluster-Catalyzed Transfer Hydrogenation of Nitrobenzaldehyde Derivatives. Journal of Physical Chemistry Letters, 2018, 9, 7173-7179.	2.1	34
44	Gold Nanoclusters: Bridging Gold Complexes and Plasmonic Nanoparticles in Photophysical Properties. Nanomaterials, 2019, 9, 933.	1.9	33
45	Solvent Dependent Excited State Behaviors of Luminescent Gold(I)â€“Silver(I) Cluster with Hypercoordinated Carbon. Journal of Physical Chemistry C, 2015, 119, 14980-14988.	1.5	30
46	Single-ligand exchange on an Auâ€“Cu bimetal nanocluster and mechanism. Nanoscale, 2018, 10, 12093-12099.	2.8	30
47	Anomalous phonon relaxation in Au ₃₃₃ (SR) ₇₉ nanoparticles with nascent plasmons. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13215-13220.	3.3	29
48	Charge Transfer and Diffusion at the Perovskite/PCBM Interface Probed by Transient Absorption and Reflection. Journal of Physical Chemistry C, 2019, 123, 22095-22103.	1.5	26
49	Heterometal-Doped M₂₃ (M = Au/Ag/Cd) Nanoclusters with Large Dipole Moments. ACS Nano, 2020, 14, 6599-6606.	7.3	26
50	Ultrafast Photoinduced Electron Transfer in Green Fluorescent Protein Bearing a Genetically Encoded Electron Acceptor. Journal of the American Chemical Society, 2015, 137, 7270-7273.	6.6	25
51	Energy transfer and spectroscopic characterization of a perylenetetracarboxylic diimide (PDI) hexamer. Physical Chemistry Chemical Physics, 2015, 17, 18567-18576.	1.3	23
52	Porous Halide Perovskiteâ€“Polymer Nanocomposites for Explosive Detection with a High Sensitivity. Advanced Materials Interfaces, 2019, 6, 1801686.	1.9	22
53	Optical properties of gold nanoclusters constructed from Au₁₃ units. Aggregate, 2022, 3, .	5.2	18
54	Single-molecule spectroscopy and femtosecond transient absorption studies on the excitation energy transfer process in ApcE(1â€“240) dimers. Physical Chemistry Chemical Physics, 2015, 17, 13387-13396.	1.3	16

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55	On the Nonâ€Metallicity of 2.2â€...nm Au 246 (SR) 80 Nanoclusters. Angewandte Chemie, 2017, 129, 16475-16479.	1.6	16
56	Electronic Transitions in Highly Symmetric Au₁₃₀ Nanoclusters by Spectroelectrochemistry and Ultrafast Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 21217-21224.	1.5	15
57	AKT1-CREB stimulation of PDGFRÎ± expression is pivotal for PTEN deficient tumor development. Cell Death and Disease, 2021, 12, 172.	2.7	15
58	Poly-L-arginine promotes asthma angiogenesis through induction of FGFBP1 in airway epithelial cells via activation of the mTORC1-STAT3 pathway. Cell Death and Disease, 2021, 12, 761.	2.7	12
59	Upregulation of 6â€phosphofructoâ€2â€kinase (PFKFB3) by hyperactivated mammalian target of rapamycin complex 1 is critical for tumor growth in tuberous sclerosis complex. IUBMB Life, 2020, 72, 965-977.	1.5	10
60	RUNX1/EGFR Pathway Contributes to STAT3 Activation and Tumor Growth Caused by Hyperactivated mTORC1. Molecular Therapy - Oncolytics, 2021, 23, 387-401.	2.0	10
61	Excitedâ€State Deactivation of Branched Phthalocyanine Compounds. ChemPhysChem, 2015, 16, 3893-3901.	1.0	9
62	MicroRNA-144: A novel biological marker and potential therapeutic target in human solid cancers. Journal of Cancer, 2020, 11, 6716-6726.	1.2	9
63	Atomic structure of a seed-sized gold nanoprism. Nature Communications, 2022, 13, 1235.	5.8	9
64	Understanding nascent plasmons and metallic bonding in atomically precise gold nanoclusters. Chemical Science, 2022, 13, 1925-1932.	3.7	8
65	Coherent vibrational dynamics of Au₁₄₄(SR)₆₀ nanoclusters. Chemical Science, 2022, 13, 8124-8130.	3.7	8
66	Single-electron charging and ultrafast dynamics of bimetallic Au144â^'xAgx(PET)60 nanoclusters. Nano Research, 2022, 15, 8573-8578.	5.8	8
67	Au10(TBBT)10: The beginning and the end of Aun(TBBT)m nanoclusters. Chinese Journal of Chemical Physics, 2018, 31, 555-562.	0.6	7
68	KLF5-mediated COX2 upregulation contributes to tumorigenesis driven by PTEN deficiency. Cellular Signalling, 2020, 75, 109767.	1.7	7
69	Coherent vibrational dynamics of [Au25(SR)18]- nanoclusters. Chinese Journal of Chemical Physics, 2021, 34, 598-604.	0.6	6
70	Effect of single electrons on the excited state dynamics of rod-shaped Au₂₅ nanoclusters. Nanoscale, 2021, 13, 19438-19445.	2.8	5
71	Asymmetrically Doping a Platium Atom into a Au38 Nanocluster for Changing the Electron Configuration and Reactivity in Electrocatalysis. Angewandte Chemie, 0, , .	1.6	3