# Yun Lu

## List of Publications by Year in descending order



| | | | |
|---|---|---|---|
| 42 papers | 2,698 citations | 172457 29 h-index | 265206 42 g-index |
| 43 all docs | 43 docs citations | 43 times ranked | 2657 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Improving the reversibility of the H2-H3 phase transitions for layered Ni-rich oxide cathode towards retarded structural transition and enhanced cycle stability. Nano Energy, 2019, 59, 50-57. | 16.0 | 334 |
| 2 | Ni-Rich LiNi<sub>0.8</sub>Co<sub>0.1</sub>Mn<sub>0.1</sub>O<sub>2</sub> Oxide Coated by Dual-Conductive Layers as High Performance Cathode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 29732-29743. | 8.0 | 309 |
| 3 | Elastic, Conductive, Polymeric Hydrogels and Sponges. Scientific Reports, 2014, 4, 5792. | 3.3 | 139 |
| 4 | Metal-organic frameworks composites threaded on the CNT knitted separator for suppressing the shuttle effect of lithium sulfur batteries. Energy Storage Materials, 2018, 14, 383-391. | 18.0 | 135 |
| 5 | Sufficient Utilization of Zirconium Ions to Improve the Structure and Surface properties of Nickelâ€Rich Cathode Materials for Lithiumâ€Ion Batteries. ChemSusChem, 2018, 11, 1639-1648. | 6.8 | 117 |
| 6 | Use of Ce to Reinforce the Interface of Niâ€Rich LiNi<sub>0.8</sub>Co<sub>0.1</sub>Mn<sub>0.1</sub>O<sub>2</sub> Cathode Materials for Lithiumâ€Ion Batteries under High Operating Voltage. ChemSusChem, 2019, 12, 935-943. | 6.8 | 113 |
| 7 | Exposing the {010} Planes by Oriented Self-Assembly with Nanosheets To Improve the Electrochemical Performances of Ni-Rich Li[Ni<sub>0.8</sub>Co<sub>0.1</sub>Mn<sub>0.1</sub>]O<sub>2</sub> Microspheres. ACS Applied Materials & Interfaces, 2018, 10, 6407-6414. | 8.0 | 98 |
| 8 | Improving the cycling stability of Ni-rich cathode materials by fabricating surface rock salt phase. Electrochimica Acta, 2018, 292, 217-226. | 5.2 | 90 |
| 9 | Renovation of LiCoO 2 with outstanding cycling stability by thermal treatment with Li 2 CO 3 from spent Li-ion batteries. Journal of Energy Storage, 2016, 8, 262-273. | 8.1 | 86 |
| 10 | Pre-oxidizing the precursors of Nickel-rich cathode materials to regulate their Li+/Ni2+ cation ordering towards cyclability improvements. Journal of Power Sources, 2018, 396, 734-741. | 7.8 | 82 |
| 11 | Ethoxy (pentafluoro) cyclotriphosphazene (PFPN) as a multi-functional flame retardant electrolyte additive for lithium-ion batteries. Journal of Power Sources, 2018, 378, 707-716. | 7.8 | 77 |
| 12 | High-Rate Structure-Gradient Ni-Rich Cathode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 36697-36704. | 8.0 | 77 |
| 13 | The mechanism of side reaction induced capacity fading of Ni-rich cathode materials for lithium ion batteries. Journal of Energy Chemistry, 2021, 58, 1-8. | 12.9 | 73 |
| 14 | The effects of alkali metal ions with different ionic radii substituting in Li sites on the electrochemical properties of Ni-Rich cathode materials. Journal of Power Sources, 2019, 441, 227195. | 7.8 | 71 |
| 15 | Stress accumulation in Ni-rich layered oxide cathodes: Origin, impact, and resolution. Journal of Energy Chemistry, 2022, 65, 236-253. | 12.9 | 65 |
| 16 | An interfacial framework for breaking through the Li-ion transport barrier of Li-rich layered cathode materials. Journal of Materials Chemistry A, 2017, 5, 24292-24298. | 10.3 | 64 |
| 17 | Improving the Structure Stability of LiNi<sub>0.8</sub>Co<sub>0.1</sub>Mn<sub>0.1</sub>O<sub>2</sub> by Surface Perovskite-like La<sub>2</sub>Ni<sub>0.5</sub>Li<sub>0.5</sub>O<sub>4</sub> Self-Assembling and Subsurface La<sup>3+</sup> Doping. ACS Applied Materials & Interfaces, 2019, 11, 36751-36762. | 8.0 | 59 |
| 18 | Strategies of Removing Residual Lithium Compounds on the Surface of <scp>Niâ€Rich</scp> Cathode Materials<sup>â€</sup>. Chinese Journal of Chemistry, 2021, 39, 189-198. | 4.9 | 52 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Enhanced Electrochemical Performance of Layered Lithium-Rich Cathode Materials by Constructing Spinel-Structure Skin and Ferric Oxide Islands. ACS Applied Materials & Interfaces, 2017, 9, 8669-8678. | 8.0 | 50 |
| 20 | Riveting Dislocation Motion: The Inspiring Role of Oxygen Vacancies in the Structural Stability of Ni-Rich Cathode Materials. ACS Applied Materials & Interfaces, 2020, 12, 37208-37217. | 8.0 | 49 |
| 21 | Role of LaNiO3 in suppressing voltage decay of layered lithium-rich cathode materials. Electrochimica Acta, 2018, 260, 986-993. | 5.2 | 44 |
| 22 | A Universal Method for Enhancing the Structural Stability of Ni-Rich Cathodes Via the Synergistic Effect of Dual-Element Cosubstitution. ACS Applied Materials & Interfaces, 2021, 13, 24925-24936. | 8.0 | 43 |
| 23 | Synergistic Effects of Stabilizing the Surface Structure and Lowering the Interface Resistance in Improving the Low-Temperature Performances of Layered Lithium-Rich Materials. ACS Applied Materials & Interfaces, 2017, 9, 8641-8648. | 8.0 | 38 |
| 24 | Hand-in-Hand Reinforced rGO Film Used as an Auxiliary Functional Layer for High-Performance Liâ€“S Batteries. ACS Applied Materials & Interfaces, 2019, 11, 12544-12553. | 8.0 | 36 |
| 25 | Dendrimer-linked, renewable and magnetic carbon nanotube aerogels. Materials Horizons, 2014, 1, 232-236. | 12.2 | 35 |
| 26 | The Effects of Trace Yb Doping on the Electrochemical Performance of Liâ€Rich Layered Oxides. ChemSusChem, 2019, 12, 2294-2301. | 6.8 | 35 |
| 27 | Polyacrylonitrile-polyvinylidene fluoride as high-performance composite binder for layered Li-rich oxides. Journal of Power Sources, 2017, 359, 226-233. | 7.8 | 32 |
| 28 | Improved Stability of Layered and Porous Nickelâ€Rich Cathode Materials by Relieving the Accumulation of Inner Stress. ChemSusChem, 2020, 13, 426-433. | 6.8 | 31 |
| 29 | Unrevealing the effects of low temperature on cycling life of 21700-type cylindrical Li-ion batteries. Journal of Energy Chemistry, 2021, 60, 104-110. | 12.9 | 31 |
| 30 | Electron bridging structure glued yolk-shell hierarchical porous carbon/sulfur composite for high performance Li-S batteries. Electrochimica Acta, 2018, 292, 199-207. | 5.2 | 27 |
| 31 | Roles of Fastâ€Ion Conductor LiTaO<sub>3</sub> Modifying Niâ€rich Cathode Material for Liâ€Ion Batteries. ChemSusChem, 2021, 14, 1955-1961. | 6.8 | 26 |
| 32 | Advances and Prospects of Surface Modification on <scp>Nickelâ€Rich</scp> Materials for <scp>Lithiumâ€Ion</scp> Batteries<sup>â€</sup>. Chinese Journal of Chemistry, 2020, 38, 1817-1831. | 4.9 | 24 |
| 33 | CF@rGO/PPy-S Hybrid Foam with Paper Window-like Microstructure as Freestanding and Flexible Cathode for the Lithiumâ€“Sulfur Battery. ACS Applied Energy Materials, 2019, 2, 4151-4158. | 5.1 | 20 |
| 34 | UiO-66 type metal-organic framework as a multifunctional additive to enhance the interfacial stability of Ni-rich layered cathode material. Journal of Energy Chemistry, 2020, 50, 378-386. | 12.9 | 19 |
| 35 | Enhanced Electrochemical Performance of Ni-Rich Cathode Materials with an In Situ-Formed LiBO<sub>2</sub>/B<sub>2</sub>O<sub>3</sub> Hybrid Coating Layer. ACS Applied Energy Materials, 2022, 5, 2231-2241. | 5.1 | 19 |
| 36 | Clean the Ni-Rich Cathode Material Surface With Boric Acid to Improve Its Storage Performance. Frontiers in Chemistry, 2020, 8, 573. | 3.6 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Synthesis and physicochemical properties of graphene/ZrO<sub>2</sub> composite aerogels. RSC Advances, 2015, 5, 11738-11744. | 3.6 | 17 |
| 38 | High-Temperature Storage Deterioration Mechanism of Cylindrical 21700-Type Batteries Using Ni-Rich Cathodes under Different SOCs. ACS Applied Materials & Interfaces, 2021, 13, 6286-6297. | 8.0 | 17 |
| 39 | Densely Packed 3D Corrugated Papery Electrodes as Polysulfide Reservoirs for Lithiumâ€“Sulfur Battery with Ultrahigh Volumetric Capacity. ACS Sustainable Chemistry and Engineering, 2020, 8, 5648-5661. | 6.7 | 15 |
| 40 | Synthesizing LiNi0.8Co0.1Mn0.1O2 with novel shell-pore structure for enhanced rate performance. Journal of Alloys and Compounds, 2019, 789, 736-743. | 5.5 | 13 |
| 41 | Interfacial Degradation and Optimization of Liâ€rich Cathode Materials<sup>â€</sup>. Chinese Journal of Chemistry, 2021, 39, 402-420. | 4.9 | 11 |
| 42 | Sublimated Seâ€Induced Formation of Dualâ€Conductive Surface Layers for Highâ€Performance Niâ€Rich Layered Cathodes. ChemElectroChem, 2021, 8, 4207-4217. | 3.4 | 7 |