M F Z Kadir

List of Publications by Year
in descending order

89 papers	4,952 citations	81434 41 h-index	111975 67 g-index
89 all docs	89 docs citations	89 times ranked	2041 citing authors

#	Article	IF	Citations
1	Structural and electrochemical studies of proton conducting biopolymer blend electrolytes based on MC:Dextran for EDLC device application with high energy density. AEJ - Alexandria Engineering Journal, 2022, 61, 3985-3997.	3.4	18
2	Influence of scan rate on CV Pattern: Electrical and electrochemical properties of plasticized Methylcellulose: Dextran (MC:Dex) proton conducting polymer electrolytes. AEJ - Alexandria Engineering Journal, 2022, 61, 5919-5937.	3.4	11
3	The study of impedance, ion transport properties, EEC modeling, dielectric and electrochemical characteristics of plasticized proton conducting PVA based electrolytes. Journal of Materials Research and Technology, 2022, 17, 1976-1985.	2.6	14
4	Electrical and structural characteristics of fish skin gelatin as alternative biopolymer electrolyte. Physica Scripta, 2022, 97, 055003.	1.2	2
5	Structural and energy storage behavior of ion conducting biopolymer blend electrolytes based on methylcellulose: Dextran polymers. AEJ - Alexandria Engineering Journal, 2022, 61, 9273-9285.	3.4	21
6	Electrochemical characteristics of solid state double-layer capacitor constructed from proton conducting chitosan-based polymer blend electrolytes. Polymer Bulletin, 2021, 78, 3149-3167.	1.7	38
7	The Study of Plasticized Sodium Ion Conducting Polymer Blend Electrolyte Membranes Based on Chitosan/Dextran Biopolymers: Ion Transport, Structural, Morphological and Potential Stability. Polymers, 2021, 13, 383.	2.0	36
8	Non-Faradaic-based supercapacitor fabricated with fish skin gelatin biopolymer electrolyte. Ionics, 2021, 27, 2219-2229.	1.2	11
9	Plasticized Sodium-Ion Conducting PVA Based Polymer Electrolyte for Electrochemical Energy Storageâ€"EEC Modeling, Transport Properties, and Charge-Discharge Characteristics. Polymers, 2021, 13, 803.	2.0	18
10	Bio-Based Plasticized PVA Based Polymer Blend Electrolytes for Energy Storage EDLC Devices: Ion Transport Parameters and Electrochemical Properties. Materials, 2021, 14, 1994.	1.3	31
11	Improving EDLC Device Performance Constructed from Plasticized Magnesium Ion Conducting Chitosan Based Polymer Electrolytes via Metal Complex Dispersion. Membranes, 2021, 11, 289.	1.4	24
12	Impregnation of [Emim]Br ionic liquid as plasticizer in biopolymer electrolytes for EDLC application. Electrochimica Acta, 2021, 375, 137923.	2.6	35
13	Plasticized Polymer Blend Electrolyte Based on Chitosan for Energy Storage Application: Structural, Circuit Modeling, Morphological and Electrochemical Properties. Polymers, 2021, 13, 1233.	2.0	16
14	Electrochemical performance of polymer blend electrolytes based on chitosan: dextran: impedance, dielectric properties, and energy storage study. Journal of Materials Science: Materials in Electronics, 2021, 32, 14846-14862.	1.1	17
15	Design of potassium ion conducting PVA based polymer electrolyte with improved ion transport properties for EDLC device application. Journal of Materials Research and Technology, 2021, 13, 933-946.	2.6	35
16	Impedance, circuit simulation, transport properties and energy storage behavior of plasticized lithium ion conducting chitosan based polymer electrolytes. Polymer Testing, 2021, 101, 107286.	2.3	18
17	Impedance, FTIR and transport properties of plasticized proton conducting biopolymer electrolyte based on chitosan for electrochemical device application. Results in Physics, 2021, 29, 104770.	2.0	36
18	Design of plasticized proton conducting Chitosan:Dextran based biopolymer blend electrolytes for EDLC application: Structural, impedance and electrochemical studies. Arabian Journal of Chemistry, 2021, 14, 103394.	2.3	22

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19	Solid-state double layer capacitors and protonic cell fabricated with dextran from Leuconostoc mesenteroides based green polymer electrolyte. Materials Chemistry and Physics, 2020, 241, 122290.	2.0	33
20	Fabrication of high performance energy storage EDLC device from proton conducting methylcellulose: dextran polymer blend electrolytes. Journal of Materials Research and Technology, 2020, 9, 1137-1150.	2.6	68
21	Influence of $$hbox {NH}_{4}$$Br as an ionic source on the structural/electrical properties of dextran-based biopolymer electrolytes and EDLC application. Bulletin of Materials Science, 2020, 43, 1.	0.8	45
22	Metal framework as a novel approach for the fabrication of electric double layer capacitor device with high energy density using plasticized Poly(vinyl alcohol): Ammonium thiocyanate based polymer electrolyte. Arabian Journal of Chemistry, 2020, 13, 7247-7263.	2.3	35
23	Structural, impedance and electrochemical double-layer capacitor characteristics of improved number density of charge carrier electrolytes employing potato starch blend polymers. Ionics, 2020, 26, 5773-5804.	1.2	24
24	The study of EDLC device fabricated from plasticized magnesium ion conducting chitosan based polymer electrolyte. Polymer Testing, 2020, 90, 106714.	2.3	71
25	Characteristics of Glycerolized Chitosan: NH4NO3-Based Polymer Electrolyte for Energy Storage Devices with Extremely High Specific Capacitance and Energy Density Over 1000 Cycles. Polymers, 2020, 12, 2718.	2.0	12
26	Synthesis of Porous Proton Ion Conducting Solid Polymer Blend Electrolytes Based on PVA: CS Polymers: Structural, Morphological and Electrochemical Properties. Materials, 2020, 13, 4890.	1.3	42
27	Characteristics of EDLC device fabricated from plasticized chitosan:MgCl2 based polymer electrolyte. Journal of Materials Research and Technology, 2020, 9, 10635-10646.	2.6	64
28	The Study of Structural, Impedance and Energy Storage Behavior of Plasticized PVA:MC Based Proton Conducting Polymer Blend Electrolytes. Materials, 2020, 13, 5030.	1.3	10
29	Study of impedance and solid-state double-layer capacitor behavior of proton (H+)-conducting polymer blend electrolyte-based CS:PS polymers. Ionics, 2020, 26, 4635-4649.	1.2	35
30	Ion association as a main shortcoming in polymer blend electrolytes based on CS:PS incorporated with various amounts of ammonium tetrafluoroborate. Journal of Materials Research and Technology, 2020, 9, 5410-5421.	2.6	33
31	Ion conduction in chitosan-starch blend based polymer electrolyte with ammonium thiocyanate as charge provider. Journal of Polymer Research, 2020, 27, 1.	1.2	33
32	Electrochemical Characteristics of Glycerolized PEO-Based Polymer Electrolytes. Membranes, 2020, 10, 116.	1.4	35
33	Effect of glycerol on EDLC characteristics of chitosan:methylcellulose polymer blend electrolytes. Journal of Materials Research and Technology, 2020, 9, 8355-8366.	2.6	75
34	Role of nano-capacitor on dielectric constant enhancement in PEO:NH4SCN:xCeO2 polymer nano-composites: Electrical and electrochemical properties. Journal of Materials Research and Technology, 2020, 9, 9283-9294.	2.6	67
35	Protonic EDLC cell based on chitosan (CS): methylcellulose (MC) solid polymer blend electrolytes. Ionics, 2020, 26, 1829-1840.	1.2	62
36	Effect of ohmic-drop on electrochemical performance of EDLC fabricated from PVA:dextran:NH4I based polymer blend electrolytes. Journal of Materials Research and Technology, 2020, 9, 3734-3745.	2.6	76

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37	Investigation on electrochemical characteristics of maltodextrin â€“ methyl cellulose electrolytes. Molecular Crystals and Liquid Crystals, 2020, 708, 63-91.	0.4	9
38	A Promising Polymer Blend Electrolytes Based on Chitosan: Methyl Cellulose for EDLC Application with High Specific Capacitance and Energy Density. Molecules, 2019, 24, 2503.	1.7	101
39	High Proton Conducting Polymer Blend Electrolytes Based on Chitosan:Dextran with Constant Specific Capacitance and Energy Density. Biomolecules, 2019, 9, 267.	1.8	56
40	Employing of Trukhan Model to Estimate Ion Transport Parameters in PVA Based Solid Polymer Electrolyte. Polymers, 2019, 11, 1694.	2.0	58
41	Ion Transport Study in CS: POZ Based Polymer Membrane Electrolytes Using Trukhan Model. International Journal of Molecular Sciences, 2019, 20, 5265.	1.8	48
42	Fabrication of energy storage EDLC device based on CS:PEO polymer blend electrolytes with high Li+ ion transference number. Results in Physics, 2019, 15, 102584.	2.0	78
43	Investigation of plasticized ionic conductor based on chitosan and ammonium bromide for EDLC application. Materials Today: Proceedings, 2019, 17, 490-498.	0.9	38
44	Development of Polymer Blends Based on PVA:POZ with Low Dielectric Constant for Microelectronic Applications. Scientific Reports, 2019, 9, 13163.	1.6	33
45	Structural, Impedance, and EDLC Characteristics of Proton Conducting Chitosan-Based Polymer Blend Electrolytes with High Electrochemical Stability. Molecules, 2019, 24, 3508.	1.7	51
46	Plasticized solid polymer electrolyte based on natural polymer blend incorporated with lithium perchlorate for electrical double-layer capacitor fabrication. Ionics, 2019, 25, 5473-5484.	1.2	36
47	Reducing the Crystallite Size of Spherulites in PEO-Based Polymer Nanocomposites Mediated by Carbon Nanodots and Ag Nanoparticles. Nanomaterials, 2019, 9, 874.	1.9	49
48	Increase of metallic silver nanoparticles in Chitosan:AgNt based polymer electrolytes incorporated with alumina filler. Results in Physics, 2019, 13, 102326.	2.0	60
49	Dextran from Leuconostoc mesenteroides-doped ammonium salt-based green polymer electrolyte. Bulletin of Materials Science, 2019, 42, 1.	0.8	49
50	Structural, thermal, morphological and optical properties of PEO filled with biosynthesized Ag nanoparticles: New insights to band gap study. Results in Physics, 2019, 13, 102220.	2.0	74
51	Structural and Optical Characteristics of PVA:C-Dot Composites: Tuning the Absorption of Ultra Violet (UV) Region. Nanomaterials, 2019, 9, 216.	1.9	108
52	Non suitability of silver ion conducting polymer electrolytes based on chitosan mediated by barium titanate (BaTiO3) for electrochemical device applications. Electrochimica Acta, 2019, 296, 494-507.	2.6	97
53	Protonic cell performance employing electrolytes based on plasticized methylcellulose-potato starch-NH4NO3. Ionics, 2019, 25, 559-572.	1.2	39
54	A conceptual review on polymer electrolytes and ion transport models. Journal of Science: Advanced Materials and Devices, 2018, 3, 1-17.	1.5	397

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55	Green electrolytes based on dextran-chitosan blend and the effect of NH4SCN as proton provider on the electrical response studies. Ionics, 2018, 24, 2379-2398.	1.2	57
56	Biopolymeric electrolyte based on glycerolized methyl cellulose with NH4Br as proton source and potential application in EDLC. Ionics, 2018, 24, 1651-1662.	1.2	67
57	Plasticized and plasticizer free lithium acetate doped polyvinyl alcoholâ€“chitosan blend solid polymer electrolytes: Comparative studies. Journal of Physics: Conference Series, 2018, 1123, 012001.	0.3	8
58	The compatibility of chitosan with divalent salts over monovalent salts for the preparation of solid polymer electrolytes. Results in Physics, 2018, 11, 826-836.	2.0	39
59	NH4NO3 as charge carrier contributor in glycerolized potato starch-methyl cellulose blend-based polymer electrolyte and the application in electrochemical double-layer capacitor. Ionics, 2017, 23, 3429-3453.	1.2	114
60	The effect of NH4NO3 towards the conductivity enhancement and electrical behavior in methyl cellulose-starch blend based ionic conductors. Ionics, 2017, 23, 1137-1154.	1.2	53
61	The development of Li+ conducting polymer electrolyte based on potato starch/graphene oxide blend. Ionics, 2017, 23, 411-425.	1.2	16
62	Characterization of starch-chitosan blend-based electrolyte doped with ammonium iodide for application in proton batteries. Ionics, 2017, 23, 681-697.	1.2	41
63	Electrical impedance and conduction mechanism analysis of biopolymer electrolytes based on methyl cellulose doped with ammonium iodide. Ionics, 2016, 22, 2157-2167.	1.2	135
64	Electrochemical characterizations and the effect of glycerol in biopolymer electrolytes based on methylcellulose-potato starch blend. Molecular Crystals and Liquid Crystals, 2016, 627, 220-233.	0.4	37
65	Ionic conductivity and dielectric properties of potato starch-magnesium acetate biopolymer electrolytes: the effect of glycerol and 1-butyl-3-methylimidazolium chloride. Ionics, 2016, 22, 1113-1123.	1.2	67
66	The effect of LiCF3SO3 on the complexation with potato starch-chitosan blend polymer electrolytes. Ionics, 2016, 22, 1647-1658.	1.2	51
67	Conductivity and Dielectric Studies of Lithium Trifluoromethanesulfonate Doped Polyethylene Oxide-Graphene Oxide Blend Based Electrolytes. Advances in Materials Science and Engineering, 2015, 2015, 1-10.	1.0	31
68	Innovative method to avoid the reduction of silver ions to silver nanoparticles $left({m A}{{{m) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 22 Scripta, 2015, 90, 035808.	1.2	69
69	Hydrogen ion conducting starch-chitosan blend based electrolyte for application in electrochemical devices. Electrochimica Acta, 2015, 158, 152-165.	2.6	139
70	Electrical and transport properties of NH4Br-doped cornstarch-based solid biopolymer electrolyte. Ionics, 2015, 21, 111-124.	1.2	72
71	The Effect of Plasticization on Conductivity and Other Properties of Starch/Chitosan Blend Biopolymer Electrolyte Incorporated with Ammonium Iodide. Molecular Crystals and Liquid Crystals, 2014, 603, 73-88.	0.4	58
72	Protonic Transport Analysis of Starch-Chitosan Blend Based Electrolytes and Application in Electrochemical Device. Molecular Crystals and Liquid Crystals, 2014, 603, 52-65.	0.4	41

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73	Electrical properties of proton conducting solid biopolymer electrolytes based on starchâ€“chitosan blend. Ionics, 2014, 20, 977-999.	1.2	115
74	Conductivity and electrical properties of corn starchâ€“chitosan blend biopolymer electrolyte incorporated with ammonium iodide. Physica Scripta, 2014, 89, 035701.	1.2	107
75	Incorporation of NH4Br in PVA-chitosan blend-based polymer electrolyte and its effect on the conductivity and other electrical properties. Ionics, 2014, 20, 1235-1245.	1.2	80
76	Electrical characterization of corn starch-LiOAc electrolytes and application in electrochemical double layer capacitor. Electrochimica Acta, 2014, 136, 204-216.	2.6	153
77	Proton conducting polymer electrolyte based on plasticized chitosanâ€“PEO blend and application in electrochemical devices. Optical Materials, 2013, 35, 1834-1841.	1.7	124
78	Conductivity and transport studies of plasticized chitosan-based proton conducting biopolymer electrolytes. Physica Scripta, 2013, T157, 014050.	1.2	27
79	Electrical analysis of amorphous corn starch-based polymer electrolyte membranes doped with LiI. Physica Scripta, 2013, 88, 025601.	1.2	68
80	Effect of plasticization on the conductivity and dielectric properties of starchâ€“chitosan blend biopolymer electrolytes infused with NH₄Br. Physica Scripta, 2013, T157, 014051.	1.2	25
81	Electrical Properties of Starch Based Silver Ion Conducting Solid Biopolymer Electrolyte. Advanced Materials Research, 2013, 701, 120-124.	0.3	8
82	Conductivity studies of biopolymer electrolytes based on chitosan incorporated with NH4Br. Physica Scripta, 2013, T157, 014049.	1.2	14
83	FTIR studies of plasticized poly(vinyl alcohol)â€“chitosan blend doped with NH4NO3 polymer electrolyte membrane. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2011, 78, 1068-1074.	2.0	142
84	Chitosanâ€“PEO proton conducting polymer electrolyte membrane doped with NH₄NO₃. Materials Research Innovations, 2011, 15, s164-s167.	1.0	26
85	Application of PVAâ€“chitosan blend polymer electrolyte membrane in electrical double layer capacitor. Materials Research Innovations, 2011, 15, s217-s220.	1.0	82
86	Plasticized chitosanâ€“PVA blend polymer electrolyte based proton battery. Electrochimica Acta, 2010, 55, 1475-1482.	2.6	257
87	Dielectric Studies of Proton Conducting Polymer Electrolyte Based on Chitosan/PEO Blend Doped with NH₄NO₃. Advanced Materials Research, 0, 488-489, 583-587.	0.3	8
88	Transport Properties of Chitosan/Peo Blend Based Proton Conducting Polymer Electrolyte. Advanced Materials Research, 0, 488-489, 114-117.	0.3	8
89	Conduction Mechanism and Dielectric Properties of Solid Biopolymer Electrolyte Incorporated with Silver Nitrate. Advanced Materials Research, 0, 701, 115-119.	0.3	9