Eungje Lee

List of Publications by Year
in descending order

56 papers	6,351 citations	218592 26 h-index	143943 57 g-index
60 all docs	60 docs citations	60 times ranked	8180 citing authors

#	Article	IF	Citations
1	Sodiumâ€Ion Batteries. Advanced Functional Materials, 2013, 23, 947-958.	7.8	3,832
2	Layered Na[Ni1/3Fe1/3Mn1/3]O2 cathodes for Na-ion battery application. Electrochemistry Communications, 2012, 18, 66-69.	2.3	384
3	Layered P2/O3 Intergrowth Cathode: Toward High Power Naâ€Ion Batteries. Advanced Energy Materials, 2014, 4, 1400458.	10.2	191
4	New Insights into the Performance Degradation of Fe-Based Layered Oxides in Sodium-Ion Batteries: Instability of Fe³⁺/Fe⁴⁺ Redox in Î±-NaFeO₂. Chemistry of Materials, 2015, 27, 6755-6764.	3.2	162
5	Enabling the high capacity of lithium-rich anti-fluorite lithium iron oxide by simultaneous anionic and cationic redox. Nature Energy, 2017, 2, 963-971.	19.8	140
6	Spherical Carbon as a New High-Rate Anode for Sodium-ion Batteries. Electrochimica Acta, 2014, 127, 61-67.	2.6	135
7	Composite â€˜Layered-Layered-Spinelâ€™ Cathode Structures for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2013, 160, A31-A38.	1.3	115
8	Extreme Fast Charge Challenges for Lithium-Ion Battery: Variability and Positive Electrode Issues. Journal of the Electrochemical Society, 2019, 166, A1926-A1938.	1.3	92
9	Rechargeable Seawater Battery and Its Electrochemical Mechanism. ChemElectroChem, 2015, 2, 328-332.	1.7	85
10	Dynamic imaging of crystalline defects in lithium-manganese oxide electrodes during electrochemical activation to high voltage. Nature Communications, 2019, 10, 1692.	5.8	68
11	Photo-accelerated fast charging of lithium-ion batteries. Nature Communications, 2019, 10, 4946.	5.8	68
12	The quest for manganese-rich electrodes for lithium batteries: strategic design and electrochemical behavior. Sustainable Energy and Fuels, 2018, 2, 1375-1397.	2.5	59
13	Effect of Mo addition on the electrocatalytic activity of Ptâ€"Snâ€"Mo/C for direct ethanol fuel cells. Electrochimica Acta, 2011, 56, 1611-1618.	2.6	57
14	Deciphering the Oxygen Absorption Preâ€edge: A Caveat on its Application for Probing Oxygen Redox Reactions in Batteries. Energy and Environmental Materials, 2021, 4, 246-254.	7.3	56
15	Role of Lithium Doping in P2-Na_{0.67}Ni_{0.33}Mn_{0.67}O₂ for Sodium-Ion Batteries. Chemistry of Materials, 2021, 33, 4445-4455.	3.2	56
16	Study of Thermal Decomposition of Li_{1â€x}(Ni_{1/3}Mn_{1/3}Co_{1/3})_{0.9}O₂ Using Inâ€Situ Highâ€Energy Xâ€Ray Diffraction. Advanced Energy Materials, 2013, 3, 729-736.	10.2	48
17	Synthesis and Characterization of Ptâˆ'Snâˆ'Pd/C Catalysts for Ethanol Electro-Oxidation Reaction. Journal of Physical Chemistry C, 2010, 114, 10634-10640.	1.5	44
18	Aluminum and Gallium Substitution into 0.5Li₂MnO₃Â·0.5Li(Ni_{0.375}Mn_{0.375}Co_{0.25})O₂ Layered Composite and the Voltage Fade Effect. Journal of the Electrochemical Society, 2015, 162, A322-A329.	1.3	44

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19	Insights into the Dual-Electrode Characteristics of Layered Na_{0.5}Ni_{0.25}Mn_{0.75}O₂ Materials for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 10618-10625.	4.0	38
20	Role of Cr³⁺/Cr⁶⁺ redox in chromium-substituted Li₂MnO₃Â·LiNi_{1/2}Mn_{1/2}O₂ layered composite cathodes: electrochemistry and voltage fade. Journal of Materials Chemistry A, 2015, 3, 9915-9924.	5.2	35
21	Comparative electrochemical sodium insertion/extraction behavior in layered NaxVS2 and NaxTiS2. Electrochimica Acta, 2014, 143, 272-277.	2.6	32
22	Structural characterization of layered Na0.5Co0.5Mn0.5O2 material as a promising cathode for sodium-ion batteries. Journal of Power Sources, 2017, 363, 442-449.	4.0	31
23	First-Principles Study of Lithium Cobalt Spinel Oxides: Correlating Structure and Electrochemistry. ACS Applied Materials & Interfaces, 2018, 10, 13479-13490.	4.0	31
24	Effect of overcharge on Li(Ni0.5Mn0.3Co0.2)O2/graphite lithium ion cells with poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	4.0	29
25	One-Step Reverse Microemulsion Synthesis of Ptâ˜CeO₂/C Catalysts with Improved Nanomorphology and Their Effect on Methanol Electrooxidation Reaction. Journal of Physical Chemistry C, 2010, 114, 21833-21839.	1.5	27
26	Design of lithium cobalt oxide electrodes with high thermal conductivity and electrochemical performance using carbon nanotubes and diamond particles. Carbon, 2018, 129, 702-710.	5.4	27
27	Electrocatalytic Properties of Indium Tin Oxide-Supported Pt Nanoparticles for Methanol Electro-oxidation. Journal of the Electrochemical Society, 2010, 157, B251.	1.3	26
28	Comparison of the stabilities and activities of Ptâ€“Ru/C and Pt3â€“Sn/C electrocatalysts synthesized by the polyol method for methanol electro-oxidation reaction. Journal of Electroanalytical Chemistry, 2011, 659, 168-175.	1.9	26
29	Probing Electrochemically Induced Structural Evolution and Oxygen Redox Reactions in Layered Lithium Iridate. Chemistry of Materials, 2019, 31, 4341-4352.	3.2	26
30	Exploring Lithium-Cobalt-Nickel Oxide Spinel Electrodes for â‰¥3.5 V Li-Ion Cells. ACS Applied Materials & Interfaces, 2016, 8, 27720-27729.	4.0	25
31	Effect of temperature on silicon-based anodes for lithium-ion batteries. Journal of Power Sources, 2019, 441, 227080.	4.0	23
32	Development of manganese-rich cathodes as alternatives to nickel-rich chemistries. Journal of Power Sources, 2019, 434, 226706.	4.0	23
33	An epoxy-reinforced ceramic sheet as a durable solid electrolyte for solid state Na-ion batteries. Journal of Materials Chemistry A, 2020, 8, 14528-14537.	5.2	23
34	Carbon-supported Pt nanoparticles prepared by a modified borohydride reduction method: Effect on the particle morphology and catalytic activity for COad and methanol electro-oxidation. Electrochemistry Communications, 2011, 13, 480-483.	2.3	21
35	Electrooxidation of methanol on highly active and stable Ptâ€“Snâ€“Ce/C catalyst for direct methanol fuel cells. Applied Catalysis B: Environmental, 2012, 121-122, 154-161.	10.8	20
36	Multiphase layered transition metal oxide positive electrodes for sodium ion batteries. Energy Science and Engineering, 2022, 10, 1672-1705.	1.9	20

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37	Effect of overcharge on Li(Ni0.5Mn0.3Co0.2)O2 cathodes: NMP-soluble binder. II â€" Chemical changes in the anode. Journal of Power Sources, 2018, 385, 156-164.	4.0	18
38	Origins of Irreversibility in Layered NaNi_{<i>x</i>}Fe_{<i>y</i>}Mn_{<i>z</i>}O₂ Cathode Materials for Sodium Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 51397-51408.	4.0	18
39	Sr4AlNbO8: A new crystal structure type determined from powder X-ray data. Journal of Solid State Chemistry, 2008, 181, 2930-2934.	1.4	17
40	â€˜Clickâ€™-functionalization of poly(sulfone)s and a study of their utilities as proton conductive membranes in direct methanol fuel cells. Polymer, 2010, 51, 5352-5358.	1.8	17
41	Lithiated Spinel LiCo_{1â€"<i>x</i>}Al_{<i>x</i>}O₂ as a Stable Zero-Strain Cathode. ACS Applied Energy Materials, 2019, 2, 6170-6175.	2.5	17
42	Identifying the Chemical Origin of Oxygen Redox Activity in Li-Rich Anti-Fluorite Lithium Iron Oxide by Experimental and Theoretical X-ray Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 806-812.	2.1	17
43	Reversible NaVS2 (De)Intercalation Cathode for Na-Ion Batteries. ECS Electrochemistry Letters, 2012, 1, A71-A73.	1.9	15
44	Reviewâ€"From LiMn₂O₄ to Partially-Disordered Li₂MnNiO₄: The Evolution of Lithiated-Spinel Cathodes for Li-Ion Batteries. Journal of the Electrochemical Society, 2022, 169, 020535.	1.3	14
45	3D Ionâ€Conducting, Scalable, and Mechanically Reinforced Ceramic Film for High Voltage Solidâ€State Batteries. Advanced Functional Materials, 2021, 31, 2002008.	7.8	13
46	A new potential electrolyte Ba11W4O23: Novel structure and electrical conductivity. Solid State Ionics, 2008, 179, 1066-1070.	1.3	11
47	Process Engineering to Increase the Layered Phase Concentration in the Immediate Products of Flame Spray Pyrolysis. ACS Applied Materials & Interfaces, 2021, 13, 26915-26923.	4.0	11
48	Synthesis, modular composition, and electrochemical properties of lamellar iron sulfides. Journal of Materials Chemistry A, 2020, 8, 15834-15844.	5.2	10
49	Understanding the constant-voltage fast-charging process using a high-rate Ni-rich cathode material for lithium-ion batteries. Journal of Materials Chemistry A, 2021, 10, 288-295.	5.2	10
50	Effect of Electrolytes on the Cathode-Electrolyte Interfacial Stability of Fe-Based Layered Cathodes for Sodium-Ion Batteries. Journal of the Electrochemical Society, 2022, 169, 030536.	1.3	10
51	SnSb Carbon Composite Anode in a SnSb_C/NaNi_{1/3}Mn_{1/3}Fe_{1/3}O₂ Na-Ion Battery. ECS Transactions, 2014, 58, 59-64.	0.3	8
52	LT-LiMn_{0.5}Ni_{0.5}O₂: a unique co-free cathode for high energy Li-ion cells. Chemical Communications, 2021, 57, 11009-11012.	2.2	8
53	New Highâ€Performance Pbâ€Based Nanocomposite Anode Enabled by Wideâ€Range Pb Redox and Zintl Phase Transition. Advanced Functional Materials, 2021, 31, 2005362.	7.8	6
54	Electrodes: Layered P2/O3 Intergrowth Cathode: Toward High Power Na-Ion Batteries (Adv. Energy) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	10.2	5

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55	Relationship of Chemical Composition and Moisture Sensitivity in LiNi<i>x</i>Mn<i>y</i>Co1âˆ’<i>X</i>âˆ’<i>Y</i>O2 for Lithium-Ion Batteries. Journal of Electrochemical Energy Conversion and Storage, 2021, 18, .	1.1	4
56	Garnet solid electrolyte blended LiNi0.6Mn0.2Co0.2O2 as high-voltage stable cathodes for advanced lithium-ion batteries. Electrochemistry Communications, 2022, 138, 107286.	2.3	2