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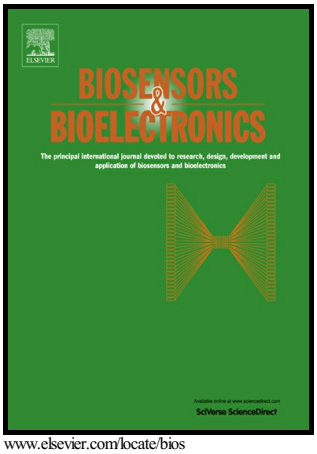

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Geometric Screening of Core/shell Hydrogel Microcapsules Using a Tapered Microchannel with Interdigitated Electrodes

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Abstract

Core/shell hydrogel microcapsules increasingly attract research attention due to their potentials in tissue engineering, food engineering, and drug delivery. Current approaches for generating core/shell hydrogel microcapsules suffer from large geometric variations. Geometrically defective core/shell microcapsules need to be removed before further use. High-throughput geometric characterization of such core/shell microcapsules is therefore necessary. In this work, a continuous-flow device was developed to measure the geometric