

Ashish Mathur

List of Publications by Year in descending order

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Version: 2024-02-01

95
papers

1,664
citations

304368

22
h-index

344852

36
g-index

96
all docs

96
docs citations

96
times ranked

2074
citing authors

#	ARTICLE	IF	CITATIONS
1	Aloe vera assisted facile green synthesis of reduced graphene oxide for electrochemical and dye removal applications. RSC Advances, 2017, 7, 26680-26688.	1.7	116
2	Point of care with micro fluidic paper based device integrated with nano zeolite-graphene oxide nanoflakes for electrochemical sensing of ketamine. Biosensors and Bioelectronics, 2017, 88, 249-257.	5.3	90
3	Characterisation of PMMA microfluidic channels and devices fabricated by hot embossing and sealed by direct bonding. Current Applied Physics, 2009, 9, 1199-1202.	1.1	84
4	Multifaceted applications of isolated microalgae Chlamydomonas sp. TRC-1 in wastewater remediation, lipid production and bioelectricity generation. Bioresource Technology, 2020, 304, 122993.	4.8	63
5	Electrochemical micro analytical device interfaced with portable potentiostat for rapid detection of chlorpyrifos using acetylcholinesterase conjugated metal organic framework using Internet of things. Scientific Reports, 2019, 9, 19862.	1.6	62
6	Paper based DNA biosensor for detection of chikungunya virus using gold shells coated magnetic nanocubes. Process Biochemistry, 2018, 74, 35-42.	1.8	55
7	Thinning of multilayer graphene to monolayer graphene in a plasma environment. Nanotechnology, 2011, 22, 025704.	1.3	53
8	Comparative analysis of single-walled and multi-walled carbon nanotubes for electrochemical sensing of glucose on gold printed circuit boards. Materials Science and Engineering C, 2018, 90, 273-279.	3.8	48
9	Paper based point of care immunosensor for the impedimetric detection of cardiac troponin I biomarker. Biomedical Microdevices, 2020, 22, 6.	1.4	46
10	Graphene quantum dot-gold hybrid nanoparticles integrated aptasensor for ultra-sensitive detection of vitamin D3 towards point-of-care application. Applied Surface Science, 2020, 521, 146427.	3.1	45
11	Electro-deposited nano-webbed structures based on polyaniline/multi walled carbon nanotubes for enzymatic detection of organophosphates. Food Chemistry, 2020, 323, 126784.	4.2	44
12	Comparative in vitro cytotoxicity study of carbon nanotubes and titania nanostructures on human lung epithelial cells. Journal of Hazardous Materials, 2011, 191, 56-61.	6.5	42
13	Vaccine Hesitancy as a Challenge or Vaccine Confidence as an Opportunity for Childhood Immunisation in India. Infectious Diseases and Therapy, 2020, 9, 421-432.	1.8	36
14	Portable bioactive paper based genosensor incorporated with Zn-Ag nanoblooms for herpes detection at the point-of-care. International Journal of Biological Macromolecules, 2018, 107, 2559-2565.	3.6	33
15	Detection of alprazolam with a lab on paper economical device integrated with urchin like Ag@ Pd shell nano-hybrids. Materials Science and Engineering C, 2017, 80, 728-735.	3.8	28
16	A new tactics for the detection of S. aureus via paper based geno-interface incorporated with graphene nano dots and zeolites. International Journal of Biological Macromolecules, 2018, 112, 364-370.	3.6	28
17	Microfluidic Affinity Sensor Based on a Molecularly Imprinted Polymer for Ultrasensitive Detection of Chlorpyrifos. ACS Omega, 2020, 5, 31765-31773.	1.6	27
18	Functional diamond like carbon (DLC) coatings on polymer for improved gas barrier performance. Diamond and Related Materials, 2017, 80, 59-63.	1.8	26

#	ARTICLE	IF	CITATIONS
19	Lab on paper chip integrated with Si@GNRs for electroanalysis of diazepam. <i>Analytica Chimica Acta</i> , 2017, 980, 50-57.	2.6	25
20	Laser induced graphene sensors for assessing pH: Application to wound management. <i>Electrochemistry Communications</i> , 2021, 123, 106914.	2.3	25
21	Self-aligned TiO ₂ - Photo reduced graphene oxide hybrid surface for smart bandage application. <i>Applied Surface Science</i> , 2019, 488, 261-268.	3.1	24
22	Ultra-sensitive detection of l-tyrosine using molecularly imprinted electrochemical sensor towards diabetic foot ulcer detection. <i>Electrochemistry Communications</i> , 2020, 117, 106782.	2.3	24
23	Electrical and Raman Spectroscopic Studies of Vertically Aligned Multi-Walled Carbon Nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 4392-4396.	0.9	23
24	MnO ₂ Based Bisphenol-A Electrochemical Sensor Using Micro-Fluidic Platform. <i>IEEE Sensors Journal</i> , 2018, 18, 2206-2210.	2.4	22
25	Graphitic Carbon Nitride as an Amplification Platform on an Electrochemical Paper-Based Device for the Detection of Norovirus-Specific DNA. <i>Sensors</i> , 2020, 20, 2070.	2.1	22
26	Nanoscale surface modifications to control capillary flow characteristics in PMMA microfluidic devices. <i>Nanoscale Research Letters</i> , 2011, 6, 411.	3.1	21
27	Paper-Based Electrodes Conjugated with Tungsten Disulfide Nanostructure and Aptamer for Impedimetric Detection of <i>Listeria monocytogenes</i> . <i>Biosensors</i> , 2022, 12, 88.	2.3	21
28	Carbon spheres for energy applications: Raman and X-ray photoemission spectroscopy studies. <i>International Journal of Energy Research</i> , 2014, 38, 444-451.	2.2	19
29	An empirical study of student perception towards pedagogy, teaching style and effectiveness of online classes. <i>Education and Information Technologies</i> , 2022, 27, 589-610.	3.5	19
30	Oxygen plasma assisted end-opening and field emission enhancement in vertically aligned multiwall carbon nanotubes. <i>Materials Chemistry and Physics</i> , 2012, 134, 425-429.	2.0	18
31	Carbon nanotube growth activated by quantum-confined silicon nanocrystals. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 122001.	1.3	18
32	Hydrothermally synthesized zinc oxide nanorods incorporated on lab-on-paper device for electrochemical detection of recreational drug. <i>Artificial Cells, Nanomedicine and Biotechnology</i> , 2018, 46, 1-8.	1.9	18
33	South Asian Cardiovascular Disease & Cancer Risk: Genetics & Pathophysiology. <i>Journal of Community Health</i> , 2018, 43, 1100-1114.	1.9	18
34	Tungsten disulfide Quantum Dots Based Disposable Paper Based Lab on GenoChip for Specific Meningitis DNA Detection. <i>Journal of the Electrochemical Society</i> , 2020, 167, 107501.	1.3	18
35	Journey of organ on a chip technology and its role in future healthcare scenario. <i>Applied Surface Science Advances</i> , 2022, 9, 100246.	2.9	17
36	A comparative study of the growth, microstructural and electrical properties of multiwall CNTs grown by thermal and microwave plasma enhanced CVD methods. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2011, 44, 29-36.	1.3	16

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37	Naked-eye quantitative assay on paper device for date rape drug sensing via smart phone APP. Vacuum, 2018, 153, 300-305.	1.6	16
38	Wound diagnostics: Deploying electroanalytical strategies for point of care sensors and smart dressings. Current Opinion in Electrochemistry, 2017, 3, 40-45.	2.5	15
39	Adapting resistive sensors for monitoring moisture in smart wound dressings. Current Opinion in Electrochemistry, 2020, 23, 31-35.	2.5	15
40	Few biomedical applications of carbon nanotubes. Methods in Enzymology, 2020, 630, 347-363.	0.4	14
41	Development of Field Deployable Sensor for Detection of Pesticide From Food Chain. IEEE Sensors Journal, 2021, 21, 4129-4134.	2.4	14
42	Effect of thin aluminum interlayer on growth and microstructure of carbon nanotubes. Current Applied Physics, 2010, 10, 407-410.	1.1	13
43	Experimental study on capillary flow through polymer microchannel bends for microfluidic applications. Journal of Micromechanics and Microengineering, 2010, 20, 055018.	1.5	13
44	Growth of carbon nanotube arrays using nanosphere lithography and their application in field emission devices. Diamond and Related Materials, 2010, 19, 914-917.	1.8	13
45	Designing of a Microelectrode Sensor-Based Label Free Milk Adulteration Testing System. IEEE Sensors Journal, 2017, 17, 6050-6055.	2.4	13
46	A Third Generation Bilirubin Sensor Development By Using Gold Nanomaterial As An Immobilization Matrix For Signal Amplification. Advanced Materials Letters, 2015, 6, 1012-1017.	0.3	13
47	An Electroanalytical Paper-Based Wound Dressing Using ZIF-67/C ₃ N ₄ Nanocomposite Towards the Monitoring of <i>Staphylococcus Aureus</i> in Diabetic Foot Ulcer. IEEE Sensors Journal, 2021, 21, 1215-1221.	2.4	12
48	An Enzymatic Multiplexed Impedimetric Sensor Based on $\text{Zn-MnO}_2/\text{GQD}$ Nano-Composite for the Detection of Diabetes and Diabetic Foot Ulcer Using Micro-Fluidic Platform. Chemosensors, 2021, 9, 339.	1.8	12
49	Microneedle array sensors based on carbon nanoparticle composites: interfacial chemistry and electroanalytical properties. Journal of Materials Science, 2019, 54, 10705-10714.	1.7	11
50	Engineering of luminescent graphene quantum dot-gold (GQD-Au) hybrid nanoparticles for functional applications. MethodsX, 2020, 7, 100963.	0.7	11
51	Electroanalytical Sensor for Diabetic Foot Ulcer Monitoring with Integrated Electronics for Connected Health Application. Electroanalysis, 2020, 32, 2082-2089.	1.5	11
52	Rapid removal of lead(II) ions from water using iron oxide "tea waste nanocomposite" a kinetic study. IET Nanobiotechnology, 2020, 14, 275-280.	1.9	11
53	Transferring vertically aligned carbon nanotubes onto a polymeric substrate using a hot embossing technique for microfluidic applications. Journal of the Royal Society Interface, 2010, 7, 1129-1133.	1.5	10
54	Self-Assembled Two-Dimensional Molybdenum Disulfide Nanosheet Geno-Interface for the Detection of <i>Salmonella</i> . ACS Omega, 2019, 4, 14913-14919.	1.6	10

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55	A COMPARATIVE CLINICAL STUDY TO EVALUATE THE EFFICACY OF LEVOBUPIVACAINE WITH CLONIDINE AND LEVOBUPIVACAINE WITH DEXMEDETOMIDINE IN SUPRACLAVICULAR BRACHIAL PLEXUS BLOCK. <i>Journal of Evolution of Medical and Dental Sciences</i> , 2016, 5, 925-929.	0.1	10
56	Titania-based porous nanocomposites for potential environmental applications. <i>Bulletin of Materials Science</i> , 2020, 43, 1.	0.8	9
57	Design and development of a portable resistive sensor based on MnO_2/GQD nanocomposites for trace quantification of Pb(II) in water. <i>IET Nanobiotechnology</i> , 2021, 15, 505-511.	1.9	9
58	New bismuth oxyiodide/chitosan nanocomposite for ultrasonic waves expedited adsorptive removal of amoxicillin from aqueous medium: kinetic, isotherm and thermodynamic investigations. <i>Environmental Science and Pollution Research</i> , 2022, 29, 86260-86276.	2.7	9
59	Ion beam modified TiO_2 nanotubular bio-interface for electrochemical detection of L-tyrosine towards smart bandage application. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 195, 111239.	2.5	8
60	Fruit Defect Prediction Model (FDPM) based on Three-Level Validation. <i>Journal of Nondestructive Evaluation</i> , 2021, 40, 1.	1.1	8
61	Equivalent Circuit Models and Analysis of Electrochemical Impedance Spectra of Caffeine Solutions and Beverages. <i>International Journal of Electrochemical Science</i> , 2016, 11, 6370-6386.	0.5	7
62	Cardiovascular Disease & Cancer Risk Among South Asians: Impact of Sociocultural Influences on Lifestyle and Behavior. <i>Journal of Immigrant and Minority Health</i> , 2019, 21, 15-25.	0.8	7
63	Design and development of a novel flexible molecularly imprinted electroanalytical sensor for the monitoring of diabetic foot ulcers. <i>Surfaces and Interfaces</i> , 2021, 26, 101310.	1.5	7
64	Cardiometabolic Risk in South Asian Inhabitants of California: Hypertriglyceridemic Waist vs Hypertriglyceridemic Body Mass Index. <i>Ethnicity and Disease</i> , 2016, 26, 191.	1.0	6
65	Palladium Nanoneedles on Carbon Fiber: Highly Sensitive Peroxide Detection for Biomedical and Wearable Sensor Applications. <i>IEEE Sensors Journal</i> , 2019, 19, 34-38.	2.4	6
66	Effectiveness of a community screening program for metabolic syndrome and cardiovascular risk factor identification in young South Asians adults. <i>Diabetes and Metabolic Syndrome: Clinical Research and Reviews</i> , 2015, 9, 38-41.	1.8	5
67	Point of Care with Micro Fluidic Paper Based Device Incorporated with Nanocrys of Zeolite "GO for Electrochemical Sensing of Date Rape Drug. <i>Procedia Technology</i> , 2017, 27, 91-93.	1.1	5
68	Effect of Surface Modification on Laminar Flow in Microchannels Fabricated by UV-Lithography. <i>E-Journal of Surface Science and Nanotechnology</i> , 2009, 7, 330-333.	0.1	4
69	EXPERIMENTAL STUDIES OF SURFACE-DRIVEN CAPILLARY FLOW IN PMMA MICROFLUIDIC DEVICES PREPARED BY DIRECT BONDING TECHNIQUE AND PASSIVE SEPARATION OF MICROPARTICLES IN MICROFLUIDIC LABORATORY-ON-A-CHIP SYSTEMS. <i>Surface Review and Letters</i> , 2015, 22, 1550050.	0.5	4
70	A label-free impedimetric sensor based on MnO_2 /tyrosinase hybrid for monitoring of diabetic foot ulcers. , 2020, , .		4
71	Enhancement of Field Emission Characteristics of Carbon Nanotubes on Oxidation. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 7011-7014.	0.9	3
72	Design of a smart sensor mesh for the measurement of pH in ostomy applications. <i>Journal of Materials Science</i> , 2019, 54, 10410-10419.	1.7	3

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73	Analysis of voltage distribution in electrowetting on Dielectric (EWOD) system. Materials Today: Proceedings, 2021, 38, 179-185.	0.9	3
74	Experimental Demonstration of Hydrophobicity Variation in Carbon Nanotubes by Surface Modifications. E-Journal of Surface Science and Nanotechnology, 2009, 7, 334-336.	0.1	3
75	A Novel Electroanalytical Biosensor Based on ZIF-8/Acetylcholinesterase Bio-nanohybrids for Early Management of Hirschsprung Disease. Electroanalysis, 2023, 35, .	1.5	3
76	An Accurate Energy Estimation Framework for VLIW Processor Cores. Proceedings - IEEE International Conference on Computer Design: VLSI in Computers and Processors, 2006, , .	0.0	2
77	Magnetic properties of microwave-plasma (thermal) chemical vapour deposited Co-filled (Fe-filled) multiwall carbon nanotubes: comparative study for magnetic device applications. Materials Research Express, 2018, 5, 076101.	0.8	2
78	Label-Free Electrochemical Detection of Dibenzofuran Using MnO ₂ Nanofibres. IEEE Sensors Journal, 2020, 20, 12537-12542.	2.4	2
79	Ultrasonic and Thermophysical Studies of Ethylene Glycol Nanofluids Containing Titania Nanoparticles and Their Heat Transfer Enhancements. Johnson Matthey Technology Review, 2021, 65, 418-430.	0.5	2
80	Electrochemical impedimetric analysis of different dimensional (0D-2D) carbon nanomaterials for effective biosensing of L-tyrosine. Measurement Science and Technology, 2022, 33, 014002.	1.4	2
81	Microfluidics and lab-on-a-chip. , 2022, , 261-287.		2
82	JouleQuest: An Accurate Power Model for the StarCore DSP Platform. , 2007, , .		1
83	A micro-controller based approach for digital microfluidic sensors. Journal of Statistics and Management Systems, 2017, 20, 743-751.	0.3	1
84	Nanotoxicology: Exposure, Mechanism, and Effects on Human Health. , 2022, , 35-77.		1
85	Substrate Effects on the Growth of Multiwalled Carbon Nanotubes by Thermal Chemical Vapor Deposition. Advanced Science Letters, 2012, 7, 21-26.	0.2	1
86	A COMPARATIVE EVALUATION OF ROPIVACAINE HYDROCHLORIDE AND ROPIVACAINE HYDROCHLORIDE WITH DEXMEDETOMIDINE FOR CAUDAL EPIDURAL ANAESTHESIA IN PAEDIATRIC PATIENTS UNDERGOING ELECTIVE INFRAUMBILICAL SURGERIES. Journal of Evolution of Medical and Dental Sciences, 2017, 6, 1072-1076.	0.1	1
87	Microfluidic Devices and Their Application in Modern Agriculture System. , 2019, , 659-681.		1
88	Conventional and emerging technologies for combating Hirschsprung's disease: The scope of electroanalytical sensing modalities. Sensors International, 2022, , 100184.	4.9	1
89	Microparticle filtration using carbon nanotubes and impedance characterisation for gold microelectrodes sensor system. Materials Research Society Symposia Proceedings, 2009, 1205, 91201.	0.1	0
90	A Method to Reuse RTL Verification Tests to Validate Cycle Accurate Model. , 2011, , .		0

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91	Laser Scribed Polyimide as a Platform for Monitoring pH within Smart Bandages. , 2020, , .		0
92	Journey of Agricultural Sensorsâ€™From Conventional to Ultra-Modern. Concepts and Strategies in Plant Sciences, 2021, , 217-240.	0.6	0
93	Self â€“ aligned mesoporous titania nanotubes â€“ reduced graphene oxide hybrid surface: A potential scaffold for osteogenesis. International Journal of Materials Research, 2021, 112, 584-590.	0.1	0
94	The use of nanotube structures in reducing the turn-on voltage in micro-discharges and micro-gas sensors. , 2008, , .		0
95	Ultra-Sensitive Immuno-Sensing Platform Based on Gold-Coated Interdigitated Electrodes for the Detection of Parathion. Surfaces, 2022, 5, 165-175.	1.0	0