Sohini RoyChoudhury

List of Publications by Year
in descending order

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55 papers	2,190 citations	304368 22 h-index	276539 41 g-index
56 all docs	56 docs citations	56 times ranked	3669 citing authors

#	Article	IF	Citations
1	Organicâ€“Inorganic Hybrid Nanocomposite-Based Gas Sensors for Environmental Monitoring. Chemical Reviews, 2015, 115, 4571-4606.	23.0	429
2	Prospects and Challenges of Volatile Organic Compound Sensors in Human Healthcare. ACS Sensors, 2018, 3, 1246-1263.	4.0	179
3	Electrochemical cortisol immunosensors based on sonochemically synthesized zinc oxide 1D nanorods and 2D nanoflakes. Biosensors and Bioelectronics, 2015, 63, 124-130.	5.3	136
4	Extreme sensitive metasensor for targeted biomarkers identification using colloidal nanoparticles-integrated plasmonic unit cells. Biomedical Optics Express, 2018, 9, 373.	1.5	116
5	Lactate biosensing: The emerging point-of-care and personal health monitoring. Biosensors and Bioelectronics, 2018, 117, 818-829.	5.3	107
6	Recent advances in metamaterial split-ring-resonator circuits as biosensors and therapeutic agents. Biosensors and Bioelectronics, 2016, 86, 595-608.	5.3	98
7	Recent advances in cytochrome c biosensing technologies. Biosensors and Bioelectronics, 2017, 87, 654-668.	5.3	88
8	Reviewâ€”Deep Learning Methods for Sensor Based Predictive Maintenance and Future Perspectives for Electrochemical Sensors. Journal of the Electrochemical Society, 2020, 167, 037552.	1.3	82
9	A-Wristocracy: Deep learning on wrist-worn sensing for recognition of user complex activities. , 2015, , .		76
10	Mediator free highly sensitive polyanilineâ€“gold hybrid nanocomposite based immunosensor for prostate-specific antigen (PSA) detection. Journal of Materials Chemistry, 2012, 22, 14763.	6.7	73
11	Continuous Monitoring of Wound Healing Using a Wearable Enzymatic Uric Acid Biosensor. Journal of the Electrochemical Society, 2018, 165, B3168-B3175.	1.3	72
12	ZnO Nanorod Integrated Flexible Carbon Fibers for Sweat Cortisol Detection. ACS Applied Electronic Materials, 2020, 2, 499-509.	2.0	69
13	Electrochemical Sensing of Cortisol: A Recent Update. Applied Biochemistry and Biotechnology, 2014, 174, 1115-1126.	1.4	64
14	Prospects of low temperature co-fired ceramic (LTCC) based microfluidic systems for point-of-care biosensing and environmental sensing. Microfluidics and Nanofluidics, 2013, 14, 683-702.	1.0	61
15	Disposable aptamer-sensor aided by magnetic nanoparticle enrichment for detection of salivary cortisol variations in obstructive sleep apnea patients. Scientific Reports, 2017, 7, 17992.	1.6	59
16	Reviewâ€”Towards Wearable Sensor Platforms for the Electrochemical Detection of Cortisol. Journal of the Electrochemical Society, 2020, 167, 067508.	1.3	53
17	Electrochemical sensing method for point-of-care cortisol detection in human immunodeficiency virus-infected patients. International Journal of Nanomedicine, 2015, 10, 677.	3.3	49
18	Silica nanowires: Growth, integration, and sensing applications. Mikrochimica Acta, 2014, 181, 1759-1780.	2.5	38

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19	A review of self-assembled monolayers as potential terahertz frequency tunnel diodes. Nano Research, 2014, 7, 589-625.	5.8	34
20	Microfluidic device for trapping and monitoring three dimensional multicell spheroids using electrical impedance spectroscopy. Biomicrofluidics, 2013, 7, 34108.	1.2	27
21	Single-domain antibody based thermally stable electrochemical immunosensor. Biosensors and Bioelectronics, 2016, 83, 162-168.	5.3	25
22	Uricase Based Enzymatic Biosensor for Nonâ€invasive Detection of Uric Acid by Entrapment in PVAâ€SbQ Polymer Matrix. Electroanalysis, 2018, 30, 2374-2385.	1.5	25
23	Multimodal technique to eliminate humidity interference for specific detection of ethanol. Biosensors and Bioelectronics, 2017, 87, 522-530.	5.3	24
24	IoT Sensor Network Approach for Smart Farming: An Application in Food, Energy and Water System. , 2018, , .		23
25	Towards the development of reagent-free and reusable electrochemical aptamer-based cortisol sensor. Bioelectrochemistry, 2022, 145, 108098.	2.4	23
26	Biosensor for Monitoring Uric Acid in Wound and Its Proximity: A Potential Wound Diagnostic Tool. Journal of the Electrochemical Society, 2019, 166, B830-B836.	1.3	21
27	Individual Gas Molecules Detection Using Zinc Oxideâ€“Graphene Hybrid Nanosensor: A DFT Study. Journal of Carbon Research, 2018, 4, 44.	1.4	17
28	Theoretical Studies of Cortisol-Imprinted Prepolymerization Mixtures: Structural Insights into Improving the Selectivity of Affinity Sensors. Journal of the Electrochemical Society, 2017, 164, B3077-B3080.	1.3	12
29	A novel storage covert channel on wearable devices using status bar notifications. , 2016, , .		11
30	Plasma-Induced Enhancement in Electronic Properties of Gold Nanoparticles: Application in Electrochemical Biosensing of Cortisol. ACS Applied Electronic Materials, 2021, 3, 230-237.	2.0	11
31	Health Monitoring with Low Power IoT Devices using Anomaly Detection Algorithm. , 2019, , .		9
32	Nanocomposite Bienzymatic Sensor for Monitoring Xanthine in Wound Diagnostics. Journal of the Electrochemical Society, 2019, 166, B3295-B3301.	1.3	9
33	A Wearable Electrochemical Sensor to Monitor Progression of Wound Healing. ECS Transactions, 2017, 80, 1345-1353.	0.3	8
34	Toxicity assessment of wearable wound sensor constituents on keratinocytes. Toxicology in Vitro, 2019, 58, 170-177.	1.1	8
35	Ultra-low power sensing platform for personal health and personal environmental monitoring. , 2015, , .		6
36	Validation of an Electrochemical Sensor to Detect Cortisol Responses to the Trier Social Stress Test. Neurobiology of Stress, 2020, 13, 100263.	1.9	6

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37	New dynamic microreactor system to mimic biofilm formation and test anti-biofilm activity of nanoparticles. Applied Microbiology and Biotechnology, 2022, 106, 2729-2738.	1.7	5
38	Novel Reproducible Manufacturing and Reversible Sealing Method for Microfluidic Devices. Micromachines, 2022, 13, 650.	1.4	5
39	Sonochemically Synthesized ZnO Nanostructure-Based L-Lactate Enzymatic Sensors on Flexible Substrates. MRS Advances, 2018, 3, 277-282.	0.5	4
40	Towards a wearable fuel cell sensor for transdermal monitoring of isoflurane â€“ an anesthetic. Analytical Methods, 2019, 11, 2007-2012.	1.3	4
41	Bio-acceptability of wearable sensors: a mechanistic study towards evaluating ionic leaching induced cellular inflammation. Scientific Reports, 2022, 12, .	1.6	4
42	Towards Biosensor Enabled Smart Bandages for Wound Monitoring: Approach and Overview. , 2018, , .		3
43	Towards a Long-Term Multi-Site Electrochemical Wound Monitoring System. , 2019, , .		3
44	Ferroeletric like characteristics in redox active polymer of 5,10,15,20 tetra(4-hydroxyphenyl)-porphyrin at room temperature. Applied Physics Letters, 2013, 103, 033302.	1.5	2
45	Textile Fiber Electrode to Monitor Uric Acid as a Marker for Assessing Wound Chronicity. ECS Transactions, 2017, 80, 1277-1286.	0.3	2
46	A wearable micro-fuel cell sensor for the determination of blood alcohol content (BAC): a multivariate regression model approach. ISSS Journal of Micro and Smart Systems, 2020, 9, 131-142.	1.0	2
47	Single cell transfection of human-induced pluripotent stem cells using a droplet-based microfluidic system. Royal Society Open Science, 2022, 9, 211510.	1.1	2
48	Reinforced Pressure Sensor for Marine Environment. , 2007, , .		1
49	Development of Micro-Fluidic Nitrate-Selective Sensor Based on Polypyrrole Nanowires. , 2007, , .		1
50	(Invited) Multimodal Enzymatic Sensing for Continuous Wound Monitoring. ECS Meeting Abstracts, 2018, , .	0.0	1
51	Nano-Composite Enzymatic Xanthine Biosensor for Wound Diagnostics. , 2018, , .		0
52	(Invited) Multimodal Enzymatic Sensing for Continuous Wound Monitoring. ECS Transactions, 2018, 88, 419-426.	0.3	0
53	Enzyme Functionalized Metal Nanostructures for Enhanced Electrochemical Detection of Lactate. ECS Transactions, 2015, 69, 7-15.	0.3	0
54	Textile Fiber Electrode to Monitor Uric Acid and for Assessing Wound Chronicity. ECS Meeting Abstracts, 2017, , .	0.0	0

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55	A Wearable Electrochemical Sensor to Monitor Progression of Wound Healing. ECS Meeting Abstracts, 2017, , .	0.0	0