Murugan Veerapandian

List of Publications by Citations

66 papers	3,337 citations	23 h-index	57 g-index
67 ext. papers	3,842 ext. citations	6.2 avg, IF	5.65 L-index

#	Paper	IF	Citations
66	The chemical and structural analysis of graphene oxide with different degrees of oxidation. *Carbon*, **2013**, 53, 38-49	10.4	1150
65	Antibacterial Efficiency of Graphene Nanosheets against Pathogenic Bacteria via Lipid Peroxidation. *Journal of Physical Chemistry C*, **2012**, 116, 17280-17287	3.8	315
64	Investigation of Raman and photoluminescence studies of reduced graphene oxide sheets. *Applied Physics A: Materials Science and Processing*, **2012**, 106, 501-506	2.6	211
63	Nanoparticles: functionalization and multifunctional applications in biomedical sciences. *Current Medicinal Chemistry*, **2010**, 17, 4559-77	4.3	211
62	Synthesis, characterization and electrochemical properties of functionalized graphene oxide. *Carbon*, **2012**, 50, 4228-4238	10.4	128
61	Functionalization of biomolecules on nanoparticles: specialized for antibacterial applications. *Applied Microbiology and Biotechnology*, **2011**, 90, 1655-67	5.7	101
60	Graphene-based nanocomposites for sensitivity enhancement of surface plasmon resonance sensor for biological and chemical sensing: A review. *Biosensors and Bioelectronics*, **2019**, 139, 111324	11.8	85
59	Simultaneous electrochemical detection of Cd(II), Pb(II), As(III) and Hg(II) ions using ruthenium(II)-textured graphene oxide nanocomposite. *Talanta*, **2017**, 162, 574-582	6.2	78
58	Glucosamine-functionalized silver glyconanoparticles: characterization and antibacterial activity. *Analytical and Bioanalytical Chemistry*, **2010**, 398, 867-76	4.4	65
57	Nanostructured molybdenum oxide-based antibacterial paint: effective growth inhibition of various pathogenic bacteria. *Nanotechnology*, **2014**, 25, 315101	3.4	64
56	Surface activation of graphene oxide nanosheets by ultraviolet irradiation for highly efficient anti-bacterials. *Nanotechnology*, **2013**, 24, 395706	3.4	59
55	Dual immunosensor based on methylene blue-electroadsorbed graphene oxide for rapid detection of the influenza A virus antigen. *Talanta*, **2016**, 155, 250-7	6.2	58
54	New function of molybdenum trioxide nanoplates: toxicity towards pathogenic bacteria through membrane stress. *Colloids and Surfaces B: Biointerfaces*, **2013**, 112, 521-4	6	57
53	Graphene oxide functionalized with silver@silica-polyethylene glycol hybrid nanoparticles for direct electrochemical detection of quercetin. *Biosensors and Bioelectronics*, **2014**, 58, 200-4	11.8	55
52	Biogenic synthesis of multidimensional gold nanoparticles assisted by Streptomyces hygroscopicus and its electrochemical and antibacterial properties. *BioMetals*, **2012**, 25, 351-60	3.4	47
51	Surface chemistry of cerium oxide nanocubes: Toxicity against pathogenic bacteria and their mechanistic study. *Journal of Industrial and Engineering Chemistry*, **2014**, 20, 3513-3517	6.3	46
50	Glucosamine functionalized copper nanoparticles: Preparation, characterization and enhancement of anti-bacterial activity by ultraviolet irradiation. *Chemical Engineering Journal*, **2012**, 209, 558-567	14.7	43

49	Low cost, catalyst free, high performance supercapacitors based on porous nano carbon derived from agriculture waste. *Journal of Energy Storage*, **2020**, 32, 101829	7.8	42
48	Functionalized graphene oxide for clinical glucose biosensing in urine and serum samples. *International Journal of Nanomedicine*, **2012**, 7, 6123-36	7.3	41
47	Graphene oxide chemically decorated with AgRu/chitosan nanoparticles: fabrication, electrode processing and immunosensing properties. *RSC Advances*, **2015**, 5, 75015-75024	3.7	31
46	Glucosamine-Anchored Graphene Oxide Nanosheets: Fabrication, Ultraviolet Irradiation, and Electrochemical Properties. *ACS Applied Materials & Interfaces*, **2015**, 7, 14552-6	9.5	27
45	Sodium functionalized graphene oxide coated titanium plates for improved corrosion resistance and cell viability. *Applied Surface Science*, **2014**, 293, 124-131	6.7	27
44	Copper-glucosamine microcubes: synthesis, characterization, and C-reactive protein detection. *Langmuir*, **2011**, 27, 8934-42	4	25
43	Lipoxygenase-modified Ru-bpy/graphene oxide: Electrochemical biosensor for on-farm monitoring of non-esterified fatty acid. *Biosensors and Bioelectronics*, **2016**, 78, 253-258	11.8	23
42	Electrochemical sensing platform for the determination of arsenite and arsenate using electroactive nanocomposite electrode. *Chemical Engineering Journal*, **2018**, 351, 319-327	14.7	21
41	PEGylated polyethyleneimine grafted silica nanoparticles: enhanced cellular uptake and efficient siRNA delivery. *Analytical and Bioanalytical Chemistry*, **2011**, 400, 535-45	4.4	20
40	Amygdalin-Functionalized Carbon Quantum Dots for Probing -Glucosidase Activity for Cancer Diagnosis and Therapeutics. *ACS Biomaterials Science and Engineering*, **2019**, 5, 3089-3099	5.5	19
39	Ruthenium dye sensitized graphene oxide electrode for on-farm rapid detection of beta-hydroxybutyrate. *Sensors and Actuators B: Chemical*, **2016**, 228, 180-184	8.5	18
38	Structural and biological evaluation of a multifunctional SWCNT-AgNPs-DNA/PVA bio-nanofilm. *Analytical and Bioanalytical Chemistry*, **2011**, 400, 547-60	4.4	18
37	Magnetic bead-amplified voltammetric detection for carbohydrate antigen 125 with enzyme labels using aptamer-antigen-antibody sandwiched assay. *Sensors and Actuators B: Chemical*, **2020**, 312, 127985	8.5	17
36	Amperometric determination of As(III) and Cd(II) using a platinum electrode modified with acetylcholinesterase, ruthenium(II)-tris(bipyridine) and graphene oxide. *Mikrochimica Acta*, **2018**, 185, 297	5.8	16
35	A One Step Hydrothermal Approach for the Improved Synthesis of Graphene Nanosheets. *Current Nanoscience*, **2012**, 8, 934-938	1.4	15
34	Opto-electrochemical functionality of Ru(II)-reinforced graphene oxide nanosheets for immunosensing of dengue virus non-structural 1 protein. *Biosensors and Bioelectronics*, **2020**, 150, 111878	11.8	14
33	Ultrasonochemically conjugated metalloid/triblock copolymer nanocomposite and subsequent thin solid laminate growth for surface and interface studies. *Langmuir*, **2010**, 26, 14216-22	4	13
32	RF magnetron sputtering mediated NiTi/Ag coating on Ti-alloy substrate with enhanced biocompatibility and durability. *Materials Science and Engineering C*, **2019**, 99, 304-314	8.3	12

31	Reusable urine glucose sensor based on functionalized graphene oxide conjugated Au electrode with protective layers. *Biotechnology Reports (Amsterdam, Netherlands)*, **2014**, 3, 49-53	5.3	12
30	Insights from a Pan India Sero-Epidemiological survey (Phenome-India Cohort) for SARS-CoV2. *ELife* , **2021**, 10,	8.9	12
29	Methylene Blue-Fortified Molybdenum Trioxide Nanoparticles: Harnessing Radical Scavenging Property. *ACS Applied Materials & Interfaces*, **2018**, 10, 43429-43438	9.5	12
28	Metalloid polymer nanoparticle functionalized graphene oxide working electrode for durable glucose sensing. *Materials Research Bulletin*, **2014**, 49, 593-600	5.1	11
27	Ruthenium bipyridine sensitized MoO multifunctional nanostructures: Study of opto-electrochemical properties, biocompatibility and bioimaging. *Colloids and Surfaces B: Biointerfaces*, **2017**, 154, 315-320	6	9
26	Methylene blue dye coated silver-silica nanoparticles with dual functionality fabricated by injection pump and ultrasonochemistry. *Materials Research Bulletin*, **2013**, 48, 1817-1823	5.1	9
25	Triad CNT-NPs/Polymer Nanocomposites: Fabrication, Characterization, and Preliminary Antimicrobial Study. *Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry*, **2011**, 41, 345-355		9
24	Ultrasonochemical-assisted fabrication and evaporation- induced self-assembly (EISA) of POSS-SiO2@Ag core/ABA triblock copolymer nanocomposite film. *Polymer Composites*, **2010**, 31, 1620-1627	3	9
23	Impact of aminated carbon quantum dots as a novel co-reactant for Ru(bpy): resolving specific electrochemiluminescence for butein detection. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 539-546	4.4	9
22	Chitosan-modified silver@ruthenium hybrid nanoparticles: evaluation of physico-chemical properties and bio-affinity with sialic acid. *Journal of Materials Chemistry B*, **2015**, 3, 665-672	7.3	8
21	State-of-Art Bio-Assay Systems and Electrochemical Approaches for Nanotoxicity Assessment. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 325	5.8	8
20	Analytical and biological characterization of quinazoline semicarbazone derivatives. *Medicinal Chemistry Research*, **2010**, 19, 283-298	2.2	8
19	Electrochemical Tracing of Butein Using Carbon Nanoparticles Interfaced Electrode Processed from Biowaste. *Electroanalysis*, **2020**, 32, 1220-1225	3	7
18	Nitrogenated-carbon nanoelectrocatalyst advertently processed from bio-waste of Allium sativum for oxygen reduction reaction. *Journal of Nanostructure in Chemistry*, **2021**, 11, 343-352	7.6	7
17	Chemically synthesized butein and butin: Optical, structure and electrochemical redox functionality at electrode interface. *Journal of Photochemistry and Photobiology B: Biology*, **2018**, 182, 122-129	6.7	5
16	Study of Atomic Force Microscopy in Pharmaceutical and Biopharmaceutical Interactions - A Mini Review. *Current Pharmaceutical Analysis*, **2009**, 5, 256-268	0.6	5
15	Electrochemical properties of Rubpy-reduced graphene oxide synergized by ultrasonication for label-free quercetin sensing. *Applied Surface Science*, **2021**, 537, 147777	6.7	5
14	Chitosanylated MoO-Ruthenium(II) Nanocomposite as Biocompatible Probe for Bioimaging and Herbaceutical Detection. *ACS Biomaterials Science and Engineering*, **2019**, 5, 3606-3617	5.5	4

List of Publications

13	Functional nanoparticles translocation into cell and adhesion force curve analysis. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 7752-63	1.3	4
12	In-situ redox-active hybrid graphene platform for label-free electrochemical biosensor: Insights from electrodeposition and electroless deposition. *TrAC - Trends in Analytical Chemistry*, **2021**, 143, 116413	14.6	4
11	Fluorescent silica nanoparticles functionalized on multi-walled carbon nanotubes: Fabrication and fluorescent properties. *Biochip Journal*, **2014**, 8, 83-90	4	3
10	A machine learning-based approach to determine infection status in recipients of BBV152 (Covaxin) whole-virion inactivated SARS-CoV-2 vaccine for serological surveys.. *Computers in Biology and Medicine*, **2022**, 146, 105419	7	2
9	Hybridized graphene nanomaterials for drug delivery, cyto-compatibility, and electrochemical biosensor application * *Volume VI: Carbon (Nanotube, Fullerene, Graphene) Nanomaterials. **2018**, 375-411		1
8	Role of partial amorphous and disordered stannous ions incorporated hydroxyapatite nanosphere for enhanced electrochemical energy storage application. *Journal of Alloys and Compounds*, **2021**, 851, 156710	5.7	1
7	Chitosan grafted butein: A metal-free transducer for electrochemical genosensing of exosomal CD24. *Carbohydrate Polymers*, **2021**, 269, 118333	10.3	1
6	Rational design of effective solid-state electrochemiluminescence platform of Gold@Polyluminol nanocomposite as an ultrasensitive immuno-probe for selective detection of prostate specific antigen.. *Analytica Chimica Acta*, **2022**, 1206, 339736	6.6	0
5	Molybdenum trioxide hybridized kaempferol: double-powered nanosystem for salvaging oxidative stress and electrochemical immunoprobing of interleukin-6. *Materials Today Chemistry*, **2022**, 24, 100809	6.2	0
4	Electrochemical and DFT studies of andrographolide on electrochemically reduced graphene oxide for anti-viral herbaceutical sensor.. *Analytica Chimica Acta*, **2022**, 1209, 339877	6.6	0
3	Physico-chemically functionalized hybrid graphene derivatives for miniaturized microfluidics and biotransducer platform. *Comprehensive Analytical Chemistry*, **2020**, 125-148	1.9	
2	Functional Nanomaterials for Biomedical Research: Focus on Bio-Functionalization, Biosynthesis, and Biomedical Applications **2013**, 67-96		
1	NMR studies of artificial double-crossover DNA tiles. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 2300-10	1.3	