

Suppressing Photobleaching and Blinking in Quantum Dots

Researchers around Suotang Jia in China investigate the behavior of single quantum dots in solvents designed to suppress photobleaching and blinking.

Quantum dots are now widely used in applications such as light sources, improving the efficiency of photovoltaic cells or fluorescent markers in biomedical applications. Blinking and photobleaching are significant challenges to overcome to use the full potential of quantum dots in these applications. The researchers use microscopic widefield imaging and confocal microscopy to observe the emission of single quantum dots. Sensitive EMCCD cameras are well suited to measure fast sequences of images of these single molecule emitters.

Featured Paper/Publication: [Suppressing the photobleaching and photoluminescence intermittency of single near-infrared CdSeTe/ZnS quantum dots with p-phenylenediamine.](#)
Optics Express, 2018

Reference Lab: Suotang Jia, Shanxi University, Taiyuan, China

Featured Product: [ProEM](#)