## Kalim Deshmukh

List of Publications by Year in descending order

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121 6,416 40 76196

124 124 124 5535
all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Structure, morphology and modelling studies of polyvinylalcohol nanocomposites reinforced with nickel oxide nanoparticles and graphene quantum dots. Environmental Research, 2022, 203, 111842.	3.7	28
2	Introduction to 2D MXenes: fundamental aspects, MAX phases and MXene derivatives, current challenges, and future prospects. , 2022, , 1-47.		O
3	MXene-based multifunctional polymer composites for electromagnetic interference shielding applications., 2022,, 649-686.		2
4	Structure defects and electronic properties of MXenes., 2022,, 91-129.		3
5	MXene-based flexible polymer composites as high dielectric constant materials. , 2022, , 725-758.		4
6	MXenes and their composites: emerging materials for gas sensing and biosensing. , 2022, , 241-279.		0
7	MXenes and their composites for energy harvesting applications. , 2022, , 687-723.		1
8	Dielectric Properties of Epoxy/Natural Fiber Composites. , 2022, , 1-35.		1
9	Electrical Properties of Synthetic Fiber/Epoxy Composites. , 2022, , 1-30.		O
10	A systematic review on 2D materials for volatile organic compound sensing. Coordination Chemistry Reviews, 2022, 461, 214502.	9.5	20
11	MXene based emerging materials for supercapacitor applications: Recent advances, challenges, and future perspectives. Coordination Chemistry Reviews, 2022, 462, 214518.	9.5	148
12	2D MXenes for combatting COVID-19 Pandemic: A perspective on latest developments and innovations. FlatChem, 2022, 33, 100377.	2.8	16
13	Fabrication of flexible ternary polymer blends comprising polypyrrole, polyvinylalcohol, and poly(4â€styrenesulfonic acid): Study of structural, morphological, and dielectric properties. Journal of Applied Polymer Science, 2022, 139, .	1.3	6
14	Cellular ceramic foam derived from potassium-based geopolymer composite: Thermal, mechanical and structural properties. Materials and Design, 2021, 198, 109355.	3.3	28
15	Structural, dielectric and EMI shielding properties of polyvinyl alcohol/chitosan blend nanocomposites integrated with graphite oxide and nickel oxide nanofillers. Journal of Materials Science: Materials in Electronics, 2021, 32, 764-779.	1.1	45
16	Dielectric and electromagnetic interference shielding properties of zeolite <scp>13X</scp> and carbon black nanoparticles based <scp>PVDF</scp> nanocomposites. Journal of Applied Polymer Science, 2021, 138, 50107.	1.3	38
17	Morphology, Dielectric and EMI Shielding Characteristics of Graphene Nanoplatelets, Montmorillonite Nanoclay and Titanium Dioxide Nanoparticles Reinforced Polyvinylidenefluoride Nanocomposites. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 2003-2016.	1.9	43
18	Chemiresistive gas sensors based on vanadium pentoxide reinforced polyvinyl alcohol/polypyrrole blend nanocomposites for room temperature LPG sensing. Synthetic Metals, 2021, 273, 116687.	2.1	29

#	Article	IF	Citations
19	Electromagnetic Interference Shielding Characteristics of SrTiO3 Nanoparticles Induced Polyvinyl Chloride and Polyvinylidene Fluoride Blend Nanocomposites. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 3481-3495.	1.9	23
20	Study on Structure, Thermal Behavior, and Viscoelastic Properties of Nanodiamond-Reinforced Poly (vinyl alcohol) Nanocomposites. Polymers, 2021, 13, 1426.	2.0	32
21	Graphene oxide nanocomposites based room temperature gas sensors: A review. Chemosphere, 2021, 280, 130641.	4.2	31
22	Silica-based geopolymer spherical beads: Influence of viscosity on porosity architecture. Cement and Concrete Composites, 2021, 124, 104261.	4.6	12
23	Dielectric and electromagnetic interference shielding performance of graphene nanoplatelets and copper oxide nanoparticles reinforced polyvinylidenefluoride/poly(3,4-ethylenedioxythiophene)-block-poly (ethylene glycol) blend nanocomposites. Synthetic Metals. 2021. 282. 116923.	2.1	18
24	Green synthesized materials for sensor, actuator, energy storage and energy generation: a review. Polymer-Plastics Technology and Materials, 2020, 59, 1-62.	0.6	26
25	Introduction to 3D and 4D printing technology: State of the art and recent trends. , 2020, , 1-24.		27
26	3D and 4D printing of pH-responsive and functional polymers and their composites. , 2020, , 85-117.		30
27	Fundamentals and applications of 3D and 4D printing of polymers: Challenges in polymer processing and prospects of future research., 2020,, 527-560.		25
28	Recent advances in mechanical properties of biopolymer composites: a review. Polymer Composites, 2020, 41, 32-59.	2.3	146
29	Dynamic mechanical analysis and broadband electromagnetic interference shielding characteristics of poly (vinyl alcohol)-poly (4-styrenesulfonic acid)-titanium dioxide nanoparticles based tertiary nanocomposites. Polymer-Plastics Technology and Materials, 2020, 59, 847-863.	0.6	16
30	Significantly enhanced electromagnetic interference shielding effectiveness of montmorillonite nanoclay and copper oxide nanoparticles based polyvinylchloride nanocomposites. Polymer Testing, 2020, 91, 106744.	2.3	37
31	Microstructural evaluation and thermal properties of sol-gel derived silica-titania based porous glasses. Journal of Physics: Conference Series, 2020, 1527, 012031.	0.3	2
32	State of the art recent progress in two dimensional MXenes based gas sensors and biosensors: A comprehensive review. Coordination Chemistry Reviews, 2020, 424, 213514.	9.5	169
33	Recent advances and future perspectives of sol–gel derived porous bioactive glasses: a review. RSC Advances, 2020, 10, 33782-33835.	1.7	108
34	Enhanced LPG Sensitivity for Electron Beam Irradiated Alâ€ZnO Nanoparticles. Macromolecular Symposia, 2020, 392, 2000168.	0.4	4
35	Dielectric properties and electromagnetic interference shielding studies of nickel oxide and tungsten oxide reinforced polyvinylchloride nanocomposites. Polymer-Plastics Technology and Materials, 2020, 59, 1667-1678.	0.6	13
36	Graphene quantum dot based materials for sensing, bio-imaging and energy storage applications: a review. RSC Advances, 2020, 10, 23861-23898.	1.7	194

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37	Electromagnetic interference shielding properties of graphene <scp>quantumâ€dots</scp> reinforced poly(vinyl alcohol)/polypyrrole blend nanocomposites. Journal of Applied Polymer Science, 2020, 137, 49392.	1.3	39
38	Dielectric and electromagnetic interference shielding properties of carbon black nanoparticles reinforced PVA/PEG blend nanocomposite films. Materials Research Express, 2020, 7, 064008.	0.8	40
39	Mechanical analysis of polymers. , 2020, , 117-152.		11
40	Green chemistry mediated synthesis of cadmium sulphide/polyvinyl alcohol nanocomposites: Assessment of microstructural, thermal, and dielectric properties. Polymer Composites, 2020, 41, 2054-2067.	2.3	24
41	Room temperature ammonia sensing based on graphene oxide integrated flexible polyvinylidenefluoride/cerium oxide nanocomposite films. Polymer-Plastics Technology and Materials, 2020, 59, 1429-1446.	0.6	8
42	Enhanced dielectric properties of green synthesized Nickel Sulphide (NiS) nanoparticles integrated polyvinylalcohol nanocomposites*. Materials Research Express, 2020, 7, 064007.	0.8	43
43	Recent Advances in Poly (Amide-B-Ethylene) Based Membranes for Carbon Dioxide (CO <sub>2</sub> ) Capture: A Review. Polymer-Plastics Technology and Materials, 2019, 58, 366-383.	0.6	12
44	Hydrothermal synthesis of ZnWO4–MnO2 nanopowder doped with carbon black nanoparticles for high-performance supercapacitor applications. Journal of Materials Science: Materials in Electronics, 2019, 30, 21250-21258.	1.1	23
45	Effect of Poly Ethylene Glycol (PEG) on Structural, Thermal and Photoluminescence Properties of CdO Nanoparticles For Optoelectronic Applications. Materials Today: Proceedings, 2019, 9, 175-183.	0.9	24
46	Enhanced Quality Factor of Polyvinyl formal (PVF) Based Nanocomposites Filled with Zinc Oxide and Carbon Black Nanoparticles for Wireless Sensing Applications. Materials Today: Proceedings, 2019, 9, 199-216.	0.9	19
47	Synthesis, optimization and applications of ZnO/polymer nanocomposites. Materials Science and Engineering C, 2019, 98, 1210-1240.	3.8	191
48	Electrospun Polymeric Nanofibers: Fundamental Aspects of Electrospinning Processes, Optimization of Electrospinning Parameters, Properties, and Applications. Lecture Notes in Bioengineering, 2019, , 375-409.	0.3	14
49	Shape Memory Polymer Composites in Biomedical Field. Lecture Notes in Bioengineering, 2019, , 299-329.	0.3	0
50	Amorphous and Semicrystalline Thermoplastic Polymer Nanocomposites Applied in Biomedical Engineering. Lecture Notes in Bioengineering, 2019, , 57-84.	0.3	1
51	Biomedical Applications of Electrospun Polymer Composite Nanofibres. Lecture Notes in Bioengineering, 2019, , 111-165.	0.3	5
52	3D Printing Technology of Polymer Composites and Hydrogels for Artificial Skin Tissue Implementations. Lecture Notes in Bioengineering, 2019, , 205-233.	0.3	13
53	Processing and Industrial Applications of Sustainable Nanocomposites Containing Nanofillers. , 2019, , 451-478.		1
54	Dielectric properties of polyvinyl alcohol (PVA) nanocomposites filled with green synthesized zinc sulphide (ZnS) nanoparticles. Journal of Materials Science: Materials in Electronics, 2019, 30, 4676-4687.	1.1	98

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55	Electromagnetic interference shielding properties of polyvinylchloride (PVC), barium titanate (BaTiO3) and nickel oxide (NiO) based nanocomposites. Polymer Testing, 2019, 77, 105925.	2.3	37
56	Surface Modified Zinc Oxide Nanoparticles as Smart UV Sensors. Journal of Electronic Materials, 2019, 48, 4726-4732.	1.0	11
57	A review on porous polymer composite materials for multifunctional electronic applications. Polymer-Plastics Technology and Materials, 2019, 58, 1253-1294.	0.6	19
58	Electrical and Electromagnetic Interference (EMI) shielding properties of hexagonal boron nitride nanoparticles reinforced polyvinylidene fluoride nanocomposite films. Polymer-Plastics Technology and Materials, 2019, 58, 1191-1209.	0.6	21
59	Natural polymer based composite membranes for water purification: a review. Polymer-Plastics Technology and Materials, 2019, 58, 1295-1310.	0.6	22
60	Flexible, biodegradable and recyclable solar cells: a review. Journal of Materials Science: Materials in Electronics, 2019, 30, 951-974.	1.1	48
61	A review on recent advances in hybrid supercapacitors: Design, fabrication and applications. Renewable and Sustainable Energy Reviews, 2019, 101, 123-145.	8.2	1,049
62	Studies on the Mechanical, Morphological and Electrical Properties of Highly Dispersible Graphene Oxide Reinforced Polypyrrole and Polyvinylalcohol Blend Composites. Materials Today: Proceedings, 2018, 5, 8744-8752.	0.9	16
63	Hydrothermal synthesis of CeO 2 SnO 2 nanocomposites with highly enhanced gas sensing performance towards n-butanol. Journal of Science: Advanced Materials and Devices, 2018, 3, 139-144.	1.5	19
64	Enhanced electromagnetic absorption in NiO and BaTiO3 based polyvinylidenefluoride nanocomposites. Materials Letters, 2018, 218, 217-220.	1.3	49
65	Influence of CuO nanoparticles and graphene nanoplatelets on the sensing behaviour of poly(vinyl) Tj ETQq1 Science: Materials in Electronics, 2018, 29, 5186-5205.	1 0.784314 r 1.1	
66	Optical Analysis of Iron-Doped Lead Sulfide Thin Films for Opto-Electronic Applications. International Journal of Nanoscience, 2018, 17, 1760004.	0.4	2
67	Studies on the Electrical Properties of Graphene Oxide-Reinforced Poly (4-Styrene Sulfonic Acid) and Polyvinyl Alcohol Blend Composites. International Journal of Nanoscience, 2018, 17, 1760005.	0.4	18
68	Dielectric and electromagnetic interference shielding properties of germanium dioxide nanoparticle reinforced poly(vinyl chloride) and poly(methylmethacrylate) blend nanocomposites. Journal of Materials Science: Materials in Electronics, 2018, 29, 20172-20188.	1,1	48
69	Recent advances in electromagnetic interference shielding properties of metal and carbon filler reinforced flexible polymer composites: A review. Composites Part A: Applied Science and Manufacturing, 2018, 114, 49-71.	3.8	554
70	Stretchable quaternary phasic PVDF-HFP nanocomposite films containing graphene-titania-SrTiO3 for mechanical energy harvesting. Emergent Materials, 2018, 1, 55-65.	3.2	105
71	A High Sensitivity Isopropanol Vapor Sensor Based on Cr <sub>2</sub> O <sub>3</sub> –SnO <sub>2</sub> Heterojunction Nanocomposites via Chemical Precipitation Route. Journal of Nanoscience and Nanotechnology, 2018, 18, 5454-5460.	0.9	19
72	CHAPTER 12. Hybrid Nano-filler for Value Added Rubber Compounds for Recycling. RSC Green Chemistry, 2018, , 310-329.	0.0	4

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73	Investigation on the Electrical Properties of Lithium Ion Conducting Polymer Electrolyte Films Based on Biodegradable Polymer Blends. Advanced Science Letters, 2018, 24, 5496-5502.	0.2	17
74	Investigation of Microstructure, Morphology, Mechanical, and Dielectric Properties of PVA/PbO Nanocomposites. Advances in Polymer Technology, 2017, 36, 352-361.	0.8	60
75	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
76	Ceramic-Based Polymer Nanocomposites as Piezoelectric Materials. Springer Series on Polymer and Composite Materials, 2017, , 77-93.	0.5	13
77	Polyvinyl alcohol (PVA)/polystyrene sulfonic acid (PSSA)/carbon black nanocomposite for flexible energy storage device applications. Journal of Materials Science: Materials in Electronics, 2017, 28, 6099-6111.	1.1	64
78	Eeonomer 200F®: A High-Performance Nanofiller for Polymer Reinforcement—Investigation of the Structure, Morphology and Dielectric Properties of Polyvinyl Alcohol/Eeonomer-200F® Nanocomposites for Embedded Capacitor Applications. Journal of Electronic Materials, 2017, 46, 2406-2418.	1.0	35
79	Graphene oxide reinforced poly (4-styrenesulfonic acid)/polyvinyl alcohol blend composites with enhanced dielectric properties for portable and flexible electronics. Materials Chemistry and Physics, 2017, 186, 188-201.	2.0	93
80	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
81	Striking multiple synergies in novel three-phase fluoropolymer nanocomposites by combining titanium dioxide and graphene oxide as hybrid fillers. Journal of Materials Science: Materials in Electronics, 2017, 28, 559-575.	1.1	60
82	Fumed SiO <sub>2</sub> 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
83	Dielectric Spectroscopy., 2017,, 237-299.		21
84	White graphene reinforced polypyrrole and poly(vinyl alcohol) blend nanocomposites as chemiresistive sensors for room temperature detection of liquid petroleum gases. Mikrochimica Acta, 2017, 184, 3977-3987.	2.5	55
85	High- quality factor poly (vinylidenefluoride) based novel nanocomposites filled with graphene nanoplatelets and vanadium pentoxide for high-Q capacitor applications. Advanced Materials Letters, 2017, 8, 288-294.	0.3	40
86	Recent advances in electrochemical biosensor and gas sensors based on graphene and carbon nanotubes (CNT) - A reviewÂ. Advanced Materials Letters, 2017, 8, 196-205.	0.3	32
87	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
88	Graphene oxide reinforced polyvinyl alcohol/polyethylene glycol blend composites as high-performance dielectric material. Journal of Polymer Research, 2016, 23, 1.	1.2	101
89	Influence of Cerium Oxide (CeO2) Nanoparticles on the Structural, Morphological, Mechanical and Dielectric Properties of PVA/PPy Blend Nanocomposites. Materials Today: Proceedings, 2016, 3, 1864-1873.	0.9	61
90	Synergistic effect of vanadium pentoxide and graphene oxide in polyvinyl alcohol for energy storage application. European Polymer Journal, 2016, 76, 14-27.	2.6	91

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91	Study of conjugated polymer/graphene oxide nanocomposites as flexible dielectric medium. Journal of Materials Science: Materials in Electronics, 2016, 27, 3397-3409.	1.1	18
92	Eco-Friendly Synthesis of Graphene Oxide Reinforced Hydroxypropyl Methylcellulose/Polyvinyl Alcohol Blend Nanocomposites Filled with Zinc Oxide Nanoparticles for High-k Capacitor Applications. Polymer-Plastics Technology and Engineering, 2016, 55, 1240-1253.	1.9	72
93	Influence of nickel on the structural, optical and magnetic properties of PbS thin films synthesized by successive ionic layer adsorption and reaction (SILAR) method. Materials Letters, 2016, 164, 108-110.	1.3	11
94	Influence of K <sub>2</sub> CrO <sub>4</sub> Doping on the Structural, Optical and Dielectric Properties of Polyvinyl Alcohol/K <sub>2</sub> CrO <sub>4</sub> Composite Films. Polymer-Plastics Technology and Engineering, 2016, 55, 231-241.	1.9	73
95	Fabrication and Excellent Dielectric Performance of Exfoliated Graphite Sheets. Journal of Nano- and Electronic Physics, 2016, 8, 01022-1-01022-3.	0.2	1
96	Zeolite 4A Filled Poly (3, 4-ethylenedioxythiophene): (polystyrenesulfonate) (PEDOT: PSS) And Polyvinyl Alcohol (PVA) Blend Nanocomposites As High-k Dielectric Materials For Embedded Capacitor Applications. Advanced Materials Letters, 2016, 7, 996-1002.	0.3	50
97	Conjugated polymer/graphene oxide nanocomposite as thermistor. AIP Conference Proceedings, 2015, ,	0.3	2
98	Electrical conductivity, optical properties and mechanical stability of 3, 4, 9, 10-perylenetetracarboxylic dianhidride based organic semiconductor. Journal of Physics and Chemistry of Solids, 2015, 80, 52-61.	1.9	29
99	Embedded capacitor applications of graphene oxide reinforced poly(3,4-ethylenedioxythiophene)-tetramethacrylate (PEDOT-TMA) composites. Journal of Materials Science: Materials in Electronics, 2015, 26, 5896-5909.	1.1	13
100	Morphology, Ionic Conductivity, and Impedance Spectroscopy Studies of Graphene Oxide-Filled Polyvinylchloride Nanocomposites. Polymer-Plastics Technology and Engineering, 2015, 54, 1743-1752.	1.9	17
101	Highly dispersible graphene oxide reinforced polypyrrole/polyvinyl alcohol blend nanocomposites with high dielectric constant and low dielectric loss. RSC Advances, 2015, 5, 61933-61945.	1.7	93
102	Preparation of modified polymer blend and electrical performance. Composite Interfaces, 2015, 22, 167-178.	1.3	22
103	Optimization of Dielectric Constant of Polycarbonate/Polystyrene Modified Blend by Ceramic Metal Oxide. Polymer-Plastics Technology and Engineering, 2015, 54, 383-389.	1.9	21
104	Impedance Spectroscopy And Conductivity Studies Of CdCl2 Doped Polymer Electrolyte. Advanced Materials Letters, 2015, 6, 165-171.	0.3	39
105	Fabrication and characterization of polymer blends consisting of cationic polyallylamine and anionic polyvinyl alcohol. Ionics, 2014, 20, 957-967.	1.2	57
106	Thermo-mechanical properties of poly (vinyl chloride)/graphene oxide as high performance nanocomposites. Polymer Testing, 2014, 34, 211-219.	2.3	75
107	Optimized Quality Factor of Graphene Oxide-Reinforced PVC Nanocomposite. Journal of Electronic Materials, 2014, 43, 1161-1165.	1.0	29
108	Novel nanocomposites of graphene oxide reinforced poly (3,4-ethylenedioxythiophene)-block-poly (ethylene glycol) and polyvinylidene fluoride for embedded capacitor applications. RSC Advances, 2014, 4, 37954-37963.	1.7	29

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109	Preparation and Performance Characterization of Soft Polymer Composites as a Function of Single and Mixed Nano Entities. Polymer-Plastics Technology and Engineering, 2014, 53, 588-595.	1.9	9
110	Stability and electrokinetic properties of aqueous TiO2 nanoparticles dispersion in polyallylamine and polyvinyl alcohol blend systems. Journal of Polymer Research, 2014, 21, 1.	1.2	9
111	Electrical characterization of polymer composite gel under biasing as polar medium. Ionics, 2014, 20, 529-534.	1.2	16
112	Optimized AC conductivity correlated to structure, morphology and thermal properties of PVDF/PVA/Nafion composites. Ionics, 2014, 20, 1427-1433.	1.2	29
113	Influence of TiO2 Nanoparticles on the Morphological, Thermal and Solution Properties of PVA/TiO2 Nanocomposite Membranes. Arabian Journal for Science and Engineering, 2014, 39, 6805-6814.	1.1	79
114	Influence of TiO <sub>2</sub> on the Chemical, Mechanical, and Gas Separation Properties of Polyvinyl Alcohol-Titanium Dioxide (PVA-TiO <sub>2</sub> ) Nanocomposite Membranes. International Journal of Polymer Analysis and Characterization, 2013, 18, 287-296.	0.9	129
115	Surface properties of graphene oxide reinforced polyvinyl chloride nanocomposites. Journal of Polymer Research, 2013, 20, 1.	1.2	89
116	Investigation of the structural, thermal, mechanical, and optical properties of poly(methyl) Tj ETQq0 0 0 rgBT /Ove 2169-2179.	erlock 10 1 1.3	Tf 50 467 Td 73
117	Surface characterization of air plasma treated poly vinylidene fluoride and poly methyl methacrylate films. Polymer Engineering and Science, 2009, 49, 808-818.	1.5	47
118	Preparation and characterization of poly(vinyl alcohol) and gelatin blend films. Journal of Applied Polymer Science, 2008, 109, 1328-1337.	1.3	103
119	Characterization of polyvinyl alcohol/gelatin blend hydrogel films for biomedical applications. Journal of Applied Polymer Science, 2008, 109, 3431-3437.	1.3	152
120	Influence of $\hat{l}^3$ irradiation on the properties of polyacrylonitrile films. Journal of Applied Polymer Science, 2008, 110, 2569-2578.	1.3	25
121	Photosensitivity and Photocatalytic Activity of ZnO Thin Films Annealed in Different Environmental Conditions. Journal of Electronic Materials, 0, , 1.	1.0	0