

# Deepu J Babu

## List of Publications by Year in descending order

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23  
papers

732  
citations

567281

15  
h-index

642732

23  
g-index

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24  
docs citations

24  
times ranked

1145  
citing authors

#	ARTICLE	IF	CITATIONS
1	Metal Soap Membranes for Gas Separation. <i>Advanced Functional Materials</i> , 2021, 31, 2005629.	14.9	2
2	Millisecond lattice gasification for high-density CO <sub>2</sub> - and O <sub>2</sub> -sieving nanopores in single-layer graphene. <i>Science Advances</i> , 2021, 7, .	10.3	47
3	Mechanistic Study on Thermally Induced Lattice Stiffening of ZIF-8. <i>Chemistry of Materials</i> , 2021, 33, 4035-4044.	6.7	12
4	Synthesis of high-performance polycrystalline metal-organic framework membranes at room temperature in a few minutes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 7633-7640.	10.3	34
5	Restricting Lattice Flexibility in Polycrystalline Metal-Organic Framework Membranes for Carbon Capture. <i>Advanced Materials</i> , 2019, 31, e1900855.	21.0	122
6	Ultrathin Carbon Molecular Sieve Films and Room-Temperature Oxygen Functionalization for Gas-Sieving. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 16729-16736.	8.0	19
7	Crystal Engineering of Metal-Organic Framework Thin Films for Gas Separations. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 49-69.	6.7	52
8	SO <sub>2</sub> gas adsorption on carbon nanomaterials: a comparative study. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 1782-1792.	2.8	17
9	Superhydrophobic Vertically Aligned Carbon Nanotubes for Biomimetic Air Retention under Water (<i>Salvinia</i> Effect). <i>Advanced Materials Interfaces</i> , 2017, 4, 1700273.	3.7	41
10	Understanding the Influence of N-Doping on the CO <sub>2</sub> Adsorption Characteristics in Carbon Nanomaterials. <i>Journal of Physical Chemistry C</i> , 2017, 121, 616-626.	3.1	61
11	Unprecedented CO <sub>2</sub> uptake in vertically aligned carbon nanotubes. <i>Carbon</i> , 2017, 125, 327-335.	10.3	20
12	Gas adsorption capacity in an all carbon nanomaterial composed of carbon nanohorns and vertically aligned carbon nanotubes. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 26265-26271.	2.8	8
13	Effect of rf-Plasma Treatment on the Activity and Selectivity of Me-N-C Electrocatalysts for the Oxygen Reduction Reaction. <i>ECS Transactions</i> , 2017, 80, 691-700.	0.5	0
14	Hierarchically structured nanoporous carbon tubes for high pressure carbon dioxide adsorption. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 1135-1144.	2.8	5
15	Gas Adsorption Studies of CO <sub>2</sub> in Carbon Nanomaterials: A Case Study of Vertically Aligned Carbon Nanotubes. <i>Chemie-Ingenieur-Technik</i> , 2017, 89, 1273-1287.	0.8	9
16	Adsorption of pure SO <sub>2</sub> on nanoscaled graphene oxide. <i>RSC Advances</i> , 2016, 6, 36834-36839.	3.6	31
17	Bud type carbon nanohorns: materials for high pressure CO <sub>2</sub> capture and Li-ion storage. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14267-14275.	10.3	16
18	Double-walled carbon nanotube array for CO <sub>2</sub> and SO <sub>2</sub> adsorption. <i>Journal of Chemical Physics</i> , 2015, 143, 124701.	3.0	37

#	ARTICLE	IF	CITATIONS
19	Inscribing Wettability Gradients Onto Superhydrophobic Carbon Nanotube Surfaces. <i>Advanced Materials Interfaces</i> , 2014, 1, 1300049.	3.7	27
20	Carbon Dioxide Plasma as a Versatile Medium for Purification and Functionalization of Vertically Aligned Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2014, 118, 12028-12034.	3.1	41
21	Gas adsorption studies of CO <sub>2</sub> and N <sub>2</sub> in spatially aligned double-walled carbon nanotube arrays. <i>Carbon</i> , 2013, 61, 616-623.	10.3	64
22	Understanding Carbon Dioxide Adsorption in Carbon Nanotube Arrays: Molecular Simulation and Adsorption Measurements. <i>Journal of Physical Chemistry C</i> , 2013, 117, 13492-13501.	3.1	61
23	Flame spray synthesis of nano lanthanum strontium manganite for solid oxide fuel cell applications. <i>Transactions of the Indian Institute of Metals</i> , 2011, 64, 181-184.	1.5	4