Hedayatollah Ghourchian

List of Publications by Citations

62 papers	996 citations	19 h-index	28 g-index
63 ext. papers	1,168 ext. citations	5 avg, IF	4.77 L-index

#	Paper	IF	Citations
62	Ionic-liquid/NH2-MWCNTs as a highly sensitive nano-composite for catalase direct electrochemistry. *Biosensors and Bioelectronics*, **2010**, 25, 1301-6	11.8	74
61	Cytotoxic effect of albumin coated copper nanoparticle on human breast cancer cells of MDA-MB 231. *PLoS ONE*, **2017**, 12, e0188639	3.7	67
60	Direct electron transfer of horseradish peroxidase on Nafion-cysteine modified gold electrode. *Electrochimica Acta*, **2007**, 52, 6261-6267	6.7	60
59	Direct electrochemistry of glucose oxidase and glucose biosensing on a hydroxyl fullerenes modified glassy carbon electrode. *Biosensors and Bioelectronics*, **2014**, 60, 30-4	11.8	49
58	Ultrasensitive optical biosensor for detection of miRNA-155 using positively charged Au nanoparticles. *Scientific Reports*, **2018**, 8, 2943	4.9	48
57	Graphene-Multiwalled Carbon Nanotube Hybrids Synthesized by Gamma Radiations: Application as a Glucose Sensor. *Journal of Nanotechnology*, **2014**, 2014, 1-10	3.5	40
56	A gold nanoparticle-based immunosensor for the chemiluminescence detection of the hepatitis B surface antigen. *Analytical Methods*, **2014**, 6, 5059-5066	3.2	31
55	Magnetic nanoparticle-based immunosensor for electrochemical detection of hepatitis B surface antigen. *Analytical Biochemistry*, **2013**, 441, 1-7	3.1	31
54	Colorimetric monitoring of rolling circle amplification for detection of H5N1 influenza virus using metal indicator. *Biosensors and Bioelectronics*, **2015**, 72, 121-6	11.8	30
53	Real-time detection of H5N1 influenza virus through hyperbranched rolling circle amplification. *Analyst, The*, **2015**, 140, 1502-9	5	29
52	A superoxide dismutase mimic nanocomposite for amperometric sensing of superoxide anions. *Mikrochimica Acta*, **2015**, 182, 1045-1053	5.8	28
51	Microfluidic-aided fabrication of nanoparticles blend based on chitosan for a transdermal multidrug delivery application. *International Journal of Biological Macromolecules*, **2017**, 99, 433-442	7.9	24
50	Silver-gold-apoferritin nanozyme for suppressing oxidative stress during cryopreservation. *Materials Science and Engineering C*, **2019**, 94, 831-840	8.3	23
49	An investigation on the interaction modes of a single-strand DNA aptamer and RBP4 protein: a molecular dynamic simulations approach. *Organic and Biomolecular Chemistry*, **2016**, 14, 8141-53	3.9	22
48	Sensitive Superoxide Biosensor Based on Silicon Carbide Nanoparticles. *Electroanalysis*, **2010**, 22, 1599-1606	3	22
47	Choline oxidase as a selective recognition element for determination of paraoxon. *Biosensors and Bioelectronics*, **2009**, 24, 2509-14	11.8	21
46	Superoxide radical biosensor based on a nano-composite containing cytochrome c. *Analyst, The*, **2011**, 136, 3803-8	5	20

45	Quantum Dot-Based Biosensor for the Detection of Human T-Lymphotropic Virus-1. *Analytical Letters*, **2017**, 50, 2402-2411	2.2	19
44	Different behaviors of single and multi wall carbon nanotubes for studying electrochemistry and electrocatalysis of choline oxidase. *Electrochimica Acta*, **2011**, 56, 9542-9548	6.7	19
43	Nafion-Methylene Blue Functional Membrane and Its Application in Chemical and Biosensing. *Analytical Letters*, **2007**, 40, 483-496	2.2	19
42	Human T-lymphotropic virus 1 (HTLV-1) pathogenesis: A systems virology study. *Journal of Cellular Biochemistry*, **2018**, 119, 3968-3979	4.7	19
41	A nanocomposite based biosensor for cholesterol determination. *Analytical Methods*, **2012**, 4, 3225	3.2	17
40	A genosensor for detection of HTLV-I based on photoluminescence quenching of fluorescent carbon dots in presence of iron magnetic nanoparticle-capped Au. *Scientific Reports*, **2018**, 8, 15593	4.9	17
39	Amine functionalized TiO2–carbon nanotube composite: synthesis, characterization and application to glucose biosensing. *Applied Nanoscience (Switzerland)*, **2011**, 1, 189-195	3.3	16
38	Albumin coated copper-cysteine nanozyme for reducing oxidative stress induced during sperm cryopreservation. *Bioorganic Chemistry*, **2018**, 80, 621-630	5.1	15
37	Ionic liquid/graphene oxide as a nanocomposite for improving the direct electrochemistry and electrocatalytic activity of glucose oxidase. *Journal of Solid State Electrochemistry*, **2013**, 17, 183-189	2.6	14
36	The electrochemical study of glucose oxidase on gold-coated magnetic iron oxide nanoparticles. *Journal of Analytical Chemistry*, **2015**, 70, 1254-1260	1.1	13
35	Gold nanoparticle based capacitive immunosensor for detection of hepatitis B surface antigen. *Analytical Methods*, **2013**, 5, 4448	3.2	13
34	Effect of hydrophilicity of room temperature ionic liquids on the electrochemical and electrocatalytic behaviour of choline oxidase. *Analyst, The*, **2012**, 137, 471-5	5	12
33	Accelerating the electron transfer of choline oxidase using ionic-liquid/NH2-MWCNTs nano-composite. *Journal of the Iranian Chemical Society*, **2012**, 9, 111-119	2	12
32	Direct electrochemistry of chemically modified catalase immobilized on an oxidatively activated glassy carbon electrode. *Journal of Applied Electrochemistry*, **2009**, 39, 7-14	2.6	12
31	Ultrasensitive interdigitated capacitance immunosensor using gold nanoparticles. *Nanotechnology*, **2018**, 29, 265102	3.4	11
30	Ultrasensitive electrochemical biosensor for detection of microRNA-155 as a breast cancer risk factor. *Analytica Chimica Acta*, **2020**, 1136, 1-8	6.6	11
29	Electrochemistry and molecular modeling of the hemoglobin–benzene interaction with a nanocrystalline mixed metal oxide. *RSC Advances*, **2014**, 4, 49128-49136	3.7	10
28	Gold nanorods etching as a powerful signaling process for plasmonic multicolorimetric chemo-/biosensors: Strategies and applications. *Coordination Chemistry Reviews*, **2021**, 442, 213934	23.2	10

27	Simple and rapid method for synthesis of porous gold nanoparticles and its application in improving DNA loading capacity. *Materials Science and Engineering C*, **2019**, 103, 109795	8.3	9
26	Enhancement of ethanol-oxygen biofuel cell output using a CNT based nano-composite as bioanode. *Biosensors and Bioelectronics*, **2016**, 78, 337-343	11.8	9
25	Cytochrome c embraced in sodium dodecyl sulfate nano-micelle as a homogeneous nanostructured peroxidase. *Journal of the Iranian Chemical Society*, **2012**, 9, 775-782	2	9
24	Aptamer-Conjugated Calcium Phosphate Nanoparticles for Reducing Diabetes Risk via Retinol Binding Protein 4 Inhibition. *Canadian Journal of Diabetes*, **2017**, 41, 305-311	2.1	7
23	A sample volume independent paper microfluidic device for quantifying glucose in real human plasma. *Microfluidics and Nanofluidics*, **2020**, 24, 1	2.8	7
22	Albumin coated cadmium nanoparticles as chemotherapeutic agent against MDA-MB 231 human breast cancer cell line. *Artificial Cells, Nanomedicine and Biotechnology*, **2018**, 46, 787-797	6.1	6
21	Direct Electrochemistry of Artificial Peroxidase Based on Self-Assembled Cytochrome c-SDS-Nano-Micelle. *Analytical Letters*, **2012**, 45, 2221-2235	2.2	6
20	High-performance porphyrin-like graphene quantum dots for immuno-sensing of Salmonella typhi. *Biosensors and Bioelectronics*, **2021**, 188, 113334	11.8	6
19	Microfluidic-assisted production of poly(e-caprolactone) and cellulose acetate nanoparticles: effects of polymers, surfactants, and flow rate ratios. *Polymer Bulletin*, **2020**, 78, 5449	2.4	5
18	Ethanol/O2 biofuel cell using a biocathode consisting of laccase/ HOOC-MWCNTs/polydiallyldimethylammonium chloride. *Enzyme and Microbial Technology*, **2016**, 86, 127-33	3.8	5
17	Direct Voltammetry of Copper, Zinc-Superoxide Dismutase Immobilized onto Electrodeposited Nickel Oxide Nanoparticles: Fabrication of Amperometric Superoxide Biosensor. *Electroanalysis*, **2011**, 23, n/a-n/a	3	5
16	Ultrasensitive nano-aptasensor for monitoring retinol binding protein 4 as a biomarker for diabetes prognosis at early stages. *Scientific Reports*, **2020**, 10, 594	4.9	5
15	Designing a magnetic inductive micro-electrode for virus monitoring: modelling and feasibility for hepatitis B virus. *Mikrochimica Acta*, **2020**, 187, 463	5.8	5
14	Microfluidic-based synthesized carboxymethyl chitosan nanoparticles containing metformin for diabetes therapy: In vitro and in vivo assessments. *Carbohydrate Polymers*, **2021**, 261, 117889	10.3	5
13	An efficient microbial fuel cell using a CNT/IL based nanocomposite. *Journal of Materials Chemistry A*, **2017**, 5, 7979-7991	13	4
12	New insight on biological interaction analysis: new nanocrystalline mixed metal oxide SPME fiber for GC-FID analysis of BTEX and its application in human hemoglobin-benzene interaction studies. *PLoS ONE*, **2014**, 9, e102992	3.7	4
11	A soft-template nanostructured peroxidase based on cytochrome c and sodium decyl sulfate and its electrochemical properties on hydroxyl fullerenes modified glassy carbon electrode. *Journal of the Iranian Chemical Society*, **2016**, 13, 471-479	2	3
10	Performance of gold- and silver-coated magnetic nanoparticles as carriers for horseradish peroxidase. *Journal of the Iranian Chemical Society*, **2013**, 10, 1113-1121	2	3

9	A nano self-assembled artificial peroxidase: spectroscopic and electrochemical investigations. *Journal of the Iranian Chemical Society*, **2014**, 11, 1397-1405	2	3
8	Capacitively-induced pulsed-field gel electrophoresis: a novel method for DNA separation. *Medical Engineering and Physics*, **2005**, 27, 723-7	2.4	3
7	Long segment detection of HTLV-1 genome based on the fluorescence quenching technique. *Heliyon*, **2018**, 4, e00996	3.6	3
6	Different electrochemical behavior of adult and fetal hemoglobin at ionic liquid-carbon nanotube nanocomposite. *Journal of the Iranian Chemical Society*, **2015**, 12, 687-694	2	2
5	Horseradish Peroxidase Immobilization on Amine Functionalized Carbon Nano Tubes: Direct Electrochemistry and Bioelectrocatalysis. *Progress in Reaction Kinetics and Mechanism*, **2012**, 37, 161-172	0.5	2
4	A Biocompatible Nanocomposite for Glucose Sensing. *International Journal of Electrochemistry*, **2011**, 2011, 1-7	2.4	1
3	A silver(I) doped bud-like DNA nanostructure as a dual-functional nanolabel for voltammetric discrimination of methylated from unmethylated genes. *Mikrochimica Acta*, **2018**, 186, 38	5.8	1
2	Ferromagnetic properties of iron-porphyrin-like structurally deformed graphene. *Physica E: Low-Dimensional Systems and Nanostructures*, **2022**, 139, 115165	3	0
1	Effects of substituted metal-free porphyrins in apo-horseradish peroxidase. *Journal of Porphyrins and Phthalocyanines*, **2007**, 11, 836-845	1.8	