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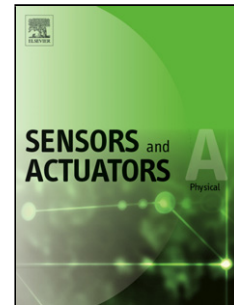
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Zinc Oxide Quantum Dots Decorated Carbon Nanotubes for Improved Opto-Electro-Mechanical Response

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Highlights

- *In-situ* growth (attachment) of zinc oxide quantum dots on the outer walls of carbon nanotubes was done thereby resulting in the fabrication of mechanically stable (thin paper) device.
- An improvement in the optoelectrical properties is observed in the hybrid system.
- In addition, an improvement in the electromechanical properties is also observed in the hybrid system.
- Substrate-less, free-standing and enhanced performance of the fabricated devices suggest an important step towards integrating nanomaterials for designing nano-hybrid devices
- Our study thus suggests that large scale integration of these devices and conjugation of more nanomaterials could help in developing improved smart nano-devices.

ABSTRACT

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