

Vincent Chevrier

List of Publications by Year in descending order

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Version: 2024-02-01

32
papers

8,011
citations

279798

23
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414414

32
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33
all docs

33
docs citations

33
times ranked

10416
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Isothermal Calorimetry Evaluation of Metallurgical Silicon as a Negative Electrode Material for Li-Ion Batteries. Journal of the Electrochemical Society, 2021, 168, 030504. | 2.9 | 11 |
| 2 | Design and Testing of Prelithiated Full Cells with High Silicon Content. Journal of the Electrochemical Society, 2018, 165, A1129-A1136. | 2.9 | 52 |
| 3 | Design of Positive Electrodes for Li-Ion Full Cells with Silicon. Journal of the Electrochemical Society, 2018, 165, A2968-A2977. | 2.9 | 10 |
| 4 | A Trade-Off Between Simplicity and Robustness? Illustration on a Lattice-Gas Model of Swarming. Emergence, Complexity and Computation, 2018, , 239-259. | 0.3 | 0 |
| 5 | Studies of Si-Fe-C Electrode Materials Prepared by Combinatorial Sputter Deposition. Journal of the Electrochemical Society, 2017, 164, A498-A507. | 2.9 | 7 |
| 6 | Measurement of Li-Ion Battery Electrolyte Stability by Electrochemical Calorimetry. Journal of the Electrochemical Society, 2017, 164, A889-A896. | 2.9 | 13 |
| 7 | The Effect of Carbon Dioxide on the Cycle Life and Electrolyte Stability of Li-Ion Full Cells Containing Silicon Alloy. Journal of the Electrochemical Society, 2017, 164, A2527-A2533. | 2.9 | 42 |
| 8 | Studies of the Capacity Fade Mechanisms of LiCoO_2/Si -Alloy: Graphite Cells. Journal of the Electrochemical Society, 2016, 163, A1146-A1156. | 2.9 | 115 |
| 9 | Understanding Anomalous Behavior in Coulombic Efficiency Measurements on Li-Ion Batteries. Journal of the Electrochemical Society, 2015, 162, A278-A283. | 2.9 | 171 |
| 10 | Alloy Negative Electrodes for Li-Ion Batteries. Chemical Reviews, 2014, 114, 11444-11502. | 47.7 | 1,675 |
| 11 | Evaluating Si-Based Materials for Li-Ion Batteries in Commercially Relevant Negative Electrodes. Journal of the Electrochemical Society, 2014, 161, A783-A791. | 2.9 | 151 |
| 12 | First steps on asynchronous lattice-gas models with an application to a swarming rule. Natural Computing, 2013, 12, 551-560. | 3.0 | 9 |
| 13 | Python Materials Genomics (pymatgen): A robust, open-source python library for materials analysis. Computational Materials Science, 2013, 68, 314-319. | 3.0 | 2,392 |
| 14 | First-principles study of iron oxyfluorides and lithiation of FeOF. Physical Review B, 2013, 87, . | 3.2 | 52 |
| 15 | Combinatorial Studies of $\text{Si}_{1-x}\text{O}_x$ as a Potential Negative Electrode Material for Li-Ion Battery Applications. Journal of the Electrochemical Society, 2013, 160, A1587-A1593. | 2.9 | 73 |
| 16 | In Situ Detection of Lithium Plating on Graphite Electrodes by Electrochemical Calorimetry. Journal of the Electrochemical Society, 2013, 160, A588-A594. | 2.9 | 116 |
| 17 | A Robustness Approach to Study Metastable Behaviours in a Lattice-Gas Model of Swarming. Lecture Notes in Computer Science, 2013, , 84-97. | 1.3 | 6 |
| 18 | Probing robustness of cellular automata through variations of asynchronous updating. Natural Computing, 2012, 11, 553-564. | 3.0 | 31 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Crystal Structure, Physical Properties, and Electrochemistry of Copper Substituted LiFePO_4 Single Crystals. Chemistry of Materials, 2012, 24, 166-173. | 6.7 | 31 |
| 20 | First Steps on Asynchronous Lattice-Gas Models with an Application to a Swarming Rule. Lecture Notes in Computer Science, 2012, , 633-642. | 1.3 | 4 |
| 21 | Challenges for Na-ion Negative Electrodes. Journal of the Electrochemical Society, 2011, 158, A1011. | 2.9 | 770 |
| 22 | Voltage, stability and diffusion barrier differences between sodium-ion and lithium-ion intercalation materials. Energy and Environmental Science, 2011, 4, 3680. | 30.8 | 1,236 |
| 23 | Comparison of lithium polaron migration and phase separation in olivine LiMnPO_4 and LiFePO_4 . | 3.2 | 128 |
| 24 | Activation Energies of Crystallization Events in Electrochemically Lithiated Silicon. Journal of the Electrochemical Society, 2011, 158, A1207. | 2.9 | 24 |
| 25 | First Principles Studies of Disordered Lithiated Silicon. Journal of the Electrochemical Society, 2010, 157, A392. | 2.9 | 90 |
| 26 | First principles study of $\text{Li}^{\delta-}\text{Si}$ crystalline phases: Charge transfer, electronic structure, and lattice vibrations. Journal of Alloys and Compounds, 2010, 496, 25-36. | 5.5 | 165 |
| 27 | Hybrid density functional calculations of redox potentials and formation energies of transition metal compounds. Physical Review B, 2010, 82, . | 3.2 | 298 |
| 28 | First principles studies of silicon as a negative electrode material for lithium-ion batteries. Canadian Journal of Physics, 2009, 87, 625-632. | 1.1 | 53 |
| 29 | First Principles Model of Amorphous Silicon Lithiation. Journal of the Electrochemical Society, 2009, 156, A454. | 2.9 | 177 |
| 30 | A high throughput method using electron microprobe analysis for quantification of protein adsorption on surfaces. Surface Science, 2008, 602, 795-804. | 1.9 | 7 |
| 31 | Production and visualization of quaternary combinatorial thin films. Measurement Science and Technology, 2006, 17, 1399-1404. | 2.6 | 29 |
| 32 | Design of Amorphous Alloy Electrodes for Li-Ion Batteries. Electrochemical and Solid-State Letters, 2004, 7, A310. | 2.2 | 60 |