

Gary T Rochelle

List of Publications by Year in Descending Order

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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	Pilot plant results with the piperazine advanced stripper at NGCC conditions. <i>International Journal of Greenhouse Gas Control</i> , 2022 , 113, 103551	4.2	2
210	Creative absorber design and optimization for CO ₂ capture with aqueous piperazine. <i>International Journal of Greenhouse Gas Control</i> , 2022 , 113, 103534	4.2	2
209	Energy use of piperazine with the advanced stripper from pilot plant testing. <i>International Journal of Greenhouse Gas Control</i> , 2022 , 113, 103531	4.2	
208	Process design of the piperazine advanced stripper for a 460 MW NGCC. <i>International Journal of Greenhouse Gas Control</i> , 2022 , 115, 103631	4.2	
207	Zero- and negative-emissions fossil-fired power plants using CO ₂ capture by conventional aqueous amines. <i>International Journal of Greenhouse Gas Control</i> , 2021 , 111, 103473	4.2	2
206	Effects of carbon treating on piperazine oxidation in pilot plant testing of PZAS. <i>International Journal of Greenhouse Gas Control</i> , 2021 , 112, 103502	4.2	
205	Volatility of 2-(diethylamino)-ethanol and 2-((2-aminoethyl) amino) ethanol, a biphasic solvent for CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2021 , 106, 103257	4.2	2
204	CO ₂ absorption rate in biphasic solvent of aminoethylethanolamine and diethylethanolamine. <i>Chemical Engineering Journal</i> , 2021 , 404, 126503	14.7	12
203	Corrosion by Aqueous Piperazine at 40–50 °C in Pilot Testing of CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 7189-7197	3.9	3
202	CO ₂ Absorption from Gas Turbine Flue Gas by Aqueous Piperazine with Intercooling. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 7174-7181	3.9	11
201	Rate-based modeling and economic optimization of next-generation amine-based carbon capture plants. <i>Applied Energy</i> , 2019 , 252, 113379	10.7	17
200	CO ₂ absorption rate and capacity of semi-aqueous piperazine for CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2019 , 85, 182-186	4.2	24
199	Corrosion of carbon steel by aqueous piperazine protected by FeCO ₃ . <i>International Journal of Greenhouse Gas Control</i> , 2019 , 85, 23-29	4.2	2
198	CO ₂ solubility and mass transfer in water-lean solvents. <i>Chemical Engineering Science</i> , 2019 , 202, 403-416	4.4	25
197	Lost work: A comparison of water-lean solvent to a second generation aqueous amine process for CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2019 , 84, 82-90	4.2	23
196	Pilot plant demonstration of piperazine with the advanced flash stripper. <i>International Journal of Greenhouse Gas Control</i> , 2019 , 84, 72-81	4.2	22
195	Demonstration of 99% CO ₂ removal from coal flue gas by amine scrubbing. <i>International Journal of Greenhouse Gas Control</i> , 2019 , 83, 236-244	4.2	20

194	Piperazine aerosol mitigation for post-combustion carbon capture. <i>International Journal of Greenhouse Gas Control</i> , 2019 , 91, 102845	4.2	6
193	Mass Transfer Parameters for Packings: Effect of Viscosity. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 718-729	3.9	25
192	CO2 absorption rate in semi-aqueous monoethanolamine. <i>Chemical Engineering Science</i> , 2018 , 182, 56-66	4.4	44
191	Volatility of amines for CO 2 capture. <i>International Journal of Greenhouse Gas Control</i> , 2017 , 58, 1-9	4.2	22
190	Effectiveness of absorber intercooling for CO 2 absorption from natural gas fired flue gases using monoethanolamine solvent. <i>International Journal of Greenhouse Gas Control</i> , 2017 , 58, 246-255	4.2	26
189	Thermodynamics of Aqueous Methyldiethanolamine/Piperazine for CO2 Capture 2017 , 113-136		1
188	Kinetics of Aqueous Methyldiethanolamine/Piperazine for CO2 Capture 2017 , 137-152		
187	Thermodynamic and Mass-Transfer Modeling of Carbon Dioxide Absorption into Aqueous 2-Amino-2-Methyl-1-Propanol. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 319-330	3.9	15
186	Reaction kinetics of carbon dioxide and hydroxide in aqueous glycerol. <i>Chemical Engineering Science</i> , 2017 , 161, 151-158	4.4	15
185	Amine Aerosol Characterization by Phase Doppler Interferometry. <i>Energy Procedia</i> , 2017 , 114, 939-951	2.3	4
184	Pilot testing of a heat integrated 0.7 MWe CO2 capture system with two-stage air-stripping: Emission. <i>International Journal of Greenhouse Gas Control</i> , 2017 , 64, 267-275	4.2	11
183	Field Measurement of Amine Aerosol by FTIR and Phase Doppler Interferometry. <i>Energy Procedia</i> , 2017 , 114, 906-929	2.3	2
182	Modeling Amine Aerosol Growth in the Absorber and Water Wash. <i>Energy Procedia</i> , 2017 , 114, 959-976	2.3	5
181	Heat Transfer Enhancement and Optimization of Lean/Rich Solvent Cross Exchanger for Amine Scrubbing. <i>Energy Procedia</i> , 2017 , 114, 1890-1903	2.3	5
180	Effects of Catalysts, Inhibitors, and Contaminants on Piperazine Oxidation. <i>Energy Procedia</i> , 2017 , 114, 1919-1929	2.3	2
179	Thermally Degraded Diglycolamine /Dimethylaminoethoxyethanol for CO2 Capture. <i>Energy Procedia</i> , 2017 , 114, 1737-1750	2.3	1
178	MEA and Piperazine Corrosion of Carbon Steel and Stainless Steel. <i>Energy Procedia</i> , 2017 , 114, 1751-1764	4.3	9
177	Effects of Viscosity on CO2 Absorption in Aqueous Piperazine/2-methylpiperazine. <i>Energy Procedia</i> , 2017 , 114, 2103-2120	2.3	11

176	Modeling of absorber pilot plant performance for CO ₂ capture with aqueous piperazine. <i>International Journal of Greenhouse Gas Control</i> , 2017 , 64, 300-313	4.2	16
175	Regeneration Design for NGCC CO ₂ Capture with Amine-only and Hybrid Amine/Membrane. <i>Energy Procedia</i> , 2017 , 114, 1394-1408	2.3	8
174	Modeling Amine Aerosol Growth at Realistic Pilot Plant Conditions. <i>Energy Procedia</i> , 2017 , 114, 1045-1060	6.3	9
173	Review of Recent Pilot Plant Activities with Concentrated Piperazine. <i>Energy Procedia</i> , 2017 , 114, 1110-1137	11.7	7
172	Effect of Liquid Viscosity on Mass Transfer Area and Liquid Film Mass Transfer Coefficient for GT-OPTIMPAK 250Y. <i>Energy Procedia</i> , 2017 , 114, 2713-2727	2.3	13
171	Piperazine/4-hydroxy-1-methylpiperidine for CO ₂ capture. <i>Chemical Engineering Journal</i> , 2017 , 307, 258-267	2.7	28
170	Approaching a reversible stripping process for CO ₂ capture. <i>Chemical Engineering Journal</i> , 2016 , 283, 1033-1043	14.7	42
169	CCS - A technology for now: general discussion. <i>Faraday Discussions</i> , 2016 , 192, 125-151	3.6	4
168	Dynamic modeling and control of an intercooled absorber for post-combustion CO ₂ capture. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016 , 107, 1-10	3.7	15
167	Process control of the advanced flash stripper for CO ₂ solvent regeneration. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016 , 107, 21-28	3.7	2
166	Absorber modeling for NGCC carbon capture with aqueous piperazine. <i>Faraday Discussions</i> , 2016 , 192, 459-477	3.6	18
165	Comment on "Reassessing the Efficiency Penalty from Carbon Capture in Coal-Fired Power Plants". <i>Environmental Science & Technology</i> , 2016 , 50, 6112-3	10.3	3
164	Thermal degradation of novel piperazine-based amine blends for CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2016 , 49, 239-249	4.2	19
163	Control Relevant Model of Amine Scrubbing for CO ₂ Capture from Power Plants. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 1690-1700	3.9	17
162	Thermal Degradation of Piperazine/4-Hydroxy-1-methylpiperidine for CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 10004-10010	3.9	1
161	Thermal Degradation of Aminosilicone Carbamates. <i>Energy & Fuels</i> , 2016 , 30, 10671-10678	4.1	2
160	Regulatory Control of Amine Scrubbing for CO ₂ Capture from Power Plants. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 4646-4657	3.9	28
159	Energy Performance of Advanced Reboiled and Flash Stripper Configurations for CO ₂ Capture Using Monoethanolamine. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 4622-4631	3.9	23

158	Pilot plant test of the advanced flash stripper for CO capture. <i>Faraday Discussions</i> , 2016 , 192, 37-58	3.6	29
157	Dimensionless Models for Predicting the Effective Area, Liquid-Film, and Gas-Film Mass-Transfer Coefficients of Packing. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 5373-5384	3.9	15
156	Capacity and absorption rate of tertiary and hindered amines blended with piperazine for CO ₂ capture. <i>Chemical Engineering Science</i> , 2016 , 155, 397-404	4.4	47
155	Optimum heat of absorption for CO ₂ capture using the advanced flash stripper. <i>International Journal of Greenhouse Gas Control</i> , 2016 , 53, 169-177	4.2	17
154	Thermodynamic and mass transfer modeling of carbon dioxide absorption into aqueous 2-piperidineethanol. <i>Chemical Engineering Science</i> , 2016 , 153, 295-307	4.4	15
153	Pilot-scale evaluation of concentrated piperazine for CO ₂ capture at an Australian coal-fired power station: Nitrosamine measurements. <i>International Journal of Greenhouse Gas Control</i> , 2015 , 37, 256-263	4.2	20
152	NO ₂ -Catalyzed Sulfite Oxidation. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4815-4822	3.9	11
151	Packing characterization: Absorber economic analysis. <i>International Journal of Greenhouse Gas Control</i> , 2015 , 42, 124-131	4.2	7
150	Pilot-scale evaluation of concentrated piperazine for CO ₂ capture at an Australian coal-fired power station: duration experiments 2015 , 5, 363-373		10
149	Pilot-scale parametric evaluation of concentrated piperazine for CO ₂ capture at an Australian coal-fired power station 2015 , 5, 7-16		21
148	Nitrosamine formation and mitigation in blended amines for CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2015 , 39, 329-334	4.2	15
147	Carbon capture and storage update. <i>Energy and Environmental Science</i> , 2014 , 7, 130-189	35.4	1404
146	Cold Rich Bypass to Strippers for CO ₂ Capture by Concentrated Piperazine. <i>Chemical Engineering and Technology</i> , 2014 , 37, 149-156	2	9
145	Inhibitors of Monoethanolamine Oxidation in CO ₂ Capture Processes. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 16222-16228	3.9	17
144	Nitrosamine formation in amine scrubbing at desorber temperatures. <i>Environmental Science & Technology</i> , 2014 , 48, 8777-83	10.3	34
143	Maximizing coal-fired power plant efficiency with integration of amine-based CO ₂ capture in greenfield and retrofit scenarios. <i>Energy</i> , 2014 , 72, 824-831	7.9	18
142	Decomposition of nitrosamines in CO ₂ capture by aqueous piperazine or monoethanolamine. <i>Environmental Science & Technology</i> , 2014 , 48, 5996-6002	10.3	42
141	Regeneration with Rich Bypass of Aqueous Piperazine and Monoethanolamine for CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 4067-4074	3.9	56

140	Thermodynamic modeling of piperazine/2-aminomethylpropanol/CO ₂ /water. <i>Chemical Engineering Science</i> , 2014 , 117, 331-341	4.4	24
139	Optimization of Stripping Piperazine with Variable Rich Loading. <i>Energy Procedia</i> , 2014 , 63, 1842-1853	2.3	6
138	Dynamic Modeling, Validation, and Time Scale Decomposition of an Advanced Post-combustion Amine Scrubbing Process. <i>Energy Procedia</i> , 2014 , 63, 1296-1307	2.3	4
137	Absorber Intercooling Configurations using Aqueous Piperazine for Capture from Sources with 4 to 27% CO ₂ . <i>Energy Procedia</i> , 2014 , 63, 1637-1656	2.3	30
136	Absorber Performance with High CO ₂ . <i>Energy Procedia</i> , 2014 , 63, 1329-1338	2.3	6
135	Quantification of Gas and Aerosol-phase Piperazine Emissions by FTIR Under Variable Bench-scale Absorber Conditions. <i>Energy Procedia</i> , 2014 , 63, 871-883	2.3	5
134	Thermodynamic and Kinetic Modeling of Piperazine/2-Methylpiperazine. <i>Energy Procedia</i> , 2014 , 63, 1243-1255	2.3	1
133	Optimization of Advanced Flash Stripper for CO ₂ Capture using Piperazine. <i>Energy Procedia</i> , 2014 , 63, 1504-1513	2.3	33
132	Piperazine/N-methylpiperazine/N,N-dimethylpiperazine as an Aqueous Solvent for Carbon Dioxide Capture. <i>Oil and Gas Science and Technology</i> , 2014 , 69, 903-914	1.9	5
131	Effect of Liquid Viscosity on the Liquid Phase Mass Transfer Coefficient of Packing. <i>Energy Procedia</i> , 2014 , 63, 1268-1286	2.3	26
130	Thermal Degradation of Linear Amines for CO ₂ Capture. <i>Energy Procedia</i> , 2014 , 63, 1558-1568	2.3	16
129	Absorption of Nitrogen Oxides in Aqueous Amines. <i>Energy Procedia</i> , 2014 , 63, 830-847	2.3	15
128	Thermodynamic Modeling of Aqueous Piperazine/N-(2-Aminoethyl) Piperazine for CO ₂ Capture. <i>Energy Procedia</i> , 2014 , 63, 997-1017	2.3	5
127	Hybrid Membrane-absorption CO ₂ Capture Process. <i>Energy Procedia</i> , 2014 , 63, 605-613	2.3	40
126	Pilot Plant Activities with Concentrated Piperazine. <i>Energy Procedia</i> , 2014 , 63, 1376-1391	2.3	16
125	CO ₂ Mass Transfer and Solubility in Aqueous Primary and Secondary Amine. <i>Energy Procedia</i> , 2014 , 63, 1487-1496	2.3	10
124	Oxidative Degradation of Amine Solvents for CO ₂ Capture. <i>Energy Procedia</i> , 2014 , 63, 1546-1557	2.3	9
123	Aqueous 3-(methylamino)propylamine for CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 15, 70-77	4.2	21

122	Oxidative Degradation of Amines With High-Temperature Cycling. <i>Energy Procedia</i> , 2013 , 37, 2118-2132	2.3	22
121	Thermal Degradation of Piperazine Blends with Diamines. <i>Energy Procedia</i> , 2013 , 37, 1904-1911	2.3	14
120	Characterization of Novel Structured Packings for CO2 Capture. <i>Energy Procedia</i> , 2013 , 37, 2145-2153	2.3	9
119	Thermal Decomposition of N-nitrosopiperazine. <i>Energy Procedia</i> , 2013 , 37, 1678-1686	2.3	16
118	Pilot Plant Results with Piperazine. <i>Energy Procedia</i> , 2013 , 37, 1572-1583	2.3	16
117	Piperazine Degradation in Pilot Plants. <i>Energy Procedia</i> , 2013 , 37, 1912-1923	2.3	40
116	Modeling Pilot Plant Performance of an Absorber with Aqueous Piperazine. <i>Energy Procedia</i> , 2013 , 37, 1987-2001	2.3	13
115	Carbon Capture with 4 m Piperazine/4 m 2-Methylpiperazine. <i>Energy Procedia</i> , 2013 , 37, 436-447	2.3	13
114	Modeling Aerosols in Amine-based CO2 Capture. <i>Energy Procedia</i> , 2013 , 37, 1706-1719	2.3	25
113	Products and process variables in oxidation of monoethanolamine for CO2 capture. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 12, 472-477	4.2	27
112	Characterization of Piperazine/2-Aminomethylpropanol for Carbon Dioxide Capture. <i>Energy Procedia</i> , 2013 , 37, 340-352	2.3	30
111	Amine blends using concentrated piperazine. <i>Energy Procedia</i> , 2013 , 37, 353-369	2.3	65
110	Absorption rates and CO2 solubility in new piperazine blends. <i>Energy Procedia</i> , 2013 , 37, 370-385	2.3	14
109	Control of carbon dioxide solubility in aqueous piperazine. <i>Computers and Chemical Engineering</i> , 2013 , 54, 122-124	4	
108	Modeling pilot plant results for CO2 stripping using piperazine in two stage flash. <i>Energy Procedia</i> , 2013 , 37, 386-399	2.3	20
107	Optimal CO2 Capture Operation in an Advanced Electric Grid. <i>Energy Procedia</i> , 2013 , 37, 2585-2594	2.3	13
106	Aqueous Piperazine/N-(2-Aminoethyl) Piperazine for CO2 Capture. <i>Energy Procedia</i> , 2013 , 37, 1621-1638	2.3	19
105	Energy Performance of Advanced Stripper Configurations. <i>Energy Procedia</i> , 2013 , 37, 1696-1705	2.3	15

104	Two-Stage Flash for CO ₂ Regeneration: Dynamic Modeling and Pilot Plant Validation. <i>Energy Procedia</i> , 2013 , 37, 2133-2144	2.3	13
103	Managing n-nitrosopiperazine and dinitrosopiperazine. <i>Energy Procedia</i> , 2013 , 37, 273-284	2.3	10
102	Modeling of pilot stripper results for CO ₂ capture by aqueous piperazine. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 12, 280-287	4.2	17
101	Thermodynamics of CO ₂ /2-Methylpiperazine/Water. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 4229-4238	3.9	17
100	Modeling of CO ₂ Absorption Kinetics in Aqueous 2-Methylpiperazine. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 4239-4248	3.9	21
99	Kinetics of N-nitrosopiperazine formation from nitrite and piperazine in CO ₂ capture. <i>Environmental Science & Technology</i> , 2013 , 47, 3528-34	10.3	40
98	Oxidation of Aqueous Piperazine: Oxidation Rates, Products, and High-Temperature Oxidation. <i>ACS Symposium Series</i> , 2012 , 219-237	0.4	0
97	Packing Characterization: Mass Transfer Properties. <i>Energy Procedia</i> , 2012 , 23, 23-32	2.3	21
96	Optimizing post-combustion CO ₂ capture in response to volatile electricity prices. <i>International Journal of Greenhouse Gas Control</i> , 2012 , 8, 180-195	4.2	60
95	Thermal degradation of amines for CO ₂ capture. <i>Current Opinion in Chemical Engineering</i> , 2012 , 1, 183-194	3.4	122
94	The Impact of Electricity Market Conditions on the Value of Flexible CO ₂ Capture 2012 ,		1
93	Density and Viscosity of Aqueous (Piperazine + Carbon Dioxide) Solutions. <i>Journal of Chemical & Engineering Data</i> , 2011 , 56, 574-581	2.8	34
92	Modeling CO ₂ absorption into concentrated aqueous monoethanolamine and piperazine. <i>Chemical Engineering Science</i> , 2011 , 66, 5212-5218	4.4	18
91	Foaming of aqueous piperazine and monoethanolamine for CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2011 , 5, 381-386	4.2	41
90	Aqueous piperazine as the new standard for CO ₂ capture technology. <i>Chemical Engineering Journal</i> , 2011 , 171, 725-733	14.7	348
89	Aqueous piperazine derivatives for CO ₂ capture: Accurate screening by a wetted wall column. <i>Chemical Engineering Research and Design</i> , 2011 , 89, 1693-1710	5.5	74
88	A dimensionless model for predicting the mass-transfer area of structured packing. <i>AIChE Journal</i> , 2011 , 57, 1173-1184	3.6	98
87	Stripper configurations for CO ₂ capture by aqueous monoethanolamine. <i>Chemical Engineering Research and Design</i> , 2011 , 89, 1639-1646	5.5	95

86	CO ₂ Absorption Rate into Concentrated Aqueous Monoethanolamine and Piperazine. <i>Journal of Chemical & Engineering Data</i> , 2011 , 56, 2187-2195	2.8	63
85	Reaction Products from the Oxidative Degradation of Monoethanolamine. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 667-673	3.9	80
84	Degradation of aqueous methyldiethanolamine by temperature and oxygen cycling. <i>Energy Procedia</i> , 2011 , 4, 23-28	2.3	36
83	Modeling piperazine thermodynamics. <i>Energy Procedia</i> , 2011 , 4, 35-42	2.3	22
82	Thermal degradation of piperazine and its structural analogs. <i>Energy Procedia</i> , 2011 , 4, 43-50	2.3	33
81	Accurate screening of amines by the Wetted Wall Column. <i>Energy Procedia</i> , 2011 , 4, 101-108	2.3	49
80	Total pressure and CO ₂ solubility at high temperature in aqueous amines. <i>Energy Procedia</i> , 2011 , 4, 117-124	2.3	49
79	Oxidation of amines at absorber conditions for CO ₂ capture from flue gas. <i>Energy Procedia</i> , 2011 , 4, 171-178	2.3	20
78	Stripper configurations for CO ₂ capture by aqueous monoethanolamine and piperazine. <i>Energy Procedia</i> , 2011 , 4, 1323-1330	2.3	44
77	Modeling pilot plant results for CO ₂ capture by aqueous piperazine. <i>Energy Procedia</i> , 2011 , 4, 1593-1600	2.3	31
76	Volatility of aqueous amines in CO ₂ capture. <i>Energy Procedia</i> , 2011 , 4, 1624-1630	2.3	44
75	Turning CO ₂ Capture On and Off in Response to Electric Grid Demand: A Baseline Analysis of Emissions and Economics. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2010 , 132,	2.6	50
74	Carbon dioxide capture with concentrated, aqueous piperazine. <i>International Journal of Greenhouse Gas Control</i> , 2010 , 4, 119-124	4.2	268
73	Degradation of aqueous piperazine in carbon dioxide capture. <i>International Journal of Greenhouse Gas Control</i> , 2010 , 4, 756-761	4.2	118
72	Amine volatility in CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2010 , 4, 707-715	4.2	139
71	Aqueous ethylenediamine for CO(2) capture. <i>ChemSusChem</i> , 2010 , 3, 913-8	8.3	80
70	Modeling CO ₂ capture with aqueous monoethanolamine. <i>International Journal of Greenhouse Gas Control</i> , 2010 , 4, 161-166	4.2	81
69	Absorber intercooling in CO ₂ absorption by piperazine-promoted potassium carbonate. <i>AIChE Journal</i> , 2009 , 56, NA-NA	3.6	5

68	Rate modeling of CO ₂ stripping from potassium carbonate promoted by piperazine?. <i>International Journal of Greenhouse Gas Control</i> , 2009 , 3, 121-132	4.2	51
67	Catalysts and inhibitors for oxidative degradation of monoethanolamine. <i>International Journal of Greenhouse Gas Control</i> , 2009 , 3, 704-711	4.2	62
66	Thermal degradation of monoethanolamine at stripper conditions. <i>Energy Procedia</i> , 2009 , 1, 327-333	2.3	198
65	Absorption and desorption rates of carbon dioxide with monoethanolamine and piperazine. <i>Energy Procedia</i> , 2009 , 1, 1163-1169	2.3	107
64	Modeling CO ₂ capture with aqueous monoethanolamine. <i>Energy Procedia</i> , 2009 , 1, 1171-1178	2.3	50
63	Catalysts and inhibitors for MEA oxidation. <i>Energy Procedia</i> , 2009 , 1, 1179-1185	2.3	35
62	Influence of viscosity and surface tension on the effective mass transfer area of structured packing. <i>Energy Procedia</i> , 2009 , 1, 1197-1204	2.3	47
61	MDEA/Piperazine as a solvent for CO ₂ capture. <i>Energy Procedia</i> , 2009 , 1, 1351-1357	2.3	89
60	Carbon dioxide capture with concentrated, aqueous piperazine. <i>Energy Procedia</i> , 2009 , 1, 1489-1496	2.3	70
59	Amine scrubbing for CO ₂ capture. <i>Science</i> , 2009 , 325, 1652-4	33.3	2896
58	Dynamic Modeling to Minimize Energy Use for CO ₂ Capture in Power Plants by Aqueous Monoethanolamine. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 6105-6111	3.9	97
57	Rate-Based Process Modeling Study of CO ₂ Capture with Aqueous Monoethanolamine Solution. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 9233-9246	3.9	205
56	Influence of Surface Tension on Effective Packing Area. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 1253-1260	3.9	52
55	Effects of the Temperature Bulge in CO ₂ Absorption from Flue Gas by Aqueous Monoethanolamine. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 867-875	3.9	160
54	Carbon Dioxide Absorption and Desorption in Aqueous Monoethanolamine Solutions in a Rotating Packed Bed. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 2823-2833	3.9	177
53	Alternative stripper configurations for CO ₂ capture by aqueous amines. <i>AIChE Journal</i> , 2007 , 53, 3144-3154	3.9	237
52	Energy Performance of Stripper Configurations for CO ₂ Capture by Aqueous Amines. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 2457-2464	3.9	232
51	Innovative Absorber/Stripper Configurations for CO ₂ Capture by Aqueous Monoethanolamine. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 2465-2472	3.9	191

50	Absorption of CO ₂ in Aqueous Diglycolamine. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 2473-2482	3.9	30
49	Oxidation Inhibitors for Copper and Iron Catalyzed Degradation of Monoethanolamine in CO ₂ Capture Processes. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 2513-2521	3.9	126
48	Thermodynamics and Equilibrium Solubility of Carbon Dioxide in Diglycolamine/Morpholine/Water. <i>Journal of Chemical & Engineering Data</i> , 2006 , 51, 708-717	2.8	20
47	Kinetics of Carbon Dioxide Absorption into Aqueous Potassium Carbonate and Piperazine. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 2531-2545	3.9	147
46	Absorption of CO ₂ in aqueous blends of diglycolamine and morpholine. <i>Chemical Engineering Science</i> , 2006 , 61, 3830-3837	4.4	16
45	Thermodynamics of aqueous potassium carbonate, piperazine, and carbon dioxide. <i>Fluid Phase Equilibria</i> , 2005 , 227, 197-213	2.5	116
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43	Carbon dioxide absorption with aqueous potassium carbonate promoted by piperazine. <i>Chemical Engineering Science</i> , 2004 , 59, 3619-3630	4.4	211
42	Monoethanolamine Degradation: O ₂ Mass Transfer Effects under CO ₂ Capture Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 6400-6408	3.9	211
41	Modeling of CO ₂ capture by aqueous monoethanolamine. <i>AIChE Journal</i> , 2003 , 49, 1676-1686	3.6	266
40	Liquid-phase mass transfer in spray contactors. <i>AIChE Journal</i> , 2003 , 49, 2363-2373	3.6	29
39	CO ₂ Absorption Rate and Solubility in Monoethanolamine/Piperazine/Water. <i>Separation Science and Technology</i> , 2003 , 38, 337-357	2.5	92
38	Effect of mixing on efficiencies for reactive tray contactors. <i>AIChE Journal</i> , 2002 , 48, 2537-2544	3.6	7
37	Absorption of carbon dioxide in aqueous piperazine/methyldiethanolamine. <i>AIChE Journal</i> , 2002 , 48, 2788-2799	3.6	219
36	Thermodynamics of Piperazine/Methyldiethanolamine/Water/Carbon Dioxide. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 604-612	3.9	148
35	Oxidative Degradation of Monoethanolamine. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 4178-4186	3.9	208
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33	Absorption of carbon dioxide into aqueous piperazine: reaction kinetics, mass transfer and solubility. <i>Chemical Engineering Science</i> , 2000 , 55, 5531-5543	4.4	469

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30	Absorption of HCl and SO ₂ from Humidified Flue Gas with Calcium Silicate Solids. <i>Industrial & Engineering Chemistry Research</i> , 2000 , 39, 1048-1060	3.9	9
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27	Preparation of calcium silicate absorbent from recycled glass. <i>Environmental Progress</i> , 1998 , 17, 86-91		8
26	Nitrogen Dioxide Absorption and Sulfite Oxidation in Aqueous Sulfite. <i>Environmental Science & Technology</i> , 1998 , 32, 1994-2003	10.3	101
25	Simultaneous sulfur dioxide and nitrogen dioxide removal by calcium hydroxide and calcium silicate solids. <i>Journal of the Air and Waste Management Association</i> , 1998 , 48, 819-28	2.4	46
24	Rate-Based Modeling of Reactive Absorption of CO ₂ and H ₂ S into Aqueous Methyldiethanolamine. <i>Industrial & Engineering Chemistry Research</i> , 1998 , 37, 4107-4117	3.9	73
23	Mercury Absorption in Aqueous Oxidants Catalyzed by Mercury(II). <i>Industrial & Engineering Chemistry Research</i> , 1998 , 37, 380-387	3.9	23
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20	A simple model for prediction of acid gas solubilities in alkanolamines. <i>Separation and Purification Technology</i> , 1996 , 10, 181-186		48
19	Hg absorption in aqueous permanganate. <i>AIChE Journal</i> , 1996 , 42, 3559-3562	3.6	17
18	Approximate simulation of CO ₂ and H ₂ S absorption into aqueous alkanolamines. <i>AIChE Journal</i> , 1993 , 39, 1389-1397	3.6	16
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16	Numerical simulation of theories for gas absorption with chemical reaction. <i>AIChE Journal</i> , 1989 , 35, 1271-1281	3.6	73
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9	Effect of limestone type and grind on SO ₂ scrubber performance. The cost-reduction effect of finer limestone grinding on SO ₂ scrubber efficiency can be very considerable. <i>Environmental Progress</i> , 1982 , 1, 59-65		8
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6	Advanced Amine Solvent Formulations and Process Integration for Near-Term CO ₂ Capture Success		21
5	CO ₂ Absorption Rate and Solubility in Monoethanolamine/Piperazine/Water		3
4	FEED for Piperazine with the Advanced Stripper on NGCC at Denver City, Texas. <i>SSRN Electronic Journal</i> ,	1	2
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