Gary T Rochelle

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

211 papers	13,823 citations	50 h-index	114 g-index
217 ext. papers	15,109 ext. citations	3.9 avg, IF	7.27 L-index

#	Paper	IF	Citations
211	Amine scrubbing for CO2 capture. *Science*, **2009**, 325, 1652-4	33.3	2896
210	Carbon capture and storage update. *Energy and Environmental Science*, **2014**, 7, 130-189	35.4	1404
209	Absorption of carbon dioxide into aqueous piperazine: reaction kinetics, mass transfer and solubility. *Chemical Engineering Science*, **2000**, 55, 5531-5543	4.4	469
208	Model of vapor-liquid equilibria for aqueous acid gas-alkanolamine systems using the electrolyte-NRTL equation. *Industrial & Engineering Chemistry Research*, **1989**, 28, 1060-1073	3.9	406
207	Aqueous piperazine as the new standard for CO2 capture technology. *Chemical Engineering Journal*, **2011**, 171, 725-733	14.7	348
206	Carbon dioxide capture with concentrated, aqueous piperazine. *International Journal of Greenhouse Gas Control*, **2010**, 4, 119-124	4.2	268
205	Modeling of CO2 capture by aqueous monoethanolamine. *AICHE Journal*, **2003**, 49, 1676-1686	3.6	266
204	Alternative stripper configurations for CO2 capture by aqueous amines. *AICHE Journal*, **2007**, 53, 3144-3154	3.6	237
203	Energy Performance of Stripper Configurations for CO2Capture by Aqueous Amines. *Industrial & Engineering Chemistry Research*, **2006**, 45, 2457-2464	3.9	232
202	Absorption of carbon dioxide in aqueous piperazine/methyldiethanolamine. *AICHE Journal*, **2002**, 48, 2788-2799	3.6	219
201	Carbon dioxide absorption with aqueous potassium carbonate promoted by piperazine. *Chemical Engineering Science*, **2004**, 59, 3619-3630	4.4	211
200	Monoethanolamine Degradation: O2 Mass Transfer Effects under CO2 Capture Conditions. *Industrial & Engineering Chemistry Research*, **2004**, 43, 6400-6408	3.9	211
199	Oxidative Degradation of Monoethanolamine. *Industrial & Engineering Chemistry Research*, **2002**, 41, 4178-4186	3.9	208
198	Rate-Based Process Modeling Study of CO2 Capture with Aqueous Monoethanolamine Solution. *Industrial & Engineering Chemistry Research*, **2009**, 48, 9233-9246	3.9	205
197	Thermal degradation of monoethanolamine at stripper conditions. *Energy Procedia*, **2009**, 1, 327-333	2.3	198
196	Innovative Absorber/Stripper Configurations for CO2 Capture by Aqueous Monoethanolamine. *Industrial & Engineering Chemistry Research*, **2006**, 45, 2465-2472	3.9	191
195	Carbon Dioxide Absorption and Desorption in Aqueous Monoethanolamine Solutions in a Rotating Packed Bed. *Industrial & Engineering Chemistry Research*, **2007**, 46, 2823-2833	3.9	177

194	Effects of the Temperature Bulge in CO2 Absorption from Flue Gas by Aqueous Monoethanolamine. *Industrial & Engineering Chemistry Research*, **2008**, 47, 867-875	3.9	160
193	Thermodynamics of Piperazine/Methyldiethanolamine/Water/Carbon Dioxide. *Industrial & Engineering Chemistry Research*, **2002**, 41, 604-612	3.9	148
192	Kinetics of Carbon Dioxide Absorption into Aqueous Potassium Carbonate and Piperazine. *Industrial & Engineering Chemistry Research*, **2006**, 45, 2531-2545	3.9	147
191	Amine volatility in CO2 capture. *International Journal of Greenhouse Gas Control*, **2010**, 4, 707-715	4.2	139
190	Oxidation Inhibitors for Copper and Iron Catalyzed Degradation of Monoethanolamine in CO2 Capture Processes. *Industrial & Engineering Chemistry Research*, **2006**, 45, 2513-2521	3.9	126
189	Thermal degradation of amines for CO2 capture. *Current Opinion in Chemical Engineering*, **2012**, 1, 183-190	3.4	122
188	Degradation of aqueous piperazine in carbon dioxide capture. *International Journal of Greenhouse Gas Control*, **2010**, 4, 756-761	4.2	118
187	Thermodynamics of aqueous potassium carbonate, piperazine, and carbon dioxide. *Fluid Phase Equilibria*, **2005**, 227, 197-213	2.5	116
186	Absorption and desorption rates of carbon dioxide with monoethanolamine and piperazine. *Energy Procedia*, **2009**, 1, 1163-1169	2.3	107
185	Nitrogen Dioxide Absorption and Sulfite Oxidation in Aqueous Sulfite. *Environmental Science & Technology*, **1998**, 32, 1994-2003	10.3	101
184	A Thermodynamic Model of Methyldiethanolamine□CO2□H2S□Water. *Industrial & Engineering Chemistry Research*, **1997**, 36, 3944-3953	3.9	99
183	A dimensionless model for predicting the mass-transfer area of structured packing. *AICHE Journal*, **2011**, 57, 1173-1184	3.6	98
182	Dynamic Modeling to Minimize Energy Use for CO2 Capture in Power Plants by Aqueous Monoethanolamine. *Industrial & Engineering Chemistry Research*, **2009**, 48, 6105-6111	3.9	97
181	Stripper configurations for CO2 capture by aqueous monoethanolamine. *Chemical Engineering Research and Design*, **2011**, 89, 1639-1646	5.5	95
180	CO2 Absorption Rate and Solubility in Monoethanolamine/Piperazine/Water. *Separation Science and Technology*, **2003**, 38, 337-357	2.5	92
179	MDEA/Piperazine as a solvent for CO2 capture. *Energy Procedia*, **2009**, 1, 1351-1357	2.3	89
178	Modeling CO2 capture with aqueous monoethanolamine. *International Journal of Greenhouse Gas Control*, **2010**, 4, 161-166	4.2	81
177	Reaction Products from the Oxidative Degradation of Monoethanolamine. *Industrial & Engineering Chemistry Research*, **2011**, 50, 667-673	3.9	80

176	Aqueous ethylenediamine for CO(2) capture. *ChemSusChem*, **2010**, 3, 913-8	8.3	80
175	Aqueous piperazine derivatives for CO2 capture: Accurate screening by a wetted wall column. *Chemical Engineering Research and Design*, **2011**, 89, 1693-1710	5.5	74
174	Rate-Based Modeling of Reactive Absorption of CO2 and H2S into Aqueous Methyldiethanolamine. *Industrial & Engineering Chemistry Research*, **1998**, 37, 4107-4117	3.9	73
173	Numerical simulation of theories for gas absorption with chemical reaction. *AICHE Journal*, **1989**, 35, 1271-1281	3.6	73
172	Carbon dioxide capture with concentrated, aqueous piperazine. *Energy Procedia*, **2009**, 1, 1489-1496	2.3	70
171	Amine blends using concentrated piperazine. *Energy Procedia*, **2013**, 37, 353-369	2.3	65
170	CO2 Absorption Rate into Concentrated Aqueous Monoethanolamine and Piperazine. *Journal of Chemical & Engineering Data*, **2011**, 56, 2187-2195	2.8	63
169	Catalysts and inhibitors for oxidative degradation of monoethanolamine. *International Journal of Greenhouse Gas Control*, **2009**, 3, 704-711	4.2	62
168	Optimizing post-combustion CO2 capture in response to volatile electricity prices. *International Journal of Greenhouse Gas Control*, **2012**, 8, 180-195	4.2	60
167	CO2 absorption into aqueous mixtures of diglycolamine□ and methyldiethanolamine. *Chemical Engineering Science*, **2000**, 55, 5125-5140	4.4	58
166	Regeneration with Rich Bypass of Aqueous Piperazine and Monoethanolamine for CO2 Capture. *Industrial & Engineering Chemistry Research*, **2014**, 53, 4067-4074	3.9	56
165	Influence of Surface Tension on Effective Packing Area. *Industrial & Engineering Chemistry Research*, **2008**, 47, 1253-1260	3.9	52
164	Rate modeling of CO2 stripping from potassium carbonate promoted by piperazine?. *International Journal of Greenhouse Gas Control*, **2009**, 3, 121-132	4.2	51
163	Turning CO2 Capture On and Off in Response to Electric Grid Demand: A Baseline Analysis of Emissions and Economics. *Journal of Energy Resources Technology, Transactions of the ASME*, **2010**, 132,	2.6	50
162	Modeling CO2 capture with aqueous monoethanolamine. *Energy Procedia*, **2009**, 1, 1171-1178	2.3	50
161	Accurate screening of amines by the Wetted Wall Column. *Energy Procedia*, **2011**, 4, 101-108	2.3	49
160	Total pressure and CO2 solubility at high temperature in aqueous amines. *Energy Procedia*, **2011**, 4, 117-124	2.3	49
159	A simple model for prediction of acid gas solubilities in alkanolamines. *Separation and Purification Technology*, **1996**, 10, 181-186		48

158	Influence of viscosity and surface tension on the effective mass transfer area of structured packing. *Energy Procedia*, **2009**, 1, 1197-1204	2.3	47
157	Capacity and absorption rate of tertiary and hindered amines blended with piperazine for CO 2 capture. *Chemical Engineering Science*, **2016**, 155, 397-404	4.4	47
156	Physical and chemical solubility of carbon dioxide in aqueous methyldiethanolamine. *Fluid Phase Equilibria*, **2000**, 168, 241-258	2.5	46
155	Simultaneous sulfur dioxide and nitrogen dioxide removal by calcium hydroxide and calcium silicate solids. *Journal of the Air and Waste Management Association*, **1998**, 48, 819-28	2.4	46
154	CO2 absorption rate in semi-aqueous monoethanolamine. *Chemical Engineering Science*, **2018**, 182, 56-66	4.4	44
153	Stripper configurations for CO2 capture by aqueous monoethanolamine and piperazine. *Energy Procedia*, **2011**, 4, 1323-1330	2.3	44
152	Volatility of aqueous amines in CO2 capture. *Energy Procedia*, **2011**, 4, 1624-1630	2.3	44
151	Approaching a reversible stripping process for CO2 capture. *Chemical Engineering Journal*, **2016**, 283, 1033-1043	14.7	42
150	Decomposition of nitrosamines in CO2 capture by aqueous piperazine or monoethanolamine. *Environmental Science & Technology*, **2014**, 48, 5996-6002	10.3	42
149	Foaming of aqueous piperazine and monoethanolamine for CO2 capture. *International Journal of Greenhouse Gas Control*, **2011**, 5, 381-386	4.2	41
148	Piperazine Degradation in Pilot Plants. *Energy Procedia*, **2013**, 37, 1912-1923	2.3	40
147	Hybrid Membrane-absorption CO2 Capture Process. *Energy Procedia*, **2014**, 63, 605-613	2.3	40
146	Kinetics of N-nitrosopiperazine formation from nitrite and piperazine in CO2 capture. *Environmental Science & Technology*, **2013**, 47, 3528-34	10.3	40
145	Degradation of aqueous methyldiethanolamine by temperature and oxygen cycling. *Energy Procedia*, **2011**, 4, 23-28	2.3	36
144	Catalysts and inhibitors for MEA oxidation. *Energy Procedia*, **2009**, 1, 1179-1185	2.3	35
143	Nitrosamine formation in amine scrubbing at desorber temperatures. *Environmental Science & Technology*, **2014**, 48, 8777-83	10.3	34
142	Density and Viscosity of Aqueous (Piperazine + Carbon Dioxide) Solutions. *Journal of Chemical & Engineering Data*, **2011**, 56, 574-581	2.8	34
141	Optimization of Advanced Flash Stripper for CO2 Capture using Piperazine. *Energy Procedia*, **2014**, 63, 1504-1513	2.3	33

140	Thermal degradation of piperazine and its structural analogs. *Energy Procedia*, **2011**, 4, 43-50	2.3	33
139	Limestone dissolution in stack gas desulfurization. A mass-transfer model is shown to predict the the measured dissolution rates with less than 30% error. *Environmental Progress*, **1982**, 1, 52-58		33
138	Modeling pilot plant results for CO2 capture by aqueous piperazine. *Energy Procedia*, **2011**, 4, 1593-1600	2.3	31
137	Absorber Intercooling Configurations using Aqueous Piperazine for Capture from Sources with 4 to 27% CO2. *Energy Procedia*, **2014**, 63, 1637-1656	2.3	30
136	Characterization of Piperazine/2-Aminomethylpropanol for Carbon Dioxide Capture. *Energy Procedia*, **2013**, 37, 340-352	2.3	30
135	Absorption of CO2 in Aqueous Diglycolamine. *Industrial & Engineering Chemistry Research*, **2006**, 45, 2473-2482	3.9	30
134	Liquid-phase mass transfer in spray contactors. *AICHE Journal*, **2003**, 49, 2363-2373	3.6	29
133	Dry Absorption of HCL and SO2 with Hydrated Lime from Humidified Flue Gas. *Industrial & Engineering Chemistry Research*, **1999**, 38, 4068-4080	3.9	29
132	Pilot plant test of the advanced flash stripper for CO capture. *Faraday Discussions*, **2016**, 192, 37-58	3.6	29
131	Piperazine/4-hydroxy-1-methylpiperidine for CO2 capture. *Chemical Engineering Journal*, **2017**, 307, 258-263	4.7	28
130	Regulatory Control of Amine Scrubbing for CO2 Capture from Power Plants. *Industrial & Engineering Chemistry Research*, **2016**, 55, 4646-4657	3.9	28
129	Products and process variables in oxidation of monoethanolamine for CO2 capture. *International Journal of Greenhouse Gas Control*, **2013**, 12, 472-477	4.2	27
128	Effectiveness of absorber intercooling for CO 2 absorption from natural gas fired flue gases using monoethanolamine solvent. *International Journal of Greenhouse Gas Control*, **2017**, 58, 246-255	4.2	26
127	Effect of Liquid Viscosity on the Liquid Phase Mass Transfer Coefficient of Packing. *Energy Procedia*, **2014**, 63, 1268-1286	2.3	26
126	CO2 solubility and mass transfer in water-lean solvents. *Chemical Engineering Science*, **2019**, 202, 403-416	4.4	25
125	Mass Transfer Parameters for Packings: Effect of Viscosity. *Industrial & Engineering Chemistry Research*, **2018**, 57, 718-729	3.9	25
124	Modeling Aerosols in Amine-based CO2 Capture. *Energy Procedia*, **2013**, 37, 1706-1719	2.3	25
123	Limestone Dissolution in Flue Gas Scrubbing: Effect of Sulfite. *Journal of the Air and Waste Management Association*, **1992**, 42, 926-935		25

122	Removal of SO2 and NOX from Stack Gas by Reaction with Calcium Hydroxide Solids. *Japca*, **1989**, 39, 175-179		25
121	CO2 absorption rate and capacity of semi-aqueous piperazine for CO2 capture. *International Journal of Greenhouse Gas Control*, **2019**, 85, 182-186	4.2	24
120	Thermodynamic modeling of piperazine/2-aminomethylpropanol/CO2/water. *Chemical Engineering Science*, **2014**, 117, 331-341	4.4	24
119	Lost work: A comparison of water-lean solvent to a second generation aqueous amine process for CO2 capture. *International Journal of Greenhouse Gas Control*, **2019**, 84, 82-90	4.2	23
118	Mercury Absorption in Aqueous Oxidants Catalyzed by Mercury(II). *Industrial & Engineering Chemistry Research*, **1998**, 37, 380-387	3.9	23
117	Energy Performance of Advanced Reboiled and Flash Stripper Configurations for CO2 Capture Using Monoethanolamine. *Industrial & Engineering Chemistry Research*, **2016**, 55, 4622-4631	3.9	23
116	Volatility of amines for CO 2 capture. *International Journal of Greenhouse Gas Control*, **2017**, 58, 1-9	4.2	22
115	Pilot plant demonstration of piperazine with the advanced flash stripper. *International Journal of Greenhouse Gas Control*, **2019**, 84, 72-81	4.2	22
114	Oxidative Degradation of Amines With High-Temperature Cycling. *Energy Procedia*, **2013**, 37, 2118-2132	2.3	22
113	Modeling piperazine thermodynamics. *Energy Procedia*, **2011**, 4, 35-42	2.3	22
112	Aqueous 3-(methylamino)propylamine for CO2 capture. *International Journal of Greenhouse Gas Control*, **2013**, 15, 70-77	4.2	21
111	Pilot-scale parametric evaluation of concentrated piperazine for CO2 capture at an Australian coal-fired power station **2015**, 5, 7-16		21
110	Packing Characterization: Mass Transfer Properties. *Energy Procedia*, **2012**, 23, 23-32	2.3	21
109	Modeling of CO2 Absorption Kinetics in Aqueous 2-Methylpiperazine. *Industrial & Engineering Chemistry Research*, **2013**, 52, 4239-4248	3.9	21
108	Advanced Amine Solvent Formulations and Process Integration for Near-Term CO2 Capture Success		21
107	Demonstration of 99% CO2 removal from coal flue gas by amine scrubbing. *International Journal of Greenhouse Gas Control*, **2019**, 83, 236-244	4.2	20
106	Pilot-scale evaluation of concentrated piperazine for CO2 capture at an Australian coal-fired power station: Nitrosamine measurements. *International Journal of Greenhouse Gas Control*, **2015**, 37, 256-263	4.2	20
105	Modeling pilot plant results for CO2 stripping using piperazine in two stage flash. *Energy Procedia*, **2013**, 37, 386-399	2.3	20

104	Oxidation of amines at absorber conditions for CO2 capture from flue gas. *Energy Procedia*, **2011**, 4, 171-178	2.3	20
103	Thermodynamics and Equilibrium Solubility of Carbon Dioxide in Diglycolamine/Morpholine/Water. *Journal of Chemical & Engineering Data*, **2006**, 51, 708-717	2.8	20
102	Thermal degradation of novel piperazine-based amine blends for CO 2 capture. *International Journal of Greenhouse Gas Control*, **2016**, 49, 239-249	4.2	19
101	Aqueous Piperazine/N-(2-Aminoethyl) Piperazine for CO2 Capture. *Energy Procedia*, **2013**, 37, 1621-1638	2.3	19
100	Absorber modeling for NGCC carbon capture with aqueous piperazine. *Faraday Discussions*, **2016**, 192, 459-477	3.6	18
99	Maximizing coal-fired power plant efficiency with integration of amine-based CO2 capture in greenfield and retrofit scenarios. *Energy*, **2014**, 72, 824-831	7.9	18
98	Modeling CO2 absorption into concentrated aqueous monoethanolamine and piperazine. *Chemical Engineering Science*, **2011**, 66, 5212-5218	4.4	18
97	Preparation of calcium silicate absorbent from iron blast furnace slag. *Journal of the Air and Waste Management Association*, **2000**, 50, 1655-62	2.4	18
96	Rate-based modeling and economic optimization of next-generation amine-based carbon capture plants. *Applied Energy*, **2019**, 252, 113379	10.7	17
95	Control Relevant Model of Amine Scrubbing for CO2 Capture from Power Plants. *Industrial & Engineering Chemistry Research*, **2016**, 55, 1690-1700	3.9	17
94	Inhibitors of Monoethanolamine Oxidation in CO2 Capture Processes. *Industrial & Engineering Chemistry Research*, **2014**, 53, 16222-16228	3.9	17
93	Modeling of pilot stripper results for CO2 capture by aqueous piperazine. *International Journal of Greenhouse Gas Control*, **2013**, 12, 280-287	4.2	17
92	Thermodynamics of CO2/2-Methylpiperazine/Water. *Industrial & Engineering Chemistry Research*, **2013**, 52, 4229-4238	3.9	17
91	Nitrogen Dioxide Reaction with Alkaline Solids. *Industrial & Engineering Chemistry Research*, **1996**, 35, 999-1005	3.9	17
90	Hg absorption in aqueous permanganate. *AICHE Journal*, **1996**, 42, 3559-3562	3.6	17
89	Optimum heat of absorption for CO 2 capture using the advanced flash stripper. *International Journal of Greenhouse Gas Control*, **2016**, 53, 169-177	4.2	17
88	Thermal Decomposition of N-nitrosopiperazine. *Energy Procedia*, **2013**, 37, 1678-1686	2.3	16
87	Pilot Plant Results with Piperazine. *Energy Procedia*, **2013**, 37, 1572-1583	2.3	16

86	Modeling of absorber pilot plant performance for CO_2 capture with aqueous piperazine. *International Journal of Greenhouse Gas Control*, **2017**, 64, 300-313	4.2	16
85	Thermal Degradation of Linear Amines for CO_2 Capture. *Energy Procedia*, **2014**, 63, 1558-1568	2.3	16
84	Pilot Plant Activities with Concentrated Piperazine. *Energy Procedia*, **2014**, 63, 1376-1391	2.3	16
83	Absorption of CO_2 in aqueous blends of diglycolamine and morpholine. *Chemical Engineering Science*, **2006**, 61, 3830-3837	4.4	16
82	Approximate simulation of CO_2 and H2s absorption into aqueous alkanolamines. *AICHE Journal*, **1993**, 39, 1389-1397	3.6	16
81	Calcium sulfite hemihydrate: Crystal growth rate and crystal habit. *Environmental Progress*, **1986**, 5, 5-11		16
80	Thermodynamic and Mass-Transfer Modeling of Carbon Dioxide Absorption into Aqueous 2-Amino-2-Methyl-1-Propanol. *Industrial & Engineering Chemistry Research*, **2017**, 56, 319-330	3.9	15
79	Reaction kinetics of carbon dioxide and hydroxide in aqueous glycerol. *Chemical Engineering Science* , **2017**, 161, 151-158	4.4	15
78	Dynamic modeling and control of an intercooled absorber for post-combustion CO_2 capture. *Chemical Engineering and Processing: Process Intensification*, **2016**, 107, 1-10	3.7	15
77	Energy Performance of Advanced Stripper Configurations. *Energy Procedia*, **2013**, 37, 1696-1705	2.3	15
76	Nitrosamine formation and mitigation in blended amines for CO 2 capture. *International Journal of Greenhouse Gas Control*, **2015**, 39, 329-334	4.2	15
75	Absorption of Nitrogen Oxides in Aqueous Amines. *Energy Procedia*, **2014**, 63, 830-847	2.3	15
74	Dimensionless Models for Predicting the Effective Area, Liquid-Film, and Gas-Film Mass-Transfer Coefficients of Packing. *Industrial & Engineering Chemistry Research*, **2016**, 55, 5373-5384	3.9	15
73	Thermodynamic and mass transfer modeling of carbon dioxide absorption into aqueous 2-piperidineethanol. *Chemical Engineering Science*, **2016**, 153, 295-307	4.4	15
72	Thermal Degradation of Piperazine Blends with Diamines. *Energy Procedia*, **2013**, 37, 1904-1911	2.3	14
71	Absorption rates and CO_2 solubility in new piperazine blends. *Energy Procedia*, **2013**, 37, 370-385	2.3	14
70	Modeling Pilot Plant Performance of an Absorber with Aqueous Piperazine. *Energy Procedia*, **2013**, 37, 1987-2001	2.3	13
69	Carbon Capture with 4 m Piperazine/4 m 2-Methylpiperazine. *Energy Procedia*, **2013**, 37, 436-447	2.3	13

68	Optimal CO2 Capture Operation in an Advanced Electric Grid. *Energy Procedia*, **2013**, 37, 2585-2594	2.3	13
67	Two-Stage Flash for CO2 Regeneration: Dynamic Modeling and Pilot Plant Validation. *Energy Procedia*, **2013**, 37, 2133-2144	2.3	13
66	Effect of Liquid Viscosity on Mass Transfer Area and Liquid Film Mass Transfer Coefficient for GT-OPTIMPAK 250Y. *Energy Procedia*, **2017**, 114, 2713-2727	2.3	13
65	CO2 absorption rate in biphasic solvent of aminoethylethanolamine and diethylethanolamine. *Chemical Engineering Journal*, **2021**, 404, 126503	14.7	12
64	Pilot testing of a heat integrated 0.7 MWe CO2 capture system with two-stage air-stripping: Emission. *International Journal of Greenhouse Gas Control*, **2017**, 64, 267-275	4.2	11
63	NO2-Catalyzed Sulfite Oxidation. *Industrial & Engineering Chemistry Research*, **2015**, 54, 4815-4822	3.9	11
62	Effects of Viscosity on CO2 Absorption in Aqueous Piperazine/2-methylpiperazine. *Energy Procedia*, **2017**, 114, 2103-2120	2.3	11
61	Nitrogen Dioxide Absorption and Sulfide Oxidation in Aqueous Sulfide. *Journal of the Air and Waste Management Association*, **1999**, 49, 332-338	2.4	11
60	CO2 Absorption from Gas Turbine Flue Gas by Aqueous Piperazine with Intercooling. *Industrial & Engineering Chemistry Research*, **2020**, 59, 7174-7181	3.9	11
59	Managing n-nitrosopiperazine and dinitrosopiperazine. *Energy Procedia*, **2013**, 37, 273-284	2.3	10
58	Pilot-scale evaluation of concentrated piperazine for CO2 capture at an Australian coal-fired power station: duration experiments **2015**, 5, 363-373		10
57	CO2 Mass Transfer and Solubility in Aqueous Primary and Secondary Amine. *Energy Procedia*, **2014**, 63, 1487-1496	2.3	10
56	Cold Rich Bypass to Strippers for CO2 Capture by Concentrated Piperazine. *Chemical Engineering and Technology*, **2014**, 37, 149-156	2	9
55	Characterization of Novel Structured Packings for CO2 Capture. *Energy Procedia*, **2013**, 37, 2145-2153	2.3	9
54	MEA and Piperazine Corrosion of Carbon Steel and Stainless Steel. *Energy Procedia*, **2017**, 114, 1751-1764	2.3	9
53	Modeling Amine Aerosol Growth at Realistic Pilot Plant Conditions. *Energy Procedia*, **2017**, 114, 1045-1060	2.3	9
52	Oxidative Degradation of Amine Solvents for CO2 Capture. *Energy Procedia*, **2014**, 63, 1546-1557	2.3	9
51	Absorption of HCl and SO2 from Humidified Flue Gas with Calcium Silicate Solids. *Industrial & Engineering Chemistry Research*, **2000**, 39, 1048-1060	3.9	9

50	Regeneration Design for NGCC CO2 Capture with Amine-only and Hybrid Amine/Membrane. *Energy Procedia*, **2017**, 114, 1394-1408	2.3	8
49	Preparation of calcium silicate absorbent from recycled glass. *Environmental Progress*, **1998**, 17, 86-91		8
48	Effect of limestone type and grind on SO2 scrubber performance. The cost-reduction effect of finer limestone grinding on SO2 scrubber efficiency can be very considerable. *Environmental Progress*, **1982**, 1, 59-65		8
47	Packing characterization: Absorber economic analysis. *International Journal of Greenhouse Gas Control*, **2015**, 42, 124-131	4.2	7
46	Review of Recent Pilot Plant Activities with Concentrated Piperazine. *Energy Procedia*, **2017**, 114, 1110-1127	2.3	7
45	Chlorine Absorption in Sulfite Solutions. *Separation Science and Technology*, **2004**, 39, 3057-3077	2.5	7
44	Effect of mixing on efficiencies for reactive tray contactors. *AICHE Journal*, **2002**, 48, 2537-2544	3.6	7
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42	Absorber Performance with High CO2. *Energy Procedia*, **2014**, 63, 1329-1338	2.3	6
41	Piperazine aerosol mitigation for post-combustion carbon capture. *International Journal of Greenhouse Gas Control*, **2019**, 91, 102845	4.2	6
40	Modeling Amine Aerosol Growth in the Absorber and Water Wash. *Energy Procedia*, **2017**, 114, 959-976	2.3	5
39	Heat Transfer Enhancement and Optimization of Lean/Rich Solvent Cross Exchanger for Amine Scrubbing. *Energy Procedia*, **2017**, 114, 1890-1903	2.3	5
38	Quantification of Gas and Aerosol-phase Piperazine Emissions by FTIR Under Variable Bench-scale Absorber Conditions. *Energy Procedia*, **2014**, 63, 871-883	2.3	5
37	Piperazine/N-methylpiperazine/N,N-dimethylpiperazine as an Aqueous Solvent for Carbon Dioxide Capture. *Oil and Gas Science and Technology*, **2014**, 69, 903-914	1.9	5
36	Thermodynamic Modeling of Aqueous Piperazine/N-(2-Aminoethyl) Piperazine for CO2 Capture. *Energy Procedia*, **2014**, 63, 997-1017	2.3	5
35	Absorber intercooling in CO2 absorption by piperazine-promoted potassium carbonate. *AICHE Journal*, **2009**, 56, NA-NA	3.6	5
34	Effect of Deliquescent Salt Additives on the Reaction of SO2 with Ca(OH)2. *ACS Symposium Series*, **1986**, 208-222	0.4	5
33	Amine Aerosol Characterization by Phase Doppler Interferometry. *Energy Procedia*, **2017**, 114, 939-951	2.3	4

32	CCS - A technology for now: general discussion. *Faraday Discussions*, **2016**, 192, 125-151	3.6	4
31	Dynamic Modeling, Validation, and Time Scale Decomposition of an Advanced Post-combustion Amine Scrubbing Process. *Energy Procedia*, **2014**, 63, 1296-1307	2.3	4
30	Corrosion by Aqueous Piperazine at 40–150 °C in Pilot Testing of CO2 Capture. *Industrial & Engineering Chemistry Research*, **2020**, 59, 7189-7197	3.9	3
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28	CO2 Absorption Rate and Solubility in Monoethanolamine/Piperazine/Water		3
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