



DROPSSENS

MWCNT-COOH Screen-Printed Carbon Electrodes

(refs. 110CNT and C1110CNT)

DropSens launches Screen-Printed Carbon Electrodes (SPCEs) modified with Carboxyl functionalised Multi-Walled Carbon Nanotubes (MWCNT-COOH)

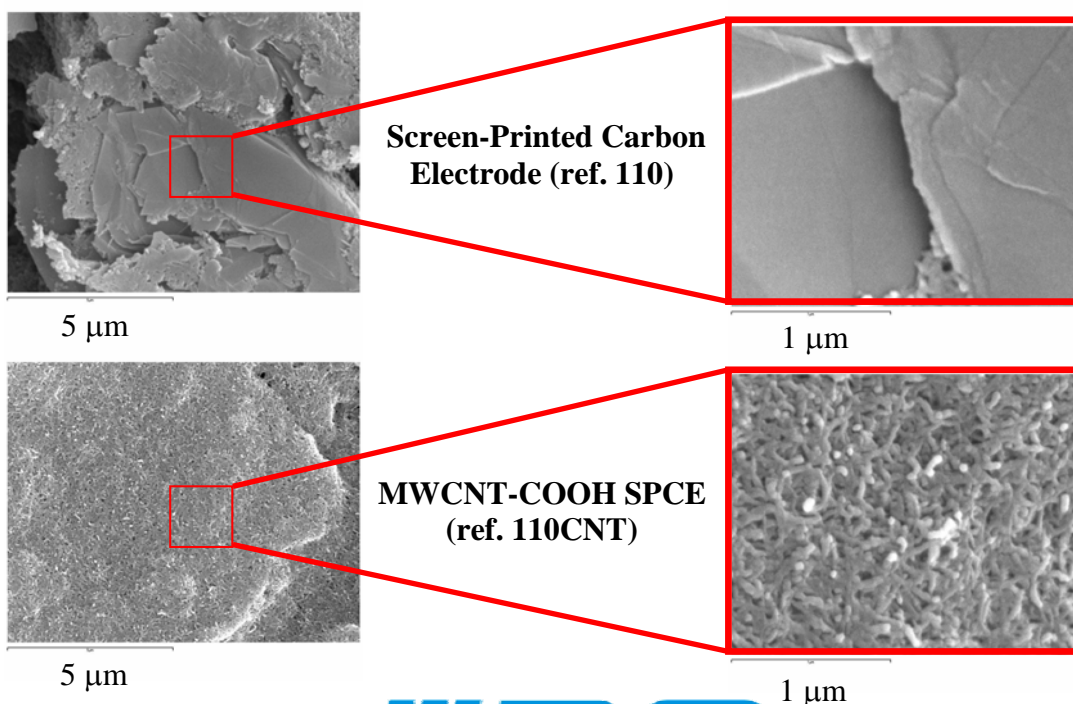
MWCNT-COOH SPCEs are designed for the development of (bio)sensors with an enhanced electrochemical active area

 Ref. 110CNT	<p><i>Ceramic substrate:</i> L33 x W10 x H0.5 mm <i>Electric contacts:</i> Silver</p> <p>The electrochemical cell consists on:</p> <p><i>Working electrode:</i> MWCNT-COOH <i>Counter electrode:</i> Carbon <i>Reference electrode:</i> Silver</p>	 Ref. C1110CNT
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MWCNT-COOH SPCEs are commercialised in 50 units packs.

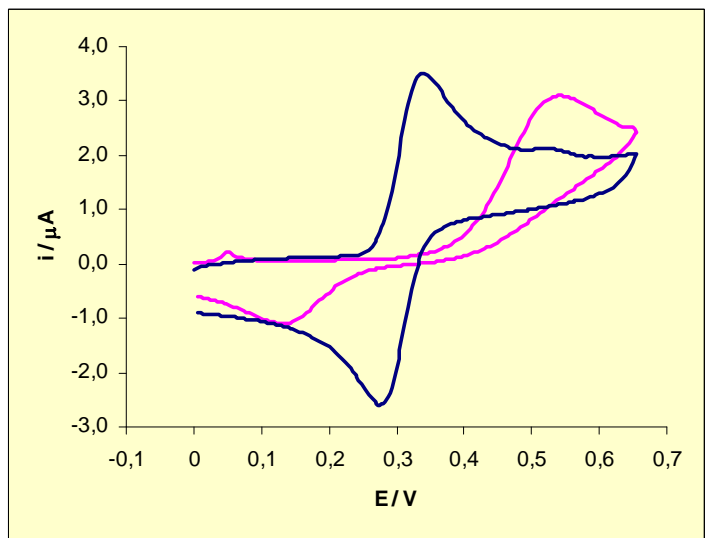
Store at room temperature in a dry place

SEM comparative images of working electrodes

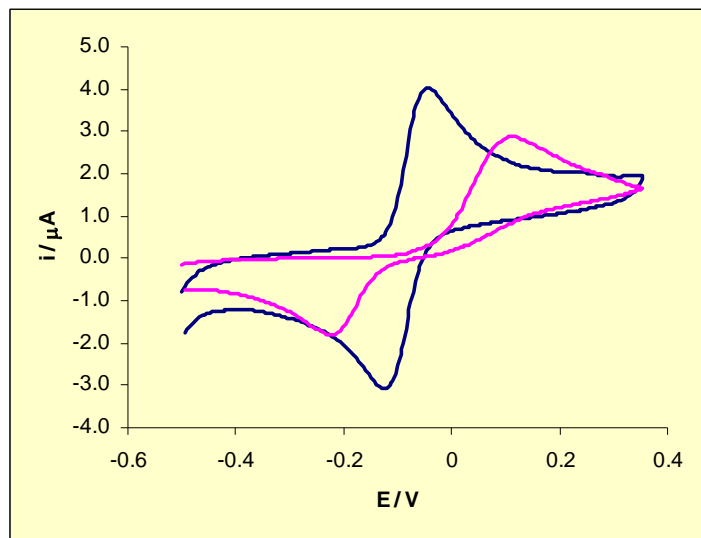


Electrochemical behaviour of MWCNT-COOH SPCEs for some benchmark redox systems

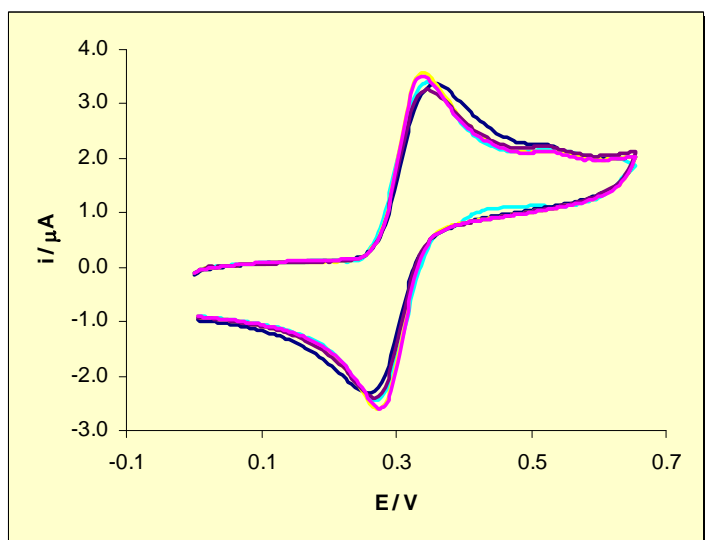
MWCNT-COOH SPCEs (**blue CVs**, ref. 110CNT) show better electron-transfer properties than conventional SPCEs (**pink CVs**, ref. 110)



Cyclic voltammogram of $1 \cdot 10^{-4}$ M dopamine in 0.01 M HCl electrolyte solution at 50 mV/s

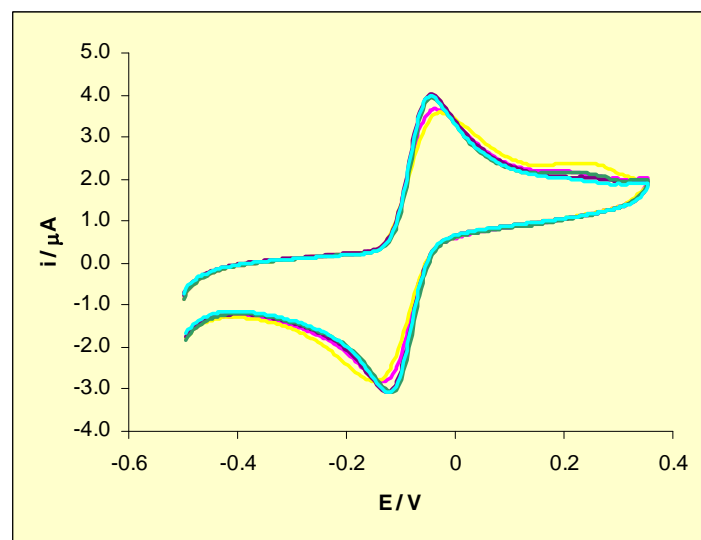


Cyclic voltammogram of $1 \cdot 10^{-4}$ M hydroquinone in 0.1 M acetate buffer solution pH 5.0 at 50 mV/s



Cyclic voltammograms of $1 \cdot 10^{-4}$ M dopamine in 0.01 M HCl electrolyte solution at 50 mV/s.
 $n = 5$ (different MWCNT-COOH SPCEs)

RSD% = 6%



Cyclic voltammograms of $1 \cdot 10^{-4}$ M hydroquinone in 0.1 M acetate buffer solution pH 5.0 at 50 mV/s.
 $n = 5$ (different MWCNT-COOH SPCEs)

RSD% = 7%

