Hyeonhu Bae

List of Publications by Year
in descending order

27	808	567144 15	526166 27
papers	citations	h-index	g-index

28	28	28	751
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Boronâ€Rich Boron Nitride Nanotubes as Highly Selective Adsorbents for Selected Diatomic Air Pollutants: A DFT Study. Advanced Theory and Simulations, 2022, 5, .	1.3	8
2	Ultrasensitive N-Channel Graphene Gas Sensors by Nondestructive Molecular Doping. ACS Nano, 2022, 16, 2176-2187.	7.3	42
3	High-capacity reversible hydrogen storage properties of metal-decorated nitrogenated holey graphenes. International Journal of Hydrogen Energy, 2022, 47, 10654-10664.	3.8	22
4	Two-Dimensional Bismuthene Nanosheets for Selective Detection of Toxic Gases. ACS Applied Nano Materials, 2022, 5, 2984-2993.	2.4	29
5	Selective decoration of nitrogenated holey graphene (C2N) with titanium clusters for enhanced hydrogen storage application. International Journal of Hydrogen Energy, 2021, 46, 7371-7380.	3.8	63
6	Density Functional Theory Study of Li-Functionalized Nanoporous R-Graphyneâ€“Metalâ€“Organic Frameworks for Reversible Hydrogen Storage. ACS Applied Nano Materials, 2021, 4, 3949-3957.	2.4	16
7	Density Functional Theory Study on Sensing and Dielectric Properties of Arsenic Trisulfide Nanosheets for Detecting Volatile Organic Compounds. ACS Applied Nano Materials, 2021, 4, 5444-5453.	2.4	9
8	Unidirectional Alignment of AgCN Microwires on Distorted Transition Metal Dichalcogenide Crystals. ACS Applied Materials & Interfaces, 2021, 13, 8727-8735.	4.0	3
9	Wafer-Scale Production of Transition Metal Dichalcogenides and Alloy Monolayers by Nanocrystal Conversion for Large-Scale Ultrathin Flexible Electronics. Nano Letters, 2021, 21, 9153-9163.	4.5	29
10	Conversion of CO₂ into Formic Acid on Transition Metal-Porphyrin-like Graphene: First Principles Calculations. ACS Omega, 2021, 6, 27045-27051.	1.6	3
11	Tunning Hydrogen Storage Properties of Carbon Eneâ€“Yne Nanosheets through Selected Foreign Metal Functionalization. Journal of Physical Chemistry C, 2020, 124, 16827-16837.	1.5	15
12	Efficient Sensing Properties of Aluminum Nitride Nanosheets toward Toxic Pollutants under Gated Electric Field. ACS Applied Electronic Materials, 2020, 2, 1645-1652.	2.0	15
13	Sensing of volatile organic compounds on two-dimensional nitrogenated holey graphene, graphdiyne, and their heterostructure. Carbon, 2020, 163, 213-223.	5.4	77
14	Critical differences in 3D atomic structure of individual ligand-protected nanocrystals in solution. Science, 2020, 368, 60-67.	6.0	103
15	Physisorption and Chemisorption of SF6 by Transition Metal-Porphyrin Structure Embedded on Graphene Surface with Different Hapticities. Journal of the Korean Physical Society, 2020, 76, 1001-1004.	0.3	1
16	Capacity enhancement of polylithiated functionalized boron nitride nanotubes: an efficient hydrogen storage medium. Physical Chemistry Chemical Physics, 2020, 22, 15675-15682.	1.3	18
17	Highly sensitive and selective sensing properties of modified green phosphorene monolayers towards SF6 decomposition gases. Applied Surface Science, 2020, 512, 145641.	3.1	28
18	Hydrogen storage capacity of low-lying isomer of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:msub><mml:mrow><mml:mtext>C</mml:mtext></mml:mrow><mml:mrow><mml:mn>24</mml:m functionalized with Ti. International Journal of Hydrogen Energy, 2020, 45, 9936-9945.	3.8	50

#	Article	IF	Citations
19	Competition between HÃ¼ckelâ€™s Rule and Jahnâ€“Teller Distortion in Small Carbon Rings: A Quantum Monte Carlo Study. Journal of Physical Chemistry A, 2020, 124, 3636-3640.	1.1	13
20	Reversible hydrogen storage properties of defect-engineered <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="bold">C</mml:mi></mml:mrow><mml:mrow><mml:mn mathvariant="bold">4</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="bold">N</mml:mi></mml:mrow></mml:math> nanosheets under ambient conditions. Car	5.4	69
21	Enhancement in hydrogen storage capacities of light metal functionalized Boronâ€“Graphdiyne nanosheets. Carbon, 2019, 147, 199-205.	5.4	100
22	Theoretical investigation of the vertical dielectric screening dependence on defects for few-layered van der Waals materials. RSC Advances, 2019, 9, 40309-40315.	1.7	12
23	Enhanced Hydrogen-Storage Capacity and Structural Stability of an Organic Clathrate Structure with Fullerene (C₆₀) Guests and Lithium Doping. Chemistry of Materials, 2018, 30, 3028-3039.	3.2	22
24	Control of CO₂ Capture Process on Transition-Metal-Porphyrin-like Graphene with Mechanical Strain. ACS Omega, 2018, 3, 10554-10563.	1.6	7
25	Calcium-decorated carbon nanostructures for the selective capture of carbon dioxide. Physical Chemistry Chemical Physics, 2016, 18, 29086-29091.	1.3	15
26	Steric effects of CO 2 binding to transition metal-benzene complexes: AÂfirst-principles study. Current Applied Physics, 2016, 16, 1124-1129.	1.1	8
27	High-throughput screening of metal-porphyrin-like graphenes for selective capture of carbon dioxide. Scientific Reports, 2016, 6, 21788.	1.6	31