Philani Mashazi

List of Publications by Year
in descending order

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Version: 2024-02-01

62 papers	1,180 citations	430874 18 h-index	434195 31 g-index
62 all docs	62 docs citations	62 times ranked	1376 citing authors

#	Article	IF	Citations
1	Tetracarboxylic acid cobalt phthalocyanine SAM on gold: Potential applications as amperometric sensor for H2O2 and fabrication of glucose biosensor. Electrochimica Acta, 2006, 52, 177-186.	5.2	104
2	Nanomagnet-Silica Nanoparticles Decorated with Au@Pd for Enhanced Peroxidase-Like Activity and Colorimetric Glucose Sensing. ACS Applied Materials & Interfaces, 2020, 12, 1973-1987.	8.0	95
3	Selective adsorption of PVP on the surface of silver nanoparticles: A molecular dynamics study. Journal of Molecular Structure, 2011, 1004, 131-137.	3.6	78
4	Surface chemistry and electrocatalytic behaviour of tetra-carboxy substituted iron, cobalt and manganese phthalocyanine monolayers on gold electrode. Electrochimica Acta, 2007, 53, 1858-1869.	5.2	55
5	Synthesis, characterization of copper oxide-gold nanoalloys and their peroxidase-like activity towards colorimetric detection of hydrogen peroxide and glucose. Materials Science and Engineering C, 2019, 96, 814-823.	7.3	51
6	The effects of carbon nanotubes on the electrocatalysis of hydrogen peroxide by metallo-phthalocyanines. Talanta, 2011, 85, 2202-2211.	5.5	48
7	Physicochemical and antimicrobial photodynamic chemotherapy of unsymmetrical indium phthalocyanines alone or in the presence of magnetic nanoparticles. New Journal of Chemistry, 2016, 40, 2710-2721.	2.8	45
8	Synthesis of Offâ€Stoichiometric CoS Nanoplates from a Molecular Precursor for Efficient H₂/O₂ Evolution and Supercapacitance. ChemElectroChem, 2019, 6, 2560-2569.	3.4	40
9	Electrode Modification Using Alkynyl Substituted Fe(II) Phthalocyanine via Electrografting and Click Chemistry for Electrocatalysis. Electroanalysis, 2015, 27, 2468-2478.	2.9	39
10	Applications of polymerized metal tetra-amino phthalocyanines towards hydrogen peroxide detection. Journal of Porphyrins and Phthalocyanines, 2010, 14, 252-263.	0.8	35
11	Critical assessment of the Quartz Crystal Microbalance with Dissipation as an analytical tool for biosensor development and fundamental studies: Metallophthalocyanineâ€“glucose oxidase biocomposite sensors. Biosensors and Bioelectronics, 2007, 23, 95-101.	10.1	34
12	Nanohybrid electrocatalyst based on cobalt phthalocyanine-carbon nanotube-reduced graphene oxide for ultrasensitive detection of glucose in human saliva. Sensors and Actuators B: Chemical, 2021, 348, 130723.	7.8	32
13	Self-assembled monolayers (SAMs) of cobalt tetracarboxylic acidchloride phthalocyanine covalently attached onto a preformed mercaptoethanol SAM: A novel method. Electrochimica Acta, 2006, 51, 3489-3494.	5.2	27
14	Electrochemical impedimetric immunosensor for the detection of measles-specific IgG antibodies after measles infections. Biosensors and Bioelectronics, 2013, 49, 32-38.	10.1	26
15	Platinum Nanoparticles Supported on Carbon Nanodots as Anode Catalysts for Direct Alcohol Fuel Cells. International Journal of Electrochemical Science, 2017, 12, 6365-6378.	1.3	22
16	Probing electrochemical and electrocatalytic properties of cobalt(II) and manganese(III) octakis(hexylthio)phthalocyanine as self-assembled monolayers. Journal of Porphyrins and Phthalocyanines, 2010, 14, 932-947.	0.8	21
17	Electrocatalytic activity of bimetallic Auâ€“Pd nanoparticles in the presence of cobalt tetraaminophthalocyanine. Journal of Colloid and Interface Science, 2015, 440, 151-161.	9.4	21
18	Electrocatalytic studies of covalently immobilized metal tetra-amino phthalocyanines onto derivatized screen-printed gold electrodes. Mikrochimica Acta, 2010, 171, 321-332.	5.0	20

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19	Metallophthalocyanines and metalloporphyrins as electrocatalysts: a case of hydrogen peroxide and glucose detection. Journal of Porphyrins and Phthalocyanines, 2012, 16, 741-753.	0.8	17
20	Synthesis and singlet oxygen production by a phthalocyanine when embedded in asymmetric polymer membranes. Polymer, 2016, 105, 203-213.	3.8	17
21	Stable thin films of human P53 antigen on gold surface for the detection of tumour associated anti-P53 autoantibodies. Electrochimica Acta, 2020, 331, 135272.	5.2	17
22	Solventless synthesis of nanospinel Ni_{1â^'x}Co_xFe₂O₄ (0 â‰ x â‰ 1) solid solutions for efficient electrochemical water splitting and supercapacitance. RSC Advances, 2021, 11, 31002-31014.	3.6	17
23	Exploiting Click Chemistry for the Covalent Immobilization of Tetra (4-Propargyloxyphenoxy) Metallophthalocyanines onto Phenylazide-Grafted Gold Surfaces. Electrochimica Acta, 2017, 254, 89-100.	5.2	16
24	Electrocatalytic behaviour of surface confined pentanethio cobalt (II) binuclear phthalocyanines towards the oxidation of 4-chlorophenol. Applied Surface Science, 2017, 425, 702-712.	6.1	16
25	Electrografting of 4-Carboxybenzenediazonium on Glassy Carbon Electrode: The Effect of Concentration on the Formation of Mono and Multilayers. Molecules, 2020, 25, 4575.	3.8	16
26	Synthesis and photophysical properties of nanocomposites of aluminum tetrasulfonated phthalocyanine covalently linked to glutathione capped CdTe/CdS/ZnS quantum dots. Synthetic Metals, 2015, 205, 212-221.	3.9	15
27	Fluorescence properties of alloyed ZnSeS quantum dots overcoated with ZnTe and ZnTe/ZnS shells. Optical Materials, 2016, 54, 104-110.	3.6	15
28	Ultrasensitive detection of anti-p53 autoantibodies based on nanomagnetic capture and separation with fluorescent sensing nanobioprobe for signal amplification. Biosensors and Bioelectronics, 2020, 170, 112640.	10.1	15
29	Bioelectrocatalysis and surface analysis of gold coated with nickel oxide/hydroxide and glucose oxidase towards detection of glucose. Colloids and Surfaces B: Biointerfaces, 2020, 190, 110981.	5.0	15
30	Fabrication of dye-sensitized solar cells based on push-pull asymmetrical substituted zinc and copper phthalocyanines and reduced graphene oxide nanosheets. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 399, 112612.	3.9	13
31	Effects of differently shaped silver nanoparticles on the photophysics of pyridylsulfanyl-substituted phthalocyanines. Polyhedron, 2015, 99, 112-121.	2.2	12
32	Visible light responsive TiO2 - graphene oxide nanosheets - Zn phthalocyanine ternary heterojunction assisted photoelectrocatalytic degradation of Orange G. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 414, 113291.	3.9	12
33	Facile deposition of gold nanoparticle thin films on semi-permeable cellulose substrate. Materials Letters, 2012, 88, 132-135.	2.6	11
34	Iodineâ€Doped Cobalt Phthalocyanine Supported on Multiwalled Carbon Nanotubes for Electrocatalysis of Oxygen Reduction Reaction. Electroanalysis, 2015, 27, 1176-1187.	2.9	11
35	The effect of the cobalt and manganese central metal ions on the nonlinear optical properties of tetra(4-propargyloxyphenoxy)phthalocyanines. New Journal of Chemistry, 2018, 42, 9857-9864.	2.8	10
36	Oriented Antibody Covalent Immobilization for Label-Free Impedimetric Detection of C-Reactive Protein via Direct and Sandwich Immunoassays. Frontiers in Chemistry, 2021, 9, 587142.	3.6	10

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37	Immunoassay detection of tumor-associated autoantibodies using protein G bioconjugated to nanomagnet-silica decorated with Au@Pd nanoparticles. Talanta, 2021, 226, 122127.	5.5	9
38	Synthesis, density functional theory, molecular dynamics and electrochemical studies of 3-thiopheneacetic acid-capped gold nanoparticles. Journal of Molecular Structure, 2011, 1006, 494-501.	3.6	8
39	Characterization of electrodes modified by one pot or step by step electro-click reaction and axial ligation of iron tetracarboxyphthalocyanine. Electrochimica Acta, 2014, 145, 237-244.	5.2	8
40	Covalent attachment of cobalt (II) tetra-(3-carboxyphenoxy) phthalocyanine onto pre-grafted gold electrode for the determination of catecholamine neurotransmitters. Electrochimica Acta, 2020, 360, 137015.	5.2	8
41	Electrografting of isophthalic acid monolayer and covalent attachment of antibody onto carbon surfaces: Construction of capacitive biosensor for methotrexate detection. Electrochimica Acta, 2021, 398, 139360.	5.2	8
42	Kirigami paper-based colorimetric immunosensor integrating smartphone readout for determination of humoral autoantibody immune response. Microchemical Journal, 2022, 178, 107427.	4.5	8
43	In-sera selectivity detection of catecholamine neurotransmitters using covalent composite of cobalt phthalocyanine and aminated graphene quantum dots. Microchemical Journal, 2022, 180, 107605.	4.5	8
44	Computational and experimental evaluation of selective substitution of thiolated coumarin derivatives on gold nanoparticles: Surface enhancing Raman scattering and electrochemical studies. Applied Surface Science, 2017, 396, 695-704.	6.1	7
45	Optimizing phthalocyanine based dye-sensitized solar cells: The role of reduced graphene oxide. Synthetic Metals, 2018, 246, 236-245.	3.9	7
46	Morphological influence of deposition routes on lead sulfide thin films. Inorganica Chimica Acta, 2019, 498, 119116.	2.4	7
47	Electrode modification using nanocomposites of electropolymerised cobalt phthalocyanines supported on multiwalled carbon nanotubes. Journal of Solid State Electrochemistry, 2016, 20, 1075-1086.	2.5	6
48	Bimetallic gold and palladium nanoparticles supported on copper oxide nanorods for enhanced H₂O₂ catalytic reduction and sensing. RSC Advances, 2021, 11, 28818-28828.	3.6	6
49	Low temperature scalable synthetic approach enabling high bifunctional electrocatalytic performance of NiCo₂S₄ and CuCo₂S₄ thiospinels. RSC Advances, 2021, 11, 31533-31546.	3.6	6
50	Unique flexible silver dendrites thin films fabricated on cellulose dialysis cassettes. Journal of Materials Science, 2013, 48, 6418-6425.	3.7	5
51	â€œTurn onâ€•fluorescence enhancement of Zn octacarboxyphthaloyanine-graphene oxide conjugates by hydrogen peroxide. Journal of Luminescence, 2016, 170, 317-324.	3.1	5
52	Electrocatalytic behavior of single walled carbon nanotubes with alkylthio-substituted cobalt binuclear phthalocyanines towards oxidation of 4-chlorophenols. Journal of Porphyrins and Phthalocyanines, 2019, 23, 142-153.	0.8	5
53	Design and evaluation of an electrochemical immunosensor for measles serodiagnosis using measles-specific Immunoglobulin G antibodies. Talanta, 2013, 115, 694-701.	5.5	4
54	Photophysical properties of zinc phthalocyanineâ€“uridine single walled carbon nanotube â€“ conjugates. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 149, 231-239.	3.9	4

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55	Tetra (4-propargyloxyphenoxy)phthalocyanines: Facile synthesis, fluorescence and thermal properties. Polyhedron, 2017, 134, 263-274.	2.2	4
56	Effective ROS generation and morphological effect of copper oxide nanoparticles as catalysts. Journal of Nanoparticle Research, 2021, 23, 1.	1.9	2
57	Novel covalent immobilization of cobalt (II) octa acyl chloride phthalocyanines onto phenylethylamine pre-grafted gold via spontaneous amidation. Electrochimica Acta, 2022, 422, 140550.	5.2	2
58	Application of gold and palladium nanoparticles supported on polymelamine microspheres in the oxidation of 1-phenylethanol and some other phenyl substituted alcohols. Molecular Catalysis, 2022, 528, 112456.	2.0	2
59	Surface functionalization of glassy carbon electrodes via adsorption, electrografting and click chemistry using quantum dots and alkynyl substituted phthalocyanines: a brief review. Proceedings of SPIE, 2017, , .	0.8	1
60	Ultrasensitive detection of prostate-specific antigen using glucose-encapsulated nanoliposomes anti-PSA polyclonal antibody as detection nanobioprobes. Talanta, 2022, 245, 123483.	5.5	1
61	Nanomagnet Bioconjugates with antiâ€CRP Polyclonal Antibodies as Nanobioprobes for Enhanced Impedimetric Detection of CRP. Electroanalysis, 2023, 35, .	2.9	1
62	Electrocatalytic behavior of single walled carbon nanotubes with alkylthio-substituted cobalt binuclear phthalocyanines towards oxidation of 4-chlorophenols. , 2021, , 1177-1188.		0