Giovanni B Appetecchi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5565213/publications.pdf

Version: 2024-02-01

98 papers	6,577 citations	57758 44 h-index	62596 80 g-index
102 all docs	102 docs citations	102 times ranked	4989 citing authors

#	Article	IF	Citations
1	Kinetics and stability of the lithium electrode in poly(methylmethacrylate)-based gel electrolytes. Electrochimica Acta, 1995, 40, 991-997.	5.2	415
2	Ternary polymer electrolytes containing pyrrolidinium-based polymeric ionic liquids for lithium batteries. Journal of Power Sources, 2010, 195, 3668-3675.	7.8	282
3	Nanoscale organization in piperidinium-based room temperature ionic liquids. Journal of Chemical Physics, 2009, 130, 164521.	3.0	221
4	Effect of the alkyl group on the synthesis and the electrochemical properties of N-alkyl-N-methyl-pyrrolidinium bis(trifluoromethanesulfonyl)imide ionic liquids. Electrochimica Acta, 2009, 54, 1325-1332.	5.2	210
5	Synthesis of Hydrophobic Ionic Liquids for Electrochemical Applications. Journal of the Electrochemical Society, 2006, 153, A1685.	2.9	193
6	NMR Investigation of Ionic Liquidâ^'LiX Mixtures:Â Pyrrolidinium Cations and TFSI-Anions. Journal of Physical Chemistry B, 2005, 109, 22814-22819.	2.6	178
7	Lithium insertion in graphite from ternary ionic liquid-lithium salt electrolytesI. Electrochemical characterization of the electrolytes. Journal of Power Sources, 2009, 192, 599-605.	7.8	176
8	Hot-pressed, dry, composite, PEO-based electrolyte membranes. Journal of Power Sources, 2003, 114, 105-112.	7.8	173
9	Hot-pressed, solvent-free, nanocomposite, PEO-based electrolyte membranes. Journal of Power Sources, 2003, 124, 246-253.	7.8	173
10	Synthesis and characterization of highly conducting gel electrolytes. Electrochimica Acta, 1994, 39, 2187-2194.	5.2	167
11	Physical and Electrochemical Properties ofN-Alkyl-N-methylpyrrolidinium Bis(fluorosulfonyl)imide Ionic Liquids: PY₁₃FSI and PY₁₄FSI. Journal of Physical Chemistry B, 2008, 112, 13577-13580.	2.6	166
12	Electrochemical performance of a solvent-free hybrid ceramic-polymer electrolyte based on Li 7 La 3 Zr 2 O 12 in P(EO) 15 LiTFSI. Journal of Power Sources, 2017, 353, 287-297.	7.8	159
13	UV cross-linked, lithium-conducting ternary polymer electrolytes containing ionic liquids. Journal of Power Sources, 2010, 195, 6130-6137.	7.8	157
14	Solvent-free, PYR1ATFSI ionic liquid-based ternary polymer electrolyte systems. Journal of Power Sources, 2007, 171, 861-869.	7.8	156
15	Chemicalâ€“physical properties of bis(perfluoroalkylsulfonyl)imide-based ionic liquids. Electrochimica Acta, 2011, 56, 1300-1307.	5.2	149
16	Poly(vinylidene fluoride)-based, co-polymer separator electrolyte membranes for lithium-ion battery systems. Journal of Power Sources, 2014, 245, 779-786.	7.8	139
17	Electrochemical and Physicochemical Properties of PY[sub 14]FSI-Based Electrolytes with LiFSI. Journal of the Electrochemical Society, 2009, 156, A891.	2.9	136
18	Molecular Environment and Enhanced Diffusivity of Li⁺ Ions in Lithium-Salt-Doped Ionic Liquid Electrolytes. Journal of Physical Chemistry Letters, 2011, 2, 153-157.	4.6	134

#	Article	IF	Citations
19	Development of safe, green and high performance ionic liquids-based batteries (ILLIBATT project). Journal of Power Sources, 2011, 196, 9719-9730.	7.8	132
20	Recent developments in the ENEA lithium metal battery project. Electrochimica Acta, 2005, 50, 3859-3865.	5.2	121
21	Composite gel membranes: a new class of improved polymer electrolytes for lithium batteries. Electrochemistry Communications, 2001, 3, 281-284.	4.7	120
22	Lithium insertion in graphite from ternary ionic liquidâ€“lithium salt electrolytes: II. Evaluation of specific capacity and cycling efficiency and stability at room temperature. Journal of Power Sources, 2009, 192, 606-611.	7.8	120
23	Development of ionic liquid-based lithium battery prototypes. Journal of Power Sources, 2012, 199, 239-246.	7.8	119
24	The role of the cation aliphatic side chain length in piperidinium bis(trifluoromethansulfonyl)imide ionic liquids. Electrochimica Acta, 2011, 57, 153-159.	5.2	106
25	High-performance electrolyte membranes for plastic lithium batteries. Journal of Power Sources, 1997, 66, 77-82.	7.8	104
26	Room temperature lithium polymer batteries based on ionic liquids. Journal of Power Sources, 2011, 196, 6703-6709.	7.8	103
27	Structural Organization and Transport Properties of Novel Pyrrolidinium-Based Ionic Liquids with Perfluoroalkyl Sulfonylimide Anions. Journal of Physical Chemistry B, 2009, 113, 10750-10759.	2.6	102
28	Thermal and electrochemical properties of PEO-LiTFSI-Pyr14TFSI-based composite cathodes, incorporating 4ÂV-class cathode active materials. Journal of Power Sources, 2014, 246, 846-857.	7.8	91
29	Effect of water and oxygen traces on the cathodic stability of N-alkyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide. Electrochimica Acta, 2008, 53, 6397-6401.	5.2	86
30	Mixtures of ionic liquids for low temperature electrolytes. Electrochimica Acta, 2012, 82, 69-74.	5.2	85
31	Physical and electrochemical properties of binary ionic liquid mixtures: (1â^'x) PYR14TFSIâ€“(x) PYR14IM14. Electrochimica Acta, 2012, 60, 163-169.	5.2	82
32	Water-based synthesis of hydrophobic ionic liquids for high-energy electrochemical devices. Electrochimica Acta, 2013, 96, 124-133.	5.2	81
33	The influence of air and its components on the cathodic stability of N-butyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide. Electrochimica Acta, 2007, 53, 1837-1842.	5.2	80
34	Mesoscopic structural organization in triphilic room temperature ionic liquids. Faraday Discussions, 2013, 167, 499.	3.2	73
35	Blending ionic liquids: how physico-chemical properties change. Physical Chemistry Chemical Physics, 2010, 12, 1784.	2.8	69
36	Behavior of Germanium and Silicon Nanowire Anodes with Ionic Liquid Electrolytes. ACS Nano, 2017, 11, 5933-5943.	14.6	69

#	Article	IF	Citations
37	Mixed organic compound-ionic liquid electrolytes for lithium battery electrolyte systems. Journal of Power Sources, 2014, 269, 608-615.	7.8	64
38	Ionic liquid electrolytes for high-voltage, lithium-ion batteries. Journal of Power Sources, 2020, 479, 228791.	7.8	64
39	Pyrrolidinium-Based Ionic Liquids Doped with Lithium Salts: How Does Li⁺ Coordination Affect Its Diffusivity?. Journal of Physical Chemistry B, 2014, 118, 13679-13688.	2.6	63
40	Study of ion-molecule interaction in poly(methylmethacrylate) based gel electrolytes by raman spectroscopy. Electrochimica Acta, 1995, 40, 2379-2382.	5.2	61
41	Inhibition of Self-Aggregation in Ionic Liquid Electrolytes for High-Energy Electrochemical Devices. Journal of Physical Chemistry C, 2011, 115, 19431-19436.	3.1	58
42	A poly(vinylidene fluoride)-based gel electrolyte membrane for lithium batteries. Journal of Electroanalytical Chemistry, 1999, 463, 248-252.	3.8	57
43	Sodium-conducting ionic liquid-based electrolytes. Electrochemistry Communications, 2014, 43, 1-4.	4.7	55
44	Phase Behavior and Thermal Properties of Ternary Ionic Liquidâ^'Lithium Salt (ILâ^'ILâ^'LiX) Electrolytes. Journal of Physical Chemistry C, 2010, 114, 6201-6204.	3.1	52
45	Investigation on lithiumâ€“polymer electrolyte batteries. Journal of Power Sources, 2001, 97-98, 790-794.	7.8	46
46	Managing transport properties in composite electrodes/electrolytes for all-solid-state lithium-based batteries. Molecular Systems Design and Engineering, 2019, 4, 850-871.	3.4	38
47	Influence of the porosity degree of poly(vinylidene fluoride-co-hexafluoropropylene) separators in the performance of Li-ion batteries. Journal of Power Sources, 2014, 263, 29-36.	7.8	37
48	Ionic liquid mixtures with tunable physicochemical properties. Electrochimica Acta, 2015, 151, 599-608.	5.2	36
49	Investigation of swelling phenomena in PEO-based polymer electrolytesII. Chemical and electrochemical characterization. Solid State Ionics, 2004, 170, 63-72.	2.7	34
50	(Invited) Long-Term Cyclability of Lithium Metal Electrodes in Ionic Liquid-Based Electrolytes at Room Temperature. ECS Transactions, 2010, 25, 127-138.	0.5	32
51	Electrochemical testing of industrially produced PEO-based polymer electrolytes. Journal of Power Sources, 2001, 101, 42-46.	7.8	31
52	A novel ternary polymer electrolyte for LMP batteries based on thermal cross-linked poly(urethane) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2153-2161.	5.4	31
53	Water-soluble, triflate-based, pyrrolidinium ionic liquids. Electrochimica Acta, 2013, 99, 108-116.	5.2	31
54	Mesoscopic organization in ionic liquids. Topics in Current Chemistry, 2017, 375, 58.	5.8	29

#	Article	IF	Citations
55	N-Alkyl-N-ethylpyrrolidinium cation-based ionic liquid electrolytes for safer lithium battery systems. Electrochimica Acta, 2016, 191, 624-630.	5.2	27
56	Ionic liquid electrolytes for room temperature sodium battery systems. Electrochimica Acta, 2019, 306, 317-326.	5.2	27
57	Microscopic Structural and Dynamic Features in Triphilic Room Temperature Ionic Liquids. Frontiers in Chemistry, 2019, 7, 285.	3.6	25
58	0.6Ah Li/V2O5 battery prototypes based on solvent-free PEOâ€“LiN(SO2CF2CF3)2 polymer electrolytes. Journal of Power Sources, 2005, 143, 236-242.	7.8	24
59	Towards improvement of the electrochemical properties of ionic liquid-containing polyethylene oxide-based electrolytes. Electrochimica Acta, 2017, 235, 323-331.	5.2	24
60	Annealing protocols for pyrrolidinium bis(trifluoromethylsulfonyl)imide type ionic liquids. Electrochimica Acta, 2011, 57, 220-227.	5.2	23
61	From Nanoscale to Microscale: Crossover in the Diffusion Dynamics within Two Pyrrolidinium-Based Ionic Liquids. Journal of Physical Chemistry Letters, 2017, 8, 5196-5202.	4.6	23
62	Na3Si2Y0.16Zr1.84PO12-ionic liquid hybrid electrolytes: An approach for realizing solid-state sodium-ion batteries?. Journal of Power Sources, 2018, 383, 157-163.	7.8	23
63	Ionic Liquid-Based Electrolyte Membranes for Medium-High Temperature Lithium Polymer Batteries. Membranes, 2018, 8, 41.	3.0	23
64	Asymmetric ammonium-based ionic liquids as electrolyte components for safer, high-energy, electrochemical storage devices. Energy Storage Materials, 2019, 18, 1-9.	18.0	23
65	Towards Li(Ni0.33Mn0.33Co0.33)O2/graphite batteries with ionic liquid-based electrolytes. I. Electrodes' behavior in lithium half-cells. Journal of Power Sources, 2016, 331, 426-434.	7.8	22
66	A novel phosphonium ionic liquid electrolyte enabling high-voltage and high-energy positive electrode materials in lithium-metal batteries. Energy Storage Materials, 2021, 42, 826-835.	18.0	22
67	(Invited) LiFSI-PYR1AFSI Binary Electrolyte Mixtures for Lithium Batteries. ECS Transactions, 2009, 25, 49-60.	0.5	21
68	Multiple points of view of heteronuclear NOE: Long range vs short range contacts in pyrrolidinium based ionic liquids in the presence of Li salts. Journal of Molecular Liquids, 2015, 210, 215-222.	4.9	21
69	Li1.4Al0.4Ge0.4Ti1.4(PO4)3 promising NASICON-structured glass-ceramic electrolyte for all-solid-state Li-based batteries: Unravelling the effect of diboron trioxide. Journal of the European Ceramic Society, 2022, 42, 1023-1032.	5.7	20
70	Novel polymeric systems for lithium ion batteries gel electrolytes. Electrochimica Acta, 2005, 50, 4396-4404.	5.2	18
71	Asymmetry effect of novel per(fluoroalkylsulfonyl)imide anions in pyrrolidinium ionic liquids. RSC Advances, 2013, 3, 17755.	3.6	18
72	Influence of Carbonate-Based Additives on the Electrochemical Performance of Si NW Anodes Cycled in an Ionic Liquid Electrolyte. Nano Letters, 2020, 20, 7011-7019.	9.1	18

#	Article	IF	Citations
73	About the Purification Route of Ionic Liquid Precursors. Challenges, 2017, 8, 11.	1.7	17
74	Investigation of the Electrochemical Properties of Polymerâ€“LiXâ€“Ionic Liquid Ternary Systems. Australian Journal of Chemistry, 2007, 60, 47.	0.9	17
75	Ionic Liquid Electrolytes for Safer and More Reliable Sodium Battery Systems. Applied Sciences (Switzerland), 2020, 10, 6323.	2.5	15
76	Mesoscopic structural organization in fluorinated pyrrolidinium-based room temperature ionic liquids. Journal of Molecular Liquids, 2019, 289, 111110.	4.9	14
77	Performance and Ageing Robustness of Graphite/NMC Pouch Prototypes Manufactured through Eco-Friendly Materials and Processes. ChemSusChem, 2017, 10, 3581-3587.	6.8	13
78	Toward more environmentally friendly routes to high purity ionic liquids. MRS Bulletin, 2013, 38, 540-547.	3.5	12
79	Composite anodes based on nanotube titanium oxide from electro-oxidation of Ti metal substrate. Journal of Power Sources, 2014, 247, 883-889.	7.8	12
80	Solvent-free, PYR1ATFSI Ionic Liquids-based Ternary Polymer Electrolyte Systems. II. Battery Tests. ECS Transactions, 2008, 11, 119-129.	0.5	11
81	Mixtures of Ionic Liquid in Combination with Graphite Electrodes: The Role of Electrolyte Additives and Li-salt. ECS Transactions, 2009, 16, 45-49.	0.5	11
82	Liquid Structure of a Water-in-Salt Electrolyte with a Remarkably Asymmetric Anion. Journal of Physical Chemistry B, 2021, 125, 12500-12517.	2.6	11
83	Physicochemical properties of Pyr13TFSI-NaTFSI electrolyte for sodium batteries. Electrochimica Acta, 2022, 412, 140123.	5.2	11
84	Electrolytes for rechargeable lithium batteries. , 2015, , 73-116.		9
85	Novel functionalized ionic liquid with a sulfur atom in the aliphatic side chain of the pyrrolidinium cation. Electrochemistry Communications, 2016, 63, 26-29.	4.7	9
86	A More Sustainable and Cheaper Oneâ€Pot Route for the Synthesis of Hydrophobic Ionic Liquids for Electrolyte Applications. ChemSusChem, 2019, 12, 4946-4952.	6.8	9
87	Magnetic Resonance Imaging and Molecular Dynamics Characterization of Ionic Liquid in Poly(ethylene oxide)-Based Polymer Electrolytes. ACS Applied Materials & Interfaces, 2020, 12, 23800-23811.	8.0	8
88	A Computational and Experimental Study of the Conformers of Pyrrolidinium Ionic Liquid Cations Containing an Ethoxy Group in the Alkyl Side Chain. Advances in Chemistry, 2016, 2016, 1-9.	1.1	7
89	Ionic Liquid Binary Mixtures for Low Temperature Applications. Advances in Science and Technology, 2010, 72, 315-319.	0.2	6
90	Structural features of selected protic ionic liquids based on a super-strong base. Physical Chemistry Chemical Physics, 2019, 21, 25369-25378.	2.8	6

#	Article	IF	Citations
91	Sodium-Conducting Ionic Liquid Electrolytes: Electrochemical Stability Investigation. Applied Sciences (Switzerland), 2022, 12, 4174.	2.5	6
92	An advanced ionic liquid-lithium salt electrolyte mixture based on the bis(fluoromethanesulfonyl)imide anion. Electrochemistry Communications, 2014, 43, 5-8.	4.7	4
93	Relaxational Dynamics in the PYR14-IM14 Ionic Liquid by Mechanical Spectroscopy. Materials Research, 2018, 21, .	1.3	4
94	Composite Electrolyte & Electrode Membranes for Electrochemical Energy Storage & Conversion Devices. Membranes, 2020, 10, 359.	3.0	2
95	GREENLION Project: Advanced Manufacturing Processes for Low Cost Greener Li-Ion Batteries. Lecture Notes in Mobility, 2015, , 45-60.	0.2	1
96	Mesoscopic organization in ionic liquids. Topics in Current Chemistry Collections, 2017, , 247-263.	0.5	1
97	4. Battery Materials. , 2018, , 75-260.		0
98	Safer electrolyte components for rechargeable batteries. Physical Sciences Reviews, 2019, 4, .	0.8	0