

Parikshit Sahatiya

List of Publications by Year in descending order

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74
papers

2,049
citations

257450

24
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265206

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74
docs citations

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times ranked

2162
citing authors

#	ARTICLE	IF	CITATIONS
1	Large Area, Flexible Broadband Photodetector Based on ZnMoS ₂ Hybrid on Paper Substrate. <i>Advanced Functional Materials</i> , 2017, 27, 1701611.	14.9	237
2	Graphene-based wearable temperature sensor and infrared photodetector on a flexible polyimide substrate. <i>Flexible and Printed Electronics</i> , 2016, 1, 025006.	2.7	126
3	2D MoS ₂ -carbon quantum dot hybrid based large area, flexible UV-vis-NIR photodetector on paper substrate. <i>Applied Materials Today</i> , 2018, 10, 106-114.	4.3	89
4	One step, high yield synthesis of amphiphilic carbon quantum dots derived from chia seeds: a solvatochromic study. <i>New Journal of Chemistry</i> , 2017, 41, 13130-13139.	2.8	80
5	Flexible, Disposable Cellulose-Paper-Based MoS ₂ /Cu ₂ S Hybrid for Wireless Environmental Monitoring and Multifunctional Sensing of Chemical Stimuli. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 9048-9059.	8.0	69
6	V ₂ O ₅ Nanosheets for Flexible Memristors and Broadband Photodetectors. <i>ACS Applied Nano Materials</i> , 2019, 2, 937-947.	5.0	66
7	MoS ₂ /Paper Decorated with Metal Nanoparticles (Au, Pt, and Pd) Based Plasmonic-Enhanced Broadband (Visible-NIR) Flexible Photodetectors. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001988.	3.7	64
8	Direct, One-Step Growth of NiSe ₂ on Cellulose Paper: A Low-Cost, Flexible, and Wearable with Smartphone Enabled Multifunctional Sensing Platform for Customized Noninvasive Personal Healthcare Monitoring. <i>ACS Applied Electronic Materials</i> , 2019, 1, 558-568.	4.3	60
9	Fabrication of a flexible UV photodetector and disposable photoresponsive uric acid sensor by direct writing of ZnO pencil on paper. <i>Journal of Materials Chemistry C</i> , 2017, 5, 10231-10240.	5.5	58
10	Discretely distributed 1D V ₂ O ₅ nanowires over 2D MoS ₂ nanoflakes for an enhanced broadband flexible photodetector covering the ultraviolet to near infrared region. <i>Journal of Materials Chemistry C</i> , 2017, 5, 12728-12736.	5.5	53
11	Low cost, flexible and disposable SnSe ₂ based photoresponsive ammonia sensor for detection of ammonia in urine samples. <i>Sensors and Actuators B: Chemical</i> , 2019, 297, 126725.	7.8	51
12	A remarkably ultra-sensitive large area matrix of MXene based multifunctional physical sensors (pressure, strain, and temperature) for mimicking human skin. <i>Journal of Materials Chemistry B</i> , 2021, 9, 4523-4534.	5.8	48
13	Eraser-based eco-friendly fabrication of a skin-like large-area matrix of flexible carbon nanotube strain and pressure sensors. <i>Nanotechnology</i> , 2017, 28, 095501.	2.6	44
14	Laser-Induced Graphene Printed Wearable Flexible Antenna-Based Strain Sensor for Wireless Human Motion Monitoring. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 3189-3194.	3.0	44
15	All MoS ₂ based 2D/0D localized unipolar heterojunctions as flexible broadband (UV-vis-NIR) photodetectors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 11593-11602.	5.5	42
16	Flexible substrate based 2D ZnO (n)/graphene (p) rectifying junction as enhanced broadband photodetector using strain modulation. <i>2D Materials</i> , 2017, 4, 025053.	4.4	41
17	Broadband, Ultra-High-Responsive Monolayer MoS ₂ /SnS ₂ Quantum-Dot-Based Mixed-Dimensional Photodetector. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 15415-15425.	8.0	40
18	Fabrication of a solution-processed, highly flexible few layer MoS ₂ (n)-CuO (p) piezotronic diode on a paper substrate for an active analog frequency modulator and enhanced broadband photodetector. <i>Journal of Materials Chemistry C</i> , 2017, 5, 11436-11447.	5.5	35

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19	Template-Assisted Electrospinning of Bubbled Carbon Nanofibers as Binder-Free Electrodes for High-Performance Supercapacitors. <i>ChemElectroChem</i> , 2018, 5, 531-539.	3.4	34
20	Direct, large area growth of few-layered MoS ₂ nanostructures on various flexible substrates: growth kinetics and its effect on photodetection studies. <i>Flexible and Printed Electronics</i> , 2018, 3, 015002.	2.7	33
21	MOF based flexible, low-cost chemiresistive device as a respiration sensor for sleep apnea diagnosis. <i>Journal of Materials Chemistry B</i> , 2020, 8, 10182-10189.	5.8	33
22	One-step fabrication of 1D p-NiO nanowire/n-Si heterojunction: Development of self-powered ultraviolet photodetector. <i>Applied Surface Science</i> , 2020, 513, 145804.	6.1	33
23	Wireless, Smart, Human Motion Monitoring Using Solution Processed Fabrication of Graphene-MoS ₂ Transistors on Paper. <i>Advanced Electronic Materials</i> , 2018, 4, 1700388.	5.1	30
24	Solvent-free fabrication of multi-walled carbon nanotube based flexible pressure sensors for ultra-sensitive touch pad and electronic skin applications. <i>RSC Advances</i> , 2016, 6, 95836-95845.	3.6	25
25	Strain-modulation-assisted enhanced broadband photodetector based on large-area, flexible, few-layered Gr/MoS ₂ on cellulose paper. <i>Nanotechnology</i> , 2017, 28, 455204.	2.6	25
26	Detection and discrimination of volatile organic compounds by noble metal nanoparticle functionalized MoS ₂ coated biodegradable paper sensors. <i>New Journal of Chemistry</i> , 2020, 44, 16613-16625.	2.8	25
27	Large Area Deposition of MoSe ₂ on Paper as a Flexible Near-Infrared Photodetector. , 2020, 4, 1-4.		25
28	Low-Cost, Disposable, Flexible, and Smartphone Enabled Pressure Sensor for Monitoring Drug Dosage in Smart Medicine Applications. <i>IEEE Sensors Journal</i> , 2019, 19, 11255-11261.	4.7	23
29	A water destructible SnS ₂ QD/PVA film based transient multifunctional sensor and machine learning assisted stimulus identification for non-invasive personal care diagnostics. <i>Materials Advances</i> , 2020, 1, 2818-2830.	5.4	23
30	Ultra-low Cost, Large Area Graphene/MoS ₂ -Based Piezotronic Memristor on Paper: A Systematic Study for Both Direct Current and Alternating Current Inputs. <i>ACS Applied Electronic Materials</i> , 2019, 1, 883-891.	4.3	22
31	Facile Fabrication of MoSe ₂ on Paper as an Electromechanical Piezoresistive Pressure-Strain Sensor. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-8.	4.7	22
32	Large-Area, Flexible SnS/Paper-Based Piezoresistive Pressure Sensor for Artificial Electronic Skin Application. <i>IEEE Sensors Journal</i> , 2021, 21, 5143-5150.	4.7	21
33	A highly electropositive ReS ₂ based ultra-sensitive flexible humidity sensor for multifunctional applications. <i>New Journal of Chemistry</i> , 2021, 45, 5855-5862.	2.8	21
34	Hybrid 2D WS ₂ -QDs (n)/SnS (p) as Distributed Heterojunctions for Highly Responsive Flexible Broad-Band Photodetectors. <i>ACS Applied Electronic Materials</i> , 2021, 3, 4105-4114.	4.3	21
35	Water dissolvable MoS ₂ quantum dots/PVA film as an active material for destructible memristors. <i>New Journal of Chemistry</i> , 2020, 44, 11941-11948.	2.8	20
36	Development of Ti ₃ C ₂ T _x /NiSe ₂ Nanohybrid-Based Large-Area Pressure Sensors as a Smart Bed for Unobtrusive Sleep Monitoring. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100706.	3.7	20

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37	A detailed comparative performance analysis of the Transition Metal Di-chalcogenides (TMDs) based strain sensors through experimental realisations and first principle calculations. FlatChem, 2022, 32, 100344.	5.6	19
38	Ultra-High Responsivity and Enhanced Trap Assisted Charge Transfer by utilizing Ti ₃ C ₂ TX(MXene) as a Transport Layer for ReS ₂ based Flexible Broadband Photodetector: A better Alternative to Graphene. FlatChem, 2022, 33, 100363.	5.6	18
39	High-Performance Visible Light Photodetector Based on 1D SnO ₂ Nanofibers with a Ti ₃ C ₂ T _x (MXene) Electron Transport Layer. ACS Applied Nano Materials, 2022, 5, 6852-6863.	5.0	18
40	Plasmonic Au Nanoparticles Coated on ReS ₂ Nanosheets for Visible-Near-Infrared Photodetectors. ACS Applied Nano Materials, 2022, 5, 11381-11390.	5.0	17
41	MoS ₂ /cellulose paper coupled with SnS ₂ quantum dots as 2D/0D electrode for high-performance flexible supercapacitor. New Journal of Chemistry, 2021, 45, 8516-8526.	2.8	16
42	Highly air-stabilized black phosphorus on disposable paper substrate as a tunnelling effect-based highly sensitive piezoresistive strain sensor. Medical Devices & Sensors, 2020, 3, e10099.	2.7	15
43	Laser-Assisted Gaussian Microstructure Patterned PDMS Encapsulated Ti ₃ C ₂ T _x (MXene)-Based Pressure Sensor for Object and Touch Detection. IEEE Sensors Journal, 2021, 21, 16547-16553.	4.7	15
44	Direct Growth of Black Phosphorus (p-Type) on a Flexible Substrate with Dual Role of Two-Dimensional ZnO (n-Type) as Effective Passivation and Enabling Highly Stable Broadband Photodetection. ACS Applied Electronic Materials, 2019, 1, 1076-1083.	4.3	14
45	Bolometric Effect Enhanced Ultrafast Graphene Based Do-It-Yourself Wearable Respiration Sensor for Personal Healthcare Monitoring. IEEE Sensors Journal, 2020, 20, 3452-3459.	4.7	14
46	Large area growth of SnS ₂ /graphene on cellulose paper as a flexible broadband photodetector and investigating its band structure through first principles calculations. Materials Advances, 2021, 2, 2373-2381.	5.4	13
47	Papertronics: Hand-Written MoS ₂ , on Paper Based Highly Sensitive and Recoverable Pressure and Strain Sensors. IEEE Sensors Journal, 2021, 21, 8943-8949.	4.7	13
48	SnS/Ti ₃ C ₂ T _x (MXene) Nanohybrid-Based Wearable Electromechanical Sensors for Sign-to-Text Translation and Sitting Posture Analysis. ACS Applied Electronic Materials, 2022, 4, 1756-1768.	4.3	13
49	Pyro-phototronic nanogenerator based on flexible 2D ZnO/graphene heterojunction and its application in self-powered near infrared photodetector and active analog frequency modulation. Nanotechnology, 2018, 29, 325205.	2.6	12
50	Laser-assisted micropillar patterned PDMS encapsulation of 1D tellurium nanowires on cellulose paper for highly sensitive strain sensor and its photodetection studies. Nanotechnology, 2021, 32, 455201.	2.6	12
51	All solution processed flexible p-NiO/n-CdS rectifying junction: Applications towards broadband photodetector and human breath monitoring. Applied Surface Science, 2021, 568, 150944.	6.1	12
52	MXene/TMD Nanohybrid for the Development of Smart Electronic Textiles Based on Physical Electromechanical Sensors. Advanced Materials Interfaces, 2022, 9, .	3.7	12
53	UV/ozone assisted local graphene (p)/ZnO(n) heterojunctions as a nanodiode rectifier. Journal Physics D: Applied Physics, 2016, 49, 265101.	2.8	10
54	Large Area Pressure Sensor for Smart Floor Sensor Applications – An Occupancy Limiting Technology to Combat Social Distancing. IEEE Consumer Electronics Magazine, 2021, 10, 98-103.	2.3	10

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55	Flexible Substrate Based Few Layer MoS ₂ Electrode for Passive Electronic Devices and Interactive Frequency Modulation Based on Human Motion. IEEE Nanotechnology Magazine, 2018, 17, 338-344.	2.0	9
56	Wireless smartphone-assisted personal healthcare monitoring system using a MoS ₂ -based flexible, wearable and ultra-low-cost functional sensor. Flexible and Printed Electronics, 2019, 4, 025003.	2.7	9
57	Non-contact, controlled and moisture triggered black phosphorus quantum dots/PVA film for transient electronics applications. Materials Letters, 2021, 290, 129477.	2.6	9
58	Development of Ti ₃ C ₂ T _x /MoS ₂ Se ₂ Nanohybrid Multilayer Structures for Piezoresistive Mechanical Transduction. ACS Applied Electronic Materials, 2021, 3, 4091-4104.	4.3	9
59	Performance Enhancement of Highly Flexible SnS(p)/MoS ₂ (n) Heterostructure based Broadband Photodetector by Piezo-phototronic Effect. FlatChem, 2022, 33, 100379.	5.6	9
60	Deep learning enabled classification of real-time respiration signals acquired by MoSSe quantum dot-based flexible sensors. Journal of Materials Chemistry B, 2021, 9, 6870-6880.	5.8	8
61	Functionalized water soluble nanomaterials and their applications in wirelessly destructible programmed flexible transient photodetectors. Materials Science in Semiconductor Processing, 2019, 93, 324-330.	4.0	6
62	MoS ₂ -Based Multifunctional Sensor for Both Chemical and Physical Stimuli and Their Classification Using Machine Learning Algorithms. IEEE Sensors Journal, 2021, 21, 3694-3701.	4.7	6
63	Water soluble flexible and wearable electronic devices: a review. Flexible and Printed Electronics, 2021, 6, 043006.	2.7	6
64	Sublimation of MXene/camphor device: a study on self-destructive dry transiency. Materials Advances, 0, , .	5.4	6
65	Paper based large area Graphene/MoS ₂ ; visible light photodetector. , 2017, , .		3
66	Large area deposition of Janus MoS ₂ Se ₂ on paper as a multifunctional electromechanical sensor for versatile physiological signal monitoring. Flexible and Printed Electronics, 2021, 6, 015011.	2.7	3
67	Investigation of the Transduction Mechanism of Few Layer SnS ₂ , for Pressure and Strain Sensing: Experimental Correlation With First Principles Study. IEEE Sensors Journal, 2021, 21, 17254-17261.	4.7	3
68	Remarkably Stable Black Phosphorus Quantum Dots-Polyvinyl Alcohol Film as a Water Soluble Breath Sensor. IEEE Transactions on Electron Devices, 2021, 68, 5167-5172.	3.0	2
69	Stacked 1D Tellurium Nanowires/Paper based Pressure Sensor with Laser Assisted Patterned PDMS Encapsulation. , 2021, , .		2
70	Flexible substrate based 2D graphene (p)/ZnO (n) heterojunction architecture as nanodiode rectifier. , 2016, , .		1
71	Solution processed ZnS-MoS ₂ for optoelectronic applications. , 2017, , .		1
72	A water-soluble micropatterned MoS ₂ quantum dots/polyvinyl alcohol film as a transient contact (pressure) and non-contact (humidity) as touch and proximity sensor. Journal of Applied Polymer Science, 2022, 139, 51711.	2.6	1

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73	Sponge and graphene/PVDF /ZnO composite based 3D stacked flexible multi-sensor platform. MRS Advances, 2017, 2, 341-347.	0.9	0
74	Carbon Nanomaterials for Emerging Electronic Devices and Sensors. Advances in Sustainability Science and Technology, 2021, , 215-258.	0.6	0