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Supplementary Materials

Carbon-Based Transducers for Solid-Contact Calcium Ion-Selective Electrodes: Mesopore and Nitrogen-Doping Effects

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Table S1. Comparison of the potentiometric performances of the NMC-based SC-ISEs with the reported Ca^{2+}-SC-ISEs.

Solid-Contact Materials	Slope	LOD	Target Ion	Stability	Short-Term Stability	Capacitance	Reference
single-walled carbon nanotubes (SWCNTs)	28.7 mV dec^{-1}	0.631 μM	Ca^{2+}	493 μV h^{-1}.	930 μV s^{-1}	5.37 μF	1
single-walled carbon nanohorns (SWCNHs)	29.69 mV dec^{-1}	0.794 μM	Ca^{2+}	/	43 μV s^{-1}	23.26 μF	2
Ag@AgCl/1-tetradecylmethylimidazolium chloride	28.3 mV dec^{-1}	/	Ca^{2+}	/	13.3 μV s^{-1}	75.2 μF	3
MXene ($Ti_3C_2T_x$)	26.4 mV dec^{-1}	0.794 μM	Ca^{2+}	/	4.0 μV s^{-1}	250 μF	4
MXene (Ti_2CT_x)	24.9 mV dec^{-1}	1.0 μM	Ca^{2+}	/	5.0 μV s^{-1}	200 μF	4
$NiCo_2S_4$ microsphere ($NiCo_2S_4$-EtOH)	27.5 mV dec^{-1}	0.5 μM	Ca^{2+}	6.4 ± 0.3 μV h^{-1}	1.77 μV s^{-1}	565 μF	5
Black phosphorous	28.3 mV dec^{-1}	0.4 μM	Ca^{2+}	/	72 μV s^{-1}	/	6
nitrogen-doped mesoporous carbon (NMC)	26.3 mV dec^{-1}	3.16 μM	Ca^{2+}	66.9 ± 14.5 μV h^{-1}	17.17 μV s^{-1}	58.2 μF	This work
reduced graphene oxide (RGO)	26.5 mV dec^{-1}	2..51 μM	Ca^{2+}	189.8 ± 3.4 μV h^{-1}	127.17 μV s^{-1}	7.9 μF	This work
carbon nanotubes (CNT)	27.4 mV dec^{-1}	2..51 μM	Ca^{2+}	160.3 ± 31.9 μV h^{-1}	123.08 μV s^{-1}	8.1 μF	This work

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