Shinjiro Takano

List of Publications by Year
in descending order

62 papers	3,772 citations	159525 30 h-index	128225 60 g-index
66 all docs	66 docs citations	66 times ranked	2671 citing authors

#	Article	IF	Citations
1	Light-induced spin-crossover magnet. Nature Chemistry, 2011, 3, 564-569.	6.6	479
2	N-heterocyclic carbene-functionalized magic-number gold nanoclusters. Nature Chemistry, 2019, 11, 419-425.	6.6	333
3	A Critical Size for Emergence of Nonbulk Electronic and Geometric Structures in Dodecanethiolate-Protected Au Clusters. Journal of the American Chemical Society, 2015, 137, 1206-1212.	6.6	322
4	90-degree optical switching of output second-harmonic light in chiral photomagnet. Nature Photonics, 2014, 8, 65-71.	15.6	276
5	Robust, Highly Luminescent Au₁₃ Superatoms Protected by N-Heterocyclic Carbenes. Journal of the American Chemical Society, 2019, 141, 14997-15002.	6.6	185
6	Binding Motif of Terminal Alkynes on Gold Clusters. Journal of the American Chemical Society, 2013, 135, 9450-9457.	6.6	179
7	Chemically Modified Gold/Silver Superatoms as Artificial Elements at Nanoscale: Design Principles and Synthesis Challenges. Journal of the American Chemical Society, 2021, 143, 1683-1698.	6.6	148
8	Hierarchy of bond stiffnesses within icosahedral-based gold clusters protected by thiolates. Nature Communications, 2016, 7, 10414.	5.8	140
9	Hydride Doping of Chemically Modified Gold-Based Superatoms. Accounts of Chemical Research, 2018, 51, 3074-3083.	7.6	106
10	Hydride-Doped Gold Superatom (Au₉H)²⁺: Synthesis, Structure, and Transformation. Journal of the American Chemical Society, 2018, 140, 8380-8383.	6.6	103
11	Alkynyl-Protected Au₂₂(Câ‰¡CR)₁₈ Clusters Featuring New Interfacial Motifs and R-Dependent Photoluminescence. Journal of Physical Chemistry Letters, 2019, 10, 6892-6896.	2.1	81
12	Amplification of the Optical Activity of Gold Clusters by the Proximity of BINAP. Journal of Physical Chemistry Letters, 2016, 7, 4509-4513.	2.1	80
13	Efficient and Selective Conversion of Phosphine-Protected (MAu₈)²⁺ (M = Pd,) Tj ETQq1 1 0.784314 rgBT / (MAu₁₂)⁴⁺ Superatoms via Hydride Doping. Journal of the American Chemical Society, 2019, 141, 15994-16002.	6.6	79
14	Hydride-Mediated Controlled Growth of a Bimetallic (Pd@Au₈)²⁺ Superatom to a Hydride-Doped (HPd@Au₁₀)³⁺ Superatom. Journal of the American Chemical Society, 2018, 140, 12314-12317.	6.6	74
15	N-Heterocyclic Carbene-Stabilized Hydrido Au₂₄ Nanoclusters: Synthesis, Structure, and Electrocatalytic Reduction of CO₂. Journal of the American Chemical Society, 2022, 144, 9000-9006.	6.6	74
16	Ligand-protected gold/silver superatoms: current status and emerging trends. Chemical Science, 2020, 11, 12233-12248.	3.7	69
17	Slow-Reduction Synthesis of a Thiolate-Protected One-Dimensional Gold Cluster Showing an Intense Near-Infrared Absorption. Journal of the American Chemical Society, 2015, 137, 7027-7030.	6.6	68
18	Toward Controlling the Electronic Structures of Chemically Modified Superatoms of Gold and Silver. Small, 2021, 17, e2001439.	5.2	64

#	Article	IF	Citations
19	Stoichiometric Formation of Open-Shell [PtAu₂₄(SC₂H₄Ph)₁₈]^{â^’} via Spontaneous Electron Proportionation between [PtAu₂₄(SC₂H₄Ph)₁₈]^{2â€“} and [PtAu₂₄(SC₂H₄Ph)₁₈]⁰. Journal of the	6.6	62
20	Photoluminescence of Doped Superatoms M@Au₁₂ (M = Ru, Rh, Ir) Homoleptically Capped by (Ph₂)PCH₂P(Ph₂): Efficient Room-Temperature Phosphorescence from Ru@Au₁₂. Journal of the American Chemical Society, 2021, 143, 10560-10564.	6.6	57
21	Synthesis and Catalytic Application of Ag₄₄ Clusters Supported on Mesoporous Carbon. Journal of Physical Chemistry C, 2015, 119, 27483-27488.	1.5	54
22	Suppressing Isomerization of Phosphine-Protected Au₉ Cluster by Bond Stiffening Induced by a Single Pd Atom Substitution. Inorganic Chemistry, 2017, 56, 8319-8325.	1.9	50
23	Synthesis and Characterization of Enantiopure Chiral Bis NHC-Stabilized Edge-Shared Au₁₀ Nanocluster with Unique Prolate Shape. Journal of the American Chemical Society, 2022, 144, 2056-2061.	6.6	44
24	Dopingâ€Mediated Energyâ€Level Engineering of M@Au₁₂ Superatoms (M=Pd, Pt, Rh, Ir) for Efficient Photoluminescence and Photocatalysis. Angewandte Chemie - International Edition, 2022, 61, .	7.2	44
25	Controlled Dimerization and Bonding Scheme of Icosahedral M@Au₁₂ (M=Pd, Pt) Superatoms. Angewandte Chemie - International Edition, 2021, 60, 645-649.	7.2	43
26	Understanding Doping Effects on Electronic Structures of Gold Superatoms: A Case Study of Diphosphine-Protected M@Au₁₂ (M = Au, Pt, Ir). Inorganic Chemistry, 2020, 59, 17889-17895.	1.9	42
27	Controlled Synthesis of Carbonâ€Supported Gold Clusters for Rational Catalyst Design. Chemical Record, 2016, 16, 2338-2348.	2.9	40
28	Anion photoelectron spectroscopy of free [Au₂₅(SC₁₂H₂₅)₁₈]^{â^’}. Nanoscale, 2017, 9, 13409-13412.	2.8	35
29	Prominent hydrogenation catalysis of a PVP-stabilized Au₃₄ superatom provided by doping a single Rh atom. Chemical Communications, 2018, 54, 5915-5918.	2.2	35
30	An Au₂₅(SR)₁₈ Cluster with a Face-Centered Cubic Core. Journal of Physical Chemistry C, 2018, 122, 13199-13204.	1.5	33
31	Collision-Induced Dissociation of Undecagold Clusters Protected by Mixed Ligands [Au₁₁(PPh₃)₈X₂]⁺ (X = Cl, Câ‰¡CPh). ACS Omega, 2018, 3, 6237-6242.	1.6	30
32	Synthesis of Trimetallic (HPd@M₂Au₈)³⁺ Superatoms (M = Ag, Cu) via Hydride-Mediated Regioselective Doping to (Pd@Au₈)²⁺. ACS Omega, 2019, 4, 7070-7075.	1.6	30
33	Synergistic Effects of Pt and Cd Codoping to Icosahedral Au_{13} Superatoms. Journal of Physical Chemistry C, 2020, 124, 23923-23929.	1.5	30
34	Ligand Effects on the Structures of [Au₂₃L₆(Câ‰¡CPh)₉]²⁺ (L = N-Heterocyclic Carbene vs) Tj ETQq0 0 0 rgBT /Overlo 9930-9936.	1.5	28
35	Interconversions of Structural Isomers of [PdAu₈(PPh₃)₈]²⁺ and [Au₉(PPh₃)₈]³⁺ Revealed by Ion Mobility Mass Spectrometry. Journal of Physical Chemistry C, 2018, 122, 23123-23128.	1.5	23
36	Ligand Effects on the Hydrogen Evolution Reaction Catalyzed by Au₁₃ and Pt@Au₁₂: Alkynyl vs Thiolate. Journal of Physical Chemistry C, 2021, 125, 23226-23230.	1.5	22

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37	NHC-Stabilized Au₁₀ Nanoclusters and Their Conversion to Au₂₅ Nanoclusters. Jacs Au, 2022, 2, 875-885.	3.6	22
38	New Magic Au₂₄ Cluster Stabilized by PVP: Selective Formation, Atomic Structure, and Oxidation Catalysis. Jacs Au, 2021, 1, 660-668.	3.6	21
39	Selective and Highâ€Yield Synthesis of Oblate Superatom [PdAu₈(PPh₃)₈]²⁺. ChemElectroChem, 2016, 3, 1206-1211.	1.7	18
40	Electron Microscopic Observation of an Icosahedral Au₁₃ Core in Au₂₅(SePh)₁₈ and Reversible Isomerization between Icosahedral and Face-Centered Cubic Cores in Au₁₄₄(SC₂H₄Ph)₆₀. Journal of Physical Chemistry C, 2020, 124, 6907-6912.	1.5	17
41	Electron-Rich Gold Clusters Stabilized by Poly(vinylpyridines) as Robust and Active Oxidation Catalysts. Langmuir, 2020, 36, 7844-7849.	1.6	13
42	A gold superatom with 10 electrons in Au₁₃(PPh₃)₈(<i>p</i>-SC₆H₄CO₂H)₃. APL Materials, 2017, 5, 053402.	2.2	11
43	Asymmetric aerobic oxidation of secondary alcohols catalyzed by poly(<i>N</i>-vinyl-2-pyrrolidone)-stabilized gold clusters modified with cyclodextrin derivatives. Chemical Communications, 2019, 55, 15033-15036.	2.2	11
44	Collision-Induced Reductive Elimination of 1,3-Diynes from [MAu₂₄(Câ‰¡CR)₁₈]^{2â€"} (M = Pd, Pt) Yielding Clusters of Superatoms. Journal of Physical Chemistry C, 2020, 124, 19119-19125.	1.5	11
45	Synthesis of active, robust and cationic Au₂₅ cluster catalysts on double metal hydroxide by long-term oxidative aging of Au₂₅(SR)₁₈. Nanoscale, 2022, 14, 3031-3039.	2.8	10
46	Reduction-resistant [Au₂₅(cyclohexanethiolate)₁₈]⁰ with an Icosahedral Au₁₃ Core. Chemistry Letters, 2019, 48, 885-887.	0.7	8
47	Controlled Dimerization and Bonding Scheme of Icosahedral M@Au₁₂ (M=Pd, Pt) Superatoms. Angewandte Chemie, 2021, 133, 655-659.	1.6	8
48	A Faceâ€toâ€Face Dimer of Au₃ Superatoms Supported by Interlocked Tridentate Scaffolds Formed in Au₁₈S₂(SR)₁₂. Angewandte Chemie - International Edition, 2022, 61, e202113275.	7.2	8
49	Effects of <scp>Ï€â€Electron</scp> Systems on Optical Activity of Au₁₁ Clusters Protected by Chiral Diphosphines. Bulletin of the Korean Chemical Society, 2021, 42, 1265-1268.	1.0	7
50	Controlled Synthesis. Frontiers of Nanoscience, 2015, 9, 9-38.	0.3	5
51	Metal Substitution Effect on a Three-Dimensional Cyanido-Bridged Fe Spin-Crossover Network. Inorganics, 2017, 5, 63.	1.2	5
52	Few-nm-sized, phase-pure Au₅Sn intermetallic nanoparticles: synthesis and characterization. Dalton Transactions, 2021, 50, 5177-5183.	1.6	5
53	Synergistic Effect in Ir- or Pt-Doped Ru Nanoparticles: Catalytic Hydrogenation of Carbonyl Compounds under Ambient Temperature and H₂ Pressure. ACS Catalysis, 2021, 11, 10502-10507.	5.5	5
54	Polymer-Stabilized Au₃₈ Cluster: Atomically Precise Synthesis by Digestive Ripening and Characterization of the Atomic Structure and Oxidation Catalysis. ACS Catalysis, 2022, 12, 6550-6558.	5.5	5

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55	Atomically-ordered Trimetallic Superatoms M@Au₆Ag₆ (M = Pd, Pt): Synthesis and Photoluminescence Properties. Chemistry Letters, 2021, 50, 1419-1422.	0.7	4
56	Critical Role of CF₃ Groups in the Electronic Stabilization of [PdAu₂₄(Câ‰¡CC₆H₃(CF₃)₂)₁₈]^{2â€“} as Revealed by Gas-Phase Anion Photoelectron Spectroscopy. Journal of Physical Chemistry Letters, 2021, 12, 10417-10421.	2.1	4
57	Decorating an anisotropic Au₁₃ core with dendron thiolates: enhancement of optical absorption and photoluminescence. Chemical Communications, 2021, 57, 12159-12162.	2.2	3
58	Chemically Modified Superatoms: Toward Controlling the Electronic Structures of Chemically Modified Superatoms of Gold and Silver (Small 27/2021). Small, 2021, 17, 2170136.	5.2	2
59	Chemical transformations of [MAu8(PPh3)8]2+ (M = Pt, Pd) and [Au9(PPh3)8]3+ in methanol induced by irradiation of atmospheric pressure plasma. Journal of Chemical Physics, 2021, 155, 124312.	1.2	2
60	A Faceâ€toâ€Face Dimer of Au₃ Superatoms Supported by Interlocked Tridentate Scaffolds Formed in Au₁₈S₂(SR)₁₂. Angewandte Chemie, 2022, 134, .	1.6	2
61	Selective and Highâ€Yield Synthesis of Oblate Superatom [PdAu₈(PPh₃)₈]²⁺. ChemElectroChem, 2016, 3, 1190-1190.	1.7	1
62	Dopingâ€Mediated Energyâ€Level Engineering of M@Au₁₂ Superatoms (M=Pd, Pt, Rh, Ir) for Efficient Photoluminescence and Photocatalysis. Angewandte Chemie, 2022, 134, .	1.6	1