## Sang Uck Lee

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2201215/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Scalable 3-D Carbon Nitride Sponge as an Efficient Metal-Free Bifunctional Oxygen Electrocatalyst for Rechargeable Zn–Air Batteries. ACS Nano, 2017, 11, 347-357.	14.6	369
2	Unveiling dual-linkage 3D hexaiminobenzene metal–organic frameworks towards long-lasting advanced reversible Zn–air batteries. Energy and Environmental Science, 2019, 12, 727-738.	30.8	300
3	Designing Nanogadgetry for Nanoelectronic Devices with Nitrogenâ€Đoped Capped Carbon Nanotubes. Small, 2009, 5, 1769-1775.	10.0	176
4	Hierarchically Designed 3D Holey C <sub>2</sub> N Aerogels as Bifunctional Oxygen Electrodes for Flexible and Rechargeable Zn-Air Batteries. ACS Nano, 2018, 12, 596-608.	14.6	159
5	Ampere-hour-scale zinc–air pouch cells. Nature Energy, 2021, 6, 592-604.	39.5	149
6	Exploring Interfacial Events in Gold-Nanocluster-Sensitized Solar Cells: Insights into the Effects of the Cluster Size and Electrolyte on Solar Cell Performance. Journal of the American Chemical Society, 2016, 138, 390-401.	13.7	137
7	Synthesis and Characteristics of a Biobased High- <i>T</i> <sub>g</sub> Terpolyester of Isosorbide, Ethylene Glycol, and 1,4-Cyclohexane Dimethanol: Effect of Ethylene Glycol as a Chain Linker on Polymerization. Macromolecules, 2013, 46, 7219-7231.	4.8	113
8	Densely colonized isolated Cu-N single sites for efficient bifunctional electrocatalysts and rechargeable advanced Zn-air batteries. Applied Catalysis B: Environmental, 2020, 268, 118746.	20.2	110
9	Iridium Cyclometalates with Tethered <i>o</i> -Carboranes: Impact of Restricted Rotation of <i>o</i> -Carborane on Phosphorescence Efficiency. Journal of the American Chemical Society, 2015, 137, 8018-8021.	13.7	103
10	Aggregation and Stabilization of Carboxylic Acid Functionalized Halloysite Nanotubes (HNT-COOH). Journal of Physical Chemistry C, 2012, 116, 18230-18235.	3.1	97
11	Selective Synthesis of Ruthenium(II) Metalla[2]Catenane via Solvent and Guest-Dependent Self-Assembly. Journal of the American Chemical Society, 2015, 137, 4674-4677.	13.7	97
12	Molecular dynamics study of the ionic conductivity of 1-n-butyl-3-methylimidazolium salts as ionic liquids. Chemical Physics Letters, 2005, 406, 332-340.	2.6	88
13	Hybridisation of perovskite nanocrystals with organic molecules for highly efficient liquid scintillators. Light: Science and Applications, 2020, 9, 156.	16.6	85
14	Bifunctional Covalent Organic Frameworkâ€Derived Electrocatalysts with Modulated <i>p</i> â€Band Centers for Rechargeable Zn–Air Batteries. Advanced Functional Materials, 2021, 31, 2101727.	14.9	76
15	Opening and blocking the inner-pores of halloysite. Chemical Communications, 2013, 49, 4519.	4.1	74
16	Manipulation of Phosphorescence Efficiency of Cyclometalated Iridium Complexes by Substituted <i>o</i> arboranes. Chemistry - A European Journal, 2015, 21, 2052-2061.	3.3	70
17	<i>Nido</i> â€Carboranes: Donors for Thermally Activated Delayed Fluorescence. Angewandte Chemie - International Edition, 2018, 57, 12483-12488.	13.8	70
18	A Robust Nonprecious CuFe Composite as a Highly Efficient Bifunctional Catalyst for Overall Electrochemical Water Splitting. Small, 2020, 16, e1905884.	10.0	63

#	Article	IF	CITATIONS
19	Metal-Free Oxygen Evolution and Oxygen Reduction Reaction Bifunctional Electrocatalyst in Alkaline Media: From Mechanisms to Structure–Catalytic Activity Relationship. ACS Sustainable Chemistry and Engineering, 2018, 6, 4973-4980.	6.7	62
20	B <sub>3</sub> S monolayer: prediction of a high-performance anode material for lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 12706-12712.	10.3	59
21	Two-dimensional haeckelite h567: A promising high capacity and fast Li diffusion anode material for lithium-ion batteries. Carbon, 2019, 148, 344-353.	10.3	59
22	Designing and Tuning the Electronic Structure of Nickel–Vanadium Layered Double Hydroxides for Highly Efficient Oxygen Evolution Electrocatalysis. ACS Catalysis, 2022, 12, 3821-3831.	11.2	58
23	Solid‣tate Rechargeable Zinc–Air Battery with Long Shelf Life Based on Nanoengineered Polymer Electrolyte. ChemSusChem, 2018, 11, 3215-3224.	6.8	55
24	Rational design of a PC3 monolayer: A high-capacity, rapidly charging anode material for sodium-ion batteries. Carbon, 2020, 157, 420-426.	10.3	49
25	Role of Transition Metals in Layered Double Hydroxides for Differentiating the Oxygen Evolution and Nonenzymatic Glucose Sensing. ACS Applied Materials & Interfaces, 2020, 12, 6193-6204.	8.0	48
26	Theoretical studies of the solvent decomposition by lithium atoms in lithium-ion battery electrolyte. Chemical Physics Letters, 2002, 360, 359-366.	2.6	44
27	Molecular orbital study on the ground and excited states of methyl substituted tris(8-hydroxyquinoline) aluminum(III). Chemical Physics Letters, 2002, 366, 9-16.	2.6	44
28	2D transition metal dichalcogenides with glucan multivalency for antibody-free pathogen recognition. Nature Communications, 2018, 9, 2549.	12.8	44
29	Phographene as a High-Performance Anode Material with High Specific Capacity and Fast Li Diffusion: From Structural, Electronic, and Mechanical Properties to LIB Applications. Journal of Physical Chemistry C, 2019, 123, 21345-21352.	3.1	43
30	Single-atom oxygen reduction reaction electrocatalysts of Fe, Si, and N co-doped carbon with 3D interconnected mesoporosity. Journal of Materials Chemistry A, 2021, 9, 4297-4309.	10.3	43
31	Assessment of the mechanical properties of monolayer graphene using the energy and strain-fluctuation methods. RSC Advances, 2018, 8, 27283-27292.	3.6	42
32	Strain-induced work function in h-BN and BCN monolayers. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 123, 114180.	2.7	42
33	Highâ€Alkaline Waterâ€Splitting Activity of Mesoporous 3D Heterostructures: An Amorphousâ€Shell@Crystallineâ€Core Nanoâ€Assembly of Coâ€Niâ€Phosphate Ultrathinâ€Nanosheets and Vâ€ Cobaltâ€Nitride Nanowires. Advanced Science, 2022, 9, .	E•D¤pæd	41
34	Atomistic Dynamics Investigation of the Thermomechanical Properties and Li Diffusion Kinetics in Î'-Graphene for LIB Anode Material. ACS Applied Materials & Interfaces, 2018, 10, 36240-36248.	8.0	39
35	Experimental and Theoretical Insights into Transition-Metal (Mo, Fe) Codoping in a Bifunctional Nickel Phosphide Microsphere Catalyst for Enhanced Overall Water Splitting. ACS Applied Energy Materials, 2021, 4, 14169-14179.	5.1	39
36	<i>o</i> -Carboranyl–Phosphine as a New Class of Strong-Field Ancillary Ligand in Cyclometalated Iridium(III) Complexes: Toward Blue Phosphorescence. Organometallics, 2015, 34, 3455-3458.	2.3	38

#	Article	IF	CITATIONS
37	Atomistic insights into the anisotropic mechanical properties and role of ripples on the thermal expansion of h-BCN monolayers. RSC Advances, 2019, 9, 1238-1246.	3.6	38
38	Designing a high-performance nitrogen-doped titanium dioxide anode material for lithium-ion batteries by unravelling the nitrogen doping effect. Nano Energy, 2020, 74, 104829.	16.0	38
39	Terpyridine–Triarylborane Conjugates for the Dual Complexation of Zinc(II) Cation and Fluoride Anion. Organometallics, 2014, 33, 753-762.	2.3	35
40	Molecular engineering of nanostructures and activities on bifunctional oxygen electrocatalysts for Zinc-air batteries. Applied Catalysis B: Environmental, 2020, 270, 118869.	20.2	34
41	Tuning d-band centers by coupling PdO nanoclusters to WO <sub>3</sub> nanosheets to promote the oxygen reduction reaction. Journal of Materials Chemistry A, 2020, 8, 13490-13500.	10.3	33
42	Experimental and Theoretical Insights into the Borohydride-Based Reduction-Induced Metal Interdiffusion in Fe-Oxide@NiCo <sub>2</sub> O <sub>4</sub> for Enhanced Oxygen Evolution. ACS Applied Materials & Interfaces, 2021, 13, 53725-53735.	8.0	32
43	Structure and stability of the defect fullerene clusters of C60: C59, C58, and C57. Journal of Chemical Physics, 2004, 121, 3941-3942.	3.0	31
44	Performance of density functionals for calculation of reductive ring-opening reaction energies of Li + -EC and Li + -VC. Theoretical Chemistry Accounts, 2004, 112, 106-112.	1.4	31
45	Origin of the Strain Energy Minimum in Imogolite Nanotubes. Journal of Physical Chemistry C, 2011, 115, 5226-5231.	3.1	30
46	Adjustable Intermolecular Interactions Allowing 2D Transition Metal Dichalcogenides with Prolonged Scavenging Activity for Reactive Oxygen Species. Small, 2018, 14, e1800026.	10.0	30
47	Experimental and theoretical investigation of fluorine substituted LiFe0.4Mn0.6PO4 as cathode material for lithium rechargeable batteries. Solid State Ionics, 2014, 260, 2-7.	2.7	27
48	The Role of Aromaticity and the <i>Ï€</i> â€Conjugated Framework in Multiporphyrinic Systems as Singleâ€Molecule Switches. Small, 2008, 4, 962-969.	10.0	26
49	Doubling the Capacity of Lithium Manganese Oxide Spinel by a Flexible Skinny Graphitic Layer. Angewandte Chemie - International Edition, 2014, 53, 5059-5063.	13.8	25
50	Rational design of time-resolved turn-on fluorescence sensors: exploiting delayed fluorescence for hydrogen peroxide sensing. Chemical Communications, 2018, 54, 12069-12072.	4.1	25
51	Mechanically robust, self-healing graphene like defective SiC: A prospective anode of Li-ion batteries. Applied Surface Science, 2021, 541, 148417.	6.1	25
52	Computational Design of a Rectifying Diode Made by Interconnecting Carbon Nanotubes with Peptide Linkages. Journal of Physical Chemistry C, 2007, 111, 12175-12180.	3.1	24
53	<i>Nido</i> arboranes: Donors for Thermally Activated Delayed Fluorescence. Angewandte Chemie, 2018, 130, 12663-12668.	2.0	24
54	Three-dimensional evaluation of compositional and structural changes in cycled LiNi1/3Co1/3Mn1/3O2 by atom probe tomography. Journal of Power Sources, 2018, 379, 160-166.	7.8	23

Sang Uck Lee

#	Article	IF	CITATIONS
55	Control of Electron Transport by Manipulating the Conjugated Framework. Journal of Physical Chemistry C, 2007, 111, 15397-15403.	3.1	22
56	Preparation of an imogolite/poly(acrylic acid) hybrid gel. Journal of Colloid and Interface Science, 2013, 406, 165-171.	9.4	21
57	Theoretical evaluation of the structure–activity relationship in graphene-based electrocatalysts for hydrogen evolution reactions. RSC Advances, 2017, 7, 27033-27039.	3.6	21
58	Designing Nanogadgets by Interconnecting Carbon Nanotubes with Zinc Layers. ACS Nano, 2008, 2, 939-943.	14.6	20
59	Efficient organic manganese( <scp>ii</scp> ) bromide green-light-emitting diodes enabled by manipulating the hole and electron transport layer. Journal of Materials Chemistry C, 2021, 9, 11314-11323.	5.5	20
60	Time-dependent density-functional calculations of S[sub 0]–S[sub 1] transition energies of poly(p-phenylene vinylene). Journal of Chemical Physics, 2004, 121, 609.	3.0	19
61	Chiral Recognition of <i>N</i> â€Phthaloyl, <i>N</i> â€Tetrachlorophthaloyl, and <i>N</i> â€Naphthaloyl αâ€Amino Acids and Their Esters on Polysaccharideâ€Derived Chiral Stationary Phases. Chirality, 2012, 24, 1037-1046.	2.6	19
62	Deciphering the Electrocatalytic Activity of Nitrogen-Doped Carbon Embedded with Cobalt Nanoparticles and the Reaction Mechanism of Triiodide Reduction in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2017, 121, 27332-27343.	3.1	18
63	Guanidinium-Pseudohalide Perovskite Interfaces Enable Surface Reconstruction of Colloidal Quantum Dots for Efficient and Stable Photovoltaics. ACS Nano, 2022, 16, 1649-1660.	14.6	18
64	Hybridized heterostructure of CoS and MoS2 nanoparticles for highly-efficient and robust bifunctional water electrolysis. Applied Surface Science, 2022, 592, 153196.	6.1	17
65	Electron transport through carbon nanotube intramolecular heterojunctions with peptide linkages. Physical Chemistry Chemical Physics, 2008, 10, 5225.	2.8	16
66	Thermodynamic Control of Diameter-Modulated Aluminosilicate Nanotubes. Journal of Physical Chemistry C, 2014, 118, 8148-8152.	3.1	16
67	Aromatic cages B0/+42: unprecedented existence of octagonal holes in boron clusters. Physical Chemistry Chemical Physics, 2016, 18, 11620-11623.	2.8	16
68	Enantiomeric discrimination of pyrethroic acid esters on polysaccharide derived chiral stationary phases. Chirality, 2003, 15, 276-283.	2.6	15
69	Palladium atalyzed Carbonylative Coupling Reactions of <i>N</i> , <i>N</i> â€Bis(methanesulfonyl)amides through C–N Bond Cleavage. European Journal of Organic Chemistry, 2018, 2018, 5717-5724.	2.4	13
70	Time Transient Electrochemical Monitoring of Tetraalkylammonium Polybromide Solid Particle Formation: Observation of Ionic Liquid-to-Solid Transitions. Analytical Chemistry, 2019, 91, 5850-5857.	6.5	13
71	Enhancing the thermally activated delayed fluorescence of nido-carborane-appended triarylboranes by steric modification of the phenylene linker. Inorganic Chemistry Frontiers, 2020, 7, 3456-3464.	6.0	13
72	Complementary Hybrid Semiconducting Superlattices with Multiple Channels and Mutual Stabilization. Nano Letters, 2020, 20, 4864-4871.	9.1	13

#	Article	IF	CITATIONS
73	Rigid adamantane tripod linkage for well-defined conductance of a single-molecule junction. Physical Chemistry Chemical Physics, 2010, 12, 11763.	2.8	12
74	Quantitative Correlation between Carrier Mobility and Intermolecular Center-to-Center Distance in Organic Single Crystals. Chemistry of Materials, 2017, 29, 4072-4079.	6.7	12
75	Lowâ€Dimensional Singleâ€Cation Formamidinium Lead Halide Perovskites (FA <i><sub>m</sub></i> <sub>+2</sub> Pb <i><sub>m</sub></i> Br <sub>3</sub> <i><sub>m</sub></i> From Synthesis to Rewritable Phaseâ€Change Memory Film. Advanced Functional Materials, 2021, 31, 2011093.	): 14.9	12
76	Structural and Electronic Modulations of Imidazolium Covalent Organic Framework-Derived Electrocatalysts for Oxygen Redox Reactions in Rechargeable Zn–Air Batteries. ACS Applied Materials & Interfaces, 2022, 14, 24404-24414.	8.0	12
77	Two-dimensional packing patterns of amino acid surfactant and higher alcohols in an aqueous phase and their associated packing parameters. Journal of Colloid and Interface Science, 2004, 273, 596-603.	9.4	11
78	Controlled Growth of Rubrene Nanowires by Eutectic Melt Crystallization. Scientific Reports, 2016, 6, 23108.	3.3	11
79	Theoretical investigation on the ground state properties of the hexaamminecobalt( <scp>iii</scp> ) and nitro–nitrito linkage isomerism in pentaamminecobalt( <scp>iii</scp> ) <i>in vacuo</i> . RSC Advances, 2018, 8, 3328-3342.	3.6	11
80	Donor–Acceptor-Appended Triarylboron Lewis Acids: Ratiometric or Time-Resolved Turn-On Fluorescence Response toward Fluoride Binding. Inorganic Chemistry, 2020, 59, 1414-1423.	4.0	11
81	Stable performance of Li-S battery: Engineering of Li2S smart cathode by reduction of multilayer graphene-embedded 2D-MoS2. Journal of Alloys and Compounds, 2021, 862, 158031.	5.5	11
82	Electron transport characteristics of organic molecule encapsulated carbon nanotubes. Nanoscale, 2011, 3, 1773.	5.6	10
83	p- and n-type Doping Effects on the Electrical and Ionic Conductivities of Li4Ti5O12 Anode Materials. Journal of Physical Chemistry C, 2018, 122, 15155-15162.	3.1	10
84	Temperature-dependent lithium diffusion in phographene: Insights from molecular dynamics simulation. Journal of Industrial and Engineering Chemistry, 2020, 81, 287-293.	5.8	10
85	Transport Properties of Nanoscale Materials for Molecular Wire Applications: A Case Study of Ferrocene Dimers. Journal of the Korean Physical Society, 2008, 52, 1197-1201.	0.7	10
86	Environmental Stimuliâ€Irresponsive Longâ€Term Radical Scavenging of 2D Transition Metal Dichalcogenides through Defectâ€Mediated Hydrogen Atom Transfer in Aqueous Media. Advanced Functional Materials, 2018, 28, 1802737.	14.9	9
87	Influence of Exchange-Correlation Functional in the Calculations of Vertical Excitation Energies of Halogenated Copper Phthalocyanines using Time-Dependent Density Functional Theory (TD-DFT). Bulletin of the Korean Chemical Society, 2013, 34, 2276-2280.	1.9	9
88	Density functional calculations on the ionization potentials of (CuPc)n (n=1–6). Computational and Theoretical Chemistry, 2004, 672, 231-234.	1.5	8
89	Electron transport characteristics of one-dimensional heterojunctions with multi-nitrogen-doped carbon nanotubes. Nanoscale, 2010, 2, 2758.	5.6	8
90	Metal Ion Coordination with an Asymmetric Fan-Shaped Dendrimer at the Air–Water Interface. Langmuir, 2011, 27, 8898-8904.	3.5	8

#	Article	IF	CITATIONS
91	Unraveling the controversy over a catalytic reaction mechanism using a new theoretical methodology: One probe and non-equilibrium surface Green's function. Nano Energy, 2019, 63, 103863.	16.0	7
92	Density Functional Studies of Ring-Opening Reactions of Li <sup>+</sup> -(ethylene carbonate) and Li <sup>+</sup> -(vinylene carbonate). Bulletin of the Korean Chemical Society, 2005, 26, 43-46.	1.9	7
93	Designing a descriptor for the computational screening of argyrodite-based solid-state superionic conductors: uniformity of ion-cage size. Journal of Materials Chemistry A, 2022, 10, 7888-7895.	10.3	7
94	Synthesis and characterization of an ester-terminated organic semiconductor for ethanol vapor detection. Organic Electronics, 2014, 15, 2277-2284.	2.6	6
95	Theoretical Basis of Electrocatalysis. , 0, , .		5
96	Strain induced structural transformation, mechanical and phonon stability in silicene derived 2D-SiB. Journal of Industrial and Engineering Chemistry, 2020, 90, 399-406.	5.8	5
97	Unveiling the effect of the crystalline phases of iron oxyhydroxide for highly sensitive and selective detection of dopamine. Dalton Transactions, 2021, 50, 13497-13504.	3.3	5
98	New catalyst design for polymerization of norbornene esters by reducing intramolecular interaction. Journal of Molecular Modeling, 2003, 9, 304-307.	1.8	4
99	The Origin of the Halogen Effect on the Phthalocyanine Green Pigments. Chemistry - an Asian Journal, 2010, 5, 1341-1346.	3.3	4
100	Molecular layer deposition of charge-transfer complex thin films with visible-light absorption. Organic Electronics, 2018, 52, 237-242.	2.6	4
101	Enhanced catalytic activity of SO <sub>x</sub> -incorporated graphene for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 22615-22620.	10.3	4
102	Interpreting STM image and tunneling-current-induced rotation of cis-2-butene on a Pd(110) surface. Chemical Physics Letters, 2007, 435, 90-95.	2.6	3
103	Temperature Effect on the Synthesis of Gibbsite and Boehmite. Chemistry Letters, 2013, 42, 1463-1465.	1.3	3
104	Strain Energy and Structural Property of Methyl Substituted Imogolite. Molecular Crystals and Liquid Crystals, 2014, 599, 68-71.	0.9	3
105	Thermal cis–trans isomerization of triazo-benzene. Current Applied Physics, 2007, 7, 513-516.	2.4	2
106	Carbon Nanotubes Oscillation under Electric Field. Japanese Journal of Applied Physics, 2010, 49, 115103.	1.5	2
107	State of charge dependent ordered and disordered phases in a Li[Ni1/3Co1/3Mn1/3]O2 cathode material. Materials Advances, 2021, 2, 3965-3970.	5.4	2
108	Nanoporous <scp>Titaniumâ€Oxo</scp> Molecular Cluster for <scp>CO<sub>2</sub></scp> Selective Adsorption. Bulletin of the Korean Chemical Society, 2021, 42, 1014-1019.	1.9	2

#	Article	IF	CITATIONS
109	Strain-induced carrier mobility modulation in organic semiconductors. Journal of Industrial and Engineering Chemistry, 2022, 107, 137-144.	5.8	2
110	Structural Dependence of Magnetic Shielding Properties in Al <sub>4</sub> Li <sub>4</sub> Clusters. Materials Transactions, 2008, 49, 2429-2436.	1.2	1
111	ENANTIOMER SEPARATION OF <i>N</i> -t-BOC AND <i>N</i> -CBZ α-AMINO ACIDS AND THEIR ESTERS ON POLYSACCHARIDE DERIVED CHIRAL STATIONARY PHASES. Journal of Liquid Chromatography and Related Technologies, 2013, 36, 1899-1914.	1.0	1
112	Two Dimensional Aggregation Behaviors of Quinoxaline Dendrimers. Journal of Nanoscience and Nanotechnology, 2015, 15, 1511-1514.	0.9	1
113	Efficiency Tuning of UVA/UVB Absorbance through Control over the Intramolecular Hydrogen Bonding of Triazine Derivatives. Bulletin of the Korean Chemical Society, 2018, 39, 858-863.	1.9	1
114	Frustrated Lewis pairs with thermally activated delayed fluorescence properties: activation of formaldehyde. Dalton Transactions, 2020, 49, 13198-13201.	3.3	1
115	Bias-Dependent Multichannel Transport in Graphene–Boron Nitride Heterojunction Nanoribbons. ACS Applied Electronic Materials, 2020, 2, 1449-1458.	4.3	1
116	Phaseâ€Change Memory Films: Lowâ€Dimensional Singleâ€Cation Formamidinium Lead Halide Perovskites (FA <i><sub>m</sub></i> <sub>+2</sub> Pb <i><sub>m</sub></i> Br <sub>3</sub> <i><sub>m</sub>+2 From Synthesis to Rewritable Phaseâ€Change Memory Film (Adv. Funct. Mater. 17/2021). Advanced Functional Materials, 2021, 31, 2170118.</i>	): 14.9	1
117	Behavior of maltose-neopentyl glycol-3 (MNG-3) at the air/aqueous interface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 484, 184-189.	4.7	0

Radical Scavengin: Environmental Stimuliâ€Irresponsive Longâ€Term Radical Scavenging of 2D Transition 118 Metal Dichalcogenides through Defectâ€Mediated Hydrogen Atom Transfer in Aqueous Media (Adv.) Tj ETQq0 0 0 ngBJ /Ovendock 10 Tf