Hanna K Knuutila

List of Publications by Year
in descending order

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		87843	149623
149	4,339	38	56
papers	citations	h-index	g-index

149	149	149	3250
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Status and progress of membrane contactors in post-combustion carbon capture: A state-of-the-art review of new developments. Journal of Membrane Science, 2016, 511, 180-206.	4.1	249
2	A review of potential amine solvents for CO 2 absorption process: Absorption capacity, cyclic capacity and pKa. International Journal of Greenhouse Gas Control, 2017, 61, 27-48.	2.3	196
3	CO2 post combustion capture with a phase change solvent. Pilot plant campaign. International Journal of Greenhouse Gas Control, 2014, 31, 153-164.	2.3	102
4	Role of Facilitated Transport Membranes and Composite Membranes for Efficient CO₂ Capture â€“ A Review. ChemBioEng Reviews, 2016, 3, 68-85.	2.6	97
5	Potential applications of membrane separation for subsea natural gas processing: A review. Journal of Natural Gas Science and Engineering, 2017, 39, 101-117.	2.1	91
6	Kinetics of the reaction of carbon dioxide with aqueous sodium and potassium carbonate solutions. Chemical Engineering Science, 2010, 65, 6077-6088.	1.9	82
7	Morphologically Tunable MOF Nanosheets in Mixed Matrix Membranes for CO₂ Separation. Chemistry of Materials, 2020, 32, 4174-4184.	3.2	82
8	An integrated materials approach to ultrapermeable and ultraselective CO ₂ polymer membranes. Science, 2022, 376, 90-94.	6.0	81
9	PVA/nanocellulose nanocomposite membranes for CO2 separation from flue gas. International Journal of Greenhouse Gas Control, 2019, 81, 93-102.	2.3	79
10	Post-combustion carbon capture technologies: Energetic analysis and life cycle assessment. International Journal of Greenhouse Gas Control, 2014, 27, 289-298.	2.3	78
11	Facile fabrication of CO2 separation membranes by cross-linking of poly(ethylene glycol) diglycidyl ether with a diamine and a polyamine-based ionic liquid. Journal of Membrane Science, 2017, 523, 551-560.	4.1	72
12	Carbon Dioxide Solubility in Phosphonium-Based Deep Eutectic Solvents: An Experimental and Molecular Dynamics Study. Industrial & Engineering Chemistry Research, 2019, 58, 17514-17523.	1.8	72
13	Corrosion and degradation in MEA based post-combustion CO2 capture. International Journal of Greenhouse Gas Control, 2016, 46, 48-56.	2.3	69
14	Computer-Aided Design of Ionic Liquids as Absorbent for Gas Separation Exemplified by CO₂ Capture Cases. ACS Sustainable Chemistry and Engineering, 2018, 6, 12025-12035.	3.2	68
15	Precombustion CO₂ Capture in Polymeric Hollow Fiber Membrane Contactors Using Ionic Liquids: Porous Membrane versus Nonporous Composite Membrane. Industrial & Engineering Chemistry Research, 2016, 55, 5983-5992.	1.8	66
16	Performance of Mixed Matrix Membranes Containing Porous Two-Dimensional (2D) and Three-Dimensional (3D) Fillers for CO2 Separation: A Review. Membranes, 2018, 8, 50.	1.4	66
17	Predicting ionic liquid melting points using machine learning. Journal of Molecular Liquids, 2018, 264, 318-326.	2.3	64
18	Nafion/IL hybrid membranes with tuned nanostructure for enhanced CO₂ separation: effects of ionic liquid and water vapor. Green Chemistry, 2018, 20, 1391-1404.	4.6	59

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19	CO2 capture from coal-fired power plants based on sodium carbonate slurry; a systems feasibility and sensitivity study. International Journal of Greenhouse Gas Control, 2009, 3, 143-151.	2.3	55
20	Post combustion CO2 capture with an amino acid salt. Energy Procedia, 2011, 4, 1550-1557.	1.8	55
21	Density measurements and modelling of loaded and unloaded aqueous solutions of MDEA (N-methyldiethanolamine), DMEA (N,N-dimethylethanolamine), DEEA (diethylethanolamine) and MAPA (N-methyl-1,3-diaminopropane). International Journal of Greenhouse Gas Control, 2014, 25, 173-185.	2.3	53
22	Membrane absorption using ionic liquid for pre-combustion CO 2 capture at elevated pressure and temperature. International Journal of Greenhouse Gas Control, 2016, 54, 59-69.	2.3	53
23	Performance of Nanocomposite Membranes Containing 0D to 2D Nanofillers for CO2 Separation: A Review. Membranes, 2018, 8, 24.	1.4	52
24	Investigating opportunities for water-lean solvents in CO2 capture: VLE and heat of absorption in water-lean solvents containing MEA. Separation and Purification Technology, 2020, 231, 115883.	3.9	52
25	PebaxÂ®/TSIL blend thin film composite membranes for CO2 separation. Science China Chemistry, 2016, 59, 538-546.	4.2	51
26	Fabrication and Evaluation of Bio-Based Nanocomposite TFC Hollow Fiber Membranes for Enhanced CO₂ Capture. ACS Applied Materials & Interfaces, 2019, 11, 10874-10882.	4.0	51
27	Nafion/PEG hybrid membrane for CO2 separation: Effect of PEG on membrane micro-structure and performance. Separation and Purification Technology, 2019, 214, 67-77.	3.9	50
28	Ether-functionalized ionic liquid based composite membranes for carbon dioxide separation. RSC Advances, 2016, 6, 45184-45192.	1.7	47
29	From hybrid solvents to water-lean solvents â€“ A critical and historical review. Separation and Purification Technology, 2021, 260, 118193.	3.9	45
30	Screening of strong bicarbonate forming solvents for CO 2 capture. International Journal of Greenhouse Gas Control, 2017, 58, 201-211.	2.3	44
31	Dynamic model validation of the post-combustion CO2 absorption process. International Journal of Greenhouse Gas Control, 2015, 41, 127-141.	2.3	43
32	Pebax/PEG Grafted CNT Hybrid Membranes for Enhanced CO₂/N₂ Separation. Industrial & Engineering Chemistry Research, 2019, 58, 12226-12234.	1.8	43
33	ASPEN PLUS simulation model for CO 2 removal with MEA: Validation of desorption model with experimental data. Journal of Environmental Chemical Engineering, 2017, 5, 4693-4701.	3.3	42
34	CO2 solubility and mass transfer in water-lean solvents. Chemical Engineering Science, 2019, 202, 403-416.	1.9	42
35	New solvent blends for post-combustion CO2 capture. Green Energy and Environment, 2019, 4, 439-452.	4.7	41
36	Kinetics of CO2 absorption in aqueous blends of N,N-diethylethanolamine (DEEA) and N-methyl-1,3-propane-diamine (MAPA). Chemical Engineering Science, 2015, 129, 145-155.	1.9	40

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37	Fabrication and Evaluation of a Blend Facilitated Transport Membrane for CO₂/CH₄ Separation. Industrial & Engineering Chemistry Research, 2015, 54, 11139-11150.	1.8	40
38	Influence of substitution of water by organic solvents in amine solutions on absorption of CO2. International Journal of Greenhouse Gas Control, 2018, 78, 286-305.	2.3	40
39	Manipulation of Fibril Surfaces in Nanocellulose-Based Facilitated Transport Membranes for Enhanced CO₂ Capture. ACS Applied Materials & Interfaces, 2019, 11, 33302-33313.	4.0	39
40	Study of Various Aqueous and Non-Aqueous Amine Blends for Hydrogen Sulfide Removal from Natural Gas. Processes, 2019, 7, 160.	1.3	38
41	A review of degradation and emissions in post-combustion CO2 capture pilot plants. International Journal of Greenhouse Gas Control, 2021, 106, 103246.	2.3	38
42	CO 2 /H 2 separation by amino-acid ionic liquids with polyethylene glycol as co-solvent. International Journal of Greenhouse Gas Control, 2016, 45, 207-215.	2.3	37
43	Development of membrane contactors using volatile amine-based absorbents for CO 2 capture: Amine permeation through the membrane. Journal of Membrane Science, 2017, 537, 272-282.	4.1	37
44	Effects of the Morphology of the ZIF on the CO₂ Separation Performance of MMMs. Industrial & Engineering Chemistry Research, 2020, 59, 14458-14466.	1.8	37
45	Hydrogen sulfide removal from natural gas using membrane technology: a review. Journal of Materials Chemistry A, 2021, 9, 20211-20240.	5.2	37
46	Swelling and Free-Volume Characteristics of TEMPO-Oxidized Cellulose Nanofibril Films. Biomacromolecules, 2018, 19, 1016-1025.	2.6	36
47	Rapid, comprehensive screening of ionic liquids towards sustainable applications. Sustainable Energy and Fuels, 2019, 3, 2798-2808.	2.5	35
48	CO2 capture using highly viscous amine blends in non-porous membrane contactors. Chemical Engineering Journal, 2019, 359, 1581-1591.	6.6	35
49	Humidity-responsive molecular gate-opening mechanism for gas separation in ultraselective nanocellulose/IL hybrid membranes. Green Chemistry, 2020, 22, 3546-3557.	4.6	35
50	Vaporâ€“liquid equilibrium in the sodium carbonateâ€“sodium bicarbonateâ€“waterâ€“CO2-system. Chemical Engineering Science, 2010, 65, 2218-2226.	1.9	32
51	Kinetics of CO2 absorption by aqueous N,N-diethylethanolamine solutions: Literature review, experimental results and modelling. Chemical Engineering Science, 2015, 127, 1-12.	1.9	32
52	Degradation and corrosion inhibitors for MEA-based CO2 capture plants. International Journal of Greenhouse Gas Control, 2016, 50, 240-247.	2.3	32
53	Density and N2O solubility of sodium and potassium carbonate solutions in the temperature range 25 to 80 Â°C. Chemical Engineering Science, 2010, 65, 2177-2182.	1.9	31
54	Nanocomposite membranes with high-charge and size-screened phosphorylated nanocellulose fibrils for CO2 separation. Green Energy and Environment, 2021, 6, 585-596.	4.7	31

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55	Kinetics of the absorption of carbon dioxide into aqueous hydroxides of lithium, sodium and potassium and blends of hydroxides and carbonates. Chemical Engineering Science, 2015, 123, 487-499.	1.9	30
56	Effect of the concentration of MAPA on the heat of absorption of CO 2 and on the cyclic capacity in DEEA-MAPA blends. International Journal of Greenhouse Gas Control, 2017, 61, 94-103.	2.3	30
57	Biomethane production system: Energetic analysis of various scenarios. Bioresource Technology, 2016, 206, 155-163.	4.8	29
58	Influence of experimental setup on amine degradation. International Journal of Greenhouse Gas Control, 2014, 28, 156-167.	2.3	28
59	CO 2 absorption into loaded aqueous MEA solutions: Kinetics assessment using penetration theory. International Journal of Greenhouse Gas Control, 2016, 53, 338-353.	2.3	27
60	Poly(1-trimethylsilyl-1-propyne)-Based Hybrid Membranes: Effects of Various Nanofillers and Feed Gas Humidity on CO2 Permeation. Membranes, 2018, 8, 76.	1.4	26
61	Solventâ€Templated Block Ionomers for Baseâ€•and Acidâ€Gas Separations: Effect of Humidity on Ammonia and Carbon Dioxide Permeation. Advanced Materials Interfaces, 2017, 4, 1700854.	1.9	25
62	NMR Speciation of Aqueous MAPA, Tertiary Amines, and Their Blends in the Presence of CO₂: Influence of pK_a and Reaction Mechanisms. Industrial & Engineering Chemistry Research, 2018, 57, 1337-1349.	1.8	25
63	Analysis and selection of optimal solvent-based technologies for biogas upgrading. Fuel, 2021, 303, 121327.	3.4	25
64	Kinetics of carbonate based CO2 capture systems. Energy Procedia, 2009, 1, 1011-1018.	1.8	24
65	Post-combustion CO2 membrane absorption promoted by mimic enzyme. Journal of Membrane Science, 2016, 499, 36-46.	4.1	24
66	Oxidative degradation of amines using a closed batch system. International Journal of Greenhouse Gas Control, 2013, 18, 1-14.	2.3	23
67	Effect of MEA's Degradation Products on Corrosion at CO2 Capture Plants. Energy Procedia, 2014, 63, 1869-1875.	1.8	23
68	Kinetics of CO₂ absorption by aqueous 3â€(methylamino)propylamine solutions: Experimental results and modeling. AICHE Journal, 2014, 60, 3792-3803.	1.8	22
69	Thermal stability and corrosion of tertiary amines in aqueous amine and amine-glycol-water solutions for combined acid gas and water removal. Journal of Natural Gas Science and Engineering, 2019, 62, 26-37.	2.1	22
70	Viscosity measurements and modeling of loaded and unloaded aqueous solutions of MDEA, DMEA, DEEA and MAPA. Chemical Engineering Science, 2017, 171, 340-350.	1.9	21
71	Novel full height pilot plant for solvent development and model validation. Energy Procedia, 2011, 4, 1753-1760.	1.8	20
72	Density and N 2 O solubility of aqueous hydroxide and carbonate solutions in the temperature range from 25 to 80 Â°C. Chemical Engineering Science, 2015, 122, 307-320.	1.9	20

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73	Influence of pKa on solvent performance of MAPA promoted tertiary amines. International Journal of Greenhouse Gas Control, 2018, 68, 68-76.	2.3	20
74	New polyalkylated imidazoles tailored for carbon dioxide capture. International Journal of Greenhouse Gas Control, 2018, 76, 167-174.	2.3	20
75	Mathematical modeling and validation of CO2 mass transfer in a membrane contactor using ionic liquids for pre-combustion CO2 capture. Chemical Engineering Research and Design, 2017, 123, 377-387.	2.7	19
76	Characterization of 2-piperidineethanol and 1-(2-hydroxyethyl)pyrrolidine as strong bicarbonate forming solvents for CO 2 capture. International Journal of Greenhouse Gas Control, 2017, 63, 260-271.	2.3	19
77	Highly CO2-permeable membranes derived from a midblock-sulfonated multiblock polymer after submersion in water. NPG Asia Materials, 2019, 11, .	3.8	19
78	Mapping Diluents for Water-Lean Solvents: A Parametric Study. Industrial & Engineering Chemistry Research, 2020, 59, 11656-11680.	1.8	19
79	Carbon dioxide solubility in mixtures of methyldiethanolamine with monoethylene glycol, monoethylene glycolâ€“water, water and triethylene glycol. Journal of Chemical Thermodynamics, 2020, 151, 106176.	1.0	19
80	Precipitation of Piperazine in Aqueous Piperazine Solutions with and without CO₂ Loadings. Industrial & Engineering Chemistry Research, 2012, 51, 12126-12134.	1.8	18
81	Gas phase amine depletion created by aerosol formation and growth. International Journal of Greenhouse Gas Control, 2017, 64, 212-222.	2.3	18
82	Applicability of enhancement factor models for CO2 absorption into aqueous MEA solutions. Applied Energy, 2017, 206, 765-783.	5.1	18
83	Extensive dataset for oxidative degradation of ethanolamine at 55â€“75Â°C and oxygen concentrations from 6 to 98%. International Journal of Greenhouse Gas Control, 2016, 50, 158-178.	2.3	17
84	Viscosity, Density, and Volatility of Binary Mixtures of Imidazole, 2-Methylimidazole, 2,4,5-Trimethylimidazole, and 1,2,4,5-Tetramethylimidazole with Water. Journal of Chemical & Engineering Data, 2019, 64, 507-516.	1.0	17
85	Effect of liquid viscosity on the performance of a non-porous membrane contactor for CO2 capture. Separation and Purification Technology, 2019, 222, 188-201.	3.9	17
86	Analysis of CO2 Facilitation Transport Effect through a Hybrid Poly(Allyl Amine) Membrane: Pathways for Further Improvement. Membranes, 2020, 10, 367.	1.4	17
87	Vapour-liquid equilibrium study of tertiary amines, single and in blend with 3-(methylamino)propylamine, for post-combustion CO2 capture. Journal of Chemical Thermodynamics, 2019, 138, 211-228.	1.0	16
88	Thermal Degradation on Already Oxidatively Degraded Solutions. Energy Procedia, 2013, 37, 2109-2117.	1.8	15
89	Development of Membrane Contactors Using Phase Change Solvents for CO₂ Capture: Material Compatibility Study. Industrial & Engineering Chemistry Research, 2016, 55, 13102-13113.	1.8	15
90	Characterization and modelling of aerosol droplet in absorption columns. International Journal of Greenhouse Gas Control, 2017, 58, 114-126.	2.3	14

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91	Stability of Structurally Varied Aqueous Amines for CO₂ Capture. Industrial & Engineering Chemistry Research, 2021, 60, 5627-5638.	1.8	14
92	Operation and dynamic behavior of wire mesh pads. Chemical Engineering Science, 2012, 68, 624-639.	1.9	13
93	Destruction of nitrosoamines with UV-light. Energy Procedia, 2013, 37, 743-750.	1.8	13
94	Corrosion Evaluation of MEA Solutions by SEM-EDS, ICP-MS and XRD. Energy Procedia, 2016, 86, 197-204.	1.8	13
95	CO 2 absorption into loaded aqueous MEA solutions: Impact of different model parameter correlations and thermodynamic models on the absorption rate model predictions. Chemical Engineering Journal, 2017, 327, 868-880.	6.6	13
96	Physical properties and reaction kinetics of CO2 absorption into unloaded and CO2 loaded viscous monoethanolamine (MEA) solution. Journal of Molecular Liquids, 2021, 329, 115569.	2.3	13
97	Nanocellulose Crystal-Enhanced Hybrid Membrane for CO₂ Capture. Industrial & Engineering Chemistry Research, 2022, 61, 9067-9076.	1.8	13
98	Decomposition of nitrosamines in aqueous monoethanolamine (MEA) and diethanolamine (DEA) solutions with UV-radiation. International Journal of Greenhouse Gas Control, 2014, 31, 182-191.	2.3	12
99	Hydrogen sulfide solubility in 50Âwt% and 70Âwt% aqueous methyldiethanolamine at temperatures from 283 to 393ÂK and total pressures from 500 to 10000ÂkPa. Fluid Phase Equilibria, 2020, 511, 112498.	1.4	12
100	Determination of Kinetics of CO2 Absorption in Unloaded and Loaded DEEA+MAPA Blend. Energy Procedia, 2017, 114, 1772-1784.	1.8	11
101	Thermopervaporation for regeneration of triethylene glycol (TEG):Experimental and model development. Journal of Membrane Science, 2019, 588, 117205.	4.1	11
102	Density and Viscosity of the Nonaqueous and Aqueous Mixtures of Methyldiethanolamine and Monoethylene Glycol at Temperatures from 283.15 to 353.15 K. Journal of Chemical & Engineering Data, 2019, 64, 5415-5431.	1.0	11
103	Solubility and Heat of Absorption of CO2 into Diisopropylamine and N,N-Diethylethanolamine Mixed with Organic Solvents. Energy & Fuels, 2020, 34, 8552-8561.	2.5	11
104	Oxygen and Temperature Effect on Formation of Degradation Compounds from MEA. Energy Procedia, 2014, 63, 957-975.	1.8	10
105	Kinetics of CO2 Absorption in to Aqueous MEA Solutions Near Equilibrium. Energy Procedia, 2017, 114, 1576-1583.	1.8	10
106	Heat to Hydrogen by REDâ€"Reviewing Membranes and Salts for the RED Heat Engine Concept. Membranes, 2022, 12, 48.	1.4	10
107	Activity-based Kinetics of the Reaction of Carbon Dioxide with Aqueous Amine Systems. Case Studies: MAPA and MEA. Energy Procedia, 2013, 37, 1888-1896.	1.8	9
108	Modeling of Oxidative MEA Degradation. Energy Procedia, 2014, 63, 940-950.	1.8	9

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109	Quantitative determination of amines used in post-combustion CO 2 capture process by ion chromatography. International Journal of Greenhouse Gas Control, 2015, 42, 372-378.	2.3	9
110	Synthesis of crosslinked PEG/IL blend membrane via oneâ€pot thiolâ€“ene/epoxy chemistry. Journal of Polymer Science, 2020, 58, 2575-2585.	2.0	9
111	Subsea natural gas dehydration in a membrane contactor with turbulence promoter: An experimental and modeling study. Chemical Engineering Journal, 2021, 404, 126535.	6.6	9
112	Modeling the Formation of Degradation Compounds during Thermal Degradation of MEA. Industrial & Engineering Chemistry Research, 2022, 61, 2867-2881.	1.8	9
113	ATR-FTIR Model Development and Verification for Qualitative and Quantitative Analysis in MDEAâ€“H2Oâ€“MEG/TEGâ€“CO2 Blends. Energies, 2019, 12, 3285.	1.6	8
114	High-Capacity Amine-Imidazole Solvent Blends for CO2 Capture. Industrial & Engineering Chemistry Research, 2019, 58, 10533-10539.	1.8	8
115	Thermodynamic modelling of unloaded and loaded N,N-diethylethanolamine solutions. Green Energy and Environment, 2016, 1, 246-257.	4.7	7
116	Aqueous MAPA, DEEA, and Their Blend as CO₂ Absorbents: Interrelationship between NMR Speciation, pH, and Heat of Absorption Data. Industrial & Engineering Chemistry Research, 2019, 58, 9781-9794.	1.8	7
117	Measurement and prediction of oxygen solubility in post-combustion CO2 capture solvents. International Journal of Greenhouse Gas Control, 2021, 104, 103205.	2.3	7
118	New solubility and heat of absorption data for CO2 in blends of 2-amino-2-methyl-1-propanol (AMP) and Piperazine (PZ) and a new eNRTL model representation. Fluid Phase Equilibria, 2021, 550, 113235.	1.4	7
119	Solubility of Carbon Dioxide, Hydrogen Sulfide, Methane, and Nitrogen in Monoethylene Glycol; Experiments and Molecular Simulation. Journal of Chemical & Engineering Data, 2021, 66, 524-534.	1.0	7
120	Activity Based Kinetics and Mass Transfer of CO2 Absorption Into MEA Using Penetration Theory. Energy Procedia, 2014, 63, 1196-1205.	1.8	6
121	Effect of Amine Volatility on Aerosol Droplet Development in Absorption Columns. Energy Procedia, 2017, 114, 977-986.	1.8	6
122	Predicting aerosol size distribution development in absorption columns. Chemical Engineering Science, 2018, 192, 25-33.	1.9	6
123	Effect of Various Parameters on the Thermal Stability and Corrosion of CO2-Loaded Tertiary Amine Blends. Energies, 2020, 13, 2626.	1.6	6
124	Degradative Behavior and Toxicity of Alkylated Imidazoles. Industrial & Engineering Chemistry Research, 2020, 59, 587-595.	1.8	6
125	Impact of dissolved oxygen removal on solvent degradation for post-combustion CO2 capturew. International Journal of Greenhouse Gas Control, 2021, 112, 103493.	2.3	6
126	Activity based kinetics of CO2â€“OHâ^' systems with Li+, Na+ and K+ counter ions. Chemical Engineering Science, 2016, 151, 1-6.	1.9	5

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127	Analysis of the Protonation Constant (pKa) and Absorption Properties of Non-alkanolamines. Energy Procedia, 2017, 114, 2590-2598.	1.8	5
128	Performance of MAPA Promoted Tertiary Amine Systems for CO2 Absorption: Influence of Alkyl Chain Length and Hydroxyl Groups. Energy Procedia, 2017, 114, 1682-1688.	1.8	5
129	Promoted Strong Bicarbonate Forming Solvents for CO2 Capture. Energy Procedia, 2017, 114, 1794-1802.	1.8	5
130	CO2 in Lyotropic Liquid Crystals: Phase Equilibria Behavior and Rheology. Polymers, 2019, 11, 309.	2.0	5
131	Addition of potassium iodide reduces oxidative degradation of monoethanolamine (MEA). Chemical Engineering Science: X, 2021, 10, 100096.	1.5	5
132	Scrubber characterization and performance using hydrocarbons at elevated pressures. Fuel, 2014, 120, 98-115.	3.4	4
133	Aminoalkyl-Functionalized Pyridines as High Cyclic Capacity CO₂ Absorbents. Energy & Fuels, 2019, 33, 10011-10015.	2.5	4
134	Solvent Regeneration by Thermopervaporation in Subsea Natural Gas Dehydration: An Experimental and Simulation Study. Industrial & Engineering Chemistry Research, 2021, 60, 6262-6276.	1.8	4
135	Signs of alkylcarbonate formation in water-lean solvents: VLE-based understanding of pKa and pKs effects. International Journal of Greenhouse Gas Control, 2021, 109, 103398.	2.3	4
136	Vaporâ€“Liquid Equilibria Data for 2-Piperidineethanol and 1-(2-Hydroxyethyl)pyrrolidine in Aqueous Solutions and a UNIQUAC Model Representation. Journal of Chemical & Engineering Data, 2022, 67, 159-166.	1.0	4
137	VLE Modeling of Aqueous Solutions of Unloaded and Loaded Hydroxides of Lithium, Sodium and Potassium. Energy Procedia, 2016, 86, 282-293.	1.8	3
138	Calorimetric Studies of Precipitating Solvent System. Energy Procedia, 2017, 114, 744-755.	1.8	3
139	Incorporation of Metallic Species into Midblockâ€Sulfonated Block Ionomers. Macromolecular Rapid Communications, 2018, 39, 1800427.	2.0	3
140	Experimental investigation of inlet vane design and performance in hydrocarbon systems. Chemical Engineering Science, 2019, 206, 63-95.	1.9	3
141	Thermal stability and corrosion studies of amines for combined acid gas removal and hydrate control for subsea gas treatment systems. , 2016, , .		2
142	Study of the effect of condensation and evaporation of water on heat and mass transfer in CO2 absorption column. Chemical Engineering Science, 2017, 172, 353-369.	1.9	2
143	Vapor Liquid Equilibrium Measurements of Two Promising Tertiary Amines for CO2 Capture. Processes, 2019, 7, 951.	1.3	2
144	Evaluating the possibility of high-pressure desorption of CO2 via volatile co-solvent injection. Chemical Engineering Research and Design, 2021, 169, 116-134.	2.7	2

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145	Preparation of cellulose nanofibrils for imaging purposes: comparison of liquid cryogens for rapid vitrification. Cellulose, 2018, 25, 4269-4274.	2.4	1
146	Absorption of CO2 in lyotropic liquid crystals. Molecular Crystals and Liquid Crystals, 2020, 703, 87-106.	0.4	1
147	DENSITY CALCULATIONS OF AQUEOUS AMINE SOLUTIONS USING AN EXCESS GIBBS BASED MODEL. Brazilian Journal of Chemical Engineering, 2019, 36, 1075-1087.	0.7	1
148	Kinetics of CO2 absorption into aqueous solutions of 3-dimethylamino-1-propanol and 1-(2-hydroxyethyl)pyrrolidine in the blend with 3-(methylamino)propylamine. Chemical Engineering Science: X, 2019, 3, 100032.	1.5	0
149	Aerosol growth in CO2 absorption with MEA, modelling and comparison with experimental results. International Journal of Greenhouse Gas Control, 2021, 109, 103390.	2.3	0