

CORRECTIONS & AMENDMENTS

RETRACTION

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Retraction: Non-blinking semiconductor nanocrystals

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In this Letter, we reported the unusual non-blinking characteristics of the fluorescence from individual CdZnSe/ZnSe alloyed quantum dots. However, it has recently come to our attention that similar fluorescence behaviour was seen by Celso de Mello Donega, Daniel Vanmaekelbergh and co-workers from a single fluorophore on bare silica glass. In particular, individual fluorescence spots from single molecules were found to be non-blinking, and fluorescence spectra looked similar to what we reported in our Letter. We corroborated their findings by conducting experiments of our own on bare quartz coverslips, and on quartz coverslips coated with polymethyl methacrylate (PMMA). Although these same control experiments were performed by us before publication, this time we clearly observed non-blinking fluorescence from isolated spots on the coverslip. Furthermore, the fluorescence spectra from these spots were in all practical respects identical to what we reported in our Letter. Subsequent investigations by us have revealed that the surprising origins of the unusual fluorescence come from individual, molecular defects in silica glasses, brightened by the polymer coating. The details of these new findings will be the subject of future publications¹. After examining the data of de Mello Donega and colleagues, and determining that we were both observing the same phenomena, we concluded that we cannot attribute the fluorescence we observed to CdZnSe/ZnSe quantum dots. In view of these new results, we therefore wish to retract the paper and sincerely apologize for our error. All authors agree with the decision to retract the paper with the exception of X.R., who was unable to be contacted.

1. Rabouw, F. *et al.* Non-blinking single-photon emitters in silica. Preprint at: <http://arXiv.org/abs/1509.07262> (2015).