

Piercarlo Mustarelli

List of Publications by Year in descending order

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242
papers

9,269
citations

43973
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251
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docs citations

251
times ranked

11090
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrolytes for solid-state lithium rechargeable batteries: recent advances and perspectives. <i>Chemical Society Reviews</i> , 2011, 40, 2525.	18.7	1,358
2	Lithium ion conducting PVdF-HFP composite gel electrolytes based on N-methoxyethyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)-imide ionic liquid. <i>Journal of Power Sources</i> , 2010, 195, 559-566.	4.0	225
3	Innovative high performing metal organic framework (MOF)-laden nanocomposite polymer electrolytes for all-solid-state lithium batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 9948-9954.	5.2	183
4	Developments of new proton conducting membranes based on different polybenzimidazole structures for fuel cells applications. <i>Journal of Power Sources</i> , 2006, 160, 175-180.	4.0	171
5	Polymer fuel cells based on polybenzimidazole/H ₃ PO ₄ . <i>Energy and Environmental Science</i> , 2012, 5, 6436.	15.6	155
6	Polymer and Composite Membranes for Proton-Conducting, High-Temperature Fuel Cells: A Critical Review. <i>Materials</i> , 2017, 10, 687.	1.3	150
7	Recent advances in the development of Li-air batteries. <i>Journal of Power Sources</i> , 2012, 220, 253-263.	4.0	128
8	Effects of water-soluble functionalized multi-walled carbon nanotubes examined by different cytotoxicity methods in human astrocyte D384 and lung A549 cells. <i>Toxicology</i> , 2010, 269, 41-53.	2.0	117
9	Energy harvesting from human motion: materials and techniques. <i>Chemical Society Reviews</i> , 2016, 45, 5455-5473.	18.7	117
10	⁷ Li and ¹⁹ F diffusion coefficients and thermal properties of non-aqueous electrolyte solutions for rechargeable lithium batteries. <i>Journal of Power Sources</i> , 1999, 81-82, 859-862.	4.0	110
11	Influence of Particle Size and Crystal Orientation on the Electrochemical Behavior of Carbon-Coated LiFePO ₄ . <i>Journal of Physical Chemistry C</i> , 2010, 114, 12598-12603.	1.5	108
12	Carrier Migration Mechanism of Physically Cross-Linked Polymer Gel Electrolytes Based on PVDF Membranes. <i>Journal of Physical Chemistry B</i> , 2002, 106, 7200-7204.	1.2	104
13	Bio-inspired choline chloride-based deep eutectic solvents as electrolytes for lithium-ion batteries. <i>Solid State Ionics</i> , 2018, 323, 44-48.	1.3	104
14	Physicochemical Characterization of AlCl ₃ -1-Ethyl-3-methylimidazolium Chloride Ionic Liquid Electrolytes for Aluminum Rechargeable Batteries. <i>Journal of Physical Chemistry C</i> , 2017, 121, 26607-26614.	1.5	99
15	Qualitative and Quantitative Structure-Property Relationships Analysis of Multicomponent Potential Bioglasses. <i>Journal of Physical Chemistry B</i> , 2005, 109, 4989-4998.	1.2	98
16	A photocatalytic water splitting device for separate hydrogen and oxygen evolution. <i>Chemical Communications</i> , 2007, , 5022.	2.2	98
17	A binary ionic liquid system composed of N-methoxyethyl-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)-imide and lithium bis(trifluoromethanesulfonyl)imide: A new promising electrolyte for lithium batteries. <i>Journal of Power Sources</i> , 2009, 194, 45-50.	4.0	94
18	Understanding the Effect of UV-Induced Cross-Linking on the Physicochemical Properties of Highly Performing PEO/LiTFSI-Based Polymer Electrolytes. <i>Langmuir</i> , 2019, 35, 8210-8219.	1.6	92

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19	Reaction Mechanism in Alumina/Chromia ($\text{Al}_{2-\text{x}}\text{O}_{3-\text{x}}\text{Cr}_{2-\text{x}}\text{O}_{3-\text{x}}$) Solid Solutions Obtained by Coprecipitation. <i>Journal of the American Ceramic Society</i> , 2000, 83, 2036-2040.	1.9	89
20	Reviewâ€”Emerging Trends in the Design of Electrolytes for Lithium and Post-Lithium Batteries. <i>Journal of the Electrochemical Society</i> , 2020, 167, 050508.	1.3	89
21	Conduction Mechanisms of PVDF-Type Gel Polymer Electrolytes of Lithium Prepared by a Phase Inversion Process. <i>Journal of Physical Chemistry B</i> , 2000, 104, 11460-11464.	1.2	84
22	Structure, porosity and conductivity of PVdF films for polymer electrolytes. <i>Journal of Power Sources</i> , 2001, 97-98, 657-660.	4.0	84
23	PVDF-based porous polymer electrolytes for lithium batteries. <i>Solid State Ionics</i> , 2002, 152-153, 347-354.	1.3	82
24	Polybenzimidazole-Based Membranes as a Real Alternative to Nafion for Fuel Cells Operating at Low Temperature. <i>Advanced Materials</i> , 2008, 20, 1339-1343.	11.1	82
25	Transport properties and microstructure of gel polymer electrolytes. <i>Electrochimica Acta</i> , 2000, 45, 1341-1345.	2.6	80
26	What is Next in Anionâ€“Exchange Membrane Water Electrolyzers? Bottlenecks, Benefits, and Future. <i>ChemSusChem</i> , 2022, 15, .	3.6	77
27	Cr and Ni Doping of $\text{Li}_{4-\text{x}}\text{Ti}_{5-\text{x}}\text{O}_{12}$: Cation Distribution and Functional Properties. <i>Journal of Physical Chemistry C</i> , 2009, 113, 19664-19671.	1.5	72
28	Structural and in vitro study of cerium, gallium and zinc containing solâ€“gel bioactive glasses. <i>Journal of Materials Chemistry</i> , 2012, 22, 13698.	6.7	71
29	Graphite-coated ZnO nanosheets as high-capacity, highly stable, and binder-free anodes for lithium-ion batteries. <i>Journal of Power Sources</i> , 2016, 320, 314-321.	4.0	70
30	Li ⁺ solvation in ethylene carbonateâ€“propylene carbonate concentrated solutions: A comprehensive model. <i>Journal of Chemical Physics</i> , 1997, 107, 5740-5747.	1.2	69
31	Theoretical investigation of $\text{Li}_2\text{MnSiO}_4$ as a cathode material for Li-ion batteries: a DFT study. <i>Journal of Materials Chemistry A</i> , 2013, 1, 2847.	5.2	69
32	In vitro calcified matrix deposition by human osteoblasts onto a zinc-containing bioactive glass. , 2011, 21, 59-72.		68
33	Transferred hyperfine interaction and structure in LiMn_2O_4 and Li_2MnO_3 coexisting phases:mA XRD and ^{7}Li NMR-MAS study. <i>Physical Review B</i> , 1997, 55, 12018-12024.	1.1	67
34	Transport Properties of Porous PVDF Membranes. <i>Journal of Physical Chemistry B</i> , 2002, 106, 10828-10833.	1.2	62
35	Synthesis and characterization of SiO_2 â€“PEG hybrid materials. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 273-280.	1.5	62
36	Pyridineâ€“based PBI Composite Membranes for PEMFCs. <i>Fuel Cells</i> , 2009, 9, 349-355.	1.5	59

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37	Silica-“polyethylene glycol hybrids synthesized by sol-gel: Biocompatibility improvement of titanium implants by coating. <i>Materials Science and Engineering C</i> , 2015, 55, 118-125.	3.8	59
38	Alkoxy substituted imidazolium-based ionic liquids as electrolytes for lithium batteries. <i>Journal of Power Sources</i> , 2013, 235, 142-147.	4.0	58
39	Cations Distribution and Valence States in Mn-Substituted Li ₄ Ti ₅ O ₁₂ Structure. <i>Chemistry of Materials</i> , 2008, 20, 4291-4298.	3.2	56
40	PBI Composite and Nanocomposite Membranes for PEMFCs: The Role of the Filler. <i>Fuel Cells</i> , 2009, 9, 231-236.	1.5	56
41	Layered LaSrGa ₃ O ₇ -based Oxide-Ion Conductors: Cooperative Transport Mechanisms and Flexible Structures. <i>Advanced Functional Materials</i> , 2010, 20, 3874-3880.	7.8	56
42	Polysulfonation of PBI-based membranes for HT-PEMFCs: a possible way to maintain high proton transport at a low H ₃ PO ₄ doping level. <i>Journal of Materials Chemistry A</i> , 2014, 2, 663-671.	5.2	55
43	Cation dynamics and relaxation in nanoscale polymer electrolytes: A ⁷ LiNMR study. <i>Physical Review B</i> , 1999, 60, 7228-7233.	1.1	54
44	Synthesis and characterization of Ce _{0.8} Gd _{0.2} O _{2-y} polycrystalline and thin film materials. <i>Solid State Ionics</i> , 2005, 176, 1505-1512.	1.3	54
45	Medium-range order in phospho-silicate bioactive glasses: Insights from MAS-NMR spectra, chemical durability experiments and molecular dynamics simulations. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 84-89.	1.5	54
46	PBI-based composite membranes for polymer fuel cells. <i>Journal of Power Sources</i> , 2010, 195, 7765-7769.	4.0	52
47	A theoretical approach to evaluate the rate capability of Li-ion battery cathode materials. <i>Journal of Materials Chemistry A</i> , 2014, 2, 107-115.	5.2	52
48	PVDF and P(VDF-HFP)-based proton exchange membranes. <i>Solid State Ionics</i> , 2004, 166, 383-389.	1.3	51
49	Vacancy and interstitial oxide ion migration in heavily doped La _{2-x} S _x CoO ₄ . <i>Journal of Materials Chemistry</i> , 2012, 22, 8969.	6.7	51
50	Inhibition of Jahn-Teller Cooperative Distortion in LiMn ₂ O ₄ Spinel by Ga ³⁺ Doping. <i>Journal of Physical Chemistry B</i> , 2002, 106, 7432-7438.	1.2	50
51	Preparation and Physicochemical Characterization of Acyclovir Cocrystals with Improved Dissolution Properties. <i>Journal of Pharmaceutical Sciences</i> , 2013, 102, 4079-4086.	1.6	50
52	Novel composite polybenzimidazole-based proton exchange membranes as efficient and sustainable separators for microbial fuel cells. <i>Journal of Power Sources</i> , 2017, 348, 57-65.	4.0	50
53	NASICON-type polymer-in-ceramic composite electrolytes for lithium batteries. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 6142-6149.	1.3	50
54	Polyethylene oxide electrolyte membranes with pyrrolidinium-based ionic liquids. <i>Electrochimica Acta</i> , 2010, 55, 5478-5484.	2.6	49

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55	Li-doped mixtures of alkoxy-N-methylpyrrolidinium bis(trifluoromethanesulfonyl)-imide and organic carbonates as safe liquid electrolytes for lithium batteries. <i>Journal of Power Sources</i> , 2013, 237, 204-209.	4.0	48
56	Investigations by impedance spectroscopy on the behaviour of poly(N,N-dimethylpropargylamine) as humidity sensor. <i>Solid State Ionics</i> , 2000, 136-137, 667-670.	1.3	47
57	SiO_{2} - P_{2}O_{5} - CaO Glasses and Glass-Ceramics with and without ZnO : Relationships among Composition, Microstructure, and Bioactivity. <i>Journal of Physical Chemistry C</i> , 2009, 113, 8821-8828.	1.5	47
58	Polysulfonated Fluoro O PBI Membranes for PEMFCs: An Efficient Strategy to Achieve Good Fuel Cell Performances with Low H_3PO_4 Doping Levels. <i>Advanced Energy Materials</i> , 2014, 4, 1301949.	10.2	46
59	Is It Possible to Obtain Solvent- Free , Li^{+} -Conducting Solid Electrolytes Based on Pure PVdF? Comment on Self- Suppression of Lithium Dendrite in All-Solid-State Lithium Metal Batteries with Poly(vinylidene difluoride)-Based Solid Electrolytes. <i>Advanced Materials</i> , 2020, 32, e1907375.	11.1	46
60	Improving the performances of Nafion -C -based membranes for microbial fuel cells with silica-based, organically-functionalized mesostructured fillers. <i>Journal of Power Sources</i> , 2016, 334, 120-127.	4.0	45
61	Photosynthetic microbial fuel cell with polybenzimidazole membrane: synergy between bacteria and algae for wastewater removal and biorefinery. <i>Heliyon</i> , 2018, 4, e00560.	1.4	45
62	Jahn-Teller transition in Al $^{3+}$ doped LiMn $_{2}$ O $_{4}$ spinel. <i>Solid State Communications</i> , 2003, 126, 169-174.	0.9	44
63	Lithium diffusion in $\text{Li}_{1-x}\text{FePO}_4$: the effect of cationic disorder. <i>Journal of Materials Chemistry</i> , 2012, 22, 24870.	6.7	44
64	Structure and magnetic properties of SiO $_{2}$ /PCL novel sol-gel organic-inorganic hybrid materials. <i>Journal of Solid State Chemistry</i> , 2013, 203, 92-99.	1.4	44
65	Cathode Active Material Recycling from Spent Lithium Batteries: A Green (Circular) Approach Based on Deep Eutectic Solvents. <i>ChemSusChem</i> , 2022, 15, .	3.6	44
66	Dehydration of the cyclodextrins: A model system for the interactions of biomolecules with water. <i>Journal of Chemical Physics</i> , 1995, 103, 7532-7540.	1.2	43
67	Nanoparticles induce platelet activation in vitro through stimulation of canonical signalling pathways. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2012, 8, 1329-1336.	1.7	43
68	Novel aryloxy-polybenzimidazoles as proton conducting membranes for high temperature PEMFCs. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 7174-7182.	3.8	42
69	An ab initio investigation of Li $_{2}$ M $_{0.5}$ N $_{0.5}$ O $_{4}$ (M, N = Mn, Fe, Co Ni) as Li-ion battery cathode materials. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 8035.	1.3	42
70	Nucleation and Crystallization of a Lithium Aluminosilicate Glass. <i>Journal of the American Ceramic Society</i> , 1997, 80, 3077-3083.	1.9	40
71	In VitroEnhancement of SAOS-2 Cell Calcified Matrix Deposition onto Radio Frequency Magnetron Sputtered Bioglass-Coated Titanium Scaffolds. <i>Tissue Engineering - Part A</i> , 2010, 16, 995-1008.	1.6	40
72	Biocompatibility of functionalized boron phosphate (BPO $_{4}$) nanoparticles for boron neutron capture therapy (BNCT) application. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014, 10, 589-597.	1.7	40

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73	Structure and cation dynamics in the system AgI:Ag ₂ MoO ₄ :Al ₁₀ AgNMR study. Physical Review B, 1998, 58, 9054-9061.	1.1	38
74	Vinylidenefluoride-hexafluoropropylene copolymers as hybrid electrolyte components for lithium batteries. Journal of Power Sources, 1999, 81-82, 790-794.	4.0	38
75	Exploiting Self-Healing in Lithium Batteries: Strategies for Next-Generation Energy Storage Devices. Advanced Energy Materials, 2020, 10, 2002815.	10.2	38
76	Water-Miscible Liquid Multiwalled Carbon Nanotubes. Advanced Materials, 2009, 21, 1761-1765.	11.1	37
77	Investigation of Ether-Based Ionic Liquid Electrolytes for Lithium-O ₂ Batteries. Journal of the Electrochemical Society, 2015, 162, A3001-A3006.	1.3	37
78	New materials for polymer electrolytes. Solid State Ionics, 2000, 135, 81-86.	1.3	36
79	Poly(vinylidenefluoride)-based porous polymer electrolytes. Electrochimica Acta, 2001, 46, 1635-1639.	2.6	36
80	Nature of conductivity in SrSiO ₃ -based fast ion conductors. Chemical Communications, 2014, 50, 14732-14735.	2.2	36
81	XANES and EXAFS at Mo K-edge in (AgI) _{1-x} (Ag ₂ MoO ₄) _x glasses and crystals. Solid State Ionics, 1999, 121, 189-192.	1.3	35
82	Synthesis of GeO ₂ -doped SiO ₂ aerogels and xerogels. Journal of Non-Crystalline Solids, 2002, 303, 208-217.	1.5	35
83	Structure-property interplay of proton conducting membranes based on PBI5N, SiO ₂ -Im and H ₃ PO ₄ for high temperature fuel cells. Physical Chemistry Chemical Physics, 2011, 13, 12146.	1.3	35
84	Structural, morphological and electrochemical properties of nanocrystalline V ₂ O ₅ thin films deposited by means of radiofrequency magnetron sputtering. Journal of Power Sources, 2011, 196, 10228-10233.	4.0	35
85	SBA-15 mesoporous silica highly functionalized with propylsulfonic pendants: A thorough physico-chemical characterization. Microporous and Mesoporous Materials, 2016, 219, 219-229.	2.2	35
86	Water content and thermal properties of glassy silver metaphosphate: role of the preparation. Journal of Non-Crystalline Solids, 1993, 163, 97-103.	1.5	34
87	Raman and NMR analysis of LiClO ₄ concentrated solutions in ethylene carbonate-propylene carbonate. Solid State Ionics, 1996, 86-88, 379-384.	1.3	34
88	Novel polymer electrolytes based on thermoplastic polyurethane and ionic liquid/lithium bis(trifluoromethanesulfonyl)imide/propylene carbonate salt system. Journal of Power Sources, 2010, 195, 5761-5767.	4.0	34
89	PEGylated carbon nanotubes: preparation, properties and applications. RSC Advances, 2013, 3, 13569.	1.7	34
90	Minireview biological effects of magnetic fields. Life Sciences, 1991, 49, 85-92.	2.0	33

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91	Pulmonary toxicity of instilled cadmium-doped silica nanoparticles during acute and subacute stages in rats. <i>Histology and Histopathology</i> , 2013, 28, 195-209.	0.5	32
92	Ionic Conduction Mechanisms of Polyvinylidenefluoride-Hexafluoropropylene Type Polymer Electrolytes with LiN(CF ₃ SO ₂) ₂ . <i>Journal of the Electrochemical Society</i> , 2000, 147, 1645.	1.3	31
93	New electrolyte membranes for Li-based cells: Methacrylic polymers encompassing pyrrolidinium-based ionic liquid by single step photo-polymerisation. <i>Journal of Membrane Science</i> , 2012, 423-424, 459-467.	4.1	31
94	Autonomous Self-Healing Strategy for Stable Sodium-Ion Battery: A Case Study of Black Phosphorus Anodes. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 13170-13182.	4.0	31
95	THE NMR INFORMATION ON PHOSPHATE GLASSES: A REVIEW. <i>Phosphorus Research Bulletin</i> , 1999, 10, 25-36.	0.1	30
96	Sol-Gel GeO ₂ -Doped SiO ₂ Glasses for Optical Applications. <i>Journal of Sol-Gel Science and Technology</i> , 2003, 26, 915-918.	1.1	30
97	Silicon-doped LiNi _{0.5} Mn _{1.5} O ₄ as a high-voltage cathode for Li-ion batteries. <i>Solid State Ionics</i> , 2018, 320, 1-6.	1.3	30
98	High-temperature neutron diffraction study of$\text{La}_{\frac{1}{2}}\text{Mn}_{\frac{2}{3}}\text{O}_3$. Correlation between structure and transport properties. <i>Physical Review B</i> , 2010, 82, .	1.1	30
99	Polymorphism and magnetic properties of Li ₂ MSiO ₄ (M = Fe, Mn) cathode materials. <i>Scientific Reports</i> , 2013, 3, 3452.	1.6	29
100	Electrochemical Study of Na ₂ Fe _{1-x} Mn _x P ₂ O ₇ (x = 0, 0.25, 0.5, 0.75, 1) as Cathode Material for Rechargeable Na-Ion Batteries. <i>Batteries</i> , 2016, 2, 1.	2.1	29
101	Pair distribution function analysis and Mössbauer study of defects in microwave-hydrothermal LiFePO ₄ . <i>RSC Advances</i> , 2012, 2, 250-258.	1.7	28
102	Ion Dynamics and Mechanical Properties of Sulfonated Polybenzimidazole Membranes for High-Temperature Proton Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9745-9753.	1.5	28
103	MCM-41 silica effect on gel polymer electrolytes based on thermoplastic polyurethane. <i>Electrochimica Acta</i> , 2012, 60, 359-365.	2.6	27
104	Characterisation of a new sol-gel precursor for a SiO ₂ -rhodamine 6G hybrid class II material. <i>Journal of Sol-Gel Science and Technology</i> , 2007, 41, 57-63.	1.1	26
105	Surface kinetic roughening caused by dental erosion: An atomic force microscopy study. <i>Journal of Applied Physics</i> , 2008, 103, 104702.	1.1	26
106	Understanding non-ideal voltage behaviour of cathodes for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 19451-19460.	5.2	26
107	Influence of Small Additions of Al ₂ O ₃ on the Properties of the Na ₂ O-3SiO ₂ Glass. <i>Journal of Physical Chemistry B</i> , 2001, 105, 919-927.	1.2	25
108	Carrier density and mobility in AgI-AgPO ₃ glasses: A NMR study. <i>Physical Review B</i> , 2001, 63, .	1.1	25

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109	OH-dependence of ultraviolet emission in porous silica. <i>Journal of Non-Crystalline Solids</i> , 2003, 322, 68-72.	1.5	25
110	Polymer-in-Ceramic Nanocomposite Solid Electrolyte for Lithium Metal Batteries Encompassing PEO-Grafted TiO ₂ Nanocrystals. <i>Journal of the Electrochemical Society</i> , 2020, 167, 070535.	1.3	25
111	Preparation and characterization of fluorinated hybrid electrolytes. <i>Electrochimica Acta</i> , 1998, 44, 677-681.	2.6	24
112	Optimal Synthesis of Organo-Phosphate Precursors for Sol-Gel Preparations. <i>Materials Research Bulletin</i> , 1998, 33, 697-710.	2.7	24
113	Transport and Structural Properties of Pure and Cr Doped Li ₃ VO ₄ . <i>Journal of Physical Chemistry B</i> , 2005, 109, 14845-14851.	1.2	24
114	Increasing the Antibacterial Effect of Lysozyme by Immobilization on Multi-Walled Carbon Nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 3100-3106.	0.9	24
115	Improving Oxygen Transport in Perovskite-Type LaGaO ₃ Solid Electrolyte through Strain. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29574-29582.	1.5	24
116	Synthesis of zirconia/polyethylene glycol hybrid materials by sol-gel processing and connections between structure and release kinetic of indomethacin. <i>Drug Delivery</i> , 2014, 21, 595-604.	2.5	24
117	Lithium-rich borosulfate glasses: Analysis of ¹¹ B and ⁷ Li NMR, glass transition and conductivity data. <i>Solid State Ionics</i> , 1990, 39, 217-224.	1.3	23
118	Bone Reconstruction: Au Nanocomposite Bioglasses with Antibacterial Properties. <i>International Journal of Artificial Organs</i> , 2011, 34, 920-928.	0.7	23
119	Increasing the permanent conductivity of PBI membranes for HT-PEMs. <i>Solid State Ionics</i> , 2012, 225, 228-231.	1.3	23
120	Mechanism of Low-Temperature Protonic Conductivity in Bulk, High-Density, Nanometric Titanium Oxide. <i>Advanced Functional Materials</i> , 2014, 24, 5137-5146.	7.8	23
121	Fractal Nanochannels as the Basis of the Ionic Transport in AgI-Based Glasses. <i>Journal of Physical Chemistry B</i> , 2005, 109, 17417-17421.	1.2	22
122	Cold-setting refractory composites from cordierite and mullite-cordierite design with geopolymers paste as binder: Thermal behavior and phase evolution. <i>Materials Chemistry and Physics</i> , 2015, 154, 66-77.	2.0	22
123	ZrO ₂ /PEG hybrid nanocomposites synthesized via sol-gel: Characterization and evaluation of the magnetic properties. <i>Journal of Non-Crystalline Solids</i> , 2015, 413, 1-7.	1.5	22
124	Al ₂ O ₃ -SiO ₂ powders synthesized via sol-gel as pure raw material in geopolymers preparation. <i>Journal of the American Ceramic Society</i> , 2017, 100, 1919-1927.	1.9	22
125	Luminescence and absorption spectroscopy of Sn-related impurity centers in silica. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 2082-2089.	1.5	21
126	Composite Proton-Conducting Membranes for PEMFCs. <i>Fuel Cells</i> , 2007, 7, 441-446.	1.5	21

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127	Local versus Average Structure in LaSrAl ₃ O ₇ : A NMR and DFT Investigation. Journal of Physical Chemistry C, 2013, 117, 23451-23458.	1.5	20
128	Mechanochemical Synthesis of Bumetanide-4-Aminobenzoic Acid Molecular Cocrystals: A Facile and Green Approach to Drug Optimization. Journal of Physical Chemistry B, 2014, 118, 9180-9190.	1.2	20
129	Insight into the charge/discharge behaviour of intercalation cathode materials: relation between delivered capacity and applied rate and analysis of multi-particle intercalation mechanisms. Physical Chemistry Chemical Physics, 2020, 22, 6351-6360.	1.3	20
130	Insight into cation disorder of Li ₂ Fe0.5Mn0.5SiO ₄ . Journal of Solid State Chemistry, 2013, 200, 70-75.	1.4	19
131	Influence of variously functionalized SBA-15 fillers on conductivity and electrochemical properties of PBI composite membranes for high temperature polymer fuel cells. Journal of Power Sources, 2015, 294, 347-353.	4.0	19
132	Stability of low-temperature Li ₇ La ₃ Zr ₂ O ₁₂ cubic phase: The role of temperature and atmosphere. Materials Chemistry and Physics, 2017, 185, 55-64.	2.0	19
133	A physico-chemical investigation of highly concentrated potassium acetate solutions towards applications in electrochemistry. Physical Chemistry Chemical Physics, 2021, 23, 1139-1145.	1.3	19
134	Characterisation of amorphous materials by modulated differential scanning calorimetry. Thermochimica Acta, 1996, 278, 9-18.	1.2	18
135	Ionic conduction in silver phosphate glasses doped with silver sulphide. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1996, 73, 349-365.	0.6	18
136	A Combined Nuclear Magnetic Resonance and X-ray Absorption Fine Structure Study on the Local Structures of Ge and Pb in PbO _{1-x} GeO ₂ Glasses and Their Relationships with Thermal Properties and Devitrification Products. Journal of Physical Chemistry B, 2002, 106, 9802-9809.	1.2	18
137	Average versus local structure in K ₂ NiF ₄ -type LaSrAlO ₄ : direct experimental evidence of local cationic ordering. Journal of Materials Chemistry, 2012, 22, 10488.	6.7	18
138	Oxygen transport and chemical compatibility with electrode materials in scheelite-type LaW _x Nb _{1-x} O _{4+x/2} ceramic electrolyte. Journal of Alloys and Compounds, 2017, 697, 392-400.	2.8	18
139	Efficiency and Quality Issues in the Production of Black Phosphorus by Mechanochemical Synthesis: A Multi-Technique Approach. ACS Applied Energy Materials, 2019, 2, 2794-2802.	2.5	18
140	Structure and Transport Properties of PEO-Li ₂ O-3B ₂ O ₃ Mixed-Phase Composites. Journal of Physical Chemistry B, 1998, 102, 9610-9616.	1.2	17
141	Electric, thermodynamic and NMR evidence of anomalies in (x)AgI(1-x)AgPO ₃ glasses. Journal of Non-Crystalline Solids, 2001, 293-295, 785-791.	1.5	17
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