

# Utkarsh Kumar

## List of Publications by Year in descending order

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29  
papers

600  
citations

516710

16  
h-index

610901

24  
g-index

29  
all docs

29  
docs citations

29  
times ranked

416  
citing authors

#	ARTICLE	IF	CITATIONS
1	Carbon Nanotube: Synthesis and Application in Solar Cell. Journal of Inorganic and Organometallic Polymers and Materials, 2016, 26, 1231-1242.	3.7	57
2	MWCNT Doped ZnO Nanocomposite Thin Film as LPG Sensing. Journal of Inorganic and Organometallic Polymers and Materials, 2016, 26, 1434-1440.	3.7	50
3	Development of humidity sensor using modified curved MWCNT based thin film with DFT calculations. Sensors and Actuators B: Chemical, 2019, 288, 399-407.	7.8	46
4	Synthesis of carbon nanotubes by direct liquid injection chemical vapor deposition method and its relevance for developing an ultra-sensitive room temperature based CO2 sensor. Journal of the Taiwan Institute of Chemical Engineers, 2019, 96, 652-663.	5.3	45
5	Self-assembled carbon nitride/cobalt (III) porphyrin photocatalyst for mimicking natural photosynthesis. Diamond and Related Materials, 2020, 101, 107648.	3.9	36
6	Development of WO3-PEDOT: PSS hybrid nanocomposites based devices for liquefied petroleum gas (LPG) sensor. Journal of Materials Science: Materials in Electronics, 2019, 30, 13593-13603.	2.2	35
7	The beauty inhabited inside the modified Graphene for moisture detection at different frequencies. Journal of Materials Science: Materials in Electronics, 2020, 31, 10836-10845.	2.2	29
8	Synthesis of MWCNT/PPY nanocomposite using oxidation polymerization method and its employment in sensing such as CO2 and humidity. Journal of the Taiwan Institute of Chemical Engineers, 2020, 113, 419-427.	5.3	27
9	Healable, highly sensitive LPG sensor based on Ni0.4Zn0.6Fe2O4 nanohybrid grown by autocombustion process. Sensors and Actuators B: Chemical, 2021, 327, 128840.	7.8	23
10	Synthesis and characterizations of exohedral functionalized graphene oxide with iron nanoparticles for humidity detection. Journal of Materials Science: Materials in Electronics, 2019, 30, 13013-13023.	2.2	22
11	Surface modification of ZnO nanopillars to enhance the sensitivity towards methane: The studies of experimental and first-principle simulation. Applied Surface Science, 2021, 568, 150817.	6.1	22
12	Revealing a Highly Sensitive Sub-ppb-Level NO <sub>2</sub> Gas-Sensing Capability of Novel Architecture 2D/0D MoS <sub>2</sub> /SnS Heterostructures with DFT Interpretation. ACS Applied Materials & Interfaces, 2022, 14, 32279-32288.	8.0	21
13	Effect of direct current biasing on the adjustable radio-frequency negative permittivity characteristics of Bi2SiO5/multiwall carbon nanotube metacomposites. Ceramics International, 2021, 47, 1389-1398.	4.8	20
14	Fabrication of nanostructured lead-free bismuth sodium titanatethin film and its liquefied petroleum gas sensing. Sensors and Actuators A: Physical, 2020, 301, 111765.	4.1	19
15	Ion beam engineering in WO3-PEDOT: PSS hybrid nanocomposite thin films for gas sensing measurement at room temperature. Inorganic Chemistry Communication, 2020, 119, 108000.	3.9	18
16	In situ growth of ternary metal sulfide based quantum dots to detect dual gas at extremely low levels with theoretical investigations. Sensors and Actuators B: Chemical, 2022, 353, 131192.	7.8	18
17	Synthesis of TiO2 nanorods using wet chemical method and their photovoltaic and humidity sensing applications. Sensors International, 2021, 2, 100095.	8.4	16
18	Hierarchical flower-like Bi2SiO5/MWCNT nanocomposites for highly sensitive LPG sensor at room temperature. Journal of Alloys and Compounds, 2021, 856, 158157.	5.5	14

#	ARTICLE	IF	CITATIONS
19	Development of scattering based glucose sensor using hydrothermally synthesized cuprous oxide nanoparticles. Results in Physics, 2019, 15, 102772.	4.1	13
20	Tunable negative permittivity of Bi <sub>2</sub> O <sub>3</sub> @SiO <sub>2</sub> /MWCNT@glass-nanocomposites at radio frequency region. Journal of Materials Science: Materials in Electronics, 2020, 31, 11791-11800.	2.2	10
21	Catalytic growth of MWCNT using CVD and its application as opto-electronic humidity sensor. Carbon Letters, 2020, 30, 215-224.	5.9	9
22	Surface modification and characterization of h-BN-doped PVP thin film and its application as humidity sensor with theoretical DFT calculations. Chemical Papers, 2021, 75, 4055-4068.	2.2	9
23	Comparative DFT dual gas adsorption model of ZnO and Ag/ZnO with experimental applications as gas detection at ppb level. Nanotechnology, 2022, 33, 105502.	2.6	9
24	Investigation on structural and optical properties of porous SnO <sub>2</sub> nanomaterial fabricated by direct liquid injection chemical vapour deposition technique. Solid State Communications, 2022, 348-349, 114723.	1.9	9
25	State of Art: An Approach to the Synthesis of Pure and Doped Graphene. Advanced Science, Engineering and Medicine, 2018, 10, 638-644.	0.3	7
26	Carbon Nanotubes Based Thin Films as Opto-Electronic Moisture Sensor. Advanced Science, Engineering and Medicine, 2018, 10, 785-787.	0.3	6
27	Synthesis and structural investigations of microporous graphene-reinforced h-BN solids for LPG sensing applications. Materials Research Express, 2019, 6, 125090.	1.6	4
28	Development of ultrafast room temperature LPG sensor using Fe <sub>2</sub> O <sub>3</sub> /PVP nanocomposite. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	4
29	Synthesis and characterization of catalytic CVD growth pristine and functionalized MWCNT. Journal of Applied Physics, 2021, 130, 075106.	2.5	2