

Supporting Information

Growth of Carbon Dot-Decorated ZnO Nanorod on a Graphite-Coated Paper Substrate to Fabricate a Flexible and Self-Powered Schottky Diode for UV Detection

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Table S1. Lattice constants for different crystalline planes.

Crystalline plane	2 θ	c(nm)	a(nm)
100	31.86°	5.06174	3.239362
002	34.54°	5.187166	2.994812
101	36.36°	4.935652	2.8496

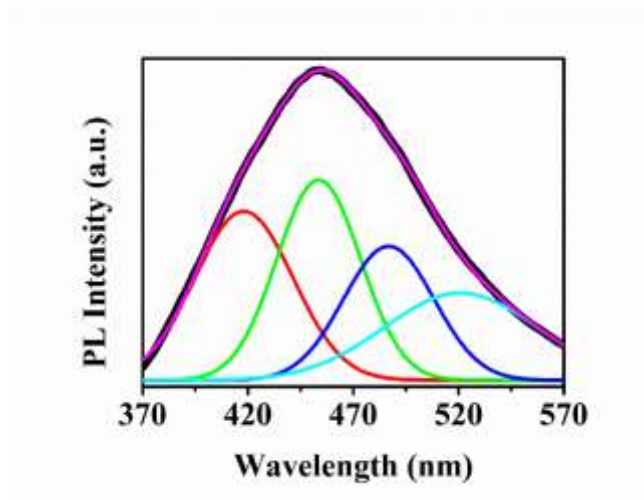


Figure S1. Deconvoluted PL peak of CD enhanced ZnO nanorods at an excitation wavelength of 340 nm.

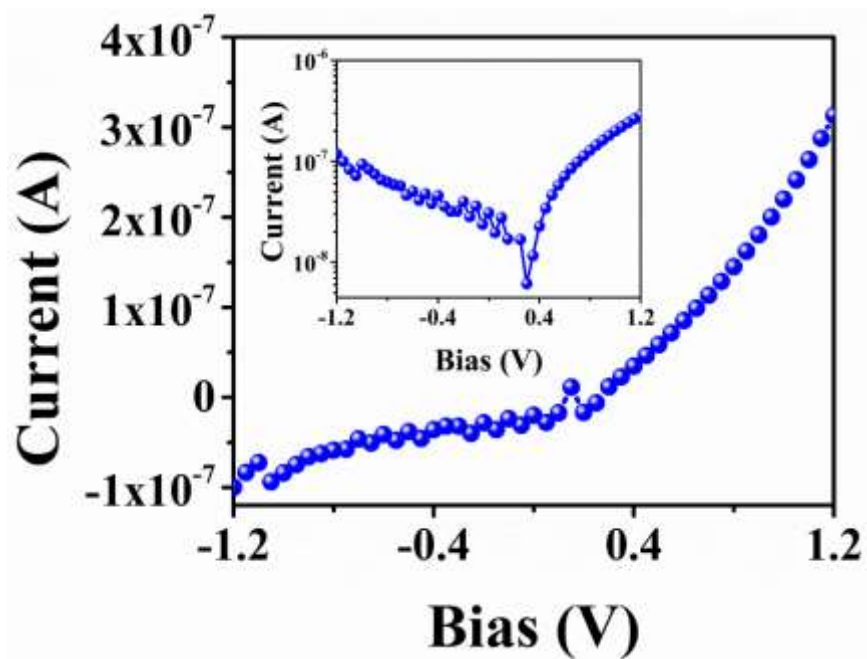


Figure S2. I – V plot of the ZnO/graphite Schottky diode in linear and semilogarithmic scale (inset) in dark.

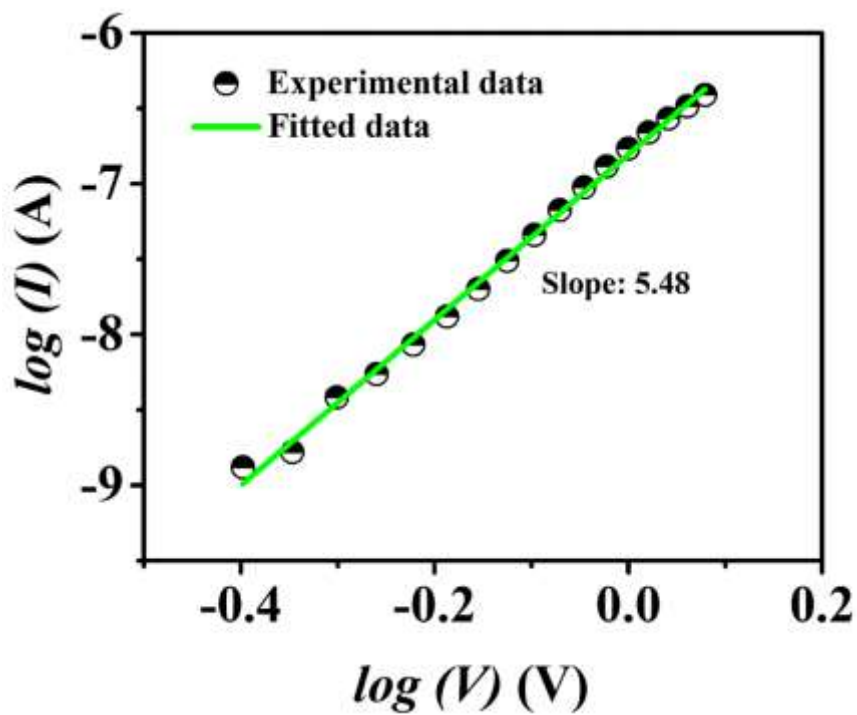


Figure S3. $\log(I)$ vs. $\log(V)$ plot of the CD enhanced ZnO/graphite Schottky diode (in the forward bias condition).

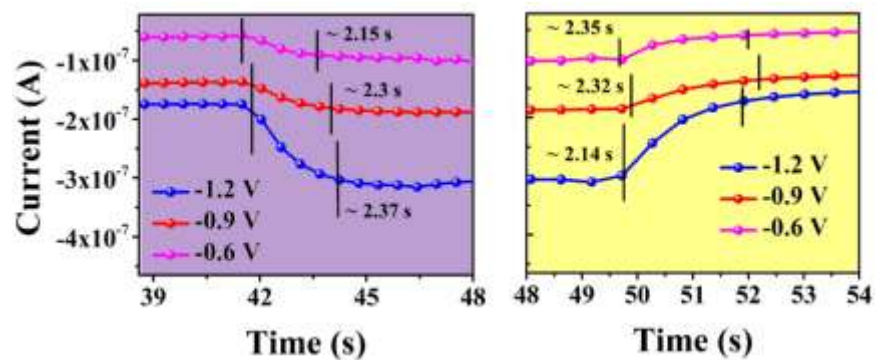


Figure S4. The response time and the recovery time of the CD enhanced ZnO/graphite Schottky diode at different reverse bias voltages.

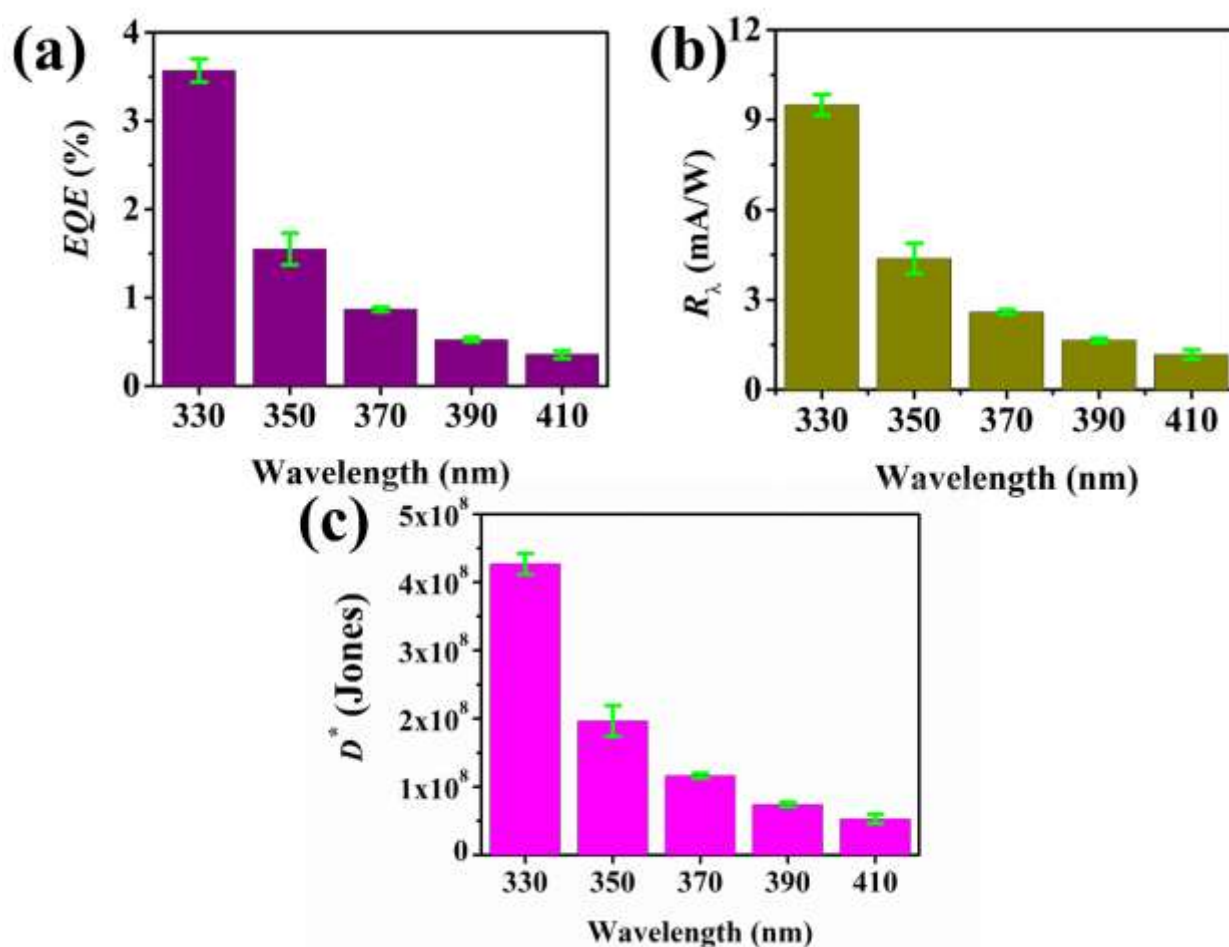


Figure S5. (a) External quantum efficiency (EQE) vs. wavelength plot, (b) Responsivity vs. wavelength plot, and (c) Specific detectivity vs. wavelength.