Mariappan C R

List of Publications by Year
in descending order

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63	1,455	304743	330143
papers	citations	22 h-index	37 g-index

65	65	65	1790
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Novel compositions of mesoporous spinel-type ternary metal oxides microspheres: Structural and electrical properties functionality. Physica B: Condensed Matter, 2022, 630, 413679.	2.7	9
2	Silver, Copper, Magnesium and Zinc Contained Electroactive Mesoporous Bioactive S53P4 Glassâ€“Ceramics Nanoparticle for Bone Regeneration: Bioactivity, Biocompatibility and Antibacterial Activity. Journal of Inorganic and Organometallic Polymers and Materials, 2022, 32, 2309-2321.	3.7	3
3	Designing Novel Co₂FeV₂O₈ Microsticks with Prompted Multiple Electrochemical Performances for an Asymmetric Solid-State Supercapacitor and the Hydrogen Evolution Reaction. Energy & Fuels, 2022, 36, 4585-4595.	5.1	4
4	Preparation of spinel structured MnCo₂O₄ microspheres for energy storage devices. Ferroelectrics, 2022, 588, 55-64.	0.6	2
5	Influence of Al on the structure and ion transport in garnet-type Li7La3-xAlxZr2O12 solid electrolytes for Li-ion batteries. Ceramics International, 2022, 48, 29238-29246.	4.8	4
6	Fabrication of Nanocluster-Aggregated Dense Ce₂(MoO₄)₃ Microspherical Architectures for High-Voltage Energy Storage and High Catalytic Energy Conversion Applications. Energy & Fuels, 2022, 36, 7841-7853.	5.1	3
7	Investigation on the electrochemical properties of mesoporous Zn_{0.2}Ni_{0.05}Co_{0.5}O microspheres for supercapacitors. International Journal of Environmental Analytical Chemistry, 2021, 101, 1684-1696.	3.3	1
8	Mesoporous electroactive silver doped calcium borosilicates: Structural, antibacterial and myogenic potential relationship of improved bio-ceramics. Ceramics International, 2021, 47, 3586-3596.	4.8	14
9	In-Vitro Study of Sol Gel Synthesized Bioactive Glass Ceramics for Anti-Microbial Properties. Journal of Nanoscience and Nanotechnology, 2021, 21, 1606-1612.	0.9	1
10	CuWO4: A promising multifunctional electrode material for energy storage as in redox active solid-state asymmetric supercapacitor and an electrocatalyst for energy conversion in methanol electro-oxidation. Journal of Electroanalytical Chemistry, 2021, 895, 115504.	3.8	18
11	Correlation between structural, electrical and electrochemical performance of Zn doped high voltage spinel LiNi0.5-xZnxMn1.5O4 porous microspheres as a cathode material for Li-Ion batteries. Ceramics International, 2021, 47, 35275-35286.	4.8	12
12	Hybrid aqueous supercapacitors based on mesoporous spinel-analogous Zn-Ni-Co-O nanorods: Effect of Ni content on the structure and energy storage. Journal of Alloys and Compounds, 2021, 882, 160712.	5.5	10
13	A new biocompatible phosphate free mesoporous calcium borosilicate glass-ceramics for medical application. Materials Letters, 2021, 305, 130752.	2.6	4
14	Boosting the Multifunctional Properties of MnCo₂O₄â€“MnCo₂S₄ Heterostructure for Portable Allâ€Solidâ€State Symmetric Supercapacitor, Methanol Oxidation and Hydrogen Evolution Reaction. ChemistrySelect, 2021, 6, 11466-11481.	1.5	11
15	Multifunctionality exploration of NiCo₂O₄â€“rGO nanocomposites: photochemical water oxidation, methanol electro-oxidation and asymmetric supercapacitor applications. Dalton Transactions, 2021, 50, 18001-18015.	3.3	8
16	Structural and ion transport properties of sodium ion conducting Na2MTeO6 (M= MgNi and MgZn) solid electrolytes. Ceramics International, 2020, 46, 663-671.	4.8	16
17	Growth of LiNi0.5Mn1.5O4 crystals on reduced graphene oxide sheets for high energy and power density charge storage. Materials Research Bulletin, 2020, 124, 110742.	5.2	7
18	Electrochemical performances of asymmetric aqueous supercapacitor based on porous Cu3Mo2O9 petals and La2Mo3O12 nanoparticles fabricated through a simple co-precipitation method. Applied Surface Science, 2020, 512, 145648.	6.1	27

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19	Synthesis and electrical impedance study of Li1+2xNi0.5Mn1.5-xZnxO4 (0â€¯â‰¤â€¯xâ€¯â‰¤â€¯0.3) for Li-ion battery application. Materials Today: Proceedings, 2020, 28, 2258-2262.	1.8	0
20	Pseudocapacitive Charge Storage in Thin Nanobelts. Advanced Fiber Materials, 2019, 1, 205-213.	16.1	41
21	Zinc doped calcium phosphosilicatebioglass: Study of in-vitro bioactivity and antimicrobial behavior. AIP Conference Proceedings, 2019, , .	0.4	0
22	Silver-doped strontium calcium silicate microspheres: Structural and antibacterial studies. AIP Conference Proceedings, 2019, , .	0.4	0
23	Light-induced water oxidation by polymorphs of the Znâ€“Coâ€“Ni oxide spinel catalyst: a comparative study. Sustainable Energy and Fuels, 2019, 3, 786-792.	4.9	7
24	Synthesis and electrochemical properties of rGO/polypyrrole/ferrites nanocomposites obtained via a hydrothermal route for hybrid aqueous supercapacitors. Journal of Electroanalytical Chemistry, 2019, 845, 72-83.	3.8	54
25	Antibacterial and structural properties of mesoporous Ag doped calcium borosilicate glass-ceramics synthesized via a sol-gel route. Journal of Non-Crystalline Solids, 2019, 505, 431-437.	3.1	15
26	Characterization of mesoporous Zn doped NiCo2O4 rods produced by hydrothermal method for NOx gas sensing application. Journal of Alloys and Compounds, 2019, 773, 158-167.	5.5	31
27	High electrochemical performance of 3D highly porous Zn_{0.2}Ni_{0.8}Co₂O₄ microspheres as an electrode material for electrochemical energy storage. CrystEngComm, 2018, 20, 2159-2168.	2.6	19
28	Synthesis, characterization, bioactivity and antibacterial studies of silver doped calcium borosilicate glass-ceramics. AIP Conference Proceedings, 2018, , .	0.4	2
29	Fabrication and characterization of monodispersed Mn0.8Ni0.2Co2O4 mesoporous microspheres for supercapacitor application. Ceramics International, 2018, 44, 8864-8869.	4.8	9
30	Ionic conduction and dielectric properties of yttrium doped LiZr2(PO4)3 obtained by a Pechini-type polymerizable complex route. Ceramics International, 2018, 44, 15509-15516.	4.8	17
31	Electrochemical performance of spinel-type Ni doped ZnCo2O4 mesoporous rods as an electrode for supercapacitors. AIP Conference Proceedings, 2018, , .	0.4	1
32	Pseudocapacitance of Mesoporous Spinel-Type MCo₂O₄ (M = Co, Zn, and Ni) Rods Fabricated by a Facile Solvothermal Route. ACS Omega, 2017, 2, 6003-6013.	3.5	79
33	Influence of silver on the structure, dielectric and antibacterial effect of silver doped bioglass-ceramic nanoparticles. Ceramics International, 2017, 43, 2196-2201.	4.8	42
34	Study of spinel-type ZnNi x Co 2â¿¿x O 4 nano-particles, synthesised by thermal decomposition of ternary metal nitrate solutions. Materials Research Bulletin, 2016, 83, 632-639.	5.2	8
35	Investigation on the grain boundaries electrical characteristics of perovskite lithium ion conductors by derivative of tanÎ´ approach. Materials Research Bulletin, 2016, 74, 134-139.	5.2	3
36	Functional properties of ZnCo₂O₄ nano-particles obtained by thermal decomposition of a solution of binary metal nitrates. RSC Advances, 2015, 5, 26843-26849.	3.6	46

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37	AC conductivity scaling behavior in grain and grain boundary response regime of fast lithium ionic conductors. Applied Physics A: Materials Science and Processing, 2014, 117, 847-852.	2.3	21
38	Analysis of Nano-Structured ${m In}_{2}{m O}_{3}$ Thin Film ${m NO}_{m x}$ Sensor by AC Impedance Spectroscopy. IEEE Sensors Journal, 2014, 14, 651-656.	4.7	7
39	Synthesis, Characterization and Electrical Properties of Nano-Sized Zn_xCo_{3â^'x}O₄ (x = 0.0â€“0.5) Materials. Advanced Science Letters, 2014, 20, 1450-1453.	0.2	1
40	Lithium ion conduction in Li5La3Ta2O12 and Li7La3Ta2O13 garnet-type materials. Journal of Electroceramics, 2013, 30, 258-265.	2.0	24
41	Selective detection of NH<inf>3</inf> by Ag<inf>6</inf>Mo<inf>10</inf>O<inf>33</inf> thick film by AC impedance spectroscopy. , 2012, , .		0
42	Impedance spectroscopy analysis of In<inf>2</inf>O<inf>3</inf> thin film gas sensor. , 2012, , .		1
43	Novel semiconducting metal-organic framework: Synthesis, structural characterisation and electrical conductivity studies of manganese based two dimensional coordination polymer. Inorganic Chemistry Communication, 2012, 20, 269-272.	3.9	15
44	Grain boundary resistance of fast lithium ion conductors: Comparison between a lithium-ion conductive Liâ€“Alâ€“Tiâ€“Pâ€“O-type glass ceramic and a Li1.5Al0.5Ge1.5P3O12 ceramic. Electrochemistry Communications, 2012, 14, 25-28.	4.7	113
45	Correlation between micro-structural properties and ionic conductivity of Li1.5Al0.5Ge1.5(PO4)3 ceramics. Journal of Power Sources, 2011, 196, 6456-6464.	7.8	180
46	Electrode polarization in glassy electrolytes: Large interfacial capacitance values and indication for pseudocapacitive charge storage. Solid State Ionics, 2010, 181, 859-863.	2.7	36
47	Electrochemical double layers at the interface between glassy electrolytes and platinum: Differentiating between the anode and the cathode capacitance. Physical Review B, 2010, 82, .	3.2	12
48	Mechanism and kinetics of Na+ ion depletion under the anode during electro-thermal poling of a bioactive glass. Journal of Non-Crystalline Solids, 2010, 356, 720-724.	3.1	26
49	Bioactivity of electro-thermally poled bioactive silicate glass. Acta Biomaterialia, 2009, 5, 1274-1283.	8.3	27
50	Inorganic Frameworks from Selenidotetrelate Anions [T2Se6]4â^' (T = Ge, Sn): Synthesis, Structures, and Ionic Conductivity of [K2(H2O)3][MnGe4Se10] and (NMe4)2[MSn4Se10] (M = Mn, Fe). Inorganic Chemistry, 2009, 48, 1689-1698.	4.0	54
51	Investigation of bioglassâ€“electrode interfaces after thermal poling. Solid State Ionics, 2008, 179, 671-677.	2.7	31
52	Electrical properties of A2.6+xTi1.4â^'xCd(PO4)3.4â^'x (A=Li, K; x=0.0â€“1.0) phosphate glasses. Journal of Non-Crystalline Solids, 2006, 352, 2737-2745.	3.1	14
53	Synthesis of nanostructured LiTi2(PO4)3 powder by a Pechini-type polymerizable complex method. Journal of Solid State Chemistry, 2006, 179, 450-456.	2.9	60
54	Preparation, characterization, ac conductivity and permittivity studies on vitreous M4AlCdP3O12 (M=Li, Na, K) system. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 121, 2-8.	3.5	36

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55	Vitrification of K3M2P3O12 (M=B, Al, Bi) NASICON-type materials and electrical relaxation studies. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 123, 63-68.	3.5	42
56	Conductivity and ion dynamic studies in the NaTi(PO) (0â‰â‰0.6) NASICON material. Solid State Ionics, 2005, 176, 1311-1318.	2.7	25
57	Synthesis, characterization and electrical conductivity studies on A3Bi2P3O12 (A=Na, K) materials. Materials Research Bulletin, 2005, 40, 610-618.	5.2	18
58	Lithium and potassium ion conduction in A3TiBâ€²P3O12 (A=Li, K; Bâ€²=Zn, Cd) NASICON-type glasses. Solid State Ionics, 2005, 176, 723-729.	2.7	45
59	Conductivity dispersion and scaling studies in Na3M2P3O12 orthophosphate (M2=Fe2, TiCd, TiZn). Physica B: Condensed Matter, 2004, 353, 65-74.	2.7	34
60	Ac conductivity, dielectric studies and conductivity scaling of NASICON materials. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 94, 82-88.	3.5	59
61	Synthesis, characterization and ion dynamic studies of NASICON type glasses. Solid State Ionics, 2002, 147, 49-59.	2.7	37
62	Scaling behavior in the frequency dependent conductivity of NASICON glasses. Journal of Materials Science Letters, 2002, 21, 1401-1403.	0.5	9
63	FREQUENCY DEPENDENT ELECTRICAL PROPERTIES OF THE Na₃Fe₂P₃O₁₂ AND Na₄FeCdP₃O₁₂ NASICON MATERIAL. , 2002. . .	0	