Anji Reddy Polu

List of Publications by Year
in descending order

41	2,013	236612	329751
papers	citations	25 h-index	37 g-index

41	41	41	2329
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent advances in MoS 2 nanostructured materials for energy and environmental applications â€“ A review. Journal of Solid State Chemistry, 2017, 252, 43-71.	1.4	216
2	Synthesis, optimization and applications of ZnO/polymer nanocomposites. Materials Science and Engineering C, 2019, 98, 1210-1240.	3.8	191
3	Ionic liquid doped PEO-based solid polymer electrolytes for lithium-ion polymer batteries. International Journal of Hydrogen Energy, 2017, 42, 7212-7219.	3.8	150
4	Perspectives for solid biopolymer electrolytes in dye sensitized solar cell and battery application. Renewable and Sustainable Energy Reviews, 2016, 65, 1098-1117.	8.2	106
5	Effect of TiO 2 nanoparticles on structural, thermal, mechanical and ionic conductivity studies of PEO 12 â€“LiTDI solid polymer electrolyte. Journal of Industrial and Engineering Chemistry, 2016, 37, 347-353.	2.9	100
6	Nanocomposite solid polymer electrolytes based on poly(ethylene oxide)/POSS-PEG (n=13.3) hybrid nanoparticles for lithium ion batteries. Journal of Industrial and Engineering Chemistry, 2015, 31, 323-329.	2.9	84
7	Fumed SiO₂ nanoparticle reinforced biopolymer blend nanocomposites with high dielectric constant and low dielectric loss for flexible organic electronics. Journal of Applied Polymer Science, 2017, 134, .	1.3	75
8	Newly developed biodegradable polymer nanocomposites of cellulose acetate and Al2O3 nanoparticles with enhanced dielectric performance for embedded passive applications. Journal of Materials Science: Materials in Electronics, 2017, 28, 973-986.	1.1	73
9	Preparation and characterization of pva based solid polymer electrolytes for electrochemical cell applications. Chinese Journal of Polymer Science (English Edition), 2013, 31, 641-648.	2.0	70
10	Impedance spectroscopy, ionic conductivity and dielectric studies of new Li+ ion conducting polymer blend electrolytes based on biodegradable polymers for solid state battery applications. Journal of Materials Science: Materials in Electronics, 2016, 27, 11410-11424.	1.1	65
11	A study of structural, electrical and electrochemical properties of PVdF-HFP gel polymer electrolyte films for magnesium ion battery applications. Journal of Industrial and Engineering Chemistry, 2016, 37, 67-74.	2.9	64
12	AC impedance and dielectric spectroscopic studies of Mg2â€‰+â€‰ ion conducting PVAâ€“PEG blended polymer electrolytes. Bulletin of Materials Science, 2011, 34, 1063-1067.	0.8	63
13	Impedance Spectroscopy and FTIR Studies of PEG - Based Polymer Electrolytes. E-Journal of Chemistry, 2011, 8, 347-353.	0.4	62
14	Ionic Conductivity and Discharge Characteristic Studies of PVA-Mg(CH₃COO)₂Solid Polymer Electrolytes. International Journal of Polymeric Materials and Polymeric Biomaterials, 2013, 62, 76-80.	1.8	62
15	Poly(ethylene oxide)-lithium difluoro(oxalato)borate new solid polymer electrolytes: ionâ€“polymer interaction, structural, thermal, and ionic conductivity studies. Ionics, 2015, 21, 2771-2780.	1.2	62
16	Magnesium ion conducting solid polymer blend electrolyte based on biodegradable polymers and application in solid-state batteries. Ionics, 2015, 21, 125-132.	1.2	59
17	Solution-processed white graphene-reinforced ferroelectric polymer nanocomposites with improved thermal conductivity and dielectric properties for electronic encapsulation. Journal of Polymer Research, 2017, 24, 1.	1.2	59
18	New solid polymer electrolytes (PEO20â€“LiTDIâ€“SN) for lithium batteries: structural, thermal and ionic conductivity studies. Journal of Materials Science: Materials in Electronics, 2015, 26, 8548-8554.	1.1	45

#	Article	IF	Citations
19	The Effects of LiTDI Salt and POSS-PEG (<I>n</I> = 4) Hybrid Nanoparticles on Crystallinity and Ionic Conductivity of PEO Based Solid Polymer Electrolytes. Science of Advanced Materials, 2016, 8, 931-940.	0.1	45
20	Effect of POSS-PEG hybrid nanoparticles on cycling performance of polyether-LiDFOB based solid polymer electrolytes for all solid-state Li-ion battery applications. Journal of Industrial and Engineering Chemistry, 2017, 45, 68-77.	2.9	43
21	Effect Of Al2O3Âceramic Filler On PEG-based Composite PolymerÂelectrolytes For Magnesium Batteries. Advanced Materials Letters, 2013, 4, 543-547.	0.3	41
22	Eeonomer 200FÂ®: A High-Performance Nanofiller for Polymer Reinforcementâ€"Investigation of the Structure, Morphology and Dielectric Properties of Polyvinyl Alcohol/Eeonomer-200FÂ® Nanocomposites for Embedded Capacitor Applications. Journal of Electronic Materials, 2017, 46, 2406-2418.	1.0	35
23	Ionic liquid incorporated nanocomposite polymer electrolytes for rechargeable lithium ion battery: A way to achieve improved electrochemical and interfacial properties. Journal of Industrial and Engineering Chemistry, 2016, 40, 168-176.	2.9	34
24	Preparation and characterization of PEGâ€"Mg(CH3COO)2â€"CeO2 composite polymer electrolytes for battery application. Bulletin of Materials Science, 2014, 37, 309-314.	0.8	28
25	A comprehensive study of chalcogenide quantum dot sensitized solar cells with a new solar cell exceeding 1 V output. Renewable and Sustainable Energy Reviews, 2015, 52, 1083-1092.	8.2	27
26	Conductivity, XRD, and FTIR Studies of New Mg2+-ion-conducting Solid Polymer Electrolytes: [PEG: Mg(CH3COO)2]. Journal of the Korean Physical Society, 2011, 59, 114-118.	0.3	27
27	Effect of zinc salt on transport, structural, and thermal properties of PEG-based polymer electrolytes for battery application. Ionics, 2014, 20, 675-679.	1.2	26
28	Effect of ceramic fillers on polyethylene glycol-based solid polymer electrolytes for solid-state magnesium batteries. High Performance Polymers, 2014, 26, 628-631.	0.8	18
29	Mg²⁺-ion conducting poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 1 Materials Express, 2014, 4, 79-84.	0.2	15
30	Effect of Organicâ€"Inorganic Hybrid Nanoparticles (POSSâ€"PEG(n = 4)) on Thermal, Mechanical, and Electrical Properties of PEOâ€Based Solid Polymer Electrolytes. Advances in Polymer Technology, 2017, 36, 145-151.	0.8	15
31	Effect of TiO[sub 2] ceramic filler on PEG-based composite polymer electrolytes for magnesium batteries. AIP Conference Proceedings, 2013, , .	0.3	14
32	Ionic Conductivity And Electrochemical Cell Studies Of New Mg2+Âion Conducting PVA/PEG Based Polymer Blend ElectrolytesÂ. Advanced Materials Letters, 2012, 3, 406-409.	0.3	13
33	Ion-Conducting Polymer Electrolyte Based on Poly (Ethylene Glycol) Complexed with Mg(CH₃COO)_{2^{â€"}}Application as an Electrochemical Cell. E-Journal of Chemistry, 2012, 9, 869-874.	0.4	10
34	Structural, thermal, and electrochemical studies of biodegradable gel polymer electrolyte for electric double layer capacitor. High Performance Polymers, 2022, 34, 673-682.	0.8	4
35	Electrical performance of soft polymer ionic membranes with mono and multi polymer systems. Karbala International Journal of Modern Science, 2015, 1, 194-199.	0.5	3
36	Improved ion dissociation and amorphous region of PEO based solid polymer electrolyte by incorporating tetracyanoethylene. Materials Today: Proceedings, 2020, , .	0.9	3

#	Article	IF	Citations
37	AC conductivity and electrochemical studies of PVA/PEG based polymer blend electrolyte films. , 2012, , .		2
38	A Novel Nanocomposite Polymer Electrolyte for Application in Solid State Lithium Ion Battery. , 2018, , .		2
39	Effect of Mixed Glass Former on Ionic Conductivity of Silver Boro Tungstate glass system x[0.75AgI:0.25AgCl]: (1-x) [Ag₂O-{B₂O₃:WO₃}]. Journal of Physics: Conference Series, 2012, 365, 012034.	0.3	1
40	Development of solid polymer electrolytes based on poly (ethylene oxide) complexed with 2-trifluoromethyl-4, 5-dicyanoimidazole lithium salt and 1-ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide ionic liquid for Li-ion batteries. High Performance Polymers, 0, , 095400832211130.	0.8	1
41	Frequency and Temperature Dependence of Conductivity Studies of New Silver-Calcia-Borate Glass System. , 2011, , .		0