Mariappan C R

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6346215/publications.pdf

Version: 2024-02-01

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	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
2	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
3	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
4	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
5	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
6	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
7	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
8	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
9	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
10	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
11	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
12	Pseudocapacitive Charge Storage in Thin Nanobelts. Advanced Fiber Materials, 2019, 1, 205-213.	16.1	41
13	Synthesis, characterization and ion dynamic studies of NASICON type glasses. Solid State Ionics, 2002, 147, 49-59.	2.7	37
14	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
15	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
16	Conductivity dispersion and scaling studies in Na3M2P3O12 orthophosphate (M2=Fe2, TiCd, TiZn). Physica B: Condensed Matter, 2004, 353, 65-74.	2.7	34
17	Investigation of bioglassâ€“electrode interfaces after thermal poling. Solid State Ionics, 2008, 179, 671-677.	2.7	31
18	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

#	Article	IF	Citations
19	Bioactivity of electro-thermally poled bioactive silicate glass. Acta Biomaterialia, 2009, 5, 1274-1283.	8.3	27
20	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
21	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
22	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
23	Lithium ion conduction in Li5La3Ta2O12 and Li7La3Ta2O13 garnet-type materials. Journal of Electroceramics, 2013, 30, 258-265.	2.0	24
24	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
25	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
26	Synthesis, characterization and electrical conductivity studies on A3Bi2P3O12 (A=Na, K) materials. Materials Research Bulletin, 2005, 40, 610-618.	5.2	18
27	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
28	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
29	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
30	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
31	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
32	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
33	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
34	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
35	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
36	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

#	Article	IF	Citations
37	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
38	Scaling behavior in the frequency dependent conductivity of NASICON glasses. Journal of Materials Science Letters, 2002, 21, 1401-1403.	0.5	9
39	Fabrication and characterization of monodispersed Mn0.8Ni0.2Co2O4 mesoporous microspheres for supercapacitor application. Ceramics International, 2018, 44, 8864-8869.	4.8	9
40	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
41	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
42	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
43	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
44	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
45	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
46	A new biocompatible phosphate free mesoporous calcium borosilicate glass-ceramics for medical application. Materials Letters, 2021, 305, 130752.	2.6	4
47	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
48	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
49	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
50	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
51	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
52	Synthesis, characterization, bioactivity and antibacterial studies of silver doped calcium borosilicate glass-ceramics. AIP Conference Proceedings, 2018, , .	0.4	2
53	Preparation of spinel structured MnCo₂O₄ microspheres for energy storage devices. Ferroelectrics, 2022, 588, 55-64.	0.6	2
54	Impedance spectroscopy analysis of In<inf>2</inf>O<inf>3</inf> thin film gas sensor. , 2012, , .		1

#	Article	IF	Citations
55	Electrochemical performance of spinel-type Ni doped ZnCo2O4 mesoporous rods as an electrode for supercapacitors. AIP Conference Proceedings, 2018, , .	0.4	1
56	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
57	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
58	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
59	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
60	Zinc doped calcium phosphosilicatebioglass: Study of in-vitro bioactivity and antimicrobial behavior. AIP Conference Proceedings, 2019, , .	0.4	0
61	Silver-doped strontium calcium silicate microspheres: Structural and antibacterial studies. AIP Conference Proceedings, 2019, , .	0.4	0
62	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
63	FREQUENCY DEPENDENT ELECTRICAL PROPERTIES OF THE Na₃Fe₂P₃O₁₂ AND Na₄FeCdP₃O₁₂ NASICON MATERIAL. , 2002, , .	0	