Takeshi Iwasa

List of Publications by Year
in descending order

57	1,790	331670 21	265206 42
papers	citations	h-index	g-index

59	59	59	1823
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Isolation, structure, and stability of a dodecanethiolate-protected Pd1Au24 cluster. Physical Chemistry Chemical Physics, 2010, 12, 6219.	2.8	297
2	Luminescent Mechanochromic 9-Anthryl Gold(I) Isocyanide Complex with an Emission Maximum at 900 nm after Mechanical Stimulation. Journal of the American Chemical Society, 2017, 139, 6514-6517.	13.7	139
3	Single-molecule resonance Raman effect in a plasmonic nanocavity. Nature Nanotechnology, 2020, 15, 105-110.	31.5	123
4	Oligomeric Gold Clusters with Vertex-Sharing Bi- and Triicosahedral Structures. Journal of Physical Chemistry C, 2007, 111, 14279-14282.	3.1	110
5	Theoretical Investigation of Optimized Structures of Thiolated Gold Cluster [Au25(SCH3)18]+. Journal of Physical Chemistry C, 2007, 111, 45-49.	3.1	101
6	Twist of Câ•C Bond Plays a Crucial Role in the Quenching of AIE-Active Tetraphenylethene Derivatives in Solution. Journal of Physical Chemistry C, 2018, 122, 245-251.	3.1	81
7	Geometric, Electronic, and Optical Properties of a Superatomic Heterodimer and Trimer: Sc@Si₁₆â€“V@Si₁₆ and Sc@Si₁₆â€“Ti@Si₁₆â€“V@Si₁₆. Journal of Physical Chemistry C, 2012, 116, 14071-14077.	3.1	62
8	Formation of a superatom monolayer using gas-phase-synthesized Ta@Si16nanocluster ions. Nanoscale, 2014, 6, 14702-14707.	5.6	61
9	Development of Integrated Dryâ€“Wet Synthesis Method for Metal Encapsulating Silicon Cage Superatoms of M@Si₁₆ (M = Ti and Ta). Journal of Physical Chemistry C, 2017, 121, 20507-20516.	3.1	57
10	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.	13.7	57
11	Spiral Eu(<scp>iii</scp>) coordination polymers with circularly polarized luminescence. Chemical Communications, 2018, 54, 10695-10697.	4.1	47
12	Single-molecule laser nanospectroscopy with microâ€“electron volt energy resolution. Science, 2021, 373, 95-98.	12.6	47
13	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, .	13.8	44
14	A designer ligand field for blue-green luminescence of organoeuropium(<scp>ii</scp>) sandwich complexes with cyclononatetraenyl ligands. Chemical Communications, 2017, 53, 6557-6560.	4.1	36
15	Thiolate-Induced Structural Reconstruction of Gold Clusters Probed by197Au MÃ¶ssbauer Spectroscopy. Journal of the American Chemical Society, 2007, 129, 7230-7231.	13.7	34
16	Gold-thiolate core-in-cage cluster Au25(SCH3)18 shows localized spins in charged states. Chemical Physics Letters, 2007, 441, 268-272.	2.6	34
17	Heterodimerization via the Covalent Bonding of Ta@Si₁₆ Nanoclusters and C₆₀ Molecules. Journal of Physical Chemistry C, 2015, 119, 10962-10968.	3.1	31
18	Nonuniform light-matter interaction theory for near-field-induced electron dynamics. Physical Review A, 2009, 80, .	2.5	29

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19	Barium Oxide Encapsulating Cobalt Nanoparticles Supported on Magnesium Oxide: Active Non-Noble Metal Catalysts for Ammonia Synthesis under Mild Reaction Conditions. ACS Catalysis, 2021, 11, 13050-13061.	11.2	28
20	Determining and Controlling Cu-Substitution Sites in Thiolate-Protected Gold-Based 25-Atom Alloy Nanoclusters. Journal of Physical Chemistry C, 2020, 124, 22304-22313.	3.1	26
21	Optical readout of hydrogen storage in films of Au and Pd. Optics Express, 2017, 25, 24081.	3.4	24
22	Experimental and theoretical studies on the electronic properties of vanadium-benzene sandwich cluster anions, V<i>n</i>Bz<i>n</i>+1â^’ (<i>n</i> = 1-5). Journal of Chemical Physics, 2012, 137, 224305.	3.0	21
23	Electronic and Optical Properties of Vertex-Sharing Homo- and Hetero-Biicosahedral Gold Clusters. Journal of Physical Chemistry C, 2013, 117, 24586-24591.	3.1	19
24	Liquid-Phase Synthesis of Multidecker Organoeuropium Sandwich Complexes and Their Physical Properties. Journal of Physical Chemistry C, 2014, 118, 5896-5907.	3.1	19
25	First Principles Calculations Toward Understanding SERS of 2,2â€²â€Bipyridyl Adsorbed on Au, Ag, and Auâ€“Ag Nanoalloy. Journal of Computational Chemistry, 2019, 40, 925-932.	3.3	19
26	Combined Automated Reaction Pathway Searches and Sparse Modeling Analysis for Catalytic Properties of Lowest Energy Twins of Cu₁₃. Journal of Physical Chemistry A, 2019, 123, 210-217.	2.5	18
27	Time-Dependent Density Functional Theory Study on Higher Low-Lying Excited States of Au25(SR)18â€“. Journal of Physical Chemistry C, 2018, 122, 4097-4104.	3.1	17
28	Geometric, electronic, and optical properties of a boron-doped aluminum cluster of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mtext>B</mml:mtext></mml:mrow><mml:mrow><mml:mn>2</mml:m /><mml:none /><mml:mrow><mml:mo>-</mml:mo></mml:mrow></mml:mmultiscripts></mml:mrow></mml:math>: A density. Chemical Physics Letters, 2013, 582, 100-104.	2.6	16
29	Geometric, Electronic, and Optical Properties of Monomer and Assembly of Endohedral Aluminum Superatomic Clusters. Journal of Physical Chemistry C, 2013, 117, 21551-21557.	3.1	16
30	Roles of silver nanoclusters in surface-enhanced Raman spectroscopy. Journal of Chemical Physics, 2019, 151, 094102.	3.0	15
31	[Ag23Pd2(PPh3)10Cl7]: A new family of synthesizable bi-icosahedral superatomic molecules. Journal of Chemical Physics, 2021, 155, 024302.	3.0	15
32	Formation and Control of Ultrasharp Metal/Molecule Interfaces by Controlled Immobilization of Sizeâ€Selected Metal Nanoclusters onto Organic Molecular Films. Advanced Functional Materials, 2014, 24, 1202-1210.	14.9	14
33	Photoluminescence Properties of [Core+<i>exo</i>]-Type Au₆ Clusters: Insights into the Effect of Ligand Environments on the Excitation Dynamics. Journal of Physical Chemistry C, 2019, 123, 6934-6939.	3.1	14
34	Photoinduced Pyramidal Inversion Behavior of Phosphanes Involved with Aggregationâ€Induced Emission Behavior. Chemistry - A European Journal, 2020, 26, 8028-8034.	3.3	11
35	Insights into geometries, stabilities, electronic structures, reactivity descriptors, and magnetic properties of bimetallic Ni m Cu nâ€“m (m â€‰=â€‰1, 2; n â€‰=â€‰3â€“13) clusters: Comparison with pure copper clusters. Journal of Computational Chemistry, 2018, 39, 1878-1889.	3.3	10
36	Low-Lying Excited States of hqxcH and Znâ€“hqxc Complex: Toward Understanding Intramolecular Proton Transfer Emission. Inorganic Chemistry, 2019, 58, 4686-4698.	4.0	10

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37	N2O decomposition properties of Ru catalysts supported on various oxide materials and SnO2. Scientific Reports, 2020, 10, 21605.	3.3	10
38	Physical properties of mononuclear organoeuropium sandwich complexes ligated by cyclooctatetraene and bis(trimethylsilyl)cyclooctatetraene. Chemical Physics Letters, 2014, 595-596, 144-150.	2.6	9
39	Generalized theoretical method for the interaction between arbitrary nonuniform electric field and molecular vibrations: Toward near-field infrared spectroscopy and microscopy. Journal of Chemical Physics, 2016, 144, 124116.	3.0	8
40	Supported binary CuO_xâ€“Pt catalysts with high activity and thermal stability for the combustion of NH₃ as a carbon-free energy source. RSC Advances, 2018, 8, 41491-41498.	3.6	7
41	Effects of support materials and Ir loading on catalytic N2O decomposition properties. Catalysis Communications, 2021, 149, 106208.	3.3	7
42	Multiple-decker and ring sandwich formation of manganeseâ€“benzene organometallic cluster anions: Mn_nBz_n^{âˆ’} (n = 1â€“5 and 18). Physical Chemistry Chemical Physics, 2016, 18, 26049-26056.	2.8	6
43	Ammonia-rich combustion and ammonia combustive decomposition properties of various supported catalysts. Catalysis Communications, 2019, 123, 64-68.	3.3	6
44	Theoretical Investigation of a Titaniumâ€“Aniline Complex with and without an Alkyl Chain. Journal of Physical Chemistry C, 2011, 115, 16574-16582.	3.1	5
45	Experimental and theoretical studies of the structural and electronic properties of vanadiumâ€“benzene sandwich clusters and their anions: VnBzn0/âˆ’ (n = 1â€“5) and VnBznâˆ’10/âˆ’ (n = 2â€“5). Journal of Chemical Physics, 2014, 141, 214304.	3.0	4
46	Theoretical method for near-field Raman spectroscopy with multipolar Hamiltonian and real-time-TDDFT: Application to on- and off-resonance tip-enhanced Raman spectroscopy. Journal of Chemical Physics, 2021, 154, 024104.	3.0	4
47	A comparative study of structural, electronic, and optical properties of thiolated gold clusters with icosahedral vs face-centered cubic cores. Journal of Chemical Physics, 2021, 155, 094304.	3.0	4
48	Structural Characterization of Nickel-Doped Aluminum Oxide Cations by Cryogenic Ion Trap Vibrational Spectroscopy. Journal of Physical Chemistry A, 2021, 125, 9527-9535.	2.5	4
49	Near-field-induced optical force on a metal particle andC60: Real-time and real-space electron dynamics simulation. Physical Review A, 2010, 82, .	2.5	3
50	Combined computational quantum chemistry and classical electrodynamics approach for surface enhanced infrared absorption spectroscopy. Journal of Chemical Physics, 2020, 152, 164103.	3.0	3
51	Ammonia Combustion Properties of Copper Oxides-based Honeycomb and Granular Catalysts. Journal of the Japan Petroleum Institute, 2020, 63, 274-281.	0.6	3
52	Structural and Electronic Properties, Isomerization, and NO Dissociation Reactions on Au, Ag, Cu Clusters. Journal of Computer Chemistry Japan, 2019, 18, 64-69.	0.1	2
53	Excited States of Metal-Adsorbed Dimethyl Disulfide: A TDDFT Study with Cluster Model. Journal of Physical Chemistry A, 2022, 126, 4191-4198.	2.5	2
54	Dopingâ€•Mediated Energyâ€•Level Engineering of M@Au₁₂ Superatoms (M=Pd, Pt, Rh, Ir) for Efficient Photoluminescence and Photocatalysis. Angewandte Chemie, 2022, 134, .	2.0	1

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55	Photoinduced Pyramidal Inversion Behavior of Phosphanes Involved with Aggregationâ€Induced Emission Behavior. Chemistry - A European Journal, 2020, 26, 7965-7965.	3.3	0
56	Inside Cover: Dopingâ€Mediated Energyâ€Level Engineering of M@Au₁₂ Superatoms (M=Pd, Pt,) Tj ETQq0 0 0 rgBT /Overl Angewandte Chemie - International Edition, 2022, 61, .	13.8	0
57	Innentitelbild: Dopingâ€Mediated Energyâ€Level Engineering of M@Au₁₂ Superatoms (M=Pd, Pt,) Tj ETQq1 1 0.784314 Chemie, 2022, 134, .	2.0	0