Xiaowen Zhang

List of Publications by Year
in descending order

18	1,058	516710 16	839539 18
papers	citations	h-index	g-index

18	18	18	587
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermodynamic studies for improving the prediction of CO2 equilibrium solubility in aqueous 2-dimethylamino-2-methyl-1-propanol. Separation and Purification Technology, 2022, 295, 121292.	7.9	21
2	CuO modified KIT-6 as a high-efficiency catalyst for energy-efficient amine solvent regeneration. Separation and Purification Technology, 2022, 300, 121702.	7.9	20
3	Attapulgite as a cost-effective catalyst for low-energy consumption amine-based CO2 capture. Separation and Purification Technology, 2022, 298, 121577.	7.9	24
4	Photoreduction of CO2 in the presence of CH4 over g-C3N4 modified with TiO2 nanoparticles at room temperature. Green Energy and Environment, 2021, 6, 938-951.	8.7	26
5	Catalytic Performance and Mechanism of Mesoâ€“Microporous Material Î²-SBA-15-Supported FeZr Catalysts for CO₂ Desorption in CO₂-Loaded Aqueous Amine Solution. Industrial & Engineering Chemistry Research, 2021, 60, 2698-2709.	3.7	8
6	Catalytic performance and mechanism of SO42â^'/ZrO2/SBA-15 catalyst for CO2 desorption in CO2-loaded monoethanolamine solution. Applied Energy, 2020, 259, 114179.	10.1	58
7	NMR Techniques and Prediction Models for the Analysis of Species Formed in CO₂ Capture Processes with Amine-Based Sorbents: A Critical Review. ACS Sustainable Chemistry and Engineering, 2020, 8, 6173-6193.	6.7	50
8	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.	12.7	55
9	Amine-functionalized sepiolite: Toward highly efficient palladium nanocatalyst for dehydrogenation of additive-free formic acid. International Journal of Hydrogen Energy, 2019, 44, 16707-16717.	7.1	33
10	Reducing Energy Penalty of CO₂ Capture Using Fe Promoted SO₄^{2â€“}/ZrO₂/MCM-41 Catalyst. Environmental Science & Technology, 2019, 53, 6094-6102.	10.0	94
11	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.	10.1	71
12	Evaluating CO2 desorption performance in CO2-loaded aqueous tri-solvent blend amines with and without solid acid catalysts. Applied Energy, 2018, 218, 417-429.	10.1	117
13	SO₄^{2â^'}/ZrO₂ supported on Î³â€Al₂O₃ as a catalyst for CO₂ desorption from CO₂â€loaded monoethanolamine solutions. AIChE Journal, 2018, 64, 3988-4001.	3.6	54
14	Reducing energy consumption of CO2 desorption in CO2-loaded aqueous amine solution using Al2O3/HZSM-5 bifunctional catalysts. Applied Energy, 2018, 229, 562-576.	10.1	110
15	Reduction of energy requirement of CO2 desorption from a rich CO2-loaded MEA solution by using solid acid catalysts. Applied Energy, 2017, 202, 673-684.	10.1	140
16	Analysis of the reduction of energy cost by using MEA-MDEA-PZ solvent for post-combustion carbon dioxide capture (PCC). Applied Energy, 2017, 205, 1002-1011.	10.1	123
17	Facile separation catalyst system: direct diastereoselective synthesis of (E)-Î±,Î²-unsaturated ketones catalyzed by an air-stable Lewis acidic/basic bifunctional organobismuth complex in ionic liquids. Green Chemistry, 2010, 12, 1767.	9.0	38
18	Cationic organobismuth complex as an effective catalyst for conversion of CO2 into cyclic carbonates. Frontiers of Environmental Science and Engineering in China, 2009, 3, 32-37.	0.8	16