

# Kamlendra Awasthi

## List of Publications by Citations

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111  
papers

1,326  
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20  
h-index

31  
g-index

122  
ext. papers

1,678  
ext. citations

3.6  
avg, IF

4.81  
L-index

#	Paper	IF	Citations
111	Gas sensing properties of ZnO nanostructures (flowers/rods) synthesized by hydrothermal method. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 292, 24-31	8.5	113
110	Investigation of luminescence and structural properties of ZnO nanoparticles, synthesized with different precursors. <i>Materials Chemistry Frontiers</i> , <b>2017</b> , 1, 1413-1421	7.8	61
109	Enhancement of hydrogen gas permeability in electrically aligned MWCNT-PMMA composite membranes. <i>Micron</i> , <b>2010</b> , 41, 909-14	2.3	49
108	Multi walled carbon nano tubes induced hepatotoxicity in Swiss albino mice. <i>Micron</i> , <b>2013</b> , 44, 359-64	2.3	48
107	Polyaniline/Carbon Nanotube Composites: Preparation Methods, Properties, and Applications. <i>Polymer-Plastics Technology and Engineering</i> , <b>2018</b> , 57, 70-97		46
106	Optical, chemical and structural modification of oxygen irradiated PET. <i>Radiation Measurements</i> , <b>2010</b> , 45, 850-855	1.5	44
105	Silver nanoparticle induced cytotoxicity, oxidative stress, and DNA damage in CHO cells. <i>Journal of Nanoparticle Research</i> , <b>2013</b> , 15, 1	2.3	43
104	Hydrogen separation in doped and blend polymer membranes. <i>International Journal of Hydrogen Energy</i> , <b>2008</b> , 33, 327-331	6.7	32
103	Functionalized Pd-decorated and aligned MWCNTs in polycarbonate as a selective membrane for hydrogen separation. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 23057-23066	6.7	29
102	Structural, optical, thermo-mechanical and transport properties of ion irradiated polymer membranes. <i>Polymer Bulletin</i> , <b>2006</b> , 56, 427-435	2.4	28
101	Synthesis and characterization of hybrid PANI/MWCNT nanocomposites for EMI applications. <i>Polymer Composites</i> , <b>2018</b> , 39, 3858-3868	3	27
100	Cytotoxicity, genotoxicity and alteration of cellular antioxidant enzymes in silver nanoparticles exposed CHO cells. <i>RSC Advances</i> , <b>2015</b> , 5, 34927-34935	3.7	24
99	An efficient one pot three-component nanocatalyzed synthesis of spiroheterocycles using TiO <sub>2</sub> nanoparticles as a heterogeneous catalyst. <i>RSC Advances</i> , <b>2015</b> , 5, 46415-46422	3.7	24
98	Effect of ZnO Nanoparticles on Germination of Triticum aestivum Seeds. <i>Macromolecular Symposia</i> , <b>2017</b> , 376, 1700043	0.8	24
97	Characterization of Nanocomposite Polymeric Membrane. <i>Journal of Polymer Research</i> , <b>2007</b> , 13, 357-360.	0.7	23
96	Microstructure change in poly(ethersulfone) films by swift heavy ions. <i>Micron</i> , <b>2010</b> , 41, 390-4	2.3	22
95	Swift heavy ion (SHI) irradiated polymer blend membranes for hydrogen permeation. <i>International Journal of Hydrogen Energy</i> , <b>2007</b> , 32, 3105-3108	6.7	22

94	Electrical behavior of dual-morphology polyaniline. <i>Journal of Applied Polymer Science</i> , <b>2016</b> , 133,	2.9	22
93	Functionalization of track-etched poly (ethylene terephthalate) membranes as a selective filter for hydrogen purification. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 9356-9365	6.7	21
92	60MeV Ni ion induced modifications in nano-CdS/polystyrene composite films. <i>Radiation Physics and Chemistry</i> , <b>2014</b> , 94, 49-53	2.5	21
91	Transport through track etched polymeric blend membrane. <i>Bulletin of Materials Science</i> , <b>2006</b> , 29, 261-264	2.4	20
90	Hydrogen ion sensing characteristics of Na <sub>3</sub> BiO <sub>4</sub> /Bi <sub>2</sub> O <sub>3</sub> mixed oxide nanostructures based EG-FET pH sensor. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 18743-18751	6.7	20
89	Optical and Structural Study of Polyaniline/Polystyrene Composite Films. <i>Macromolecular Symposia</i> , <b>2015</b> , 357, 229-234	0.8	19
88	Study of gas permeation for asymmetric track-etched polymer blends. <i>International Journal of Hydrogen Energy</i> , <b>2006</b> , 31, 1266-1270	6.7	19
87	Gas permeation study of Ti-coated, track-etched polymeric membranes. <i>Vacuum</i> , <b>2006</b> , 81, 389-393	3.7	19
86	Ion transport through track etched polypropylene membrane. <i>European Polymer Journal</i> , <b>2006</b> , 42, 883-887	3.7	18
85	Study of hydrogen transport through porous aluminum and composite membranes. <i>International Journal of Hydrogen Energy</i> , <b>2008</b> , 33, 346-349	6.7	17
84	Gas and ion transport through a track-etched large-area polymer film. <i>Desalination</i> , <b>2006</b> , 195, 273-280	10.3	16
83	An efficient and environmentally sustainable domino protocol for the synthesis of structurally diverse spiroannulated pyrimidophenazines using erbium doped TiO nanoparticles as a recyclable and reusable heterogeneous acid catalyst.. <i>RSC Advances</i> , <b>2018</b> , 8, 30430-30440	3.7	16
82	Development of ZnO nanostructure film for pH sensing application. <i>Applied Physics A: Materials Science and Processing</i> , <b>2020</b> , 126, 1	2.6	15
81	Large area Cl <sup>9+</sup> irradiated PET membranes for hydrogen separation. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 9374-9381	6.7	15
80	Surface Modification and Synthesis of Polymeric Membrane for Energy and Biological Applications. <i>Journal of Biomedical Nanotechnology</i> , <b>2006</b> , 2, 144-151	4	15
79	In Vivo Genotoxic Assessment Of Silver Nanoparticles In Liver Cells Of Swiss Albino Mice Using Comet Assay. <i>Advanced Materials Letters</i> , <b>2015</b> , 6, 187-193	2.4	15
78	Flower-like BiS nanostructures as highly efficient anodes for all-solid-state lithium-ion batteries.. <i>RSC Advances</i> , <b>2019</b> , 9, 29549-29555	3.7	15
77	Palladium nanoparticle binding in functionalized track etched PET membrane for hydrogen gas separation. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 16186-16194	6.7	14

76	Dose dependent enhanced antibacterial effects and reduced biofilm activity against <i>Bacillus subtilis</i> in presence of ZnO nanoparticles. <i>Materials Science and Engineering C</i> , <b>2020</b> , 113, 111021	8.3	14
75	Using fast atomic source and low-energy plasma ions for polymer surface modification. <i>Vacuum</i> , <b>2006</b> , 80, 643-646	3.7	14
74	LiBH <sub>4</sub> as solid electrolyte for Li-ion batteries with Bi <sub>2</sub> Te <sub>3</sub> nanostructured anode. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 21709-21714	6.7	13
73	Morphology-dependent structural and optical properties of ZnO nanostructures. <i>Applied Physics A: Materials Science and Processing</i> , <b>2019</b> , 125, 1	2.6	13
72	Non-isothermal crystallization kinetics of TiO <sub>2</sub> nanoparticle-filled poly(ethylene terephthalate) with structural and chemical properties. <i>Polymer Bulletin</i> , <b>2014</b> , 71, 1539-1555	2.4	13
71	Highly stable nanostructured Bi <sub>2</sub> Se <sub>3</sub> anode material for all solid-state lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 838, 155403	5.7	12
70	Selective deposition of Pd nanoparticles in porous PET membrane for hydrogen separation. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 15203-15210	6.7	11
69	Electrochemical hydrogen evolution and storage studies on bismuth nano hexagons. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 21642-21648	6.7	11
68	Swift heavy ion irradiated polymeric membranes for gas permeation. <i>Journal of Applied Polymer Science</i> , <b>2006</b> , 102, 2386-2390	2.9	11
67	Nanostructured Bi <sub>2</sub> Te <sub>3</sub> as anode material as well as a destabilizing agent for LiBH <sub>4</sub> . <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 16992-16999	6.7	11
66	Electrochemical sensor for detection of mercury (II) ions in water using nanostructured bismuth hexagons. <i>Applied Physics A: Materials Science and Processing</i> , <b>2018</b> , 124, 1	2.6	11
65	An efficient hydrogen gas sensor based on hierarchical Ag/ZnO hollow microstructures. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 346, 130510	8.5	11
64	Hydrogen gas separation with controlled selectivity via efficient and cost effective block copolymer coated PET membranes. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 19977-19983	6.7	10
63	Thermal Stability and Electrical Properties of Polyaniline Synthesized by Oxidative Polymerization Method. <i>Macromolecular Symposia</i> , <b>2015</b> , 357, 168-172	0.8	10
62	Effect of temperature and irradiation on gas permeability for polymeric membrane. <i>Bulletin of Materials Science</i> , <b>2005</b> , 28, 643-646	1.7	10
61	Effect of UV irradiation on PC membrane and use of Pd nanoparticles with/without PVP for H <sub>2</sub> selectivity enhancement over CO <sub>2</sub> and N <sub>2</sub> gases. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 21690-21698	6.7	9
60	Characterization of asymmetric polymeric membranes by gas permeation. <i>Micron</i> , <b>2007</b> , 38, 326-9	2.3	9
59	Antimicrobial Properties of Electro-Chemically Stabilized Organo-Metallic Thin Films <b>2013</b> , 1, 42-47		9

58	Tuning of fermi level in antimony telluride thin films by low-energy FeIon implantation. <i>Applied Physics A: Materials Science and Processing</i> , <b>2021</b> , 127, 1	2.6	9
57	Surface Modification Of Nanocomposite Polymer Membranes By Ion Plasma Irradiation For Improving Biocompatibility Of Polymer. <i>Advanced Materials Letters</i> , <b>2014</b> , 5, 645-651	2.4	8
56	Synthesis and characterization of polyaniline membranes with secondary amine additive containing N,N'-dimethyl propylene urea for fuel cell application. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 21715-21723	6.7	7
55	Conduction nature of conical pores in PET membrane. <i>Polymer Bulletin</i> , <b>2006</b> , 57, 723-728	2.4	7
54	Synthesis and Crystallization Studies of Thermo-plastic Polyester/Titania Nanocomposites. <i>Journal of Nuclear Physics Material Sciences Radiation and Applications</i> , <b>2014</b> , 1, 207-211	0.2	7
53	The destabilization of LiBH <sub>4</sub> through the addition of Bi <sub>2</sub> Se <sub>3</sub> nanosheets. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 23947-23953	6.7	7
52	Recent advances in application of the graphene-based membrane for water purification. <i>Materials Today Chemistry</i> , <b>2021</b> , 22, 100597	6.2	6
51	Electrochemical reaction mechanism for Bi <sub>2</sub> Te <sub>3</sub> -based anode material in highly durable all solid-state lithium-ion batteries. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2020</b> , 31, 16429-16436	2.1	6
50	Synthesis and characterization of terbium doped TiO <sub>2</sub> nanoparticles and their use as recyclable and reusable heterogeneous catalyst for efficient and environmentally sustainable synthesis of spiroannulated indolo[3,2-c]quinolines- mimetic scaffolds of isocryptolepine. <i>Applied Organometallic Chemistry</i> , <b>2020</b> , 34, e5836	3.1	5
49	Functionalized and engineered nanochannels for gas separation. <i>Pure and Applied Chemistry</i> , <b>2018</b> , 90, 1063-1071	2.1	5
48	Investigation of thermal stability of TiO <sub>2</sub> nanoparticles using 1-thioglycerol as capping agent. <i>Solid State Communications</i> , <b>2017</b> , 263, 1-5	1.6	5
47	Structural and Morphological Study of PS-ZnO Nanocomposite Membrane. <i>Macromolecular Symposia</i> , <b>2015</b> , 357, 218-222	0.8	5
46	Silver Nanoparticles and Carbon Nanotubes Induced DNA Damage in Mice Evaluated by Single Cell Gel Electrophoresis. <i>Macromolecular Symposia</i> , <b>2015</b> , 357, 210-217	0.8	5
45	Functional role of single-atom catalysts in electrocatalytic hydrogen evolution: Current developments and future challenges. <i>Coordination Chemistry Reviews</i> , <b>2022</b> , 452, 214289	23.2	5
44	Effects of hydroxyl-functionalized multiwalled carbon nanotubes on sperm health and testes of Wistar rats. <i>Toxicology and Industrial Health</i> , <b>2017</b> , 33, 519-529	1.8	4
43	Synthesis and Characterization of Plasma Treated TiO <sub>2</sub> Nano Composites Polymer Membranes <b>2013</b> , 1, 98-104		4
42	Synthesis and thermal analysis of polyaniline (PANI). <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1531, 012108	0.3	3
41	Toxicological Evaluation of TiO <sub>2</sub> Nanoparticles in Bacterial Cell. <i>Macromolecular Symposia</i> , <b>2015</b> , 357, 235-240	0.8	3

40	Structural and Morphological Study of PS-TiO <sub>2</sub> Nanocomposite Membranes. <i>Macromolecular Symposia</i> , <b>2015</b> , 357, 200-205	0.8	3
39	Metal-Immobilized Micellar Aggregates of a Block Copolymer from a Mixed Solvent for a SERS-Active Sensing Substrate and Versatile Dip Catalysis. <i>Langmuir</i> , <b>2021</b> , 37, 2445-2456	4	3
38	ZnO nanoparticles favours heterogeneous nucleation in PET/ZnO nanocomposites. <i>Philosophical Magazine</i> , <b>2015</b> , 95, 2306-2322	1.6	2
37	SHI irradiation of metal doped zinc sulfide polymer nanocomposites synthesized using micro emulsion method. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2015</b> , 358, 258-262	1.2	2
36	Effective Doping of Er <sup>3+</sup> in ZnO Nanoparticles to Control Its Luminescent Properties. <i>Macromolecular Symposia</i> , <b>2017</b> , 376, 1700005	0.8	2
35	Investigation of dimensionality-dependent thermal stability of (Bi) <sub>2</sub> (Te) <sub>3</sub> . <i>Applied Physics A: Materials Science and Processing</i> , <b>2018</b> , 124, 1	2.6	2
34	Optical studies on bismuth chalcogenides. <i>Materials Today: Proceedings</i> , <b>2019</b> , 10, 142-150	1.4	2
33	Titania nanodots array using self-assembled poly(styrene)-b-poly(4-vinylpyridine) block copolymer nanotemplates via ex-situ approach. <i>Materials Letters</i> , <b>2017</b> , 209, 365-368	3.3	2
32	Effect of Volume Fraction of Minority Block on Morphology of PS-b-P4VP Nanotemplates. <i>Macromolecular Symposia</i> , <b>2017</b> , 376, 1700016	0.8	2
31	ZnO Doping in PET Matrix Enhances Conductivity of PET-ZnO Nanocomposites <b>2013</b> , 1, 118-123		2
30	Insights into the progress of polymeric nano-composite membranes for hydrogen separation and purification in the direction of sustainable energy resources. <i>Separation and Purification Technology</i> , <b>2021</b> , 120029	8.3	2
29	Biosensors for diagnosis of urinary tract infections: Advances and future challenges. <i>Materials Letters: X</i> , <b>2021</b> , 10, 100077	0.5	2
28	Active block copolymer layer on carboxyl-functionalized PET film for hydrogen separation. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 18676-18684	6.7	2
27	Luminescent and structural behaviour of Tb <sup>3+</sup> ions doped TiO <sub>2</sub> nanoparticles synthesized by facile sol-gel method. <i>Physica B: Condensed Matter</i> , <b>2021</b> , 602, 412465	2.8	2
26	Zinc oxide nanostructures based biosensors <b>2021</b> , 655-695		2
25	Conjugate polymer-based membranes for gas separation applications: current status and future prospects. <i>Materials Today Chemistry</i> , <b>2021</b> , 22, 100558	6.2	2
24	Charge storage mechanism in vanadium telluride/carbon nanobelts as electroactive material in an aqueous asymmetric supercapacitor.. <i>Journal of Colloid and Interface Science</i> , <b>2022</b> , 621, 110-118	9.3	2
23	Disposable bismuth-based electrodes for heavy metal ion detection. <i>IOP Conference Series: Earth and Environmental Science</i> , <b>2019</b> , 228, 012014	0.3	1

22	Hydrogen Sorption Characteristics of ZrCrAl Ternary Alloy as a Function of Milling Time. <i>Macromolecular Symposia</i> , <b>2017</b> , 376, 1700047	0.8	1
21	Poly (Ethylene Terephthalate)-ZnO Nanocomposites: Optical and Raman Studies. <i>Macromolecular Symposia</i> , <b>2015</b> , 357, 105-108	0.8	1
20	Enhanced hydrogen sensing performances of PdO nanoparticles-decorated ZnO flower-like nanostructures. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 900, 163545	5.7	1
19	Structural and Morphological Modifications Induced by Fe Ion Implantation in Sb <sub>2</sub> Te <sub>3</sub> Thin Films. <i>Macromolecular Symposia</i> , <b>2021</b> , 399, 2100079	0.8	1
18	UV-irradiation assisted functionalization and binding of Pd nanoparticles in polycarbonate membranes for hydrogen separation. <i>Environmental Science and Pollution Research</i> , <b>2021</b> , 28, 46404-46413	5.1	1
17	Facile synthesis of Pd@ZnO core@shell nanoparticles for selective ethanol detection. <i>Materials Letters: X</i> , <b>2021</b> , 10, 100068	0.5	1
16	A reversible tuning of Fermi level in BiSbTe <sub>3</sub> thin films through ion implantation. <i>Materials Letters</i> , <b>2022</b> , 306, 130923	3.3	1
15	Synthesis of ZnO nanostructures <b>2021</b> , 93-116		1
14	OPTICAL AND DYNAMIC MECHANICAL CHARACTERIZATION OF THIN FILM POLYMER NANOCOMPOSITES. <i>International Journal of Modern Physics B</i> , <b>2010</b> , 24, 57-63	1.1	0
13	Rapid thermal annealing induced engineering of surface and photoluminescence properties of (K,Na)NbO <sub>3</sub> thin films for optoelectronic applications. <i>Applied Surface Science</i> , <b>2021</b> , 151794	6.7	0
12	Bismuth Oxide Extended-Gate Field-Effect Transistor as pH Sensor. <i>Journal of Electronic Materials</i> , <b>2022</b> , 51, 2673-2681	1.9	0
11	Preface to the special issue on Soft Materials ICSM 2014. <i>Macromolecular Symposia</i> , <b>2015</b> , 357, 11-11	0.8	
10	A Comparative Study of the Effects of Oxygen Ions Upon the Free Volume and Physico-Chemical Properties of Makrofol (KG & N) Polycarbonate. <i>Macromolecular Symposia</i> , <b>2015</b> , 357, 86-98	0.8	
9	Temperature Dependence Study of Gas Permeability in Metal Doped Composite Polymeric Membranes. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 973, 1		
8	Preparation and Characterization of Zn-Se Bilayer Structure. <i>Advanced Materials Research</i> , <b>2007</b> , 31, 153-157	1.5	
7	Nanoporous Polymeric Membranes for Hydrogen Separation. <i>Green Energy and Technology</i> , <b>2020</b> , 355-376	6.6	
6	Efficient and Sustainable Synthesis of Spiroannulated Hybrid Molecules with Privileged Substructures using Nanostructured Heterogeneous Catalyst. <i>ChemistrySelect</i> , <b>2020</b> , 5, 14069-14077	1.8	
5	Effect of nanostructuring on surface oxidation of bismuth telluride. <i>Materials Today: Proceedings</i> , <b>2021</b> , 38, 1255-1258	1.4	

4 General introduction of zinc oxide nanomaterials **2021**, 1-19

3 Zinc-Oxide based EGFET pH sensors **2021**, 459-481

2 Palladium-oxide Extended Gate Field Effect Transistor as pH Sensor. *Materials Letters: X*, **2021**, 12, 1001025

1 Impact of defects on the structural and electrical transport properties of Sb<sub>2</sub>Te<sub>3</sub> thin films by SHI irradiation. *Materials Letters: X*, **2021**, 12, 100113

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