Paitoon Tontiwachwuthikul

List of Publications by Year in Descending Order

276 papers	9,720 citations	54 h-index	85 g-index
290 ext. papers	11,041 ext. citations	4.3 avg, IF	6.37 L-index

#	Paper	IF	Citations
276	The CO absorption and desorption analysis of tri-solvent MEA + EAE + AMP compared with MEA + BEA + AMP along with "coordination effects" evaluation.. *Environmental Science and Pollution Research*, **2022**, 1	5.1	1
275	Structure–Activity Correlation Analyses of MEA + 3A1P/MAE Isomers with a Coordinative Effect Study. *Industrial & Engineering Chemistry Research*, **2022**, 61, 3091-3103	3.9	2
274	Artificial neural network prediction of transport properties of novel MPDL-based solvents for post combustion carbon capture. *Energy Reports*, **2022**, 8, 88-94	4.6	1
273	CO2-capture research and Clean Energy Technologies Research Institute (CETRI) of University of Regina, Canada: history, current status and future development. *Clean Energy*, **2022**, 6, 883-890	4.7	1
272	Comparative desorption energy consumption of post-combustion CO2 capture integrated with mechanical vapor recompression technology. *Separation and Purification Technology*, **2022**, 294, 121202	8.3	0
271	Synthesis of CuP/SnO composites for degradation of tetracycline hydrochloride in wastewater.. *RSC Advances*, **2021**, 11, 33471-33480	3.7	2
270	Applied Artificial Neural Network for Hydrogen Sulfide Solubility in Natural Gas Purification. *ACS Omega*, **2021**, 6, 31321-31329	3.9	0
269	Density, viscosity, physical CO2 diffusivity, and CO2 absorption capacity of novel blended N-methyl-4-piperidinol and piperazine solvent. *Energy Reports*, **2021**, 7, 844-853	4.6	1
268	Numerical Simulation of Combustion of Natural Gas Mixed with Hydrogen in Gas Boilers. *Energies*, **2021**, 14, 6883	3.1	4
267	Study of "coordinative effect" within bi-blended amine MEA + AMP and MEA + BEA at 0.1 + 2–0.5 + 2 mol/L with absorption–desorption parameter analyses. *Asia-Pacific Journal of Chemical Engineering*, **2021**, 16, e2645	1.3	3
266	Experimental investigations and developing multilayer neural network models for prediction of CO2 solubility in aqueous MDEA/PZ and MEA/MDEA/PZ blends **2021**, 11, 712-733		1
265	Application of "coordinative effect" into tri-solvent MEA+BEA+AMP blends at concentrations of 0.1 + 2 + 2~0.5 + 2 + 2 mol/L with absorption, desorption and mass transfer analyses. *International Journal of Greenhouse Gas Control*, **2021**, 107, 103267	4.2	7
264	Evaluating Energy-Efficient Solutions of CO2 Capture within Tri-solvent MEA+BEA+AMP within 0.1+2+2–0.5+2+2 mol/L Combining Heterogeneous Acid–Base Catalysts. *Industrial & Engineering Chemistry Research*, **2021**, 60, 7352-7366	3.9	5
263	Technology development and applications of artificial intelligence for post-combustion carbon dioxide capture: Critical literature review and perspectives. *International Journal of Greenhouse Gas Control*, **2021**, 108, 103307	4.2	4
262	Catalytic Performance and Mechanism of Meso–Microporous Material SBA-15-Supported FeZr Catalysts for CO2 Desorption in CO2-Loaded Aqueous Amine Solution. *Industrial & Engineering Chemistry Research*, **2021**, 60, 2698-2709	3.9	0
261	The optimization and thermodynamic and economic estimation analysis for CO2 compression-liquefaction process of CCUS system using LNG cold energy. *Energy*, **2021**, 236, 121376	7.9	2
260	Parametric Process Design and Economic Analysis of Post-Combustion CO2 Capture and Compression for Coal- and Natural Gas-Fired Power Plants. *Energies*, **2020**, 13, 2519	3.1	7

259	Modified Heterogeneous Catalyst-Aided Regeneration of CO2 Capture Amines: A Promising Perspective for a Drastic Reduction in Energy Consumption. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 9526-9536	8.3	16
258	Amine-based CO2 capture aided by acid-basic bifunctional catalyst: Advancement of amine regeneration using metal modified MCM-41. *Chemical Engineering Journal*, **2020**, 383, 123077	14.7	24
257	Absorption kinetics of CO2 in novel formulated 2-amino-2-methyl-1-propanol and N-methyl-4-piperidinol solvent. *Energy Reports*, **2020**, 6, 143-150	4.6	2
256	Studies of the coordination effect of DEA-MEA blended amines (within 1 + 4 to 2 + 3 M) under heterogeneous catalysis by means of absorption and desorption parameters. *Separation and Purification Technology*, **2020**, 236, 116179	8.3	17
255	Catalytic performance and mechanism of SO42−/ZrO2/SBA-15 catalyst for CO2 desorption in CO2-loaded monoethanolamine solution. *Applied Energy*, **2020**, 259, 114179	10.7	26
254	Predictions of equilibrium solubility and mass transfer coefficient for CO2 absorption into aqueous solutions of 4-diethylamino-2-butanol using artificial neural networks. *Petroleum*, **2020**, 6, 385-391	4.1	4
253	An improved correlation to determine minimum miscibility pressure of CO2–oil system. *Green Energy and Environment*, **2020**, 5, 97-104	5.7	10
252	Kinetics and new Brønsted correlations study of CO2 absorption into primary and secondary alkanolamine with and without steric-hindrance. *Separation and Purification Technology*, **2020**, 233, 115998	8.3	18
251	Laboratory measurements of solubility and swelling factor for CO2/Brine and CO2/heavy oil binary systems under low-medium pressure and temperature. *Canadian Journal of Chemical Engineering*, **2019**, 97, 2137-2145	2.3	1
250	CO2 capture from water-gas shift process plant: Comparative bench-scale pilot plant investigation of MDEA-PZ blend vs novel MDEA activated by 1,5-diamino-2-methylpentane. *International Journal of Greenhouse Gas Control*, **2019**, 82, 218-228	4.2	7
249	Four nanoscale-extended equations of state: Phase behaviour of confined fluids in shale reservoirs. *Fuel*, **2019**, 250, 88-97	7.1	9
248	Eley-Rideal model of heterogeneous catalytic carbamate formation based on CO-MEA absorptions with CaCO, MgCO and BaCO. *Royal Society Open Science*, **2019**, 6, 190311	3.3	4
247	Carbon dioxide capture from pulp mill using 2-amino-2-methyl-1-propanol and monoethanolamine blend: Techno-economic assessment of advanced process configuration. *Applied Energy*, **2019**, 250, 1202-1216	10.7	10
246	Reducing Energy Penalty of CO Capture Using Fe Promoted SO/ZrO/MCM-41 Catalyst. *Environmental Science & Technology*, **2019**, 53, 6094-6102	10.3	46
245	Study of Catalytic CO2 Absorption and Desorption with Tertiary Amine DEEA and 1DMA-2P with the Aid of Solid Acid and Solid Alkaline Chemicals. *Molecules*, **2019**, 24,	4.8	6
244	Analysis of equilibrium CO2 solubility and thermodynamic models for aqueous 1-(2-hydoxyethyl)-piperidine solution. *AICHE Journal*, **2019**, 65, e16605	3.6	7
243	Novel models for correlation of Solubility constant and diffusivity of N2O in aqueous 1-dimethylamino-2-propanol. *Chemical Engineering Science*, **2019**, 203, 86-103	4.4	23
242	Analysis of CO2 equilibrium solubility of seven tertiary amine solvents using thermodynamic and ANN models. *Fuel*, **2019**, 249, 61-72	7.1	36

241	Viability of carbonated water injection (CWI) as a means of secondary oil recovery in heavy oil systems in presence and absence of wormholes: Microfluidic experiments. *Fuel*, **2019**, 249, 286-293	7.1	9
240	Reaction Kinetics of Carbon Dioxide in Aqueous Blends of N-Methyldiethanolamine and L-Arginine Using the Stopped-Flow Technique. *Processes*, **2019**, 7, 81	2.9	5
239	Zeolite catalyst-aided tri-solvent blend amine regeneration: An alternative pathway to reduce the energy consumption in amine-based CO2 capture process. *Applied Energy*, **2019**, 240, 827-841	10.7	35
238	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	3.9	11
237	Study on Diffusivity of CO2 in Oil-Saturated Porous Media under High Pressure and Temperature. *Energy & Fuels*, **2019**, 33, 11364-11372	4.1	6
236	Pilot and Demonstration Plants. *SpringerBriefs in Petroleum Geoscience & Engineering*, **2019**, 47-51	0.1	
235	Solvent Management. *SpringerBriefs in Petroleum Geoscience & Engineering*, **2019**, 29-45	0.1	
234	Introduction and Background Information. *SpringerBriefs in Petroleum Geoscience & Engineering*, **2019**, 1-5	0.1	
233	Solvent Property of Amine Based Solvents. *SpringerBriefs in Petroleum Geoscience & Engineering*, **2019**, 7-22	0.1	
232	Post-combustion CO2 Capture Technology. *SpringerBriefs in Petroleum Geoscience & Engineering*, **2019**,	0.1	1
231	Carbamate Formation and Amine Protonation Constants in 2-Amino-1-Butanol–CO2–H2O System and Their Temperature Dependences. *Journal of Solution Chemistry*, **2018**, 47, 262-277	1.8	5
230	CO2 desorption tests of blended monoethanolamine–diethanolamine solutions to discover novel energy efficient solvents. *Asia-Pacific Journal of Chemical Engineering*, **2018**, 13, e2186	1.3	13
229	Investigation mechanism of DEA as an activator on aqueous MEA solution for postcombustion CO2 capture. *AICHE Journal*, **2018**, 64, 2515-2525	3.6	24
228	Reaction Kinetics of Carbon Dioxide with 2-Amino-1-butanol in Aqueous Solutions Using a Stopped-Flow Technique. *Industrial & Engineering Chemistry Research*, **2018**, 57, 2797-2804	3.9	6
227	CO2 capture efficiency and heat duty of solid acid catalyst-aided CO2 desorption using blends of primary-tertiary amines. *International Journal of Greenhouse Gas Control*, **2018**, 69, 52-59	4.2	21
226	The study of CO2 absorption intensification using porous media material in aqueous AMP solution. *Petroleum*, **2018**, 4, 90-94	4.1	4
225	A comparative study of novel activated AMP using 1,5-diamino-2-methylpentane vs MEA solution for CO2 capture from gas-fired power plant. *Fuel*, **2018**, 234, 1089-1098	7.1	19
224	SO42−/ZrO2 supported on γ-Al2O3 as a catalyst for CO2 desorption from CO2-loaded monoethanolamine solutions. *AICHE Journal*, **2018**, 64, 3988-4001	3.6	28

223	Reducing energy consumption of CO2 desorption in CO2-loaded aqueous amine solution using Al2O3/HZSM-5 bifunctional catalysts. *Applied Energy*, **2018**, 229, 562-576	10.7	64
222	Catalytic-CO2-Desorption Studies of DEA and DEAMEA Blended Solutions with the Aid of Lewis and Brønsted Acids. *Industrial & Engineering Chemistry Research*, **2018**, 57, 11505-11516	3.9	22
221	A comparative kinetics study of CO2 absorption into aqueous DEEA/MEA and DMEA/MEA blended solutions. *AICHE Journal*, **2018**, 64, 1350-1358	3.6	39
220	CO2 capture from lime kiln using AMP-DA2MP amine solvent blend: A pilot plant study. *Journal of Environmental Chemical Engineering*, **2018**, 6, 7102-7110	6.8	10
219	Techno-economic analysis of CO2 capture from a 1.2 million MTPA cement plant using AMP-PZ-MEA blend. *International Journal of Greenhouse Gas Control*, **2018**, 78, 400-412	4.2	29
218	Process simulation and parametric sensitivity study of CO2 capture from 115 MW coal-fired power plant using MEADEA blend. *International Journal of Greenhouse Gas Control*, **2018**, 76, 1-11	4.2	14
217	Density, Viscosity, and N2O Solubility of Aqueous 2-(Methylamino)ethanol Solution. *Journal of Chemical & Engineering Data*, **2017**, 62, 129-140	2.8	27
216	Advancement and new perspectives of using formulated reactive amine blends for post-combustion carbon dioxide (CO2) capture technologies. *Petroleum*, **2017**, 3, 10-36	4.1	45
215	The history and development of the IEA GHG Weyburn-Midale CO2 Monitoring and Storage Project in Saskatchewan, Canada (the world largest CO2 for EOR and CCS program). *Petroleum*, **2017**, 3, 3-9	4.1	12
214	Analysis of solubility, absorption heat and kinetics of CO 2 absorption into 1-(2-hydroxyethyl)pyrrolidine solvent. *Chemical Engineering Science*, **2017**, 162, 120-130	4.4	34
213	Evaluation of the heat duty of catalyst-aided amine-based post combustion CO2 capture. *Chemical Engineering Science*, **2017**, 170, 48-57	4.4	48
212	Screening tests of aqueous alkanolamine solutions based on primary, secondary, and tertiary structure for blended aqueous amine solution selection in post combustion CO2 capture. *Chemical Engineering Science*, **2017**, 170, 574-582	4.4	61
211	Analysis of CO 2 solubility and absorption heat into 1-dimethylamino-2-propanol solution. *Chemical Engineering Science*, **2017**, 170, 3-15	4.4	60
210	Heat duty, heat of absorption, sensible heat and heat of vaporization of 2-Amino-2-Methyl-1-Propanol (AMP), Piperazine (PZ) and Monoethanolamine (MEA) tri-solvent blend for carbon dioxide (CO2) capture. *Chemical Engineering Science*, **2017**, 170, 26-35	4.4	61
209	Amine regeneration tests on MEA, DEA, and MMEA with respect to cabamate stability analyses. *Canadian Journal of Chemical Engineering*, **2017**, 95, 1471-1479	2.3	11
208	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	4.4	5
207	Mass transfer studies on catalyst-aided CO2 desorption from CO2-loaded amine solution in a post-combustion CO2 capture plant. *Chemical Engineering Science*, **2017**, 170, 508-517	4.4	23
206	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	14.7	32

205	A Novel Model for Correlation and Predication of the Equilibrium CO 2 Solubility in Seven Tertiary Solvents. *Energy Procedia*, **2017**, 105, 4476-4481	2.3	3
204	The development of kinetics model for CO2 absorption into tertiary amines containing carbonic anhydrase. *AICHE Journal*, **2017**, 63, 4933-4943	3.6	12
203	Investigation of CO2 Regeneration in Single and Blended Amine Solvents with and without Catalyst. *Industrial & Engineering Chemistry Research*, **2017**, 56, 7656-7664	3.9	45
202	Modeling of CO2 equilibrium solubility in a novel 1-Diethylamino-2-Propanol Solvent. *AICHE Journal* , **2017**, 63, 4465-4475	3.6	13
201	Reaction kinetics of carbon dioxide with aqueous solutions of l-Arginine, Glycine & Sarcosine using the stopped flow technique. *International Journal of Greenhouse Gas Control*, **2017**, 63, 47-58	4.2	14
200	Development of Ion Speciation Plots for Three Promising Tertiary Amine□CO2□H2O Systems Using the pH Method and the 13C NMR Method. *Energy & Fuels*, **2017**, 31, 3069-3080	4.1	5
199	A new model for correlation and prediction of equilibrium CO2 solubility in N-methyl-4-piperidinol solvent. *AICHE Journal*, **2017**, 63, 3395-3403	3.6	22
198	Rheological properties study of foam fracturing fluid using CO2 and surfactant. *Chemical Engineering Science*, **2017**, 170, 720-730	4.4	29
197	The analysis of solubility, absorption kinetics of CO2 absorption into aqueous 1-diethylamino-2-propanol solution. *AICHE Journal*, **2017**, 63, 2694-2704	3.6	30
196	The Study of Ion Speciation of CO2 Absorption into Aqueous 1-Dimethylamino-2-propanol Solution Using the NMR Technique. *Energy Procedia*, **2017**, 114, 1803-1810	2.3	
195	Kinetics of Carbon Dioxide (CO2) with DiethylenetriamineinNon-aqueous Solvents Using Stopped-flow Technique. *Energy Procedia*, **2017**, 114, 1869-1876	2.3	1
194	The Research on the Coordinative and Competitive Relationship between MEA and DEA Absorbing CO2 into Aqueous Blended Amine Solution. *Energy Procedia*, **2017**, 114, 1883-1889	2.3	3
193	Solvent Extraction of Degradation Products in Amine Absorption Solution for CO2 Capture in Flue Gases from Coal Combustion: Effect of Amines. *Energy Procedia*, **2017**, 114, 1980-1985	2.3	3
192	Effect of Number of Hydroxyl Group in Sterically Hindered Alkanolamine on CO2 Capture Activity. *Energy Procedia*, **2017**, 114, 1966-1972	2.3	1
191	Density, Viscosity, Refractive Index and Heat capacity Studies of Aqueous Ethylaminoethanol Solutions at 293.15 to 323.15 K. *Energy Procedia*, **2017**, 114, 1523-1529	2.3	
190	Mass Transfer Studies on Catalyst Aided Desorption Using a Blended Solvent in a Post Combustion Capture Plant. *Energy Procedia*, **2017**, 114, 1506-1513	2.3	
189	Experiments and Modeling of Vapor-liquid Equilibrium in DEEA-CO2-H2O System. *Energy Procedia*, **2017**, 114, 1530-1537	2.3	1
188	Investigation of mass transfer coefficient of CO2 absorption into amine solutions in hollow fiber membrane contactor. *Energy Procedia*, **2017**, 114, 621-626	2.3	4

187	The Effect of Chemical Structure of Newly Synthesized Tertiary Amines Used for the Post Combustion Capture Process on Carbon dioxide (CO2): Kinetics of CO2 Absorption Using the Stopped-Flow Apparatus and Regeneration, and Heat Input of CO2 Regeneration. *Energy Procedia*, **2017**, 114, 852-859	2.3	8
186	Regeneration Energy Analysis of Aqueous Tri-Solvent Blends Containing 2-Amino-2-Methyl-1-Propanol (AMP), Methyldiethanolamine (MDEA) and Diethylenetriamine (DETA) for Carbon Dioxide (CO2) Capture. *Energy Procedia*, **2017**, 114, 2039-2046	2.3	7
185	Heterogeneous catalysis of CO2-diethanolamine absorption with MgCO3 and CaCO3 and comparing to non-catalytic CO2-monoethanolamine interactions. *Reaction Kinetics, Mechanisms and Catalysis*, **2017**, 122, 539-555	1.6	12
184	Study of Ion Speciation of CO2 Absorption into Aqueous 1-Dimethylamino-2-propanol Solution Using the NMR Technique. *Industrial & Engineering Chemistry Research*, **2017**, 56, 8697-8704	3.9	4
183	Review on current advances, future challenges and consideration issues for post-combustion CO2 capture using amine-based absorbents. *Chinese Journal of Chemical Engineering*, **2016**, 24, 278-288	3.2	113
182	Carbon dioxide (CO2) capture performance of aqueous tri-solvent blends containing 2-amino-2-methyl-1-propanol (AMP) and methyldiethanolamine (MDEA) promoted by diethylenetriamine (DETA). *International Journal of Greenhouse Gas Control*, **2016**, 53, 292-304	4.2	54
181	Experiments and modeling of vapor-liquid equilibrium data in DEEA-CO2-H2O system. *International Journal of Greenhouse Gas Control*, **2016**, 53, 160-168	4.2	21
180	Reaction Kinetics of Carbon Dioxide (CO2) with Diethylenetriamine and 1-Amino-2-propanol in Nonaqueous Solvents Using Stopped-Flow Technique. *Industrial & Engineering Chemistry Research*, **2016**, 55, 7307-7317	3.9	22
179	A study of structure–activity relationships of commercial tertiary amines for post-combustion CO2 capture. *Applied Energy*, **2016**, 184, 219-229	10.7	93
178	Artificial Neural Networks for Accurate Prediction of Physical Properties of Aqueous Quaternary Systems of Carbon Dioxide (CO2)-Loaded 4-(Diethylamino)-2-butanol and Methyldiethanolamine Blended with Monoethanolamine. *Industrial & Engineering Chemistry Research*, **2016**, 55, 11614-11621	3.9	12
177	Carbon dioxide (CO2) capture: Absorption-desorption capabilities of 2-amino-2-methyl-1-propanol (AMP), piperazine (PZ) and monoethanolamine (MEA) tri-solvent blends. *Journal of Natural Gas Science and Engineering*, **2016**, 33, 742-750	4.6	78
176	New Reactive Extraction Based Reclaiming Technique for Amines Used in Carbon Dioxide Capture Process from Industrial Flue Gases. *Industrial & Engineering Chemistry Research*, **2016**, 55, 5006-5018	3.9	5
175	Human health risks of post- and oxy-fuel combustion carbon dioxide capture technologies: Hypothetically modeled scenarios. *International Journal of Greenhouse Gas Control*, **2016**, 47, 279-290	4.2	4
174	A Comparative Study of Human Health Impacts Due to Heavy Metal Emissions from a Conventional Lignite Coal-Fired Electricity Generation Station, with Post-Combustion, and Oxy- Fuel Combustion Capture Technologies **2016**,		1
173	Environmental Performance of Hypothetical Canadian Pre-Combustion Carbon Dioxide Capture Processes Using Life-Cycle Techniques. *Technologies*, **2016**, 4, 9	2.4	
172	Experimental study on the solvent regeneration of a CO2-loaded MEA solution using single and hybrid solid acid catalysts. *AICHE Journal*, **2016**, 62, 753-765	3.6	78
171	Reaction kinetics of carbon dioxide in aqueous blends of N-methyldiethanolamine and glycine using the stopped flow technique. *Journal of Natural Gas Science and Engineering*, **2016**, 33, 186-195	4.6	12
170	Synthesis of new amines for enhanced carbon dioxide (CO2) capture performance: The effect of chemical structure on equilibrium solubility, cyclic capacity, kinetics of absorption and regeneration, and heats of absorption and regeneration. *Separation and Purification Technology*, **2016**, 167, 97-107	8.3	63

169	Study of cyclic CO2 injection for low-pressure light oil recovery under reservoir conditions. *Fuel*, **2016**, 174, 296-306	7.1	42
168	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	8.3	49
167	Solubility, absorption heat and mass transfer studies of CO2 absorption into aqueous solution of 1-dimethylamino-2-propanol. *Fuel*, **2015**, 144, 121-129	7.1	64
166	Determination of Vapor□iquid Equilibrium (VLE) Plots of 1-Dimethylamino-2-propanol Solutions Using the pH Method. *Industrial & Engineering Chemistry Research*, **2015**, 54, 4709-4716	3.9	20
165	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	4.2	291
164	Practical experience in post-combustion CO2 capture using reactive solvents in large pilot and demonstration plants. *International Journal of Greenhouse Gas Control*, **2015**, 40, 6-25	4.2	85
163	Simulation Studies of Process Improvement of Three-Tower Low-Temperature Distillation Process to Minimize Energy Consumption for Separation of Produced Gas of CO2-Enhanced Oil Recovery (EOR). *Canadian Journal of Chemical Engineering*, **2015**, 93, 1266-1274	2.3	0
162	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	14.7	24
161	Enhanced light oil recovery from tight formations through CO 2 huff □□puff processes. *Fuel*, **2015**, 154, 35-44	7.1	80
160	Experimental Studies of Reboiler Heat Duty for CO2 Desorption from Triethylenetetramine (TETA) and Triethylenetetramine (TETA) + N-Methyldiethanolamine (MDEA). *Industrial & Engineering Chemistry Research*, **2015**, 54, 8554-8560	3.9	14
159	Experimental analyses of mass transfer and heat transfer of post-combustion CO2 absorption using hybrid solvent MEA□MeOH in an absorber. *Chemical Engineering Journal*, **2015**, 260, 11-19	14.7	54
158	Kinetics and Reactor Modeling of the Steam Reforming of Methanol over a Mn-Promoted Cu/Al Catalyst. *Chemical Engineering and Technology*, **2015**, 38, 2305-2315	2	6
157	Comparison of Overall Gas-Phase Mass Transfer Coefficient for CO2 Absorption between Tertiary Amines in a Randomly Packed Column. *Chemical Engineering and Technology*, **2015**, 38, 1435-1443	2	20
156	Artificial neural network models for the prediction of CO2 solubility in aqueous amine solutions. *International Journal of Greenhouse Gas Control*, **2015**, 39, 174-184	4.2	31
155	Investigation of the effects of operating parameters on the local mass transfer coefficient and membrane wetting in a membrane gas absorption process. *Journal of Membrane Science*, **2015**, 490, 236-246	5.6	44
154	Analysis of Reaction Kinetics of CO2 Absorption into a Novel 1-(2-Hydroxyethyl)-piperidine Solvent Using Stopped-Flow Technique. *Industrial & Engineering Chemistry Research*, **2015**, 54, 12525-12533	3.9	12
153	Kinetics of CO2 absorption into a novel 1-diethylamino-2-propanol solvent using stopped-flow technique. *AICHE Journal*, **2014**, 60, 3502-3510	3.6	56
152	High-Pressure Solubility of Carbon Dioxide (CO2) in Aqueous 1-Methyl Piperazine Solution. *Journal of Chemical & Engineering Data*, **2014**, 59, 3610-3623	2.8	10

151	Analysis of Mass Transfer Performance of Monoethanolamine-Based CO2 Absorption in a Packed Column Using Artificial Neural Networks. *Industrial & Engineering Chemistry Research*, **2014**, 53, 4413-4423	3.9	29
150	Physical and Chemical Resistance of Elastomers in Aqueous Monoethanolamine (MEA) and CO2-Loaded MEA Solutions during Postcombustion Carbon Dioxide Capture Processes. *Industrial & Engineering Chemistry Research*, **2014**, 53, 5932-5940	3.9	6
149	A life cycle assessment study of a hypothetical Canadian oxy-fuel combustion carbon dioxide capture process. *International Journal of Greenhouse Gas Control*, **2014**, 28, 257-274	4.2	20
148	1D NMR Analysis of a Quaternary MEA□DEAB□CO2□H2O Amine System: Liquid Phase Speciation and Vapor□Liquid Equilibria at CO2 Absorption and Solvent Regeneration Conditions. *Industrial & Engineering Chemistry Research*, **2014**, 53, 8577-8591	3.9	27
147	CO2 absorption kinetics of 4-diethylamine-2-butanol solvent using stopped-flow technique. *Separation and Purification Technology*, **2014**, 136, 81-87	8.3	30
146	The genetic algorithm based back propagation neural network for MMP prediction in CO2-EOR process. *Fuel*, **2014**, 126, 202-212	7.1	131
145	A life cycle assessment study of a Canadian post-combustion carbon dioxide capture process system. *International Journal of Life Cycle Assessment*, **2014**, 19, 357-369	4.6	12
144	Comparative studies of heat duty and total equivalent work of a new heat pump distillation with split flow process, conventional split flow process, and conventional baseline process for CO2 capture using monoethanolamine. *International Journal of Greenhouse Gas Control*, **2014**, 24, 87-97	4.2	43
143	Catalytic and non catalytic solvent regeneration during absorption-based CO2 capture with single and blended reactive amine solvents. *International Journal of Greenhouse Gas Control*, **2014**, 26, 39-50	4.2	116
142	An expert system for monitoring and diagnosis of ammonia emissions from the post-combustion carbon dioxide capture process system. *International Journal of Greenhouse Gas Control*, **2014**, 26, 158-168	4.2	6
141	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	2.3	
140	A Comparative of Life Cycle Assessment of Post-combustion, Pre-combustion and Oxy-fuel CO2 Capture. *Energy Procedia*, **2014**, 63, 7452-7458	2.3	16
139	Thermal and Oxidative Degradation of Aqueous N, N-Diethylethanolamine (DEEA) at Stripping Conditions for CO2 Capture. *Energy Procedia*, **2014**, 63, 1911-1918	2.3	11
138	Life Cycle Assessment of Post-combustion CO2 Capture and CO2-Enhanced Oil Recovery Based on the Boundary Dam Integrated Carbon Capture and Storage Demonstration Project in Saskatchewan. *Energy Procedia*, **2014**, 63, 7398-7407	2.3	13
137	Study of Physical and Chemical Resistance of Elastomers in Aqueous MEA and MEA+CO2 Solutions during the Carbon Dioxide Absorption Process. *Energy Procedia*, **2014**, 63, 1415-1423	2.3	3
136	Catalytic Solvent Regeneration Using Hot Water During Amine Based CO2 Capture Process. *Energy Procedia*, **2014**, 63, 266-272	2.3	9
135	Catalytic Solvent Regeneration Using Hot Water During Amine Based CO2 Capture Process. *Energy Procedia*, **2014**, 63, 273-278	2.3	6
134	Life cycle assessment of a hypothetical Canadian pre-combustion carbon dioxide capture process system. *Carbon Management*, **2014**, 5, 519-534	3.3	5

133	Experimental studies of regeneration heat duty for CO2 desorption from diethylenetriamine (DETA) solution in a stripper column packed with Dixon ring random packing. *Fuel*, **2014**, 136, 261-267	7.1	56
132	1D absorption kinetics modeling of CO2DEABH2O system. *International Journal of Greenhouse Gas Control*, **2013**, 12, 390-398	4.2	16
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