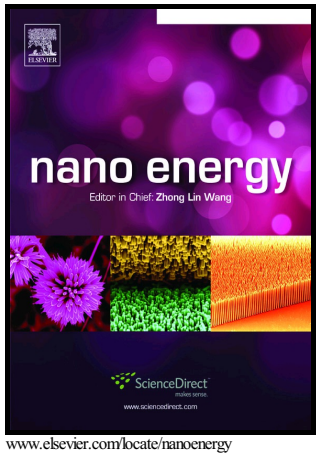

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Abstract:

The key factor in the functional performance of field emission devices (FEDs) is the selection of cold cathode materials. In this study, conductive, interconnected three-dimensional framework carbon (3DFC) with rich sharp edges acting as the emission sites is chosen as the cold cathode material. The distinguished field emission properties of 3DFC emitter yield low turn-on (2.6 V μm^{-1}) and threshold (3.2 V μm^{-1}) fields, with outstanding emission stability

[1] JTC, BJY and YDL contributed equally to the work.