Yongseon Kim

List of Publications by Year
in descending order

40 papers	809 citations	566801 15 h-index	500791 28 g-index
40 all docs	40 docs citations	40 times ranked	1158 citing authors

#	Article	IF	Citations
1	Origin of the different degradation mechanisms of LNCM and LNCA cathodes in Li-ion batteries. Physical Chemistry Chemical Physics, 2022, 24, 3429-3439.	1.3	2
2	Synthesis and Surface Coating of LiMn₂O₄ Nanorods for the Cathode of the Lithium-Ion Battery. Journal of Nanoscience and Nanotechnology, 2021, 21, 5289-5295.	0.9	1
3	Understanding the Chemical Composition with Doping Aliovalent Ions, Followed by the Electrochemical Behavior for Surface-Modified Ni-Rich NMC Cathode Materials. Inorganic Chemistry, 2021, 60, 16294-16302.	1.9	3
4	Free-Standing, Robust, and Stable Li⁺ Conductive Li(Sr,Zr)₂(PO₄)₃/PEO Composite Electrolytes for Solid-State Batteries. ACS Applied Energy Materials, 2021, 4, 13974-13982.	2.5	3
5	Luminescent properties and energy transfer of Eu2+/Mn2+ codoped Na(Sr,Ba)PO4 and Ba2Mg(BO3)2 phosphors. Journal of Luminescence, 2020, 220, 116958.	1.5	4
6	Minimum Co content limit in layer-structured cathode materials for Li-ion batteries. Journal of Power Sources, 2020, 467, 228351.	4.0	2
7	Effect of metal composition on the structure of layer-structured cathode materials for Li-ion batteries. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	8
8	Investigation of growth kinetics of Ni0Â·855Co0Â·145(OH)2 particles in continuous co-precipitation process. Ceramics International, 2020, 46, 19476-19483.	2.3	4
9	First-principles investigation of the effect of Co in stabilizing the structures of layer-structured cathodes in delithiated state. Materials Research Express, 2020, 7, 075507.	0.8	0
10	Thermochemical investigation of Zr doping in LiNi_{8/12}Co_{2/12}Mn_{2/12}O₂ based on phase equilibria simulation. International Journal of Quantum Chemistry, 2019, 119, e26028.	1.0	5
11	Effects and distribution of Zr introduced in Ni-based cathode material for Li-ion batteries. Physical Chemistry Chemical Physics, 2019, 21, 12505-12517.	1.3	27
12	Theoretical investigation of the cation antisite defect in layer-structured cathode materials for Li-ion batteries. Physical Chemistry Chemical Physics, 2019, 21, 24139-24146.	1.3	8
13	Component-Selective Passivation of Li Residues of Ni-Based Cathode Materials by Chemical Mimicry of Solid Electrolyte Interphase Formation. ACS Applied Energy Materials, 2019, 2, 217-221.	2.5	5
14	Rational design of electrochemically active polymorphic MnOx/rGO composites for Li+-rechargeable battery electrodes. Ceramics International, 2019, 45, 9522-9528.	2.3	3
15	Water adsorption on the surface of Niâ€•and Coâ€based layerâ€structured cathode materials for lithiumâ€ion batteries. International Journal of Quantum Chemistry, 2018, 118, e25591.	1.0	6
16	Investigation of the processing conditions for the synthesis of rod-shaped LiCoO2. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	1
17	Dual spectra band emissive Eu²⁺/Mn²⁺co-activated alkaline earth phosphates for indoor plant growth novel phosphor converted-LEDs. Physical Chemistry Chemical Physics, 2017, 19, 11111-11119.	1.3	38
18	Self-assembly of coreâ€"shell structures driven by low doping limit of Ti in LiCoO₂: first-principles thermodynamic and experimental investigation. Physical Chemistry Chemical Physics, 2017, 19, 4104-4113.	1.3	36

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19	Improvement of the electrochemical properties of LiNi0.5Mn1.5O4 by controlling the heating atmosphere during synthesis. Ceramics International, 2017, 43, 15510-15518.	2.3	16
20	Defects on the Surface of Ti-Doped MgAl2O4 Nanophosphor. Nanoscale Research Letters, 2017, 12, 536.	3.1	1
21	Fluorination of free lithium residues on the surface of lithium nickel cobalt aluminum oxide cathode materials for lithium ion batteries. Materials and Design, 2016, 100, 175-179.	3.3	22
22	Eu²⁺-Activated Phase-Pure Oxonitridosilicate Phosphor in a Baâ€“Siâ€“Oâ€“N System via Facile Silicate-Assisted Routes Designed by First-Principles Thermodynamic Simulation. Inorganic Chemistry, 2016, 55, 8750-8757.	1.9	14
23	Point Defects in Layer-Structured Cathode Materials for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2016, 120, 4173-4182.	1.5	24
24	Thermodynamic investigation of Ti doping in MgAl₂O₄ based on the first-principles method. Journal of Materials Chemistry C, 2015, 3, 8970-8978.	2.7	12
25	First-principles investigation of the gas evolution from the cathodes of lithium-ion batteries during the storage test. Journal of Materials Science, 2014, 49, 8444-8448.	1.7	8
26	Investigation of the change in the electronic properties of FeF₃by the introduction of oxygen using a molecular orbital method. International Journal of Quantum Chemistry, 2014, 114, 340-344.	1.0	5
27	Encapsulation of LiNi0.5Co0.2Mn0.3O2 with a thin inorganic electrolyte film to reduce gas evolution in the application of lithium ion batteries. Physical Chemistry Chemical Physics, 2013, 15, 6400.	1.3	58
28	First-principles thermodynamic calculations and experimental investigation of Srâ€“Siâ€“Nâ€“O systemâ€”synthesis of Sr₂Si₅N₈:Eu phosphor. Journal of Materials Chemistry C, 2013, 1, 69-78.	2.7	34
29	Investigation of the gas evolution in lithium ion batteries: effect of free lithium compounds in cathode materials. Journal of Solid State Electrochemistry, 2013, 17, 1961-1965.	1.2	46
30	Mechanism of gas evolution from the cathode of lithium-ion batteries at the initial stage of high-temperature storage. Journal of Materials Science, 2013, 48, 8547-8551.	1.7	64
31	Investigation on the dissolution of Mn ions from LiMn₂O₄ cathode in the application of lithium ion batteries: First principle molecular orbital method. International Journal of Quantum Chemistry, 2013, 113, 148-154.	1.0	30
32	First principles investigation of the structure and stability of LiNiO2 doped with Co and Mn. Journal of Materials Science, 2012, 47, 7558-7563.	1.7	16
33	First-principles and experimental investigation of the morphology of layer-structured LiNiO2 and LiCoO2. Journal of Materials Chemistry, 2012, 22, 12874.	6.7	74
34	Synthesis of High-Density Nickel Cobalt Aluminum Hydroxide by Continuous Coprecipitation Method. ACS Applied Materials & Interfaces, 2012, 4, 586-589.	4.0	81
35	Experimental and First-Principles Thermodynamic Study of the Formation and Effects of Vacancies in Layered Lithium Nickel Cobalt Oxides. Chemistry of Materials, 2011, 23, 5388-5397.	3.2	89
36	Enhancement of UV emission in ZnO nanorods by growing additional ZnO layers on the surface. Nanotechnology, 2011, 22, 275707.	1.3	11

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37	Multi-functional colored coating of BaMgAl10O17:Eu phosphors with cobalt-doped Al2O3 thin films. Applied Physics A: Materials Science and Processing, 2010, 98, 245-248.	1.1	5
38	Surface Photoluminescence Emission of ZnO Nanorod Arrays: Experimental and First-Principles Investigation. Journal of Physical Chemistry C, 2010, 114, 17894-17898.	1.5	9
39	Calculation of Formation Energy of Oxygen Vacancy in ZnO Based on Photoluminescence Measurements. Journal of Physical Chemistry B, 2010, 114, 7874-7878.	1.2	33
40	Postheating Effect of LiNi0.925Co0.05Mn0.025O2 in Argon Atmosphere on Lithium Residues and Related Battery Performance. ACS Applied Energy Materials, 0, , .	2.5	1