

CALCIUM-MODULATED PLASMONIC SWITCH

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NU-NSEC researchers at Northwestern University and the University of Chicago developed a nanoscale sensor that translates changes in calcium concentration to modulations in the plasmonic signal from an array of silver nanoparticles. The sensor is able to detect conformational changes in a calcium-binding protein immobilized on a silver nanoparticle array. The sensor not only provides information about the dynamics of protein conformational changes, but also has significant potential as a nanoscale optical switch and memory storage device.

