Rebar T Abdulwahid

List of Publications by Year
in descending order

58	2,291	147801 31	233421 45
papers	citations	h-index	g-index

59	59	59	882
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Optical properties of pure and doped PVA:PEO based solid polymer blend electrolytes: two methods for band gap study. Journal of Materials Science: Materials in Electronics, 2017, 28, 7473-7479.	2.2	115
2	Polymer Blending as a Novel Approach for Tuning the SPR Peaks of Silver Nanoparticles. Polymers, 2017, 9, 486.	4.5	98
3	In situ synthesis of CuS nanoparticle with a distinguishable SPR peak in NIR region. Journal of Materials Science: Materials in Electronics, 2016, 27, 4163-4171.	2.2	85
4	A Comprehensive Review on Optical Properties of Polymer Electrolytes and Composites. Materials, 2020, 13, 3675.	2.9	85
5	Fabrication of Interconnected Plasmonic Spherical Silver Nanoparticles with Enhanced Localized Surface Plasmon Resonance (LSPR) Peaks Using Quince Leaf Extract Solution. Nanomaterials, 2019, 9, 1557.	4.1	81
6	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.	4.1	78
7	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.	5.8	76
8	Effect of glycerol on EDLC characteristics of chitosan:methylcellulose polymer blend electrolytes. Journal of Materials Research and Technology, 2020, 9, 8355-8366.	5.8	75
9	The study of structural and optical properties of PVA:PbO2 based solid polymer nanocomposites. Journal of Materials Science: Materials in Electronics, 2016, 27, 12112-12118.	2.2	71
10	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.	5.8	68
11	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.	5.8	67
12	Characteristics of EDLC device fabricated from plasticized chitosan:MgCl2 based polymer electrolyte. Journal of Materials Research and Technology, 2020, 9, 10635-10646.	5.8	64
13	Protonic EDLC cell based on chitosan (CS): methylcellulose (MC) solid polymer blend electrolytes. Ionics, 2020, 26, 1829-1840.	2.4	62
14	Increase of metallic silver nanoparticles in Chitosan:AgNt based polymer electrolytes incorporated with alumina filler. Results in Physics, 2019, 13, 102326.	4.1	60
15	Electrical, Dielectric Property and Electrochemical Performances of Plasticized Silver Ion-Conducting Chitosan-Based Polymer Nanocomposites. Membranes, 2020, 10, 151.	3.0	57
16	The Study of Plasticized Amorphous Biopolymer Blend Electrolytes Based on Polyvinyl Alcohol (PVA): Chitosan with High Ion Conductivity for Energy Storage Electrical Double-Layer Capacitors (EDLC) Device Application. Polymers, 2020, 12, 1938.	4.5	55
17	Structural, Impedance, and EDLC Characteristics of Proton Conducting Chitosan-Based Polymer Blend Electrolytes with High Electrochemical Stability. Molecules, 2019, 24, 3508.	3.8	51
18	Glycerolized Li+ Ion Conducting Chitosan-Based Polymer Electrolyte for Energy Storage EDLC Device Applications with Relatively High Energy Density. Polymers, 2020, 12, 1433.	4.5	51

#	Article	IF	Citations
19	Ion Transport Study in CS: POZ Based Polymer Membrane Electrolytes Using Trukhan Model. International Journal of Molecular Sciences, 2019, 20, 5265.	4.1	48
20	Metal Complex as a Novel Approach to Enhance the Amorphous Phase and Improve the EDLC Performance of Plasticized Proton Conducting Chitosan-Based Polymer Electrolyte. Membranes, 2020, 10, 132.	3.0	46
21	Steps Toward the Band Gap Identification in Polystyrene Based Solid Polymer Nanocomposites Integrated with Tin Titanate Nanoparticles. Polymers, 2020, 12, 2320.	4.5	44
22	Synthesis of Porous Proton Ion Conducting Solid Polymer Blend Electrolytes Based on PVA: CS Polymers: Structural, Morphological and Electrochemical Properties. Materials, 2020, 13, 4890.	2.9	42
23	From Cellulose, Shrimp and Crab Shells to Energy Storage EDLC Cells: The Study of Structural and Electrochemical Properties of Proton Conducting Chitosan-Based Biopolymer Blend Electrolytes. Polymers, 2020, 12, 1526.	4.5	41
24	Tea from the drinking to the synthesis of metal complexes and fabrication of PVA based polymer composites with controlled optical band gap. Scientific Reports, 2020, 10, 18108.	3.3	38
25	Electrochemical characteristics of solid state double-layer capacitor constructed from proton conducting chitosan-based polymer blend electrolytes. Polymer Bulletin, 2021, 78, 3149-3167.	3.3	38
26	Synthesis of PVA/CeO2 Based Nanocomposites with Tuned Refractive Index and Reduced Absorption Edge: Structural and Optical Studies. Materials, 2021, 14, 1570.	2.9	38
27	The Study of Electrical and Electrochemical Properties of Magnesium Ion Conducting CS: PVA Based Polymer Blend Electrolytes: Role of Lattice Energy of Magnesium Salts on EDLC Performance. Molecules, 2020, 25, 4503.	3.8	37
28	Impedance, FTIR and transport properties of plasticized proton conducting biopolymer electrolyte based on chitosan for electrochemical device application. Results in Physics, 2021, 29, 104770.	4.1	36
29	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.	4.9	35
30	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.	2.4	35
31	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.	5.8	35
32	Investigation of Ion Transport Parameters and Electrochemical Performance of Plasticized Biocompatible Chitosan-Based Proton Conducting Polymer Composite Electrolytes. Membranes, 2020, 10, 363.	3.0	34
33	The Study of EDLC Device with High Electrochemical Performance Fabricated from Proton Ion Conducting PVA-Based Polymer Composite Electrolytes Plasticized with Glycerol. Polymers, 2020, 12, 1896.	4.5	33
34	Structural, Impedance and Electrochemical Characteristics of Electrical Double Layer Capacitor Devices Based on Chitosan: Dextran Biopolymer Blend Electrolytes. Polymers, 2020, 12, 1411.	4.5	33
35	Design of non-faradaic EDLC from plasticized MC based polymer electrolyte with an energy density close to lead-acid batteries. Journal of Industrial and Engineering Chemistry, 2022, 105, 414-426.	5.8	30
36	Blending and Characteristics of Electrochemical Double-Layer Capacitor Device Assembled from Plasticized Proton Ion Conducting Chitosan:Dextran:NH4PF6 Polymer Electrolytes. Polymers, 2020, 12, 2103.	4.5	26

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37	Improving EDLC Device Performance Constructed from Plasticized Magnesium Ion Conducting Chitosan Based Polymer Electrolytes via Metal Complex Dispersion. Membranes, 2021, 11, 289.	3.0	24
38	Insights into ion transport in biodegradable solid polymer blend electrolyte based on FTIR analysis and circuit design. Journal of Physics and Chemistry of Solids, 2022, 167, 110774.	4.0	24
39	Drawbacks of Low Lattice Energy Ammonium Salts for Ion-Conducting Polymer Electrolyte Preparation: Structural, Morphological and Electrical Characteristics of CS:PEO:NH4BF4-Based Polymer Blend Electrolytes. Polymers, 2020, 12, 1885.	4.5	22
40	Structural and energy storage behavior of ion conducting biopolymer blend electrolytes based on methylcellulose: Dextran polymers. AEJ - Alexandria Engineering Journal, 2022, 61, 9273-9285.	6.4	21
41	Optical Dielectric Loss as a Novel Approach to Specify the Types of Electron Transition: XRD and UV-vis as a Non-Destructive Techniques for Structural and Optical Characterization of PEO Based Nanocomposites. Materials, 2020, 13, 2979.	2.9	19
42	Structural and optical properties of thermally annealed TiO2â€“SiO2 binary thin films synthesized by solâ€“gel method. Journal of Materials Science: Materials in Electronics, 2018, 29, 16010-16020.	2.2	18
43	Plasticized Sodium-Ion Conducting PVA Based Polymer Electrolyte for Electrochemical Energy Storageâ€”EEC Modeling, Transport Properties, and Charge-Discharge Characteristics. Polymers, 2021, 13, 803.	4.5	18
44	Impedance, circuit simulation, transport properties and energy storage behavior of plasticized lithium ion conducting chitosan based polymer electrolytes. Polymer Testing, 2021, 101, 107286.	4.8	18
45	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.	2.2	17
46	Solid-State EDLC Device Based on Magnesium Ion-Conducting Biopolymer Composite Membrane Electrolytes: Impedance, Circuit Modeling, Dielectric Properties and Electrochemical Characteristics. Membranes, 2020, 10, 389.	3.0	15
47	Energy Storage Behavior of Lithium-Ion Conducting poly(vinyl alcohol) (PVA): Chitosan(CS)-Based Polymer Blend Electrolyte Membranes: Preparation, Equivalent Circuit Modeling, Ion Transport Parameters, and Dielectric Properties. Membranes, 2020, 10, 381.	3.0	15
48	The Study of Ion Transport Parameters in MC-Based Electrolyte Membranes Using EIS and Their Applications for EDLC Devices. Membranes, 2022, 12, 139.	3.0	15
49	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.	5.8	14
50	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.	4.5	12
51	Green coordination chemistry as a novel approach to fabricate polymer:Cd(II)-complex composites: Structural and optical properties. Optical Materials, 2021, 116, 111062.	3.6	12
52	Synthesis of Hg metal complex and its application to reduce the optical band gap of polymer. Arabian Journal of Chemistry, 2021, 14, 103215.	4.9	12
53	The Study of Structural, Impedance and Energy Storage Behavior of Plasticized PVA:MC Based Proton Conducting Polymer Blend Electrolytes. Materials, 2020, 13, 5030.	2.9	10
54	Fabrication of Alternating Copolymers Based on Cyclopentadithiophene-Benzothiadiazole Dicarboxylic Imide with Reduced Optical Band Gap: Synthesis, Optical, Electrochemical, Thermal, and Structural Properties. Polymers, 2021, 13, 63.	4.5	9

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55	Influence of Fluorine Substitution on the Optical, Thermal, Electrochemical and Structural Properties of Carbazole-Benzothiadiazole Dicarboxylic Imide Alternate Copolymers. Polymers, 2020, 12, 2910.	4.5	8
56	Optical, Electrochemical, Thermal, and Structural Properties of Synthesized Fluorene/Dibenzosilole-Benzothiadiazole Dicarboxylic Imide Alternating Organic Copolymers for Photovoltaic Applications. Coatings, 2020, 10, 1147.	2.6	6
57	Impact of ethynylene linkers on the optical and electrochemical properties of benzothiadiazole based alternate conjugated polymers. Arabian Journal of Chemistry, 2021, 14, 103320.	4.9	6
58	Synthesis, Optical, Thermal and Structural Characteristics of Novel Thermocleavable Polymers Based on Phthalate Esters. Polymers, 2020, 12, 2791.	4.5	5