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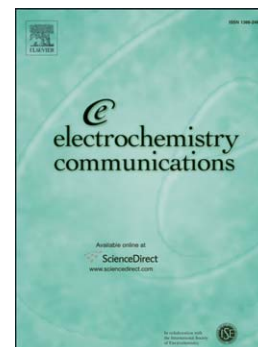
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Electrochemistry-assisted microstructuring of reduced graphene oxide-based microarrays with adjustable electrical behavior

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Abstract

An electrochemistry-assisted microstructuring process is developed for fabricating well-aligned reduced graphene oxide (rGO)-based micropatterns on arbitrary substrates using a combined method of photolithography, electrochemical reduction and wet etching techniques. The dimension of special-shaped rGO microarrays localized in an insulating GO matrix is effectively adjusted by changing GO reduction time without multi-mask patterning. The increased conductivity of rGO micropatterns by several orders of magnitude is achieved by controlling GO thickness and reduction time. The electrochemical activity of rGO micropatterns as microarray

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