

Hanna K Knuutila

List of Publications by Year in descending order

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149
papers

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87843

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149
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#	ARTICLE	IF	CITATIONS
1	Vapor–Liquid Equilibria Data for 2-Piperidineethanol and 1-(2-Hydroxyethyl)pyrrolidine in Aqueous Solutions and a UNIQUAC Model Representation. <i>Journal of Chemical & Engineering Data</i> , 2022, 67, 159-166.	1.0	4
2	Modeling the Formation of Degradation Compounds during Thermal Degradation of MEA. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 2867-2881.	1.8	9
3	An integrated materials approach to ultrapermeable and ultrasensitive CO ₂ polymer membranes. <i>Science</i> , 2022, 376, 90-94.	6.0	81
4	Heat to Hydrogen by RED—Reviewing Membranes and Salts for the RED Heat Engine Concept. <i>Membranes</i> , 2022, 12, 48.	1.4	10
5	Nanocellulose Crystal-Enhanced Hybrid Membrane for CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 9067-9076.	1.8	13
6	Subsea natural gas dehydration in a membrane contactor with turbulence promoter: An experimental and modeling study. <i>Chemical Engineering Journal</i> , 2021, 404, 126535.	6.6	9
7	Nanocomposite membranes with high-charge and size-screened phosphorylated nanocellulose fibrils for CO ₂ separation. <i>Green Energy and Environment</i> , 2021, 6, 585-596.	4.7	31
8	Measurement and prediction of oxygen solubility in post-combustion CO ₂ capture solvents. <i>International Journal of Greenhouse Gas Control</i> , 2021, 104, 103205.	2.3	7
9	A review of degradation and emissions in post-combustion CO ₂ capture pilot plants. <i>International Journal of Greenhouse Gas Control</i> , 2021, 106, 103246.	2.3	38
10	Stability of Structurally Varied Aqueous Amines for CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 5627-5638.	1.8	14
11	From hybrid solvents to water-lean solvents – A critical and historical review. <i>Separation and Purification Technology</i> , 2021, 260, 118193.	3.9	45
12	Solvent Regeneration by Thermopervaporation in Subsea Natural Gas Dehydration: An Experimental and Simulation Study. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 6262-6276.	1.8	4
13	Physical properties and reaction kinetics of CO ₂ absorption into unloaded and CO ₂ loaded viscous monoethanolamine (MEA) solution. <i>Journal of Molecular Liquids</i> , 2021, 329, 115569.	2.3	13
14	Evaluating the possibility of high-pressure desorption of CO ₂ via volatile co-solvent injection. <i>Chemical Engineering Research and Design</i> , 2021, 169, 116-134.	2.7	2
15	Addition of potassium iodide reduces oxidative degradation of monoethanolamine (MEA). <i>Chemical Engineering Science: X</i> , 2021, 10, 100096.	1.5	5
16	Aerosol growth in CO ₂ absorption with MEA, modelling and comparison with experimental results. <i>International Journal of Greenhouse Gas Control</i> , 2021, 109, 103390.	2.3	0
17	Signs of alkylcarbonate formation in water-lean solvents: VLE-based understanding of pK _a and pK _s effects. <i>International Journal of Greenhouse Gas Control</i> , 2021, 109, 103398.	2.3	4
18	New solubility and heat of absorption data for CO ₂ in blends of 2-amino-2-methyl-1-propanol (AMP) and Piperazine (PZ) and a new eNRTL model representation. <i>Fluid Phase Equilibria</i> , 2021, 550, 113235.	1.4	7

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19	Analysis and selection of optimal solvent-based technologies for biogas upgrading. <i>Fuel</i> , 2021, 303, 121327.	3.4	25
20	Hydrogen sulfide removal from natural gas using membrane technology: a review. <i>Journal of Materials Chemistry A</i> , 2021, 9, 20211-20240.	5.2	37
21	Solubility of Carbon Dioxide, Hydrogen Sulfide, Methane, and Nitrogen in Monoethylene Glycol; Experiments and Molecular Simulation. <i>Journal of Chemical & Engineering Data</i> , 2021, 66, 524-534.	1.0	7
22	Impact of dissolved oxygen removal on solvent degradation for post-combustion CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2021, 112, 103493.	2.3	6
23	Investigating opportunities for water-lean solvents in CO ₂ capture: VLE and heat of absorption in water-lean solvents containing MEA. <i>Separation and Purification Technology</i> , 2020, 231, 115883.	3.9	52
24	Effects of the Morphology of the ZIF on the CO ₂ Separation Performance of MMMs. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 14458-14466.	1.8	37
25	Absorption of CO ₂ in lyotropic liquid crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2020, 703, 87-106.	0.4	1
26	Analysis of CO ₂ Facilitation Transport Effect through a Hybrid Poly(Allyl Amine) Membrane: Pathways for Further Improvement. <i>Membranes</i> , 2020, 10, 367.	1.4	17
27	Mapping Diluents for Water-Lean Solvents: A Parametric Study. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 11656-11680.	1.8	19
28	Carbon dioxide solubility in mixtures of methyldiethanolamine with monoethylene glycol, monoethylene glycol+water, water and triethylene glycol. <i>Journal of Chemical Thermodynamics</i> , 2020, 151, 106176.	1.0	19
29	Effect of Various Parameters on the Thermal Stability and Corrosion of CO ₂ -Loaded Tertiary Amine Blends. <i>Energies</i> , 2020, 13, 2626.	1.6	6
30	Solubility and Heat of Absorption of CO ₂ into Diisopropylamine and N,N-Diethylethanolamine Mixed with Organic Solvents. <i>Energy & Fuels</i> , 2020, 34, 8552-8561.	2.5	11
31	Degradative Behavior and Toxicity of Alkylated Imidazoles. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 587-595.	1.8	6
32	Hydrogen sulfide solubility in 50Åwt% and 70Åwt% aqueous methyldiethanolamine at temperatures from 283 to 393ÅK and total pressures from 500 to 10000ÅkPa. <i>Fluid Phase Equilibria</i> , 2020, 511, 112498.	1.4	12
33	Synthesis of crosslinked PEG/IL blend membrane via one-pot thiol+ene/epoxy chemistry. <i>Journal of Polymer Science</i> , 2020, 58, 2575-2585.	2.0	9
34	Morphologically Tunable MOF Nanosheets in Mixed Matrix Membranes for CO ₂ Separation. <i>Chemistry of Materials</i> , 2020, 32, 4174-4184.	3.2	82
35	Humidity-responsive molecular gate-opening mechanism for gas separation in ultraselective nanocellulose/IL hybrid membranes. <i>Green Chemistry</i> , 2020, 22, 3546-3557.	4.6	35
36	Rapid, comprehensive screening of ionic liquids towards sustainable applications. <i>Sustainable Energy and Fuels</i> , 2019, 3, 2798-2808.	2.5	35

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37	Kinetics of CO ₂ absorption into aqueous solutions of 3-dimethylamino-1-propanol and 1-(2-hydroxyethyl)pyrrolidine in the blend with 3-(methylamino)propylamine. <i>Chemical Engineering Science</i> , 2019, 3, 100032.	1.5	0
38	Carbon Dioxide Solubility in Phosphonium-Based Deep Eutectic Solvents: An Experimental and Molecular Dynamics Study. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 17514-17523.	1.8	72
39	Manipulation of Fibril Surfaces in Nanocellulose-Based Facilitated Transport Membranes for Enhanced CO ₂ Capture. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 33302-33313.	4.0	39
40	Thermopervaporation for regeneration of triethylene glycol (TEG): Experimental and model development. <i>Journal of Membrane Science</i> , 2019, 588, 117205.	4.1	11
41	ATR-FTIR Model Development and Verification for Qualitative and Quantitative Analysis in MDEA-H ₂ O-MEG/TEG-CO ₂ Blends. <i>Energies</i> , 2019, 12, 3285.	1.6	8
42	Aminoalkyl-Functionalized Pyridines as High Cyclic Capacity CO ₂ Absorbents. <i>Energy & Fuels</i> , 2019, 33, 10011-10015.	2.5	4
43	Highly CO ₂ -permeable membranes derived from a midblock-sulfonated multiblock polymer after submersion in water. <i>NPG Asia Materials</i> , 2019, 11, .	3.8	19
44	Viscosity, Density, and Volatility of Binary Mixtures of Imidazole, 2-Methylimidazole, 2,4,5-Trimethylimidazole, and 1,2,4,5-Tetramethylimidazole with Water. <i>Journal of Chemical & Engineering Data</i> , 2019, 64, 507-516.	1.0	17
45	Pebax/PEG Grafted CNT Hybrid Membranes for Enhanced CO ₂ /N ₂ Separation. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 12226-12234.	1.8	43
46	Vapour-liquid equilibrium study of tertiary amines, single and in blend with 3-(methylamino)propylamine, for post-combustion CO ₂ capture. <i>Journal of Chemical Thermodynamics</i> , 2019, 138, 211-228.	1.0	16
47	Aqueous MAPA, DEEA, and Their Blend as CO ₂ Absorbents: Interrelationship between NMR Speciation, pH, and Heat of Absorption Data. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 9781-9794.	1.8	7
48	Experimental investigation of inlet vane design and performance in hydrocarbon systems. <i>Chemical Engineering Science</i> , 2019, 206, 63-95.	1.9	3
49	High-Capacity Amine-Imidazole Solvent Blends for CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 10533-10539.	1.8	8
50	Effect of liquid viscosity on the performance of a non-porous membrane contactor for CO ₂ capture. <i>Separation and Purification Technology</i> , 2019, 222, 188-201.	3.9	17
51	CO ₂ in Lyotropic Liquid Crystals: Phase Equilibria Behavior and Rheology. <i>Polymers</i> , 2019, 11, 309.	2.0	5
52	CO ₂ solubility and mass transfer in water-lean solvents. <i>Chemical Engineering Science</i> , 2019, 202, 403-416.	1.9	42
53	Study of Various Aqueous and Non-Aqueous Amine Blends for Hydrogen Sulfide Removal from Natural Gas. <i>Processes</i> , 2019, 7, 160.	1.3	38
54	Fabrication and Evaluation of Bio-Based Nanocomposite TFC Hollow Fiber Membranes for Enhanced CO ₂ Capture. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 10874-10882.	4.0	51

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55	New solvent blends for post-combustion CO ₂ capture. <i>Green Energy and Environment</i> , 2019, 4, 439-452.	4.7	41
56	Vapor Liquid Equilibrium Measurements of Two Promising Tertiary Amines for CO ₂ Capture. <i>Processes</i> , 2019, 7, 951.	1.3	2
57	Density and Viscosity of the Nonaqueous and Aqueous Mixtures of Methyl-diethanolamine and Monoethylene Glycol at Temperatures from 283.15 to 353.15 K. <i>Journal of Chemical & Engineering Data</i> , 2019, 64, 5415-5431.	1.0	11
58	PVA/nanocellulose nanocomposite membranes for CO ₂ separation from flue gas. <i>International Journal of Greenhouse Gas Control</i> , 2019, 81, 93-102.	2.3	79
59	Thermal stability and corrosion of tertiary amines in aqueous amine and amine-glycol-water solutions for combined acid gas and water removal. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 62, 26-37.	2.1	22
60	CO ₂ capture using highly viscous amine blends in non-porous membrane contactors. <i>Chemical Engineering Journal</i> , 2019, 359, 1581-1591.	6.6	35
61	Nafion/PEG hybrid membrane for CO ₂ separation: Effect of PEG on membrane micro-structure and performance. <i>Separation and Purification Technology</i> , 2019, 214, 67-77.	3.9	50
62	DENSITY CALCULATIONS OF AQUEOUS AMINE SOLUTIONS USING AN EXCESS GIBBS BASED MODEL. <i>Brazilian Journal of Chemical Engineering</i> , 2019, 36, 1075-1087.	0.7	1
63	Nafion/IL hybrid membranes with tuned nanostructure for enhanced CO ₂ separation: effects of ionic liquid and water vapor. <i>Green Chemistry</i> , 2018, 20, 1391-1404.	4.6	59
64	NMR Speciation of Aqueous MAPA, Tertiary Amines, and Their Blends in the Presence of CO ₂ : Influence of pK_a and Reaction Mechanisms. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 1337-1349.	1.8	25
65	Swelling and Free-Volume Characteristics of TEMPO-Oxidized Cellulose Nanofibril Films. <i>Biomacromolecules</i> , 2018, 19, 1016-1025.	2.6	36
66	Predicting ionic liquid melting points using machine learning. <i>Journal of Molecular Liquids</i> , 2018, 264, 318-326.	2.3	64
67	Influence of pK_a on solvent performance of MAPA promoted tertiary amines. <i>International Journal of Greenhouse Gas Control</i> , 2018, 68, 68-76.	2.3	20
68	Influence of substitution of water by organic solvents in amine solutions on absorption of CO ₂ . <i>International Journal of Greenhouse Gas Control</i> , 2018, 78, 286-305.	2.3	40
69	Poly(1-trimethylsilyl-1-propyne)-Based Hybrid Membranes: Effects of Various Nanofillers and Feed Gas Humidity on CO ₂ Permeation. <i>Membranes</i> , 2018, 8, 76.	1.4	26
70	Incorporation of Metallic Species into Sulfonated Block Ionomers. <i>Macromolecular Rapid Communications</i> , 2018, 39, 1800427.	2.0	3
71	Performance of Mixed Matrix Membranes Containing Porous Two-Dimensional (2D) and Three-Dimensional (3D) Fillers for CO ₂ Separation: A Review. <i>Membranes</i> , 2018, 8, 50.	1.4	66
72	Computer-Aided Design of Ionic Liquids as Absorbent for Gas Separation Exemplified by CO ₂ Capture Cases. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12025-12035.	3.2	68

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73	Predicting aerosol size distribution development in absorption columns. <i>Chemical Engineering Science</i> , 2018, 192, 25-33.	1.9	6
74	Performance of Nanocomposite Membranes Containing OD to 2D Nanofillers for CO ₂ Separation: A Review. <i>Membranes</i> , 2018, 8, 24.	1.4	52
75	New polyalkylated imidazoles tailored for carbon dioxide capture. <i>International Journal of Greenhouse Gas Control</i> , 2018, 76, 167-174.	2.3	20
76	Preparation of cellulose nanofibrils for imaging purposes: comparison of liquid cryogenes for rapid vitrification. <i>Cellulose</i> , 2018, 25, 4269-4274.	2.4	1
77	Potential applications of membrane separation for subsea natural gas processing: A review. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 39, 101-117.	2.1	91
78	Screening of strong bicarbonate forming solvents for CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2017, 58, 201-211.	2.3	44
79	Effect of the concentration of MAPA on the heat of absorption of CO ₂ and on the cyclic capacity in DEEA-MAPA blends. <i>International Journal of Greenhouse Gas Control</i> , 2017, 61, 94-103.	2.3	30
80	Development of membrane contactors using volatile amine-based absorbents for CO ₂ capture: Amine permeation through the membrane. <i>Journal of Membrane Science</i> , 2017, 537, 272-282.	4.1	37
81	Viscosity measurements and modeling of loaded and unloaded aqueous solutions of MDEA, DMEA, DEEA and MAPA. <i>Chemical Engineering Science</i> , 2017, 171, 340-350.	1.9	21
82	A review of potential amine solvents for CO ₂ absorption process: Absorption capacity, cyclic capacity and pKa. <i>International Journal of Greenhouse Gas Control</i> , 2017, 61, 27-48.	2.3	196
83	Characterization and modelling of aerosol droplet in absorption columns. <i>International Journal of Greenhouse Gas Control</i> , 2017, 58, 114-126.	2.3	14
84	Calorimetric Studies of Precipitating Solvent System. <i>Energy Procedia</i> , 2017, 114, 744-755.	1.8	3
85	Determination of Kinetics of CO ₂ Absorption in Unloaded and Loaded DEEA+MAPA Blend. <i>Energy Procedia</i> , 2017, 114, 1772-1784.	1.8	11
86	Analysis of the Protonation Constant (pKa) and Absorption Properties of Non-alkanolamines. <i>Energy Procedia</i> , 2017, 114, 2590-2598.	1.8	5
87	Gas phase amine depletion created by aerosol formation and growth. <i>International Journal of Greenhouse Gas Control</i> , 2017, 64, 212-222.	2.3	18
88	ASPEN PLUS simulation model for CO ₂ removal with MEA: Validation of desorption model with experimental data. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 4693-4701.	3.3	42
89	Applicability of enhancement factor models for CO ₂ absorption into aqueous MEA solutions. <i>Applied Energy</i> , 2017, 206, 765-783.	5.1	18
90	Solvent-templated Block Ionomers for Base- and Acid- Gas Separations: Effect of Humidity on Ammonia and Carbon Dioxide Permeation. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700854.	1.9	25

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91	Effect of Amine Volatility on Aerosol Droplet Development in Absorption Columns. Energy Procedia, 2017, 114, 977-986.	1.8	6
92	Kinetics of CO ₂ Absorption in to Aqueous MEA Solutions Near Equilibrium. Energy Procedia, 2017, 114, 1576-1583.	1.8	10
93	Performance of MAPA Promoted Tertiary Amine Systems for CO ₂ Absorption: Influence of Alkyl Chain Length and Hydroxyl Groups. Energy Procedia, 2017, 114, 1682-1688.	1.8	5
94	Promoted Strong Bicarbonate Forming Solvents for CO ₂ Capture. Energy Procedia, 2017, 114, 1794-1802.	1.8	5
95	Study of the effect of condensation and evaporation of water on heat and mass transfer in CO ₂ absorption column. Chemical Engineering Science, 2017, 172, 353-369.	1.9	2
96	Mathematical modeling and validation of CO ₂ mass transfer in a membrane contactor using ionic liquids for pre-combustion CO ₂ capture. Chemical Engineering Research and Design, 2017, 123, 377-387.	2.7	19
97	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
98	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
99	Facile fabrication of CO ₂ 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
100	Role of Facilitated Transport Membranes and Composite Membranes for Efficient CO ₂ Capture – A Review. ChemBioEng Reviews, 2016, 3, 68-85.	2.6	97
101	Development of Membrane Contactors Using Phase Change Solvents for CO ₂ Capture: Material Compatibility Study. Industrial & Engineering Chemistry Research, 2016, 55, 13102-13113.	1.8	15
102	Thermodynamic modelling of unloaded and loaded N,N-diethylethanolamine solutions. Green Energy and Environment, 2016, 1, 246-257.	4.7	7
103	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
104	Degradation and corrosion inhibitors for MEA-based CO ₂ capture plants. International Journal of Greenhouse Gas Control, 2016, 50, 240-247.	2.3	32
105	Activity based kinetics of CO ₂ –OH ⁻ systems with Li ⁺ , Na ⁺ and K ⁺ counter ions. Chemical Engineering Science, 2016, 151, 1-6.	1.9	5
106	Precombustion CO ₂ 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
107	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
108	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

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109	Thermal stability and corrosion studies of amines for combined acid gas removal and hydrate control for subsea gas treatment systems. , 2016, , .		2
110	Extensive dataset for oxidative degradation of ethanolamine at 55–75°C and oxygen concentrations from 6 to 98%. International Journal of Greenhouse Gas Control, 2016, 50, 158-178.	2.3	17
111	Corrosion Evaluation of MEA Solutions by SEM-EDS, ICP-MS and XRD. Energy Procedia, 2016, 86, 197-204.	1.8	13
112	VLE Modeling of Aqueous Solutions of Unloaded and Loaded Hydroxides of Lithium, Sodium and Potassium. Energy Procedia, 2016, 86, 282-293.	1.8	3
113	Ether-functionalized ionic liquid based composite membranes for carbon dioxide separation. RSC Advances, 2016, 6, 45184-45192.	1.7	47
114	Pebax®/TSIL blend thin film composite membranes for CO ₂ separation. Science China Chemistry, 2016, 59, 538-546.	4.2	51
115	Biomethane production system: Energetic analysis of various scenarios. Bioresource Technology, 2016, 206, 155-163.	4.8	29
116	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
117	Corrosion and degradation in MEA based post-combustion CO ₂ capture. International Journal of Greenhouse Gas Control, 2016, 46, 48-56.	2.3	69
118	Post-combustion CO ₂ membrane absorption promoted by mimic enzyme. Journal of Membrane Science, 2016, 499, 36-46.	4.1	24
119	Kinetics of CO ₂ absorption by aqueous N,N-diethylethanolamine solutions: Literature review, experimental results and modelling. Chemical Engineering Science, 2015, 127, 1-12.	1.9	32
120	Dynamic model validation of the post-combustion CO ₂ absorption process. International Journal of Greenhouse Gas Control, 2015, 41, 127-141.	2.3	43
121	Kinetics of CO ₂ 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
122	Fabrication and Evaluation of a Blend Facilitated Transport Membrane for CO ₂ /CH ₄ Separation. Industrial & Engineering Chemistry Research, 2015, 54, 11139-11150.	1.8	40
123	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
124	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
125	Density and N ₂ O solubility of aqueous hydroxide and carbonate solutions in the temperature range from 25 to 80 °C. Chemical Engineering Science, 2015, 122, 307-320.	1.9	20
126	Activity Based Kinetics and Mass Transfer of CO ₂ Absorption Into MEA Using Penetration Theory. Energy Procedia, 2014, 63, 1196-1205.	1.8	6

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127	Effect of MEA's Degradation Products on Corrosion at CO ₂ Capture Plants. Energy Procedia, 2014, 63, 1869-1875.	1.8	23
128	Modeling of Oxidative MEA Degradation. Energy Procedia, 2014, 63, 940-950.	1.8	9
129	Oxygen and Temperature Effect on Formation of Degradation Compounds from MEA. Energy Procedia, 2014, 63, 957-975.	1.8	10
130	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
131	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
132	CO ₂ post combustion capture with a phase change solvent. Pilot plant campaign. International Journal of Greenhouse Gas Control, 2014, 31, 153-164.	2.3	102
133	Post-combustion carbon capture technologies: Energetic analysis and life cycle assessment. International Journal of Greenhouse Gas Control, 2014, 27, 289-298.	2.3	78
134	Influence of experimental setup on amine degradation. International Journal of Greenhouse Gas Control, 2014, 28, 156-167.	2.3	28
135	Kinetics of CO ₂ absorption by aqueous 3-(methylamino)propylamine solutions: Experimental results and modeling. AIChE Journal, 2014, 60, 3792-3803.	1.8	22
136	Scrubber characterization and performance using hydrocarbons at elevated pressures. Fuel, 2014, 120, 98-115.	3.4	4
137	Oxidative degradation of amines using a closed batch system. International Journal of Greenhouse Gas Control, 2013, 18, 1-14.	2.3	23
138	Destruction of nitrosoamines with UV-light. Energy Procedia, 2013, 37, 743-750.	1.8	13
139	Thermal Degradation on Already Oxidatively Degraded Solutions. Energy Procedia, 2013, 37, 2109-2117.	1.8	15
140	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
141	Precipitation of Piperazine in Aqueous Piperazine Solutions with and without CO ₂ Loadings. Industrial & Engineering Chemistry Research, 2012, 51, 12126-12134.	1.8	18
142	Operation and dynamic behavior of wire mesh pads. Chemical Engineering Science, 2012, 68, 624-639.	1.9	13
143	Post combustion CO ₂ capture with an amino acid salt. Energy Procedia, 2011, 4, 1550-1557.	1.8	55
144	Novel full height pilot plant for solvent development and model validation. Energy Procedia, 2011, 4, 1753-1760.	1.8	20

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145	Kinetics of the reaction of carbon dioxide with aqueous sodium and potassium carbonate solutions. Chemical Engineering Science, 2010, 65, 6077-6088.	1.9	82
146	Density and N ₂ O solubility of sodium and potassium carbonate solutions in the temperature range 25 to 80 Å°C. Chemical Engineering Science, 2010, 65, 2177-2182.	1.9	31
147	Vapor-liquid equilibrium in the sodium carbonate-sodium bicarbonate-water-CO ₂ -system. Chemical Engineering Science, 2010, 65, 2218-2226.	1.9	32
148	CO ₂ 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
149	Kinetics of carbonate based CO ₂ capture systems. Energy Procedia, 2009, 1, 1011-1018.	1.8	24