

Nanomaterials Based Biosensors with Smartphone Reader for Point-of-Care Diagnostics

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In this talk, I will give an overview of recent works in our laboratory for hand-held biosensing devices based on nanomaterials, smartphone, and 3D-printing. We have synthesized various functional nanomaterials such as organic-inorganic hybrid nanoflowers, carbon quantum dots, Pt-Pd and Pt-Au nanoflowers, single-atom nanozymes for signal enhancement in biosensing. Applications of these smartphone based nanosensors for biomedical diagnostics and food safety monitoring will be discussed.

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