

# Sung Joo Kim

## List of Publications by Year in descending order

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49  
papers

2,396  
citations

257450

24  
h-index

243625

44  
g-index

51  
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51  
docs citations

51  
times ranked

4154  
citing authors

#	ARTICLE	IF	CITATIONS
1	Coupling structural evolution and oxygen-redox electrochemistry in layered transition metal oxides. <i>Nature Materials</i> , 2022, 21, 664-672.	27.5	89
2	Microscopic Insight into Tin Nanoparticle Magnesianation. <i>ACS Applied Energy Materials</i> , 2022, 5, 7944-7949.	5.1	2
3	Impact of sodium vanadium oxide (NaV <sub>3</sub> O <sub>8</sub> , NVO) material synthesis conditions on charge storage mechanism in Zn-ion aqueous batteries. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 8607-8617.	2.8	10
4	Unravelling high volumetric capacity of Co <sub>3</sub> O <sub>4</sub> nanograin-interconnected secondary particles for lithium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6242-6251.	10.3	18
5	Toward the Understanding of the Reaction Mechanism of Zn/MnO <sub>2</sub> Batteries Using Non-alkaline Aqueous Electrolytes. <i>Chemistry of Materials</i> , 2021, 33, 7283-7289.	6.7	27
6	Nanoscale Phenomena in Lithium-Ion Batteries. <i>Chemical Reviews</i> , 2020, 120, 6684-6737.	47.7	142
7	Quantitative temporally and spatially resolved X-ray fluorescence microprobe characterization of the manganese dissolution-deposition mechanism in aqueous Zn/±-MnO <sub>2</sub> batteries. <i>Energy and Environmental Science</i> , 2020, 13, 4322-4333.	30.8	72
8	The Effects of Vanadium Substitution on One-dimensional Tunnel Structures of Cryptomelane: Combined TEM and DFT Study. <i>Microscopy and Microanalysis</i> , 2020, 26, 3162-3164.	0.4	0
9	Unraveling the Dissolution-Mediated Reaction Mechanism of ±-MnO <sub>2</sub> Cathodes for Aqueous Zn-Ion Batteries. <i>Small</i> , 2020, 16, e2005406.	10.0	58
10	New Insights into the Reaction Mechanism of Sodium Vanadate for an Aqueous Zn Ion Battery. <i>Chemistry of Materials</i> , 2020, 32, 2053-2060.	6.7	37
11	Anchored Mediator Enabling Shuttle-Free Redox Mediation in Lithium-Oxygen Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 5376-5380.	13.8	31
12	Voltage decay and redox asymmetry mitigation by reversible cation migration in lithium-rich layered oxide electrodes. <i>Nature Materials</i> , 2020, 19, 419-427.	27.5	328
13	Anchored Mediator Enabling Shuttle-Free Redox Mediation in Lithium-Oxygen Batteries. <i>Angewandte Chemie</i> , 2020, 132, 5414-5418.	2.0	10
14	Visualization of regulated nucleation and growth of lithium sulfides for high energy lithium sulfur batteries. <i>Energy and Environmental Science</i> , 2019, 12, 3144-3155.	30.8	104
15	Facile <i>in situ</i> Lithiation and Sodiation Observation in TEM Employing MF (M=Li, Na). <i>Microscopy and Microanalysis</i> , 2019, 25, 1860-1861.	0.4	1
16	Sodium Ion Batteries: Pulverization-Tolerance and Capacity Recovery of Copper Sulfide for High-Performance Sodium Storage ( <i>Adv. Sci.</i> 12/2019). <i>Advanced Science</i> , 2019, 6, 1970074.	11.2	0
17	Tailoring sodium intercalation in graphite for high energy and power sodium ion batteries. <i>Nature Communications</i> , 2019, 10, 2598.	12.8	195
18	Pulverization-Tolerance and Capacity Recovery of Copper Sulfide for High-Performance Sodium Storage. <i>Advanced Science</i> , 2019, 6, 1900264.	11.2	39

#	ARTICLE	IF	CITATIONS
19	Toward a low-cost high-voltage sodium aqueous rechargeable battery. <i>Materials Today</i> , 2019, 29, 26-36.	14.2	156
20	Graphene Liquid Cell Electron Microscopy of Initial Lithiation in Co <sub>3</sub> O <sub>4</sub> Nanoparticles. <i>ACS Omega</i> , 2019, 4, 6784-6788.	3.5	11
21	One-step synthesis of Pt/a-CoOx core/shell nanocomposites. <i>Applied Microscopy</i> , 2019, 49, 12.	1.4	0
22	Atomic visualization of a non-equilibrium sodiation pathway in copper sulfide. <i>Nature Communications</i> , 2018, 9, 922.	12.8	71
23	Super-Ionic Conduction in Solid-State Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub> -Type Sulfide Electrolytes. <i>Chemistry of Materials</i> , 2018, 30, 8764-8770.	6.7	43
24	Accordion Strain Accommodation Mechanism within the Epitaxially Constrained Electrode. <i>ACS Energy Letters</i> , 2018, 3, 1848-1853.	17.4	5
25	Tunable, Endotaxial Inclusion of Crystalline Pt-Based Nanoparticles Inside a High-Quality Bronze TiO <sub>2</sub> Matrix. <i>Chemistry of Materials</i> , 2017, 29, 2016-2023.	6.7	2
26	One-Structure-Based Barrier Film for Simultaneous Exclusion of Water and Ultraviolet Light. <i>Advanced Optical Materials</i> , 2017, 5, 1600888.	7.3	5
27	Direct Realization of Complete Conversion and Agglomeration Dynamics of SnO <sub>2</sub> Nanoparticles in Liquid Electrolyte. <i>ACS Omega</i> , 2017, 2, 6329-6336.	3.5	26
28	Hollow Ag <sub>2</sub> S nanosphere formation via electron beam-assisted oxidative etching of Ag nanoparticles. <i>Chemical Communications</i> , 2017, 53, 11122-11125.	4.1	8
29	In Situ Transmission Electron Microscopy Graphene Liquid Cell on Chemical Sodiation of Nickel Oxide Nanoparticle. <i>Microscopy and Microanalysis</i> , 2017, 23, 204-205.	0.4	1
30	Real Time Observation of Initial Conversion Reaction of Co <sub>3</sub> O <sub>4</sub> Nanoparticles Using Graphene Liquid Cell Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2017, 23, 1968-1969.	0.4	0
31	<i>In Situ</i> High-Resolution Transmission Electron Microscopy (TEM) Observation of Sn Nanoparticles on SnO <sub>2</sub> Nanotubes Under Lithiation. <i>Microscopy and Microanalysis</i> , 2017, 23, 1107-1115.	0.4	21
32	In Situ TEM Observation on the Agglomeration of Nanoparticles in the Interface of SnO <sub>2</sub> . <i>Microscopy and Microanalysis</i> , 2017, 23, 2054-2055.	0.4	2
33	Supercapacitors: Solid-State Dual Function Electrochemical Devices: Energy Storage and Light-Emitting Applications ( <i>Adv. Energy Mater.</i> 19/2016). <i>Advanced Energy Materials</i> , 2016, 6, .	19.5	1
34	Solid-State Dual Function Electrochemical Devices: Energy Storage and Light-Emitting Applications. <i>Advanced Energy Materials</i> , 2016, 6, 1600651.	19.5	27
35	Case Examination on Volume Expansion of Crystalline Si Nanoparticles under Sodiation: In Situ TEM Study Using Graphene Liquid Cells. <i>Microscopy and Microanalysis</i> , 2016, 22, 1370-1371.	0.4	0
36	Atomic structure of defects and interfaces in TiO <sub>2</sub> -B and Ca:TiO <sub>2</sub> -B (CaTi <sub>5</sub> O <sub>11</sub> ) films grown on SrTiO <sub>3</sub> . <i>CrystEngComm</i> , 2015, 17, 4309-4315.	2.6	6

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37	p-Si/SnO <sub>2</sub> /Fe <sub>2</sub> O <sub>3</sub> Core/Shell/Shell Nanowire Photocathodes for Neutral pH Water Splitting. <i>Advanced Functional Materials</i> , 2015, 25, 2609-2615.	14.9	47
38	Creating high quality Ca:TiO <sub>2</sub> -B (CaTi <sub>5</sub> O <sub>11</sub> ) and TiO <sub>2</sub> -B epitaxial thin films by pulsed laser deposition. <i>Chemical Communications</i> , 2015, 51, 8584-8587.	4.1	15
39	Lithiation of Rutile TiO <sub>2</sub> -Coated Si NWs Observed by in Situ TEM. <i>Chemistry of Materials</i> , 2015, 27, 6929-6933.	6.7	17
40	In-situ TEM Observation of Electrochemical Cycling of a Si/TiO <sub>2</sub> Composite NW. <i>Microscopy and Microanalysis</i> , 2014, 20, 454-455.	0.4	0
41	Plasmonic tuning of aluminum doped zinc oxide nanostructures by atomic layer deposition. <i>Physica Status Solidi - Rapid Research Letters</i> , 2014, 8, 948-952.	2.4	25
42	Water-Free Titania-Bronze Thin Films with Superfast Lithium-Ion Transport. <i>Advanced Materials</i> , 2014, 26, 7365-7370.	21.0	31
43	In situ TEM observation of the structural transformation of rutile TiO <sub>2</sub> nanowire during electrochemical lithiation. <i>Chemical Communications</i> , 2014, 50, 9932.	4.1	34
44	Room-Temperature Polar Ferromagnet ScFeO <sub>3</sub> Transformed from a High-Pressure Orthorhombic Perovskite Phase. <i>Journal of the American Chemical Society</i> , 2014, 136, 15291-15299.	13.7	78
45	ZnO/CuO Heterojunction Branched Nanowires for Photoelectrochemical Hydrogen Generation. <i>ACS Nano</i> , 2013, 7, 11112-11120.	14.6	275
46	Enhancing thermopower and hole mobility in bulk p-type half-Heuslers using full-Heusler nanostructures. <i>Nanoscale</i> , 2013, 5, 9419.	5.6	44
47	Three-dimensional ZnO/Si broom-like nanowire heterostructures as photoelectrochemical anodes for solar energy conversion. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 2561-2568.	1.8	9
48	Analysis of defect-free GaSb/GaAs(001) quantum dots grown on the Sb-terminated (2×8) surface. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2012, 30, .	1.2	14
49	Experimental evidence of ferroelectric negative capacitance in nanoscale heterostructures. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	256