Jaehoon Jung

List of Publications by Citations

114 papers	2,468 citations	27 h-index	45 g-index
119 ext. papers	2,887 ext. citations	7.5 avg, IF	5.28 L-index

#	Paper	IF	Citations
114	Real-space and real-time observation of a plasmon-induced chemical reaction of a single molecule. *Science*, **2018**, 360, 521-526	33.3	153
113	State-selective dissociation of a single water molecule on an ultrathin MgO film. *Nature Materials*, **2010**, 9, 442-7	27	146
112	Rigidity-Induced Delayed Fluorescence by Ortho Donor-Appended Triarylboron Compounds: Record-High Efficiency in Pure Blue Fluorescent Organic Light-Emitting Diodes. *ACS Applied Materials & Interfaces*, **2017**, 9, 24035-24042	9.5	110
111	Selective Synthesis of Molecular Borromean Rings: Engineering of Supramolecular Topology via Coordination-Driven Self-Assembly. *Journal of the American Chemical Society*, **2016**, 138, 8368-71	16.4	85
110	Ligand effects on the stability of thiol-stabilized gold nanoclusters: Au25(SR)18(-), Au38(SR)24, and Au102(SR)44. *Nanoscale*, **2012**, 4, 4206-10	7.7	84
109	Catalytic Transfer Hydrogenation of Furfural to Furfuryl Alcohol under Mild Conditions over Zr-MOFs: Exploring the Role of Metal Node Coordination and Modification. *ACS Catalysis*, **2020**, 10, 3720-3732	13.1	84
108	High-Efficiency Sky Blue to Ultradeep Blue Thermally Activated Delayed Fluorescent Diodes Based on Ortho-Carbazole-Appended Triarylboron Emitters: Above 32% External Quantum Efficiency in Blue Devices. *Advanced Optical Materials*, **2018**, 6, 1800385	8.1	80
107	Molecular dynamics study of the ionic conductivity of 1-n-butyl-3-methylimidazolium salts as ionic liquids. *Chemical Physics Letters*, **2005**, 406, 332-340	2.5	79
106	Basis set effects on relative energies and HOMO□LUMO energy gaps of fullerene C36. *Theoretical Chemistry Accounts*, **2005**, 113, 233-237	1.9	74
105	Homoleptic Tris-Cyclometalated Iridium Complexes with Substituted o-Carboranes: Green Phosphorescent Emitters for Highly Efficient Solution-Processed Organic Light-Emitting Diodes. *Inorganic Chemistry*, **2016**, 55, 909-17	5.1	59
104	Understanding the characteristics of high-voltage additives in Li-ion batteries: Solvent effects. *Journal of Power Sources*, **2009**, 187, 581-585	8.9	58
103	Structurally driven one-dimensional electron confinement in sub-5-nm graphene nanowrinkles. *Nature Communications*, **2015**, 6, 8601	17.4	56
102	Coordination-Driven Self-Assembly of a Molecular Knot Comprising Sixteen Crossings. *Angewandte Chemie - International Edition*, **2018**, 57, 5669-5673	16.4	54
101	Template-Free Synthesis of a Molecular Solomon Link by Two-Component Self-Assembly. *Angewandte Chemie - International Edition*, **2016**, 55, 2007-11	16.4	54
100	Remarkably efficient photocurrent generation based on a [60]fullerene-triosmium cluster/Zn-porphyrin/boron-dipyrrin triad SAM. *Chemistry - A European Journal*, **2010**, 16, 5586-99	4.8	54
99	Direct Pathway to Molecular Photodissociation on Metal Surfaces Using Visible Light. *Journal of the American Chemical Society*, **2017**, 139, 3115-3121	16.4	44
98	Termination and Verwey transition of the (111) surface of magnetite studied by scanning tunneling microscopy and first-principles calculations. *Physical Review B*, **2010**, 81,	3.3	43

97	Does the "superatom" exist in halogenated aluminum clusters?. *Journal of the American Chemical Society*, **2008**, 130, 2-3	16.4	43
96	Structure and stability of Al13H(n) (n=1-13) clusters: exceptional stability of Al13H13. *Journal of Chemical Physics*, **2006**, 125, 64306	3.9	39
95	Deboronation-Induced Turn-on Phosphorescent Sensing of Fluorides by Iridium(III) Cyclometalates with o-Carborane. *Organometallics*, **2017**, 36, 2573-2580	3.8	38
94	Controlling water dissociation on an ultrathin MgO film by tuning film thickness. *Physical Review B*, **2010**, 82,	3.3	37
93	Activation of ultrathin oxide films for chemical reaction by interface defects. *Journal of the American Chemical Society*, **2011**, 133, 6142-5	16.4	36
92	Synthetic, electrochemical, and theoretical studies of tetrairidium clusters bearing mono- and bis[60]fullerene ligands. *Journal of the American Chemical Society*, **2006**, 128, 11160-72	16.4	34
91	Crystal-to-crystal conversion of Cu2O nanoparticles to Cu crystals and applications in printed electronics. *Journal of Materials Chemistry*, **2011**, 21, 6928		32
90	Structure and stability of Al13H clusters. *Journal of Chemical Physics*, **2005**, 122, 124319	3.9	31
89	BODIPY-based Ru(II) and Ir(III) organometallic complexes of avobenzone, a sunscreen material: Potent anticancer agents. *Journal of Inorganic Biochemistry*, **2018**, 189, 17-29	4.2	28
88	Determination of the oxidation potentials of organic benzene derivatives: theory and experiment. *Chemical Physics Letters*, **2003**, 368, 601-608	2.5	27
87	Understanding the Magic Nature of Ligand-Protected Gold Nanoparticle Au102(MBA)44. *Journal of Physical Chemistry C*, **2010**, 114, 7548-7552	3.8	25
86	Structure and stability of Al13I clusters. *Journal of Chemical Physics*, **2004**, 121, 8500-2	3.9	25
85	Rapid Photochemical Synthesis of Sea-Urchin-Shaped Hierarchical Porous COF-5 and Its Lithography-Free Patterned Growth. *Advanced Functional Materials*, **2017**, 27, 1700925	15.6	24
84	Supramolecular assembly through interactions between molecular dipoles and alkali metal ions. *Angewandte Chemie - International Edition*, **2014**, 53, 13729-33	16.4	24
83	Can an electron-shell closing model explain the structure and stability of ligand-stabilized metal clusters?. *Journal of the American Chemical Society*, **2011**, 133, 6090-5	16.4	24
82	On-surface synthesis of aligned functional nanoribbons monitored by scanning tunnelling microscopy and vibrational spectroscopy. *Nature Communications*, **2017**, 8, 14735	17.4	23
81	Single-Molecule Study of a Plasmon-Induced Reaction for a Strongly Chemisorbed Molecule. *Angewandte Chemie - International Edition*, **2020**, 59, 7960-7966	16.4	21
80	Ligand field effect at oxide-metal interface on the chemical reactivity of ultrathin oxide film surface. *Journal of the American Chemical Society*, **2012**, 134, 10554-61	16.4	21

79	Template-Free Synthesis of a Molecular Solomon Link by Two-Component Self-Assembly. *Angewandte Chemie*, **2016**, 128, 2047-2051	3.6	21
78	Elucidation of Isomerization Pathways of a Single Azobenzene Derivative Using an STM. *Journal of Physical Chemistry Letters*, **2015**, 6, 4239-43	6.4	19
77	One-dimensional molecular zippers. *Journal of the American Chemical Society*, **2011**, 133, 9236-8	16.4	19
76	[Os3(CO)6(PMe3)3](mu3-eta2:eta2:eta2-C60)[Re3(mu-H)3(CO)9]: a fullerene[60] coordinated to two different trinuclear clusters. *Angewandte Chemie - International Edition*, **2007**, 46, 1436-9	16.4	19
75	Heterometallic BODIPY-Based Molecular Squares Obtained by Self-Assembly: Synthesis and Biological Activities. *ACS Omega*, **2019**, 4, 13200-13208	3.9	17
74	Functionalization of graphene grown on metal substrate with atomic oxygen: enolate vs epoxide. *Journal of the American Chemical Society*, **2014**, 136, 8528-31	16.4	17
73	Two-dimensional superstructure formation of fluorinated fullerene on Au(111): a scanning tunneling microscopy study. *ACS Nano*, **2012**, 6, 2679-85	16.7	17
72	The First Quantitative Synthesis of a Closed Three-Link Chain (6) Using Coordination and Noncovalent Interactions-Driven Self-Assembly. *Journal of the American Chemical Society*, **2020**, 142, 9327-9336	16.4	17
71	Structure and electronic properties of Al13X (X=F, Cl, Br, and I) clusters. *Physical Review B*, **2005**, 72,	3.3	16
70	Does the Al13- core exist in the Al13 polyhalide Al13I(n)- (n = 1-12) clusters?. *Journal of Chemical Physics*, **2005**, 123, 101102	3.9	16
69	Impact of the number of o-carboranyl ligands on the photophysical and electroluminescent properties of iridium(III) cyclometalates. *Journal of Materials Chemistry C*, **2017**, 5, 3024-3034	7.1	15
68	Coordination-Driven Self-Assembly of a Molecular Knot Comprising Sixteen Crossings. *Angewandte Chemie*, **2018**, 130, 5771-5775	3.6	15
67	Ordering of Molecules with Conjugated Triangular Core by Switching Hydrogen Bonding and van der Waals Interactions. *Journal of Physical Chemistry C*, **2012**, 116, 17082-17088	3.8	15
66	Structure and stability of the Al14 halides Al14In - (n=1-11): can we regard the Al14 core as an alkaline earthlike superatom?. *Journal of Chemical Physics*, **2006**, 125, 084101	3.9	15
65	Selective and quantitative synthesis of a linear [3]catenane by two component coordination-driven self-assembly. *Chemical Communications*, **2019**, 55, 6866-6869	5.8	14
64	Triarylboron-based TADF emitters with perfluoro substituents: high-efficiency OLEDs with a power efficiency over 100 lm W. *Journal of Materials Chemistry C*, **2020**, 8, 4253-4263	7.1	14
63	Lateral Hopping of CO on Ag(110) by Multiple Overtone Excitation. *Physical Review Letters*, **2016**, 116, 056101	7.4	14
62	Geometric and Electronic Structures of Os3(CO)9(-,,-C60), Os3(CO)8(P(CH3)3)(-,,-C60), and Their Anions (Q = to): Reduction-Induced Conversion of to C60Metal Complexes. *Organometallics*, **2004**, 23, 3865-3869	3.8	14

61	Direct observation of adsorption geometry for the van der Waals adsorption of a single □conjugated hydrocarbon molecule on Au(111). *Journal of Chemical Physics*, **2014**, 140, 074709	3.9	13
60	Seamless growth of a supramolecular carpet. *Nature Communications*, **2016**, 7, 10653	17.4	12
59	The Orientation of Silver Surfaces Drives the Reactivity and the Selectivity in Homo-Coupling Reactions. *ChemPhysChem*, **2018**, 19, 1802	3.2	12
58	Acute pancreatitis induced by methimazole treatment in a 51-year-old korean man: a case report. *Journal of Korean Medical Science*, **2014**, 29, 1170-3	4.7	12
57	Tunable Optical Transition in 2H-MoS via Direct Electrochemical Engineering of Vacancy Defects and Surface S-C Bonds. *ACS Applied Materials & Interfaces*, **2020**, 12, 40870-40878	9.5	12
56	Valorization of Chemical Wastes: Ir(biscarbene)-Catalyzed Transfer Hydrogenation of Inorganic Carbonates Using Glycerol. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 6972-6978	8.3	12
55	STM studies of photochemistry and plasmon chemistry on metal surfaces. *Progress in Surface Science*, **2018**, 93, 163-176	6.6	12
54	A trigonal molecular assembly system with the dual light-driven functions of phase transition and fluorescence switching. *Journal of Materials Chemistry C*, **2019**, 7, 2276-2282	7.1	11
53	Reaction mechanisms of dissociative chemisorption of HI, I2, and CH3I on a magic cluster Al13-. *Journal of Computational Chemistry*, **2008**, 29, 1626-31	3.5	11
52	Tuning the photophysical properties of carboranyl luminophores by closo- to nido-carborane conversion and application to OFF-ON fluoride sensing. *Dalton Transactions*, **2018**, 47, 17441-17449	4.3	11
51	Atomic-scale luminescence measurement and theoretical analysis unveiling electron energy dissipation at a p-type GaAs(110) surface. *Nanotechnology*, **2015**, 26, 365402	3.4	10
50	Lattice-Contraction-Induced Moir□Patterns in Direction-Controlled Epitaxial Graphene on Cu(111). *Advanced Materials Interfaces*, **2014**, 1, 1300080	4.6	10
49	Supramolecular Assembly through Interactions between Molecular Dipoles and Alkali Metal Ions. *Angewandte Chemie*, **2014**, 126, 13949-13953	3.6	10
48	Reductive Decomposition Mechanism of Prop-1-ene-1,3-sultone in the Formation of a Solid□lectrolyte Interphase on the Anode of a Lithium-Ion Battery. *Journal of Physical Chemistry C*, **2016**, 120, 28390-28397	3.8	10
47	Energy-level alignment of a single molecule on ultrathin insulating film. *Physical Review B*, **2018**, 98,	3.3	10
46	Thermally activated polymorphic transition from a 1D ribbon to a 2D carpet: squaric acid on Au(111). *Chemical Communications*, **2014**, 50, 11230-3	5.8	9
45	Adsorption-induced stability reversal of photochromic diarylethene on metal surfaces. *Chemical Communications*, **2013**, 49, 8710-2	5.8	9
44	Managing local triplet excited states of boron-based TADF emitters for fast spin-flip process: Toward highly efficient TADF-OLEDs with low efficiency roll-off. *Chemical Engineering Journal*, **2021**, 423, 130224	14.7	9

43	Highly Emissive ortho-Donor-Acceptor Triarylboranes: Impact of Boryl Acceptors on Luminescence Properties. *Organometallics*, **2020**, 39, 2235-2244	3.8	7
42	Doubly Boron-Doped TADF Emitters Decorated with ortho-Donor Groups for Highly Efficient Green to Red OLEDs. *Chemistry - A European Journal*, **2020**, 26, 16793-16801	4.8	7
41	Growth of Monolayer and Multilayer MoS Films by Selection of Growth Mode: Two Pathways via Chemisorption and Physisorption of an Inorganic Molecular Precursor. *ACS Applied Materials & Interfaces*, **2021**, 13, 6805-6812	9.5	7
40	Facile color tuning of thermally activated delayed fluorescence by substituted ortho-carbazole-appended triarylboron emitters. *Dyes and Pigments*, **2019**, 168, 273-280	4.6	6
39	Atomic-Scale Dynamics of Surface-Catalyzed Hydrogenation/Dehydrogenation: NH on Pt(111). *ACS Nano*, **2015**, 9, 8303-11	16.7	6
38	Combined scanning tunneling microscopy and high-resolution electron energy loss spectroscopy study on the adsorption state of CO on Ag(001). *Langmuir*, **2012**, 28, 13249-52	4	6
37	Gold behaves as hydrogen in the intermolecular self-interaction of metal aurides MAu4 (M = Ti, Zr, and Hf). *Chemistry - an Asian Journal*, **2011**, 6, 868-72	4.5	6
36	[Os3(CO)6(PMe3)3](μ3-η2:η2:η2-C60)[Re3(μ-H)3(CO)9]: A Fullerene[60] Coordinated to Two Different Trinuclear Clusters. *Angewandte Chemie*, **2007**, 119, 1458-1461	3.6	6
35	Impact of Boron Acceptors on the TADF Properties of -Donor-Appended Triarylboron Emitters. *Frontiers in Chemistry*, **2020**, 8, 538	5	5
34	Comment on "Magic rule for Al(n)H(m) magic clusters". *Physical Review Letters*, **2008**, 100, 199701; discussion 199702	7.4	5
33	The vibrational structure and predissociation of the B state of HeBr2 using a simple theoretical method. *Chemical Physics Letters*, **2001**, 336, 311-320	2.5	5
32	Vibrational structure and predissociation rates of the He-O2 vander Waals complex. *Molecular Physics*, **2001**, 99, 1867-1873	1.7	5
31	Impact of boryl acceptors in para-acridine-appended triarylboron emitters on blue thermally activated delayed fluorescence OLEDs. *Dyes and Pigments*, **2021**, 188, 109224	4.6	5
30	reversible tuning of chemical interface damping in single gold nanorod-based recyclable platforms through manipulation of supramolecular host-guest interactions. *Chemical Science*, **2021**, 12, 7115-7124	9.4	5
29	Molecular Encapsulation of Trimeric Chromium Carboxylate Clusters in Metal-Organic Frameworks and Propylene Sorption. *Chemistry - A European Journal*, **2019**, 25, 12889-12894	4.8	4
28	On-Surface Evolution of meso-Isomerism in Two-Dimensional Supramolecular Assemblies. *Angewandte Chemie - International Edition*, **2019**, 58, 9611-9618	16.4	4
27	Cyclic voltammetry modeling, geometries, and electronic properties for metallofullerene complexes with mu3-eta2:eta2:eta2-C60 bonding mode. *Journal of Computational Chemistry*, **2007**, 28, 1100-6	3.5	4
26	Liquid chromatographic enantiomer separation of racemic amine using chiral crown ether stationary phase. *Journal of Chromatographic Science*, **2006**, 44, 27-31	1.4	4

25	Blue TADF Emitters Based on -Heterotriangulene Acceptors for Highly Efficient OLEDs with Reduced Efficiency Roll-Off. *ACS Applied Materials & Interfaces*, **2021**, 13, 45778-45788	9.5	4
24	Molecular orbital interpretation of magic clusters with non-magic numbers. *ChemPhysChem*, **2009**, 10, 341-3	3.2	3
23	Phase transition-induced improvement in the capacity of fluorine-substituted LiFeBO3 as a cathode material for lithium ion batteries. *Electrochimica Acta*, **2021**, 367, 137364	6.7	3
22	Metal-free Carbon Monoxide (CO) Capture and Utilization: Formylation of Amines. *Advanced Synthesis and Catalysis*, **2019**, 361, 3068-3073	5.6	2
21	Dimensionality Control of Self-Assembled Azobenzene Derivatives on a Gold Surface. *Journal of Physical Chemistry C*, **2019**, 123, 8859-8864	3.8	2
20	Single-Molecule Study of a Plasmon-Induced Reaction for a Strongly Chemisorbed Molecule. *Angewandte Chemie*, **2020**, 132, 8034-8040	3.6	2
19	Dispersive Electronic States of the Orbitals Stacking in Single Molecular Lines on the Si(001)-(2 1)-H Surface. *Journal of Physical Chemistry Letters*, **2013**, 4, 1199-204	6.4	2
18	Vibrational Structure and Predissociation of Ar-CO2by CO2Symmetric Stretching Mode Coupled with Ar Motion. *Bulletin of the Korean Chemical Society*, **2002**, 23, 245-252	1.2	2
17	Scanning tunneling microscopic investigations for studying conformational change of underlying Cu(111) and Ni(111) during graphene growth. *Surface Science*, **2020**, 693, 121526	1.8	2
16	Centimeter-Scale and Highly Crystalline Two-Dimensional Alcohol: Evidence for Graphenol (COH). *Nano Letters*, **2020**, 20, 2107-2112	11.5	1
15	Thermally Activated Delayed Fluorescent Properties of Ortho-Carbazole-Appended Triazine Compounds. *Bulletin of the Korean Chemical Society*, **2019**, 40, 1112-1116	1.2	1
14	Molecular Assembly Through the Chain Reaction of Substituted Acenes on the Si(100)(2 1)H Surface. *Journal of Physical Chemistry C*, **2013**, 130912152428004	3.8	1
13	Comment on Orbital Interactions between a C60 Molecule and Cu(111) Surface *Journal of Physical Chemistry B*, **2004**, 108, 8089-8090	3.4	1
12	Solvent- and Light-Sensitive AIEE-Active Azo Dye: From Spherical to 1D and 2D Assemblies.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	1
11	Toward an Accurate Self-interaction Binding Energy of Magic Cluster TiAu_4. *Bulletin of the Korean Chemical Society*, **2008**, 29, 305-308	1.2	1
10	Dissociation Mechanism of a Single O Molecule Chemisorbed on Ag(110). *Journal of Physical Chemistry Letters*, **2021**, 12, 9868-9873	6.4	1
9	Understanding Dimerization Process of Cyclohexyl Benzene as an Overcharge Protection Agent in Lithium Ion Battery. *Bulletin of the Korean Chemical Society*, **2018**, 39, 1227-1230	1.2	1
8	Weak base-promoted selective rearrangement of oxaziridines to amides visible-light photoredox catalysis. *Chemical Communications*, **2021**, 57, 9995-9998	5.8	1

7	Planarized B , N -diarylated dibenzoazaborine compounds for deep blue fluorescence. *Bulletin of the Korean Chemical Society*, **2022**, 43, 293-298	1.2	1
6	Vapor pressure-controllable molecular inorganic precursors for growth of monolayer WS2: Influence of precursor-substrate interaction on growth thermodynamics. *Applied Surface Science*, **2022**, 587, 152829	6.7	0
5	Front Cover Picture: Metal-free Carbon Monoxide (CO) Capture and Utilization: Formylation of Amines (Adv. Synth. Catal. 13/2019). *Advanced Synthesis and Catalysis*, **2019**, 361, 3015-3015	5.6	
4	On-Surface Evolution of meso-Isomerism in Two-Dimensional Supramolecular Assemblies. *Angewandte Chemie*, **2019**, 131, 9713-9720	3.6	
3	Innentitelbild: Single-Molecule Study of a Plasmon-Induced Reaction for a Strongly Chemisorbed Molecule (Angew. Chem. 20/2020). *Angewandte Chemie*, **2020**, 132, 7698-7698	3.6	
2	Controlling Dissociation Reaction of a Water Molecule on Ultrathin MgO Film. *Hyomen Kagaku*, **2014**, 35, 486-491		
1	Dissociation of Single O Molecules on Ag(110) by Electrons, Holes, and Localized Surface Plasmons.. *Chemical Record*, **2022**, e202200011	6.6	