

# Padmanabhan Santhosh

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8338827/publications.pdf>

Version: 2024-02-01

63  
papers

3,206  
citations

126907

33  
h-index

149698

56  
g-index

64  
all docs

64  
docs citations

64  
times ranked

3829  
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of electrospun PVdF/PAN membrane-based polymer electrolytes for lithium batteries. <i>Journal of Membrane Science</i> , 2008, 325, 683-690.	8.2	263
2	Gold nanoparticles dispersed polyaniline grafted multiwall carbon nanotubes as newer electrocatalysts: Preparation and performances for methanol oxidation. <i>Journal of Catalysis</i> , 2006, 238, 177-185.	6.2	162
3	A novel glucose biosensor based on immobilization of glucose oxidase into multiwall carbon nanotubes/polyelectrolyte-loaded electrospun nanofibrous membrane. <i>Biosensors and Bioelectronics</i> , 2008, 23, 771-779.	10.1	154
4	Microneedle array-based carbon paste amperometric sensors and biosensors. <i>Analyst, The</i> , 2011, 136, 1846.	3.5	130
5	Electrochemical determination of dopamine and ascorbic acid at a novel gold nanoparticles distributed poly(4-aminothiophenol) modified electrode. <i>Talanta</i> , 2007, 71, 1774-1781.	5.5	122
6	Electrocatalytic oxidation of NADH at gold nanoparticles loaded poly(3,4-ethylenedioxythiophene)/poly(styrene sulfonic acid) film modified electrode and integration of alcohol dehydrogenase for alcohol sensing. <i>Talanta</i> , 2008, 75, 1307-1314.	5.5	110
7	Origins of Nanoscale Damage to Glass-Sealed Platinum Electrodes with Submicrometer and Nanometer Size. <i>Analytical Chemistry</i> , 2013, 85, 6198-6202.	6.5	104
8	Fabrication of a new polyaniline grafted multi-wall carbon nanotube modified electrode and its application for electrochemical detection of hydrogen peroxide. <i>Analytica Chimica Acta</i> , 2006, 575, 32-38.	5.4	103
9	Fabrication of enzymatic glucose biosensor based on palladium nanoparticles dispersed onto poly(3,4-ethylenedioxythiophene) nanofibers. <i>Bioelectrochemistry</i> , 2009, 75, 61-66.	4.6	102
10	Electrospun poly(vinylidene fluoride)/poly(aminophenylboronic acid) composite nanofibrous membrane as a novel glucose sensor. <i>Analytical Biochemistry</i> , 2007, 360, 189-195.	2.4	99
11	Multiplexing of injury codes for the parallel operation of enzyme logic gates. <i>Analyst, The</i> , 2010, 135, 2249.	3.5	96
12	Hybrid Polymer-Grafted Multiwalled Carbon Nanotubes for In vitro Gene Delivery. <i>Small</i> , 2010, 6, 2281-2291.	10.0	94
13	Textile-based Electrochemical Sensing: Effect of Fabric Substrate and Detection of Nitroaromatic Explosives. <i>Electroanalysis</i> , 2010, 22, 2511-2518.	2.9	84
14	Voltammetric determination of nitroaromatic and nitramine explosives contamination in soil. <i>Talanta</i> , 2006, 69, 656-662.	5.5	82
15	Enzyme logic gates for the digital analysis of physiological level upon injury. <i>Biosensors and Bioelectronics</i> , 2009, 24, 3569-3574.	10.1	81
16	Multi-enzyme logic network architectures for assessing injuries: digital processing of biomarkers. <i>Molecular BioSystems</i> , 2010, 6, 2554.	2.9	80
17	Novel amperometric carbon monoxide sensor based on multi-wall carbon nanotubes grafted with polydiphenylamine-Fabrication and performance. <i>Sensors and Actuators B: Chemical</i> , 2007, 125, 92-99.	7.8	73
18	Gamma radiation induced distribution of gold nanoparticles into carbon nanotube-polyaniline composite. <i>Composites Science and Technology</i> , 2007, 67, 811-816.	7.8	71

#	ARTICLE	IF	CITATIONS
19	Poly(vinylidene fluoride)-polydiphenylamine composite electrospun membrane as high-performance polymer electrolyte for lithium batteries. <i>Journal of Membrane Science</i> , 2008, 318, 422-428.	8.2	68
20	Preparation and properties of new cross-linked polyurethane acrylate electrolytes for lithium batteries. <i>Journal of Power Sources</i> , 2006, 160, 609-620.	7.8	66
21	Sensitive electrochemical detection of superoxide anion using gold nanoparticles distributed poly(methyl methacrylate)-polyaniline core-shell electrospun composite electrode. <i>Analyst</i> , The, 2011, 136, 1557.	3.5	59
22	Gold nanoparticles dispersed into poly(aminothiophenol) as a novel electrocatalyst-Fabrication of modified electrode and evaluation of electrocatalytic activities for dioxygen reduction. <i>Journal of Molecular Catalysis A</i> , 2006, 256, 335-345.	4.8	57
23	Electrocatalytic Dioxygen Reduction at Glassy Carbon Electrode Modified with Polyaniline Grafted Multiwall Carbon Nanotube Film. <i>Electroanalysis</i> , 2006, 18, 1564-1571.	2.9	56
24	Different types of molecular interactions in carbon nanotube/conducting polymer composites - A close analysis. <i>Composites Science and Technology</i> , 2007, 67, 900-905.	7.8	55
25	Enzymatic AND Logic Gates Operated Under Conditions Characteristic of Biomedical Applications. <i>Journal of Physical Chemistry B</i> , 2010, 114, 12166-12174.	2.6	55
26	Role of organic additives on zinc plating. <i>Surface and Coatings Technology</i> , 2006, 201, 3438-3442.	4.8	52
27	Enhanced Electrocatalysis for the Reduction of Hydrogen Peroxide at New Multiwall Carbon Nanotube Grafted Polydiphenylamine Modified Electrode. <i>Electroanalysis</i> , 2006, 18, 894-903.	2.9	50
28	Ultrafast Electron Transfer Kinetics of Graphene Grown by Chemical Vapor Deposition. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15134-15137.	13.8	49
29	High-fidelity determination of security threats via a Boolean biocatalytic cascade. <i>Chemical Communications</i> , 2011, 47, 3087.	4.1	46
30	One-pot construction of mediatorless bi-enzymatic glucose biosensor based on organic-inorganic hybrid. <i>Biosensors and Bioelectronics</i> , 2010, 25, 1579-1586.	10.1	44
31	Electrochemical detection of celecoxib at a polyaniline grafted multiwall carbon nanotubes modified electrode. <i>Analytica Chimica Acta</i> , 2008, 626, 1-9.	5.4	39
32	Hollow spherical nanostructured polydiphenylamine for direct electrochemistry and glucose biosensor. <i>Biosensors and Bioelectronics</i> , 2009, 24, 2008-2014.	10.1	39
33	Platinum particles dispersed poly(diphenylamine) modified electrode for methanol oxidation. <i>Applied Surface Science</i> , 2006, 252, 7964-7969.	6.1	36
34	Fe <sup>3+</sup> ion sensing characteristics of polydiphenylamine electrochemical and spectroelectrochemical analysis. <i>Sensors and Actuators B: Chemical</i> , 2005, 105, 223-231.	7.8	32
35	Evaluation of a cross-linked polyurethane acrylate as polymer electrolyte for lithium batteries. <i>Materials Research Bulletin</i> , 2006, 41, 1023-1037.	5.2	30
36	Generalized Theory for Nanoscale Voltammetric Measurements of Heterogeneous Electron-Transfer Kinetics at Macroscopic Substrates by Scanning Electrochemical Microscopy. <i>Analytical Chemistry</i> , 2011, 83, 5928-5935.	6.5	30

#	ARTICLE	IF	CITATIONS
37	Fabrication of Functional Nanofibrous Ammonia Sensor. IEEE Nanotechnology Magazine, 2007, 6, 513-518.	2.0	29
38	Electrochemical, spectroelectrochemical and spectroscopic evidences for copolymer formation between diphenylamine and m-toluidine. Materials Chemistry and Physics, 2004, 85, 316-328.	4.0	22
39	Development of amperometric $\alpha$ -ketoglutarate biosensor based on ruthenium-rhodium modified carbon fiber enzyme microelectrode. Biosensors and Bioelectronics, 2011, 26, 3670-3673.	10.1	22
40	Preparation and characterization of polyurethane/poly(vinylidene fluoride) composites and evaluation as polymer electrolytes. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 135, 65-73.	3.5	21
41	Boolean-format biocatalytic processing of enzyme biomarkers for the diagnosis of soft tissue injury. Sensors and Actuators B: Chemical, 2010, 150, 285-290.	7.8	21
42	In situ UV-visible spectroelectrochemical studies on the copolymerization of diphenylamine with ortho-methoxy aniline. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2003, 59, 1427-1439.	3.9	19
43	Bioelectronic system for the control and readout of enzyme logic gates. Sensors and Actuators B: Chemical, 2011, 155, 206-213.	7.8	19
44	Fabrication and Electrocatalysis of Self-Assembly Directed Gold Nanoparticles Anchored Carbon Nanotubes Modified Electrode. Journal of Nanoscience and Nanotechnology, 2006, 6, 1575-1583.	0.9	17
45	Silica-Polyaniline Based Bienzyme Cholesterol Biosensor: Fabrication and Characterization. Electroanalysis, 2010, 22, 2467-2474.	2.9	16
46	Fabrication of a Gold Nanoparticles Decorated Carbon Nanotubes Based Novel Modified Electrode for the Electrochemical Detection of Glucose. Journal of Nanoscience and Nanotechnology, 2007, 7, 3365-3372.	0.9	15
47	UV-vis spectroscopy for following the kinetics of homogeneous polymerization of diphenylamine in p-toluene sulphonic acid. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 62, 420-430.	3.9	13
48	Enhanced Electrochemical Detection of Ketorolac Tromethamine at Polypyrrole Modified Glassy Carbon Electrode. Analytical Sciences, 2007, 23, 475-478.	1.6	13
49	Influence of Finely Dispersed Carbon Nanotubes on the Performance Characteristics of Polymer Electrolytes for Lithium Batteries. IEEE Nanotechnology Magazine, 2007, 6, 362-367.	2.0	13
50	LiNi <sub>0.8</sub> Co <sub>0.2</sub> xTi <sub>x</sub> O <sub>2</sub> nanoparticles: synthesis, structure, and evaluation of electrochemical properties for lithium ion cell application. Journal of Solid State Electrochemistry, 2007, 11, 1665-1669.	2.5	12
51	Strip-based amperometric detection of myeloperoxidase. Biosensors and Bioelectronics, 2010, 26, 886-889.	10.1	12
52	Preparation and characterization of conducting poly(diphenylamine) entrapped polyurethane network electrolyte. Journal of Applied Polymer Science, 2006, 101, 611-617.	2.6	10
53	Nanostructuring of Poly(diphenylamine) Inside the Galleries of Montmorillonite Organo Clay Through Self-Assembly Approach. Journal of Nanoscience and Nanotechnology, 2006, 6, 1594-1601.	0.9	8
54	Studies on monitoring the composition of the copolymer by cyclic voltammetry and in situ spectroelectrochemical analysis. European Polymer Journal, 2005, 41, 97-105.	5.4	7

#	ARTICLE	IF	CITATIONS
55	Electrochemical Characterization of Nanocrystalline $\text{LiM}_x\text{Co}_{1-x}\text{O}_2$ (M=Mg, Ca) Prepared by a Solid-State Thermal Method. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2006, 36, 71-81.	0.6	7
56	Synthesis and Characterization of Processable Multi-Walled Carbon Nanotubes-Sulfonated Polydiphenylamine Graft Copolymers. Journal of Nanoscience and Nanotechnology, 2007, 7, 3386-3393.	0.9	6
57	Microstructure and Thermal Behavior of Poly(o-anisidine)/Poly(ethylene terephthalate) Composite. Polymer Journal, 2005, 37, 489-497.	2.7	5
58	Electro-analysis of energetic materials. Journal of Hazardous Materials, 2007, 148, 573-582.	12.4	5
59	Self-assembly directed synthesis of gold nanostructures. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 313-314, 612-616.	4.7	4
60	Validation of a membrane touch biosensor for the qualitative detection of IgG class antibodies to herpes simplex virus type 2. Analyst, The, 2017, 142, 2725-2734.	3.5	4
61	Chemical oxidative grafting of conducting poly(N-methyl aniline) onto poly(ethylene terephthalate). Journal of Applied Polymer Science, 2005, 95, 596-605.	2.6	3
62	Electrochemical Synthesis and Characterization of Conducting Poly(diphenylamine-co-2-methoxyaniline). International Journal of Polymer Analysis and Characterization, 2005, 10, 341-360.	1.9	2
63	Physical properties and characterization of $\text{RuSr}_2\text{GdCu}_2\text{O}_8$ (Ru-1212) grown by top seeded melt textured technique. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 163, 165-169.	3.5	2