Pranjal Chandra

List of Publications by Year
in descending order

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100	5,515	61857	82410
papers	citations	43 h-index	72 g-index

106	106	106	5536
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prospects of using nanotechnology for food preservation, safety, and security. Journal of Food and Drug Analysis, 2018, 26, 1201-1214.	0.9	300
2	Ultrasensitive and Selective Electrochemical Diagnosis of Breast Cancer Based on a Hydrazineâ€“Au Nanoparticleâ€“Aptamer Bioconjugate. Analytical Chemistry, 2013, 85, 1058-1064.	3.2	277
3	Paper based diagnostics for personalized health care: Emerging technologies and commercial aspects. Biosensors and Bioelectronics, 2017, 96, 246-259.	5.3	223
4	Label-free detection of kanamycin based on the aptamer-functionalized conducting polymer/gold nanocomposite. Biosensors and Bioelectronics, 2012, 36, 29-34.	5.3	215
5	Biosensor nanoengineering: Design, operation, and implementation for biomolecular analysis. Sensors International, 2020, 1, 100040.	4.9	205
6	Prospects of Nanostructure Materials and Their Composites as Antimicrobial Agents. Frontiers in Microbiology, 2018, 9, 422.	1.5	167
7	Application of a Cuâ€“Co alloy dendrite on glucose and hydrogen peroxide sensors. Electrochimica Acta, 2012, 61, 36-43.	2.6	156
8	Chitosan: An undisputed bio-fabrication material for tissue engineering and bio-sensing applications. International Journal of Biological Macromolecules, 2018, 110, 110-123.	3.6	149
9	Paper-based miniaturized immunosensor for naked eye ALP detection based on digital image colorimetry integrated with smartphone. Biosensors and Bioelectronics, 2019, 128, 9-16.	5.3	148
10	Detection of daunomycin using phosphatidylserine and aptamer co-immobilized on Au nanoparticles deposited conducting polymer. Biosensors and Bioelectronics, 2011, 26, 4442-4449.	5.3	137
11	In vitro chloramphenicol detection in a Haemophilus influenza model using an aptamer-polymer based electrochemical biosensor. Biosensors and Bioelectronics, 2014, 55, 337-342.	5.3	112
12	Fundamentals and commercial aspects of nanobiosensors in point-of-care clinical diagnostics. 3 Biotech, 2018, 8, 149.	1.1	110
13	Shifting paradigm of cancer diagnoses in clinically relevant samples based on miniaturized electrochemical nanobiosensors and microfluidic devices. Biosensors and Bioelectronics, 2018, 100, 411-428.	5.3	108
14	Gold nanoparticle surface engineering strategies and their applications in biomedicine and diagnostics. 3 Biotech, 2019, 9, 57.	1.1	106
15	Engineered Nanomaterial Assisted Signalâ€amplification Strategies for Enhancing Analytical Performance of Electrochemical Biosensors. Electroanalysis, 2019, 31, 1615-1629.	1.5	102
16	Smartphone-assisted personalized diagnosticÂdevices and wearable sensors. Current Opinion in Biomedical Engineering, 2020, 13, 42-50.	1.8	100
17	Novel electrochemical biosensor for serotonin detection based on gold nanorattles decorated reduced graphene oxide in biological fluids and in vitro model. Biosensors and Bioelectronics, 2019, 142, 111502.	5.3	96
18	Phytofabricated metallic nanoparticles and their clinical applications. RSC Advances, 2016, 6, 105996-106010.	1.7	93

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19	Evolving trends in bio/chemical sensor fabrication incorporating bimetallic nanoparticles. Biosensors and Bioelectronics, 2018, 117, 546-561.	5.3	88
20	Cancer cell detection based on the interaction between an anticancer drug and cell membrane components. Chemical Communications, 2013, 49, 1900.	2.2	87
21	Uricase grafted nanoconducting matrix based electrochemical biosensor for ultrafast uric acid detection in human serum samples. International Journal of Biological Macromolecules, 2019, 130, 333-341.	3.6	81
22	CDâ€...59 Targeted Ultrasensitive Electrochemical Immunosensor for Fast and Noninvasive Diagnosis of Oral Cancer. Electroanalysis, 2016, 28, 2565-2574.	1.5	80
23	Clinically practiced and commercially viable nanobio engineered analytical methods for COVID-19 diagnosis. Biosensors and Bioelectronics, 2020, 165, 112361.	5.3	79
24	Ultrasensitive detection of drug resistant cancer cells in biological matrixes using an amperometric nanobiosensor. Biosensors and Bioelectronics, 2015, 70, 418-425.	5.3	78
25	Investigation on the downregulation of dopamine by acetaminophen administration based on their simultaneous determination in urine. Biosensors and Bioelectronics, 2013, 39, 139-144.	5.3	77
26	Biomarkers of oxidative stress in erythrocytes as a function of human age. World Journal of Methodology, 2015, 5, 216.	1.1	77
27	Chitosan stabilized gold nanoparticle mediated self-assembled gliP nanobiosensor for diagnosis of Invasive Aspergillosis. International Journal of Biological Macromolecules, 2018, 110, 449-456.	3.6	73
28	Electropolymerized Self-Assembled Layer on Gold Nanoparticles: Detection of Inducible Nitric Oxide Synthase in Neuronal Cell Culture. Analytical Chemistry, 2011, 83, 6177-6183.	3.2	72
29	Miniaturized label-free smartphone assisted electrochemical sensing approach for personalized COVID-19 diagnosis. Sensors International, 2020, 1, 100019.	4.9	71
30	An amperometric nanobiosensor using a biocompatible conjugate for early detection of metastatic cancer cells in biological fluid. Biosensors and Bioelectronics, 2016, 85, 883-890.	5.3	70
31	Clinically comparable impedimetric immunosensor for serum alkaline phosphatase detection based on electrochemically engineered Au-nano-Dendroids and graphene oxide nanocomposite. Biosensors and Bioelectronics, 2020, 148, 111815.	5.3	70
32	Clinical implications and electrochemical biosensing of monoamine neurotransmitters in body fluids, in vitro, in vivo, and ex vivo models. Biosensors and Bioelectronics, 2018, 121, 137-152.	5.3	69
33	InÂvivo detection of glutathione disulfide and oxidative stress monitoring using a biosensor. Biomaterials, 2012, 33, 2600-2607.	5.7	66
34	A review on determination of steroids in biological samples exploiting nanobio-electroanalytical methods. Analytica Chimica Acta, 2013, 762, 14-24.	2.6	65
35	Ultrasensitive dual probe immunosensor for the monitoring of nicotine induced-brain derived neurotrophic factor released from cancer cells. Biosensors and Bioelectronics, 2018, 116, 108-115.	5.3	63
36	Separation and simultaneous detection of anticancer drugs in a microfluidic device with an amperometric biosensor. Biosensors and Bioelectronics, 2011, 28, 326-332.	5.3	61

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37	Engineered nanoporous materials mediated heterogeneous catalysts and their implications in biodiesel production. Materials Science for Energy Technologies, 2018, 1, 11-21.	1.0	60
38	Synthesis, characterization and in vitro analysis of Î±-Fe2O3-GdFeO3 biphasic materials as therapeutic agent for magnetic hyperthermia applications. Materials Science and Engineering C, 2018, 92, 932-941.	3.8	58
39	In vitro monitoring of i-NOS concentrations with an immunosensor: The inhibitory effect of endocrine disruptors on i-NOS release. Biosensors and Bioelectronics, 2012, 32, 278-282.	5.3	55
40	Nanoengineered material based biosensing electrodes for enzymatic biofuel cells applications. Materials Science for Energy Technologies, 2018, 1, 38-48.	1.0	53
41	Design and characterization of novel Al-doped ZnO nanoassembly as an effective nanoantibiotic. Applied Nanoscience (Switzerland), 2018, 8, 1925-1941.	1.6	52
42	Gold Nanoparticles and Nanocomposites in Clinical Diagnostics Using Electrochemical Methods. Journal of Nanoparticles, 2013, 2013, 1-12.	1.4	51
43	Detection of norfloxacin and monitoring its effect on caffeine catabolism in urine samples. Biosensors and Bioelectronics, 2013, 47, 307-312.	5.3	49
44	Sputtering enhanced peroxidase like activity of a dendritic nanochip for amperometric determination of hydrogen peroxide in blood samples. Mikrochimica Acta, 2019, 186, 658.	2.5	45
45	Simultaneous detection of antibacterial sulfonamides in a microfluidic device with amperometry. Biosensors and Bioelectronics, 2013, 39, 204-209.	5.3	43
46	Synthesis and Application of PHTâ€TiO₂ Nanohybrid for Amperometric Glucose Detection in Human Saliva Sample. Electroanalysis, 2018, 30, 2793-2802.	1.5	43
47	Development of a bifunctional nanobiosensor for screening and detection of chemokine ligand in colorectal cancer cell line. Biosensors and Bioelectronics, 2018, 100, 396-403.	5.3	42
48	Red blood cells as an efficient in vitro model for evaluating the efficacy of metallic nanoparticles. 3 Biotech, 2019, 9, 279.	1.1	42
49	Electrochemical Immunosensors. , 2018, , 359-414.		40
50	Design and Development of Ultrafast Sinapic Acid Sensor Based on Electrochemically Nanotuned Gold Nanoparticles and Solvothermally Reduced Graphene Oxide. Electroanalysis, 2020, 32, 59-69.	1.5	38
51	Highly Sensitive in vitro Biosensor for Enterotoxigenic Escherichia coli Detection Based on ssDNA Anchored on PtNPsâ€Chitosan Nanocomposite. Electroanalysis, 2017, 29, 2665-2671.	1.5	34
52	Design of commercially comparable nanotherapeutic agent against human disease-causing parasite, Leishmania. Scientific Reports, 2018, 8, 8814.	1.6	34
53	Goldâ€Iron Bimetallic Nanoparticles Impregnated Reduced Graphene Oxide Based Nanosensor for Labelâ€free Detection of Biomarker Related to Nonâ€alcoholic Fatty Liver Disease. Electroanalysis, 2019, 31, 2417-2428.	1.5	34
54	Novel Sensing Assembly Comprising Engineered Gold Dendrites and MWCNTâ€AuNPs Nanohybrid for Acetaminophen Detection in Human Urine. Electroanalysis, 2020, 32, 561-570.	1.5	34

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55	Bioinspired Composite Materials: Applications in Diagnostics and Therapeutics. Journal of Molecular and Engineering Materials, 2016, 04, 1640004.	0.9	31
56	Glucose modified carbon paste sensor in the presence of cationic surfactant for mefenamic acid detection in urine and pharmaceutical samples. Microchemical Journal, 2021, 160, 105599.	2.3	28
57	Cancer Cytosensing Approaches in Miniaturized Settings Based on Advanced Nanomaterials and Biosensors. , 2019, , 133-147.		26
58	A Simple Separation Method with a Microfluidic Channel Based on Alternating Current Potential Modulation. Analytical Chemistry, 2012, 84, 9738-9744.	3.2	25
59	Nanostructured Ba/ZnO modified electrode as a sensor material for detection of organosulfur thiosalicylic acid. Microchemical Journal, 2020, 159, 105409.	2.3	25
60	Nanobioengineered Sensing Technologies Based on Cellulose Matrices for Detection of Small Molecules, Macromolecules, and Cells. Biosensors, 2021, 11, 168.	2.3	25
61	Electrochemical Evaluation of Binding Affinity for Aptamer Selection Using the Microarray Chip. Electroanalysis, 2012, 24, 1057-1064.	1.5	24
62	Age-dependent detection of erythrocytes glucose-6-phosphate dehydrogenase and its correlation with oxidative stress. Archives of Physiology and Biochemistry, 2016, 122, 61-66.	1.0	23
63	Prospects and advancements in C-reactive protein detection. World Journal of Methodology, 2014, 4, 1.	1.1	23
64	Ultrasensitive Aptasensors for the Detection of Viruses Based on Opto-Electrochemical Readout Systems. Biosensors, 2022, 12, 81.	2.3	23
65	Amberlite XAD-4 based electrochemical sensor for diclofenac detection in urine and commercial tablets. Materials Chemistry and Physics, 2021, 273, 125044.	2.0	20
66	Advance Engineered Nanomaterials in Point-of-care Immunosensing for Biomedical Diagnostics. RSC Detection Science, 2019, , 238-266.	0.0	19
67	Nanotherapeutics. , 2019, , 149-161.		18
68	Paper-based biosensors for clinical and biomedical applications: Emerging engineering concepts and challenges. Comprehensive Analytical Chemistry, 2020, 89, 163-188.	0.7	15
69	Multi-target detection of oxidative stress biomarkers in quercetin and myricetin treated human red blood cells. RSC Advances, 2016, 6, 53195-53202.	1.7	14
70	Influence of Dietary Capsaicin on Redox Status in Red Blood Cells During Human Aging. Advanced Pharmaceutical Bulletin, 2015, 5, 583-586.	0.6	14
71	Ultra-sensitive detection of tizanidine in commercial tablets and urine samples using zinc oxide coated glassy carbon electrode. Microchemical Journal, 2022, 172, 106956.	2.3	14
72	Bio-Nano-Interface Engineering Strategies of AuNPs Passivation for Next-Generation Biomedical Applications. , 2020, , 215-231.		13

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73	Marine biological macromolecules as matrix material for biosensor fabrication. Biotechnology and Bioengineering, 2022, 119, 2046-2063.	1.7	13
74	Electrochemical Nanobiosensors for Cancer Diagnosis. Journal of Analytical & Bioanalytical Techniques, 2015, 6, .	0.6	12
75	N-acetyl-d-glucosamine decorated nano-lipid-based carriers as theranostics module for targeted anti-cancer drug delivery. Materials Chemistry and Physics, 2022, 282, 125956.	2.0	12
76	Advances in Clinical Diagnosis through Electrochemical Aptamer Sensors. Journal of Bioanalysis & Biomedicine, 2013, 05, .	0.1	11
77	Advanced Biosensing Methodologies for Ultrasensitive Detection of Human Coronaviruses. Medical Virology, 2020, , 19-36.	2.1	10
78	HER2 Protein Biomarker Based Sensor Systems for Breast Cancer Diagnosis. Journal of Molecular Biomarkers & Diagnosis, 2013, 05, .	0.4	10
79	Nanomaterial Functionalization Strategies in Bio-Interface Development for Modern Diagnostic Devices. , 2020, , 195-214.		9
80	Next-Generation Immunosensing Technologies Based on Nano-Bio-Engineered Paper Matrices. , 2021, , 93-110.		9
81	Nano-bioengineered sensing technologies for real-time monitoring of reactive oxygen species in in vitro and in vivo models. Microchemical Journal, 2022, 180, 107615.	2.3	9
82	Lipid based nanocarriers: Production techniques, concepts, and commercialization aspect. Journal of Drug Delivery Science and Technology, 2022, 74, 103526.	1.4	8
83	Nanoâ€bioâ€engineered silk matrix based devices for molecular bioanalysis. Biotechnology and Bioengineering, 2022, 119, 784-806.	1.7	7
84	Marine Biomaterials in Therapeutics and Diagnostic. , 2015, , 1247-1263.		6
85	Design and development of lactoferrin conjugated lipid-polymer nano-bio-hybrid for cancer theranostics. Materials Today Communications, 2022, 31, 103548.	0.9	6
86	Continuous Glucose Monitoring for Diabetes Management Based on Miniaturized Biosensors. , 2022, , 149-175.		6
87	Insights into Novel Coronavirus and COVID-19 Outbreak. Medical Virology, 2020, , 1-17.	2.1	5
88	Electroanalytical techniques for investigating biofilms: Applications in biosensing and biomolecular interfacing. , 2020, , 293-329.		4
89	Engineered three-dimensional Au-Cu bimetallic dendritic nanosensor for ultrasensitive drug detection in urine samples and in vitro human embryonic kidney cells model. Microchemical Journal, 2022, 176, 107239.	2.3	4
90	Chromatography-Based Determination of Anabolic Steroids in Biological Fluids: Future Prospects Using Electrochemistry and Miniaturized Microchip Device. Chromatographia, 2013, 76, 1439-1448.	0.7	3

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91	Spectroscopic determination of intracellular quercetin uptake using erythrocyte model and its implications in human aging. 3 Biotech, 2018, 8, 498.	1.1	3
92	Electrochemical biosensors for monitoring of bioorganic and inorganic chemical pollutants in biological and environmental matrices. , 2022, , 509-531.		3
93	Materials for wearable sensors. , 2022, , 5-40.		3
94	Engineering Design, Implementation, and Sensing Mechanisms of Wearable Bioelectronic Sensors in Clinical Settings. Electroanalysis, 2023, 35, .	1.5	3
95	Advance Diagnosis of Drug Resistance in Cancer: Towards Point-of-Care Electronic Nanodevice. Journal of Analytical & Bioanalytical Techniques, 2015, 06, .	0.6	2
96	Mutational studies on Leishmania donovani dihydrolipoamide dehydrogenase (LdBPK291950.1) indicates that the enzyme may not be classical class-I pyridine nucleotide-disulfide oxidoreductase. International Journal of Biological Macromolecules, 2020, 164, 2141-2150.	3.6	1
97	Novel Therapeutics and Diagnostics Strategies Based on Engineered Nanobiomaterials. , 2019, , 1-27.		0
98	Advanced Microchannel Fabrication Technologies for Biomedical Devices. Materials Horizons, 2022, , 127-143.	0.3	0
99	Biomedical Potential of Marine Sponges. , 2016, , 329-340.		0
100	Omics and Its Application in Clinical Nanotechnology and Nanodiagnostics. , 2016, , 497-512.		0