# Dipak Rana

#### List of Publications by Citations

Source: https://exaly.com/author-pdf/1858247/dipak-rana-publications-by-citations.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

163 papers

5,717 citations

44 h-index

64 g-index

168 ext. papers

6,911 ext. citations

6.5 avg, IF

6.35 L-index

#	Paper	IF	Citations
163	Insight Studies on Metal-Organic Framework Nanofibrous Membrane Adsorption and Activation for Heavy Metal Ions Removal from Aqueous Solution. <i>ACS Applied Materials &amp; Discrete Amp; Interfaces</i> , <b>2018</b> , 10, 18619-18629	9.5	193
162	Metal®rganic frameworks supported on nanofibers to remove heavy metals. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 4550-4555	13	183
161	Strategies for effective oral insulin delivery with modified chitosan nanoparticles: A review. <i>Progress in Polymer Science</i> , <b>2012</b> , 37, 1457-1475	29.6	153
160	Influence of electrospun fiber size on the separation efficiency of thin film nanofiltration composite membrane. <i>Journal of Membrane Science</i> , <b>2012</b> , 392-393, 101-111	9.6	134
159	Effects of superhydrophobic SiO2 nanoparticles on the performance of PVDF flat sheet membranes for vacuum membrane distillation. <i>Desalination</i> , <b>2015</b> , 373, 47-57	10.3	123
158	Effects of operating parameters and coexisting ions on the efficiency of heavy metal ions removal by nano-fibrous metal-organic framework membrane filtration process. <i>Science of the Total Environment</i> , <b>2019</b> , 674, 355-362	10.2	109
157	Development of antifouling thin-film-composite membranes for seawater desalination. <i>Journal of Membrane Science</i> , <b>2011</b> , 367, 110-118	9.6	107
156	Experiment and modeling for flux and permeate concentration of heavy metal ion in adsorptive membrane filtration using a metal-organic framework incorporated nanofibrous membrane. <i>Chemical Engineering Journal</i> , <b>2018</b> , 352, 737-744	14.7	97
155	Effect of poly(vinyl pyrrolidone) on the morphology and physical properties of poly(vinyl alcohol)/sodium montmorillonite nanocomposite films. <i>Progress in Natural Science: Materials International</i> , <b>2013</b> , 23, 579-587	3.6	95
154	Layered double hydroxides as effective carrier for anticancer drugs and tailoring of release rate through interlayer anions. <i>Journal of Controlled Release</i> , <b>2016</b> , 224, 186-198	11.7	90
153	Anticancer (in vitro) and antimicrobial effect of gold nanoparticles synthesized using Abelmoschus esculentus (L.) pulp extract via a green route. <i>RSC Advances</i> , <b>2014</b> , 4, 37838	3.7	88
152	Towards antibiofouling ultrafiltration membranes by blending silver containing surface modifying macromolecules. <i>Chemical Communications</i> , <b>2012</b> , 48, 693-5	5.8	82
151	Tailored polymer nanocomposite membranes based on carbon, metal oxide and silicon nanomaterials: a review. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 8723-8745	13	79
150	Enhanced performance of PVDF nanocomposite membrane by nanofiber coating: A membrane for sustainable desalination through MD. <i>Water Research</i> , <b>2016</b> , 89, 39-49	12.5	75
149	Comparison of cellulose acetate (CA) membrane and novel CA membranes containing surface modifying macromolecules to remove pharmaceutical and personal care product micropollutants from drinking water. <i>Journal of Membrane Science</i> , <b>2012</b> , 409-410, 346-354	9.6	74
148	Prediction of emissions and performance of a diesel engine fueled with n-octanol/diesel blends using response surface methodology. <i>Journal of Cleaner Production</i> , <b>2018</b> , 184, 423-439	10.3	73
147	Review: the characterization of electrospun nanofibrous liquid filtration membranes. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 6143-6159	4.3	73

## (2015-2013)

146	Effect of xanthan gum and guar gum on in situ gelling ophthalmic drug delivery system based on poloxamer-407. <i>International Journal of Biological Macromolecules</i> , <b>2013</b> , 62, 117-23	7.9	72
145	Studies on synthesis of reduced graphene oxide (RGO) via green route and its electrical property.  Materials Research Bulletin, <b>2016</b> , 79, 41-51	5.1	69
144	Development of novel charged surface modifying macromolecule blended PES membranes to remove EDCs and PPCPs from drinking water sources. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 10059-7	10072	69
143	Studies on methylcellulose/pectin/montmorillonite nanocomposite films and their application possibilities. <i>Carbohydrate Polymers</i> , <b>2016</b> , 136, 1218-27	10.3	68
142	Preparation and characterization of surface modified electrospun membranes for higher filtration flux. <i>Journal of Membrane Science</i> , <b>2012</b> , 390-391, 235-242	9.6	67
141	Effects of hydrophilic CuO nanoparticles on properties and performance of PVDF VMD membranes. <i>Desalination</i> , <b>2015</b> , 369, 75-84	10.3	66
140	Enhancements of Catalyst Distribution and Functioning Upon Utilization of Conducting Polymers as Supporting Matrices in DMFCs: A Review. <i>Polymer Reviews</i> , <b>2015</b> , 55, 1-56	14	66
139	Effects of Inorganic Nano-Additives on Properties and Performance of Polymeric Membranes in Water Treatment. <i>Separation and Purification Reviews</i> , <b>2016</b> , 45, 141-167	7.3	65
138	Metal-Organic Frameworks Supported on Nanofiber for Desalination by Direct Contact Membrane Distillation. <i>ACS Applied Materials &amp; Distillation</i> , 10, 11251-11260	9.5	64
137	Nano CuO/g-CN sheets-based ultrafiltration membrane with enhanced interfacial affinity, antifouling and protein separation performances for water treatment application. <i>Journal of Environmental Sciences</i> , <b>2019</b> , 82, 57-69	6.4	62
136	Removal of disinfection byproducts from water by carbonized electrospun nanofibrous membranes. <i>Separation and Purification Technology</i> , <b>2010</b> , 74, 202-212	8.3	60
135	Jute cellulose nano-fibrils/hydroxypropylmethylcellulose nanocomposite: A novel material with potential for application in packaging and transdermal drug delivery system. <i>Industrial Crops and Products</i> , <b>2018</b> , 112, 633-643	5.9	58
134	Studies on green synthesized silver nanoparticles using Abelmoschus esculentus (L.) pulp extract having anticancer (in vitro) and antimicrobial applications. <i>Arabian Journal of Chemistry</i> , <b>2019</b> , 12, 2572-	2584	58
133	Biodegradable toughened nanohybrid shape memory polymer for smart biomedical applications. <i>Nanoscale</i> , <b>2018</b> , 10, 9917-9934	7.7	57
132	Reversible Bidirectional Shape Memory Effect in Polyurethanes through Molecular Flipping. <i>Macromolecules</i> , <b>2016</b> , 49, 4889-4897	5.5	57
131	Preparation of ZnIn2S4/K2La2Ti3O10 composites and their photocatalytic H2 evolution from aqueous Na2S/Na2SO3 under visible light irradiation. <i>Catalysis Communications</i> , <b>2014</b> , 48, 55-59	3.2	54
130	In situ synthesis of a reduced graphene oxide/cuprous oxide nanocomposite: a reusable catalyst. <i>RSC Advances</i> , <b>2014</b> , 4, 52044-52052	3.7	49
129	Study on structure and vacuum membrane distillation performance of PVDF membranes: II. Influence of molecular weight. <i>Chemical Engineering Journal</i> , <b>2015</b> , 276, 174-184	14.7	48

128	Enhanced visible-light-responsive photocatalytic property of PbS-sensitized K4Nb6O17 nanocomposite photocatalysts. <i>Applied Surface Science</i> , <b>2013</b> , 276, 823-831	6.7	48
127	Study on the structure and vacuum membrane distillation performance of PVDF composite membranes: I. Influence of blending. <i>Separation and Purification Technology</i> , <b>2014</b> , 133, 303-312	8.3	47
126	Physical and electrochemical characterization of reduced graphene oxide/silver nanocomposites synthesized by adopting a green approach. <i>RSC Advances</i> , <b>2015</b> , 5, 25357-25364	3.7	46
125	Influence of surface modifying macromolecules on the surface properties of poly(ether sulfone) ultra-filtration membranes. <i>Journal of Membrane Science</i> , <b>2009</b> , 338, 84-91	9.6	46
124	Antibacterial activity of Ag-Au alloy NPs and chemical sensor property of Au NPs synthesized by dextran. <i>Carbohydrate Polymers</i> , <b>2014</b> , 107, 151-7	10.3	45
123	Taro corms mucilage/HPMC based transdermal patch: an efficient device for delivery of diltiazem hydrochloride. <i>International Journal of Biological Macromolecules</i> , <b>2014</b> , 66, 158-65	7.9	45
122	Tailored SPVdF-co-HFP/SGO nanocomposite proton exchange membranes for direct methanol fuel cells. <i>Polymer</i> , <b>2018</b> , 140, 22-32	3.9	44
121	Synthesis and characterization of graphene from waste dry cell battery for electronic applications. <i>RSC Advances</i> , <b>2016</b> , 6, 10557-10564	3.7	44
120	Antimicrobial activity and biodegradation behavior of poly(butylene adipate-co-terephthalate)/clay nanocomposites. <i>Journal of Applied Polymer Science</i> , <b>2014</b> , 131, n/a-n/a	2.9	44
119	Using renewable n-octanol in a non-road diesel engine with some modifications. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects,</i> <b>2019</b> , 41, 1194-1208	1.6	44
118	Effects of hydrophilic silica nanoparticles and backing material in improving the structure and performance of VMD PVDF membranes. <i>Separation and Purification Technology</i> , <b>2016</b> , 157, 60-71	8.3	43
117	Cellulose nanofibrils/chitosan based transdermal drug delivery vehicle for controlled release of ketorolac tromethamine. <i>New Journal of Chemistry</i> , <b>2017</b> , 41, 15312-15319	3.6	43
116	Effect of gellan gum on the thermogelation property and drug release profile of Poloxamer 407 based ophthalmic formulation. <i>International Journal of Biological Macromolecules</i> , <b>2017</b> , 102, 258-265	7.9	42
115	Synergistic effect of salt mixture on the gelation temperature and morphology of methylcellulose hydrogel. <i>International Journal of Biological Macromolecules</i> , <b>2012</b> , 51, 831-6	7.9	41
114	Pharmaceutical and personal care products removal from drinking water by modified cellulose acetate membrane: Field testing. <i>Chemical Engineering Journal</i> , <b>2013</b> , 225, 848-856	14.7	40
113	Synthesis of PbSk2La2Ti3O10 composite and its photocatalytic activity for hydrogen production. <i>Progress in Natural Science: Materials International</i> , <b>2012</b> , 22, 120-125	3.6	39
112	Effect of clay concentration on morphology and properties of hydroxypropylmethylcellulose films. <i>Carbohydrate Polymers</i> , <b>2013</b> , 96, 57-63	10.3	39
111	Studies of the kinetics and mechanism of the removal process of proflavine dye through adsorption by graphene oxide. <i>Journal of Molecular Liquids</i> , <b>2017</b> , 230, 696-704	6	37

## (2016-2019)

110	on PVDF polymeric membranes for vacuum membrane distillation. <i>Separation and Purification Technology</i> , <b>2019</b> , 217, 154-163	8.3	37
109	Polydopamine layered poly (ether imide) ultrafiltration membranes tailored with silver nanoparticles designed for better permeability, selectivity and antifouling. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2019</b> , 76, 141-149	6.3	36
108	Functionalized poly(vinylidene fluoride) nanohybrid for superior fuel cell membrane. <i>Journal of Membrane Science</i> , <b>2015</b> , 481, 124-136	9.6	36
107	Engineered Cellular Uptake and Controlled Drug Delivery Using Two Dimensional Nanoparticle and Polymer for Cancer Treatment. <i>Molecular Pharmaceutics</i> , <b>2018</b> , 15, 679-694	5.6	36
106	Tailored PVDF nanocomposite membranes using exfoliated MoS2 nanosheets for improved permeation and antifouling performance. <i>New Journal of Chemistry</i> , <b>2017</b> , 41, 14315-14324	3.6	35
105	Graphene Oxide Nanocomposite Incorporated Poly(ether imide) Mixed Matrix Membranes for in Vitro Evaluation of Its Efficacy in Blood Purification Applications. <i>Industrial &amp; Discrete Matrix</i> (1997) <i>Industrial &amp; Discrete Matrix</i> (1997) <i>Chemistry Research</i> , <b>2015</b> , 54, 7899-7913	3.9	35
104	Green synthesis of cadmium oxide decorated reduced graphene oxide nanocomposites and its electrical and antibacterial properties. <i>Materials Science and Engineering C</i> , <b>2019</b> , 99, 696-709	8.3	34
103	Custom-made sulfonated poly (ether sulfone) nanocomposite proton exchange membranes using exfoliated molybdenum disulfide nanosheets for DMFC applications. <i>Polymer</i> , <b>2018</b> , 147, 48-55	3.9	34
102	Effect of methyl cellulose on gelation behavior and drug release from poloxamer based ophthalmic formulations. <i>International Journal of Biological Macromolecules</i> , <b>2015</b> , 72, 706-10	7.9	33
101	Studies on carboxylated graphene oxide incorporated polyetherimide mixed matrix ultrafiltration membranes. <i>Materials Chemistry and Physics</i> , <b>2017</b> , 186, 146-158	4.4	33
100	Bio-derived cellulose nanofibril reinforced poly(N-isopropylacrylamide)-g-guar gum nanocomposite: An avant-garde biomaterial as a transdermal membrane. <i>Polymer</i> , <b>2018</b> , 135, 85-102	3.9	32
99	Tailoring the Efficacy of Multifunctional Biopolymeric Graphene Oxide Quantum Dot-Based Nanomaterial as Nanocargo in Cancer Therapeutic Application. <i>ACS Biomaterials Science and Engineering</i> , <b>2018</b> , 4, 514-531	5.5	32
98	Influence of graphene on self-assembly of polyurethane and evaluation of its biomedical properties. <i>Polymer</i> , <b>2015</b> , 65, 183-192	3.9	31
97	Effect of PVA on the gel temperature of MC and release kinetics of KT from MC based ophthalmic formulations. <i>International Journal of Biological Macromolecules</i> , <b>2012</b> , 50, 565-72	7.9	31
96	Relationship between surface structure and separation performance of poly(ether sulfone) ultra-filtration membranes blended with surface modifying macromolecules. <i>Separation and Purification Technology</i> , <b>2010</b> , 72, 123-132	8.3	31
95	The heat and mass transfer of vacuum membrane distillation: Effect of active layer morphology with and without support material. <i>Separation and Purification Technology</i> , <b>2016</b> , 164, 56-62	8.3	30
94	Synthesis of methylcellulose/cellulose nano-crystals nanocomposites: Material properties and study of sustained release of ketorolac tromethamine. <i>Carbohydrate Polymers</i> , <b>2018</b> , 188, 168-180	10.3	29
93	Superior biomaterials using diamine modified graphene grafted polyurethane. <i>Polymer</i> , <b>2016</b> , 106, 109-1	131 <b>9</b>	29

92	Separation of oil/water emulsions using nano MgO anchored hybrid ultrafiltration membranes for environmental abatement. <i>Journal of Applied Polymer Science</i> , <b>2016</b> , 133, n/a-n/a	2.9	29
91	Nanocomposite films based on cellulose acetate/polyethylene glycol/modified montmorillonite as nontoxic active packaging material. <i>RSC Advances</i> , <b>2016</b> , 6, 92569-92578	3.7	29
90	Investigation on sodium benzoate release from poly(butylene adipate-co-terephthalate)/organoclay/sodium benzoate based nanocomposite film and their antimicrobial activity. <i>Journal of Food Science</i> , <b>2015</b> , 80, E602-9	3.4	28
89	Polymer Electrolyte Membranes for Microbial Fuel Cells: A Review. <i>Polymer Reviews</i> , <b>2018</b> , 58, 610-629	14	28
88	Green synthesis of silver nanoparticles-based nanofluids and investigation of their antimicrobial activities. <i>Microfluidics and Nanofluidics</i> , <b>2014</b> , 16, 541-551	2.8	28
87	Green Synthesis of Silver Nanoparticles Using Paederia foetida L. Leaf Extract and Assessment of Their Antimicrobial Activities. <i>International Journal of Green Nanotechnology</i> , <b>2012</b> , 4, 230-239		28
86	Zero thermal input membrane distillation, a zero-waste and sustainable solution for freshwater shortage. <i>Applied Energy</i> , <b>2017</b> , 187, 910-928	10.7	27
85	Investigating the usefulness of chitosan based proton exchange membranes tailored with exfoliated molybdenum disulfide nanosheets for clean energy applications. <i>Carbohydrate Polymers</i> , <b>2019</b> , 208, 504-512	10.3	27
84	A poly(vinylidene fluoride-co-hexafluoro propylene) nanohybrid membrane using swift heavy ion irradiation for fuel cell applications. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 10413-10424	13	26
83	Green one step morphosynthesis of silver nanoparticles and their antibacterial and anticancerous activities. <i>New Journal of Chemistry</i> , <b>2016</b> , 40, 2749-2762	3.6	26
82	Criteria for the selection of a support material to fabricate coated membranes for a life support device. <i>RSC Advances</i> , <b>2014</b> , 4, 38711-38717	3.7	26
81	Effect of PEG-salt mixture on the gelation temperature and morphology of MC gel for sustained delivery of drug. <i>Carbohydrate Polymers</i> , <b>2013</b> , 91, 529-36	10.3	26
80	An ex situ approach to fabricating nanosilica reinforced polyacrylamide grafted guar gum nanocomposites as an efficient biomaterial for transdermal drug delivery application. <i>New Journal of Chemistry</i> , <b>2017</b> , 41, 9461-9471	3.6	26
79	A facile comparative approach towards utilization of waste cotton lint for the synthesis of nano-crystalline cellulose crystals along with acid recovery. <i>International Journal of Biological Macromolecules</i> , <b>2018</b> , 109, 1246-1252	7.9	26
78	Development of an auto-phase separable and reusable graphene oxide-potato starch based cross-linked bio-composite adsorbent for removal of methylene blue dye. <i>International Journal of Biological Macromolecules</i> , <b>2018</b> , 116, 1037-1048	7.9	26
77	Graphene as a chain extender of polyurethanes for biomedical applications. <i>RSC Advances</i> , <b>2016</b> , 6, 586	2 <i>§</i> 586	<b>40</b> 5
76	Assessment of morphology and property of graphene oxide-hydroxypropylmethylcellulose nanocomposite films. <i>International Journal of Biological Macromolecules</i> , <b>2014</b> , 66, 338-45	7.9	25
75	Dielectric relaxation in polyvinyl alcoholpolypyrrolemultiwall carbon nanotube composites below room temperature. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , <b>2013</b> , 4, 025005	1.6	25

#### (2018-2018)

74	Custom-made PEI/exfoliated-MoS nanocomposite ultrafiltration membranes for separation of bovine serum albumin and humic acid. <i>Materials Science and Engineering C</i> , <b>2018</b> , 83, 108-114	8.3	25
73	Sulfonated poly (ether sulfone)/poly (vinyl alcohol) blend membranes customized with tungsten disulfide nanosheets for DMFC applications. <i>Polymer</i> , <b>2018</b> , 155, 42-49	3.9	25
72	Dextrin-mediated synthesis of Ag NPs for colorimetric assays of Cu(2+) ion and Au NPs for catalytic activity. <i>International Journal of Biological Macromolecules</i> , <b>2015</b> , 80, 309-16	7.9	24
71	Fabrication of anti-fouling PVDF nanocomposite membranes using manganese dioxide nanospheres with tailored morphology, hydrophilicity and permeation. <i>New Journal of Chemistry</i> , <b>2018</b> , 42, 15803-15810	3.6	24
70	Development of solid super desiccants based on a polymeric superabsorbent hydrogel composite. <i>RSC Advances</i> , <b>2015</b> , 5, 59583-59590	3.7	24
69	Modeling of pore wetting in vacuum membrane distillation. <i>Journal of Membrane Science</i> , <b>2019</b> , 572, 332-342	9.6	23
68	Novel shape memory behaviour in IPDI based polyurethanes: Influence of nanoparticle. <i>Polymer</i> , <b>2017</b> , 110, 95-104	3.9	22
67	Synergic effects of hydrophilic and hydrophobic nanoparticles on performance of nanocomposite distillation membranes: An experimental and numerical study. <i>Separation and Purification Technology</i> , <b>2018</b> , 202, 45-58	8.3	22
66	Microstructure of polyacrylonitrile-based activated carbon fibers prepared from solvent-free coagulation process. <i>Journal of Applied Research and Technology</i> , <b>2016</b> , 14, 54-61	1.7	22
65	Development of plasma and/or chemically induced graft co-polymerized electrospun poly(vinylidene fluoride) membranes for solute separation. <i>Separation and Purification Technology</i> , <b>2013</b> , 108, 196-204	8.3	22
64	Synthesis of RGO/NiO nanocomposites adopting a green approach and its photocatalytic and antibacterial properties. <i>Materials Chemistry and Physics</i> , <b>2020</b> , 247, 122906	4.4	21
63	Nanoclay and swift heavy ions induced piezoelectric and conducting nanochannel based polymeric membrane for fuel cell. <i>Journal of Power Sources</i> , <b>2016</b> , 301, 338-347	8.9	20
62	Effect of nanoparticle on the mechanical and gas barrier properties of thermoplastic polyurethane. <i>Applied Clay Science</i> , <b>2017</b> , 146, 468-474	5.2	20
61	Triple-Layered Nanofibrous Metal@rganic Framework-Based Membranes for Desalination by Direct Contact Membrane Distillation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 6601-6610	8.3	20
60	Cellulose acetate ultrafiltration membranes customized with bio-inspired polydopamine coating and in situ immobilization of silver nanoparticles. <i>New Journal of Chemistry</i> , <b>2019</b> , 43, 4216-4225	3.6	19
59	Cross-linked methyl cellulose/graphene oxide rate controlling membranes for in vitro and ex vivo permeation studies of diltiazem hydrochloride. <i>RSC Advances</i> , <b>2016</b> , 6, 36136-36145	3.7	19
58	Customized antifouling polyacrylonitrile ultrafiltration membranes for effective removal of organic contaminants from aqueous stream. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2019</b> , 94, 859-86	5 <del>8</del> .5	19
57	Fabrication of novel aromatic amine functionalized nanofiltration (NF) membranes and testing its dye removal and desalting ability. <i>Polymer Testing</i> , <b>2018</b> , 72, 1-10	4.5	19

56	The performance of polyvinylidene fluoride - polytetrafluoroethylene nanocomposite distillation membranes: An experimental and numerical study. <i>Separation and Purification Technology</i> , <b>2019</b> , 226, 192-208	8.3	18
55	Mechanical and wear behaviour of poly(vinylidene fluoride)/clay nanocomposite. <i>Journal of Materials Research and Technology</i> , <b>2019</b> , 8, 5874-5881	5.5	18
54	Highly permeable, antifouling and antibacterial poly(ether imide) membranes tailored with poly(hexamethylenebiguanide) coated copper oxide nanoparticles. <i>Materials Chemistry and Physics</i> , <b>2020</b> , 240, 122224	4.4	18
53	Polythiophenes: An emerging class of promising water purifying materials. <i>European Polymer Journal</i> , <b>2019</b> , 116, 370-385	5.2	17
52	Effect of carrageenan and potassium chloride on an in situ gelling ophthalmic drug delivery system based on methylcellulose. <i>RSC Advances</i> , <b>2015</b> , 5, 60386-60391	3.7	17
51	Development of active packaging material based on cellulose acetate butyrate/polyethylene glycol/aryl ammonium cation modified clay. <i>Carbohydrate Polymers</i> , <b>2018</b> , 187, 8-18	10.3	17
50	Versatility of hydrophilic and antifouling PVDF ultrafiltration membranes tailored with polyhexanide coated copper oxide nanoparticles. <i>Polymer Testing</i> , <b>2020</b> , 84, 106367	4.5	17
49	The rubberfiller interaction and reinforcement in styrene butadiene rubber/devulcanize natural rubber composites with silicagraphene oxide. <i>Polymer Composites</i> , <b>2019</b> , 40, E1559-E1572	3	17
48	Optimization of nanocomposite membrane for vacuum membrane distillation (VMD) using static and continuous flow cells: Effect of nanoparticles and film thickness. <i>Separation and Purification Technology</i> , <b>2020</b> , 241, 116685	8.3	16
47	Novel surface modifying macromolecules (SMMs) blended polysulfone gas separation membranes by phase inversion technique. <i>Journal of Applied Polymer Science</i> , <b>2012</b> , 124, 2287-2299	2.9	16
46	Electrical transport properties of the composite of multiwall carbon nanotubepolypyrrolepolyvinyl alcohol below room temperature. <i>Polymer Composites</i> , <b>2012</b> , 33, 343-35	52 <sup>3</sup>	16
45	In situ fabrication of polyaniline-silver nanocomposites using soft template of sodium alginate. <i>Journal of Applied Polymer Science</i> , <b>2013</b> , 129, 3551-3557	2.9	16
44	Cellulose acetate nanocomposite ultrafiltration membranes tailored with hydrous manganese dioxide nanoparticles for water treatment applications. <i>Polymers for Advanced Technologies</i> , <b>2019</b> , 30, 1943-1950	3.2	15
43	In situ fluorescence of lac dye stabilized gold nanoparticles; DNA binding assay and toxicity study. <i>New Journal of Chemistry</i> , <b>2016</b> , 40, 7121-7131	3.6	15
42	Selective sensing of dopamine by sodium cholate tailored polypyrrole-silver nanocomposite. <i>Synthetic Metals</i> , <b>2020</b> , 260, 116296	3.6	15
41	Biosurfactant tailored synthesis of porous polypyrrole nanostructures: A facile approach towards CO2 adsorption and dopamine sensing. <i>Synthetic Metals</i> , <b>2018</b> , 245, 209-222	3.6	15
40	Functionalized MWCNTs in improving the performance and biocompatibility of potential hemodialysis membranes. <i>RSC Advances</i> , <b>2016</b> , 6, 63156-63170	3.7	14
39	Physical and electrical characterization of reduced graphene oxide synthesized adopting green route. <i>Bulletin of Materials Science</i> , <b>2016</b> , 39, 543-550	1.7	14

# (2020-2021)

38	Chemical precipitation enabled UF and MF filtration for lead removal. <i>Journal of Water Process Engineering</i> , <b>2021</b> , 41, 101987	6.7	13	
37	Pore wetting in membrane distillation: A comprehensive review. <i>Progress in Materials Science</i> , <b>2021</b> , 122, 100843	42.2	13	
36	Green approaches to synthesize reduced graphene oxide and assessment of its electrical properties. <i>Nano Structures Nano Objects</i> , <b>2019</b> , 19, 100362	5.6	12	
35	Performances of poly(vinylidene fluoride-co-hexafluoropropylene) ultrafiltration membranes modified with poly(vinyl pyrrolidone). <i>Polymer Engineering and Science</i> , <b>2015</b> , 55, 2482-2492	2.3	12	
34	CFD-based genetic programming model for liquid entry pressure estimation of hydrophobic membranes. <i>Desalination</i> , <b>2020</b> , 476, 114231	10.3	12	
33	Carbon Nanomaterials in Renewable Energy Production and Storage Applications. <i>Environmental Chemistry for A Sustainable World</i> , <b>2019</b> , 51-104	0.8	11	
32	Poloxamer and gelatin gel guided polyaniline nanofibers: synthesis and characterization. <i>Polymer International</i> , <b>2014</b> , 63, 1505-1512	3.3	11	
31	Synthesis of sodium cholate mediated rod-like polypyrrole-silver nanocomposite for selective sensing of acetone vapor. <i>Nano Structures Nano Objects</i> , <b>2020</b> , 21, 100419	5.6	10	
30	Structural, mechanical, and gas barrier properties of poly(ethylene terephthalate) nanohybrid using nanotalc. <i>Journal of Applied Polymer Science</i> , <b>2020</b> , 137, 48607	2.9	10	
29	Sulfonated poly(phenylene ether ether sulfone) membrane tailored with layer-by-layer self-assembly of poly(diallyldimethylammonium chloride) and phosphotungstic acid for DMFC applications. <i>Journal of Applied Polymer Science</i> , <b>2019</b> , 136, 47344	2.9	10	
28	Sulfonated poly (ether sulfone) composite membranes customized with polydopamine coated molybdenum disulfide nanosheets for renewable energy devices. <i>Polymer</i> , <b>2019</b> , 175, 255-264	3.9	9	
27	Potency of nanolay on structural, mechanical and gas barrier properties of poly(ethylene terephthalate) Nanohybrid. <i>Journal of Polymer Research</i> , <b>2020</b> , 27, 1	2.7	9	
26	The gamut of perspectives, challenges, and recent trends for in situ hydrogels: a smart ophthalmic drug delivery vehicle. <i>Biomaterials Science</i> , <b>2020</b> , 8, 4665-4691	7.4	9	
25	Cellulose acetate ultrafiltration membranes customized with copper oxide nanoparticles for efficient separation with antifouling behavior. <i>Journal of Applied Polymer Science</i> , <b>2021</b> , 138, 49867	2.9	9	
24	Design of an efficient and selective adsorbent of cationic dye through activated carbon - graphene oxide nanocomposite: Study on mechanism and synergy. <i>Materials Chemistry and Physics</i> , <b>2021</b> , 260, 12	4 <del>0</del> 90	9	
23	Na-cholate micelle mediated synthesis of polypyrrole nanoribbons for ethanol sensing. <i>Journal of Environmental Chemical Engineering</i> , <b>2020</b> , 8, 104249	6.8	7	
22	Improvement in mechanical and structural properties of poly(ethylene terephthalate) nanohybrid. <i>SN Applied Sciences</i> , <b>2019</b> , 1, 1	1.8	7	
21	Investigating the efficacy of PVDF membranes customized with sulfonated graphene oxide nanosheets for enhanced permeability and antifouling. <i>Journal of Environmental Chemical Engineering</i> , <b>2020</b> , 8, 104426	6.8	7	

20	Development of Membrane-Based Desiccant Fiber for Vacuum Desiccant Cooling. <i>ACS Applied Materials &amp; Acs Applied &amp; Acs Applied</i>	9.5	6
19	Influence of novel surface modifying macromolecules and coagulation media on the gas permeation properties of different polymeric gas separation membranes. <i>Journal of Applied Polymer Science</i> , <b>2012</b> , 124, 2300-2310	2.9	6
18	Investigation of the versatility of SPES membranes customized with sulfonated molybdenum disulfide nanosheets for DMFC applications. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 15507-7	15320	5
17	Custom-made sulfonated poly (vinylidene fluoride-co-hexafluoropropylene) nanocomposite membranes for vanadium redox flow battery applications. <i>Polymer Testing</i> , <b>2020</b> , 90, 106685	4.5	5
16	Effects of Polymer Ratio and Film-Penetration Time on the Properties and Performance of Nanocomposite PVDF Membranes in Membrane Distillation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 9971-9982	3.9	5
15	Nonlinear Viscoelasticity of One Dimensional Filler Reinforced Elastomer Composites. <i>Advances in Polymer Science</i> , <b>2014</b> , 15-41	1.3	5
14	Membrane Distillation <b>2016</b> , 419-455		5
13	PFOM fillers embedded PVDF/cellulose dual-layered membranes with hydrophobic-hydrophilic channels for desalination direct contact membrane distillation process <i>RSC Advances</i> , <b>2019</b> , 9, 41462-4	1474	5
12	Transport characteristics of liquid-gas interface in a capillary membrane pore. <i>Journal of Membrane Science</i> , <b>2020</b> , 611, 118387	9.6	4
11	Membrane Transport Models <b>2010</b> , 1041-1047		4
10	Membrane Transport Models <b>2010</b> , 1041-1047  Chemically reduced graphene oxide (CRGO) from waste batteries and morphological assessment of CRGO/methyl cellulose transdermal film. <i>Nano Structures Nano Objects</i> , <b>2020</b> , 22, 100454	5.6	4
	Chemically reduced graphene oxide (CRGO) from waste batteries and morphological assessment of	5.6 3.2	4 4 3
10	Chemically reduced graphene oxide (CRGO) from waste batteries and morphological assessment of CRGO/methyl cellulose transdermal film. <i>Nano Structures Nano Objects</i> , <b>2020</b> , 22, 100454  Sulfonated poly (vinylidene fluoride-co-hexafluoropropylene) nanocomposite membranes with high selectivity, stability, and vanadium-ion barrier for vanadium redox flow batteries. <i>Polymers for</i>		
10	Chemically reduced graphene oxide (CRGO) from waste batteries and morphological assessment of CRGO/methyl cellulose transdermal film. <i>Nano Structures Nano Objects</i> , <b>2020</b> , 22, 100454  Sulfonated poly (vinylidene fluoride-co-hexafluoropropylene) nanocomposite membranes with high selectivity, stability, and vanadium-ion barrier for vanadium redox flow batteries. <i>Polymers for Advanced Technologies</i> , <b>2020</b> , 31, 3341-3350  Highly selective custom-made chitosan based membranes with reduced fuel permeability for direct	3.2	3
10 9 8	Chemically reduced graphene oxide (CRGO) from waste batteries and morphological assessment of CRGO/methyl cellulose transdermal film. <i>Nano Structures Nano Objects</i> , <b>2020</b> , 22, 100454  Sulfonated poly (vinylidene fluoride-co-hexafluoropropylene) nanocomposite membranes with high selectivity, stability, and vanadium-ion barrier for vanadium redox flow batteries. <i>Polymers for Advanced Technologies</i> , <b>2020</b> , 31, 3341-3350  Highly selective custom-made chitosan based membranes with reduced fuel permeability for direct methanol fuel cells. <i>Journal of Applied Polymer Science</i> , <b>2021</b> , 138, 51366  Performance of a newly developed hydrophilic additive blended with different ultrafiltration base	3.2	3
10 9 8	Chemically reduced graphene oxide (CRGO) from waste batteries and morphological assessment of CRGO/methyl cellulose transdermal film. <i>Nano Structures Nano Objects</i> , <b>2020</b> , 22, 100454  Sulfonated poly (vinylidene fluoride-co-hexafluoropropylene) nanocomposite membranes with high selectivity, stability, and vanadium-ion barrier for vanadium redox flow batteries. <i>Polymers for Advanced Technologies</i> , <b>2020</b> , 31, 3341-3350  Highly selective custom-made chitosan based membranes with reduced fuel permeability for direct methanol fuel cells. <i>Journal of Applied Polymer Science</i> , <b>2021</b> , 138, 51366  Performance of a newly developed hydrophilic additive blended with different ultrafiltration base polymers. <i>Journal of Applied Polymer Science</i> , <b>2010</b> , 116, NA-NA	3.2 2.9 2.9 3.6	3 2
10 9 8 7 6	Chemically reduced graphene oxide (CRGO) from waste batteries and morphological assessment of CRGO/methyl cellulose transdermal film. <i>Nano Structures Nano Objects</i> , <b>2020</b> , 22, 100454  Sulfonated poly (vinylidene fluoride-co-hexafluoropropylene) nanocomposite membranes with high selectivity, stability, and vanadium-ion barrier for vanadium redox flow batteries. <i>Polymers for Advanced Technologies</i> , <b>2020</b> , 31, 3341-3350  Highly selective custom-made chitosan based membranes with reduced fuel permeability for direct methanol fuel cells. <i>Journal of Applied Polymer Science</i> , <b>2021</b> , 138, 51366  Performance of a newly developed hydrophilic additive blended with different ultrafiltration base polymers. <i>Journal of Applied Polymer Science</i> , <b>2010</b> , 116, NA-NA  Effect of tamarind seed polysaccharide on thermogelation property and drug release profile of poloxamer 407-based ophthalmic formulation. <i>New Journal of Chemistry</i> , <b>2020</b> , 44, 15708-15715  A reverse approach to evaluate membrane pore size distribution by the bubble gas transport	3.2 2.9 2.9	3 2 2

#### LIST OF PUBLICATIONS

- 2 Crystal-Melt Phase Change of Food and Biopolymers **2017**, 119-139
- Thermal Properties of Food and Biopolymer Using Relaxation Techniques **2017**, 141-157