

ELECTRONIC SUPPORTING INFORMATION

Nickel (II) tetraaminophthalocyanine modified MWCNTs on basal plane pyrolytic graphite as a potential supercapacitor[†]

Alfred T. Chidembo^a, Kenneth I. Ozoemena^{*a,b}, Bolade O. Agboola^{a,b}, Vinay Gupta^c, Gregory G. Wildgoose^d and Richard G. Compton^d

Received (in XXX, XXX) Xth XXXXXXXXX 200X, Accepted Xth XXXXXXXXX 200X

First published on the web Xth XXXXXXXXX 200X

DOI: 10.1039/b00000

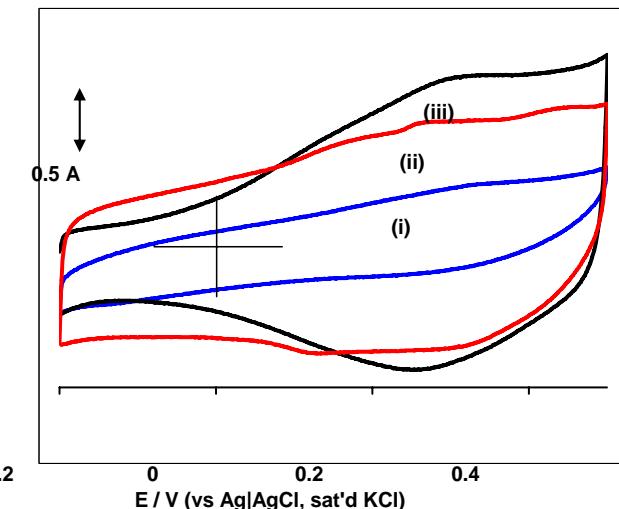
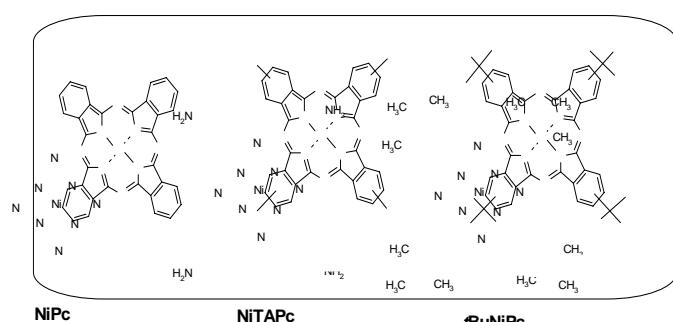


Figure ESI 1: Molecular structures of the nickel phthalocyanine complexes used in this work, nickel phthalocyanine (NiPc), nickel tetra-aminophthalocyanine (NiTAPc) and nickel tetra-tert-butyl phthalocyanine (tBuNiPc)

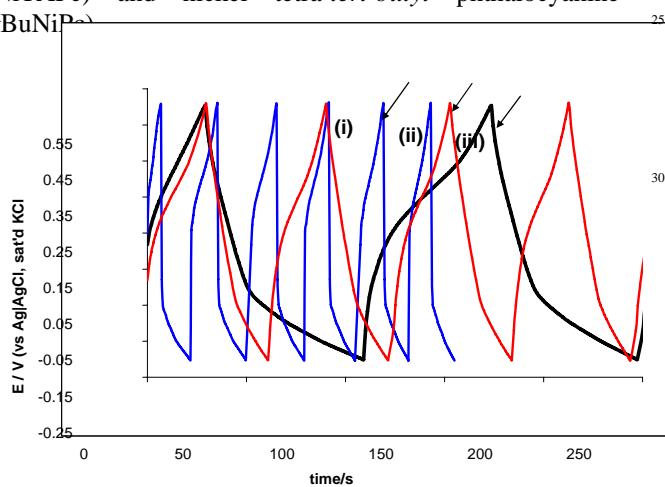


Figure ESI 2: Comparative charge-discharge curves at 3 A g^{-1} for BPPGE-NiTAPc (i), BPPGE-MWCNT (ii), and BPPGE-MWCNT-NiTAPc (iii) using 40 μg material loading (i.e., $\sim 2 \text{ mg cm}^{-2}$).

Figure ESI 3: Comparative cyclic voltammetric evolutions of BPPGE-MWCNT-tBuNiPc (i), BPPGE-MWCNT-NiPc (ii) and BPPGE-MWCNT-NiTAPc (iii) at 300 mVs^{-1} .

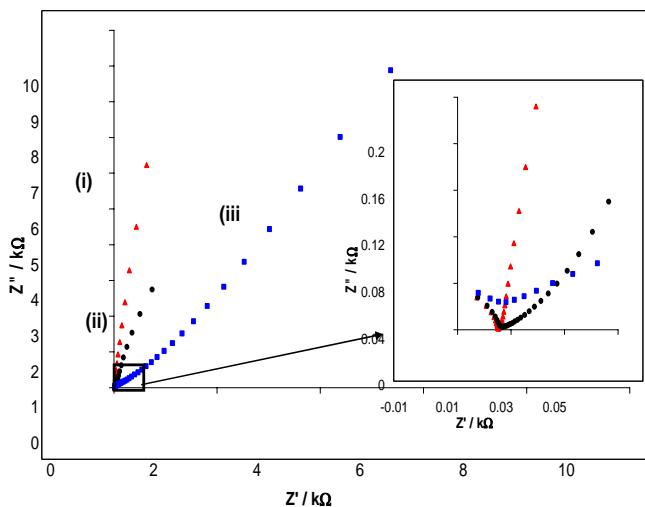


Figure ESI 4: Typical cyclic voltammetric evolutions of BPPGE-MWCNT-NiTBPc (i), BPPGE-MWCNT-NiPc (ii) and BPPGE-MWCNT-NiTAPc (iii) at 300 mVs^{-1} .

^a Department of Chemistry, University of Pretoria, Pretoria 0002,
South Africa.

^b Energy and Processes Unit, Materials Science and Manufacturing,
Council for Scientific and Industrial Research (CSIR), Pretoria 0001,
South Africa. Tel: +27(0)12 841 3664; Fax: +27(0)12 841 2135; *E-mail:
kokoemena@csir.co.za

^c Carbon Technology Unit, National Physical Laboratory, New
Delhi, 110012, India

^d Physical and Theoretical Chemistry Laboratory, University of
Oxford, South Parks Road, Oxford, UK.