Seong-Hyeon Hong

List of Publications by Citations

90 papers	2,551 citations	30 h-index	46 g-index
92 ext. papers	2,941 ext. citations	6.7 avg, IF	5.53 L-index

#	Paper	IF	Citations
90	Scalable synthesis of silicon nanosheets from sand as an anode for Li-ion batteries. *Nanoscale*, **2014**, 6, 4297-302	7.7	131
89	SnO2@Co3O4 hollow nano-spheres for a Li-ion battery anode with extraordinary performance. *Nano Research*, **2014**, 7, 1128-1136	10	112
88	Synthesis of SnO2 nano hollow spheres and their size effects in lithium ion battery anode application. *Journal of Power Sources*, **2013**, 225, 108-112	8.9	100
87	Gas sensing properties of MoO3 nanoparticles synthesized by solvothermal method. *Journal of Nanoparticle Research*, **2010**, 12, 1889-1896	2.3	96
86	Anisotropic Grain Growth in Diphasic-Gel-Derived Titania-Doped Mullite. *Journal of the American Ceramic Society*, **2005**, 81, 1269-1277	3.8	85
85	Influence of Minor Ions on the Stability and Hydration Rates of Dicalcium Silicate. *Journal of the American Ceramic Society*, **2004**, 87, 900-905	3.8	78
84	Calcium Phosphate Bioceramics with Various Porosities and Dissolution Rates. *Journal of the American Ceramic Society*, **2004**, 85, 3129-3131	3.8	71
83	Spark Plasma Sintering (SPS) of NASICON Ceramics. *Journal of the American Ceramic Society*, **2004**, 87, 305-307	3.8	69
82	Spark Plasma Sintering of LiTi2(PO4)3-Based Solid Electrolytes. *Journal of the American Ceramic Society*, **2005**, 88, 1803-1807	3.8	69
81	Anisotropic Abnormal Grain Growth in TiO2/SiO2-Doped Alumina. *Journal of the American Ceramic Society*, **2004**, 83, 2809-2812	3.8	68
80	A nanopore-embedded graphitic carbon shell on silicon anode for high performance lithium ion batteries. *Journal of Materials Chemistry A*, **2018**, 6, 8013-8020	13	64
79	Electric and Dielectric Properties of Nb-Doped CaCu3Ti4O12 Ceramics. *Journal of the American Ceramic Society*, **2007**, 90, 2118-2121	3.8	61
78	Sn4P3 nanospheres as high capacitive and ultra-stable anodes for sodium ion and lithium ion batteries. *Journal of Materials Chemistry A*, **2018**, 6, 17437-17443	13	60
77	Effect of Liquid Content on the Abnormal Grain Growth of Alumina. *Journal of the American Ceramic Society*, **2004**, 84, 1597-1600	3.8	59
76	Meso-porous silicon-coated carbon nanotube as an anode for lithium-ion battery. *Nano Research*, **2016**, 9, 2174-2181	10	54
75	Mullite Transformation Kinetics in P2O5-, TiO2-, and B2O3-Doped Aluminosilicate Gels. *Journal of the American Ceramic Society*, **2005**, 80, 1551-1559	3.8	53
74	H2 and C2H5OH sensing characteristics of mesoporous p-type CuO films prepared via a novel precursor-based ink solution route. *Sensors and Actuators B: Chemical*, **2013**, 178, 395-403	8.5	50

73	An approach to flexible Na-ion batteries with exceptional rate capability and long lifespan using Na2FeP2O7 nanoparticles on porous carbon cloth. *Journal of Materials Chemistry A*, **2017**, 5, 5502-5510	13	49
72	Effect of the Liquid-Forming Additive Content on the Kinetics of Abnormal Grain Growth in Alumina. *Journal of the American Ceramic Society*, **2003**, 86, 1421-1423	3.8	48
71	Effect of the Amine Concentration on Phase Evolution and Densification in Printed Films Using Cu(II) Complex Ink. *Langmuir*, **2015**, 31, 8101-10	4	45
70	Apatite Induction on Ca-Containing Titania Formed by Micro-Arc Oxidation. *Journal of the American Ceramic Society*, **2005**, 88, 2642-2644	3.8	40
69	Revisiting Primary Particles in Layered Lithium Transition-Metal Oxides and Their Impact on Structural Degradation. *Advanced Science*, **2019**, 6, 1800843	13.6	39
68	Highly stable SnO-FeO-C hollow spheres for reversible lithium storage with extremely long cycle life. *Nanoscale*, **2018**, 10, 4370-4376	7.7	38
67	Direct printing synthesis of self-organized copper oxide hollow spheres on a substrate using copper(II) complex ink: gas sensing and photoelectrochemical properties. *Langmuir*, **2014**, 30, 700-9	4	37
66	Stable Silicon Anode for Lithium-Ion Batteries through Covalent Bond Formation with a Binder via Esterification. *ACS Applied Materials & Interfaces*, **2019**, 11, 26753-26763	9.5	36
65	Coarsening Behavior of Tricalcium Silicate (C3S) and Dicalcium Silicate (C2S) Grains Dispersed in a Clinker Melt. *Journal of the American Ceramic Society*, **2004**, 83, 1247-1252	3.8	36
64	p-Type aliovalent Li(I) or Fe(III)-doped CuO hollow spheres self-organized by cationic complex ink printing: Structural and gas sensing characteristics. *Sensors and Actuators B: Chemical*, **2017**, 243, 262-270	8.5	35
63	Reversible storage of Li-ion in nano-Si/SnO2 core□shell nanostructured electrode. *Journal of Materials Chemistry A*, **2013**, 1, 3733	13	33
62	Characterization of Ca2SiO4:Eu2+ Phosphors Synthesized by Polymeric Precursor Process. *Journal of the American Ceramic Society*, **2009**, 92, 2025-2028	3.8	31
61	New Insight into Microstructure Engineering of Ni-Rich Layered Oxide Cathode for High Performance Lithium Ion Batteries. *Advanced Functional Materials*, **2021**, 31, 2010095	15.6	31
60	The Role of Zr Doping in Stabilizing Li[Ni Co Mn]O as a Cathode Material for Lithium-Ion Batteries. *ChemSusChem*, **2019**, 12, 2439-2446	8.3	30
59	Dielectric and magnetic properties in Ta-substituted BiFeO3 ceramics. *Journal of Materials Research* , **2007**, 22, 3397-3403	2.5	30
58	Synthesis and Photoluminescence Properties of Eu3+-Doped Calcium Phosphates. *Journal of the American Ceramic Society*, **2007**, 90, 2795-2798	3.8	30
57	CuBiO Prepared by the Polymerized Complex Method for Gas-Sensing Applications. *ACS Applied Materials & Interfaces*, **2018**, 10, 14901-14913	9.5	29
56	Fabrication of Ga2O3/SnO2 core□shell nanowires and their ethanol gas sensing properties. *Journal of Materials Research*, **2011**, 26, 2322-2327	2.5	29

55	Fabrication of Silicon Nitride Nanoceramics and their Tribological Properties. *Journal of the American Ceramic Society*, **2010**, 93, 1461	3.8	28
54	Photoluminescence Characteristics of Sr3SiO5: Eu2+ Yellow Phosphors Synthesized by Solid-State Method and Pechini Process. *Journal of the Electrochemical Society*, **2011**, 158, J330	3.9	28
53	p-Type CuBi2O4 thin films prepared by flux-mediated one-pot solution process with improved structural and photoelectrochemical characteristics. *Materials Letters*, **2017**, 188, 192-196	3.3	27
52	Uniform Coating of Nanometer-Scale BaTiO3 Layer on Spherical Ni Particles via Hydrothermal Conversion of Ti-Hydroxide. *Journal of the American Ceramic Society*, **2005**, 88, 303-307	3.8	26
51	Synthetic Mechanism Discovery of Monophase Cuprous Oxide for Record High Photoelectrochemical Conversion of CO to Methanol in Water. *ACS Nano*, **2018**, 12, 8187-8196	16.7	24
50	Substantially improved room temperature NO2 sensing in 2-dimensional SnS2 nanoflowers enabled by visible light illumination. *Journal of Materials Chemistry A*, **2021**, 9, 11168-11178	13	24
49	Microscopic Evidence for Strong Interaction between Pd and Graphene Oxide that Results in Metal-Decoration-Induced Reduction of Graphene Oxide. *Advanced Materials*, **2017**, 29, 1605929	24	23
48	Alternative Explanation for the Role of Magnesia in the Sintering of Alumina Containing Small Amounts of a Liquid Phase. *Journal of the American Ceramic Society*, **2003**, 86, 634-39	3.8	21
47	An in situ formed graphene oxide–polyacrylic acid composite cage on silicon microparticles for lithium ion batteries via an esterification reaction. *Journal of Materials Chemistry A*, **2019**, 7, 12763-12772	13	20
46	Tribological Properties of Si3N4/SiC Nano–Nano Composite Ceramics. *Journal of the American Ceramic Society*, **2011**, 94, 3683-3685	3.8	20
45	Blue-emitting AlN:Eu2+ Powder Phosphor Prepared by Spark Plasma Sintering. *Journal of the American Ceramic Society*, **2010**, 93, 356-358	3.8	20
44	CO gas sensing properties in Pd-added ZnO sensors. *Journal of Electroceramics*, **2009**, 23, 196-199	1.5	20
43	Coating of TiO2 nanolayer on spherical Ni particles using a novel sol-gel route. *Journal of Materials Research*, **2004**, 19, 1669-1675	2.5	18
42	Enhanced Lithium Storage in Reduced Graphene Oxide-supported M-phase Vanadium(IV) Dioxide Nanoparticles. *Scientific Reports*, **2016**, 6, 30202	4.9	17
41	V4P7@C nanocomposite as a high performance anode material for lithium-ion batteries. *Journal of Power Sources*, **2018**, 400, 204-211	8.9	17
40	Superior sodium storage performance of reduced graphene oxide-supported NaFe(PO)/C nanocomposites. *Chemical Communications*, **2017**, 53, 9316-9319	5.8	16
39	Effect of Surface Impurities on the Microstructure Development during Sintering of Alumina. *Journal of the American Ceramic Society*, **2004**, 84, 1386-1388	3.8	16
38	Mesoporous Nano-Si Anode for Li-ion Batteries Produced by Magnesio-Mechanochemical Reduction of Amorphous SiO2. *Energy Technology*, **2013**, 1, 327-331	3.5	15

37	Manganese Tetraphosphide (MnP4) as a High Capacity Anode for Lithium-Ion and Sodium-Ion Batteries. *Advanced Energy Materials*, **2021**, 11, 2003609	21.8	15
36	TiO2@SnO2@TiO2 triple-shell nanotube anode for high-performance lithium-ion batteries. *Journal of Solid State Electrochemistry*, **2017**, 21, 2365-2371	2.6	14
35	A P2-type Na(NiCoMn)O cathode with excellent cyclability and rate capability for sodium ion batteries. *Chemical Communications*, **2019**, 55, 11575-11578	5.8	14
34	Effect of ultra-thin SnO2 coating on Pt catalyst for energy applications. *International Journal of Precision Engineering and Manufacturing*, **2016**, 17, 691-694	1.7	13
33	Tunable conductivity at LaAlO3/SrxCa1−xTiO3 (0 ≤ x ≤ 1) heterointerfaces. *Applied Physics Letters*, **2013**, 102, 012903	3.4	13
32	Photoelectrochemical hydrogen production at neutral pH phosphate buffer solution using TiO2 passivated InAs Nanowire/p-Si heterostructure photocathode. *Chemical Engineering Journal*, **2020**, 392, 123688	14.7	13
31	Synthesis and hydration behavior of calcium zirconium aluminate (Ca7ZrAl6O18) cement. *Cement and Concrete Research*, **2014**, 56, 106-111	10.3	11
30	Nanoscale ZnO and Al-Doped ZnO Coatings on ZnS:Ag Phosphors and their Cathodoluminescent Properties. *Journal of the American Ceramic Society*, **2008**, 91, 451-455	3.8	11
29	Superior electrochemical sodium storage of VP nanoparticles as an anode for rechargeable sodium-ion batteries. *Chemical Communications*, **2019**, 55, 3207-3210	5.8	11
28	Mesoporous Si-Cu nanocomposite anode for a lithium ion battery produced by magnesiothermic reduction and electroless deposition. *Nanotechnology*, **2019**, 30, 405401	3.4	10
27	Preparation of SnO2 whiskers via the decomposition of tin oxalate. *Journal of Electroceramics*, **2006**, 17, 895-898	1.5	10
26	Challenges and recent progress in LiNixCoyMn1−x−yO2 (NCM) cathodes for lithium ion batteries. *Journal of the Korean Ceramic Society*, **2021**, 58, 1-27	2.2	10
25	Giant Electroresistive Ferroelectric Diode on 2DEG. *Scientific Reports*, **2015**, 5, 10548	4.9	9
24	Electrical Transport and Thermoelectric Properties of SnSe-SnTe Solid Solution. *Materials*, **2019**, 12,	3.5	9
23	Revisiting the role of Zr doping in Ni-rich layered cathodes for lithium-ion batteries. *Journal of Materials Chemistry A*, **2021**, 9, 17415-17424	13	9
22	Solid solution phosphide (MnFeP) as a tunable conversion/alloying hybrid anode for lithium-ion batteries. *Nanoscale*, **2019**, 11, 13494-13501	7.7	8
21	A MnVO/graphene nanocomposite as an efficient electrocatalyst for the oxygen evolution reaction. *Nanoscale*, **2020**, 12, 16028-16033	7.7	8
20	Texture Evolution of Abnormal Grains with Post-Deposition Annealing Temperature in Nanocrystalline Cu Thin Films. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 152-162	2.3	8

19	Lateral epitaxial growth of faceted SnO2 nanowires with self-alignment. *CrystEngComm*, **2014**, 16, 9340-9344	3.3	7
18	Effect of Al Doping on the Electric and Dielectric Properties of CaCu3Ti4O12. *Journal of the American Ceramic Society*, **2007**, 90, 070922001308001-???	3.8	7
17	Synthesis of well-aligned SnO2 nanowires with branches on r-cut sapphire substrate. *CrystEngComm*, **2012**, 14, 1545	3.3	5
16	Synthesis and Hydration Characteristics of Alinite Cement. *Journal of the American Ceramic Society*, **2002**, 85, 1941-1946	3.8	4
15	Interfacial precipitation in titania-doped diphasic mullite gels. *Journal of Materials Research*, **1998**, 13, 974-978	2.5	4
14	Electrochemical Properties and Reaction Mechanism of NiTi2S4 Ternary Metal Sulfide as an Anode for Lithium Ion Battery. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 9680-9688	8.3	4
13	Stepwise Dopant Selection Process for High-Nickel Layered Oxide Cathodes. *Advanced Energy Materials*,2200136	21.8	4
12	Novel Calcium Zirconate Silicate Cement Biomineralize and Seal Root Canals. *Materials*, **2018**, 11,	3.5	3
11	Hetero-epitaxial growth of vertically-aligned TiO2 nanorods on an m-cut sapphire substrate with an (001) SnO2 buffer layer. *CrystEngComm*, **2012**, 14, 4963	3.3	3
10	Visible Light Driven Ultrasensitive and Selective NO Detection in Tin Oxide Nanoparticles with Sulfur Doping Assisted by l-Cysteine.. *Small*, **2022**, e2106613	11	2
9	A Novel Solid Solution Mn1-xVxP Anode with Tunable Alloying/Insertion Hybrid Electrochemical Reaction for High Performance Lithium Ion Batteries. *Energy Storage Materials*, **2021**, 41, 310-320	19.4	2
8	Graphene Oxide: Microscopic Evidence for Strong Interaction between Pd and Graphene Oxide that Results in Metal-Decoration-Induced Reduction of Graphene Oxide (Adv. Mater. 15/2017). *Advanced Materials*, **2017**, 29,	24	1
7	Epitaxial recrystallization and luminescence of CaAl2O4:Eu2+ thin films prepared on sapphire substrates. *Journal of Electroceramics*, **2013**, 30, 36-40	1.5	1
6	NiP2/C nanocomposite as a high performance anode for sodium ion batteries. *Electrochimica Acta*, **2021**, 403, 139686	6.7	1
5	Hydration behavior and radiopacity of strontium substituted Ca3SiO5 cement. *Journal of the Korean Ceramic Society*, **2021**, 58, 330-336	2.2	1
4	Microstructure Modification of Liquid Phase Sintered FeNiBC Alloys for Improved Mechanical Properties. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2021**, 52, 4395-4401	2.3	0
3	Effect of Co-Precipitation on the Low-Temperature Sintering of Biphasic Calcium Phosphate. *Journal of the American Ceramic Society*, **2006**, 89, 060427083300032-???	3.8	
2	Characteristics of Liquid Penetration into Undoped and Magnesia-Doped Alumina. *Journal of the American Ceramic Society*, **2003**, 86, 2206-2208	3.8	

List of Publications

1	Effects of sintering conditions on the microstructure and mechanical properties of SiC prepared using powders recovered from kerf loss sludge. *Bulletin of Materials Science*, **2018**, 41, 1	1.7