Mallory P Gobet

List of Publications by Year
in descending order

48 papers	3,065 citations	257450 24 h-index	243625 44 g-index
52 all docs	52 docs citations	52 times ranked	4283 citing authors

#	Article	IF	Citations
1	Fluorine-donating electrolytes enable highly reversible 5-V-class Li metal batteries. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1156-1161.	7.1	512
2	Hybrid Aqueous/Non-aqueous Electrolyte for Safe and High-Energy Li-Ion Batteries. Joule, 2018, 2, 927-937.	24.0	303
3	An Iodide-Based Li₇P₂S₈I Superionic Conductor. Journal of the American Chemical Society, 2015, 137, 1384-1387.	13.7	298
4	Liquid Structure with Nano-Heterogeneity Promotes Cationic Transport in Concentrated Electrolytes. ACS Nano, 2017, 11, 10462-10471.	14.6	283
5	A carbonate-free, sulfone-based electrolyte for high-voltage Li-ion batteries. Materials Today, 2018, 21, 341-353.	14.2	258
6	Solvation behavior of carbonate-based electrolytes in sodium ion batteries. Physical Chemistry Chemical Physics, 2017, 19, 574-586.	2.8	152
7	Anion Solvation in Carbonate-Based Electrolytes. Journal of Physical Chemistry C, 2015, 119, 27255-27264.	3.1	121
8	Fundamental Limitations of Ionic Conductivity in Polymerized Ionic Liquids. Macromolecules, 2018, 51, 8637-8645.	4.8	103
9	Mechanism of Conductivity Relaxation in Liquid and Polymeric Electrolytes: Direct Link between Conductivity and Diffusivity. Journal of Physical Chemistry B, 2016, 120, 11074-11083.	2.6	101
10	Comparative Study of Ether-Based Electrolytes for Application in Lithiumâ€"Sulfur Battery. ACS Applied Materials & Interfaces, 2015, 7, 13859-13865.	8.0	95
11	New battery strategies with a polymer/Al2O3 separator. Journal of Power Sources, 2014, 263, 52-58.	7.8	74
12	A simple approach for making a viable, safe, and high-performances lithium-sulfur battery. Journal of Power Sources, 2018, 377, 26-35.	7.8	67
13	Defect chemistry and electrical properties of garnet-type Li₇La₃Zr₂O₁₂. Physical Chemistry Chemical Physics, 2018, 20, 1447-1459.	2.8	64
14	Structural Evolution and Li Dynamics in Nanophase Li₃PS₄ by Solid-State and Pulsed-Field Gradient NMR. Chemistry of Materials, 2014, 26, 3558-3564.	6.7	60
15	Polyethylene glycol dimethyl ether (PEGDME)-based electrolyte for lithium metal battery. Journal of Power Sources, 2015, 299, 460-464.	7.8	52
16	Characteristics of glyme electrolytes for sodium battery: nuclear magnetic resonance and electrochemical study. Electrochimica Acta, 2017, 231, 223-229.	5.2	39
17	Anisotropic Ion Diffusion and Electrochemically Driven Transport in Nanostructured Block Copolymer Electrolytes. Journal of Physical Chemistry B, 2018, 122, 1537-1544.	2.6	39
18	Influence of Solvent on Ion Aggregation and Transport in PY₁₅TFSI Ionic Liquidâ€"Aprotic Solvent Mixtures. Journal of Physical Chemistry B, 2013, 117, 10581-10588.	2.6	35

#	Article	IF	Citations
19	Structure and dynamics in yttrium-based molten rare earth alkali fluorides. Journal of Chemical Physics, 2013, 138, 184503.	3.0	33
20	Natural Abundance Oxygen-17 NMR Investigation of Lithium Ion Solvation in Glyme-based Electrolytes. Electrochimica Acta, 2016, 213, 606-612.	5.2	26
21	Carbon Composites for a Highâ€Energy Lithiumâ€“Sulfur Battey with a Glymeâ€Based Electrolyte. ChemElectroChem, 2017, 4, 209-215.	3.4	26
22	Correlating Li⁺-Solvation Structure and its Electrochemical Reaction Kinetics with Sulfur in Subnano Confinement. Journal of Physical Chemistry Letters, 2018, 9, 1739-1745.	4.6	26
23	Ethyl Difluoro(trimethylsilyl)acetate and Difluoro(trimethylsilyl)acetamides â€“ Precursors of 3,3-Difluoroazetidinones. European Journal of Organic Chemistry, 2006, 2006, 4147-4154.	2.4	24
24	Lithium diffusion in lithium nitride by pulsed-field gradient NMR. Physical Chemistry Chemical Physics, 2012, 14, 13535.	2.8	24
25	Relevant Features of a Triethylene Glycol Dimethyl Ether-Based Electrolyte for Application in Lithium Battery. ACS Applied Materials & Interfaces, 2017, 9, 17085-17095.	8.0	24
26	An alternative route to single ion conductivity using multi-ionic salts. Materials Horizons, 2018, 5, 461-473.	12.2	24
27	The effect of salt content on the structure of <i>iota</i>â€carrageenan systems: ²³Na DQF NMR and rheological studies. Magnetic Resonance in Chemistry, 2009, 47, 307-312.	1.9	22
28	Enhanced Lithium Oxygen Battery Using a Glyme Electrolyte and Carbon Nanotubes. ACS Applied Materials & Interfaces, 2018, 10, 16367-16375.	8.0	21
29	Distribution and mobility of phosphates and sodium ions in cheese by solidâ€state ³¹P and doubleâ€quantum filtered ²³Na NMR spectroscopy. Magnetic Resonance in Chemistry, 2010, 48, 297-303.	1.9	20
30	Multinuclear magnetic resonance investigation of cation-anion and anion-solvent interactions in carbonate electrolytes. Journal of Power Sources, 2018, 399, 215-222.	7.8	19
31	Insight on the Li₂S electrochemical process in a composite configuration electrode. New Journal of Chemistry, 2016, 40, 2935-2943.	2.8	18
32	First-Principles Molecular Dynamics Simulation and Conductivity Measurements of a Molten xLi2Oâ€“(1) Tj ETQq0 0 0 rgBT /Overlock 10	2.6	17
33	A Rayleighian approach for modeling kinetics of ionic transport in polymeric media. Journal of Chemical Physics, 2017, 146, 064902.	3.0	12
34	Hybrid Aqueous/Non-aqueous Electrolyte for Safe and High-Energy Li-Ion Batteries. Joule, 2018, 2, 2178.	24.0	12
35	Exploring the Use of Ionic Liquid Mixtures to Enhance the Performance of Dicationic Ionic Liquids. Journal of the Electrochemical Society, 2017, 164, H5150-H5159.	2.9	9
36	Self-diffusion coefficient of lithium in molten xLi2Oâ€“(1â^’x)B2O3 system using high-temperature PFG NMR. Chemical Physics Letters, 2012, 530, 61-63.	2.6	8

#	ARTICLE	IF	CITATIONS
37	Determination of aroma compound diffusion in model food systems: Comparison of macroscopic and microscopic methodologies. Journal of Food Engineering, 2010, 100, 557-566.	5.2	7
38	Transport Properties in Cryolitic Melts: NMR Measurements and Molecular Dynamics Calculations of Self-Diffusion Coefficients. ECS Transactions, 2010, 33, 679-684.	0.5	6
39	In Situ Experimental Approach of the Speciation in Molten Lanthanide and Actinide Fluorides Combining NMR, EXAFS and Molecular Dynamics. ECS Transactions, 2010, 33, 361-369.	0.5	5
40	Lithium chloride molten flux approach to Li2MnO3:LiMO2 (M = Mn, Ni, Co) â€œcompositeâ€•synthesis for lithium-ion battery cathode applications. RSC Advances, 2014, 4, 12018-12027.	3.6	5
41	Evaluating the Ion Transport of 1-Ethyl-3-Methylimidazolium Acetate Solutions Containing Carbohydrate Solutes. Journal of the Electrochemical Society, 2019, 166, H721-H729.	2.9	5
42	Solid-State 31P NMR, a Relevant Method to Evaluate the Distribution of Phosphates in Semi-hard Cheeses. Food Analytical Methods, 2013, 6, 1544-1550.	2.6	4
43	Investigation of Fluoroacidity in Molten Fluorides by the Combination of High Temperature NMR and Molecular Dynamics. ECS Transactions, 2010, 33, 159-165.	0.5	3
44	Alkyl chain length effects of hydroxyl-functionalized imidazolium ionic liquids in the ionothermal synthesis of LiFePO₄. Phosphorus, Sulfur and Silicon and the Related Elements, 2019, 194, 292-296.	1.6	2
45	Ion Solvation and the Search for a Correlation with Electrode Passivation. Materials Research Society Symposia Proceedings, 2015, 1740, 49.	0.1	0
46	Towards Better Understanding of Molecular Solvent Behavior in Ionic Liquid-Biopolymer Mixtures. ECS Transactions, 2016, 75, 677-683.	0.5	0
47	The Impact of Carbohydrate Solutes on the Ionicity of 1-Ethyl-3-Methylimidazolium Acetate Ionic Liquid Solutions. ECS Transactions, 2018, 86, 279-286.	0.5	0
48	Cellulose, Cellobiose, and Glucose Cause Similar Decreases to Molar Conductivity and Drastically Different Increases to Dynamic Viscosity of 1-Ethyl-3-Methylimidazoilum Acetate Based Solvents. ECS Transactions, 2018, 86, 257-268.	0.5	0