

1. N. Masilela, P. Kleyi, Z. Tshentu, G. Priniotakis, P. Westbroek and T. Nyokong
Photodynamic inactivation of *Staphylococcus aureus* using low symmetrically substituted phthalocyanines supported on a polystyrene polymer fiber
Dyes and Pigments 96(2) (2013) 500-508
<http://dx.doi.org/10.1016/j.dyepig.2012.10.001>
DOI:10.1016/j.dyepig.2012.10.001
2. Phindile Khoza, Edith Antunes, Ji-Yao Chen, Tebello Nyokong
Synthesis and photophysicochemical studies of a water soluble conjugate between folic acid and zinc tetraaminophthalocyanine
J. Luminescence. 134 (2013) 784-790
<http://dx.doi.org/10.1016/j.jlumin.2012.06.048>
DOI: 10.1016/j.jlumin.2012.06.048
3. Oluwasesan Adegoke, Tebello Nyokong
Probing the sensitive and selective luminescent detection of peroxynitrite using thiol-capped CdTe and CdTe@ZnS quantum dots
J. Luminescence, 134 (2013) 448-455
<http://www.sciencedirect.com/science/article/pii/S0022231312004577>
DOI: 10.1016/j.jlumin.2012.08.002
4. R. Zugle, T. Nyokong
Zinc(II) 2,9,16,23-tetrakis[4-(N-methylpyridyloxy)]-phthalocyanine anchored on an electrospun polysulfone polymer fiber: Application for photosensitized conversion of methyl orange
J. Mol Cat. A: 366 (2013) 247-253
<http://dx.doi.org/10.1016/j.molcata.2012.10.001>
DOI:10.1016/j.molcata.2012.10.001
5. J. Britton, C. Litwinski, E. Antunes, M. Durmu?, V. Chauke, T. Nyokong
Optical limiting analysis of phthalocyanines in polymer thin films
Journal of Macromolecular Science, Part A: Pure and Applied Chemistry 50(1) (2013), 110-120
<http://www.tandfonline.com/doi/abs/10.1080/10601325.2013.736269>
DOI: 10.1080/10601325.2013.736269
6. K.E. Sekhosana, E. Antunes, S. Khene, S. D'Souza, T. Nyokong
Fluorescence behavior of glutathione capped CdTe@ZnS quantum dots chemically coordinated to zinc octacarboxy phthalocyanines
J. Luminescence, 136 (2013) 255 – 264
<http://dx.doi.org/10.1016/j.jlumin.2012.11.044>
DOI: 10.1016/j.jlumin.2012.11.044
7. B. De Schoenmaker L. Van der Schueren, R. Zugle, A. Goethals, P. Westbroek, P. Kiekens, T. Nyokong Tebello,
K. De Clerck
Effect of the relative humidity on the fibre morphology of polyamide 4.6 and polyamide 6.9 nanofibres
J. Mater Sci: Mater in Medicine 48 (4) (2013) 1746-1754
<http://hdl.handle.net/1854/LU-3118590>

DOI 10.1007/s10853-012-6934-9

8. R. S. Walmsley, P. Hlangothi, C. Litwinski, T. Nyokong, N. Torto, Z. R. Tshentu
Catalytic oxidation of thioanisole using oxovanadium(IV)-functionalized electrospun
polybenzimidazole nanofibers,
J. Appl. Polymer Scie. 127 (6) (2013) 4719-4725
<http://onlinelibrary.wiley.com/doi/10.1002/app.38067/full>
DOI: 10.1002/app.38067

9. Ruphino Zugle, Tebello Nyokong
Comparative phototransformation of environmental pollutants using metallophthalocyanines
supported on electrospun polymer fibers
J. App. Polymer Science 128(2) (2013) 1131-1142
<http://onlinelibrary.wiley.com/doi/10.1002/app.38381/full>
DOI: 10.1002/app.38381

10. E. Rohwer, C. Richter, N. Heming, K. Strauch, C. Litwinski, T. Nyokong, D. Schlettwein, H. Schwoerer
Ultrafast Photodynamics of the Indoline Dye D149 Adsorbed to Porous ZnO in Dye-Sensitized Solar
Cells
ChemPhysChem, 14(1) (2013) 132-139
<http://onlinelibrary.wiley.com/wol1/doi/10.1002/cphc.201200715/full>
DOI: 10.1002/cphc.201200715

11. E. Rohwer, C. Litwinski, K. Strauch, N. Heming, C. Richter, T. Nyokong, D. Schlettwein,
H. Schwoerer
Photoinduced charge transfer between Indoline D149 and porous ZnO detected in transient
absorption
EPJ Web of Conferences 41 (2013), 04011.
<http://dx.doi.org/10.1051/epjconf/20134104011>
DOI: 10.1051/epjconf/20134104011

12. Nomasonto Rapulenyane, Edith Antunes and Tebello Nyokong
A study of the photophysics and antimicrobial properties of two zinc phthalocyanine - silver
nanoparticle conjugates
New J. Chem. 37 (4) (2013) 1216-1223
<http://xlink.rsc.org/?DOI=c3nj41107a>
DOI: 10.1039/c3nj41107a

13. Edith Antunes, Nomasonto Rapulenyane, Mpho Ledwaba, Christian Litwinski, Wadzanai
Chidawanyika, Tebello Nyokong.
The synthesis and characterisation of magnetic nanoparticles and their interaction with a zinc
phthalocyanine
Inorganic Chemistry Communications 29 (2013) 60-64
<http://www.sciencedirect.com/science/article/pii/S1387700312005771>
DOI: 10.1016/j.jinoche.2012.12.010

14. Megan Coates, Tebello Nyokong
Characterization of glassy carbon electrodes modified with iron phthalocyanine through grafting and click chemistry
Electrochim. Acta. 91 (2013) 158-165.
<http://dx.doi.org/10.1016/j.electacta.2012.12.112>
DOI: 10.1016/j.electacta.2012.12.112
15. S. Tombe, E. Antunes, T. Nyokong
The photophysical and photochemical behaviour of coumarin-derivatized zinc phthalocyanine when conjugated with gold nanoparticles and electrospun into polymer fibers
New J Chem. 37(3) (2013) 679-689
<http://xlink.rsc.org/?DOI=c2nj40984d>
DOI: 10.1039/c2nj40984d
16. N. Masilela and T. Nyokong, The interaction of silver nanoparticles with low symmetry cysteinyl metallophthalocyanines and their antimicrobial effect.
J. Photochem. Photobiol. A: Chem. 255 (2013) 1-9
<http://dx.doi.org/10.1016/j.jphotochem.2013.01.009>
DOI: 10.1016/j.jphotochem.2013.01.009
17. T. P. Mthethwa, S. Tuncel, M. Durmu? and Tebello Nyokong
Photophysical and photochemical properties of a novel thiol terminated low symmetry zinc phthalocyanine complex and its gold nanoparticles conjugate
Dalton Trans. 42 (14) (2013) 4922-4930
<http://www.ncbi.nlm.nih.gov/pubmed/23385542>
DOI: 10.1039/c3dt32698e
18. S. Tombe, E. Antunes and T. Nyokong
Electrospun fibers functionalized with phthalocyanine-gold nanoparticle conjugates for photocatalytic applications
J. Mol. Cat. A: Chem –371 (2013) 125-134
<http://dx.doi.org/10.1016/j.molcata.2013.01.033>
DOI: 10.1016/j.molcata.2013.01.033
19. A. Fashina, E. Antunes, T. Nyokong,
Characterization and photophysical behavior of Phthalocyanines when grafted onto Silica Nanoparticles
Polyhedron 53 (2013) 278-285
<http://dx.doi.org/10.1016/j.poly.2013.01.037>
DOI: 10.1016/j.poly.2013.01.037
20. O. Adegoke, E. Antunes, T. Nyokong
Nanoconjugates of CdTe@ZnS quantum dots with cobalt tetraamino-phthalocyanine: characterization and implications for the fluorescence recognition of superoxide anion
J. Photochem. Photobiol. A: Chem. 257 (2013) 11–19
<http://dx.doi.org/10.1016/j.jphotochem.2013.02.010>
DOI: 10.1016/j.jphotochem.2013.02.010

21. D. Quinton, A. Maringa, S. griveau, T. nyokong, F. bediou
Surface patterning using scanning electrochemical microscopy to locally trigger a “click” chemistry reaction
Electrochem. Comm. 31 (2013) 112-115
<http://dx.doi.org/10.1016/j.elecom.2013.03.021>
DOI: 10.1016/j.elecom.2013.03.021
22. K. E. Sekhosana, E. Antunes, T.Nyokong,
Glutathione capped CdTe@ZnS quantum dots – zinc tetracarboxy phthalocyanine conjugates:
fluorescence behaviour studies in comparison with zinc octacarboxy phthalocyanine
Polyhedron, 54 (2013) 294-299
<http://dx.doi.org/10.1016/j.poly.2013.02.060>
DOI: 10.1016/j.poly.2013.02.060
23. N. Malinga, E. Antunes, T. Nyokong
Synthesis and physicochemical behaviour of aluminium bis and tris(diammineplatinum)
octacarboxyphthalocyanine
Polyhedron, 55 (2013) 121-125
<http://dx.doi.org/10.1016/j.poly.2013.02.073>
DOI: 10.1016/j.poly.2013.02.073
24. M. Coates, T. Nyokong
X-ray photoelectron spectroscopy analysis of the effect of alkyl- and arylthio substituents on
manganese phthalocyanines for self-assembled monolayer formation on gold
Electrochem. Comm. 31 (2013) 104-107
<http://dx.doi.org/10.1016/j.elecom.2013.03.019>
DOI: 10.1016/j.elecom.2013.03.019
25. A. Maringa, T. Mugadza, E. Antunes, T. Nyokong
Characterization and electrocatalytic behaviour of glassy carbon electrode modified with nickel
nanoparticles towards amitrole detection.
J. Electroanal. Chem, 700 (2013) 86-92
<http://dx.doi.org/10.1016/j.jelechem.2013.04.022>
DOI: 10.1016/j.jelechem.2013.04.022
26. P. Mashazi, P. Tetyana, S. Vilakazi, T. Nyokong
Electrochemical impedimetric immunosensor for the detection of measles-specific IgG antibodies
after measles infections.
Biosensors and Bioelectronics 49 (2013) 32-38
<http://dx.doi.org/10.1016/j.bios.2013.04.028>
DOI: 10.1016/j.bios.2013.04.028
27. J. Britton, E. Antunes, T.Nyokong
Synthesis and nonlinear optical examination of 3(4),15(16)-Bis-(4 -tert-butyl-phenoxy)-10,22-
diaminohemiporphyrinato chloroindium
J. Mol. Stru. 1047 (2013) 143-148
<http://linkinghub.elsevier.com/retrieve/pii/S0022286013003943>
DOI: 10.1016/j.molstruc.2013.05.001

28. Racheal O. Ogbodu, Edith Antunes, Tebello Nyokong
Physicochemical properties of zinc monoamino phthalocyanine conjugated to folic acid and single walled carbon nanotubes
Polyhedron 60 (2013) 59–67
<http://www.sciencedirect.com/science/article/pii/S0277538713003938>
DOI:10.1016/j.poly.2013.05.025
29. S. D'Souza, S. Moeno, E. Antunes, T.Nyokong
Effects of gold nanoparticle shape on the aggregation and fluorescence behaviour of water soluble zinc phthalocyanines.
New J. Chem. 37(7) (2013) 1950-1958
<http://xlink.rsc.org/?DOI=c3nj00146f>
DOI: 10.1039/c3nj00146f
30. T. Nyokong, E. Antunes
Influence of nanoparticles on the photophysical behavior of phthalocyanines
Coord. Chem. Rev 257(15-16) (2013) 2401-2418
<http://dx.doi.org/10.1016/j.ccr.2013.03.016>
DOI: 10.1016/j.ccr.2013.03.016
31. Oluwasesan Adegoke, Tebello Nyokong
Fluorescence “turn on” probe for bromide ion using nanoconjugates of glutathione-capped CdTe@ZnS quantum dots with nickel tetraamino-phthalocyanine: characterization and size-dependent properties.
J. Photochem. Photobiol. A: Chem, 265 (2013) 58-66
<http://www.sciencedirect.com/science/article/pii/S1010603013002268>
DOI: 10.1016/j.jphotochem.2013.05.013
32. R.O. Ogbodu, E.Antunes, T. Nyokong
Physiochemical properties of zinc a phthalocyanine – pyrene conjugate adsorbed onto single wall carbon nanotubes.
Dalton Trans, 42 (30) (2013) 10769-10777
<http://pubs.rsc.org/en/content/articlehtml/2013/dt/c3dt50335f>
DOI: 10.1039/c3dt50335f
33. P. Khoza, E. Antunes, T. Nyokong
Synthesis and photophysicochemical properties of zinc phthalocyanine derivatized with benzothiazole or carbazole photosensitizers.
Polyhedron 61 (2013) 119-125
<http://dx.doi.org/10.1016/j.poly.2013.05.046>
DOI: 10.1016/j.poly.2013.05.046
34. P. Modisha, E. Antunes, J. Mack and T. Nyokong
Improvement of the photophysical parameters of zinc octacarboxy phthalocyanine upon conjugation to magnetic nanoparticles
International Journal of Nanoscience, 12(2) (2013) 1350010 (10 pages)
<http://www.worldscientific.com/doi/abs/10.1142/S0219581X13500105>

DOI: 10.1142/S0219581X13500105

35. Nkosiphile Masilela, Edith Antunes and Tebello Nyokong

Axial coordination of zinc and silicon phthalocyanines to silver and gold nanoparticles: an investigation of their photophysics and antimicrobial behavior.

J. Porphyrins Phthalocyanines (special issue Prof Özer Bekaro?lu) 2013; 17(6-7) 417–430

<http://www.worldscientific.com/doi/abs/10.1142/S1088424613500016>

DOI: 10.1142/S1088424613500016

36. A. Fashina, E. Antunes, T. Nyokong,

Silica nanoparticles grafted with phthalocyanines: photophysical properties and studies in artificial lysosomal fluid.

New J Chem. 37 (9) (2013) 2800 – 2809

<http://xlink.rsc.org/?DOI=c3nj00439b>

DOI: 10.1039/c3nj00439b

37. J. Mack, X. Liang, T.V. Dubinina, L. G. Tomilova, T. Nyokong, N. Kobayashi

MCD spectroscopy and TD-DFT calculations of a naphthalene-ring-bridged coplanar binuclear phthalocyanine dimer

J. Porphyrins Phthalocyanines (special issue Prof Özer Bekaro?lu), 17(6-7) (2013) 489-500

<http://www.worldscientific.com/doi/abs/10.1142/S1088424613500259>

DOI: 10.1142/S1088424613500259

38. J. Britton, M. Durmu?, Samson Khene, V. Chauke, T.Nyokong

Third order nonlinear optical properties of phthalocyanines in the presence nanomaterials and in polymer thin films, J. Porphyrins Phthalocyanines (Special issue Lukyanets) 17(8-9) (2013) 691-702

<http://www.worldscientific.com/doi/abs/10.1142/S108842461350003X>

DOI: 10.1142/S108842461350003X

39. R. S. Walmsley, C. Litwinski, E. Antunes, P. Hlangothi, E. Hosten,C. McCleland, T.Nyokong,

N.Torto,

Z. R. Tshentu

Oxovanadium(IV)-containing poly(styrene-co-4'-ethenyl-2-hydroxyphenylimidazole) electrospun nanofibers for the catalytic oxidation of thioanisole.

J. Mol. Cat. A: Chem. 379 (2013) 94-102

<http://www.sciencedirect.com/science/article/pii/S138111691300280X>

DOI: 10.1016/j.molcata.2013.07.018

40. S. O. Sanusi, E. Antunes, T. Nyokong

Nonlinear optical behavior of metal octaphenoxy phthalocyanines: effect of distortion caused by the central metal

J. Porphyrins Phthalocyanine 17(10) (2013) 920-927, In honours of Prof Ahsen

<http://www.worldscientific.com/doi/abs/10.1142/S1088424613500715>

DOI: 10.1142/S1088424613500715

41. M. Coates, T. Nyokong

X-ray photoelectron spectroscopy and scanning electrochemical microscopy studies of branched multiwalled carbon nanotube paper modified by electrochemical grafting and click chemistry.

Int J. Nanoscie. 12 (3) (2013) 1350017, 8 Pages (1-8)
<http://www.worldscientific.com/doi/abs/10.1142/S0219581X13500178>
DOI: 10.1142/S0219581X13500178

42. J. Britton, M.Durmus, V.Chauke, T. Nyokong
Poly methyl methacrylate films containing metallophthalocyanines in the presence of CdTe quantum dots: Non-linear optical behaviour and triplet state lifetimes.
Journal of Molecular Structure 1054–1055 (2013) 209–214
<http://www.sciencedirect.com/science/article/pii/S0022286013007928>
DOI:10.1016/j.molstruc.2013.09.017

43. T. Nyokong, J. Limson
An Education in Progress.
Nature Nanotechnology 8(11) 2013 789-791
<http://www.nature.com/nnano/journal/v8/n11/full/nnano.2013.235.html>
DOI: 10.1038/nnano.2013.235

44. P. Mashazi, S. Vilakazi, T. Nyokong
Design and evaluation of an electrochemical immunosensor for measles serodiagnosis using measles-specific Immunoglobulin G antibodies
Talanta (2013), 115, 694-701
<http://dx.doi.org/10.1016/j.talanta.2013.06.036>
DOI:10.1016/j.talanta.2013.06.036

45. O. Adegoke, S. Khene, T. Nyokong
Fluorescence "Switch on" of Conjugates of CdTe@ZnS Quantum Dots with Al, Ni and Zn Tetraamino-Phthalocyanines by Hydrogen Peroxide: Characterization and Applications as Luminescent Nanosensors.
Journal of Fluorescence (2013), 23(5), 963-974
<http://link.springer.com/article/10.1007/s10895-013-1222-x>
DOI:10.1007/s10895-013-1222-x

46. O.E. Fayemi, A.S. Ogunlaja, P.F.M. Kempgens, E, Antunes, N. Torto, T. Nyokong, Z.R. Tshentu
Adsorption and separation of platinum and palladium by polyamine functionalized polystyrene-based beads and nanofibers.
Minerals Engineering (2013), 53, 256-265.
<http://dx.doi.org/10.1016/j.mineng.2013.06.006>
DOI:10.1016/j.mineng.2013.06.006

47. A.S. Ogunlaja, S. Khene, E. Antunes, T. Nyokong, N. Torto, Z.R. Tshentu
The development of catalytic oxovanadium(IV)-containing microspheres for the oxidation of various organosulfur compounds
Applied Catalysis, A: General (2013), 462-463, 157-167.
<http://dx.doi.org/10.1016/j.apcata.2013.05.004>
DOI:10.1016/j.apcata.2013.05.004

48. A.I. Okewole, E. Antunes, T. Nyokong, Z.R. Tshentu
The development of novel nickel selective amine extractants: 2,2'-Pyridylimidazole

functionalised chelating resin.

Minerals Engineering 54 (2013) 88–93

<http://dx.doi.org/10.1016/j.mineng.2013.04.019>

DOI: 10.1016/j.mineng.2013.04.019

49. Modisha, Phillimon; Nyokong, Tebello; Antunes, Edith

Photodegradation of Orange G using zinc octacarboxyphthalocyanine supported on Fe₃O₄ nanoparticles.

Journal of Molecular Catalysis A: Chemical (2013), 380, 131-138.

<http://dx.doi.org/10.1016/j.molcata.2013.09.030>

DOI:10.1016/j.molcata.2013.09.030

50. R.C. George, G.O. Egharevba, T. Nyokong

Absorbance and fluorescence studies on porphyrin nanostructures (pnrs) as light harvesters in dye sensitized solar cells

<http://www.ajol.info/index.php/ijc/article/view/131579>

Ife Journal of Science 15 (2013) 455-462

51. Adegoke, Oluwasesan and Nyokong, Tebello

Unsymmetrically Substituted Nickel Triazatetra-Benzcorrole and Phthalocyanine Complexes: Conjugation to Quantum Dots and Applications as Fluorescent "Turn ON" Sensors

Journal of Fluorescence, 24(2) (2013) 1-11

<http://link.springer.com/article/10.1007/s10895-013-1317-4>

10.1007/s10895-013-1317-4

52. Ogbodu, O. and Nyokong, T.

Effects of number of ring substituents on the physicochemical properties of zinc aminophenoxy phthalocyanine-single walledcarbon nanotube conjugate.

Journal of Photochemistry and Photobiology A: Chemistry 274 (2013) 83-90

<http://dx.doi.org/10.1016/j.jphotochem.2013.09.015>