

Supplementary material 1. Powder X-ray diffraction (XRD) patterns of ZnS#ZnO QDs heterostructure (6 nm). Those marked with “■” can be indexed to hexagonal wurtzite ZnO (JCPDS file no.36-1451), while the others marked with “●” can be indexed to hexagonal wurtzite-8H ZnS (JCPDS Card No. 39-1363).

Supplementary material 2. The TEM pictures of ZnS#ZnO QDs heterostructures. A, 2 nm; B, 4 nm; C, 6 nm (the black circle is a amplified QDs); D, 8 nm; E, 10 nm.

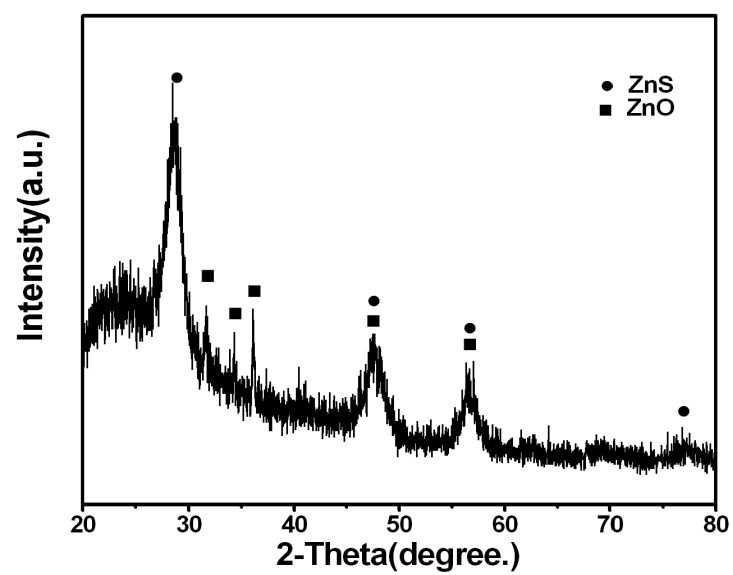
Supplementary material 3. RLS spectra of 3 ml 1.67×10^{-5} M of ZnO#ZnS QDs heterojuncture (10 nm) with 0 (a), 5 (b), and 10 μ l (c) CBPP (1:25).

Supplementary material 4. The fluorescence quenching of CBPP by resveratrol and polydatin.

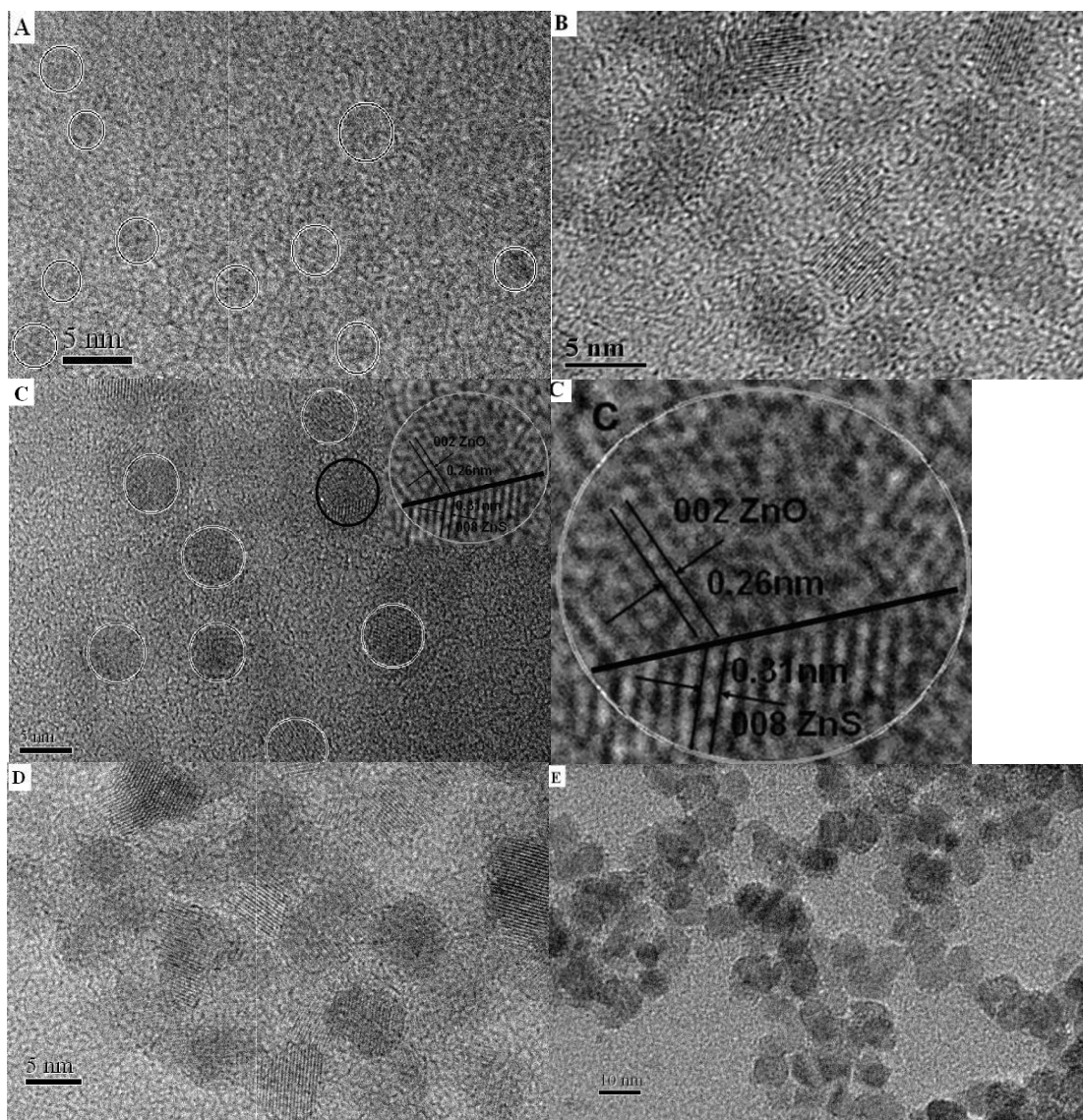
Supplementary material 5. The Stern-Volmer plots for CBPP fluorescence quenching by resveratrol and polydatin.

Supplementary material 6. Double-logarithm curves of resveratrol and polydatin quenching CBPP fluorescence.

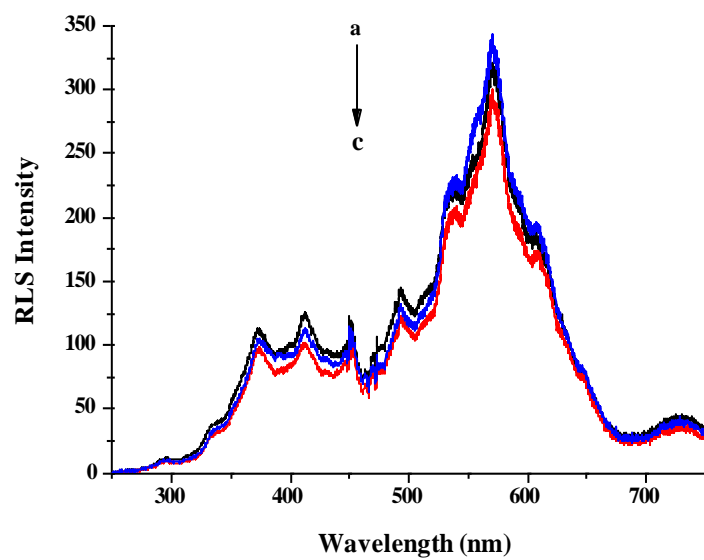
Supplementary material 7. Relationship between $\lg K_a$ and the number of binding sites (n) of stilbenes for CBPP.



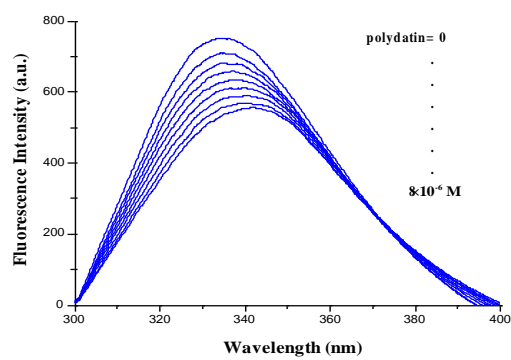
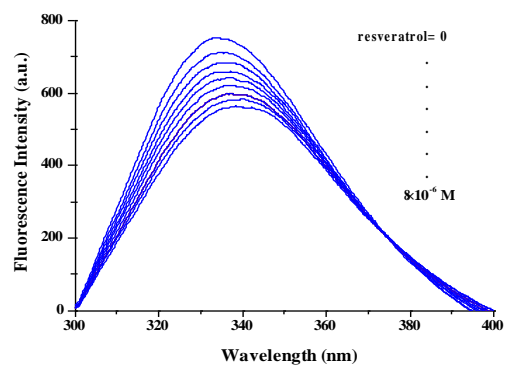
Supplementary material 1



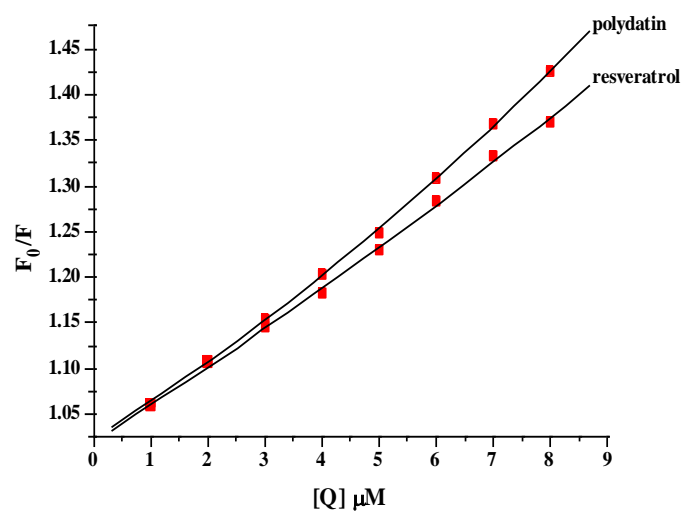
Supplementary material 2



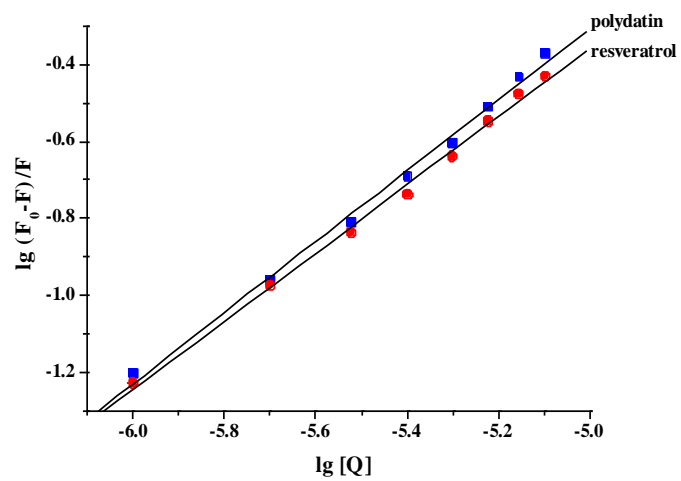
Supplementary material 3



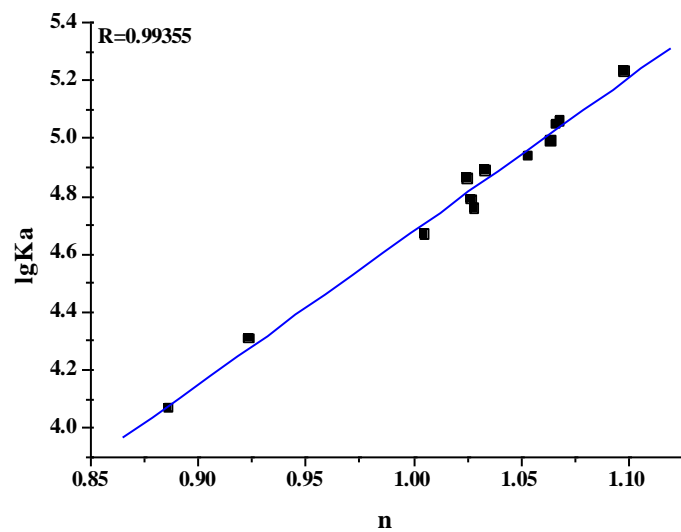
Supplementary material 4



Supplementary material 5



Supplementary material 6



Supplementary material 7