

2014 Publications

1. Fashina, Adedayo; Antunes, Edith; Nyokong, Tebello
A comparative photophysicochemical study of mono substituted phthalocyanines grafted onto silica nanoparticles
Journal of Porphyrins and Phthalocyanines (2014), 18(5), 396-405.
<http://www.worldscientific.com/doi/abs/10.1142/S1088424614500138>
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2. Osifeko, Olawale L.; Nyokong, Tebello
Applications of lead phthalocyanines embedded in electrospun fibers for the photoinactivation of Escherichia coli in water
Dyes and Pigments (2014), 111, 8-15.
<http://dx.doi.org/10.1016/j.dyepig.2014.05.010>
DOI:10.1016/j.dyepig.2014.05.010
3. Maringa, Audacity; Nyokong, Tebello
Behavior of palladium nanoparticles in the absence or presence of cobalt tetraaminophthalocyanine for the electrooxidation of hydrazine
Electroanalysis (2014), 26(5), 1068-1077.
<http://doi.wiley.com/10.1002/elan.201400028>
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4. Mphahlele, Nonhlanhla E.; Le Roux, Lukas; Jafta, Charl J.; Cele, Leskey; Mathe, Mkhulu K.; Nyokong, Tebello; Kobayashi, Nagao; Ozoemena, Kenneth I.
Carbon nanotube-enhanced photoelectrochemical properties of metallo-octacarboxyphthalocyanines
Journal of Materials Science (2014), 49(1), 340-346.
<http://link.springer.com/10.1007/s10853-013-7710-1>
DOI:10.1007/s10853-013-7710-1
5. Maringa, Audacity; Mashazi, Philani; Nyokong, Tebello
Characterization of electrodes modified by one pot or step by step electro-click reaction and axial ligation of iron tetracarboxyphthalocyanine
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<http://dx.doi.org/10.1016/j.electacta.2014.09.011>
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6. Managa, Muthumuni; Antunes, Edith; Nyokong, Tebello
Conjugates of platinum nanoparticles with gallium tetra - (4-Carboxyphenyl) porphyrin and their use in photodynamic antimicrobial chemotherapy when in solution or embedded in electrospun fiber
Polyhedron (2014), 76, 94-101.
<http://dx.doi.org/10.1016/j.poly.2014.03.050>
DOI:10.1016/j.poly.2014.03.050
7. Adegoke, Oluwasesan; Nyokong, Tebello
Conjugation of mono-substituted phthalocyanine derivatives to CdSe@ZnS quantum dots and their applications as fluorescent-based sensors
Synthetic Metals (2014), 188, 35-45.
<http://dx.doi.org/10.1016/j.synthmet.2013.11.016>
DOI:10.1016/j.synthmet.2013.11.016

8. S. Nyoni, T. Nyokong
Development of Graphene/CdSe Quantum Dots-Co Phthalocyanine Nanocomposite for Oxygen Reduction Reaction.
Electroanalysis 26(10) (2014) 2261-2272
<http://doi.wiley.com/10.1002/elan.201400372>
DOI: 10.1002/elan.201400372

9. Ogbodu, Racheal O.; Nyokong, Tebello
Effect of bovine serum albumin and single walled carbon nanotube on the photophysical properties of zinc octacarboxy phthalocyanine
Spectrochimica Acta, Part A: Molecular and Biomolecular Spectroscopy (2014), 121, 81-87.
<http://dx.doi.org/10.1016/j.saa.2013.10.064>
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Effects of analytes on the fluorescence properties of CdTe@ZnS quantum dots decorated with cobalt tetraaminophthalocyanine
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11. Ogbodu, Racheal O.; Nyokong, Tebello
Effects of number of ring substituents on the physicochemical properties of zinc aminophenoxy phthalocyanine-single walled carbon nanotube conjugate
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12. Sanusi, Kayode; Nyokong, Tebello
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<http://www.tandfonline.com/doi/abs/10.1080/00958972.2014.959509>
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13. He, Qinggang; Wu, Gang; Liu, Ke; Khene, Samson; Li, Qing; Mugadza, Tawanda; Deunf, Elise; Nyokong, Tebello; Chen, Shaowei W.
Effects of Redox Mediators on the Catalytic Activity of Iron Porphyrins towards Oxygen Reduction in Acidic Media
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14. Nyoni, Stephen; Nyokong, Tebello
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15. Maringa, Audacity; Antunes, Edith; Nyokong, Tebello
Electrochemical behaviour of gold nanoparticles and Co tetraaminophthalocyanine on glassy carbon electrode

Electrochimica Acta (2014), 121, 93-101.
<http://dx.doi.org/10.1016/j.electacta.2013.12.132>
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Enhanced nonlinear optical properties of octa-substituted lead and cadmium phthalocyanines when embedded in poly(bisphenol A carbonate) as thin films
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17. Sanusi, Kayode; Amuhaya, Edith K.; Nyokong, Tebello
Enhanced Optical Limiting Behavior of an Indium Phthalocyanine-Single-Walled Carbon Nanotube Composite: An Investigation of the Effects of Solvents
Journal of Physical Chemistry C (2014), 118(13), 7057-7069.
<http://pubs.acs.org/doi/abs/10.1021/jp501469e>
DOI:10.1021/jp501469e

18. Sanusi, Kayode; Khene, Samson; Nyokong, Tebello
Enhanced optical limiting performance in phthalocyanine-quantum dot nanocomposites by free-carrier absorption mechanism
Optical Materials (Amsterdam, Netherlands) (2014), 37, 572-582
<http://linkinghub.elsevier.com/retrieve/pii/S0925346714003541>
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Journal of Molecular Catalysis A: Chemical (2014), 381, 132-137.
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22. Sekhosana, Kutloano Edward; Amuhaya, Edith; Mack, John; Nyokong, Tebello
Optical nonlinearities and photophysical behaviour of green and blue forms of lutetium bisphthalocyanines
Journal of Materials Chemistry C: Materials for Optical and Electronic Devices (2014), 2(27), 5431-5437.
<http://xlink.rsc.org/?DOI=c4tc00505h>
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23. Sanusi, Kayode; Antunes, Edith; Nyokong, Tebello
Optical nonlinearities in non-peripherally substituted pyridyloxy phthalocyanines: a combined effect of symmetry, ring-strain and demetallation
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DOI:10.1039/c3dt52462k
24. Khoza, Phindile; Nyokong, Tebello
Photocatalytic behavior of phthalocyanine-silver nanoparticle conjugates supported on polystyrene fibers
Journal of Molecular Catalysis A: Chemical (2014), 395, 34-41
<http://www.sciencedirect.com/science/journal/13811169/395>
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25. Yilmaz, Yusuf; Mack, John; Sener, M. Kasim; Sonmez, Mehmet; Nyokong, Tebello
Photophysical and photochemical properties and TD-DFT calculations of novel zinc and platinum phthalocyanines
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26. Fashina, Adedayo; Antunes, Edith; Nyokong, Tebello
Photophysical behavior of Zn aminophenoxy substituted phthalocyanine conjugates with carboxylic acid-coated silica nanoparticles: Effect of point of substitution
Journal of Molecular Structure (2014), 1068, 245-254.
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27. Mthethwa, Thandekile; Antunes, Edith; Nyokong, Tebello
Photophysical properties of new water soluble tetra thiamine substituted zinc phthalocyanine conjugated to gold nanorods of different aspect ratios
Dalton Transactions (2014), 43(22), 8230-8240.
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28. Khoza, Phindile; Antunes, Edith; Nyokong, Tebello
Photophysicochemical behavior of carbazole derivatized zinc phthalocyanine in the presence of ZnO microparticles and when embedded in electrospun fibers
Dyes and Pigments (2014), 104, 57-66.
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29. Managa, Muthumuni; Idowu, Mopelola Abidemi; Antunes, Edith; Nyokong, Tebello
Photophysicochemical behavior and antimicrobial activity of dihydroxosilicon tris(diaquaplatinum)octacarboxyphthalocyanine
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Synthesis and characterization of quantum dots designed for biomedical use

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Synthesis of ytterbium bisphthalocyanines: Photophysicochemical properties and nonlinear absorption behavior

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35. Shi, Maohu; Tian, Jiangwei; Mkhize, Colin; Kubheka, Gugu; Zhou, Jinfeng; Mack, John; Nyokong, Tebello; Shen, Zhen

Synthesis, characterization and photodynamic therapy properties of an octa-4-tert-butylphenoxy-substituted phosphorus(V) triazatetrabenzcorrole

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rational design of photosensitizers for PDT and NIR region sensor applications

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