

# Amrita Agarwal

## List of Publications by Year in descending order

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75  
papers

2,515  
citations

201385

27  
h-index

205818

48  
g-index

75  
all docs

75  
docs citations

75  
times ranked

2075  
citing authors

#	ARTICLE	IF	CITATIONS
1	Preparation and characterization of low cost ceramic membranes for micro-filtration applications. Applied Clay Science, 2008, 42, 102-110.	2.6	234
2	Fabrication and properties of low cost ceramic microfiltration membranes for separation of oil and bacteria from its solution. Journal of Membrane Science, 2011, 379, 154-163.	4.1	178
3	Treatment of oily wastewater using low cost ceramic membrane: Comparative assessment of pore blocking and artificial neural network models. Chemical Engineering Research and Design, 2010, 88, 881-892.	2.7	140
4	Pd(II) adsorption characteristics of glutaraldehyde cross-linked chitosan copolymer resin. International Journal of Biological Macromolecules, 2017, 94, 72-84.	3.6	112
5	Cross-flow microfiltration of oil-in-water emulsions using low cost ceramic membranes. Desalination, 2013, 320, 86-95.	4.0	108
6	Preparation and characterization of low cost ceramic membranes for mosambi juice clarification. Desalination, 2013, 317, 32-40.	4.0	97
7	Cross flow microfiltration of oil-water emulsions using kaolin based low cost ceramic membranes. Desalination, 2014, 341, 61-71.	4.0	85
8	Microfiltration of mosambi juice using low cost ceramic membrane. Journal of Food Engineering, 2009, 95, 597-605.	2.7	79
9	Fly ash based ceramic microfiltration membranes for oil-water emulsion treatment: Parametric optimization using response surface methodology. Journal of Water Process Engineering, 2016, 13, 27-43.	2.6	73
10	Treatment of Oily Waste Water Using Low-Cost Ceramic Membrane: Flux Decline Mechanism and Economic Feasibility. Separation Science and Technology, 2009, 44, 2840-2869.	1.3	72
11	Effect of process parameters on electroless plating and nickel-ceramic composite membrane characteristics. Desalination, 2011, 268, 195-203.	4.0	71
12	Influence of emulsification, interfacial tension, wettability alteration and saponification on residual oil recovery by alkali flooding. Journal of Industrial and Engineering Chemistry, 2018, 59, 286-296.	2.9	66
13	Effects of dip coating parameters on the morphology and transport properties of cellulose acetate-ceramic composite membranes. Journal of Membrane Science, 2009, 330, 246-258.	4.1	65
14	An Inverse Analysis for Parameter Estimation Applied to a Non-Fourier Conduction-Radiation Problem. Heat Transfer Engineering, 2011, 32, 455-466.	1.2	63
15	Feasibility of poly-vinyl alcohol/starch/glycerol/citric acid composite films for wound dressing applications. International Journal of Biological Macromolecules, 2019, 131, 998-1007.	3.6	62
16	Effect of mineralogy on the adsorption characteristics of surfactant-Reservoir rock system. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 531, 121-132.	2.3	60
17	Optimization of crude distillation system using aspen plus: Effect of binary feed selection on grass-root design. Chemical Engineering Research and Design, 2010, 88, 121-134.	2.7	54
18	Multiparameter Estimation in a Transient Conduction-Radiation Problem Using the Lattice Boltzmann Method and the Finite-Volume Method Coupled with the Genetic Algorithms. Numerical Heat Transfer; Part A: Applications, 2008, 53, 1321-1338.	1.2	52

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19	Influence of Sintering Temperature on the Properties of Porous Ceramic Support Prepared by Uniaxial Dry Compaction Method Using Low-Cost Raw Materials for Membrane Applications. Separation Science and Technology, 2011, 46, 1241-1249.	1.3	51
20	Global optimization of MSF seawater desalination processes. Desalination, 2016, 394, 30-43.	4.0	42
21	Effects of interfacial tension, oil layer break time, emulsification and wettability alteration on oil recovery for carbonate reservoirs. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 559, 92-103.	2.3	40
22	Influence of varying fiber lengths on mechanical, thermal, and morphological properties of MAEPP compatibilized and chemically modified short pineapple leaf fiber reinforced polypropylene composites. Journal of Applied Polymer Science, 2009, 113, 3750-3756.	1.3	38
23	Lattice Boltzmann Method Applied to the Analysis of Transient Conduction-Radiation Problems in a Cylindrical Medium. Numerical Heat Transfer; Part A: Applications, 2009, 56, 42-59.	1.2	35
24	Application of a Particle Swarm Algorithm for Parameter Retrieval in a Transient Conduction-Radiation Problem. Numerical Heat Transfer; Part A: Applications, 2011, 59, 672-692.	1.2	32
25	Identification of optimal membrane morphological parameters during microfiltration of mosambi juice using low cost ceramic membranes. LWT - Food Science and Technology, 2011, 44, 214-223.	2.5	31
26	Microfiltration of oil-water emulsions using low cost ceramic membranes prepared with the uniaxial dry compaction method. Ceramics International, 2014, 40, 1155-1164.	2.3	31
27	Manufacture of Nickel-Ceramic Composite Membranes in Agitated Electroless Plating Baths. Materials and Manufacturing Processes, 2011, 26, 862-867.	2.7	30
28	Equilibrium and Kinetic Studies of Ni (II) Adsorption using Pineapple and Bamboo Stem Based Adsorbents. Separation Science and Technology, 2014, 49, 533-544.	1.3	29
29	Economic feasibility of silica and palladium composite membranes for industrial dehydrogenation reactions. Chemical Engineering Research and Design, 2010, 88, 1088-1101.	2.7	26
30	Optimality of poly-vinyl alcohol/starch/glycerol/citric acid in wound dressing applicable composite films. International Journal of Biological Macromolecules, 2020, 155, 260-272.	3.6	25
31	Performance of Low Cost Ceramic Microfiltration Membranes for the Treatment of Oil-in-water Emulsions. Separation Science and Technology, 2013, 48, 849-858.	1.3	23
32	Combinatorial performance characteristics of agitated nickel hypophosphite electroless plating baths. Journal of Materials Processing Technology, 2011, 211, 1488-1499.	3.1	22
33	On the simultaneous optimization of pressure and layout for gas permeation membrane systems. Journal of Membrane Science, 2006, 280, 832-848.	4.1	21
34	Revamp study of crude distillation unit heat exchanger network: Energy integration potential of delayed coking unit free hot streams. Applied Thermal Engineering, 2009, 29, 2271-2279.	3.0	19
35	Optimization of Heat Fluxes on the Heater and the Design Surfaces of a Radiating-Conducting Medium. Numerical Heat Transfer; Part A: Applications, 2009, 56, 846-860.	1.2	18
36	CLARIFICATION OF ORANGE JUICE USING CERAMIC MEMBRANE AND EVALUATION OF FOULING MECHANISM. Journal of Food Process Engineering, 2012, 35, 403-423.	1.5	18

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37	Role of protonation and functional groups in Pd(II) recovery and reuse characteristics of commercial anion exchange resin-synthetic electroless plating solution systems. <i>Journal of Water Process Engineering</i> , 2018, 22, 227-238.	2.6	18
38	Effect of surface roughness and mass transfer enhancement on the performance characteristics of nickel-hypophosphite electroless plating baths for metal-ceramic composite membrane fabrication. <i>Chemical Engineering Research and Design</i> , 2011, 89, 2485-2494.	2.7	17
39	Effect of surfactants on performance of electroless plating baths for nickel-ceramic composite membrane fabrication. <i>Surface Engineering</i> , 2012, 28, 44-48.	1.1	17
40	Effect of Ultrasound on the Performance of Nickel Hydrazine Electroless Plating Baths. <i>Materials and Manufacturing Processes</i> , 2012, 27, 201-206.	2.7	16
41	Microfiltration of Synthetic Bacteria Solution Using Low Cost Ceramic Membranes. <i>Separation Science and Technology</i> , 2015, 50, 121-135.	1.3	15
42	Efficacy of reducing agent and surfactant contacting pattern on the performance characteristics of nickel electroless plating baths coupled with and without ultrasound. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1382-1391.	3.8	14
43	Optimal fabrication of carbonate free kaolin based low cost ceramic membranes using mixture model response surface methodology. <i>Applied Clay Science</i> , 2018, 162, 101-112.	2.6	14
44	Investigation on Pd (II) removal and recovery characteristics of chitosan from electroless plating solutions. <i>Journal of Water Process Engineering</i> , 2017, 19, 8-17.	2.6	13
45	Role of EDTA on the Pd(II) adsorption characteristics of chitosan cross-linked 3-amino-1,2,4-triazole-5-thiol derivative from synthetic electroless plating solutions. <i>International Journal of Biological Macromolecules</i> , 2019, 127, 320-329.	3.6	13
46	Simultaneous Reconstruction of Thermal Field and Retrieval of Parameters in a Cylindrical Enclosure. <i>Numerical Heat Transfer; Part A: Applications</i> , 2008, 54, 983-998.	1.2	12
47	Performance characteristics of hydrothermal and sonication assisted electroless plating baths for nickel-ceramic composite membrane fabrication. <i>Desalination</i> , 2012, 284, 77-85.	4.0	12
48	Preparation, optimization and characterization of low cost ceramics for the fabrication of dense nickel composite membranes. <i>Ceramics International</i> , 2013, 39, 7709-7716.	2.3	11
49	Efficacy of Novel Electroless Plating Process for Dense Pd/Cr <sub>2</sub> O <sub>3</sub> /PSS Membrane Fabrication. <i>Materials and Manufacturing Processes</i> , 2016, 31, 1-5.	2.7	11
50	Preparation and characterization of hydrothermally engineered TiO <sub>2</sub> -fly ash composite membrane. <i>Frontiers of Chemical Science and Engineering</i> , 2017, 11, 266-279.	2.3	11
51	Compositional synergy of poly-vinyl alcohol, starch, glycerol and citric acid concentrations during wound dressing films fabrication. <i>International Journal of Biological Macromolecules</i> , 2020, 146, 70-79.	3.6	10
52	Feasibility of Low-Cost Kaolin-Based Ceramic Membranes for Organic <i>Lagerania siceraria</i> Juice Production. <i>Food and Bioprocess Technology</i> , 2020, 13, 1009-1023.	2.6	10
53	Nickel-ceramic composite membranes: Optimization of hydrazine based electroless plating process parameters. <i>Desalination</i> , 2011, 275, 243-251.	4.0	9
54	Global optimality of hybrid MSF-RO seawater desalination processes. <i>Desalination</i> , 2016, 400, 47-59.	4.0	9

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55	Combinatorial Electroless Plating Characteristics for Dense Pd-PSS Composite Membrane Fabrication. <i>Materials and Manufacturing Processes</i> , 2016, 31, 6-11.	2.7	9
56	Surface engineering characteristics of ultrasound assisted hypophosphite electroless plating baths. <i>Surface Engineering</i> , 2013, 29, 489-494.	1.1	8
57	Preparation, characterization, and performance evaluation of LTA zeolite-ceramic composite membrane by separation of BSA from aqueous solution. <i>Separation Science and Technology</i> , 2017, 52, 767-777.	1.3	8
58	Microfiltration of stable oil-in-water emulsions using kaolinbased ceramic membrane and evaluation of fouling mechanism. <i>Desalination and Water Treatment</i> , 2010, 22, 133-145.	1.0	7
59	Effect of pore former (saw dust) characteristics on the properties of sub-micron range low-cost ceramic membranes. <i>International Journal of Ceramic Engineering &amp; Science</i> , 2020, 2, 243-253.	0.5	7
60	Preparation and characterization of inexpensive submicron range inorganic microfiltration membranes. <i>Membrane Water Treatment</i> , 2010, 1, 121-137.	0.5	6
61	Efficacy of Palladium Solution Concentration on Electroless Fabrication of Dense Metal Ceramic Composite Membranes Coupled with Surfactant and Sonication. <i>Materials and Manufacturing Processes</i> , 2016, 31, 18-23.	2.7	5
62	Combinatorial optimality of functional groups, process parameters, and Pd(II) adsorption-desorption characteristics for commercial anion exchange resins-synthetic electroless plating systems. <i>Environmental Science and Pollution Research</i> , 2020, 27, 24614-24626.	2.7	5
63	Process and product characteristics of refractance window dried <i>Curcuma longa</i> . <i>Journal of Food Science</i> , 2021, 86, 443-453.	1.5	5
64	LabVIEW based e-learning portal for virtual mass transfer operations laboratory. <i>CSI Transactions on ICT</i> , 2013, 1, 75-90.	0.7	3
65	Rate enhanced electroless fabrication of nickel ceramic composite membranes. <i>Surface Engineering</i> , 2015, 31, 221-225.	1.1	3
66	Effect of Pd concentration on electroless dense Pd-PSS membrane fabrication. <i>Surface Engineering</i> , 2015, 31, 209-213.	1.1	3
67	Combinatorial optimality of membrane morphology and feedstock during microfiltration of bottle gourd juice. <i>Innovative Food Science and Emerging Technologies</i> , 2020, 63, 102382.	2.7	3
68	A novel method of reducing agent contacting pattern for metal ceramic composite membrane fabrication. <i>Applied Surface Science</i> , 2014, 320, 52-59.	3.1	2
69	Role of surfactant-induced chromia barriers on performance characteristics of Pd composite membranes. <i>Chemical Engineering Communications</i> , 2020, 207, 253-262.	1.5	2
70	Uses of Ceramic Membrane-Based Technology for the Clarification of Mosambi, Pineapple and Orange Juice. <i>Materials Horizons</i> , 2019, , 459-483.	0.3	2
71	Identification of optimal rate-enhanced silver ELP processes for silver-ceramic composite membrane fabrication. <i>Materials and Manufacturing Processes</i> , 2017, 32, 450-457.	2.7	1
72	Efficacy of reducing agent contacting pattern in Ag-SOEP electroless plating baths. <i>Surface Engineering</i> , 2017, 33, 383-388.	1.1	1

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73	An Innovative System Architecture for Real-Time Monitoring and Alarming for Cutting Transport in Oil Well Drilling. , 2019, , .		1
74	Global optimality of RO seawater desalination networks with permeate reprocessing and recycle. Separation Science and Technology, 2017, 52, 1225-1239.	1.3	0
75	Efficacy of sonicationâ€microfiltration hybrid process for the production of clarified bitter melon extracts. Journal of Food Process Engineering, 2021, 44, e13854.	1.5	0