

# 2006 Publications

1. K.I. Ozoemena and T. Nyokong,  
Comparative electrochemical and electrocatalytic studies of cobalt, iron and manganese phthalocyanine complexes axially coordinated to mercaptopyridine self-assembled monolayer at gold electrodes.  
*Electrochim Acta* 51 (2006) 2669-2677
2. K. I. Ozoemena, Z. Zhao and T. Nyokong  
Electropolymerizable dicyanophenoxy cobalt (II) and iron (III) tetraphenylporphyrin complexes: Potential  
Electrocatalysts.  
*Inorg. Chem. Comm.* 9 (2006) 223-227.
3. P. N. Mashazi, K.I. Ozoemena, D. M. Maree and T. Nyokong  
Self-Assembled Monolayers (SAMs) of CoPc covalently attached onto a preformed Mercaptoethanol SAM:  
A Novel Method.  
*Electrochim. Acta*, 51 (2006) 3489-3494.
4. N. Sehloho, T. Nyokong, J.H. Zagal and F. Bediou  
Electrocatalysis of oxidation of 2-mercaptopropanoic acid, L-cysteine and reduced glutathione by adsorbed and electrodeposited cobalt pyrrolephenoxy and thiopheneethoxy substituted phthalocyanines.  
*Electrochim. Acta* , 51 (2006) 5125-5136.
5. M. Siswana, K. I. Ozoemena and T. Nyokong  
Electrocatalytic behaviour of carbon paste electrode modified with iron (II) phthalocyanine (FePc) nanoparticles towards the detection of amitrole.  
*Talanta* 69 (2006) 1136-1142.
6. I. Seotsanyana-Mokhosi, T. Kresfelder, H. Abrahamse and T. Nyokong  
The effect of Ge, Si and Sn phthalocyanine photosensitizers on cell proliferation and viability of human oesophageal carcinoma cells.  
*J. Photochem. Photobiol. B: Biol.* 83 (1) (2006) 55-62.
7. P. Tau and T. Nyokong  
Synthesis and electrochemical characterisation of  $\alpha$ - and  $\beta$ - tetrasubstituted oxo(phthalocyaninato) titanium (IV) complexes  
*Polyhedron* 25 (2006) 1802-1810.
8. K.I. Ozoemena and T. Nyokong,  
Novel amperometric glucose biosensor based on an ether-linked cobalt(II) phthalocyanine–cobalt(II) porphyrin pentamer as novel redox mediator.  
*Electrochim. Acta* 51 (2006) 5131-5136.
9. B. Agboola, K.I. Ozoemena and T. Nyokong,  
Comparative efficiency of immobilized non-transition metal phthalocyanine photosensitisers for the visible light transformation of chlorophenols.

J. Mol. Catal. A: Chem. 248 (2006) 84-92.

10. P. Tau and T. Nyokong

Synthesis and electrochemical characterization of new tantalum(V) phthalocyanine derivatives  
J. Porphyrins Phthalocyanines, 10 (2006) 69-75.

11. B. Agboola, K. Ozoemena and T. Nyokong

Synthesis and electrochemical characterisation of benzyl mercapto and dodecythiol tetra substituted cobalt,  
iron, and zinc phthalocyanines complexes.  
Electrochim. Acta, 51 (2006) 4379-4387.

12. N. Sehloho and T. Nyokong

Electrocatalytic oxidation of thiocyanate, L-cysteine and 2-mercaptoethanol by self-assembled monolayer of cobalt tetraethoxy thiophene phthalocyanine.  
Electrochim. Acta, 55 (2006) 4463-4470.

13. M. Siswana, K.I. Ozoemena and T. Nyokong

Electrocatalysis of asulum on cobalt phthalocyanine modified multi-walled carbon nanotubes immobilized on a basal plane pyrolytic graphite electrode.  
Electrochim. Acta, 51 (2006) 114 -122.

14. B. O. Agboola, K. I. Ozoemena and T. Nyokong

Electrochemical properties of benzylmercapto and dodecylmercapto tetra substituted nickel phthalocyanine complexes: electrocatalytic oxidation of nitrite.  
Electrochim. Acta, 51 (2006) 6470-6478.

15. P. N. Mashazi, K. I. Ozoemena and T. Nyokong

Tetra carboxylic acid cobalt phthalocyanine SAM on gold: Potential applications as amperometric sensor for H<sub>2</sub>O<sub>2</sub> and fabrication of glucose biosensor.  
Electrochim. Acta, 52 (2006) 177-186.

16. N. Sehloho and T. Nyokong

Effects of ring substituents on electrocatalytic activity of manganese phthalocyanines towards the reduction of Oxygen.  
J. Electroanal. Chem. 595 (2006) 161-167.

17. J. C. Obirai, S. Hamadi, A. Ithurbide, C. Wartelle, T. Nyokong, J. Zagal, S.Top and F.

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UV-visible and Electrochemical Monitoring of Carbon Monoxide Release by Donor Complexes to Myoglobin  
Solutions and to Electrodes Modified with Films Containing Hemin.  
Electroanalysis 18 (2006) 1689-1697.

18. K.I. Ozoemena, J. Pillay and T. Nyokong

Preferential electrosorption of cobalt (II) tetra-aminophthalocyanine at single-wall carbon nanotubes immobilised on a basal plane pyrolytic graphite electrode.  
Electrochim. Comm. 8 (2006) 1391-1396.

19. P. Tau and T. Nyokong

Synthesis and photophysical properties of octa-substituted phthalocyaninato oxotitanium(IV) derivatives.

J Porphyrins Phthalocyanines, 10 (2006) 1040-1048

20. P. Tau and T. Nyokong

Synthesis and electrochemical properties of phthalocyaninato oxotitanium(IV) complexes tetrasubstituted at

the  $\alpha$ - and  $\beta$ -positions with arylthio groups.

Dalton Trans. (2006) 4482 – 4490.

21. T. Nyokong and F.Bedioui

Self assembled monolayers and electropolymerized thin films of phthalocyanines as molecular materials for

Electroanalysis.

J. Porphyrins Phthalocyanines, 10 (2006) 1101-1115.