

concentration ratio is varied. These experiments indicate that nonradiative energy transfer mediated light harvesting using aqueous quantum dots leads to enhanced emission of dye molecules in water at wavelengths beyond the absorption range of the dyes. One should also note that a good operating point in the A/D concentration ratio for a specific donor-acceptor pair has to be set to provide both reasonably high efficiency and high light harvesting of the acceptor emission. This nonradiative energy transfer assisted light harvesting holds great potential for future quantum dot multiplexed biological and optoelectronic applications.

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