Bishnupada Mandal

List of Publications by Year
in descending order

96	3,522	126708	155451
papers	citations	33 h-index	55 g-index

98	98	98	3086
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthesis of highly fluorescent, amine-functionalized carbon dots from biotin-modified chitosan and silk-fibroin blend for target-specific delivery of antitumor agents. Carbohydrate Polymers, 2022, 277, 118862.	5.1	22
2	Advancements in visible light responsive MOF composites for photocatalytic decontamination of textile wastewater: A review. Chemosphere, 2022, 295, 133835.	4.2	47
3	Engineering of graphene quantum dots by varying the properties of graphene oxide for fluorescence detection of picric acid. Chemosphere, 2022, 300, 134432.	4.2	20
4	Elucidating the important thermo physical characterization properties of amine activated hybrid novel solvents for designing post-combustion CO2 capture unit. Journal of Molecular Liquids, 2022, 355, 118919.	2.3	5
5	Introduction to carbon capture. , 2022, , 1-31.		0
6	Hierarchical graphite oxide decorated UiO-66 for ultrahigh adsorption of dye with synergistic effect of ultrasonication: Experimental and density functional theory study. Separation and Purification Technology, 2022, 294, 121217.	3.9	17
7	Measurement and Correlations of Physicochemical Properties of the Novel Solvent Tris(2-aminoethyl) amine and Its Blend with N-Methyldiethanolamine and 2-Amino 2-Methyl-1-Propanol. Journal of Chemical & Engineering Data, 2022, 67, 2067-2076.	1.0	2
8	Enrichment in CO₂ Absorption by 2-Methyl Piperazine-Activated Tertiary Amines, Physical Solvents, and Ionic Liquid Systems. ACS Omega, 2022, 7, 23611-23623.	1.6	4
9	Fabrication, characterization and optimization of industrial alpha alumina powders based ceramic membrane supports and its applicative potential for CO2/N2 separation. Journal of CO2 Utilization, 2022, 63, 102121.	3.3	1
10	Fundamental understanding on the preparation conditions of high-performance polyimide-based hollow fiber membranes for organic solvent nanofiltration (OSN). Separation and Purification Technology, 2021, 254, 117600.	3.9	18
11	Synthesis of functionalized silk-coated chitosan-gold nanoparticles and microparticles for target-directed delivery of antitumor agents. Carbohydrate Polymers, 2021, 258, 117659.	5.1	26
12	Stimulation of CO2 solubility in reversible ionic liquids activated by novel 1-(2-aminoethyl piperazine) and bis (3-aminopropyl) amine. Separation and Purification Technology, 2021, 262, 118260.	3.9	10
13	Physicochemical and thermodynamic properties of aqueous blends of 3-aminopropyl triethoxysilane and amines at 298.15â€“333.15â€¯K. Journal of Molecular Liquids, 2021, 332, 115440.	2.3	4
14	Engineering of Interfacial Energy Bands for Synthesis of Photoluminescent 0D/2D Coupled MOF Heterostructure with Enhanced Selectivity toward the Proton-Exchange Membrane. ACS Applied Materials & Interfaces, 2021, 13, 29619-29630.	4.0	12
15	Enhanced <scp>CO₂</scp> separation performance of mixed matrix membrane by incorporating amineâ€functionalized silica filler. Journal of Applied Polymer Science, 2021, 138, 51438.	1.3	5
16	Ultrasound assisted extraction of gallic acid from Ficus auriculata leaves using green solvent. Food and Bioproducts Processing, 2021, 128, 1-11.	1.8	33
17	Cover Image, Volume 138, Issue 47. Journal of Applied Polymer Science, 2021, 138, 51659.	1.3	0
18	A review on chitosan-based membranes for sustainable CO2 separation applications: Mechanism, issues, and the way forward. Carbohydrate Polymers, 2021, 267, 118178.	5.1	16

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19	L-tyrosine grafted palladium graphite oxide and sulfonated poly(ether ether ketone) based novel composite membrane for direct methanol fuel cell. Chemical Engineering Journal, 2021, 423, 130235.	6.6	24
20	Equilibrium CO2 solubility of novel tris(2-aminoethyl) amine as a promoter to N-methyldiethanolamine and 2-amino-2-methyl-1-propanol. Separation and Purification Technology, 2021, 279, 119705.	3.9	9
21	Highâ€speed CO₂ transport channel containing carboxymethyl chitosan/hydrotalcite membrane for CO₂ separation. Journal of Applied Polymer Science, 2020, 137, 48715.	1.3	13
22	Engineering of structural and surface functional characteristics of graphite oxide nanosheets by controlling oxidation temperature. Applied Surface Science, 2020, 504, 144444.	3.1	20
23	Fabrication and Performance Evaluation of Industrial Alumina Based Graded Ceramic Substrate for CO₂ Selective Amino Silicate Membrane. ACS Applied Materials & Interfaces, 2020, 12, 40269-40284.	4.0	11
24	Measurements and modeling of vapor liquid equilibrium of CO2 in amine activated imidazolium ionic liquid solvents. Fluid Phase Equilibria, 2020, 521, 112643.	1.4	15
25	Elucidating the performance of (N-(3-aminopropyl)-1, 3-propanediamine) activated (1-) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 Fuel, 2020, 277, 118209.	3.4	13
26	Amine-functionalized ZIF-8 nanoparticles as interlayer for the improvement of the separation performance of organic solvent nanofiltration (OSN) membrane. Journal of Membrane Science, 2020, 614, 118433.	4.1	43
27	Environmentâ€friendly synthesis of sustainable chitosanâ€based nonisocyanate polyurethane: A biobased polymeric film. Journal of Applied Polymer Science, 2020, 137, 49050.	1.3	21
28	Analysis of equilibrium CO 2 solubility in aqueous APDA and its potential blends with AMP / MDEA for postcombustion CO 2 capture. International Journal of Energy Research, 2020, 44, 12395-12415.	2.2	12
29	Sustainable Routes for Synthesis of Poly(Îµ-Caprolactone): Prospects in Chemical Industries. Materials Horizons, 2020, , 21-33.	0.3	4
30	Thermally stable and moisture responsive carboxymethyl chitosan/dendrimer/hydrotalcite membrane for CO2 separation. Journal of Membrane Science, 2020, 608, 118214.	4.1	27
31	Carboxymethyl chitosan/carbon nanotubes mixed matrix membranes for CO2 separation. Reactive and Functional Polymers, 2019, 143, 104331.	2.0	47
32	pH Responsive Carboxymethyl Chitosan/Poly(amidoamine) Molecular Gate Membrane for CO₂/N₂ Separation. ACS Applied Materials & Interfaces, 2019, 11, 42616-42628.	4.0	27
33	Thermally induced characterization and modeling of physicochemical, acoustic, rheological, and thermodynamic properties of novel blends of (HEF + AEP) and (HEF + AMP) for CO2/H2S absorption. Environmental Science and Pollution Research, 2019, 26, 32209-32223.	2.7	6
34	Investigation on the inclusion of 1-(2-aminoethyl) piperazine as a promoter on the equilibrium CO2 solubility of aqueous 2-amino-2-methyl-1-propanol. Journal of Molecular Liquids, 2019, 289, 111036.	2.3	22
35	Enhanced CO2 separation membrane prepared from waste by-product of silk fibroin. Journal of Membrane Science, 2019, 587, 117170.	4.1	18
36	Synthesis and characterization of water-soluble chitosan membrane blended with a mobile carrier for CO2 separation. Separation and Purification Technology, 2019, 222, 177-187.	3.9	31

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37	Graphene oxide (GO)-interlayered thin-film nanocomposite (TFN) membranes with high solvent resistance for organic solvent nanofiltration (OSN). Journal of Materials Chemistry A, 2019, 7, 13315-13330.	5.2	86
38	Fluorine incorporation for enhancing solvent resistance of organic solvent nanofiltration membrane. Chemical Engineering Journal, 2019, 369, 498-510.	6.6	44
39	Synthesis, characterization and CO2 separation performance of novel PVA/PG/ZIF-8 mixed matrix membrane. Journal of Membrane Science, 2019, 572, 198-209.	4.1	61
40	Graphene Quantum Dots-Doped Thin Film Nanocomposite Polyimide Membranes with Enhanced Solvent Resistance for Solvent-Resistant Nanofiltration. ACS Applied Materials & Interfaces, 2019, 11, 6527-6540.	4.0	99
41	Development of a photoresponsive chitosan conjugated prodrug nano-carrier for controlled delivery of antitumor drug 5-fluorouracil. International Journal of Biological Macromolecules, 2019, 121, 1070-1076.	3.6	37
42	Advances in Bio-based Polymer Membranes for CO2 Separation. Materials Horizons, 2019, , 277-307.	0.3	1
43	Equilibrium CO 2 solubility and thermophysical properties of aqueous blends of 1-(2-aminoethyl) piperazine and N-methyldiethanolamine. Fluid Phase Equilibria, 2018, 463, 91-105.	1.4	27
44	Moisture responsive and CO2 selective biopolymer membrane containing silk fibroin as a green carrier for facilitated transport of CO2. Journal of Membrane Science, 2018, 550, 416-426.	4.1	38
45	Enhanced CO₂ separation performance by PVA/PEG/silica mixed matrix membrane. Journal of Applied Polymer Science, 2018, 135, 46481.	1.3	31
46	Graphene-Incorporated Biopolymeric Mixed-Matrix Membrane for Enhanced CO₂ Separation by Regulating the Support Pore Filling. ACS Applied Materials & Interfaces, 2018, 10, 27810-27820.	4.0	36
47	Preparation and characterization of CO2-selective facilitated transport membrane composed of chitosan and poly(allylamine) blend for CO2/N2 separation. Journal of Industrial and Engineering Chemistry, 2018, 66, 419-429.	2.9	35
48	<scp>CO</scp>₂ separation performance by chitosan/tetraethylenepentamine/poly(ether) Tj ETQq0 0 0 rgBT /Overlock 10	1.3	30
49	Experimental and theoretical studies on efficient carbon dioxide capture using novel bis(3-aminopropyl)amine (APA)-activated aqueous 2-amino-2-methyl-1-propanol (AMP) solutions. RSC Advances, 2017, 7, 21518-21530.	1.7	11
50	Absorption of CO 2 into novel aqueous bis(3-aminopropyl)amine and enhancement of CO 2 absorption into its blends with N -methyldiethanolamine. International Journal of Greenhouse Gas Control, 2017, 60, 172-185.	2.3	14
51	Measurement and Correlation of the Physicochemical Properties of Novel Aqueous Bis(3-aminopropyl)amine and Its Blend with N-Methyldiethanolamine for CO2 Capture. Journal of Chemical & Engineering Data, 2016, 61, 2226-2235.	1.0	13
52	Effect of single and blended amine carriers on CO2 separation from CO2/N2 mixtures using crosslinked thin-film poly(vinyl alcohol) composite membrane. International Journal of Greenhouse Gas Control, 2015, 39, 27-38.	2.3	27
53	Synthesis and characterization of ordered mesoporous silica membrane: Role of porous support and gas permeation study. Microporous and Mesoporous Materials, 2015, 210, 10-19.	2.2	16
54	Effects of sintering temperature and initial compaction load on alpha-alumina membrane support quality. Ceramics International, 2014, 40, 11299-11309.	2.3	23

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55	Enzymatic removal of burnt-on protein residues from solid surface: AÂpotential food equipment cleanser. Food Control, 2014, 40, 314-319.	2.8	2
56	CO2 separation using thermally stable crosslinked poly(vinyl alcohol) membrane blended with polyvinylpyrrolidone/polyethyleneimine/tetraethylenepentamine. Journal of Membrane Science, 2014, 460, 126-138.	4.1	67
57	Adsorption Characteristics of Metalâ€“Organic Frameworks Containing Coordinatively Unsaturated Metal Sites: Effect of Metal Cations and Adsorbate Properties. Journal of Physical Chemistry C, 2014, 118, 6847-6855.	1.5	34
58	Adsorption and Separation of Carbon Dioxide Using MIL-53(Al) Metal-Organic Framework. Industrial & Engineering Chemistry Research, 2014, 53, 19747-19753.	1.8	35
59	Novel CO2-Selective Cross-Linked Poly(vinyl alcohol)/Polyvinylpyrrolidone Blend Membrane Containing Amine Carrier for CO2â€“N2 Separation: Synthesis, Characterization, and Gas Permeation Study. Industrial & Engineering Chemistry Research, 2014, 53, 19736-19746.	1.8	23
60	Synthesis and characterization of crosslinked poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (alcohol)/poly(allylamine)/2-amino for CO2/N2 separation. Journal of Membrane Science, 2013, 446, 383-394.	4.1	43
61	Adsorption of CO2, CO, CH4 and N2 on DABCO based metal organic frameworks. Microporous and Mesoporous Materials, 2013, 169, 75-80.	2.2	43
62	Effect of Adsorbent History on Adsorption Characteristics of MIL-53(Al) Metal Organic Framework. Langmuir, 2013, 29, 12162-12167.	1.6	21
63	Measurement and Modeling of Adsorption of Lower Hydrocarbons on Activated Carbon. Journal of Chemical & Engineering Data, 2013, 58, 1606-1612.	1.0	17
64	Adsorption of Lower Alkanes on a Zinc Based Metal Organic Framework. Journal of Chemical & Engineering Data, 2012, 57, 2610-2613.	1.0	10
65	Single, binary and ternary metal adsorption using acidâ€treated Aegle marmelos Correa shell: kinetic, mechanistic and thermodynamic study. Asia-Pacific Journal of Chemical Engineering, 2012, 7, 928-939.	0.8	5
66	Adsorption of CO2, CO, CH4 and N2 on a zinc based metal organic framework. Separation and Purification Technology, 2012, 94, 124-130.	3.9	75
67	Absorption of carbon dioxide into aqueous blends of 2-amino-2-hydroxymethyl-1,3-propanediol and monoethanolamine. Separation and Purification Technology, 2012, 94, 92-96.	3.9	39
68	Adsorption of chromium(VI) and Rhodamine B by surface modified tannery waste: Kinetic, mechanistic and thermodynamic studies. Journal of Hazardous Materials, 2011, 186, 1088-1096.	6.5	152
69	Characterization of a Novel Surfactant and Organic Solvent Stable High-alkaline Protease from New Bacillus pseudofirmus SVB1. Research Journal of Microbiology, 2011, 6, 769-783.	0.2	12
70	Nitration of nitrobenzene at highâ€concentrations of sulfuric acid: Mass transfer and kinetic aspects. AICHE Journal, 2010, 56, 737-748.	1.8	19
71	Medium development for enhanced production of alkaline protease from a newly isolated Bacillus pseudofirmus SVB1. Asia-Pacific Journal of Chemical Engineering, 2010, 5, 925-931.	0.8	6
72	Physicochemical Properties of Aqueous Solutions of 2-(1-Piperazinyl)-ethylamine. Journal of Chemical & Engineering Data, 2010, 55, 1359-1363.	1.0	10

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73	Effect of physical parameters, carbon and nitrogen sources on the production of alkaline protease from a newly isolatedBacillus pseudofirmus SVB1. Annals of Microbiology, 2009, 59, 531-538.	1.1	29
74	Kinetics of absorption of carbon dioxide into aqueous solutions of 2-amino-2-hydroxymethyl-1,3-propanediol. Separation and Purification Technology, 2009, 68, 422-427.	3.9	19
75	Removal of Cr(VI) from aqueous solution using Bael fruit (Aegle marmelos correa) shell as an adsorbent. Journal of Hazardous Materials, 2009, 168, 633-640.	6.5	172
76	Kinetics of absorption of carbon dioxide into aqueous solution of 2-(1-piperazinyl)-ethylamine. Chemical Engineering Science, 2009, 64, 313-321.	1.9	54
77	Kinetics of absorption of carbon dioxide into aqueous blends of 2-(1-piperazinyl)-ethylamine and N-methyldiethanolamine. Chemical Engineering Science, 2009, 64, 1618-1622.	1.9	34
78	Physicochemical Properties of Aqueous Solutions of 2-Amino-2-hydroxymethyl-1,3-propanediol. Journal of Chemical & Engineering Data, 2009, 54, 444-447.	1.0	16
79	Absorption of Carbon Dioxide into Aqueous Solutions of 2-Piperidineethanol: Kinetics Analysis. Industrial & Engineering Chemistry Research, 2009, 48, 1414-1419.	1.8	42
80	Theoretical studies on separation of CO2 by single and blended aqueous alkanolamine solvents in flat sheet membrane contactor (FSMC). Chemical Engineering Journal, 2008, 144, 352-360.	6.6	48
81	Removal of CO2by Single and Blended Aqueous Alkanolamine Solvents in Hollow-Fiber Membrane Contactor:Â Modeling and Simulation. Industrial & Engineering Chemistry Research, 2007, 46, 2576-2588.	1.8	66
82	Developments in Directed Evolution for Improving Enzyme Functions. Applied Biochemistry and Biotechnology, 2007, 143, 212-223.	1.4	85
83	Simultaneous Absorption of CO2and H2S Into Aqueous Blends ofN-Methyldiethanolamine and Diethanolamine. Environmental Science & Technology, 2006, 40, 6076-6084.	4.6	65
84	Density and Viscosity of Aqueous Solutions of (N-Methyldiethanolamine + Piperazine) and (2-Amino-2-methyl-1-propanol + Piperazine) from (288 to 333) K. Journal of Chemical & Engineering Data, 2006, 51, 1808-1810.	1.0	71
85	Density and Viscosity of Aqueous Solutions of (2-Piperidineethanol + Piperazine) from (288 to 333) K and Surface Tension of Aqueous Solutions of (N-Methyldiethanolamine + Piperazine), (2-Amino-2-methyl-1-propanol + Piperazine), and (2-Piperidineethanol + Piperazine) from (293 to 323) K. Journal of Chemical & Engineering Data, 2006, 51, 2242-2245.	1.0	36
86	Density and Viscosity of Aqueous Solutions of 2-Piperidineethanol, (2-Piperidineethanol +) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td Chemical & Engineering Data, 2006, 51, 1406-1410.	1.0	27
87	Absorption of carbon dioxide into aqueous blends of 2-amino-2-methyl-1-propanol and monoethanolamine. Chemical Engineering Science, 2006, 61, 5440-5447.	1.9	157
88	Simultaneous absorption of carbon dioxide and hydrogen sulfide into aqueous blends of 2-amino-2-methyl-1-propanol and diethanolamine. Chemical Engineering Science, 2005, 60, 6438-6451.	1.9	99
89	Physical Solubility and Diffusivity of N2O and CO2into Aqueous Solutions of (2-Amino-2-methyl-1-propanol + Monoethanolamine) and (N-Methyldiethanolamine +) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 97	1.0	83
90	Physical Solubility and Diffusivity of N2O and CO2into Aqueous Solutions of (2-Amino-2-methyl-1-propanol + Diethanolamine) and (N-Methyldiethanolamine + Diethanolamine). Journal of Chemical & Engineering Data, 2004, 49, 264-270.	1.0	53

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91	Absorption of carbon dioxide into aqueous blends of 2-amino-2-methyl-1-propanol and diethanolamine. Chemical Engineering Science, 2003, 58, 4137-4144.	1.9	148
92	Vaporâ˜'Liquid Equilibrium of CO2in Aqueous Solutions of 2-Amino-2-methyl-1-propanolâ€. Journal of Chemical & Engineering Data, 2003, 48, 789-796.	1.0	65
93	Density and Viscosity of Aqueous Solutions of (N-Methyldiethanolamine + Monoethanolamine), (N-Methyldiethanolamine + Diethanolamine), (2-Amino-2-methyl-1-propanol + Monoethanolamine), and (2-Amino-2-methyl-1-propanol + Diethanolamine). Journal of Chemical & Engineering Data, 2003, 48, 703-707.	1.0	127
94	Removal of carbon dioxide by absorption in mixed amines: modelling of absorption in aqueous MDEA/MEA and AMP/MEA solutions. Chemical Engineering Science, 2001, 56, 6217-6224.	1.9	175
95	Modeling and simulation for post-combustion carbon dioxide capture from power plant flue gas with economic analysis. Separation Science and Technology, 0, , 150527095459001.	1.3	3
96	Negatively charged polyamide thin film composite membrane with ultra-smooth selective layer and excellent organic solvent resistance for nanofiltration application. , 0, 157, 18-28.		1