

Swapna Ganapathy

List of Publications by Year in descending order

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Version: 2024-02-01

21
papers

2,238
citations

394421

19
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752698

20
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docs citations

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times ranked

2776
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Accessing the bottleneck in all-solid state batteries, lithium-ion transport over the solid-electrolyte-electrode interface. <i>Nature Communications</i> , 2017, 8, 1086. | 12.8 | 299 |
| 2 | Nature of Li_2O_2 Oxidation in a Li^+O_2 Battery Revealed by Operando X-ray Diffraction. <i>Journal of the American Chemical Society</i> , 2014, 136, 16335-16344. | 13.7 | 283 |
| 3 | Clarifying the relationship between redox activity and electrochemical stability in solid electrolytes. <i>Nature Materials</i> , 2020, 19, 428-435. | 27.5 | 271 |
| 4 | Synthesis, structure and electrochemical performance of the argyrodite $\text{Li}_6\text{PS}_5\text{Cl}$ solid electrolyte for Li-ion solid state batteries. <i>Electrochimica Acta</i> , 2016, 215, 93-99. | 5.2 | 203 |
| 5 | Unravelling Li-Ion Transport from Picoseconds to Seconds: Bulk versus Interfaces in an Argyrodite $\text{Li}_6\text{PS}_5\text{Cl}$ Li_2S All-Solid-State Li-Ion Battery. <i>Journal of the American Chemical Society</i> , 2016, 138, 11192-11201. | 13.7 | 188 |
| 6 | Facile Synthesis toward the Optimal Structure-Conductivity Characteristics of the Argyrodite $\text{Li}_6\text{PS}_5\text{Cl}$ Solid-State Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 33296-33306. | 8.0 | 158 |
| 7 | Nanosize Storage Properties in Spinel $\text{Li}_4\text{Ti}_5\text{O}_{12}$ Explained by Anisotropic Surface Lithium Insertion. <i>ACS Nano</i> , 2012, 6, 8702-8712. | 14.6 | 131 |
| 8 | Revealing the Impact of Space-Charge Layers on the Li-Ion Transport in All-Solid-State Batteries. <i>Joule</i> , 2020, 4, 1311-1323. | 24.0 | 111 |
| 9 | Tandem Interface and Bulk Li-Ion Transport in a Hybrid Solid Electrolyte with Microsized Active Filler. <i>ACS Energy Letters</i> , 2019, 4, 2336-2342. | 17.4 | 80 |
| 10 | Revealing the relation between the structure, Li-ion conductivity and solid-state battery performance of the argyrodite $\text{Li}_6\text{PS}_5\text{Br}$ solid electrolyte. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21178-21188. | 10.3 | 76 |
| 11 | Synthesis and Structure-Property Relationships of Polyimide Covalent Organic Frameworks for Carbon Dioxide Capture and (Aqueous) Sodium-Ion Batteries. <i>Chemistry of Materials</i> , 2021, 33, 818-833. | 6.7 | 76 |
| 12 | Tailoring $\text{Li}_6\text{PS}_5\text{Br}$ ionic conductivity and understanding of its role in cathode mixtures for high performance all-solid-state Li^+S batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10412-10421. | 10.3 | 64 |
| 13 | Peeking across Grain Boundaries in a Solid-State Ionic Conductor. <i>ACS Energy Letters</i> , 2019, 4, 1092-1097. | 17.4 | 45 |
| 14 | High dielectric barium titanate porous scaffold for efficient Li metal cycling in anode-free cells. <i>Nature Communications</i> , 2021, 12, 6536. | 12.8 | 44 |
| 15 | Toward Optimal Performance and In-Depth Understanding of Spinel $\text{Li}_4\text{Ti}_5\text{O}_{12}$ Electrodes through Phase Field Modeling. <i>Advanced Functional Materials</i> , 2018, 28, 1705992. | 14.9 | 43 |
| 16 | Controlling the Lithium-Metal Growth To Enable Low-Lithium-Metal-Excess All-Solid-State Lithium-Metal Batteries. , 2020, 2, 665-670. | | 37 |
| 17 | Quantification of the Li-ion diffusion over an interface coating in all-solid-state batteries via NMR measurements. <i>Nature Communications</i> , 2021, 12, 5943. | 12.8 | 36 |
| 18 | The Fine Line between a Two-Phase and Solid-Solution Phase Transformation and Highly Mobile Phase Interfaces in Spinel $\text{Li}_4\text{Ti}_5\text{O}_{12}$. <i>Advanced Energy Materials</i> , 2017, 7, 1601781. | 19.5 | 33 |

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|----|---|------|-----------|
| 19 | Equilibrium Lithium ⁺ Ion Transport Between Nanocrystalline Lithium ⁺ Inserted Anatase TiO ₂ and the Electrolyte. Chemistry - A European Journal, 2011, 17, 14811-14816. | 3.3 | 30 |
| 20 | A Direct View on Li-Ion Transport and Li-Metal Plating in Inorganic and Hybrid Solid-State Electrolytes. Accounts of Chemical Research, 2022, 55, 333-344. | 15.6 | 25 |
| 21 | Fast interfaces. Nature Energy, 2020, 5, 424-425. | 39.5 | 4 |