

Supporting information for:

Evaluation of Mesoporous Borosilicate Glass-Ceramic Composites as Frits in Reference Electrodes

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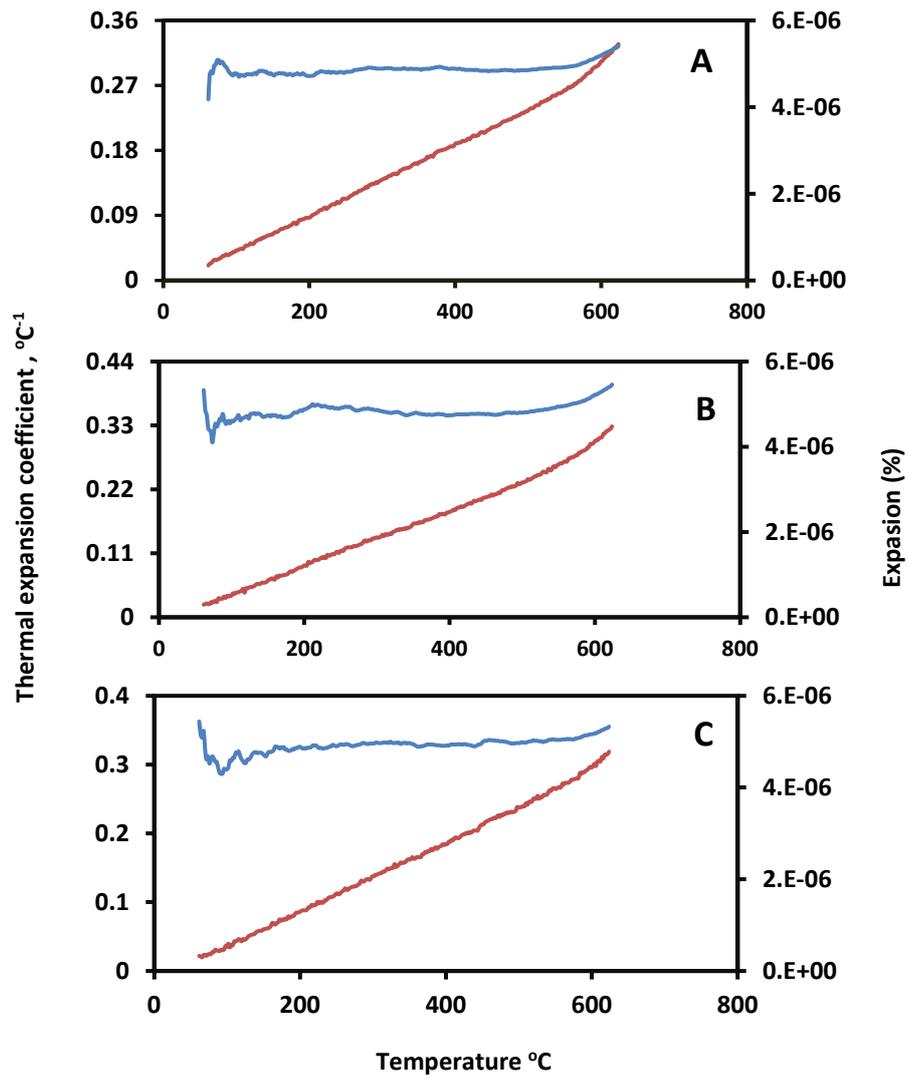


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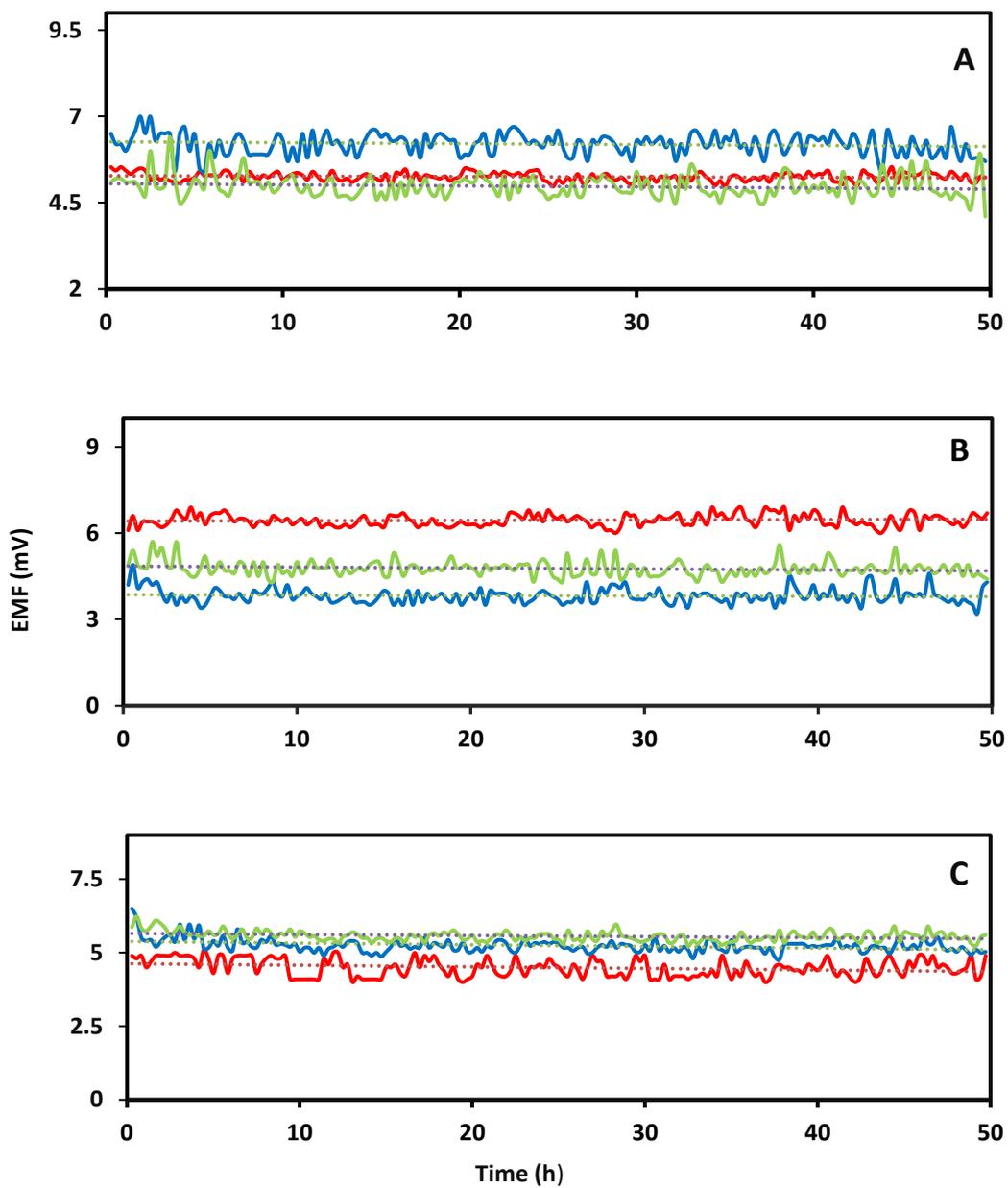


Figure S2. stability of glass-ceramic-based reference electrodes assembled using frits (A, B, and C) measured over 50 h in 0.10 M KCl at 25 °C. Measurements were performed in triplicate using identically prepared electrodes. The green, red, and blue traces represent individual electrodes.

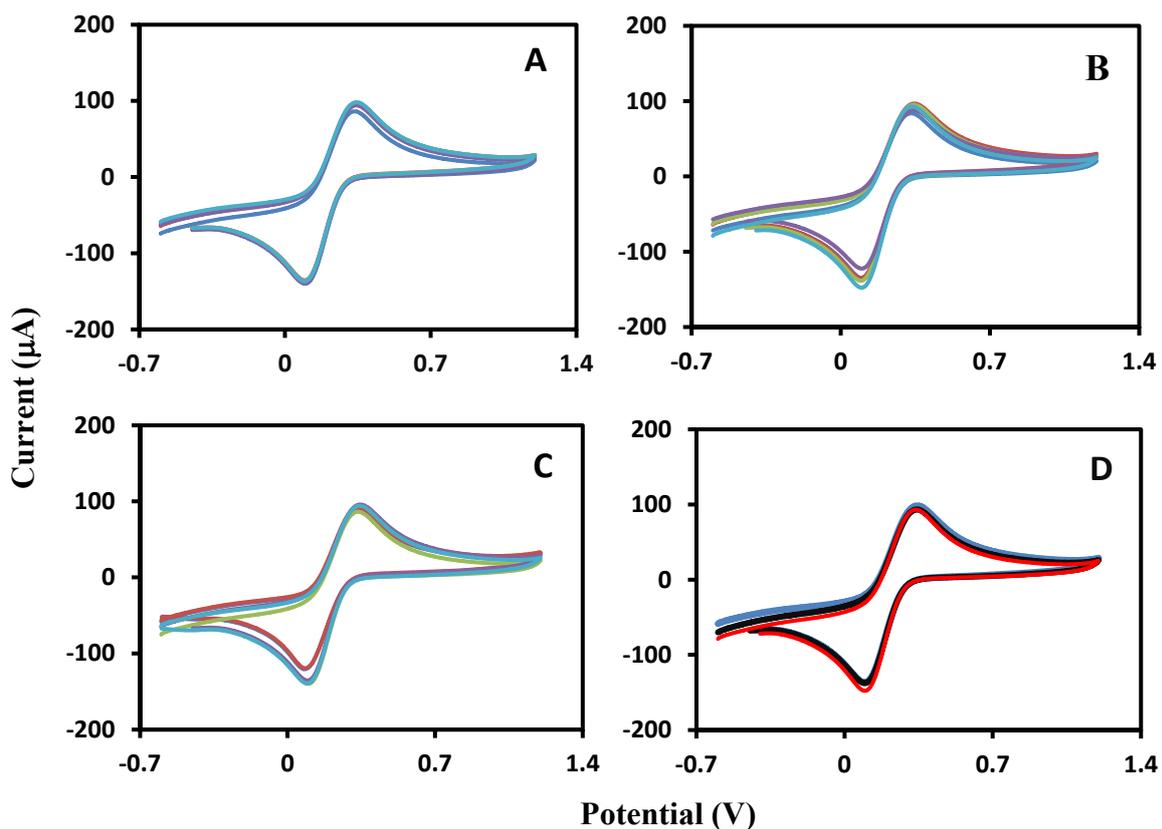


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Experimental procedures for Measurement of Zeta potential of glass-ceramic composite.

The glass-ceramic composite was milled to a fine powder (< 6 mm) using a laboratory fast mill Mod Speedy from Nannetti (Italy). Then 0.1 g of the fine powder was dispersed in 5 ml of deionized distilled water. The pH of identical dispersed samples was adjusted to pH values in the range of 2 to 9, using aqueous solutions of sodium hydroxide and hydrogen chloric acid. The dispersed samples were analyzed for zeta potential using Zetasizer Nano ZN (Malvern Panalytical Ltd, United Kingdom) at 25 °C. Samples were analyzed in triplicate and the average values are reported.