Maohuai Wang

List of Publications by Year
in descending order

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18	356	840776 11	888059 17
papers	citations	h-index	g-index

18	18	18	257
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Penta-graphene as a promising controllable CO2 capture and separation material in an electric field. Applied Surface Science, 2020, 502, 144067.	6.1	49
2	Mechanistic insights into porous graphene membranes for helium separation and hydrogen purification. Applied Surface Science, 2018, 441, 631-638.	6.1	42
3	Stimulus-responsive adsorbent materials for CO₂ capture and separation. Journal of Materials Chemistry A, 2020, 8, 10519-10533.	10.3	39
4	Strain-controlled carbon nitride: A continuously tunable membrane for gas separation. Applied Surface Science, 2020, 506, 144675.	6.1	29
5	Edge-functionalized nanoporous carbons for high adsorption capacity and selectivity of CO2 over N2. Applied Surface Science, 2017, 410, 259-266.	6.1	25
6	Nanoporous Boron Nitride Membranes for Helium Separation. ACS Applied Nano Materials, 2019, 2, 4471-4479.	5.0	25
7	Alkyl amine functionalized triphenylamine-based covalent organic frameworks for high-efficiency CO2 capture and separation over N2. Materials Letters, 2018, 230, 28-31.	2.6	24
8	Carbon phosphides: promising electric field controllable nanoporous materials for CO₂ capture and separation. Journal of Materials Chemistry A, 2020, 8, 9970-9980.	10.3	21
9	First-row transition metal embedded pyrazine-based graphynes as high-performance single atom catalysts for the CO₂reduction reaction. Journal of Materials Chemistry A, 2022, 10, 9048-9058.	10.3	21
10	Diffusion and separation of CH4/N2 in pillared graphene nanomaterials: A molecular dynamics investigation. Chemical Physics Letters, 2016, 660, 272-276.	2.6	17
11	CO2 capture and separation over N2 and CH4 in nanoporous MFM-300(In, Al, Ga, and In-3N): Insight from GCMC simulations. Journal of CO2 Utilization, 2018, 28, 145-151.	6.8	16
12	High-efficiency CO2 capture and separation over N2 in penta-graphene pores: insights from GCMC and DFT simulations. Journal of Materials Science, 2020, 55, 16603-16611.	3.7	11
13	Theoretical Screening of Transition Metal-Embedded Ti₂N for High-Efficiency Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2022, 10, 4152-4160.	6.7	10
14	Tracking CO2 capture and separation over N2 in a flexible metalâ€“organic framework: insights from GCMC and DFT simulations. Journal of Materials Science, 2021, 56, 10414-10423.	3.7	8
15	Can Chargeâ€Modulated Metalâ€Organic Frameworks Achieve Highâ€Performance CO ₂ Capture and Separation over H ₂ , N ₂ , and CH ₄ ?. ChemSusChem, 2022, 15, .	6.8	8
16	Precise regulation of CO2 packing pattern in s-block metal doped single-layer covalent organic frameworks for high-performance CO2 capture and separation. Chemical Engineering Journal, 2022, 441, 135903.	12.7	7
17	Multi-objective optimization of alkali/alkaline earth metals doped graphyne for ultrahigh-performance CO2 capture and separation over N2/CH4. Materials Today Physics, 2021, 21, 100539.	6.0	4
18	Mechanisms into Hydrogen Purification in a Graphene-like Carbon Nitride Separation Membrane. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2020, , 655.	1.3	0