

# Sean P Culver

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4386016/publications.pdf>

Version: 2024-02-01

24  
papers

2,864  
citations

331670

21  
h-index

610901

24  
g-index

24  
all docs

24  
docs citations

24  
times ranked

2265  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Rapid and Facile Approach for the Recycling of High-Performance LiNi <sub>1-x</sub> Co <sub>x</sub> Mn <sub>y</sub> O <sub>2</sub> Active Materials. <i>ChemSusChem</i> , 2021, 14, 441-448.	6.8	20
2	Changing the Static and Dynamic Lattice Effects for the Improvement of the Ionic Transport Properties within the Argyrodite Li <sub>6</sub> PS <sub>5</sub> Se. <i>ACS Applied Energy Materials</i> , 2020, 3, 9-18.	5.1	52
3	Defect-Mediated Conductivity Enhancements in Na <sub>3</sub> Pn <sub>1</sub> W <sub>4</sub> S <sub>4</sub> (Pn = P, Sb) Using Aliovalent Substitutions. <i>ACS Energy Letters</i> , 2020, 5, 146-151.	17.4	100
4	Evidence for a Solid-Electrolyte Inductive Effect in the Superionic Conductor Li <sub>10</sub> Ge <sub>1</sub> Sn <sub>x</sub> P <sub>2</sub> S <sub>12</sub> . <i>Journal of the American Chemical Society</i> , 2020, 142, 21210-21219.	13.7	43
5	Enhancing the Electrochemical Performance of LiNi <sub>0.70</sub> Co <sub>0.15</sub> Mn <sub>0.15</sub> O <sub>2</sub> Cathodes Using a Practical Solution-Based Al <sub>2</sub> O <sub>3</sub> Coating. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 31392-31400.	8.0	57
6	Solution-based synthesis of lithium thiophosphate superionic conductors for solid-state batteries: a chemistry perspective. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17735-17753.	10.3	82
7	Ionic Conductivity of the NASICON-Related Thiophosphate Na <sub>1+x</sub> Ti <sub>2</sub> Ga <sub>x</sub> (PS <sub>4</sub> ) <sub>3</sub> . <i>Chemistry - A European Journal</i> , 2019, 25, 4143-4148.	3.3	14
8	Local Structure and Influence of Sb Substitution on the Structure-Transport Properties in AgBiSe <sub>2</sub> . <i>Inorganic Chemistry</i> , 2019, 58, 9236-9245.	4.0	18
9	Further Evidence for Energy Landscape Flattening in the Superionic Argyrodites Li <sub>6+x</sub> P <sub>1</sub> M <sub>x</sub> S <sub>5</sub> I (M = Si, Ge, Sn). <i>Chemistry of Materials</i> , 2019, 31, 4936-4944.	6.7	109
10	On the Functionality of Coatings for Cathode Active Materials in Thiophosphate-Based All-Solid-State Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1900626.	19.5	221
11	Influence of the Lithium Substructure on the Diffusion Pathways and Transport Properties of the Thio-LISICON Li <sub>4</sub> Ge <sub>1</sub> Sn <sub>x</sub> S <sub>4</sub> . <i>Chemistry of Materials</i> , 2019, 31, 3794-3802.	6.7	39
12	Rapid Crystallization and Kinetic Freezing of Site-Disorder in the Lithium Superionic Argyrodite Li <sub>6</sub> PS <sub>5</sub> Br. <i>Chemistry of Materials</i> , 2019, 31, 10178-10185.	6.7	72
13	Bottleneck of Diffusion and Inductive Effects in Li <sub>10</sub> Ge <sub>1</sub> Sn <sub>x</sub> P <sub>2</sub> S <sub>12</sub> . <i>Chemistry of Materials</i> , 2018, 30, 1791-1798.	6.7	114
14	Effect of Si substitution on the structural and transport properties of superionic Li-argyrodites. <i>Journal of Materials Chemistry A</i> , 2018, 6, 645-651.	10.3	128
15	Investigation of Fluorine and Nitrogen as Anionic Dopants in Nickel-Rich Cathode Materials for Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 44452-44462.	8.0	63
16	Comparing the Descriptors for Investigating the Influence of Lattice Dynamics on Ionic Transport Using the Superionic Conductor Na <sub>3</sub> PS <sub>4</sub> Se. <i>Journal of the American Chemical Society</i> , 2018, 140, 14464-14473.	13.7	122
17	Competing Structural Influences in the Li Superionic Conducting Argyrodites Li <sub>6</sub> PS <sub>5</sub> Se <sub>x</sub> Br (0 ≤ x ≤ 1) upon Se Substitution. <i>Inorganic Chemistry</i> , 2018, 57, 13920-13928.	4.0	82
18	Inducing High Ionic Conductivity in the Lithium Superionic Argyrodites Li <sub>6+x</sub> P <sub>1</sub> Ge <sub>x</sub> S <sub>5</sub> I for All-Solid-State Batteries. <i>Journal of the American Chemical Society</i> , 2018, 140, 16330-16339.	13.7	331

#	ARTICLE	IF	CITATIONS
19	Designing Ionic Conductors: The Interplay between Structural Phenomena and Interfaces in Thiophosphate-Based Solid-State Batteries. <i>Chemistry of Materials</i> , 2018, 30, 4179-4192.	6.7	131
20	Degradation Mechanisms at the $\text{Li}_{10}\text{GeP}_2\text{S}_{12}/\text{LiCoO}_2$ Cathode Interface in an All-Solid-State Lithium-Ion Battery. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 22226-22236.	8.0	250
21	Vacancy and anti-site disorder scattering in $\text{AgBiSe}_2$ thermoelectrics. <i>Dalton Transactions</i> , 2017, 46, 3906-3914.	3.3	39
22	Synthesis, Structural Characterization, and Lithium Ion Conductivity of the Lithium Thiophosphate $\text{Li}_2\text{P}_2\text{S}_6$ . <i>Inorganic Chemistry</i> , 2017, 56, 6681-6687.	4.0	98
23	Influence of Lattice Polarizability on the Ionic Conductivity in the Lithium Superionic Argyrodites $\text{Li}_6\text{PS}_5\text{X}$ (X = Cl, Br, I). <i>Journal of the American Chemical Society</i> , 2017, 139, 10909-10918.	13.7	446
24	Lithium ion conductivity in $\text{Li}_2\text{S-P}_2\text{S}_5$ glasses “building units and local structure evolution during the crystallization of superionic conductors $\text{Li}_3\text{PS}_4$ , $\text{Li}_7\text{P}_3\text{S}_{11}$ and $\text{Li}_4\text{P}_2\text{S}_7$ ”. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18111-18119.	10.3	233