Shinjiro Takano

List of Publications by Citations

59 papers	2,452 citations	24 h-index	49 g-index
66 ext. papers	3,057 ext. citations	9.2 avg, IF	5.76 L-index

#	Paper	IF	Citations
59	Light-induced spin-crossover magnet. *Nature Chemistry*, **2011**, 3, 564-9	17.6	392
58	A critical size for emergence of nonbulk electronic and geometric structures in dodecanethiolate-protected Au clusters. *Journal of the American Chemical Society*, **2015**, 137, 1206-12	16.4	271
57	90-degree optical switching of output second-harmonic light in chiral photomagnet. *Nature Photonics*, **2014**, 8, 65-71	33.9	218
56	N-heterocyclic carbene-functionalized magic-number gold nanoclusters. *Nature Chemistry*, **2019**, 11, 419-425	17.6	185
55	Binding motif of terminal alkynes on gold clusters. *Journal of the American Chemical Society*, **2013**, 135, 9450-7	16.4	141
54	Hierarchy of bond stiffnesses within icosahedral-based gold clusters protected by thiolates. *Nature Communications*, **2016**, 7, 10414	17.4	118
53	Robust, Highly Luminescent Au Superatoms Protected by N-Heterocyclic Carbenes. *Journal of the American Chemical Society*, **2019**, 141, 14997-15002	16.4	95
52	Hydride Doping of Chemically Modified Gold-Based Superatoms. *Accounts of Chemical Research*, **2018**, 51, 3074-3083	24.3	77
51	Hydride-Doped Gold Superatom (AuH): Synthesis, Structure, and Transformation. *Journal of the American Chemical Society*, **2018**, 140, 8380-8383	16.4	74
50	Amplification of the Optical Activity of Gold Clusters by the Proximity of BINAP. *Journal of Physical Chemistry Letters*, **2016**, 7, 4509-4513	6.4	59
49	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, 7027-30	16.4	56
48	Alkynyl-Protected Au(C?CR) Clusters Featuring New Interfacial Motifs and R-Dependent Photoluminescence. *Journal of Physical Chemistry Letters*, **2019**, 10, 6892-6896	6.4	53
47	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	16.4	53
46	Hydride-Mediated Controlled Growth of a Bimetallic (Pd@Au) Superatom to a Hydride-Doped (HPd@Au) Superatom. *Journal of the American Chemical Society*, **2018**, 140, 12314-12317	16.4	51
45	Efficient and Selective Conversion of Phosphine-Protected (MAu) (M = Pd, Pt) Superatoms to Thiolate-Protected (MAu) or Alkynyl-Protected (MAu) Superatoms via Hydride Doping. *Journal of the American Chemical Society*, **2019**, 141, 15994-16002	16.4	50
44	Synthesis and Catalytic Application of Ag44 Clusters Supported on Mesoporous Carbon. *Journal of Physical Chemistry C*, **2015**, 119, 27483-27488	3.8	49
43	Suppressing Isomerization of Phosphine-Protected Au Cluster by Bond Stiffening Induced by a Single Pd Atom Substitution. *Inorganic Chemistry*, **2017**, 56, 8319-8325	5.1	39

42	Stoichiometric Formation of Open-Shell [PtAu(SCHPh)] via Spontaneous Electron Proportionation between [PtAu(SCHPh)] and [PtAu(SCHPh)]. *Journal of the American Chemical Society*, **2019**, 141, 14048-14051	16.4	39
41	Controlled Synthesis of Carbon-Supported Gold Clusters for Rational Catalyst Design. *Chemical Record*, **2016**, 16, 2338-2348	6.6	33
40	Anion photoelectron spectroscopy of free [Au(SCH)]. *Nanoscale*, **2017**, 9, 13409-13412	7.7	32
39	Toward Controlling the Electronic Structures of Chemically Modified Superatoms of Gold and Silver. *Small*, **2021**, 17, e2001439	11	31
38	An Au25(SR)18 Cluster with a Face-Centered Cubic Core. *Journal of Physical Chemistry C*, **2018**, 122, 13199-13204	3.8	28
37	Ligand-protected gold/silver superatoms: current status and emerging trends. *Chemical Science*, **2020**, 11, 12233-12248	9.4	26
36	Synthesis of Trimetallic (HPd@MAu) Superatoms (M = Ag, Cu) via Hydride-Mediated Regioselective Doping to (Pd@Au). *ACS Omega*, **2019**, 4, 7070-7075	3.9	24
35	Collision-Induced Dissociation of Undecagold Clusters Protected by Mixed Ligands [Au(PPh)X] (X = Cl, C?CPh). *ACS Omega*, **2018**, 3, 6237-6242	3.9	23
34	Prominent hydrogenation catalysis of a PVP-stabilized Au superatom provided by doping a single Rh atom. *Chemical Communications*, **2018**, 54, 5915-5918	5.8	23
33	Understanding Doping Effects on Electronic Structures of Gold Superatoms: A Case Study of Diphosphine-Protected M@Au (M = Au, Pt, Ir). *Inorganic Chemistry*, **2020**, 59, 17889-17895	5.1	21
32	Controlled Dimerization and Bonding Scheme of Icosahedral M@Au (M=Pd, Pt) Superatoms. *Angewandte Chemie - International Edition*, **2021**, 60, 645-649	16.4	19
31	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	3.8	16
30	Selective and High-Yield Synthesis of Oblate Superatom [PdAu8(PPh3)8]2+. *ChemElectroChem*, **2016**, 3, 1206-1211	4.3	15
29	Synergistic Effects of Pt and Cd Codoping to Icosahedral Au13 Superatoms. *Journal of Physical Chemistry C*, **2020**, 124, 23923-23929	3.8	14
28	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	3.8	12
27	Photoluminescence of Doped Superatoms M@Au (M = Ru, Rh, Ir) Homoleptically Capped by (Ph)PCHP(Ph): Efficient Room-Temperature Phosphorescence from Ru@Au. *Journal of the American Chemical Society*, **2021**, 143, 10560-10564	16.4	12
26	Asymmetric aerobic oxidation of secondary alcohols catalyzed by poly(N-vinyl-2-pyrrolidone)-stabilized gold clusters modified with cyclodextrin derivatives. *Chemical Communications*, **2019**, 55, 15033-15036	5.8	11
25	A gold superatom with 10 electrons in Au13(PPh3)8(p-SC6H4CO2H)3. *APL Materials*, **2017**, 5, 053402	5.7	9

24	Synthesis and Characterization of Enantiopure Chiral Bis NHC-Stabilized Edge-Shared Au Nanocluster with Unique Prolate Shape.. *Journal of the American Chemical Society*, **2022**,	16.4	8
23	Ligand Effects on the Structures of [Au23L6(C?CPh)9]2+ (L = N-Heterocyclic Carbene vs Phosphine) with Au17 Superatomic Cores. *Journal of Physical Chemistry C*, **2021**, 125, 9930-9936	3.8	8
22	New Magic Au Cluster Stabilized by PVP: Selective Formation, Atomic Structure, and Oxidation Catalysis. *Jacs Au*, **2021**, 1, 660-668		7
21	Electron-Rich Gold Clusters Stabilized by Poly(vinylpyridines) as Robust and Active Oxidation Catalysts. *Langmuir*, **2020**, 36, 7844-7849	4	6
20	Collision-Induced Reductive Elimination of 1,3-Diynes from [MAu24(C?CR)18]2□(M = Pd, Pt) Yielding Clusters of Superatoms. *Journal of Physical Chemistry C*, **2020**, 124, 19119-19125	3.8	6
19	Reduction-resistant [Au25(cyclohexanethiolate)18]0 with an Icosahedral Au13 Core. *Chemistry Letters*, **2019**, 48, 885-887	1.7	6
18	Ligand Effects on the Hydrogen Evolution Reaction Catalyzed by Au13 and [email□protected]12: Alkynyl vs Thiolate. *Journal of Physical Chemistry C*, **2021**, 125, 23226-23230	3.8	5
17	Controlled Synthesis: Size Control. *Frontiers of Nanoscience*, **2015**, 9, 9-38	0.7	4
16	Synthesis of active, robust and cationic Au cluster catalysts on double metal hydroxide by long-term oxidative aging of Au(SR).. *Nanoscale*, **2022**,	7.7	4
15	Metal Substitution Effect on a Three-Dimensional Cyanido-Bridged Fe Spin-Crossover Network. *Inorganics*, **2017**, 5, 63	2.9	3
14	Few-nm-sized, phase-pure AuSn intermetallic nanoparticles: synthesis and characterization. *Dalton Transactions*, **2021**, 50, 5177-5183	4.3	2
13	Atomically-ordered Trimetallic Superatoms M@Au6Ag6 (M = Pd, Pt): Synthesis and Photoluminescence Properties. *Chemistry Letters*, **2021**, 50, 1419-1422	1.7	2
12	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	13.1	2
11	NHC-Stabilized Au Nanoclusters and Their Conversion to Au Nanoclusters.. *Jacs Au*, **2022**, 2, 875-885		2
10	Critical Role of CF Groups in the Electronic Stabilization of [PdAu(C?CCH(CF))] as Revealed by Gas-Phase Anion Photoelectron Spectroscopy. *Journal of Physical Chemistry Letters*, **2021**, 12, 10417-10421	6.4	1
9	Controlled Dimerization and Bonding Scheme of Icosahedral M@Au12 (M=Pd, Pt) Superatoms. *Angewandte Chemie*, **2021**, 133, 655-659	3.6	1
8	Effects of □Electron Systems on Optical Activity of Au11 Clusters Protected by Chiral Diphosphines. *Bulletin of the Korean Chemical Society*, **2021**, 42, 1265-1268	1.2	1
7	Polymer-Stabilized Au38 Cluster: Atomically Precise Synthesis by Digestive Ripening and Characterization of the Atomic Structure and Oxidation Catalysis. *ACS Catalysis*,6550-6558	13.1	1

6	Selective and High-Yield Synthesis of Oblate Superatom [PdAu8(PPh3)8]2+. *ChemElectroChem*, **2016**, 3, 1190-1190	4.3	0
5	Decorating an anisotropic Au core with dendron thiolates: enhancement of optical absorption and photoluminescence. *Chemical Communications*, **2021**, 57, 12159-12162	5.8	0
4	A Face-to-Face Dimer of Au Superatoms Supported by Interlocked Tridentate Scaffolds Formed in Au S (SR). *Angewandte Chemie - International Edition*, **2021**, 61, e202113275	16.4	0
3	Chemical transformations of [MAu(PPh)] (M = Pt, Pd) and [Au(PPh)] in methanol induced by irradiation of atmospheric pressure plasma. *Journal of Chemical Physics*, **2021**, 155, 124312	3.9	0
2	Atomically Precise Synthesis of Chemically Modified Superatoms **2021**, 141-181		
1	Chemically Modified Superatoms: Toward Controlling the Electronic Structures of Chemically Modified Superatoms of Gold and Silver (Small 27/2021). *Small*, **2021**, 17, 2170136	11	