Dong-Kyun Seo

List of Publications by Year
in descending order

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75 papers	1,826 citations	279798 23 h-index	276875 41 g-index
79 all docs	79 docs citations	79 times ranked	2759 citing authors

#	Article	IF	Citations
1	Structural analysis of highly porous Î³-Al2O3. Journal of Solid State Chemistry, 2014, 217, 1-8.	2.9	223
2	A Facile One-Step in situ Functionalization of Quantum Dots with Preserved Photoluminescence for Bioconjugation. Journal of the American Chemical Society, 2007, 129, 6380-6381.	13.7	105
3	Polyamide thin-film nanocomposite membranes with graphene oxide nanosheets: Balancing membrane performance and fouling propensity. Desalination, 2019, 451, 139-147.	8.2	85
4	Preparation of Large Transparent Silica Monoliths with Embedded Photoluminescent CdSe@ZnS Core/Shell Quantum Dots. Chemistry of Materials, 2005, 17, 4762-4764.	6.7	78
5	Geopolymer with Hierarchically Mesoâ€‹Macroporous Structures from Reactive Emulsion Templating. Journal of the American Ceramic Society, 2014, 97, 70-73.	3.8	71
6	Blue-silica by Eu²⁺-activator occupied in interstitial sites. RSC Advances, 2015, 5, 74790-74801.	3.6	70
7	Evaluation and optimization of VPSA processes with nanostructured zeolite NaX for post-combustion CO2 capture. Chemical Engineering Journal, 2019, 371, 693-705.	12.7	69
8	Calcium-modified hierarchically porous aluminosilicate geopolymer as a highly efficient regenerable catalyst for biodiesel production. RSC Advances, 2015, 5, 65454-65461.	3.6	67
9	Synthesis of Deep-Red-Emitting CdSe Quantum Dots and General Non-Inverse-Square Behavior of Quantum Confinement in CdSe Quantum Dots. Chemistry of Materials, 2006, 18, 5764-5767.	6.7	59
10	Report from the third workshop on future directions of solid-state chemistry: The status of solid-state chemistry and its impact in the physical sciences. Progress in Solid State Chemistry, 2008, 36, 1-133.	7.2	58
11	Synthesis, Structure, and Bonding of Hypoelectronic SrIn4:Â Direct Example of a Dominant Size Effect in Structure Selection. Journal of the American Chemical Society, 2000, 122, 9621-9627.	13.7	54
12	New Solidâ^'Gas Metathetical Synthesis of Binary Metal Polysulfides and Sulfides at Intermediate Temperatures:Â Utilization of Boron Sulfides. Journal of the American Chemical Society, 2004, 126, 4676-4681.	13.7	47
13	Electron-Precise/Deficient La5-xCaxGe4(3.4 â‰¤xâ‰¤ 3.8) and Ce5-xCaxGe4(3.0 â‰¤xâ‰¤ 3.3):Â Probing Low-Valence Electron Concentrations in Metal-Rich Gd5Si4-type Germanides. Journal of the American Chemical Society, 2005, 127, 15682-15683.	13.7	46
14	CHEMISTRY: Aromatic Metal Clusters. Science, 2001, 291, 841-842.	12.6	43
15	One-pot synthesis of highly mesoporous antimony-doped tin oxide from interpenetrating inorganic/organic networks. Journal of Materials Chemistry, 2011, 21, 13232.	6.7	39
16	Synthesis, Structure, and Bonding of Open-Shell Sr3In5:Â An Unusual Electron Deficiency in an Indium Network, beyond the Zintl Boundary. Journal of the American Chemical Society, 2001, 123, 4512-4518.	13.7	37
17	Silver-Ion-Exchanged Nanostructured Zeolite X as Antibacterial Agent with Superior Ion Release Kinetics and Efficacy against Methicillin-Resistant Staphylococcus aureus. ACS Applied Materials & Interfaces, 2017, 9, 39271-39282.	8.0	36
18	Spectroelectrochemistry of cytochrome c and azurin immobilized in nanoporous antimony-doped tin oxide. Chemical Communications, 2011, 47, 12367.	4.1	34

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19	Preparation and electrochemical properties of nanoporous transparent antimony-doped tin oxide (ATO) coatings. Journal of Materials Chemistry A, 2013, 1, 699-706.	10.3	33
20	Superior ion release properties and antibacterial efficacy of nanostructured zeolites ion-exchanged with zinc, copper, and iron. RSC Advances, 2018, 8, 37949-37957.	3.6	32
21	Iron oxide-modified nanoporous geopolymers for arsenic removal from ground water. Resource-efficient Technologies, 2015, 1, 19-27.	0.1	27
22	Metathetical Conversion of Nd2O3Nanoparticles into NdS2Polysulfide Nanoparticles at Low Temperatures Using Boron Sulfides. Inorganic Chemistry, 2003, 42, 5798-5800.	4.0	24
23	Hydrogen production from glycerol steam reforming over molybdenaâ€“alumina catalysts. Catalysis Communications, 2016, 77, 83-88.	3.3	23
24	Equipment-Free Deposition of Graphene-Based Molybdenum Oxide Nanohybrid Langmuirâ€“Blodgett Films for Flexible Electrochromic Panel Application. ACS Applied Materials & Interfaces, 2016, 8, 21539-21544.	8.0	22
25	Self-emitting blue and red EuOX (X = F, Cl, Br, I) materials: band structure, charge transfer energy, and emission energy. Physical Chemistry Chemical Physics, 2019, 21, 1737-1749.	2.8	22
26	Low-temperature synthetic method for size-controlled CdSe nanocrystals: utilization of boron selenide. Chemical Communications, 2004, , 2298.	4.1	21
27	Nanoporous Delafossite CuAlO₂ from Inorganic/Polymer Double Gels: A Desirable High-Surface-Area p-Type Transparent Electrode Material. Inorganic Chemistry, 2015, 54, 1100-1108.	4.0	20
28	Two-Dimensional Superdegeneracy and Structureâ^'Magnetism Correlations in Strong Ferromagnet, Mn₂Ga₅. Journal of the American Chemical Society, 2008, 130, 1384-1391.	13.7	19
29	Self-interaction correction in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>LDA</mml:mi><mml:mo>+</mml:mo><mml:mi mathvariant="normal">U</mml:mi></mml:mrow></mml:math>method. Physical Review B, 2007, 76, .	3.2	18
30	Size-Selective Incorporation of DNA Nanocages into Nanoporous Antimony-Doped Tin Oxide Materials. ACS Nano, 2011, 5, 6060-6068.	14.6	18
31	New hydrogen titanium phosphate sulfate electrodes for Li-ion and Na-ion batteries. Journal of Power Sources, 2017, 343, 197-206.	7.8	18
32	Synthesis, Structure, and Bonding of BaTl3:â€‰ An Unusual Competition between Cluster and Classical Bonding in the Thallium Layers. Journal of the American Chemical Society, 2002, 124, 415-420.	13.7	16
33	Photocurrent Generation by Photosynthetic Purple Bacterial Reaction Centers Interfaced with a Porous Antimony-Doped Tin Oxide (ATO) Electrode. ACS Applied Materials & Interfaces, 2016, 8, 25104-25110.	8.0	15
34	Preparation of photostable quantum dot-polystyrene microbeads through covalent organosilane coupling of CdSe@Zns quantum dots. Journal of Materials Science, 2009, 44, 816-820.	3.7	14
35	Unusual Changes in Electronic Band-Edge Energies of the Nanostructured Transparent n-Type Semiconductor Zr-Doped Anatase TiO₂ (Ti_{1â€“x}Zr_xO₂; x < 0.3). Inorganic Chemistry, 2016, 55, 6574-6585.	4.0	14
36	Role of oxygen vacancies and Mn4+/Mn3+ ratio in oxidation and dry reforming over cobalt-manganese spinel oxides. Molecular Catalysis, 2020, 483, 110704.	2.0	14

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37	Remarkable flux effect of Li-codoping on highly enhanced luminescence of orthosilicate Ba₂SiO₄:Eu²⁺ phosphors for NUV-LEDs: autonomous impurity purification by eutectic Li₂CO₃ melts. RSC Advances, 2015, 5, 105339-105346.	3.6	13
38	A highly stable and scalable photosynthetic reaction centerâ€“graphene hybrid electrode system for biomimetic solar energy transduction. Journal of Materials Chemistry A, 2017, 5, 6038-6041.	10.3	13
39	Hydrotalcites with vanadium, effective catalysts for steam reforming of toluene. International Journal of Hydrogen Energy, 2017, 42, 21732-21740.	7.1	13
40	Nature of Stoner condition for metallic ferromagnetism. Journal of Computational Chemistry, 2008, 29, 2172-2176.	3.3	12
41	Preparation of highly porous Î³-alumina via combustion of biorenewable oil. Journal of Materials Chemistry, 2010, 20, 5923.	6.7	12
42	Exploratory Synthesis of Low-Silica Nanozeolites through Geopolymer Chemistry. Crystal Growth and Design, 2019, 19, 1167-1171.	3.0	12
43	Density functional perturbational orbital theory of spin polarization in electronic systems. I. Formalism. Journal of Chemical Physics, 2006, 125, 154105.	3.0	11
44	Concomitant Thionation and Reduction of Graphene Oxide Through Solid/Gas Metathetical Sulfidation Reactions at High Temperatures. Phosphorus, Sulfur and Silicon and the Related Elements, 2014, 189, 721-737.	1.6	11
45	Coarsening and Spinodal Decomposition of Zeolite Linde Type A Precursor Gels Aged at Low Temperatures. Crystal Growth and Design, 2016, 16, 3224-3230.	3.0	11
46	Highly Selective Solid Acid Catalyst H1â^'xTi2(PO4)3â^'x(SO4)x for Non-Oxidative Dehydrogenation of Methanol and Ethanol. Catalysts, 2017, 7, 95.	3.5	11
47	Synthesized Geopolymers Adsorb Bacterial Proteins, Toxins, and Cells. Frontiers in Bioengineering and Biotechnology, 2020, 8, 527.	4.1	10
48	Accessing alkali-free NASICON-type compounds through mixed oxoanion solâ€“gel chemistry: Hydrogen titanium phosphate sulfate, H1â^'Ti2(PO4)3â^'(SO4) (x=0.5â€“1). Journal of Solid State Chemistry, 2016, 242, 116-125.	2.9	9
49	Template-free synthesis and structural evolution of discrete hydroxycancrinite zeolite nanorods from high-concentration hydrogels. Nanoscale, 2017, 9, 18804-18811.	5.6	9
50	Effect of Mo/Ce ratio in Moâ€“Ceâ€“Al catalysts on the hydrogen production by steam reforming of glycerol. Catalysis Science and Technology, 2016, 6, 7902-7912.	4.1	8
51	Ketonic decarboxylation and esterification of propionic acid over beta zeolites. Microporous and Mesoporous Materials, 2021, 310, 110628.	4.4	8
52	Molybdenum Dopped Copper Ferrites as Active Catalysts for Alcohols Oxidative Coupling. Materials, 2019, 12, 1871.	2.9	7
53	Effects of Wax-Impregnated Nanozeolites on Bitumenâ€™s Thermomechanical Properties. ACS Sustainable Chemistry and Engineering, 2020, 8, 15299-15309.	6.7	7
54	Selective oxidation of n-buthanol to butyraldehyde over MnCo₂O₄ spinel oxides. RSC Advances, 2020, 10, 25125-25135.	3.6	7

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55	Interfacing Photosystem I Reaction Centers with a Porous Antimony-Doped Tin Oxide Electrode to Perform Light-Driven Redox Chemistry. ACS Applied Electronic Materials, 2021, 3, 2087-2096.	4.3	7
56	Density functional perturbational orbital theory of spin polarization in electronic systems. II. Transition metal dimer complexes. Journal of Chemical Physics, 2007, 127, 184103.	3.0	6
57	Steam reforming of toluene as model of tar compound over Mo catalysts derived from hydrotalcites. Journal of Saudi Chemical Society, 2019, 23, 916-924.	5.2	6
58	Large Negative Magnetoresistance of the Rare-Earth Transition-Metal Intermetallic Compound PrMnSi2. Chemistry of Materials, 2005, 17, 6338-6341.	6.7	5
59	Enhancing Photocurrent Generation in Photosynthetic Reaction Centerâ€Based Photoelectrochemical Cells with Biomimetic DNA Antenna. ChemSusChem, 2017, 10, 4457-4460.	6.8	5
60	Orbital Interpretation of Kinetic Energy Density and a Direct Space Comparison of Chemical Bonding in Tetrahedral Network Solids. Journal of Physical Chemistry A, 2008, 112, 7705-7716.	2.5	4
61	High-surface area mesoporous carbons from gel templating and inorganic-organic hybrid gel formation. Journal of Solid State Chemistry, 2020, 281, 121040.	2.9	4
62	Observation of Unusual Hysteretic Magnetic Properties of the Rare Earth Intermetallic Compound PrMnSi2:â€‰ Magnetic Susceptibility, Magnetization, Heat Capacity, and Electronic Band Structure Studies. Chemistry of Materials, 2005, 17, 3711-3716.	6.7	3
63	Tracking Single DNA Nanodevices in Hierarchically Meso-Macroporous Antimony-Doped Tin Oxide Demonstrates Finite Confinement. Langmuir, 2017, 33, 6410-6418.	3.5	3
64	Photoelectrochemical Water Oxidation by Cobalt Cytochrome C Integrated-ATO Photoanode. Catalysts, 2021, 11, 626.	3.5	2
65	Understanding Structure-forming Factors and Theory-guided Exploration of Structureâ€“Property Relationships in Intermetallics. , 0, , 183-193.		1
66	Electon-Precise/Deficient La5-xCaxGe4 (3.4 â‰‰ x â‰‰ 3.8) and Ce5-xCaxGe4 (3.0 â‰‰ x â‰‰ 3.3): Probing Low-Valence Electron Concentrations in Metal-Rich Gd5Si4-Type Germanides.. ChemInform, 2006, 37, no.	0.0	1
67	Thickness-Dependent Bioelectrochemical and Energy Applications of Thickness-Controlled Meso-Macroporous Antimony-Doped Tin Oxide. Coatings, 2018, 8, 128.	2.6	1
68	Interfacing Photosystem I Reaction Centers with a Porous Antimony-Doped Tin Oxide Electrode to Perform Light Driven Redox Chemistry. Biophysical Journal, 2019, 116, 443a.	0.5	1
69	Laâ€Hâ€zeolites: efficient catalysts for acetic acid ketonic decarboxylation and esterification. Journal of Chemical Technology and Biotechnology, 2021, 96, 2022-2032.	3.2	1
70	Observation of Unusual Hysteretic Magnetic Properties of the Rare Earth Intermetallic Compound PrMnSi2: Magnetic Susceptibility, Magnetization, Heat Capacity, and Electronic Band Structure Studies.. ChemInform, 2005, 36, no.	0.0	0
71	Optically tandem thin film solar cells. , 2009, , .		0
72	A synthetic strategy of quantum dot-bioconjugate. , 2010, , .		0

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73	Preparation of Nanoporous MgAl2O4 by Combined Utilization of Sol-Gel Process and Combustion of Biorenewable Oil. Materials Research Society Symposia Proceedings, 2011, 1306, 1.	0.1	0
74	The Oxidative Coupling Between Methanol and Ethanol Over Copper Ferrites with Vanadium. Catalysis Letters, 2019, 149, 2043-2052.	2.6	0
75	Heterogeneous catalysts for biomass-derived alcohols and acid conversion. , 2022, , 297-326.		0