Julian Self

List of Publications by Year
in descending order

21 papers	1,434 citations	516710 16 h-index	752698 20 g-index
21 all docs	21 docs citations	21 times ranked	1733 citing authors

#	Article	IF	Citations
1	Uncharted Waters: Super-Concentrated Electrolytes. Joule, 2020, 4, 69-100.	24.0	305
2	The influence of FEC on the solvation structure and reduction reaction of LiPF6/EC electrolytes and its implication for solid electrolyte interphase formation. Nano Energy, 2019, 64, 103881.	16.0	239
3	Dielectric Constants for Quantum Chemistry and Li-Ion Batteries: Solvent Blends of Ethylene Carbonate and Ethyl Methyl Carbonate. Journal of Physical Chemistry C, 2015, 119, 22322-22330.	3.1	154
4	Ion Transport and the True Transference Number in Nonaqueous Polyelectrolyte Solutions for Lithium Ion Batteries. ACS Central Science, 2019, 5, 1250-1260.	11.3	126
5	Survey of Gas Expansion in Li-Ion NMC Pouch Cells. Journal of the Electrochemical Society, 2015, 162, A796-A802.	2.9	123
6	Transport in Superconcentrated LiPF₆ and LiBF₄/Propylene Carbonate Electrolytes. ACS Energy Letters, 2019, 4, 2843-2849.	17.4	71
7	The role of prop-1-ene-1,3-sultone as an additive in lithium-ion cells. Journal of Power Sources, 2015, 298, 369-378.	7.8	58
8	Ion Correlations and Their Impact on Transport in Polymer-Based Electrolytes. Macromolecules, 2021, 54, 2575-2591.	4.8	50
9	Sulfolane-Based Electrolyte for High Voltage Li(Ni_{0.42}Mn_{0.42}Co_{0.16})O₂(NMC442)/Graphite Pouch Cells. Journal of the Electrochemical Society, 2015, 162, A1424-A1431.	2.9	49
10	The Interplay between Salt Association and the Dielectric Properties of Low Permittivity Electrolytes: The Case of LiPF₆ and LiAsF₆ in Dimethyl Carbonate. Journal of Physical Chemistry C, 2018, 122, 1990-1994.	3.1	43
11	Onsager Transport Coefficients and Transference Numbers in Polyelectrolyte Solutions and Polymerized Ionic Liquids. Macromolecules, 2020, 53, 9503-9512.	4.8	42
12	The critical role of configurational flexibility in facilitating reversible reactive metal deposition from borohydride solutions. Journal of Materials Chemistry A, 2020, 8, 7235-7244.	10.3	37
13	Transport Phenomena in Low Temperature Lithium-Ion Battery Electrolytes. Journal of the Electrochemical Society, 2021, 168, 080501.	2.9	35
14	A systematic study of some promising electrolyte additives in Li[Ni1/3Mn1/3Co1/3]O2/graphite, Li[Ni0.5Mn0.3Co0.2]/graphite and Li[Ni0.6Mn0.2Co0.2]/graphite pouch cells. Journal of Power Sources, 2015, 299, 130-138.	7.8	31
15	Ion Pairing and Redissociaton in Low-Permittivity Electrolytes for Multivalent Battery Applications. Journal of Physical Chemistry Letters, 2020, 11, 2046-2052.	4.6	28
16	Quantifying Species Populations in Multivalent Borohydride Electrolytes. Journal of Physical Chemistry B, 2021, 125, 3644-3652.	2.6	17
17	Concentration-dependent ion correlations impact the electrochemical behavior of calcium battery electrolytes. Physical Chemistry Chemical Physics, 2022, 24, 674-686.	2.8	13
18	A Theoretical Model for Computing Freezing Point Depression of Lithium-Ion Battery Electrolytes. Journal of the Electrochemical Society, 2021, 168, 120532.	2.9	6

#	Article	IF	Citations
19	Ion Association Constants for Lithium Ion Battery Electrolytes from First-Principles Quantum Chemistry. Journal of the Electrochemical Society, 2019, 166, A3554-A3558.	2.9	5
20	Random Numbers from a Delay Equation. Journal of Nonlinear Science, 2016, 26, 1311-1327.	2.1	2
21	Application of Spectral Density/Periodogram Analysis to Serial Neutrophil Counts to Diagnose Cyclic Neutropenia. Blood, 2015, 126, 4608-4608.	1.4	0