Seung-Yong Lee

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5715112/publications.pdf

Version: 2024-02-01

72 papers	2,471 citations	236833 25 h-index	206029 48 g-index
72 all docs	72 docs citations	72 times ranked	4320 citing authors

#	Article	IF	Citations
1	Porous ZrO2 bone scaffold coated with hydroxyapatite with fluorapatite intermediate layer. Biomaterials, 2003, 24, 3277-3284.	5.7	178
2	High-resolution nanotransfer printing applicable to diverse surfaces via interface-targeted adhesion switching. Nature Communications, 2014, 5, 5387.	5.8	178
3	3D Crossâ€Point Plasmonic Nanoarchitectures Containing Dense and Regular Hot Spots for Surfaceâ€Enhanced Raman Spectroscopy Analysis. Advanced Materials, 2016, 28, 8695-8704.	11.1	178
4	Ubiquitous magneto-mechano-electric generator. Energy and Environmental Science, 2015, 8, 2402-2408.	15.6	177
5	Selfâ€Assembled SERS Substrates with Tunable Surface Plasmon Resonances. Advanced Functional Materials, 2011, 21, 3424-3429.	7.8	146
6	Dispersion in the SERS Enhancement with Silver Nanocube Dimers. ACS Nano, 2010, 4, 5763-5772.	7.3	142
7	Targeted multimodal imaging modalities. Advanced Drug Delivery Reviews, 2014, 76, 60-78.	6.6	113
8	Oxidation Behavior of Titanium Boride at Elevated Temperatures. Journal of the American Ceramic Society, 2001, 84, 239-241.	1.9	103
9	Chromium removal from aqueous solution by a PEI-silica nanocomposite. Scientific Reports, 2018, 8, 1438.	1.6	101
10	Metallic Ni₃S₂ Films Grown by Atomic Layer Deposition as an Efficient and Stable Electrocatalyst for Overall Water Splitting. ACS Applied Materials & Interfaces, 2018, 10, 12807-12815.	4.0	78
11	The Role of Zr Doping in Stabilizing Li[Ni_{0.6}Co_{0.2}Mn_{0.2}]O₂ as a Cathode Material for Lithiumâ€Ion Batteries. ChemSusChem, 2019, 12, 2439-2446.	3.6	61
12	Lithiation Mechanism of Tunnelâ€Structured MnO₂ Electrode Investigated by In Situ Transmission Electron Microscopy. Advanced Materials, 2017, 29, 1703186.	11.1	52
13	Rigid double-stranded siloxane-induced high-flux carbon molecular sieve hollow fiber membranes for CO2/CH4 separation. Journal of Membrane Science, 2019, 570-571, 504-512.	4.1	49
14	Thermal Stability Enhanced Tetraethylenepentamine/Silica Adsorbents for High Performance CO2 Capture. Industrial & Engineering Chemistry Research, 2018, 57, 4632-4639.	1.8	46
15	Hydrogen Bonding-Mediated Enhancement of Bioinspired Electrochemical Nitrogen Reduction on Cu_{2â€“x}S Catalysts. ACS Catalysis, 2020, 10, 10577-10584.	5.5	43
16	Effect of Strain Aging on Tensile Behavior and Properties of API X60, X70, and X80 Pipeline Steels. Metals and Materials International, 2018, 24, 1221-1231.	1.8	40
17	Unraveling the Origin and Mechanism of Nanofilament Formation in Polycrystalline SrTiO₃ Resistive Switching Memories. Advanced Materials, 2019, 31, e1901322.	11.1	38
18	Most suitable amino silane molecules for surface functionalization of graphene oxide toward hexavalent chromium adsorption. Chemosphere, 2020, 251, 126387.	4.2	38

#	Article	IF	Citations
19	Synergetic control of band gap and structural transformation for optimizing TiO 2 photocatalysts. Applied Catalysis B: Environmental, 2017, 210, 513-521.	10.8	37
20	Solvent-free synthesis of Cu2ZnSnS4 nanocrystals: a facile, green, up-scalable route for low cost photovoltaic cells. Nanoscale, 2014, 6, 11703-11711.	2.8	34
21	Copper nanoparticle incorporated plasmonic organic bulk-heterojunction solar cells. Applied Physics Letters, 2014, 105, 223306.	1.5	32
22	Unlocking the Potential of Nanoparticles Composed of Immiscible Elements for Direct H2O2 Synthesis. ACS Catalysis, 2019, 9, 8702-8711.	5.5	32
23	A supramolecular host-guest interaction-mediated injectable hydrogel system with enhanced stability and sustained protein release. Acta Biomaterialia, 2021, 131, 286-301.	4.1	29
24	Sequentially Self-Assembled Rings-in-Mesh Nanoplasmonic Arrays for Surface-Enhanced Raman Spectroscopy. Chemistry of Materials, 2015, 27, 5007-5013.	3.2	28
25	A novel pH-sensitive PEG-PPG-PEG copolymer displaying a closed-loop solâ€“gelâ€“sol transition. Journal of Materials Chemistry, 2009, 19, 8198.	6.7	27
26	A Flexible Patch-Type Strain Sensor Based on Polyaniline for Continuous Monitoring of Pulse Waves. IEEE Access, 2020, 8, 152105-152115.	2.6	27
27	Highly crystalline Fe₂GeS₄ nanocrystals: green synthesis and their structural and optical characterization. Journal of Materials Chemistry A, 2015, 3, 2265-2270.	5.2	26
28	Investigation of the mechanism of chromium removal in (3-aminopropyl)trimethoxysilane functionalized mesoporous silica. Scientific Reports, 2018, 8, 12078.	1.6	24
29	Axial oxygen vacancy-regulated microwave absorption in micron-sized tetragonal BaTiO₃ particles. Journal of Materials Chemistry C, 2018, 6, 9749-9755.	2.7	24
30	Centrifugal microfluidic device for the high-throughput synthesis of Pd@AuPt coreâ€“shell nanoparticles to evaluate the performance of hydrogen peroxide generation. Lab on A Chip, 2020, 20, 3293-3301.	3.1	23
31	<scp>ZnS</scp> Nanoâ€Spheres Formed by the Aggregation of Small Crystallites and Their Photocatalytic Degradation of Eosin B. Chinese Journal of Chemistry, 2017, 35, 159-164.	2.6	21
32	High-throughput computational-experimental screening protocol for the discovery of bimetallic catalysts. Npj Computational Materials, 2021, 7, .	3.5	20
33	Hexagonally ordered nanoparticles templated using a block copolymer film through Coulombic interactions. Nanotechnology, 2013, 24, 045305.	1.3	19
34	Mechanochemically Synthesized SnS Nanocrystals: Impact of Nonstoichiometry on Phase Purity and Solar Cell Performance. ACS Sustainable Chemistry and Engineering, 2018, 6, 3002-3009.	3.2	17
35	Influences of Extended Selenization on Cu₂ZnSnSe₄ Solar Cells Prepared from Quaternary Nanocrystal Ink. Journal of Physical Chemistry C, 2014, 118, 27657-27663.	1.5	16
36	Shape-controlled synthesis of goldâ€“nickel bimetallic nanoparticles and their electrocatalytic properties. Materials Chemistry and Physics, 2015, 156, 1-8.	2.0	16

#	Article	IF	Citations
37	One-pot synthesis of PdAu bimetallic composite nanoparticles and their catalytic activities for hydrogen peroxide generation. Korean Journal of Chemical Engineering, 2018, 35, 2379-2383.	1.2	16
38	Unexpected Roles of Interstitially Doped Lithium in Blue and Green Light Emitting Y₂O₃:Bi³⁺: A Combined Experimental and Computational Study. Inorganic Chemistry, 2017, 56, 12139-12147.	1.9	14
39	High photo-conversion efficiency in double-graded Cu(In,Ga)(S,Se)₂thin film solar cells with two-step sulfurization post-treatment. Progress in Photovoltaics: Research and Applications, 2017, 25, 139-148.	4.4	14
40	Flame synthesized Y2O3:Tb3+â€“Yb3+ phosphors as spectral convertors for solar cells. Research on Chemical Intermediates, 2018, 44, 4619-4632.	1.3	13
41	SERS Substrates by the Assembly of Silver Nanocubes: High-Throughput and Enhancement Reliability Considerations. Journal of Nanotechnology, 2012, 2012, 1-12.	1.5	12
42	Anion Extraction-Induced Polymorph Control of Transition Metal Dichalcogenides. Nano Letters, 2019, 19, 8644-8652.	4.5	12
43	Facile Direct Seed-Mediated Growth of AuPt Bimetallic Shell on the Surface of Pd Nanocubes and Application for Direct H2O2 Synthesis. Catalysts, 2020, 10, 650.	1.6	12
44	Epoxide-Functionalized, Poly(ethylenimine)-Confined Silica/Polymer Module Affording Sustainable CO₂ Capture in Rapid Thermal Swing Adsorption. Industrial & Engineering Chemistry Research, 2018, 57, 13923-13931.	1.8	11
45	Luminescent silica films prepared using perhydropolysilazane and Mn-doped ZnS nanophosphors. Applied Surface Science, 2020, 511, 145441.	3.1	11
46	Flame-synthesized Y2O3:Tb3+ nanocrystals as spectral converting materials. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	10
47	Solid-solution alloying of immiscible Pt and Au boosts catalytic performance for H2O2 direct synthesis. Acta Materialia, 2021, 205, 116563.	3.8	10
48	Blends of Oppositely Charged PEGâ€“PPGâ€“PEG Copolymers Displaying Improved Physical Thermogelling Properties. Macromolecular Chemistry and Physics, 2010, 211, 692-697.	1.1	9
49	Hollow/porous-walled SnO2 via nanoscale Kirkendall diffusion with irregular particles. Acta Materialia, 2020, 186, 20-28.	3.8	9
50	Preferred diffusion paths for copper electromigration by in situ transmission electron microscopy. Ultramicroscopy, 2017, 181, 160-164.	0.8	9
51	Cu Diffusionâ€Driven Dynamic Modulation of the Electrical Properties of Amorphous Oxide Semiconductors. Advanced Functional Materials, 2017, 27, 1700336.	7.8	8
52	Thermally Stable Amorphous Oxide-based Schottky Diodes through Oxygen Vacancy Control at Metal/Oxide Interfaces. Scientific Reports, 2019, 9, 7872.	1.6	8
53	A foolproof method for phase transfer of metal nanoparticles via centrifugation. Chemical Communications, 2016, 52, 1625-1628.	2.2	7
54	Synthesis RhAg bimetallic composite nanoparticles for improved catalysts on direct synthesis of hydrogen peroxide generation. Korean Journal of Chemical Engineering, 2019, 36, 1417-1420.	1.2	7

#	Article	IF	Citations
55	Dynamic Strain Aging and Serration Behavior of Three High-Manganese Austenitic Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1693-1700.	1.1	7
56	Performance of a silica-polyethyleneimine adsorbent for post-combustion CO2 capture on a 100Âkg scale in a fluidized bed continuous unit. Chemical Engineering Journal, 2021, 407, 127209.	6.6	7
57	Enhancement of stability of aqueous suspension of alumina nanoparticles by femtosecond laser irradiation. Journal of Applied Physics, 2015, 118, 114906.	1.1	6
58	Enhanced photoluminescence due to Bi 3+ â† Eu 3+ energy transfer and re-precipitation of RE doped homogeneous sized Y 2 O 3 nanophosphors. Materials Research Bulletin, 2016, 83, 186-192.	2.7	6
59	Mechanochemical synthesis of ZnS for fabrication of transparent ceramics. Research on Chemical Intermediates, 2018, 44, 4721-4731.	1.3	6
60	Highly Efficient Pureâ€Blue Perovskite Lightâ€Emitting Diode Leveraging CsPbBr_xCl_{3â^'}_x/Cs₄PbBr_xCl_{6â^'}<s Nanocomposite Emissive Layer with Shallow Valence Band. Advanced Optical Materials, 2022, 10, .	3.6	6
61	Near-infrared quantum cutting in Tb3+ and Yb3+-doped Y2O3 nanophosphors. Research on Chemical Intermediates, 2017, 43, 3463-3471.	1.3	5
62	Effects of compression and controlled selenization on powder-fabricated Cu(In,Ga)Se2 thin films. Applied Surface Science, 2019, 475, 158-161.	3.1	5
63	Roughening and strain-field evolution at a grain boundary in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î±</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi mathvariant="normal">A</mml:mi><mml:msub><mml:mi mathvariant="normal">I</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Materials, 2018, 2, .	0.9	5
64	Influence of Hydrogen Absorption on Stacking Fault of Energy of a Face-Centered Cubic High Entropy Alloy. Metals and Materials International, 2022, 28, 2637-2645.	1.8	4
65	Increased mobility of an Î±-Al2O3 grain boundary by electron-beam irradiation. Journal of Materials Science, 2018, 53, 2383-2388.	1.7	2
66	Resistive Switching: Unraveling the Origin and Mechanism of Nanofilament Formation in Polycrystalline SrTiO₃ Resistive Switching Memories (Adv. Mater. 28/2019). Advanced Materials, 2019, 31, 1970205.	11.1	2
67	Performance Differences of Hexavalent Chromium Adsorbents Caused by Graphene Oxide Drying Process. Scientific Reports, 2020, 10, 4882.	1.6	2
68	A unique solidâ€“solid transformation of silver nanoparticles on reactive ion-etching-processed silicon. Nanotechnology, 2012, 23, 065301.	1.3	1
69	Effects of chloride and silver ions on gold nanorod formation. Japanese Journal of Applied Physics, 2015, 54, 015001.	0.8	1
70	Rationally designed CuSb1-Bi S2 as a promising photovoltaic material: Theoretical and experimental study. Scripta Materialia, 2020, 179, 107-112.	2.6	1
71	Synthesis of Uniformly Sized Bi0.5Sb1.5Te3.0 Nanoparticles via Mechanochemical Process and Wet-Milling for Reduced Thermal Conductivity. Materials, 2021, 14, 536.	1.3	0
72	Highly Efficient Pureâ€Blue Perovskite Lightâ€Emitting Diode Leveraging CsPbBr_xCl_{3â^'}_x/Cs₄PbBr_xCl_{6â^'}<s Nanocomposite Emissive Layer with Shallow Valence Band (Advanced Optical Materials 6/2022). Advanced Optical Materials, 2022, 10, .	3.6	0