

# Guanhe Rim

## List of Publications by Year in descending order

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15  
papers

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933447

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996975

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docs citations

15  
times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Novel in-capsule synthesis of metal-organic framework for innovative carbon dioxide capture system. Green Energy and Environment, 2023, 8, 767-774.	8.7	5
2	Encapsulation of highly viscous CO <sub>2</sub> capture solvents for enhanced capture kinetics: Modeling investigation of mass transfer mechanisms. Chemical Engineering Journal, 2022, 428, 131603.	12.7	9
3	Research needs targeting direct air capture of carbon dioxide: Material & process performance characteristics under realistic environmental conditions. Korean Journal of Chemical Engineering, 2022, 39, 1-19.	2.7	40
4	Sub-Ambient Temperature Direct Air Capture of CO <sub>2</sub> using Amine-Impregnated MIL-101(Cr) Enables Ambient Temperature CO <sub>2</sub> Recovery. JACS Au, 2022, 2, 380-393.	7.9	62
5	Solvent Impregnated Polymers Loaded with Liquid-Like Nanoparticle Organic Hybrid Materials for Enhanced Kinetics of Direct Air Capture and Point Source CO <sub>2</sub> Capture. Advanced Functional Materials, 2021, 31, 2010047.	14.9	46
6	Electrochemical approaches for selective recovery of critical elements in hydrometallurgical processes of complex feedstocks. IScience, 2021, 24, 102374.	4.1	46
7	CO <sub>2</sub> utilization in built environment via the P-CO <sub>2</sub> swing carbonation of alkaline solid wastes with different mineralogy. Faraday Discussions, 2021, 230, 187-212.	3.2	20
8	Integration of Two Waste Streams for Carbon Storage and Utilization: Enhanced Metal Extraction from Steel Slag Using Biogenic Volatile Organic Acids. ACS Sustainable Chemistry and Engineering, 2020, 8, 18519-18527.	6.7	13
9	Investigation on Abrasion versus Fragmentation of the Si-rich Passivation Layer for Enhanced Carbon Mineralization via CO <sub>2</sub> Partial Pressure Swing. Industrial & Engineering Chemistry Research, 2020, 59, 6517-6531.	3.7	16
10	<sup>29</sup> Si solid state MAS NMR study on leaching behaviors and chemical stability of different Mg-silicate structures for CO <sub>2</sub> sequestration. Chemical Engineering Journal, 2020, 396, 125204.	12.7	31
11	Kinetic and mechanistic investigation of catalytic alkaline thermal treatment of xylan producing high purity H <sub>2</sub> with in-situ carbon capture. Journal of Industrial and Engineering Chemistry, 2020, 85, 219-225.	5.8	9
12	Bubbling to turbulent bed regime transition of ternary particles in a gas-solid fluidized bed. Powder Technology, 2016, 290, 45-52.	4.2	11
13	Flow characteristics and axial bed composition according to mass ratio of binary solids in gas-solid circulating fluidised beds. Powder Technology, 2014, 258, 344-351.	4.2	11
14	Data and models for liquid velocity and liquid holdup at layer inversion point in a three-phase fluidized bed of binary solids. Chemical Engineering Science, 2014, 109, 82-84.	3.8	7
15	Prediction of layer inversion velocity in three-phase fluidized beds. Chemical Engineering Science, 2013, 100, 91-97.	3.8	9