Sung-Wook Kim

List of Publications by Year in Descending Order

76 papers	7,493 citations	34 h-index	78 g-index
78 ext. papers	8,083 ext. citations	7 avg, IF	5.87 L-index

#	Paper	IF	Citations
76	Dissolution Behavior of Simulated Spent Nuclear Fuel in LiCl-KCl-UCl3 Molten Salt. *Science and Technology of Nuclear Installations*, **2021**, 2021, 1-6	0.6	0
75	Chlorination technique for decontamination of radioactive concrete waste contaminated by Sr. *Journal of Radioanalytical and Nuclear Chemistry*, **2021**, 328, 195-203	1.5	1
74	Cesium Removal from Nonexpandable Illite Clay by Chloride Salt Treatment. *ACS Omega*, **2021**, 6, 17923-17930	3.7	
73	Dilution of Li-Li2O in a metallic fuel produced through oxide reduction using ZrO2-assisted rinsing in molten LiCl. *Journal of Nuclear Materials*, **2020**, 533, 152107	3.3	2
72	Electrochemical Behavior of CsI in LiCl Molten Salt. *Science and Technology of Nuclear Installations*, **2020**, 2020, 1-6	0.6	
71	Employing high-temperature gas flux in a residual salt separation technique for pyroprocessing. *Nuclear Engineering and Technology*, **2019**, 51, 1866-1870	2.6	1
70	Electrolytic behavior of SrCl2 and BaCl2 in LiCl molten salt during oxide reduction in pyroprocessing. *Journal of Radioanalytical and Nuclear Chemistry*, **2019**, 321, 361-365	1.5	3
69	Evaluation of Pt anode stability in repeated electrochemical oxide reduction reactions for pyroprocessing. *Journal of Radioanalytical and Nuclear Chemistry*, **2018**, 316, 1053-1058	1.5	7
68	Residual salt separation technique using centrifugal force for pyroprocessing. *Nuclear Engineering and Technology*, **2018**, 50, 1184-1189	2.6	2
67	Chemical behavior of grey phases in LiCl molten salt for oxide reduction in pyroprocessing. *Journal of Radioanalytical and Nuclear Chemistry*, **2018**, 318, 1923-1930	1.5	3
66	Thermodynamic investigation on the behavior of rare earth oxides during electrolytic reduction process. *Journal of Radioanalytical and Nuclear Chemistry*, **2018**, 317, 1089-1093	1.5	1
65	Electrochemical properties of noble metal anodes for electrolytic reduction of uranium oxide. *Journal of Radioanalytical and Nuclear Chemistry*, **2017**, 311, 809-814	1.5	8
64	Hot corrosion behavior of magnesia-stabilized ceramic material in a lithium molten salt. *Journal of Nuclear Materials*, **2017**, 490, 85-93	3.3	7
63	Electrolytic reduction runs of 0.6 kg scale-simulated oxide fuel in a Li2O-LiCl molten salt using metal anode shrouds. *Journal of Nuclear Materials*, **2017**, 489, 1-8	3.3	15
62	Reoxidation of uranium metal immersed in a Li2O-LiCl molten salt after electrolytic reduction of uranium oxide. *Journal of Nuclear Materials*, **2017**, 485, 90-97	3.3	12
61	In Situ Tracking Kinetic Pathways of Li/Na Substitution during Ion-Exchange Synthesis of LiNaVOPOF. *Journal of the American Chemical Society*, **2017**, 139, 12504-12516	16.4	18
60	A preliminary study of pilot-scale electrolytic reduction of UO2 using a graphite anode. *Nuclear Engineering and Technology*, **2017**, 49, 1451-1456	2.6	10

59	Electrolytic reduction rate of porous UO2 pellets. *Korean Journal of Chemical Engineering*, **2016**, 33, 2235-2239	2.2	6
58	Chemical Stability of Conductive Ceramic Anodes in LiCl□Li2O Molten Salt for Electrolytic Reduction in Pyroprocessing. *Nuclear Engineering and Technology*, **2016**, 48, 997-1001	2.6	6
57	Carbon anode with repeatable use of LiCl molten salt for electrolytic reduction in pyroprocessing. *Journal of Radioanalytical and Nuclear Chemistry*, **2016**, 310, 463-467	1.5	18
56	Electrolytic reduction of a simulated oxide spent fuel and the fates of representative elements in a Li2O-LiCl molten salt. *Journal of Nuclear Materials*, **2016**, 477, 59-66	3.3	20
55	Stability of yttria-stabilized zirconia during pyroprocessing tests. *Journal of Nuclear Materials*, **2016**, 475, 57-61	3.3	4
54	Distillation characteristics of LiCl□Li2O electrolyte for UO2 electrolytic reduction process. *Journal of Radioanalytical and Nuclear Chemistry*, **2016**, 310, 1165-1171	1.5	7
53	A conductive oxide as an O2 evolution anode for the electrolytic reduction of metal oxides. *Electrochemistry Communications*, **2015**, 55, 14-17	5.1	16
52	Production of uranium metal via electrolytic reduction of uranium oxide in molten LiCl and salt distillation. *Journal of Radioanalytical and Nuclear Chemistry*, **2015**, 304, 535-546	1.5	15
51	Ternary metal fluorides as high-energy cathodes with low cycling hysteresis. *Nature Communications*, **2015**, 6, 6668	17.4	104
50	Structure Stabilization by Mixed Anions in Oxyfluoride Cathodes for High-Energy Lithium Batteries. *ACS Nano*, **2015**, 9, 10076-84	16.7	47
49	Use of a single fuel containment material during pyroprocessing tests. *Annals of Nuclear Energy*, **2015**, 76, 305-314	1.7	10
48	Electrochemical behavior of liquid Sb anode system for electrolytic reduction of UO2. *Journal of Radioanalytical and Nuclear Chemistry*, **2015**, 303, 1041-1046	1.5	6
47	Electrolytic Reduction of 1 kg-UO2in Li2O-LiCl Molten Salt using Porous Anode Shroud. *Journal of the Korean Electrochemical Society*, **2015**, 18, 121-129		1
46	TiN Anode for Electrolytic Reduction of UO2 in Pyroprocessing. *Journal of Nuclear Fuel Cycle and Waste Technology*, **2015**, 13, 229-233	0.3	4
45	Electrolytic Reduction Characteristics of Titanium Oxides in a LiCl-Li2O Molten Salt. *Journal of the Korean Electrochemical Society*, **2015**, 18, 156-160		
44	Ion-exchange mechanism of layered transition-metal oxides: case study of LiNi(0.5)Mn(0.5)O□ *Inorganic Chemistry*, **2014**, 53, 8083-7	5.1	34
43	Aqueous rechargeable Li and Na ion batteries. *Chemical Reviews*, **2014**, 114, 11788-827	68.1	929
42	Probing the Local Chemical and Structural Ordering of Iron Oxyfluoride. *Microscopy and Microanalysis*, **2014**, 20, 430-431	0.5	

41	Mechanism of Co3O4/graphene catalytic activity in Li-O2 batteries using carbonate based electrolytes. *Electrochimica Acta*, **2013**, 90, 63-70	6.7	44
40	Scalable functionalized graphene nano-platelets as tunable cathodes for high-performance lithium rechargeable batteries. *Scientific Reports*, **2013**, 3, 1506	4.9	79
39	Factors that Affect the Phase Behavior of Multi-Component Olivine (LiFexMnyCo1-x-yPO4; 0 . *Journal of the Electrochemical Society*, **2013**, 160, A444-A448	3.9	15
38	Critical Role of Oxygen Evolved from Layered Li-Excess Metal Oxides in Lithium Rechargeable Batteries. *Chemistry of Materials*, **2012**, 24, 2692-2697	9.6	213
37	Energy storage in composites of a redox couple host and a lithium ion host. *Nano Today*, **2012**, 7, 168-173	17.9	38
36	Synthesis of graphene-wrapped CuO hybrid materials by CO2 mineralization. *Green Chemistry*, **2012** , 14, 2391	10	47
35	Energy storage in in vivo synthesizable biominerals. *RSC Advances*, **2012**, 2, 5499	3.7	4
34	New iron-based mixed-polyanion cathodes for lithium and sodium rechargeable batteries: combined first principles calculations and experimental study. *Journal of the American Chemical Society*, **2012**, 134, 10369-72	16.4	323
33	A combined first principles and experimental study on Na3V2(PO4)2F3 for rechargeable Na batteries. *Journal of Materials Chemistry*, **2012**, 22, 20535		253
32	Electrode Materials for Rechargeable Sodium-Ion Batteries: Potential Alternatives to Current Lithium-Ion Batteries. *Advanced Energy Materials*, **2012**, 2, 710-721	21.8	2590
31	A comparative study on Na2MnPO4F and Li2MnPO4F for rechargeable battery cathodes. *Physical Chemistry Chemical Physics*, **2012**, 14, 3299-303	3.6	87
30	Nano-graphite platelet loaded with LiFePO4 nanoparticles used as the cathode in a high performance Li-ion battery. *Carbon*, **2012**, 50, 1966-1971	10.4	30
29	First-principles study on lithium metal borate cathodes for lithium rechargeable batteries. *Physical Review B*, **2011**, 83,	3.3	61
28	The Effect of Particle Size on Phase Stability of the Delithiated LixMnPO4. *Journal of the Electrochemical Society*, **2011**, 159, A55-A59	3.9	15
27	Invited paper: Preparation and electrochemical characterization of doped spinel LiMn1.88Ge0.1Li0.02O4 cathode material. *Electronic Materials Letters*, **2011**, 7, 105-108	2.9	9
26	Electrochemical performance and ex situ analysis of ZnMn2O4 nanowires as anode materials for lithium rechargeable batteries. *Nano Research*, **2011**, 4, 505-510	10	154
25	Graphene-Based Hybrid Electrode Material for High-Power Lithium-Ion Batteries. *Journal of the Electrochemical Society*, **2011**, 158, A930	3.9	43
24	Highly reversible Co3O4/graphene hybrid anode for lithium rechargeable batteries. *Carbon*, **2011**, 49, 326-332	10.4	327

23	Mg and Fe Co-doped Mn Based Olivine Cathode Material for High Power Capability. *Journal of the Electrochemical Society*, **2011**, 158, A250	3.9	46
22	Electrochemical and ex-situ analysis on manganese oxide/graphene hybrid anode for lithium rechargeable batteries. *Journal of Materials Research*, **2011**, 26, 2665-2671	2.5	31
21	Synthesis of Multicomponent Olivine by a Novel Mixed Transition Metal Oxalate Coprecipitation Method and Electrochemical Characterization. *Chemistry of Materials*, **2010**, 22, 2573-2581	9.6	59
20	Mn based olivine electrode material with high power and energy. *Chemical Communications*, **2010**, 46, 1305-7	5.8	73
19	Multicomponent Olivine Cathode for Lithium Rechargeable Batteries: A First-Principles Study. *Chemistry of Materials*, **2010**, 22, 518-523	9.6	81
18	Synthesis of diphenylalanine/cobalt oxide hybrid nanowires and their application to energy storage. *ACS Nano*, **2010**, 4, 159-64	16.7	135
17	Structural evolution of layered Li1.2Ni0.2Mn0.6O2 upon electrochemical cycling in a Li rechargeable battery. *Journal of Materials Chemistry*, **2010**, 20, 10179		184
16	Carbon nanotube-amorphous FePO4 core-shell nanowires as cathode material for Li ion batteries. *Chemical Communications*, **2010**, 46, 7409-11	5.8	94
15	SnO2/graphene composite with high lithium storage capability for lithium rechargeable batteries. *Nano Research*, **2010**, 3, 813-821	10	171
14	Mineralization of self-assembled peptide nanofibers for rechargeable lithium ion batteries. *Advanced Materials*, **2010**, 22, 5537-41	24	115
13	Fabrication of FeF3 Nanoflowers on CNT branches and their application to high power lithium rechargeable batteries. *Advanced Materials*, **2010**, 22, 5260-4	24	242
12	Two Step Annealing of Iridium Thin Films prepared by Plasma-Enhanced Atomic Layer Deposition. *ECS Transactions*, **2009**, 16, 309-314	1	6
11	Combined First-Principle Calculations and Experimental Study on Multi-Component Olivine Cathode for Lithium Rechargeable Batteries. *Advanced Functional Materials*, **2009**, 19, 3285-3292	15.6	112
10	Comparative study of Li(Li1/3Ti5/3)O4 and Li(Ni1/2Li2x/3Tix/3)Ti3/2O4 (x=1/3) anodes for Li rechargeable batteries. *Electrochimica Acta*, **2009**, 54, 5914-5918	6.7	31
9	Fabrication and electrochemical characterization of TiO2 three-dimensional nanonetwork based on peptide assembly. *ACS Nano*, **2009**, 3, 1085-90	16.7	183
8	Highly entangled hollow TiO2nanoribbons templating diphenylalanine assembly. *Journal of Materials Chemistry*, **2009**, 19, 3512		49
7	Phase Stability Study of Li[sub 1]MnPO[sub 4] (0) Cathode for Li Rechargeable Battery. *Journal of the Electrochemical Society*, **2009**, 156, A635	3.9	106
6	Phase control of iridium and iridium oxide thin films in atomic layer deposition. *Journal of Applied Physics*, **2008**, 103, 023517	2.5	34

5	Improvement of Copper Diffusion Barrier Properties of Tantalum Nitride Films by Incorporating Ruthenium Using PEALD. *Journal of the Electrochemical Society*, **2008**, 155, H885	3.9	34
4	Improvement of Morphological Stability of PEALD-Iridium Thin Films by Adopting Two-Step Annealing Process. *Electrochemical and Solid-State Letters*, **2008**, 11, H303		17
3	Improvement of the Morphological Stability by Stacking RuO[sub 2] on Ru Thin Films with Atomic Layer Deposition. *Journal of the Electrochemical Society*, **2007**, 154, H773	3.9	40
2	Recycling of Li(Ni,Co,Mn)O2 via a chlorination technique. *Korean Journal of Chemical Engineering*,1	2.8	1
1	Chlorination behavior of LiCoO2. *Korean Journal of Chemical Engineering*,1	2.8	0