Deepu J Babu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8422832/publications.pdf

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23	732	567281 15	642732 23
papers	citations	h-index	g-index

24	24	24	1145
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Restricting Lattice Flexibility in Polycrystalline Metalâ€“Organic Framework Membranes for Carbon Capture. Advanced Materials, 2019, 31, e1900855.	21.0	122
2	Gas adsorption studies of CO2 and N2 in spatially aligned double-walled carbon nanotube arrays. Carbon, 2013, 61, 616-623.	10.3	64
3	Understanding Carbon Dioxide Adsorption in Carbon Nanotube Arrays: Molecular Simulation and Adsorption Measurements. Journal of Physical Chemistry C, 2013, 117, 13492-13501.	3.1	61
4	Understanding the Influence of N-Doping on the CO₂ Adsorption Characteristics in Carbon Nanomaterials. Journal of Physical Chemistry C, 2017, 121, 616-626.	3.1	61
5	Crystal Engineering of Metalâ€“Organic Framework Thin Films for Gas Separations. ACS Sustainable Chemistry and Engineering, 2019, 7, 49-69.	6.7	52
6	Millisecond lattice gasification for high-density CO ₂ - and O ₂ -sieving nanopores in single-layer graphene. Science Advances, 2021, 7, .	10.3	47
7	Carbon Dioxide Plasma as a Versatile Medium for Purification and Functionalization of Vertically Aligned Carbon Nanotubes. Journal of Physical Chemistry C, 2014, 118, 12028-12034.	3.1	41
8	Superhydrophobic Vertically Aligned Carbon Nanotubes for Biomimetic Air Retention under Water (Salvinia Effect). Advanced Materials Interfaces, 2017, 4, 1700273.	3.7	41
9	Double-walled carbon nanotube array for CO2 and SO2 adsorption. Journal of Chemical Physics, 2015, 143, 124701.	3.0	37
10	Synthesis of high-performance polycrystalline metalâ€“organic framework membranes at room temperature in a few minutes. Journal of Materials Chemistry A, 2020, 8, 7633-7640.	10.3	34
11	Adsorption of pure SO₂ on nanoscaled graphene oxide. RSC Advances, 2016, 6, 36834-36839.	3.6	31
12	Inscribing Wettability Gradients Onto Superhydrophobic Carbon Nanotube Surfaces. Advanced Materials Interfaces, 2014, 1, 1300049.	3.7	27
13	Unprecedented CO2 uptake in vertically aligned carbon nanotubes. Carbon, 2017, 125, 327-335.	10.3	20
14	Ultrathin Carbon Molecular Sieve Films and Room-Temperature Oxygen Functionalization for Gas-Sieving. ACS Applied Materials & Interfaces, 2019, 11, 16729-16736.	8.0	19
15	SO₂ gas adsorption on carbon nanomaterials: a comparative study. Beilstein Journal of Nanotechnology, 2018, 9, 1782-1792.	2.8	17
16	Bud type carbon nanohorns: materials for high pressure CO₂ capture and Li-ion storage. Journal of Materials Chemistry A, 2016, 4, 14267-14275.	10.3	16
17	Mechanistic Study on Thermally Induced Lattice Stiffening of ZIF-8. Chemistry of Materials, 2021, 33, 4035-4044.	6.7	12
18	Gas Adsorption Studies of CO₂ in Carbon Nanomaterials: A Case Study of Vertically Aligned Carbon Nanotubes. Chemie-Ingenieur-Technik, 2017, 89, 1273-1287.	0.8	9

#	Article	IF	Citations
19	Gas adsorption capacity in an all carbon nanomaterial composed of carbon nanohorns and vertically aligned carbon nanotubes. Physical Chemistry Chemical Physics, 2017, 19, 26265-26271.	2.8	8
20	Hierarchically structured nanoporous carbon tubes for high pressure carbon dioxide adsorption. Beilstein Journal of Nanotechnology, 2017, 8, 1135-1144.	2.8	5
21	Flame spray synthesis of nano lanthanum strontium manganite for solid oxide fuel cell applications. Transactions of the Indian Institute of Metals, 2011, 64, 181-184.	1.5	4
22	Metal Soap Membranes for Gas Separation. Advanced Functional Materials, 2021, 31, 2005629.	14.9	2
23	Effect of rf-Plasma Treatment on the Activity and Selectivity of Me-N-C Electrocatalysts for the Oxygen Reduction Reaction. ECS Transactions, 2017, 80, 691-700.	0.5	0