Guinevere A Giffin

List of Publications by Year
in descending order

69 papers	3,418 citations	185998 28 h-index	143772 57 g-index
73 all docs	73 docs citations	73 times ranked	4908 citing authors

#	Article	IF	Citations
1	Impact of Bracing on Large Format Prismatic Lithiumâ€Ion Battery Cells during Aging. Advanced Energy Materials, 2022, 12, .	10.2	17
2	Influence of external pressure on silicon electrodes in lithium-ion cells. Electrochimica Acta, 2022, 419, 140354.	2.6	9
3	How interdiffusion affects the electrochemical performance of LiMn₂O₄ thin films on stainless steel. Materials Advances, 2021, 2, 2289-2298.	2.6	4
4	Influence of the specific surface area of StÃ¶ber silica additives on the electrochemical properties of negative electrodes in lead-acid batteries. Journal of Energy Storage, 2021, 34, 102193.	3.9	5
5	Electrochromic Polymer Ink Derived from a Sidechainâ€Modified EDOT for Electrochromic Devices with Colorless Bright State. ChemElectroChem, 2021, 8, 726-734.	1.7	4
6	Impact of electrochemical and mechanical interactions on lithium-ion battery performance investigated by operando dilatometry. Journal of Power Sources, 2021, 488, 229457.	4.0	30
7	A New In Situ and Operando Measurement Method to Determine the Electrical Conductivity of the Negative Active Material in Lead-Acid Batteries during Operation. Journal of the Electrochemical Society, 2021, 168, 050537.	1.3	0
8	Mixed metal oxides as optically-passive ion storage layers in electrochromic devices based on metallopolymers. Solar Energy Materials and Solar Cells, 2021, 223, 110950.	3.0	8
9	Long-Term Cycling Performance of Aqueous Processed Ni-Rich LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ Cathodes. Journal of the Electrochemical Society, 2021, 168, 060511.	1.3	12
10	Charge balancing and optical contrast optimization in Fe-MEPE/Ni1-xO electrochromic devices containing a Li reference electrode. Solar Energy Materials and Solar Cells, 2021, 227, 111080.	3.0	3
11	Abrasive Blasting of Lithium Metal Surfaces Yields Clean and 3Dâ€Structured Lithium Metal Anodes with Superior Properties. Energy Technology, 2021, 9, 2100455.	1.8	3
12	Influence of basic carbon additives on the electrochemical performance of lead-carbon batteries. Journal of Energy Storage, 2021, 44, 103400.	3.9	6
13	New Rollâ€toâ€Roll Processable PEDOTâ€Based Polymer with Colorless Bleached State for Flexible Electrochromic Devices. Advanced Functional Materials, 2020, 30, 1906254.	7.8	68
14	Avoiding Voltage-Induced Degradation in PET-ITO-Based Flexible Electrochromic Devices. ACS Applied Materials & Interfaces, 2020, 12, 36695-36705.	4.0	26
15	Surface Modification of LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ Particles via Li₃PO₄ Coating to Enable Aqueous Electrode Processing. ChemSusChem, 2020, 13, 5962-5971.	3.6	33
16	Redox Electrolytes for Hybrid Type II Electrochromic Devices with Feâˆ’MEPE or Ni 1âˆ’ x O as Electrode Materials. ChemElectroChem, 2020, 7, 3274-3283.	1.7	8
17	Implications of Aqueous Processing for High Energy Density Cathode Materials: Part I. Ni-Rich Layered Oxides. Journal of the Electrochemical Society, 2020, 167, 140512.	1.3	22
18	Implications of Aqueous Processing for High Energy Density Cathode Materials: Part II. Water-Induced Surface Species on LiNi_{0.8}Co_{0.15}Al_{0.05}O₂. Journal of the Electrochemical Society, 2020, 167, 140535.	1.3	20

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19	Dielectric spectroscopy of Pyr14TFSI and Pyr12O1TFSI ionic liquids. Electrochimica Acta, 2018, 274, 400-405.	2.6	1
20	Connection between Lithium Coordination and Lithium Diffusion in [Pyr_{12O1}][FTFSI] Ionic Liquid Electrolytes. ChemSusChem, 2018, 11, 1981-1989.	3.6	46
21	Relevance of ion clusters for Li transport at elevated salt concentrations in [Pyr_{12O1}][FTFSI] ionic liquid-based electrolytes. Chemical Communications, 2018, 54, 4278-4281.	2.2	56
22	Dendrite Growth in Mg Metal Cells Containing Mg(TFSI)₂/Glyme Electrolytes. Journal of the Electrochemical Society, 2018, 165, A1983-A1990.	1.3	124
23	Insights into the Structure and Transport of the Lithium, Sodium, Magnesium, and Zinc Bis(trifluoromethansulfonyl)imide Salts in Ionic Liquids. Journal of Physical Chemistry C, 2018, 122, 20108-20121.	1.5	64
24	Interplay between structure and properties in acid-base blend PBI-based membranes for HT-PEM fuel cells. Journal of Membrane Science, 2017, 535, 122-131.	4.1	54
25	Decoupling effective Li+ ion conductivity from electrolyte viscosity for improved room-temperature cell performance. Journal of Power Sources, 2017, 342, 335-341.	4.0	50
26	A lipophilic ionic liquid based on formamidinium cations and TFSI: the electric response and the effect of CO₂ on the conductivity mechanism. Physical Chemistry Chemical Physics, 2017, 19, 26230-26239.	1.3	2
27	Influence of oligo(ethylene oxide) substituents on pyrrolidinium-based ionic liquid properties, Li⁺ solvation and transport. Physical Chemistry Chemical Physics, 2016, 18, 21539-21547.	1.3	29
28	Macromol. Rapid Commun. 14/2016. Macromolecular Rapid Communications, 2016, 37, 1228-1228.	2.0	0
29	Ionic liquid-based electrolytes for â€œbeyond lithiumâ€• battery technologies. Journal of Materials Chemistry A, 2016, 4, 13378-13389.	5.2	168
30	Appleâ€Biowasteâ€Derived Hard Carbon as a Powerful Anode Material for Naâ€Ion Batteries. ChemElectroChem, 2016, 3, 292-298.	1.7	201
31	Non-Aqueous K-Ion Battery Based on Layered K_{0.3}MnO₂and Hard Carbon/Carbon Black. Journal of the Electrochemical Society, 2016, 163, A1295-A1299.	1.3	349
32	Beneficial effect of propane sultone and tris(trimethylsilyl) borate as electrolyte additives on the cycling stability of the lithium rich nickel manganese cobalt (NMC) oxide. Journal of Power Sources, 2016, 325, 525-533.	4.0	49
33	Quaternary Polymer Electrolytes Containing an Ionic Liquid and a Ceramic Filler. Macromolecular Rapid Communications, 2016, 37, 1188-1193.	2.0	7
34	Crystalline Complexes of Pyr_{12O1}TFSI-Based Ionic Liquid Electrolytes. Journal of Physical Chemistry C, 2015, 119, 5878-5887.	1.5	11
35	Interplay between solid state transitions, conductivity mechanisms, and electrical relaxations in a [PVBTMA] [Br]-b-PMB diblock copolymer membrane for electrochemical applications. Physical Chemistry Chemical Physics, 2015, 17, 31125-31139.	1.3	29
36	Unfolding the Mechanism of Sodium Insertion in Anatase TiO₂ Nanoparticles. Advanced Energy Materials, 2015, 5, 1401142.	10.2	293

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37	Microstructure Development and Dielectric Characterization of Forsteriteâ€Based Ceramics from Silicone Resins and Oxide Fillers. Advanced Engineering Materials, 2014, 16, 806-813.	1.6	19
38	Mechanisms of Magnesium Ion Transport in Pyrrolidinium Bis(trifluoromethanesulfonyl)imide-Based Ionic Liquid Electrolytes. Journal of Physical Chemistry C, 2014, 118, 28361-28368.	1.5	28
39	Li-doped N-methoxyethyl-N-methylpyrrolidinium fluorosulfonyl-(trifluoromethanesulfonyl)imide as electrolyte for reliable lithium ion batteries. Journal of Power Sources, 2014, 269, 645-650.	4.0	26
40	Complex Nature of Ionic Coordination in Magnesium Ionic Liquid-Based Electrolytes: Solvates with Mobile Mg²⁺ Cations. Journal of Physical Chemistry C, 2014, 118, 9966-9973.	1.5	121
41	Single-ion-conducting nanocomposite polymer electrolytes based on PEG400 and anionic nanoparticles: Part 2. Electrical characterization. International Journal of Hydrogen Energy, 2014, 39, 2884-2895.	3.8	38
42	A vibrational spectroscopic and modeling study of poly(2,5-benzimidazole) (ABPBI) â€“ Phosphoric acid interactions in high temperature PEFC membranes. International Journal of Hydrogen Energy, 2014, 39, 2776-2784.	3.8	27
43	New nanocomposite proton conducting membranes based on a coreâ€“shell nanofiller for low relative humidity fuel cells. RSC Advances, 2013, 3, 18960.	1.7	17
44	Interplay between chemical structure and ageing on mechanical and electric relaxations in poly(ether-block-amide)s. Polymer Degradation and Stability, 2013, 98, 1126-1137.	2.7	20
45	Interplay between Structure and Relaxations in Perfluorosulfonic Acid Proton Conducting Membranes. Journal of the American Chemical Society, 2013, 135, 822-834.	6.6	100
46	Conformations and Vibrational Assignments of the (Fluorosulfonyl)(trifluoromethanesulfonyl)imide Anion in Ionic Liquids. Journal of Physical Chemistry C, 2013, 117, 24206-24212.	1.5	24
47	Molecular Relaxations in Magnesium Polymer Electrolytes via GHz Broadband Electrical Spectroscopy. ChemSusChem, 2013, 6, 2157-2160.	3.6	25
48	(Keynote Lecture) Multi-Metal Nano-Electrocatalysts Based on Carbon Nitride Supports for the ORR and FOR in PEM Fuel Cells. ECS Transactions, 2012, 40, 3-10.	0.3	4
49	Synthesisâ€“Structureâ€“Morphology Interplay of Bimetallic â€œCoreâ€“Shellâ€•Carbon Nitride Nanoâ€electrocatalysts. ChemSusChem, 2012, 5, 2451-2459.	3.6	80
50	Interplay between the Structure and Relaxations in Selemion AMV Hydroxide Conducting Membranes for AEMFC Applications. Journal of Physical Chemistry C, 2012, 116, 23965-23973.	1.5	28
51	Influence of Anions on Proton-Conducting Membranes Based on Neutralized Nafion 117, Triethylammonium Methanesulfonate, and Triethylammonium Perfluorobutanesulfonate. 2. Electrical Properties. Journal of Physical Chemistry C, 2012, 116, 1370-1379.	1.5	44
52	Influence of Anions on Proton-Conducting Membranes Based on Neutralized Nafion 117, Triethylammonium Methanesulfonate, and Triethylammonium Perfluorobutanesulfonate. 1. Synthesis and Properties. Journal of Physical Chemistry C, 2012, 116, 1361-1369.	1.5	35
53	Interplay between Structural and Dielectric Features of New Low k Hybrid Organicâ€“Organometallic Supramolecular Ribbons. Crystal Growth and Design, 2012, 12, 297-305.	1.4	48
54	Interplay between Mechanical, Electrical, and Thermal Relaxations in Nanocomposite Proton Conducting Membranes Based on Nafion and a [(ZrO₂)Â·(Ta₂O₅)_{0.119}] Coreâ€“Shell Nanofiller. Journal of the American Chemical Society, 2012, 134, 19099-19107.	6.6	79

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55	New Nanocomposite Hybrid Inorganicâ€“Organic Protonâ€Conducting Membranes Based on Functionalized Silica and PTFE. ChemSusChem, 2012, 5, 1758-1766.	3.6	24
56	Inorganicâ€“organic membranes based on Nafion, [(ZrO2)Â·(HfO2)0.25] and [(SiO2)Â·(HfO2)0.28]. Part I: Synthesis, thermal stability and performance in a single PEMFC. International Journal of Hydrogen Energy, 2012, 37, 6199-6214.	3.8	50
57	Inorganicâ€“organic membranes based on Nafion, [(ZrO2)Â·(HfO2)0.25] and [(SiO2)Â·(HfO2)0.28] nanoparticles. Part II: Relaxations and conductivity mechanism. International Journal of Hydrogen Energy, 2012, 37, 6215-6227.	3.8	51
58	Characterization of sulfated-zirconia/NafionÂ® composite membranes for proton exchange membrane fuel cells. Journal of Power Sources, 2012, 198, 66-75.	4.0	58
59	Broadband electric spectroscopy of proton conducting SPEEK membranes. Journal of Membrane Science, 2012, 390-391, 58-67.	4.1	37
60	Structureâ€“property interplay of proton conducting membranes based on PBI5N, SiO2â€“Im and H3PO4 for high temperature fuel cells. Physical Chemistry Chemical Physics, 2011, 13, 12146.	1.3	35
61	Broadband Electric Spectroscopy at High CO₂ Pressure: Dipole Moment of CO₂ and Relaxation Phenomena of the CO₂â€“Poly(vinyl chloride) System. Journal of Physical Chemistry B, 2011, 115, 9014-9021.	1.2	10
62	New Sulfonated Poly(<i>p</i>-phenylenesulfone)/Poly(1-oxotrimethylene) Nanocomposite Proton-Conducting Membranes for PEMFCs. Chemistry of Materials, 2011, 23, 4452-4458.	3.2	12
63	Effect of High Pressure CO₂ on the Structure of PMMA: A FT-IR Study. Journal of Physical Chemistry B, 2011, 115, 13519-13525.	1.2	23
64	Spectroscopic investigation of proton-conducting, cross-linked linear poly(ethylenimine) hydrochloride membranes. Polymer, 2009, 50, 171-176.	1.8	11
65	Vibrational Spectroscopy of Secondary Amine Salts: 1. Assignment of NH2+Stretching Frequencies in Crystalline Phases. Journal of Physical Chemistry B, 2009, 113, 15914-15920.	1.2	21
66	Quantum Dots in a Polymer Composite: A Convenient Particle-in-a-Box Laboratory Experiment. Journal of Chemical Education, 2008, 85, 842.	1.1	14
67	Spectroscopic studies of polymer electrolytes based on poly(N-ethylethylenimine) and poly(N-methylethylenimine). Electrochimica Acta, 2005, 50, 3963-3968.	2.6	8
68	Flexible electrochromic devices prepared on ultra-thin ITO glass. Materials Advances, 0, , .	2.6	6
69	Comparison of Dynamic Charge Acceptance Tests on Leadâ€“Acid Cells for Carbon Additive Screening. Energy Technology, 0, , 2101051.	1.8	5