

Sirshendu De

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3380697/publications.pdf>

Version: 2024-02-01

107
papers

2,768
citations

159573

30
h-index

214788

47
g-index

107
all docs

107
docs citations

107
times ranked

2824
citing authors

#	ARTICLE	IF	CITATIONS
1	Aluminium fumarate metal-organic framework: A super adsorbent for fluoride from water. <i>Journal of Hazardous Materials</i> , 2016, 303, 10-20.	12.4	184
2	Optimizing pectinase usage in pretreatment of mosambi juice for clarification by response surface methodology. <i>Journal of Food Engineering</i> , 2004, 64, 397-403.	5.2	121
3	Lipase applications in oil hydrolysis with a case study on castor oil: a review. <i>Critical Reviews in Biotechnology</i> , 2013, 33, 81-96.	9.0	99
4	Smart responsive materials for water purification: an overview. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22095-22112.	10.3	98
5	Adsorptive removal of nitrate from aqueous solution by polyacrylonitrile-alumina nanoparticle mixed matrix hollow-fiber membrane. <i>Journal of Membrane Science</i> , 2014, 466, 281-292.	8.2	95
6	Effect of various pretreatment methods on permeate flux and quality during ultrafiltration of mosambi juice. <i>Journal of Food Engineering</i> , 2007, 78, 561-568.	5.2	89
7	Adsorptive removal of phenolic compounds using cellulose acetate phthalate-alumina nanoparticle mixed matrix membrane. <i>Journal of Hazardous Materials</i> , 2014, 265, 8-19.	12.4	89
8	Resistance in series model for ultrafiltration of mosambi (<i>Citrus sinensis</i> (L.) Osbeck) juice in a stirred continuous mode. <i>Journal of Membrane Science</i> , 2006, 283, 116-122.	8.2	81
9	Adsorptive removal of heavy metals from battery industry effluent using MOF incorporated polymeric beads: A combined experimental and modeling approach. <i>Journal of Hazardous Materials</i> , 2021, 403, 123624.	12.4	66
10	Prediction of the viscosity of clarified fruit juice using artificial neural network: a combined effect of concentration and temperature. <i>Journal of Food Engineering</i> , 2005, 68, 527-533.	5.2	65
11	Separation of aromatic alcohols using micellar-enhanced ultrafiltration and recovery of surfactant. <i>Journal of Membrane Science</i> , 2005, 250, 47-59.	8.2	65
12	Membrane filtration of leather plant effluent: Flux decline mechanism. <i>Journal of Membrane Science</i> , 2005, 258, 85-96.	8.2	61
13	Optimisation of low temperature extraction of banana juice using commercial pectinase. <i>Food Chemistry</i> , 2014, 151, 182-190.	8.2	58
14	Synthesis of NiAl- layered double hydroxide with nitrate intercalation: Application in cyanide removal from steel industry effluent. <i>Journal of Hazardous Materials</i> , 2019, 373, 791-800.	12.4	58
15	Antibacterial polymeric membranes: a short review. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 1078-1104.	2.4	56
16	Mechanism of Permeate Flux Decline during Microfiltration of Watermelon (<i>Citrullus lanatus</i>) Juice. <i>Food and Bioprocess Technology</i> , 2010, 3, 545-553.	4.7	52
17	Modeling the performance of batch ultrafiltration of synthetic fruit juice and mosambi juice using artificial neural network. <i>Journal of Food Engineering</i> , 2005, 71, 273-281.	5.2	43
18	Aromatic conjugated polymers for removal of heavy metal ions from wastewater: a short review. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 793-805.	2.4	43

#	ARTICLE	IF	CITATIONS
19	Electroviscous effects in purely pressure driven flow and stationary plane analysis in electroosmotic flow of power-law fluids in a slit microchannel. <i>International Journal of Engineering Science</i> , 2010, 48, 1641-1658.	5.0	42
20	Comparison of treated laterite as arsenic adsorbent from different locations and performance of best filter under field conditions. <i>Journal of Hazardous Materials</i> , 2013, 262, 1176-1186.	12.4	42
21	Preparation, characterization and humic acid removal capacity of chitosan coated iron-oxide-polyacrylonitrile mixed matrix membrane. <i>Journal of Water Process Engineering</i> , 2015, 6, 93-104.	5.6	40
22	Clarification of Stevia extract by ultrafiltration: Selection criteria of the membrane and effects of operating conditions. <i>Food and Bioproducts Processing</i> , 2012, 90, 525-532.	3.6	38
23	Application of nanofiltration membrane for treatment of chloride rich steel plant effluent. <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 1-9.	6.7	37
24	Adsorptive removal of potentially toxic metals (cadmium, copper, nickel and zinc) by chemically treated laterite: Single and multicomponent batch and column study. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 3273-3289.	6.7	37
25	Investigation of antifouling and disinfection potential of chitosan coated iron oxide-PAN hollow fiber membrane using Gram-positive and Gram-negative bacteria. <i>Materials Science and Engineering C</i> , 2017, 75, 133-148.	7.3	35
26	Identification of Fouling Mechanism During Ultrafiltration of Stevia Extract. <i>Food and Bioprocess Technology</i> , 2013, 6, 931-940.	4.7	34
27	Sherwood number in flow through parallel porous plates (Microchannel) due to pressure and electroosmotic flow. <i>AIChE Journal</i> , 2012, 58, 1693-1703.	3.6	33
28	Sherwood number in porous microtube due to combined pressure and electroosmotically driven flow. <i>Chemical Engineering Science</i> , 2011, 66, 6515-6524.	3.8	32
29	Defluoridation using novel chemically treated carbonized bone meal: batch and dynamic performance with scale-up studies. <i>Environmental Science and Pollution Research</i> , 2018, 25, 18161-18178.	5.3	32
30	Removal of cyanide from steel plant effluent using coke breeze, a waste product of steel industry. <i>Journal of Water Process Engineering</i> , 2019, 28, 135-143.	5.6	32
31	Polyaniline doped ultrafiltration membranes: Mechanism of membrane formation and pH response characteristics. <i>Polymer</i> , 2018, 153, 201-213.	3.8	31
32	Selective Extraction of (âˆ-)Epigallocatechin Gallate from Green Tea Leaves Using Two-Stage Infusion Coupled with Membrane Separation. <i>Food and Bioprocess Technology</i> , 2012, 5, 2568-2577.	4.7	30
33	Ultrafiltration of Banana (<i>Musa acuminata</i>) Juice Using Hollow Fibers for Enhanced Shelf Life. <i>Food and Bioprocess Technology</i> , 2014, 7, 2711-2722.	4.7	28
34	Ultrafiltration of oily waste water: Contribution of surface roughness in membrane properties and fouling characteristics of polyacrylonitrile membranes. <i>Canadian Journal of Chemical Engineering</i> , 2015, 93, 2031-2042.	1.7	28
35	Optimization of process variables in castor oil hydrolysis by <i>Candida rugosa</i> lipase with buffer as dispersion medium. <i>Biotechnology and Bioprocess Engineering</i> , 2009, 14, 220-224.	2.6	27
36	Clarification and storage study of bottle gourd (<i>Lagenaria siceraria</i>) juice by hollow fiber ultrafiltration. <i>Food and Bioproducts Processing</i> , 2016, 100, 1-15.	3.6	25

#	ARTICLE	IF	CITATIONS
37	Highly efficient reduction of p-Nitrophenol by sodium borohydride over binary ZIF-67/g-C ₃ N ₄ heterojunction catalyst. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106677.	6.7	25
38	ALTERNATIVE PRETREATMENT METHODS TO ENZYMATIC TREATMENT FOR CLARIFICATION OF MOSAMBI JUICE USING ULTRAFILTRATION. <i>Journal of Food Process Engineering</i> , 2006, 29, 202-218.	2.9	24
39	Treatment of fatliquoring effluent from a tannery using membrane separation process: Experimental and modeling. <i>Journal of Hazardous Materials</i> , 2010, 176, 434-443.	12.4	24
40	A socio-economic study along with impact assessment for laterite based technology demonstration for arsenic mitigation. <i>Science of the Total Environment</i> , 2017, 583, 142-152.	8.0	23
41	QUANTIFICATION OF FLUX DECLINE AND DESIGN OF ULTRAFILTRATION SYSTEM FOR CLARIFICATION OF TENDER COCONUT WATER. <i>Journal of Food Process Engineering</i> , 2010, 33, 128-143.	2.9	21
42	Improved antifouling characteristics of acrylonitrile co-polymer membrane by low temperature pulsed ammonia plasma in the treatment of oil-in-water emulsion. <i>Vacuum</i> , 2016, 131, 293-304.	3.5	21
43	Treatment of soaking effluent from a tannery using membrane separation processes. <i>Desalination</i> , 2007, 216, 160-173.	8.2	20
44	UNDERSTANDING ULTRAFILTRATION PERFORMANCE WITH MOSAMBI JUICE IN AN UNSTIRRED BATCH CELL. <i>Journal of Food Process Engineering</i> , 2005, 28, 166-180.	2.9	19
45	Modeling of Sucrose Permeation through a Pectin Gel During Ultrafiltration of Depectinized Mosambi [<i>Citrus sinensis</i> (L.) Osbeck] Juice. <i>Journal of Food Science</i> , 2006, 71, E87.	3.1	19
46	Mass transport in a porous microchannel for non-Newtonian fluid with electrokinetic effects. <i>Electrophoresis</i> , 2013, 34, 668-673.	2.4	19
47	Effects of polymer molecular weight, concentration, and role of polyethylene glycol as additive on polyacrylonitrile homopolymer membranes. <i>Polymer Engineering and Science</i> , 2014, 54, 2375-2391.	3.1	18
48	Stability of Poiseuille flow of a Bingham fluid overlying an anisotropic and inhomogeneous porous layer. <i>Journal of Fluid Mechanics</i> , 2019, 874, 573-605.	3.4	18
49	Flux decline during electric field-assisted cross-flow ultrafiltration of mosambi (<i>Citrus sinensis</i> (L.)) Tj ETQq1 1 0.784314 rgBT/Overlo	8.2	17
50	Comparison between Centrifugation and Microfiltration As Primary Clarification of Bottle Gourd (<i>Lagenaria siceraria</i>) Juice. <i>Journal of Food Processing and Preservation</i> , 2016, 40, 226-238.	2.0	17
51	Modeling of solution thermodynamics: A method for tuning the properties of blend polymeric membranes. <i>Journal of Membrane Science</i> , 2017, 540, 485-495.	8.2	17
52	Role of thermodynamic and kinetic interaction of poly(vinylidene fluoride) with various solvents for tuning phase inversion membranes. <i>Polymer Engineering and Science</i> , 2018, 58, 1062-1073.	3.1	17
53	Prediction of permeate flux during osmotic pressure-controlled electric field-enhanced cross-flow ultrafiltration. <i>Journal of Colloid and Interface Science</i> , 2008, 319, 236-246.	9.4	16
54	Modeling of extraction of dyes and their mixtures from aqueous solution using emulsion liquid membrane. <i>Journal of Membrane Science</i> , 2010, 360, 190-201.	8.2	16

#	ARTICLE	IF	CITATIONS
55	A combined complete pore blocking and cake filtration model for steady-state electric field-assisted ultrafiltration. <i>AIChE Journal</i> , 2012, 58, 1435-1446.	3.6	16
56	Performance evaluation of two stage nanofiltration for treatment of textile effluent containing reactive dyes. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 1678-1690.	6.7	16
57	Mass transfer coefficient with suction for laminar non-Newtonian flow in application to membrane separations. <i>Journal of Food Engineering</i> , 2004, 64, 53-61.	5.2	14
58	CLARIFICATION OF WATERMELON (<i>CITRULLUS LANATUS</i>) JUICE BY MICROFILTRATION. <i>Journal of Food Process Engineering</i> , 2008, 31, 768-782.	2.9	14
59	STORAGE STUDY OF ULTRAFILTERED MOSAMBI (<i>CITRUS SINENSIS</i> (L.) OSBECK) JUICE. <i>Journal of Food Processing and Preservation</i> , 2008, 32, 923-934.	2.0	14
60	Preparation, characterization and application of powdered activated carbon-cellulose acetate phthalate mixed matrix membrane for treatment of steel plant effluent. <i>Polymers for Advanced Technologies</i> , 2016, 27, 444-459.	3.2	14
61	Removal of reactive dyes using a high throughput-hybrid separation process. <i>Desalination and Water Treatment</i> , 2016, 57, 10295-10311.	1.0	14
62	Preparation, characterization, and performance of a novel hollow fiber nanofiltration membrane. <i>Polymers for Advanced Technologies</i> , 2015, 26, 1155-1167.	3.2	13
63	State-of-the-Art Materials and Spinning Technology for Hemodialyzer Membranes. <i>Separation and Purification Reviews</i> , 2017, 46, 216-240.	5.5	13
64	Theoretical investigation of cross flow ultrafiltration by mixed matrix membrane: A case study on fluoride removal. <i>Desalination</i> , 2015, 365, 347-354.	8.2	12
65	Fundamental Understanding of Fouling Mechanisms During Microfiltration of Bitter Gourd (<i>Momordica charantia</i>) Extract and Their Dependence on Operating Conditions. <i>Food and Bioprocess Technology</i> , 2018, 11, 1012-1026.	4.7	12
66	Effect of Couette component on the stability of Poiseuille flow of a Bingham fluid-porous system: Modal and non-modal approaches. <i>Physics of Fluids</i> , 2020, 32, 064103.	4.0	12
67	In situ photodecyanation of steel industry wastewater in a pilot scale. <i>Environmental Science and Pollution Research</i> , 2020, 27, 33226-33233.	5.3	12
68	QUANTIFICATION OF FLUX DECLINE OF DEPECTINIZED MOSAMBI (<i>CITRUS SINENSIS</i> [L.] OSBECK) JUICE USING UNSTIRRED BATCH ULTRAFILTRATION. <i>Journal of Food Process Engineering</i> , 2005, 28, 359-377.	2.9	11
69	Steady state modeling for membrane separation of pretreated liming effluent under cross-flow mode. <i>Journal of Membrane Science</i> , 2009, 338, 175-181.	8.2	11
70	Adsorption-concentration polarization model for ultrafiltration in mixed matrix membrane. <i>AIChE Journal</i> , 2014, 60, 2354-2364.	3.6	10
71	Potential of extraction of Steviol glycosides using cellulose acetate phthalate (CAP) - polyacrylonitrile (PAN) blend hollow fiber membranes. <i>Journal of Food Science and Technology</i> , 2015, 52, 7081-7091.	2.8	10
72	Robust self cleaning polypyrrole-polysulfone blend hollow fiber membrane for biofouling mitigation. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 3185-3198.	3.2	10

#	ARTICLE	IF	CITATIONS
73	Nanofiltration range desalination by high flux graphene oxide impregnated ultrafiltration hollow fiber mixed matrix membrane. <i>Journal of Cleaner Production</i> , 2019, 213, 393-405.	9.3	10
74	Modeling of Gel Layer-Controlled Fruit Juice Microfiltration in a Radial Cross Flow Cell. <i>Food and Bioprocess Technology</i> , 2014, 7, 355-370.	4.7	9
75	Modeling of cross-flow osmotic pressure controlled membrane separation processes under turbulent flow conditions. <i>Journal of Membrane Science</i> , 2002, 201, 203-212.	8.2	8
76	Mass transfer of a neutral solute in porous microchannel under streaming potential. <i>Electrophoresis</i> , 2014, 35, 681-690.	2.4	8
77	Effects of overlapping electric double layer on mass transport of a macro-solute across porous wall of a micro/nanochannel for power law fluid. <i>Electrophoresis</i> , 2017, 38, 1301-1309.	2.4	8
78	Effect of different operating conditions in cloud point assisted extraction of thymol from Ajwain (<i>Trachyspermum Ammi L.</i>) seeds and recovery using solvent. <i>Journal of Food Science and Technology</i> , 2017, 54, 4353-4361.	2.8	8
79	Understanding and tuning of polymer surfaces for dialysis applications. <i>Polymers for Advanced Technologies</i> , 2017, 28, 174-187.	3.2	8
80	Hydrophilic surface modification of polyacrylonitrile based membrane: effect of low temperature radio frequency carbon dioxide plasma. <i>Polymer Bulletin</i> , 2018, 75, 3567-3586.	3.3	8
81	Integral Method of Analysis for Combined Concentration Polarization and Pore Flow Model for Prediction of the Performance of a Nanofiltration Membrane. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 4108-4118.	3.7	8
82	Mass transfer coefficient with suction for turbulent non-Newtonian flow in application to membrane separations. <i>Journal of Food Engineering</i> , 2004, 65, 533-541.	5.2	7
83	Pressure driven transport of neutral macro-solute in microchannel with porous wall at high surface potential. <i>International Journal of Heat and Mass Transfer</i> , 2017, 104, 574-583.	4.8	7
84	Purification of Polyphenols from Green Tea Leaves and Performance Prediction Using the Blend Hollow Fiber Ultrafiltration Membrane. <i>Food and Bioprocess Technology</i> , 2019, 12, 933-953.	4.7	7
85	Erucic acid production using porcine pancreas lipase: Enhancement by mixed surfactants. <i>Biotechnology and Bioprocess Engineering</i> , 2011, 16, 327-336.	2.6	6
86	Quantification of Selective Transport of Fructose and Glucose During Membrane Filtration of Pomegranate Juice. <i>Food and Bioprocess Technology</i> , 2021, 14, 272-286.	4.7	6
87	Effect of mixed solvents on phase inversion of polymeric membranes. <i>Polymer International</i> , 2020, 69, 920-932.	3.1	5
88	Modeling of turbulent cross flow microfiltration of pomegranate juice using hollow fiber membranes. <i>AIChE Journal</i> , 2014, 60, 4279-4291.	3.6	4
89	Treatment of polyacrylonitrile co-polymer membrane by low temperature radio-frequency nitrogen plasma. <i>Polymers for Advanced Technologies</i> , 2018, 29, 775-784.	3.2	4
90	Comparative study of hydrophilic modification of polyacrylonitrile membranes by nitrogen and carbon dioxide RF plasma. <i>Polymer Engineering and Science</i> , 2019, 59, 2148-2158.	3.1	4

#	ARTICLE	IF	CITATIONS
91	Effect of electrolyte nature in mass transport of a neutral solute in a microtube with porous wall. <i>AIChE Journal</i> , 2020, 66, e16765.	3.6	4
92	Solubility parameter estimation and phase inversion modeling of bentonite-embedded polymeric membrane systems. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48450.	2.6	4
93	Long-time instability and transient behavior of pressure-driven flow of a power-law fluid in a plane channel overlying a porous layer. <i>Physics of Fluids</i> , 2021, 33, 054109.	4.0	4
94	Electrohydrodynamic transport of non-symmetric electrolyte through porous wall of a microtube. <i>Electrophoresis</i> , 2019, 40, 720-729.	2.4	3
95	Fast purification of graphene oxide solution by continuous counter current hollow fibre dialysis: A step towards large scale production. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 1596-1604.	1.7	3
96	Mass transport in electrokinetic microflows with the wall reaction affecting the hydrodynamics. <i>Theoretical and Computational Fluid Dynamics</i> , 2021, 35, 39-60.	2.2	3
97	Multicomponent transport model-based scaling up of long-term fixed bed adsorption of reactive dyes from textile effluent using aminated PAN beads. <i>Environmental Science and Pollution Research</i> , 2021, 28, 43483-43506.	5.3	3
98	Effect of the transition layer on the stability of a fluid-porous configuration: Impact on power-law rheology. <i>Physical Review Fluids</i> , 2021, 6, .	2.5	3
99	Modelling of cross-flow microfiltration of dye-loaded activated carbon in a ceramic tubular membrane module. <i>Canadian Journal of Chemical Engineering</i> , 2015, 93, 2005-2014.	1.7	2
100	Effect of process parameters on aqueous extraction of thymol and other phytonutrients from herbal seed Ajwain (<i>Trachyspermum ammi</i> L.). <i>Journal of Applied Research on Medicinal and Aromatic Plants</i> , 2018, 11, 27-36.	1.5	2
101	Permeate flux hysteresis with transmembrane pressure in the gel controlling membrane filtration. <i>Journal of Food Engineering</i> , 2020, 264, 109689.	5.2	2
102	Mass transfer of a neutral solute in polyelectrolyte grafted soft nanochannel with porous wall. <i>Electrophoresis</i> , 2020, 41, 578-587.	2.4	2
103	PERFORMANCE PREDICTION OF MEMBRANE MODULES INCORPORATING THE EFFECTS OF SUCTION IN THE MASS TRANSFER COEFFICIENT UNDER LAMINAR AND TURBULENT FLOW CONDITIONS FOR NON-NEWTONIAN FLUIDS. <i>Journal of Food Process Engineering</i> , 2009, 32, 752-774.	2.9	1
104	Effects of finite ion size on transport of neutral solute across porous wall of a nanotube. <i>Theoretical and Computational Fluid Dynamics</i> , 2020, 34, 659-677.	2.2	1
105	Discretization and Encapsulation of Palladium inside the Cavity of Crown Ether within the Interlayer of Layered Double Hydroxide for Enhanced Activity: A Case Study with Hydrogenation Reaction. <i>Advanced Materials Interfaces</i> , 0, , 2101712.	3.7	1
106	Criteria for a unique steady state for enzymatic depectinization of bael (<i>Aegle marmelos</i>) juice in a continuous stirred tank reactor. <i>Reaction Chemistry and Engineering</i> , 2018, 3, 333-343.	3.7	0
107	Effects of operating conditions during hollow fiber ultrafiltration of bitter melon (<i>Mormordica charantia</i>). <i>Process Engineering</i> , 2019, 42, e13118.	2.9	0