Sung-Wook Kim

List of Publications by Year
in descending order

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77 papers	8,667 citations	109264 35 h-index	85498 71 g-index
78 all docs	78 docs citations	78 times ranked	10454 citing authors

#	Article	IF	Citations
1	Chlorination technique for decontamination of radioactive concrete waste contaminated by Sr. Journal of Radioanalytical and Nuclear Chemistry, 2021, 328, 195-203.	0.7	2
2	Cesium Removal from Nonexpandable Illite Clay by Chloride Salt Treatment. ACS Omega, 2021, 6, 17923-17930.	1.6	1
3	Dissolution Behavior of Simulated Spent Nuclear Fuel in LiCl-KCl-UCl3 Molten Salt. Science and Technology of Nuclear Installations, 2021, 2021, 1-6.	0.3	1
4	Electrochemical Behavior of CsI in LiCl Molten Salt. Science and Technology of Nuclear Installations, 2020, 2020, 1-6.	0.3	0
5	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.	1.3	3
6	Employing high-temperature gas flux in a residual salt separation technique for pyroprocessing. Nuclear Engineering and Technology, 2019, 51, 1866-1870.	1.1	2
7	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.	0.7	3
8	Evaluation of Pt anode stability in repeated electrochemical oxide reduction reactions for pyroprocessing. Journal of Radioanalytical and Nuclear Chemistry, 2018, 316, 1053-1058.	0.7	8
9	Chemical behavior of grey phases in LiCl molten salt for oxide reduction in pyroprocessing. Journal of Radioanalytical and Nuclear Chemistry, 2018, 318, 1923-1930.	0.7	5
10	Thermodynamic investigation on the behavior of rare earth oxides during electrolytic reduction process. Journal of Radioanalytical and Nuclear Chemistry, 2018, 317, 1089-1093.	0.7	1
11	Residual salt separation technique using centrifugal force for pyroprocessing. Nuclear Engineering and Technology, 2018, 50, 1184-1189.	1.1	2
12	Electrochemical properties of noble metal anodes for electrolytic reduction of uranium oxide. Journal of Radioanalytical and Nuclear Chemistry, 2017, 311, 809-814.	0.7	11
13	Hot corrosion behavior of magnesia-stabilized ceramic material in a lithium molten salt. Journal of Nuclear Materials, 2017, 490, 85-93.	1.3	10
14	Electrolytic reduction runs of 0.6Âkg scale-simulated oxide fuel in a Li 2 O-LiCl molten salt using metal anode shrouds. Journal of Nuclear Materials, 2017, 489, 1-8.	1.3	22
15	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.	1.3	18
16	In Situ Tracking Kinetic Pathways of Li⁺/Na⁺ Substitution during Ion-Exchange Synthesis of Li_xNa_{1.5â€“x}VOPO₄F_{0.5}. Journal of the American Chemical Society, 2017, 139, 12504-12516.	6.6	28
17	A preliminary study of pilot-scale electrolytic reduction of UO 2 using aÂgraphite anode. Nuclear Engineering and Technology, 2017, 49, 1451-1456.	1.1	13
18	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.	1.3	26

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19	Stability of yttria-stabilized zirconia during pyroprocessing tests. Journal of Nuclear Materials, 2016, 475, 57-61.	1.3	4
20	Distillation characteristics of LiClâ€"Li2O electrolyte for UO2 electrolytic reduction process. Journal of Radioanalytical and Nuclear Chemistry, 2016, 310, 1165-1171.	0.7	8
21	Electrolytic reduction rate of porous UO2 pellets. Korean Journal of Chemical Engineering, 2016, 33, 2235-2239.	1.2	6
22	Chemical Stability of Conductive Ceramic Anodes in LiClâ€"Li 2 O Molten Salt for Electrolytic Reduction in Pyroprocessing. Nuclear Engineering and Technology, 2016, 48, 997-1001.	1.1	7
23	Carbon anode with repeatable use of LiCl molten salt for electrolytic reduction in pyroprocessing. Journal of Radioanalytical and Nuclear Chemistry, 2016, 310, 463-467.	0.7	20
24	Electrochemical behavior of liquid Sb anode system for electrolytic reduction of UO2. Journal of Radioanalytical and Nuclear Chemistry, 2015, 303, 1041-1046.	0.7	6
25	A conductive oxide as an O2 evolution anode for the electrolytic reduction of metal oxides. Electrochemistry Communications, 2015, 55, 14-17.	2.3	21
26	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.	0.7	16
27	Ternary metal fluorides as high-energy cathodes with low cycling hysteresis. Nature Communications, 2015, 6, 6668.	5.8	138
28	Structure Stabilization by Mixed Anions in Oxyfluoride Cathodes for High-Energy Lithium Batteries. ACS Nano, 2015, 9, 10076-10084.	7.3	54
29	Use of a single fuel containment material during pyroprocessing tests. Annals of Nuclear Energy, 2015, 76, 305-314.	0.9	10
30	Electrolytic Reduction of 1 kg-UO2in Li2O-LiCl Molten Salt using Porous Anode Shroud. Journal of the Korean Electrochemical Society, 2015, 18, 121-129.	0.1	1
31	TiN Anode for Electrolytic Reduction of UO2 in Pyroprocessing. Journal of Nuclear Fuel Cycle and Waste Technology, 2015, 13, 229-233.	0.1	4
32	Electrolytic Reduction Characteristics of Titanium Oxides in a LiCl-Li₂O Molten Salt. Journal of the Korean Electrochemical Society, 2015, 18, 156-160.	0.1	0
33	Ion-Exchange Mechanism of Layered Transition-Metal Oxides: Case Study of LiNi_{0.5}Mn_{0.5}O₂. Inorganic Chemistry, 2014, 53, 8083-8087.	1.9	43
34	Aqueous Rechargeable Li and Na Ion Batteries. Chemical Reviews, 2014, 114, 11788-11827.	23.0	1,183
35	Probing the Local Chemical and Structural Ordering of Iron Oxyfluoride. Microscopy and Microanalysis, 2014, 20, 430-431.	0.2	0
36	Mechanism of Co3O4/graphene catalytic activity in Liâ€"O2 batteries using carbonate based electrolytes. Electrochimica Acta, 2013, 90, 63-70.	2.6	48

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37	Scalable Functionalized Graphene Nano-platelets as Tunable Cathodes for High-performance Lithium Rechargeable Batteries. Scientific Reports, 2013, 3, 1506.	1.6	84
38	Factors that Affect the Phase Behavior of Multi-Component Olivine (LiFe_xMn_yCo_{1-x-y}PO₄; 0) Tj ETQq0 0 0 rgBT /Overlock 1 Reaction. Journal of the Electrochemical Society, 2013, 160, A444-A448.	1.3	16
39	Critical Role of Oxygen Evolved from Layered Liâ€"Excess Metal Oxides in Lithium Rechargeable Batteries. Chemistry of Materials, 2012, 24, 2692-2697.	3.2	255
40	Energy storage in composites of a redox couple host and a lithium ion host. Nano Today, 2012, 7, 168-173.	6.2	44
41	Synthesis of graphene-wrapped CuO hybrid materials by CO2 mineralization. Green Chemistry, 2012, 14, 2391.	4.6	53
42	Energy storage in in vivo synthesizable biominerals. RSC Advances, 2012, 2, 5499.	1.7	6
43	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, 10369-10372.	6.6	395
44	A combined first principles and experimental study on Na3V2(PO4)2F3 for rechargeable Na batteries. Journal of Materials Chemistry, 2012, 22, 20535.	6.7	306
45	Electrode Materials for Rechargeable Sodiumâ€Ion Batteries: Potential Alternatives to Current Lithiumâ€Ion Batteries. Advanced Energy Materials, 2012, 2, 710-721.	10.2	2,944
46	A comparative study on Na2MnPO4F and Li2MnPO4F for rechargeable battery cathodes. Physical Chemistry Chemical Physics, 2012, 14, 3299.	1.3	98
47	Nano-graphite platelet loaded with LiFePO4 nanoparticles used as the cathode in a high performance Li-ion battery. Carbon, 2012, 50, 1966-1971.	5.4	36
48	Graphene-Based Hybrid Electrode Material for High-Power Lithium-Ion Batteries. Journal of the Electrochemical Society, 2011, 158, A930.	1.3	44
49	First-principles study on lithium metal borate cathodes for lithium rechargeable batteries. Physical Review B, 2011, 83, .	1.1	69
50	The Effect of Particle Size on Phase Stability of the Delithiated Li_xMnPO₄. Journal of the Electrochemical Society, 2011, 159, A55-A59.	1.3	18
51	Bio-Inspired Synthesis of Electrode Materials for Lithium Rechargeable Batteries. , 2011, , .		1
52	Invited paper: Preparation and electrochemical characterization of doped spinel LiMn1.88Ge0.1Li0.02O4 cathode material. Electronic Materials Letters, 2011, 7, 105-108.	1.0	9
53	Electrochemical performance and ex situ analysis of ZnMn2O4 nanowires as anode materials for lithium rechargeable batteries. Nano Research, 2011, 4, 505-510.	5.8	170
54	Highly reversible Co3O4/graphene hybrid anode for lithium rechargeable batteries. Carbon, 2011, 49, 326-332.	5.4	357

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55	Mg and Fe Co-doped Mn Based Olivine Cathode Material for High Power Capability. Journal of the Electrochemical Society, 2011, 158, A250.	1.3	52
56	Electrochemical and ex-situ analysis on manganese oxide/graphene hybrid anode for lithium rechargeable batteries. Journal of Materials Research, 2011, 26, 2665-2671.	1.2	39
57	SnO2/graphene composite with high lithium storage capability for lithium rechargeable batteries. Nano Research, 2010, 3, 813-821.	5.8	178
58	Mineralization of Selfâ€assembled Peptide Nanofibers for Rechargeable Lithium Ion Batteries. Advanced Materials, 2010, 22, 5537-5541.	11.1	127
59	Fabrication of FeF₃ Nanoflowers on CNT Branches and Their Application to High Power Lithium Rechargeable Batteries. Advanced Materials, 2010, 22, 5260-5264.	11.1	270
60	Synthesis of Multicomponent Olivine by a Novel Mixed Transition Metal Oxalate Coprecipitation Method and Electrochemical Characterization. Chemistry of Materials, 2010, 22, 2573-2581.	3.2	66
61	Mn based olivine electrode material with high power and energy. Chemical Communications, 2010, 46, 1305.	2.2	81
62	Multicomponent Olivine Cathode for Lithium Rechargeable Batteries: A First-Principles Study. Chemistry of Materials, 2010, 22, 518-523.	3.2	91
63	Synthesis of Diphenylalanine/Cobalt Oxide Hybrid Nanowires and Their Application to Energy Storage. ACS Nano, 2010, 4, 159-164.	7.3	150
64	Structural evolution of layered Li1.2Ni0.2Mn0.6O2 upon electrochemical cycling in a Li rechargeable battery. Journal of Materials Chemistry, 2010, 20, 10179.	6.7	211
65	Carbon nanotube-amorphous FePO4 coreâ€"shell nanowires as cathode material for Li ion batteries. Chemical Communications, 2010, 46, 7409.	2.2	107
66	Combined Firstâ€Principle Calculations and Experimental Study on Multiâ€Component Olivine Cathode for Lithium Rechargeable Batteries. Advanced Functional Materials, 2009, 19, 3285-3292.	7.8	121
67	Comparative study of Li(Li1/3Ti5/3)O4 and Li(Ni1/2â^'Li2/3Ti/3)Ti3/2O4 (x= 1/3) anodes for Li rechargeable batteries. Electrochimica Acta, 2009, 54, 5914-5918.	2.6	32
68	Fabrication and Electrochemical Characterization of TiO₂ Three-Dimensional Nanonetwork Based on Peptide Assembly. ACS Nano, 2009, 3, 1085-1090.	7.3	195
69	Highly entangled hollow TiO2 nanoribbons templating diphenylalanine assembly. Journal of Materials Chemistry, 2009, 19, 3512.	6.7	50
70	Phase Stability Study of Li[sub 1â^'x]MnPO[sub 4] (0â‰xâ‰1) Cathode for Li Rechargeable Battery. Journal of the Electrochemical Society, 2009, 156, A635.	1.3	113
71	Phase control of iridium and iridium oxide thin films in atomic layer deposition. Journal of Applied Physics, 2008, 103, .	1.1	37
72	Improvement of Copper Diffusion Barrier Properties of Tantalum Nitride Films by Incorporating Ruthenium Using PEALD. Journal of the Electrochemical Society, 2008, 155, H885.	1.3	37

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73	Improvement of Morphological Stability of PEALD-Iridium Thin Films by Adopting Two-Step Annealing Process. Electrochemical and Solid-State Letters, 2008, 11, H303.	2.2	17
74	Two Step Annealing of Iridium Thin Films prepared by Plasma-Enhanced Atomic Layer Deposition. ECS Transactions, 2008, 16, 309-314.	0.3	6
75	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.	1.3	46
76	Recycling of Li(Ni,Co,Mn)O2 via a chlorination technique. Korean Journal of Chemical Engineering, 0, , 1.	1.2	7
77	Chlorination behavior of LiCoO2. Korean Journal of Chemical Engineering, 0, , 1.	1.2	4