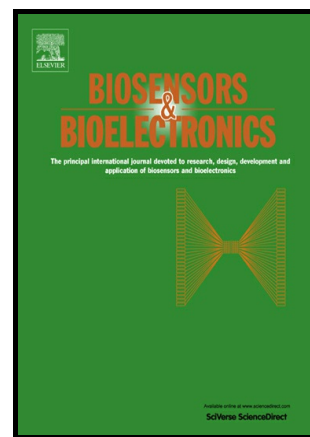


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# Single-step detection of norovirus tuning localized surface plasmon resonance-induced optical signal between gold nanoparticles and quantum dots

Fahmida Nasrin<sup>a</sup>, Ankan Dutta Chowdhury<sup>b</sup>, Kenshin Takemura<sup>a</sup>, Jaewook Lee<sup>b</sup>, Oluwasesan Adegoke<sup>b</sup>, Vipin Kumar Deo<sup>c</sup>, Fuyuki Abe<sup>d</sup>, Tetsuro Suzuki<sup>e</sup>, Enoch Y. Park<sup>a,b\*</sup>

<sup>a</sup> Laboratory of Biotechnology, Graduate School of Science and Technology, Shizuoka University, 836 Ohya, Suruga-ku, Shizuoka 422-8529, Japan

<sup>b</sup> Laboratory of Biotechnology, Research Institute of Green Science and Technology, Shizuoka University, 836 Ohya, Suruga-ku, Shizuoka 422-8529, Japan

<sup>c</sup> Organization for International Collaboration, Shizuoka University, 836 Ohya, Suruga-ku, Shizuoka 422-8529, Japan

<sup>d</sup> Department of Microbiology, Shizuoka Institute of Environment and Hygiene, 4-27-2, Kita-ando, Aoi-ku, Shizuoka 420-8637, Japan

<sup>e</sup> Department of Infectious Diseases, Hamamatsu University School of Medicine, 1-20-1 Higashi-ku, Handa-yama, Hamamatsu 431-3192, Japan

fnsoma@yahoo.com (FN)

dc\_ankan@yahoo.co.in (ADC)

takemura.kenshin.16@shizuoka.ac.jp (KT)

lee.jaewook@shizuoka.ac.jp (JL)

adegoke.sesan@mailbox.co.za (OA)

deo.vipin.kumar@shizuoka.ac.jp (VKD)

fuyuki1\_abe@pref.shizuoka.lg.jp (FA)

tesuzuki@hama-med.ac.jp (TS)

park.enoch@shizuoka.ac.jp (EYP)

\*Corresponding author at: Research Institute of Green Science and Technology, Shizuoka University, 836 Ohya, Suruga-ku, Shizuoka 422-8529, Japan. Tel./fax: +81-54-238-4887.

## Abstract

A new method of label free sensing approach with superior selectivity and sensitivity towards virus detection is presented here, employing the localized surface plasmon resonance (LSPR) behavior of gold nanoparticles (AuNPs) and fluorescent CdSeTeS quantum dots (QDs). Inorganic quaternary alloyed CdSeTeS QDs were capped with L-cysteine via a ligand exchange reaction. Alternatively, citrate stabilized AuNPs were functionalized with 11-

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