Pranjal Chandra

List of Publications by Year in Descending Order

105 papers	3,935 citations	39 h-index	61 g-index
106 ext. papers	4,600 ext. citations	6.2 avg, IF	6.46 L-index

#	Paper	IF	Citations
105	Ultrasensitive Aptasensors for the Detection of Viruses Based on Opto-Electrochemical Readout Systems.. *Biosensors*, **2022**, 12,	5.9	7
104	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	4.8	0
103	Electrochemical biosensors for monitoring of bioorganic and inorganic chemical pollutants in biological and environmental matrices **2022**, 509-531		2
102	Ultra-sensitive detection of tizanidine in commercial tablets and urine samples using zinc oxide coated glassy carbon electrode. *Microchemical Journal*, **2022**, 172, 106956	4.8	0
101	Advanced Microchannel Fabrication Technologies for Biomedical Devices. *Materials Horizons*, **2022**, 127-143		0
100	Materials for wearable sensors **2022**, 5-40		1
99	Potential of Nanotechnology in Food Analysis and Quality Improvement **2022**, 169-194		
98	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	4.4	2
97	Design and Development of Lactoferrin Conjugated Lipid-polymer Nano-bio-hybrid for Cancer Theranostics. *Materials Today Communications*, **2022**, 103548	2.5	0
96	Marine Biological Macromolecules as Matrix Material for Biosensor fabrication.. *Biotechnology and Bioengineering*, **2022**,	4.9	2
95	Onsite Quality Controls for Food Safety Based on Miniaturized Biosensing **2022**, 251-272		
94	Commercial Aspects and Market Pull of Biosensors in Diagnostic Industries **2022**, 351-368		
93	Continuous Glucose Monitoring for Diabetes Management Based on Miniaturized Biosensors **2022**, 149-175		
92	Nano-bioengineered sensing technologies for real-time monitoring of reactive oxygen species in in vitro and in vivo models. *Microchemical Journal*, **2022**, 180, 107615	4.8	1
91	Nano-Bio-engineered Silk Matrix based Devices for Molecular Bioanalysis.. *Biotechnology and Bioengineering*, **2021**,	4.9	2
90	Next-Generation Immunosensing Technologies Based on Nano-Bio-Engineered Paper Matrices **2021**, 93-110		3
89	Nanobioengineered Sensing Technologies Based on Cellulose Matrices for Detection of Small Molecules, Macromolecules, and Cells. *Biosensors*, **2021**, 11,	5.9	9

88	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	4.8	15
87	Amberlite XAD-4 based electrochemical sensor for diclofenac detection in urine and commercial tablets. *Materials Chemistry and Physics*, **2021**, 273, 125044	4.4	4
86	Clinically practiced and commercially viable nanobio engineered analytical methods for COVID-19 diagnosis. *Biosensors and Bioelectronics*, **2020**, 165, 112361	11.8	59
85	Paper-based biosensors for clinical and biomedical applications: Emerging engineering concepts and challenges. *Comprehensive Analytical Chemistry*, **2020**, 89, 163-188	1.9	9
84	Insights into Novel Coronavirus and COVID-19 Outbreak. *Medical Virology*, **2020**, 1-17	6.6	2
83	Nanomaterial Functionalization Strategies in Bio-Interface Development for Modern Diagnostic Devices **2020**, 195-214		1
82	Bio-Nano-Interface Engineering Strategies of AuNPs Passivation for Next-Generation Biomedical Applications **2020**, 215-231		5
81	Advanced Biosensing Methodologies for Ultrasensitive Detection of Human Coronaviruses. *Medical Virology*, **2020**, 19-36	6.6	4
80	Novel Sensing Assembly Comprising Engineered Gold Dendrites and MWCNT-AuNPs Nanohybrid for Acetaminophen Detection in Human Urine. *Electroanalysis*, **2020**, 32, 561-570	3	19
79	Biosensor nanoengineering: Design, operation, and implementation for biomolecular analysis. *Sensors International*, **2020**, 1, 100040	6.1	99
78	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	7.9	0
77	Miniaturized label-free smartphone assisted electrochemical sensing approach for personalized COVID-19 diagnosis. *Sensors International*, **2020**, 1, 100019	6.1	55
76	Electroanalytical techniques for investigating biofilms: Applications in biosensing and biomolecular interfacing **2020**, 293-329		3
75	Nanostructured Ba/ZnO modified electrode as a sensor material for detection of organosulfur thiosalicylic acid. *Microchemical Journal*, **2020**, 159, 105409	4.8	16
74	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	11.8	39
73	Smartphone-assisted personalized diagnostic devices and wearable sensors. *Current Opinion in Biomedical Engineering*, **2020**, 13, 42-50	4.4	64
72	Design and Development of Ultrafast Sinapic Acid Sensor Based on Electrochemically Nanotuned Gold Nanoparticles and Solvothermally Reduced Graphene Oxide. *Electroanalysis*, **2020**, 32, 59-69	3	20
71	Sputtering enhanced peroxidase like activity of a dendritic nanochip for amperometric determination of hydrogen peroxide in blood samples. *Mikrochimica Acta*, **2019**, 186, 658	5.8	27

70	Gold nanoparticle surface engineering strategies and their applications in biomedicine and diagnostics. *3 Biotech*, **2019**, 9, 57	2.8	68
69	Red blood cells as an efficient in vitro model for evaluating the efficacy of metallic nanoparticles. *3 Biotech*, **2019**, 9, 279	2.8	23
68	Engineered Nanomaterial Assisted Signal-amplification Strategies for Enhancing Analytical Performance of Electrochemical Biosensors. *Electroanalysis*, **2019**, 31, 1615-1629	3	65
67	Novel Therapeutics and Diagnostics Strategies Based on Engineered Nanobiomaterials **2019**, 1-27		
66	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	7.9	56
65	Gold-Iron Bimetallic Nanoparticles Impregnated Reduced Graphene Oxide Based Nanosensor for Label-free Detection of Biomarker Related to Non-alcoholic Fatty Liver Disease. *Electroanalysis*, **2019**, 31, 2417-2428	3	22
64	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	11.8	49
63	Modernization of Biosensing Strategies for the Development of Lab-on-Chip Integrated Systems **2019**, 325-342		15
62	Cancer Cytosensing Approaches in Miniaturized Settings Based on Advanced Nanomaterials and Biosensors **2019**, 133-147		18
61	CHAPTER 11:Advance Engineered Nanomaterials in Point-of-care Immunosensing for Biomedical Diagnostics. *RSC Detection Science*, **2019**, 238-266	0.4	13
60	Nanotherapeutics: A Novel and Powerful Approach in Modern Healthcare System **2019**, 149-161		13
59	Paper-based miniaturized immunosensor for naked eye ALP detection based on digital image colorimetry integrated with smartphone. *Biosensors and Bioelectronics*, **2019**, 128, 9-16	11.8	100
58	Fundamentals and commercial aspects of nanobiosensors in point-of-care clinical diagnostics. *3 Biotech*, **2018**, 8, 149	2.8	78
57	Chitosan: An undisputed bio-fabrication material for tissue engineering and bio-sensing applications. *International Journal of Biological Macromolecules*, **2018**, 110, 110-123	7.9	111
56	Chitosan stabilized gold nanoparticle mediated self-assembled gliP nanobiosensor for diagnosis of Invasive Aspergillosis. *International Journal of Biological Macromolecules*, **2018**, 110, 449-456	7.9	47
55	Development of a bifunctional nanobiosensor for screening and detection of chemokine ligand in colorectal cancer cell line. *Biosensors and Bioelectronics*, **2018**, 100, 396-403	11.8	26
54	Shifting paradigm of cancer diagnoses in clinically relevant samples based on miniaturized electrochemical nanobiosensors and microfluidic devices. *Biosensors and Bioelectronics*, **2018**, 100, 411-428	11.8	83
53	Evolving trends in bio/chemical sensor fabrication incorporating bimetallic nanoparticles. *Biosensors and Bioelectronics*, **2018**, 117, 546-561	11.8	66

52	Prospects of Nanostructure Materials and Their Composites as Antimicrobial Agents. *Frontiers in Microbiology*, **2018**, 9, 422	5.7	118
51	Synthesis, characterization and in vitro analysis of □FeO-GdFeO biphasic materials as therapeutic agent for magnetic hyperthermia applications. *Materials Science and Engineering C*, **2018**, 92, 932-941	8.3	43
50	Design of commercially comparable nanotherapeutic agent against human disease-causing parasite, Leishmania. *Scientific Reports*, **2018**, 8, 8814	4.9	24
49	Smart Materials for Biosensing Applications **2018**, 421-431		11
48	Spectroscopic determination of intracellular quercetin uptake using erythrocyte model and its implications in human aging. *3 Biotech*, **2018**, 8, 498	2.8	2
47	Synthesis and Application of PHT-TiO2 Nanohybrid for Amperometric Glucose Detection in Human Saliva Sample. *Electroanalysis*, **2018**, 30, 2793-2802	3	27
46	Design and characterization of novel Al-doped ZnO nanoassembly as an effective nanoantibiotic. *Applied Nanoscience (Switzerland)*, **2018**, 8, 1925-1941	3.3	36
45	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	11.8	50
44	Engineered nanoporous materials mediated heterogeneous catalysts and their implications in biodiesel production. *Materials Science for Energy Technologies*, **2018**, 1, 11-21	5.2	43
43	Nanoengineered material based biosensing electrodes for enzymatic biofuel cells applications. *Materials Science for Energy Technologies*, **2018**, 1, 38-48	5.2	43
42	Electrochemical Immunosensors **2018**, 359-414		28
41	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	11.8	35
40	Prospects of using nanotechnology for food preservation, safety, and security. *Journal of Food and Drug Analysis*, **2018**, 26, 1201-1214	7	189
39	Paper based diagnostics for personalized health care: Emerging technologies and commercial aspects. *Biosensors and Bioelectronics*, **2017**, 96, 246-259	11.8	174
38	Highly Sensitive in vitro Biosensor for Enterotoxigenic Escherichia coli Detection Based on ssDNA Anchored on PtNPs-Chitosan Nanocomposite. *Electroanalysis*, **2017**, 29, 2665-2671	3	23
37	Phytofabricated metallic nanoparticles and their clinical applications. *RSC Advances*, **2016**, 6, 105996-106010	3.7	74
36	Multi-target detection of oxidative stress biomarkers in quercetin and myricetin treated human red blood cells. *RSC Advances*, **2016**, 6, 53195-53202	3.7	14
35	An amperometric nanobiosensor using a biocompatible conjugate for early detection of metastatic cancer cells in biological fluid. *Biosensors and Bioelectronics*, **2016**, 85, 883-890	11.8	61

34	Age-dependent detection of erythrocytes glucose-6-phosphate dehydrogenase and its correlation with oxidative stress. *Archives of Physiology and Biochemistry*, **2016**, 122, 61-6	2.2	19
33	Biomedical Potential of Marine Sponges **2016**, 329-340		
32	Omics and Its Application in Clinical Nanotechnology and Nanodiagnostics **2016**, 497-512		
31	CD 59 Targeted Ultrasensitive Electrochemical Immunosensor for Fast and Noninvasive Diagnosis of Oral Cancer. *Electroanalysis*, **2016**, 28, 2565-2574	3	56
30	Bioinspired Composite Materials: Applications in Diagnostics and Therapeutics. *Journal of Molecular and Engineering Materials*, **2016**, 04, 1640004	1.3	26
29	Ultrasensitive detection of drug resistant cancer cells in biological matrixes using an amperometric nanobiosensor. *Biosensors and Bioelectronics*, **2015**, 70, 418-25	11.8	67
28	Electrochemical Nanobiosensors for Cancer Diagnosis. *Journal of Analytical & Bioanalytical Techniques*, **2015**, 6,		7
27	Biomarkers of oxidative stress in erythrocytes as a function of human age. *World Journal of Methodology*, **2015**, 5, 216-22	1.2	50
26	Advance Diagnosis of Drug Resistance in Cancer: Towards Point-of-Care Electronic Nanodevice. *Journal of Analytical & Bioanalytical Techniques*, **2015**, 06,		2
25	Marine Biomaterials in Therapeutics and Diagnostic **2015**, 1247-1263		6
24	Influence of Dietary Capsaicin on Redox Status in Red Blood Cells During Human Aging. *Advanced Pharmaceutical Bulletin*, **2015**, 5, 583-6	4.5	13
23	In vitro chloramphenicol detection in a Haemophilus influenza model using an aptamer-polymer based electrochemical biosensor. *Biosensors and Bioelectronics*, **2014**, 55, 337-42	11.8	89
22	Prospects and advancements in C-reactive protein detection. *World Journal of Methodology*, **2014**, 4, 1-5	1.2	17
21	Strategy of Marine Viruses in Global Ecosystem **2013**, 33-44		
20	Chromatography-Based Determination of Anabolic Steroids in Biological Fluids: Future Prospects Using Electrochemistry and Miniaturized Microchip Device. *Chromatographia*, **2013**, 76, 1439-1448	2.1	2
19	Ultrasensitive and selective electrochemical diagnosis of breast cancer based on a hydrazine-Au nanoparticle-aptamer bioconjugate. *Analytical Chemistry*, **2013**, 85, 1058-64	7.8	236
18	Cancer cell detection based on the interaction between an anticancer drug and cell membrane components. *Chemical Communications*, **2013**, 49, 1900-2	5.8	75
17	Detection of norfloxacin and monitoring its effect on caffeine catabolism in urine samples. *Biosensors and Bioelectronics*, **2013**, 47, 307-12	11.8	41

16	A review on determination of steroids in biological samples exploiting nanobio-electroanalytical methods. *Analytica Chimica Acta*, **2013**, 762, 14-24	6.6	59
15	Investigation on the downregulation of dopamine by acetaminophen administration based on their simultaneous determination in urine. *Biosensors and Bioelectronics*, **2013**, 39, 139-44	11.8	61
14	Simultaneous detection of antibacterial sulfonamides in a microfluidic device with amperometry. *Biosensors and Bioelectronics*, **2013**, 39, 204-9	11.8	38
13	Gold Nanoparticles and Nanocomposites in Clinical Diagnostics Using Electrochemical Methods. *Journal of Nanoparticles*, **2013**, 2013, 1-12		39
12	Advances in Clinical Diagnosis through Electrochemical Aptamer Sensors. *Journal of Bioanalysis & Biomedicine*, **2013**, 05,	1	9
11	HER2 Protein Biomarker Based Sensor Systems for Breast Cancer Diagnosis. *Journal of Molecular Biomarkers & Diagnosis*, **2013**, 05,	2	4
10	Application of a Cu□o alloy dendrite on glucose and hydrogen peroxide sensors. *Electrochimica Acta*, **2012**, 61, 36-43	6.7	130
9	In□vivo detection of glutathione disulfide and oxidative stress monitoring using a biosensor. *Biomaterials*, **2012**, 33, 2600-7	15.6	60
8	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, 278-82	11.8	48
7	A simple separation method with a microfluidic channel based on alternating current potential modulation. *Analytical Chemistry*, **2012**, 84, 9738-44	7.8	21
6	Label-free detection of kanamycin based on the aptamer-functionalized conducting polymer/gold nanocomposite. *Biosensors and Bioelectronics*, **2012**, 36, 29-34	11.8	182
5	Electrochemical Evaluation of Binding Affinity for Aptamer Selection Using the Microarray Chip. *Electroanalysis*, **2012**, 24, 1057-1064	3	21
4	Separation and simultaneous detection of anticancer drugs in a microfluidic device with an amperometric biosensor. *Biosensors and Bioelectronics*, **2011**, 28, 326-32	11.8	55
3	Electropolymerized self-assembled layer on gold nanoparticles: detection of inducible nitric oxide synthase in neuronal cell culture. *Analytical Chemistry*, **2011**, 83, 6177-83	7.8	68
2	Detection of daunomycin using phosphatidylserine and aptamer co-immobilized on Au nanoparticles deposited conducting polymer. *Biosensors and Bioelectronics*, **2011**, 26, 4442-9	11.8	115
1	Engineering Design, Implementation, and Sensing Mechanisms of Wearable Bioelectronic Sensors in Clinical Settings. *Electroanalysis*,	3	