

Eungje Lee

List of Publications by Year in descending order

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56
papers

6,351
citations

218381
26
h-index

143772
57
g-index

60
all docs

60
docs citations

60
times ranked

8180
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2013, 23, 947-958. | 7.8 | 3,832 |
| 2 | Layered Na[Ni _{1/3} Fe _{1/3} Mn _{1/3}]O ₂ cathodes for Na-ion battery application. <i>Electrochemistry Communications</i> , 2012, 18, 66-69. | 2.3 | 384 |
| 3 | Layered P ₂ O ₃ Intergrowth Cathode: Toward High Power Na-Ion Batteries. <i>Advanced Energy Materials</i> , 2014, 4, 1400458. | 10.2 | 191 |
| 4 | New Insights into the Performance Degradation of Fe-Based Layered Oxides in Sodium-Ion Batteries: Instability of Fe ³⁺ /Fe ⁴⁺ Redox in \pm -NaFeO ₂ . <i>Chemistry of Materials</i> , 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. <i>Nature Energy</i> , 2017, 2, 963-971. | 19.8 | 140 |
| 6 | Spherical Carbon as a New High-Rate Anode for Sodium-ion Batteries. <i>Electrochimica Acta</i> , 2014, 127, 61-67. | 2.6 | 135 |
| 7 | Composite \sim Layered-Layered-Spinel \sim Cathode Structures for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2013, 160, A31-A38. | 1.3 | 115 |
| 8 | Extreme Fast Charge Challenges for Lithium-Ion Battery: Variability and Positive Electrode Issues. <i>Journal of the Electrochemical Society</i> , 2019, 166, A1926-A1938. | 1.3 | 92 |
| 9 | Rechargeable Seawater Battery and Its Electrochemical Mechanism. <i>ChemElectroChem</i> , 2015, 2, 328-332. | 1.7 | 85 |
| 10 | Dynamic imaging of crystalline defects in lithium-manganese oxide electrodes during electrochemical activation to high voltage. <i>Nature Communications</i> , 2019, 10, 1692. | 5.8 | 68 |
| 11 | Photo-accelerated fast charging of lithium-ion batteries. <i>Nature Communications</i> , 2019, 10, 4946. | 5.8 | 68 |
| 12 | The quest for manganese-rich electrodes for lithium batteries: strategic design and electrochemical behavior. <i>Sustainable Energy and Fuels</i> , 2018, 2, 1375-1397. | 2.5 | 59 |
| 13 | Effect of Mo addition on the electrocatalytic activity of Pt \sim Sn \sim Mo/C for direct ethanol fuel cells. <i>Electrochimica Acta</i> , 2011, 56, 1611-1618. | 2.6 | 57 |
| 14 | Deciphering the Oxygen Absorption Pre-edge: A Caveat on its Application for Probing Oxygen Redox Reactions in Batteries. <i>Energy and Environmental Materials</i> , 2021, 4, 246-254. | 7.3 | 56 |
| 15 | Role of Lithium Doping in P ₂ -Na _{0.67} Ni _{0.33} Mn _{0.67} O ₂ for Sodium-Ion Batteries. <i>Chemistry of Materials</i> , 2021, 33, 4445-4455. | 3.2 | 56 |
| 16 | Study of Thermal Decomposition of Li \sim (Ni _{1/3} Mn _{1/3} Co _{1/3}) _{0.9} O ₂ Using In-situ High-Energy X-Ray Diffraction. <i>Advanced Energy Materials</i> , 2013, 3, 729-736. | 10.2 | 48 |
| 17 | Synthesis and Characterization of Pt \sim Sn \sim Pd/C Catalysts for Ethanol Electro-Oxidation Reaction. <i>Journal of Physical Chemistry C</i> , 2010, 114, 10634-10640. | 1.5 | 44 |
| 18 | Aluminum and Gallium Substitution into 0.5Li ₂ MnO ₃ \cdot 0.5Li(Ni _{0.375} Mn _{0.375} Co _{0.25})O ₂ Layered Composite and the Voltage Fade Effect. <i>Journal of the Electrochemical Society</i> , 2015, 162, A322-A329. | 1.4 | 44 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Insights into the Dual-Electrode Characteristics of Layered Na _{0.5} Ni _{0.25} Mn _{0.75} O ₂ Materials for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 10618-10625. | 4.0 | 38 |
| 20 | Role of Cr ³⁺ /Cr ⁶⁺ redox in chromium-substituted Li ₂ MnO ₃ ·LiNi _{1/2} Mn _{1/2} O ₂ 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 Na _x VS ₂ and Na _x TiS ₂ . Electrochimica Acta, 2014, 143, 272-277. | 2.6 | 32 |
| 22 | Structural characterization of layered Na _{0.5} Co _{0.5} Mn _{0.5} O ₂ 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(Ni _{0.5} Mn _{0.3} Co _{0.2})O ₂ /graphite lithium ion cells with poly(vinylidene fluoride) electrolyte. Journal of Power Sources, 2017, 363, 442-449. | 4.0 | 29 |
| 25 | One-Step Reverse Microemulsion Synthesis of Pt ⁰ /CeO ₂ /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 Pt ⁰ /Ru/C and Pt ₃ /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 ~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 CO ₂ and methanol electro-oxidation. Electrochemistry Communications, 2011, 13, 480-483. | 2.3 | 21 |
| 35 | Electrooxidation of methanol on highly active and stable Pt ⁰ /Sn ⁰ /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(Ni _{0.5} Mn _{0.3} Co _{0.2})O ₂ cathodes: NMP-soluble binder. II "Chemical changes in the anode. Journal of Power Sources, 2018, 385, 156-164. | 4.0 | 18 |
| 38 | Origins of Irreversibility in Layered NaNi _x Fe _y Mn _z O ₂ Cathode Materials for Sodium Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 51397-51408. | 4.0 | 18 |
| 39 | Sr ₄ AlNbO ₈ : A new crystal structure type determined from powder X-ray data. Journal of Solid State Chemistry, 2008, 181, 2930-2934. | 1.4 | 17 |
| 40 | "Click"™-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 _{1-x} Al _x O ₂ 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 NaVS ₂ (De)Intercalation Cathode for Na-Ion Batteries. ECS Electrochemistry Letters, 2012, 1, A71-A73. | 1.9 | 15 |
| 44 | Review"From LiMn ₂ O ₄ to Partially-Disordered Li ₂ MnNiO ₄ : The Evolution of Lithiated-Spinel Cathodes for Li-Ion Batteries. Journal of the Electrochemical Society, 2022, 169, 020535. | 1.3 | 14 |
| 45 | 3D Ion-Conducting, Scalable, and Mechanically Reinforced Ceramic Film for High Voltage Solid-State Batteries. Advanced Functional Materials, 2021, 31, 2002008. | 7.8 | 13 |
| 46 | A new potential electrolyte Ba ₁₁ W ₄ O ₂₃ : 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} O ₂ Na-Ion Battery. ECS Transactions, 2014, 58, 59-64. | 0.3 | 8 |
| 52 | LT-LiMn _{0.5} Ni _{0.5} O ₂ : a unique co-free cathode for high energy Li-ion cells. Chemical Communications, 2021, 57, 11009-11012. | 2.2 | 8 |
| 53 | New High-Performance Pb-Based Nanocomposite Anode Enabled by Wide-Range Pb Redox and Zintl Phase Transition. Advanced Functional Materials, 2021, 31, 2005362. | 7.8 | 6 |
| 54 | Electrodes: Layered P ₂ /O ₃ 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 $\text{LiNi}_x\text{Mn}_y\text{Co}_{1-x-y}\text{O}_2$ for Lithium-Ion Batteries. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2021, 18, . | 1.1 | 4 |
| 56 | Garnet solid electrolyte blended $\text{LiNi}_0.6\text{Mn}_0.2\text{Co}_0.2\text{O}_2$ as high-voltage stable cathodes for advanced lithium-ion batteries. <i>Electrochemistry Communications</i> , 2022, 138, 107286. | 2.3 | 2 |