Fausto Croce

List of Publications by Year
in descending order

135 papers	12,622 citations	38720 50 h-index	23514 111 g-index
144 all docs	144 docs citations	144 times ranked	8815 citing authors

#	Article	IF	Citations
1	Highly Stable Fe₃O₄/C Composite: A Candidate Material for All Solid-State Lithium-Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 070556.	1.3	10
2	Electrospun Carbon/Cu_xO Nanocomposite material as Sustainable and High Performance Anode for Lithiumâ€Ion Batteries. ChemistryOpen, 2019, 8, 781-787.	0.9	3
3	Comparison between Exhaustive and Equilibrium Extraction Using Different SPE Sorbents and Sol-Gel Carbowax 20M Coated FPSE Media. Molecules, 2019, 24, 382.	1.7	16
4	Electrospun tin-carbon nanocomposite as anode material for all solid state lithium-ion batteries. Journal of Solid State Electrochemistry, 2019, 23, 1697-1703.	1.2	7
5	Novel MIPs-Parabens based SPE Stationary Phases Characterization and Application. Molecules, 2019, 24, 3334.	1.7	18
6	V₂O₅ Cryogel: A Versatile Electrode for All Solid State Lithium Batteries. Journal of the Electrochemical Society, 2019, 166, A3927-A3931.	1.3	2
7	Tailoring oxygen redox reactions in ionic liquid based Li/O2 batteries by means of the Li+ dopant concentration. Sustainable Energy and Fuels, 2018, 2, 118-124.	2.5	4
8	Gel Polymer Electrolytes Based on Silica-Added Poly(ethylene oxide) Electrospun Membranes for Lithium Batteries. Membranes, 2018, 8, 126.	1.4	6
9	Hot Pressing of Electrospun PVdF-CTFE Membranes as Separators for Lithium Batteries: a Delicate Balance Between Mechanical Properties and Retention. Materials Research, 2018, 21, .	0.6	2
10	Minimizing the Electrolyte Volume in Liâ€“S Batteries: A Step Forward to High Gravimetric Energy Density. Advanced Energy Materials, 2018, 8, 1801560.	10.2	68
11	Synthesis and characterization of Si nanoparticles wrapped by V2O5 nanosheets as a composite anode material for lithium-ion batteries. Electrochimica Acta, 2018, 281, 676-683.	2.6	16
12	Graphene/V₂O₅ Cryogel Composite As a Highâ€Energy Cathode Material For Lithiumâ€Ion Batteries. ChemElectroChem, 2017, 4, 613-619.	1.7	17
13	Anatase TiO₂ as a Cheap and Sustainable Buffering Filler for Silicon Nanoparticles in Lithiumâ€Ion Battery Anodes. ChemSusChem, 2017, 10, 4771-4777.	3.6	14
14	New Approach in Translational Medicine: Effects of Electrolyzed Reduced Water (ERW) on NF-ÎºB/iNOS Pathway in U937 Cell Line under Altered Redox State. International Journal of Molecular Sciences, 2016, 17, 1461.	1.8	17
15	High cycling stability of anodes for lithium-ion batteries based on Fe3O4 nanoparticles and poly(acrylic acid) binder. Journal of Power Sources, 2016, 332, 79-87.	4.0	33
16	Singleâ€Walled Carbon Nanotubes in Highly Viscous Media: A Comparison between the Dispersive Agents [BMIM][BF₄], L121, and Triton Xâ€100. Chemistry - A European Journal, 2016, 22, 546-549.	1.7	13
17	Analytical methods for the endocrine disruptor compounds determination in environmental water samples. Journal of Chromatography A, 2016, 1434, 1-18.	1.8	76
18	(Invited) Electrospun Electrolytes and Electrodes for Li-Ion Batteries. ECS Meeting Abstracts, 2016, , .	0.0	0

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19	Electrospun Gel Electrolytes for Li-Ion Batteries. ECS Meeting Abstracts, 2016, , .	0.0	0
20	Interaction of 1-butyl-1-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide with an electrospun PVdF membrane: Temperature dependence of the concentration of the anion conformers. Journal of Chemical Physics, 2015, 143, 094707.	1.2	20
21	Electrochemical characteristics of iron oxide nanowires during lithium-promoted conversion reaction. Journal of Power Sources, 2014, 256, 133-136.	4.0	24
22	Î³-Fe2O3 nanoparticles encapsulated in polypyrrole for quasi-solid-state lithium batteries. Journal of Materials Chemistry A, 2014, 2, 3551.	5.2	11
23	Low-Temperature Phase Transitions of 1-Butyl-1-methylpyrrolidinium Bis(trifluoromethanesulfonyl)imide Swelling a Polyvinylidenefluoride Electrospun Membrane. Journal of Physical Chemistry C, 2014, 118, 5749-5755.	1.5	24
24	Graphene/silicon nanocomposite anode with enhanced electrochemical stability for lithium-ion battery applications. Journal of Power Sources, 2014, 269, 873-882.	4.0	106
25	High-performance Sn@carbon nanocomposite anode for lithium batteries. Journal of Power Sources, 2013, 226, 241-248.	4.0	83
26	Mesoporous, Si/C composite anode for Li battery obtained by â€˜magnesium-thermalâ€™ reduction process. Solid State Ionics, 2013, 232, 24-28.	1.3	34
27	High-performance Sn@carbon nanocomposite anode for lithium-ion batteries: Lithium storage processes characterization and low-temperature behavior. Electrochimica Acta, 2013, 107, 85-92.	2.6	49
28	Effect of Oxide Nanoparticles on Thermal and Mechanical Properties of Electrospun Separators for Lithium-Ion Batteries. Journal of Nanomaterials, 2012, 2012, 1-8.	1.5	23
29	Phase behaviour, transport properties, and interactions in Li-salt doped ionic liquids. Faraday Discussions, 2012, 154, 71-80.	1.6	77
30	Solâ€“gel synthesis and electrochemical characterization of Mg-/Zr-doped LiCoO2 cathodes for Li-ion batteries. Journal of Power Sources, 2012, 197, 276-284.	4.0	70
31	Tin-coated graphite electrodes as composite anodes for Li-ion batteries. Effects of tin coatings thickness toward intercalation behavior. Journal of Power Sources, 2012, 198, 243-250.	4.0	28
32	Study of a Liâ€“air battery having an electrolyte solution formed by a mixture of an ether-based aprotic solvent and an ionic liquid. Journal of Power Sources, 2012, 213, 233-238.	4.0	101
33	A safe, high-rate and high-energy polymer lithium-ion battery based on gelled membranes prepared by electrospinning. Energy and Environmental Science, 2011, 4, 921.	15.6	227
34	Thermal analysis of commercial gutta-percha. Journal of Thermal Analysis and Calorimetry, 2011, 103, 563-567.	2.0	13
35	Investigation of the O₂ Electrochemistry in a Polymer Electrolyte Solidâ€State Cell. Angewandte Chemie - International Edition, 2011, 50, 2999-3002.	7.2	230
36	Lithium-iron battery: Fe2O3 anode versus LiFePO4 cathode. Electrochemistry Communications, 2011, 13, 228-231.	2.3	78

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37	Temperature-dependent Performances of a Fuel Cell Using a Superacid Zirconia-doped Nafion Polymer Electrolyte. Fuel Cells, 2009, 9, 222-225.	1.5	18
38	Lithium intercalation and interfacial kinetics of composite anodes formed by oxidized graphite and copper. Journal of Power Sources, 2009, 190, 141-148.	4.0	74
39	MATERIALS | Nanofibers. , 2009, , 607-612.		4
40	Thermal Properties and Ionic Conductivity of Imidazolium Bis(trifluoromethanesulfonyl)imide Dicationic Ionic Liquids. Journal of Physical Chemistry B, 2009, 113, 10607-10610.	1.2	85
41	Sulfated zirconia nanoparticles as a proton conductor for fuel cell electrodes. Journal of Power Sources, 2008, 185, 656-663.	4.0	26
42	New, high temperature superacid zirconia-doped Nafionâ„¢ composite membranes. Journal of Materials Chemistry, 2007, 17, 3210.	6.7	85
43	Acidâ€“gel-immobilized, nanoporous composite, protonic membranes as low cost system for Direct Methanol Fuel Cells. Electrochemistry Communications, 2007, 9, 2045-2050.	2.3	4
44	LiTFSI-BEPyTFSI as an improved ionic liquid electrolyte for rechargeable lithium batteries. Journal of Power Sources, 2007, 174, 342-348.	4.0	234
45	Correlation of Ac-Impedance and In Situ X-ray Spectra of LiCoO2. Journal of Physical Chemistry B, 2006, 110, 11310-11313.	1.2	46
46	Superacid ZrO2-added, composite polymer electrolytes with improved transport properties. Electrochemistry Communications, 2006, 8, 364-368.	2.3	168
47	Nanoporous composite, low cost, protonic membranes for direct methanol fuel cells. Electrochemistry Communications, 2006, 8, 1125-1131.	2.3	22
48	Advanced, high-performance composite polymer electrolytes for lithium batteries. Journal of Power Sources, 2006, 161, 560-564.	4.0	99
49	Advanced, lithium batteries based on high-performance composite polymer electrolytes. Journal of Power Sources, 2006, 162, 685-689.	4.0	150
50	Plenary Address- New Types of Rechargeable Lithium and Lithium-Ion Polymer Batteries. ECS Transactions, 2006, 1, 1-7.	0.3	1
51	Direct determination of transference numbers of LiClO solutions in propylene carbonate and acetonitrile. Journal of Power Sources, 2005, 141, 167-170.	4.0	30
52	An ac impedance spectroscopic study of Mg-doped LiCoO2 at different temperatures: electronic and ionic transport properties. Electrochimica Acta, 2005, 50, 2307-2313.	2.6	71
53	A High-Rate, Nanocomposite LiFePO[sub 4]âˆ•Carbon Cathode. Electrochemical and Solid-State Letters, 2005, 8, A484.	2.2	217
54	Conductivities and Transport Properties of Gelled Electrolytes with and without an Ionic Liquid for Li and Li-Ion Batteries. Journal of Physical Chemistry B, 2005, 109, 4492-4496.	1.2	89

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55	Metallic-lithium, LiFePO₄-based polymer battery using PEOâ€“ZrO₂nanocomposite polymer electrolyte. Journal of Applied Electrochemistry, 2004, 34, 403-408.	1.5	37
56	PEO based polymer electrolyte lithium-ion battery. Journal of the European Ceramic Society, 2004, 24, 1385-1387.	2.8	30
57	Effect of Mg2+ Doping on the Structural, Thermal, and Electrochemical Properties of LiNi0.8Co0.16Mg0.04O2.. ChemInform, 2004, 35, no.	0.1	0
58	Lithium and proton conducting gel-type membranes. Journal of Power Sources, 2004, 127, 53-57.	4.0	26
59	Nanotechnology for the progress of lithium batteries R&D. Journal of Power Sources, 2004, 129, 90-95.	4.0	46
60	Effect of Mg2+Doping on the Structural, Thermal, and Electrochemical Properties of LiNi0.8Co0.16Mg0.04O2. Chemistry of Materials, 2004, 16, 3559-3564.	3.2	20
61	Title is missing!. Journal of Sol-Gel Science and Technology, 2003, 26, 201-206.	1.1	2
62	Hot-pressed, dry, composite, PEO-based electrolyte membranes. Journal of Power Sources, 2003, 114, 105-112.	4.0	173
63	Advanced electrolyte and electrode materials for lithium polymer batteries. Journal of Power Sources, 2003, 119-121, 399-402.	4.0	32
64	Hot-pressed, solvent-free, nanocomposite, PEO-based electrolyte membranes. Journal of Power Sources, 2003, 124, 246-253.	4.0	173
65	Nanocomposite Lithium Ion Conducting Membranes. Annals of the New York Academy of Sciences, 2003, 984, 194-207.	1.8	30
66	Ruthenium Oxide-Added Quartz Iron Phosphate as a New Intercalation Electrode in Rechargeable Lithium Cells. Journal of the Electrochemical Society, 2003, 150, A576.	1.3	39
67	Nanotechnology for the Progress of Lithium Battery R&D. Electrochemistry, 2003, 71, 202-202.	0.6	1
68	An AC Impedance Spectroscopic Study of LixCoO2at Different Temperatures. Journal of Physical Chemistry B, 2002, 106, 3909-3915.	1.2	86
69	A Novel Concept for the Synthesis of an Improved LiFePO[sub 4] Lithium Battery Cathode. Electrochemical and Solid-State Letters, 2002, 5, A47.	2.2	549
70	Poly(ethylene oxide)-Based, Nanocomposite Electrolytes as Improved Separators for Rechargeable Lithium Polymer Batteries. Journal of the Electrochemical Society, 2002, 149, A212.	1.3	59
71	A LiTi2O4â€“LiFePO4 novel lithium-ion polymer battery. Electrochemistry Communications, 2002, 4, 92-95.	2.3	36
72	Electronic and Electrochemical Properties of LixNi1-yCoyO2Cathodes Studied by Impedance Spectroscopy. Chemistry of Materials, 2001, 13, 1642-1646.	3.2	167

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73	Thermal, electrochemical and structural properties of stabilized LiNiyCo1-y-zMzO2 lithium-ion cathode material prepared by a chemical route. Physical Chemistry Chemical Physics, 2001, 3, 4399-4403.	1.3	28
74	An electrochemical ac impedance study of LixNi0.75Co0.25O2 intercalation electrode. Journal of Power Sources, 2001, 94, 238-241.	4.0	58
75	Enhancement of ion transport in polymer electrolytes by addition of nanoscale inorganic oxides. Journal of Power Sources, 2001, 97-98, 644-648.	4.0	269
76	Progress in lithium polymer battery R&D. Journal of Power Sources, 2001, 100, 93-100.	4.0	224
77	Role of the ceramic fillers in enhancing the transport properties of composite polymer electrolytes. Electrochimica Acta, 2001, 46, 2457-2461.	2.6	637
78	Lithium diffusion in ceriumâ€“vanadium mixed oxide thin films: a systematic study. Electrochimica Acta, 2001, 46, 2069-2075.	2.6	43
79	A High-Rate, Long-Life, Lithium Nanocomposite Polymer Electrolyte Battery. Electrochemical and Solid-State Letters, 2001, 4, A121.	2.2	66
80	Nuclear magnetic resonance studies of nanocomposite polymer electrolytes. Journal of Physics Condensed Matter, 2001, 13, 11763-11768.	0.7	17
81	Transport and interfacial properties of composite polymer electrolytes. Electrochimica Acta, 2000, 45, 1481-1490.	2.6	279
82	Nanocomposite polymer electrolytes and their impact on the lithium battery technology. Solid State Ionics, 2000, 135, 47-52.	1.3	224
83	Impedance Spectroscopy Study of PEO-Based Nanocomposite Polymer Electrolytes. Journal of the Electrochemical Society, 2000, 147, 1718.	1.3	392
84	A poly(vinylidene fluoride)-based gel electrolyte membrane for lithium batteries. Journal of Electroanalytical Chemistry, 1999, 463, 248-252.	1.9	57
85	An electrochemical impedance study on the interfacial behaviour of KC8 electrodes in LiClO4 containing electrolytes. Journal of Electroanalytical Chemistry, 1999, 474, 107-112.	1.9	9
86	An electrochemical impedance spectroscopic study of the transport properties of LiNi0.75Co0.25O2. Electrochemistry Communications, 1999, 1, 605-608.	2.3	113
87	Lithium insertion into carbonaceous materials and transition metal oxides from high performance polymer electrolytes. Electrochimica Acta, 1999, 45, 23-30.	2.6	25
88	Physical and Chemical Properties of Nanocomposite Polymer Electrolytes. Journal of Physical Chemistry B, 1999, 103, 10632-10638.	1.2	503
89	Electrochemical characterization of a composite polymer electrolyte with improved lithium metal electrode interfacial properties. Ionics, 1999, 5, 59-63.	1.2	9
90	Long-term structural stability of PMMA-based gel polymer electrolytes. Electrochimica Acta, 1998, 43, 1435-1439.	2.6	46

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91	Investigation of ion dynamics in LiClO4/EC/PC highly concentrated solutions by ionic conductivity and DSC measurements. Electrochimica Acta, 1998, 43, 1441-1446.	2.6	10
92	Nanocomposite polymer electrolytes for lithium batteries. Nature, 1998, 394, 456-458.	13.7	2,804
93	Composite Polymer Electrolytes with Improved Lithium Metal Electrode Interfacial Properties: II. Application in Rechargeable Batteries. Journal of the Electrochemical Society, 1998, 145, 4133-4135.	1.3	40
94	Composite Polymer Electrolytes with Improved Lithium Metal Electrode Interfacial Properties: I. Elechtrochemical Properties of Dry PEOâ€LiX Systems. Journal of the Electrochemical Society, 1998, 145, 4126-4132.	1.3	151
95	Dry Composite Polymer Electrolytes for Lithium Batteries. Materials Research Society Symposia Proceedings, 1997, 496, 511.	0.1	5
96	Synthesis and Preliminary Electrochemical Characterization of LiNi0.5Co0.5O2 Powders Obtained by the Complex Sol-Gel Process (CSGP). Materials Research Society Symposia Proceedings, 1997, 496, 347.	0.1	1
97	Crystallization kinetics of PEO-alkaline perchlorate solutions observed by energy dispersive x-ray diffraction. Journal of Macromolecular Science - Physics, 1997, 36, 629-641.	0.4	19
98	Li+ solvation in ethylene carbonateâ€“propylene carbonate concentrated solutions: A comprehensive model. Journal of Chemical Physics, 1997, 107, 5740-5747.	1.2	69
99	Junction with tunable currentâ€“voltage characteristics: n-doped Si/poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 422 Td (ch	2.1	2
100	Electrochemical characterization of a lithiated mixed nickel-cobalt oxide (LiNi0.5Co0.5O2) prepared by sol-gel process. Ionics, 1997, 3, 390-395.	1.2	16
101	High-performance electrolyte membranes for plastic lithium batteries. Journal of Power Sources, 1997, 66, 77-82.	4.0	104
102	Impedance and lithium-7 NMR studies of polymer electrolytes based on poly(vinylidene fluoride). Solid State Ionics, 1996, 86-88, 307-312.	1.3	34
103	Raman and NMR analysis of LiClO4 concentrated solutions in ethylene carbonate-propylene carbonate. Solid State Ionics, 1996, 86-88, 379-384.	1.3	34
104	Kinetics and stability of the lithium electrode in poly(methylmethacrylate)-based gel electrolytes. Electrochimica Acta, 1995, 40, 991-997.	2.6	415
105	Lithium-7 NMR and ionic conductivity studies of gel electrolytes based on poly(methylmethacrylate). Electrochimica Acta, 1995, 40, 2137-2141.	2.6	86
106	Study of ion-molecule interaction in poly(methylmethacrylate) based gel electrolytes by raman spectroscopy. Electrochimica Acta, 1995, 40, 2379-2382.	2.6	61
107	A thin layer, solid-state, primary Liï¿½Ag2CrO4 polymer battery. Journal of Applied Electrochemistry, 1995, 25, 987.	1.5	2
108	Lattice and ion dynamics in gel electrolytes based on poly(acrylonitrile) by6Li-7Li NMR. Ionics, 1995, 1, 147-152.	1.2	3

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109	The role of conductive polymers in advanced electrochemical technology. Electrochimica Acta, 1994, 39, 255-263.	2.6	150
110	Sodium-23 NMR and complex impedance studies of gel electrolytes based on poly (acrylonitrile). Solid State Ionics, 1994, 73, 119-126.	1.3	44
111	Electrochemical characterization of an ambient temperature rechargeable Li battery based on low molecular weight polymer electrolyte. Solid State Ionics, 1994, 70-71, 654-657.	1.3	4
112	Characterization of PAN-Based Gel Electrolytes. Electrochemical Stability and Lithium Cyclability. Chemistry of Materials, 1994, 6, 538-542.	3.2	56
113	New Concepts in Primary and Rechargeable Solid State Lithium Polymer Batteries. Materials Research Society Symposia Proceedings, 1994, 369, 495.	0.1	1
114	Composite polymer ionics: advanced electrolyte materials for thin-film batteries. Polymers for Advanced Technologies, 1993, 4, 198-204.	1.6	29
115	Interfacial phenomena in polymer-electrolyte cells: lithium passivation and cycleability. Journal of Power Sources, 1993, 43, 9-19.	4.0	124
116	The LixTiS2Li(1â^'Ï‡)CoO2 solid-state rocking chair battery. Journal of Power Sources, 1993, 44, 481-484.	4.0	8
117	Lithium-7 NMR and ionic conductivity studies of gel electrolytes based on polyacrylonitrile. Chemistry of Materials, 1993, 5, 1268-1272.	3.2	115
118	Sintering of ZrO2â€‰â€â€‰CeO2 Spherical Powders Prepared by a Water Extraction Variant of the Solâ€Gel Process. Journal of the Electrochemical Society, 1993, 140, 2294-2297.	1.3	14
119	Electrochemical and spectroscopic study of the transport properties of composite polymer electrolytes. Chemistry of Materials, 1992, 4, 1134-1136.	3.2	57
120	Comparison of NMR and conductivity in (PEP)8LiClO4+Î³-LiAlO2. Solid State Ionics, 1992, 53-56, 1102-1105.	1.3	41
121	The lithium polymer electrolyte battery VI. Design and characterization of prototypes. Journal of Power Sources, 1992, 37, 369-377.	4.0	16
122	Composite Polymer Electrolytes. Journal of the Electrochemical Society, 1991, 138, 1918-1922.	1.3	392
123	Electrochemical Properties and Applications of Ionically and Electronically Conducting Polymers. Materials Research Society Symposia Proceedings, 1990, 210, 179.	0.1	4
124	The lithium polymer electrolyte battery IV. Use of composite electrolytes. Journal of Power Sources, 1990, 32, 381-388.	4.0	38
125	The lithium polymer electrolyte battery V. The roles of the composition and morphology of the positive electrode. Journal of Power Sources, 1990, 32, 389-396.	4.0	29
126	Properties and applications of lithium ion-conducting polymers. Solid State Ionics, 1990, 40-41, 375-379.	1.3	15

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127	Electrochemical characterization of a class of low temperature conducting polymer electrolytes. Electrochimica Acta, 1989, 34, 635-640.	2.6	28
128	Mechanism of oxygen incorporation in the YBa2Cu3O6.9 superconductor. Solid State Ionics, 1989, 36, 85-88.	1.3	1
129	Properties of mixed polymer and crystalline ionic conductors. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1989, 59, 161-168.	0.6	48
130	Characteristics of a poly(ethylene oxide)-LiBF4 polymer electrolyte. Journal of Applied Electrochemistry, 1988, 18, 401-404.	1.5	13
131	Electrochemical characterization of a polymer/polymer, rechargeable solid-state lithium cell. Solid State Ionics, 1988, 28-30, 895-899.	1.3	8
132	The Li/LiV3O8 polymer electrolyte lithium battery III. Investigation of the electrode interfaces. Journal of Power Sources, 1988, 24, 287-294.	4.0	20
133	Polarization of the lithium electrode in sulfuryl chloride solutions. Journal of Power Sources, 1983, 9, 289-294.	4.0	4
134	Titanium and niobium disulphides as intercalation electrodes in copper and silver solid-state cells. Solid State Ionics, 1983, 9-10, 365-369.	1.3	5
135	Determination of the protonic transference number for KH2PO4 by electromotive force measurements. Solid State Ionics, 1982, 6, 201-202.	1.3	5