

Jaehoon Jung

List of Publications by Year in descending order

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113
papers

3,209
citations

172207

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182168

51
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119
all docs

119
docs citations

119
times ranked

4484
citing authors

#	ARTICLE	IF	CITATIONS
1	Real-space and real-time observation of a plasmon-induced chemical reaction of a single molecule. <i>Science</i> , 2018, 360, 521-526.	6.0	224
2	Catalytic Transfer Hydrogenation of Furfural to Furfuryl Alcohol under Mild Conditions over Zr-MOFs: Exploring the Role of Metal Node Coordination and Modification. <i>ACS Catalysis</i> , 2020, 10, 3720-3732.	5.5	187
3	State-selective dissociation of a single water molecule on an ultrathin MgO film. <i>Nature Materials</i> , 2010, 9, 442-447.	13.3	171
4	Rigidity-Induced Delayed Fluorescence by Ortho Donor-Appended Triarylboron Compounds: Record-High Efficiency in Pure Blue Fluorescent Organic Light-Emitting Diodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 24035-24042.	4.0	131
5	High-Efficiency Sky Blue to Ultradeep Blue Thermally Activated Delayed Fluorescent Diodes Based on <i>Ortho</i> -Carbazole-Appended Triarylboron Emitters: Above 32% External Quantum Efficiency in Blue Devices. <i>Advanced Optical Materials</i> , 2018, 6, 1800385.	3.6	104
6	Ligand effects on the stability of thiol-stabilized gold nanoclusters: Au ₂₅ (SR) ₁₈ ⁻ , Au ₃₈ (SR) ₂₄ , and Au ₁₀₂ (SR) ₄₄ . <i>Nanoscale</i> , 2012, 4, 4206.	2.8	103
7	Selective Synthesis of Molecular Borromean Rings: Engineering of Supramolecular Topology via Coordination-Driven Self-Assembly. <i>Journal of the American Chemical Society</i> , 2016, 138, 8368-8371.	6.6	98
8	Basis set effects on relative energies and HOMO-LUMO energy gaps of fullerene C ₃₆ . <i>Theoretical Chemistry Accounts</i> , 2005, 113, 233-237.	0.5	89
9	Molecular dynamics study of the ionic conductivity of 1-n-butyl-3-methylimidazolium salts as ionic liquids. <i>Chemical Physics Letters</i> , 2005, 406, 332-340.	1.2	88
10	Structurally driven one-dimensional electron confinement in sub-5-nm graphene nanowrinkles. <i>Nature Communications</i> , 2015, 6, 8601.	5.8	71
11	Template-Free Synthesis of a Molecular Solomon Link by Two-Component Self-Assembly. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2007-2011.	7.2	71
12	Coordination-Driven Self-Assembly of a Molecular Knot Comprising Sixteen Crossings. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 5669-5673.	7.2	65
13	Homoleptic Tris-Cyclometalated Iridium Complexes with Substituted <i>ortho</i> -Carboranes: Green Phosphorescent Emitters for Highly Efficient Solution-Processed Organic Light-Emitting Diodes. <i>Inorganic Chemistry</i> , 2016, 55, 909-917.	1.9	63
14	Does the "Superatom" Exist in Halogenated Aluminum Clusters?. <i>Journal of the American Chemical Society</i> , 2008, 130, 2-3.	6.6	60
15	Direct Pathway to Molecular Photodissociation on Metal Surfaces Using Visible Light. <i>Journal of the American Chemical Society</i> , 2017, 139, 3115-3121.	6.6	60
16	Understanding the characteristics of high-voltage additives in Li-ion batteries: Solvent effects. <i>Journal of Power Sources</i> , 2009, 187, 581-585.	4.0	59
17	Remarkably Efficient Photocurrent Generation Based on a [60]Fullerene-Triosmium Cluster/Zn-Porphyrin/Boron-Dipyrin Triad SAM. <i>Chemistry - A European Journal</i> , 2010, 16, 5586-5599.	1.7	54
18	Termination and Verwey transition of the (111) surface of magnetite studied by scanning tunneling microscopy and first-principles calculations. <i>Physical Review B</i> , 2010, 81, .	1.1	49

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19	Rapid Photochemical Synthesis of Sea-Urchin-Shaped Hierarchical Porous COF and Its Lithography-Free Patterned Growth. <i>Advanced Functional Materials</i> , 2017, 27, 1700925.	7.8	45
20	BODIPY-based Ru(II) and Ir(III) organometallic complexes of avobenzone, a sunscreen material: Potent anticancer agents. <i>Journal of Inorganic Biochemistry</i> , 2018, 189, 17-29.	1.5	44
21	Activation of Ultrathin Oxide Films for Chemical Reaction by Interface Defects. <i>Journal of the American Chemical Society</i> , 2011, 133, 6142-6145.	6.6	41
22	Deboronation-Induced Turn-on Phosphorescent Sensing of Fluorides by Iridium(III) Cyclometalates with <i>o</i> -Carborane. <i>Organometallics</i> , 2017, 36, 2573-2580.	1.1	41
23	Structure and stability of Al ₁₃ H _n (n=1-13) clusters: Exceptional stability of Al ₁₃ H ₁₃ . <i>Journal of Chemical Physics</i> , 2006, 125, 064306.	1.2	40
24	Controlling water dissociation on an ultrathin MgO film by tuning film thickness. <i>Physical Review B</i> , 2010, 82, .	1.1	38
25	Single-Molecule Study of a Plasmon-Induced Reaction for a Strongly Chemisorbed Molecule. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 7960-7966.	7.2	37
26	Crystal-to-crystal conversion of Cu ₂ O nanoparticles to Cu crystals and applications in printed electronics. <i>Journal of Materials Chemistry</i> , 2011, 21, 6928.	6.7	35
27	The First Quantitative Synthesis of a Closed Three-Link Chain (6 ₁ ³) Using Coordination and Noncovalent Interactions-Driven Self-Assembly. <i>Journal of the American Chemical Society</i> , 2020, 142, 9327-9336.	6.6	35
28	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. <i>Chemical Engineering Journal</i> , 2021, 423, 130224.	6.6	35
29	Synthetic, Electrochemical, and Theoretical Studies of Tetrairidium Clusters Bearing Mono- and Bis[60]fullerene Ligands. <i>Journal of the American Chemical Society</i> , 2006, 128, 11160-11172.	6.6	34
30	Structure and stability of Al ₁₃ H clusters. <i>Journal of Chemical Physics</i> , 2005, 122, 124319.	1.2	32
31	Supramolecular Assembly through Interactions between Molecular Dipoles and Alkali Metal Ions. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 13729-13733.	7.2	28
32	Heterometallic BODIPY-Based Molecular Squares Obtained by Self-Assembly: Synthesis and Biological Activities. <i>ACS Omega</i> , 2019, 4, 13200-13208.	1.6	28
33	Determination of the oxidation potentials of organic benzene derivatives: theory and experiment. <i>Chemical Physics Letters</i> , 2003, 368, 601-608.	1.2	27
34	Template-Free Synthesis of a Molecular Solomon Link by Two-Component Self-Assembly. <i>Angewandte Chemie</i> , 2016, 128, 2047-2051.	1.6	26
35	Structure and stability of Al ₁₃ I clusters. <i>Journal of Chemical Physics</i> , 2004, 121, 8500.	1.2	25
36	Understanding the Magic Nature of Ligand-Protected Gold Nanoparticle Au ₁₀₂ (MBA) ₄₄ . <i>Journal of Physical Chemistry C</i> , 2010, 114, 7548-7552.	1.5	25

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37	Can an Electron-Shell Closing Model Explain the Structure and Stability of Ligand-Stabilized Metal Clusters?. <i>Journal of the American Chemical Society</i> , 2011, 133, 6090-6095.	6.6	25
38	[Os ₃ (CO) ₆ (PMe ₃) ₃] ₂ (C ₆₀)[Re ₃ (H) ₃ (CO) ₉]: A Fullerene[60] Coordinated to Two Different Trinuclear Clusters. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 1436-1439.	7.2	24
39	On-surface synthesis of aligned functional nanoribbons monitored by scanning tunnelling microscopy and vibrational spectroscopy. <i>Nature Communications</i> , 2017, 8, 14735.	5.8	24
40	Ligand Field Effect at Oxide-Metal Interface on the Chemical Reactivity of Ultrathin Oxide Film Surface. <i>Journal of the American Chemical Society</i> , 2012, 134, 10554-10561.	6.6	23
41	Triarylboron-based TADF emitters with perfluoro substituents: high-efficiency OLEDs with a power efficiency over 100 lm W ⁻¹ . <i>Journal of Materials Chemistry C</i> , 2020, 8, 4253-4263.	2.7	23
42	Tuning the photophysical properties of carboranyl luminophores by <i>cis</i> - to <i>nido</i> -carborane conversion and application to OFF-ON fluoride sensing. <i>Dalton Transactions</i> , 2018, 47, 17441-17449.	1.6	22
43	Doubly Boron-Doped TADF Emitters Decorated with <i>ortho</i> -Donor Groups for Highly Efficient Green to Red OLEDs. <i>Chemistry - A European Journal</i> , 2020, 26, 16793-16801.	1.7	22
44	Blue TADF Emitters Based on <i>B</i> -Heterotriangulene Acceptors for Highly Efficient OLEDs with Reduced Efficiency Roll-Off. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 45778-45788.	4.0	22
45	Elucidation of Isomerization Pathways of a Single Azobenzene Derivative Using an STM. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4239-4243.	2.1	21
46	STM studies of photochemistry and plasmon chemistry on metal surfaces. <i>Progress in Surface Science</i> , 2018, 93, 163-176.	3.8	21
47	Functionalization of Graphene Grown on Metal Substrate with Atomic Oxygen: Enolate vs Epoxide. <i>Journal of the American Chemical Society</i> , 2014, 136, 8528-8531.	6.6	20
48	One-Dimensional Molecular Zippers. <i>Journal of the American Chemical Society</i> , 2011, 133, 9236-9238.	6.6	19
49	Coordination-Driven Self-Assembly of a Molecular Knot Comprising Sixteen Crossings. <i>Angewandte Chemie</i> , 2018, 130, 5771-5775.	1.6	19
50	Tunable Optical Transition in 2H-MoS ₂ via Direct Electrochemical Engineering of Vacancy Defects and Surface C Bonds. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 40870-40878.	4.0	19
51	Valorization of Chemical Wastes: Ir(biscarbene)-Catalyzed Transfer Hydrogenation of Inorganic Carbonates Using Glycerol. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 6972-6978.	3.2	19
52	Two-Dimensional Superstructure Formation of Fluorinated Fullerene on Au(111): A Scanning Tunneling Microscopy Study. <i>ACS Nano</i> , 2012, 6, 2679-2685.	7.3	18
53	Selective and quantitative synthesis of a linear [3]catenane by two component coordination-driven self-assembly. <i>Chemical Communications</i> , 2019, 55, 6866-6869.	2.2	18
54	Does the Al ₁₃ ⁺ core exist in the Al ₁₃ polyhalide Al ₁₃ In ⁿ⁺ (n=1-12) clusters?. <i>Journal of Chemical Physics</i> , 2005, 123, 101102.	1.2	17

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55	Ordering of Molecules with π -Conjugated Triangular Core by Switching Hydrogen Bonding and van der Waals Interactions. <i>Journal of Physical Chemistry C</i> , 2012, 116, 17082-17088.	1.5	17
56	Lateral Hopping of CO on Ag(110) by Multiple Overtone Excitation. <i>Physical Review Letters</i> , 2016, 116, 056101.	2.9	17
57	Impact of the number of o-carboranyl ligands on the photophysical and electroluminescent properties of iridium(π -conjugated) cyclometalates. <i>Journal of Materials Chemistry C</i> , 2017, 5, 3024-3034.	2.7	17
58	Structure and electronic properties of Al_3X (X=F, Cl, Br, and I) clusters. <i>Physical Review B</i> , 2005, 72, .	1.1	16
59	Acute Pancreatitis Induced by Methimazole Treatment in a 51-Year-Old Korean Man: A Case Report. <i>Journal of Korean Medical Science</i> , 2014, 29, 1170.	1.1	16
60	Growth of Monolayer and Multilayer MoS ₂ Films by Selection of Growth Mode: Two Pathways via Chemisorption and Physisorption of an Inorganic Molecular Precursor. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 6805-6812.	4.0	16
61	Structure and stability of the Al ₁₄ halides Al ₁₄ In ⁿ⁺ (n=1-11): Can we regard the Al ₁₄ core as an alkaline earthlike superatom?. <i>Journal of Chemical Physics</i> , 2006, 125, 084101.	1.2	15
62	The Orientation of Silver Surfaces Drives the Reactivity and the Selectivity in Homo-coupling Reactions. <i>ChemPhysChem</i> , 2018, 19, 1802-1808.	1.0	15
63	A trigonal molecular assembly system with the dual light-driven functions of phase transition and fluorescence switching. <i>Journal of Materials Chemistry C</i> , 2019, 7, 2276-2282.	2.7	15
64	Geometric and Electronic Structures of Os ₃ (CO) ₉ (η^3 -C ₆₀), Os ₃ (CO) ₈ (P(CH ₃) ₃)(η^3 -C ₆₀), and Their Anions (Q= -1 to -4): Reduction-Induced Conversion of Os^{III} to Os^{II} Metal Complexes. <i>Organometallics</i> , 2004, 23, 3865-3869.	1.1	14
65	Energy-level alignment of a single molecule on ultrathin insulating film. <i>Physical Review B</i> , 2018, 98, .	1.1	14
66	In situ reversible tuning of chemical interface damping in single gold nanorod-based recyclable platforms through manipulation of supramolecular host-guest interactions. <i>Chemical Science</i> , 2021, 12, 7115-7124.	3.7	14
67	Direct observation of adsorption geometry for the van der Waals adsorption of a single π -conjugated hydrocarbon molecule on Au(111). <i>Journal of Chemical Physics</i> , 2014, 140, 074709.	1.2	13
68	Seamless growth of a supramolecular carpet. <i>Nature Communications</i> , 2016, 7, 10653.	5.8	13
69	Lattice-Contraction-Induced Moiré Patterns in Direction-Controlled Epitaxial Graphene on Cu(111). <i>Advanced Materials Interfaces</i> , 2014, 1, 1300080.	1.9	12
70	Atomic-scale luminescence measurement and theoretical analysis unveiling electron energy dissipation at a p-type GaAs(110) surface. <i>Nanotechnology</i> , 2015, 26, 365402.	1.3	12
71	Reductive Decomposition Mechanism of Prop-1-ene-1,3-sultone in the Formation of a Solid-Electrolyte Interphase on the Anode of a Lithium-Ion Battery. <i>Journal of Physical Chemistry C</i> , 2016, 120, 28390-28397.	1.5	12
72	Reaction mechanisms of dissociative chemisorption of H ₂ , O ₂ , and CH ₃ I on a magic cluster Al. <i>Journal of Computational Chemistry</i> , 2008, 29, 1626-1631.	1.5	11

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91	Comment on "Magic Rule for Al _n H _m Magic Clusters", Physical Review Letters, 2008, 100, 199701; discussion 199702.	2.9	5
92	Centimeter-Scale and Highly Crystalline Two-Dimensional Alcohol: Evidence for Graphenol (C ₆ /OH). Nano Letters, 2020, 20, 2107-2112.	4.5	5
93	Weak base-promoted selective rearrangement of oxaziridines to amides <i>via</i> visible-light photoredox catalysis. Chemical Communications, 2021, 57, 9995-9998.	2.2	5
94	Liquid Chromatographic Enantiomer Separation of Racemic Amine Using Chiral Crown Ether Stationary Phase. Journal of Chromatographic Science, 2006, 44, 27-31.	0.7	4
95	Cyclic voltammetry modeling, geometries, and electronic properties for metallofullerene complexes with $\frac{1}{3}$ - $\frac{1}{2}$ - $\frac{1}{2}$ -C ₆₀ bonding mode. Journal of Computational Chemistry, 2007, 28, 1100-1106.	1.5	4
96	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.	1.0	4
97	Vapor pressure-controllable molecular inorganic precursors for growth of monolayer WS ₂ : Influence of precursor-substrate interaction on growth thermodynamics. Applied Surface Science, 2022, 587, 152829.	3.1	4
98	Molecular Orbital Interpretation of Magic Clusters with Non-Magic Numbers. ChemPhysChem, 2009, 10, 341-343.	1.0	3
99	Dissociation Mechanism of a Single O ₂ Molecule Chemisorbed on Ag(110). Journal of Physical Chemistry Letters, 2021, 12, 9868-9873.	2.1	3
100	Solvent- and Light-Sensitive AIEE-Active Azo Dye: From Spherical to 1D and 2D Assemblies. International Journal of Molecular Sciences, 2022, 23, 965.	1.8	3
101	Molecular Assembly Through the Chain Reaction of Substituted Acenes on the Si(100)-(2 × 1)-H Surface. Journal of Physical Chemistry C, 2013, , 130912152428004.	1.5	2
102	Dispersive Electronic States of the π -Orbitals Stacking in Single Molecular Lines on the Si(001)-(2 × 1)-H Surface. Journal of Physical Chemistry Letters, 2013, 4, 1199-1204.	2.1	2
103	Dimensionality Control of Self-Assembled Azobenzene Derivatives on a Gold Surface. Journal of Physical Chemistry C, 2019, 123, 8859-8864.	1.5	2
104	Single-Molecule Study of a Plasmon-Induced Reaction for a Strongly Chemisorbed Molecule. Angewandte Chemie, 2020, 132, 8034-8040.	1.6	2
105	Vibrational Structure and Predissociation of Ar-CO ₂ by CO ₂ Symmetric Stretching Mode Coupled with Ar Motion. Bulletin of the Korean Chemical Society, 2002, 23, 245-252.	1.0	2
106	Toward an Accurate Self-interaction Binding Energy of Magic Cluster TiAu ₄ . Bulletin of the Korean Chemical Society, 2008, 29, 305-308.	1.0	2
107	Comment on "Orbital Interactions between a C ₆₀ Molecule and Cu(111) Surface", Journal of Physical Chemistry B, 2004, 108, 8089-8090.	1.2	1
108	Thermally Activated Delayed Fluorescent Properties of Ortho-Carbazole-Appended Triazine Compounds. Bulletin of the Korean Chemical Society, 2019, 40, 1112-1116.	1.0	1

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109	Dissociation of Single O ₂ Molecules on Ag(110) by Electrons, Holes, and Localized Surface Plasmons. <i>Chemical Record</i> , 2022, , e202200011.	2.9	1
110	Controlling Dissociation Reaction of a Water Molecule on Ultrathin MgO Film. <i>Hyomen Kagaku</i> , 2014, 35, 486-491.	0.0	0
111	Front Cover Picture: Metal-free Carbon Monoxide (CO) Capture and Utilization: Formylation of Amines (<i>Adv. Synth. Catal.</i> 13/2019). <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 3015-3015.	2.1	0
112	On-Surface Evolution of meso-Isomerism in Two-Dimensional Supramolecular Assemblies. <i>Angewandte Chemie</i> , 2019, 131, 9713-9720.	1.6	0
113	Innentitelbild: Single-Molecule Study of a Plasmon-Induced Reaction for a Strongly Chemisorbed Molecule (<i>Angew. Chem.</i> 20/2020). <i>Angewandte Chemie</i> , 2020, 132, 7698-7698.	1.6	0