Bin Liu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1931928/publications.pdf

Version: 2024-02-01

53	2,008	218677	243625
papers	citations	26 h-index	44 g-index

54	54	54	1219
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent progress and new developments in post-combustion carbon-capture technology with amine based solvents. International Journal of Greenhouse Gas Control, 2015, 40, 26-54.	4.6	403
2	The genetic algorithm based back propagation neural network for MMP prediction in CO2-EOR process. Fuel, 2014, 126, 202-212.	6.4	196
3	Solubility, absorption heat and mass transfer studies of CO2 absorption into aqueous solution of 1-dimethylamino-2-propanol. Fuel, 2015, 144, 121-129.	6.4	82
4	A comparative kinetics study of CO₂ absorption into aqueous DEEA/MEA and DMEA/MEA blended solutions. AICHE Journal, 2018, 64, 1350-1358.	3.6	72
5	Experimental analyses of mass transfer and heat transfer of post-combustion CO2 absorption using hybrid solvent MEAâ€“MeOH in an absorber. Chemical Engineering Journal, 2015, 260, 11-19.	12.7	69
6	Kinetics of CO₂ absorption into a novel 1â€diethylaminoâ€2â€propanol solvent using stoppedâ€flow technique. AICHE Journal, 2014, 60, 3502-3510.	3.6	64
7	An improved fast screening method for single and blended amine-based solvents for post-combustion CO2 capture. Separation and Purification Technology, 2016, 169, 279-288.	7.9	64
8	13C NMR Spectroscopy of a Novel Amine Species in the DEABâ€“CO2â€“H2O system: VLE Model. Industrial & Engineering Chemistry Research, 2012, 51, 8608-8615.	3.7	63
9	Part 5b: Solvent chemistry: reaction kinetics of CO₂absorption into reactive amine solutions. Carbon Management, 2012, 3, 201-220.	2.4	60
10	Analysis of reaction kinetics of CO2 absorption into a novel reactive 4-diethylamino-2-butanol solvent. Chemical Engineering Science, 2012, 81, 251-259.	3.8	46
11	Analysis of solubility, absorption heat and kinetics of CO2 absorption into 1-(2-hydroxyethyl)pyrrolidine solvent. Chemical Engineering Science, 2017, 162, 120-130.	3.8	40
12	Kinetics and mechanism study of homogeneous reaction of CO2 and blends of diethanolamine and monoethanolamine using the stopped-flow technique. Chemical Engineering Journal, 2017, 316, 592-600.	12.7	40
13	The analysis of solubility, absorption kinetics of CO₂ absorption into aqueous 1â€diethylaminoâ€2â€propanol solution. AICHE Journal, 2017, 63, 2694-2704.	3.6	40
14	Investigation mechanism of DEA as an activator on aqueous MEA solution for postcombustion CO₂ capture. AICHE Journal, 2018, 64, 2515-2525.	3.6	38
15	Kinetics and new BrÃ¸nsted correlations study of CO2 absorption into primary and secondary alkanolamine with and without steric-hindrance. Separation and Purification Technology, 2020, 233, 115998.	7.9	38
16	A new model for correlation and prediction of equilibrium CO₂ solubility in Nâ€methylâ€4â€piperidinol solvent. AICHE Journal, 2017, 63, 3395-3403.	3.6	34
17	Efficient One Pot Capture and Conversion of CO₂ into Quinazoline-2,4(1H,3H)-diones Using Triazolium-Based Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2020, 8, 2910-2918.	6.7	34
18	CO2 absorption kinetics of 4-diethylamine-2-butanol solvent using stopped-flow technique. Separation and Purification Technology, 2014, 136, 81-87.	7.9	32

#	Article	IF	Citations
19	Development of a Promising Biphasic Absorbent for Postcombustion CO₂ Capture: Sulfolane + 2-(Methylamino)ethanol + H₂O. Industrial & Engineering Chemistry Research, 2020, 59, 14496-14506.	3.7	32
20	Mass transfer of CO2 absorption in hybrid MEA-methanol solvents in packed column. Energy Procedia, 2013, 37, 883-889.	1.8	31
21	New Insights and Assessment of Primary Alkanolamine/Sulfolane Biphasic Solutions for Post-combustion CO₂ Capture: Absorption, Desorption, Phase Separation, and Technological Process. Industrial & Engineering Chemistry Research, 2019, 58, 20461-20471.	3.7	30
22	Characterization and Correlations of CO₂ Absorption Performance into Aqueous Amine Blended Solution of Monoethanolamine (MEA) and N,N-Dimethylethanolamine (DMEA) in a Packed Column. Energy & Fuels, 2019, 33, 7614-7625.	5.1	29
23	Experimental studies on mass transfer performance for CO2 absorption into aqueous N,N-dimethylethanolamine (DMEA) based solutions in a PTFE hollow fiber membrane contactor. International Journal of Greenhouse Gas Control, 2019, 82, 210-217.	4.6	29
24	Mass transfer performance for CO2 absorption into aqueous blended DMEA/MEA solution with optimized molar ratio in a hollow fiber membrane contactor. Separation and Purification Technology, 2019, 211, 628-636.	7.9	29
25	Experimental study of the kinetics of the homogenous reaction of CO2 into a novel aqueous 3-diethylamino-1,2-propanediol solution using the stopped-flow technique. Chemical Engineering Journal, 2015, 270, 485-495.	12.7	28
26	The comparative kinetics study of CO2 absorption into non-aqueous DEEA/MEA and DMEA/MEA blended systems solution by using stopped-flow technique. Chemical Engineering Journal, 2020, 386, 121295.	12.7	27
27	Comparative kinetics of carbon dioxide (CO2) absorption into EAE, 1DMA2P and their blends in aqueous solution using the stopped-flow technique. International Journal of Greenhouse Gas Control, 2020, 94, 102948.	4.6	24
28	Part 5a: Solvent chemistry: NMR analysis and studies for amineâ€“CO₂â€“H₂O systems with vaporâ€“liquid equilibrium modeling for CO₂capture processes. Carbon Management, 2012, 3, 185-200.	2.4	23
29	Experiments and modeling of vapor-liquid equilibrium data in DEEA-CO2-H2O system. International Journal of Greenhouse Gas Control, 2016, 53, 160-168.	4.6	23
30	1D absorption kinetics modeling of CO2â€“DEABâ€“H2O system. International Journal of Greenhouse Gas Control, 2013, 12, 390-398.	4.6	21
31	Kinetics and new mechanism study of CO₂ absorption <scp>i</scp>nto water and tertiary amine solutions <scp>b</scp>y stoppedâ€Flow technique. AICHE Journal, 2019, 65, 652-661.	3.6	20
32	Application of â€œcoordinative effectâ€•into tri-solvent MEA+BEA+AMP blends at concentrations of 0.1 + 2 + 2â¼0.5 + 2 + 2 mol/L with absorption, desorption and mass transfer analyses. International Journal of Greenhouse Gas Control, 2021, 107, 103267.	4.6	20
33	CO2 Adsorption on Premodified Li/Al Hydrotalcite Impregnated with Polyethylenimine. Industrial & Engineering Chemistry Research, 2019, 58, 1177-1189.	3.7	18
34	New method of kinetic modeling for <scp>CO₂</scp> absorption into blended amine systems: A case of <scp>MEA</scp>/<scp>EAE</scp>/<scp>3DEA1P</scp> trisolvent blends. AICHE Journal, 2022, 68, .	3.6	18
35	The development of kinetics model for CO₂ absorption into tertiary amines containing carbonic anhydrase. AICHE Journal, 2017, 63, 4933-4943.	3.6	17
36	A study of film thickness and hydrodynamic entrance length in liquid laminar film flow along a vertical tube. AICHE Journal, 2018, 64, 2078-2088.	3.6	17

#	Article	IF	Citations
37	Experimental and Theoretical Studies on Mass Transfer Performance for CO₂ Absorption into Aqueous N,N-Dimethylethanolamine Solution in the Polytetrafluoroethylene Hollow-Fiber Membrane Contactor. Industrial & Engineering Chemistry Research, 2018, 57, 16862-16874.	3.7	17
38	Better Choice of Tertiary Alkanolamines for Postcombustion CO₂ Capture: Structure with Linear Alkanol Chain Instead of Branched. Industrial & Engineering Chemistry Research, 2019, 58, 15344-15352.	3.7	16
39	Mass transfer performance and correlation for CO2 absorption into aqueous 3-diethylaminopropylamine solution in a hollow fiber membrane contactor. Chemical Engineering and Processing: Process Intensification, 2020, 152, 107932.	3.6	15
40	Novel thermodynamic model for vapor-liquid equilibrium of CO2 in aqueous solution of 4-(ethyl-methyl-amino)-2-butanol with designed structures. Chemical Engineering Science, 2020, 218, 115557.	3.8	14
41	A novel reactive 4-diethylamino-2-butanol solvent for capturing CO2 in the aspect of absorption capacity, cyclic capacity, mass transfer, and reaction kinetics. Energy Procedia, 2013, 37, 477-484.	1.8	11
42	The study of kinetics of CO2 absorption into 3-dimethylaminopropylamine and 3-diethylaminopropylamine aqueous solution. International Journal of Greenhouse Gas Control, 2018, 75, 214-223.	4.6	11
43	Study of Equilibrium Solubility, NMR Analysis, and Reaction Kinetics of CO2 Absorption into Aqueous N1,N2-Dimethylethane-1,2-diamine Solutions. Energy & Fuels, 2020, 34, 672-682.	5.1	10
44	A study of kinetics, equilibrium solubility, speciation and thermodynamics of CO2 absorption into benzylamine (BZA) solution. Chemical Engineering Science, 2022, 251, 117452.	3.8	10
45	An experimental/computational study of steric hindrance effects on <scp>CO₂</scp> absorption in (non)aqueous amine solutions. AICHE Journal, 2022, 68, .	3.6	10
46	Reaction kinetics of the absorption of carbon dioxide (CO 2) in aqueous solutions of sterically hindered secondary alkanolamines using the stopped-flow technique. Chemical Engineering Science, 2017, 170, 16-25.	3.8	9
47	Kinetics of CO2 absorption into ethanolamineÂ+ÂwaterÂ+Âethanol systemâ€"mechanism, role of water, and kinetic model. Chemical Engineering Science, 2022, 259, 117732.	3.8	8
48	The Kinetics Investigation of CO2 Absorption into TEA and DEEA Amine Solutions Containing Carbonic Anhydrase. Processes, 2021, 9, 2140.	2.8	5
49	The Effects of Mass Transfer on the Determination of Gasâ€"Liquid Reaction Kinetics in a Stirred Cell Reactor: In the Case of CO₂ Absorption by Aqueous Alkanolamine Solution. Energy & Fuels, 2019, 33, 11524-11535.	5.1	4
50	Comparative kinetics of homogeneous reaction of CO2 and unloaded/loaded amine using stopped-flow technique: A case study of MDEA solution. Separation and Purification Technology, 2020, 242, 116833.	7.9	4
51	overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd"	4.6	1
52	Comparison of Liquid Phase Ion Speciation in DEAB-CO2-H2O System with IPAB-CO2-H2O System Using 13C NMR Techniques. Energy Procedia, 2014, 63, 1919-1926.	1.8	0
53	Analysis of CO2 Solubility and Absorption Heat into Aqueous 1-Diethylamino-2-propanol. Energy Procedia, 2017, 114, 873-879.	1.8	0