Dennis W Mcowen

List of Publications by Year
in descending order

31	2,975	516561 16	752573 20
papers	citations	h-index	g-index

31	31	31	3342
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Probing the Mechanical Properties of a Doped Li₇La₃Zr₂O₁₂ Garnet Thin Electrolyte for Solid-State Batteries. ACS Applied Materials & Interfaces, 2020, 12, 24693-24700.	4.0	24
2	The Effects of Constriction Factor and Geometric Tortuosity on Liâ€Ion Transport in Porous Solidâ€State Liâ€Ion Electrolytes. Advanced Functional Materials, 2020, 30, 1910362.	7.8	22
3	Predicting the flexural strength of Liâ€ionâ€conducting garnet type oxide for solidâ€stateâ€batteries. Journal of the American Ceramic Society, 2020, 103, 5186-5195.	1.9	13
4	Garnet-Type Solid-State Electrolytes: Materials, Interfaces, and Batteries. Chemical Reviews, 2020, 120, 4257-4300.	23.0	655
5	(Invited) Temperature-Flexible High Performance Quasi Solid-State Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 959-959.	0.0	0
6	High-rate lithium cycling in a scalable trilayer Li-garnet-electrolyte architecture. Materials Today, 2019, 22, 50-57.	8.3	233
7	Enhanced Performance and Safety in Intermediate Temperature Lithium-Sulfur Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
8	Improved Sulfur Tolerance of SOFCs through Surface Modification of Anodes. ACS Applied Energy Materials, 2018, 1, 1559-1566.	2.5	13
9	3D lithium metal anodes hosted in asymmetric garnet frameworks toward high energy density batteries. Energy Storage Materials, 2018, 14, 376-382.	9.5	114
10	Lithium-ion conductive ceramic textile: A new architecture for flexible solid-state lithium metal batteries. Materials Today, 2018, 21, 594-601.	8.3	134
11	Continuous plating/stripping behavior of solid-state lithium metal anode in a 3D ion-conductive framework. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3770-3775.	3.3	250
12	3Dâ€Printing Electrolytes for Solidâ€State Batteries. Advanced Materials, 2018, 30, e1707132.	11.1	236
13	Three-Dimensional, Solid-State Mixed Electronâ€“Ion Conductive Framework for Lithium Metal Anode. Nano Letters, 2018, 18, 3926-3933.	4.5	175
14	All-in-one lithium-sulfur battery enabled by a porous-dense-porous garnet architecture. Energy Storage Materials, 2018, 15, 458-464.	9.5	108
15	3D Microstructure Reconstruction and Characterization of Solid-State Electrolyte with Varying Porosity. Microscopy and Microanalysis, 2018, 24, 814-815.	0.2	0
16	Three-dimensional bilayer garnet solid electrolyte based high energy density lithium metalâ€“sulfur batteries. Energy and Environmental Science, 2017, 10, 1568-1575.	15.6	499
17	Mechanical Properties of Li7La2.75Ca0.25Zr1.75Nb0.25O12 Garnet Electrolyteâ€”a Preliminary Study of a Porous Layer Support All-Solid State Battery. ECS Meeting Abstracts, 2017, , .	0.0	0
18	Fully Dense Sintering of Li Garnet Materials for All Solid State Li Ion Batteries. ECS Meeting Abstracts, 2017, , .	0.0	0

#	Article	IF	Citations
19	Effect of Alumina Addition on Li6.75La2.75Ca.25Zr1.5Nb.5O12 Lithium Garnet. ECS Meeting Abstracts, 2017, , .	0.0	0
20	Quasi Solid State Li-S Battery Enabled By a Triple Layer Garnet Framework. ECS Meeting Abstracts, 2017, , .	0.0	0
21	Understanding the Effect of Solid Electrolyte Structure on Properties through 3D-Printing. ECS Meeting Abstracts, 2017, , .	0.0	0
22	Structure-Performance Relations in Multi-Layer Solid-State Li-Ion Electrolytes Using FIB-Tomography. ECS Meeting Abstracts, 2017, , .	0.0	0
23	3D Printing Microstructured Li-Garnet Electrolytes for Solid-State Lithium Batteries. ECS Meeting Abstracts, 2016, , .	0.0	0
24	Concentrated electrolytes: decrypting electrolyte properties and reassessing Al corrosion mechanisms. Energy and Environmental Science, 2014, 7, 416-426.	15.6	332
25	The Use of Methyl Butyrate-Based Electrolytes with Additives to Enable the Operation of Li-Ion Cells with High Voltage Cathodes over a Wide Temperature Range. ECS Transactions, 2014, 58, 97-107.	0.3	3
26	Anion Coordination Interactions in Solvates with the Lithium Salts LiDCTA and LiTDI. Journal of Physical Chemistry C, 2014, 118, 7781-7787.	1.5	25
27	Thermal Phase Behavior and Electrochemical/Physicochemical Properties of Carbonate and Ester Electrolytes with LiBF₄, LiDFOB and LiBOB. ECS Transactions, 2013, 50, 381-387.	0.3	3
28	Electrolyte Solvation and Ionic Association. Journal of the Electrochemical Society, 2013, 160, A2100-A2110.	1.3	43
29	Solvate Structures and Computational/Spectroscopic Characterization of Lithium Difluoro(oxalato)borate (LiDFOB) Electrolytes. Journal of Physical Chemistry C, 2013, 117, 5521-5531.	1.5	58
30	N-Alkyl-N-methylpyrrolidinium difluoro(oxalato)borate ionic liquids: Physical/electrochemical properties and Al corrosion. Journal of Power Sources, 2013, 237, 104-111.	4.0	35
31	Dilithium 1,2,5-thiadiazolidine-3,4-dione 1,1-dioxide dihydrate. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, m1228-m1228.	0.2	0