

Cyanostilben-Based Derivatives: Mechanical Stimuli-Responsive Luminophors with Aggregation-Induced Emission Enhancement

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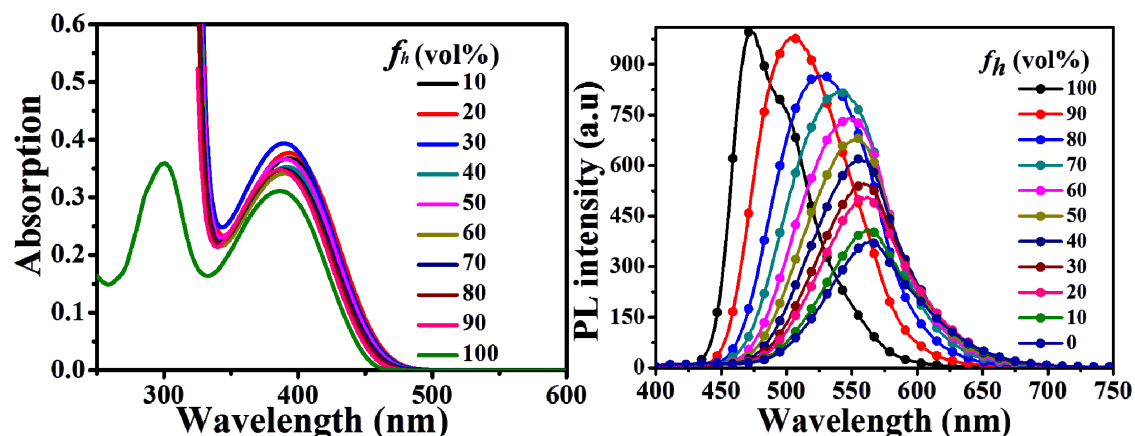


Fig.S1 The absorption spectra of CNS-4 in *n*-hexane/acetone mixtures with different fractions of hexane (f_h), solution concentration: $10\mu\text{M}$

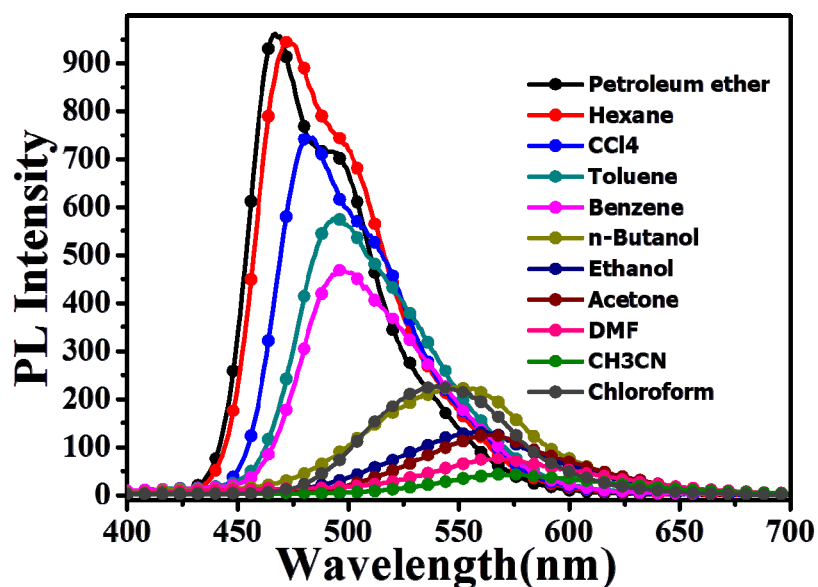


Fig.S2 The emission spectra of solutions of CNS-4 in solvents with different polarities (A_f), solution concentration: $10\mu\text{M}$, solutions were excited at 400 nm.

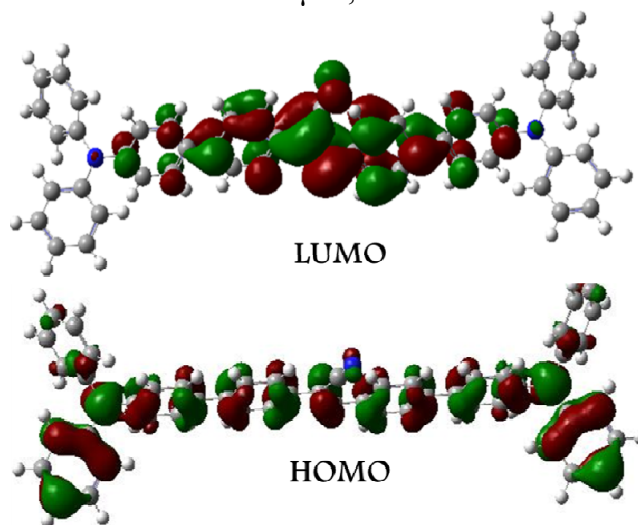


Fig.S3 Pictorial representations of Frontier molecular orbitals calculated at B3LYP/3-21G for compounds CNS-4

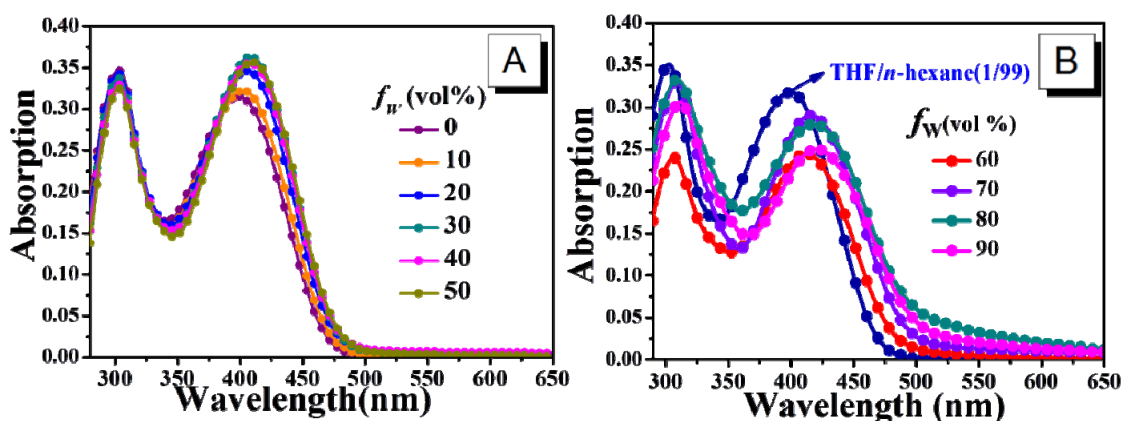


Fig.S4 The absorption spectra of CNS-4 in THF/water mixtures with different fractions of water (f_w), Solution concentration: 10 μ M

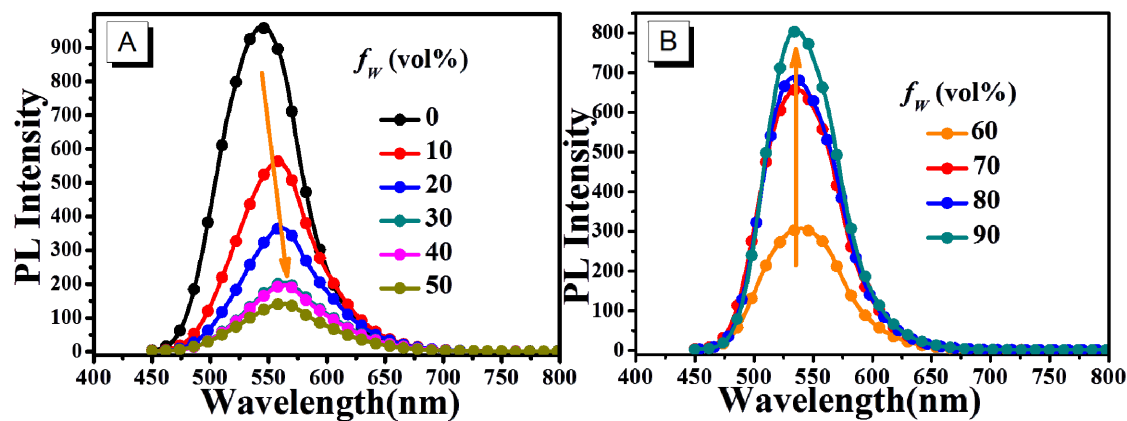


Fig.S5 The emission spectra of CNS-4 in THF/water mixtures with different fractions of water (f_w). Excitation wavelength: 435 nm, Solution concentration: 10 μ M.

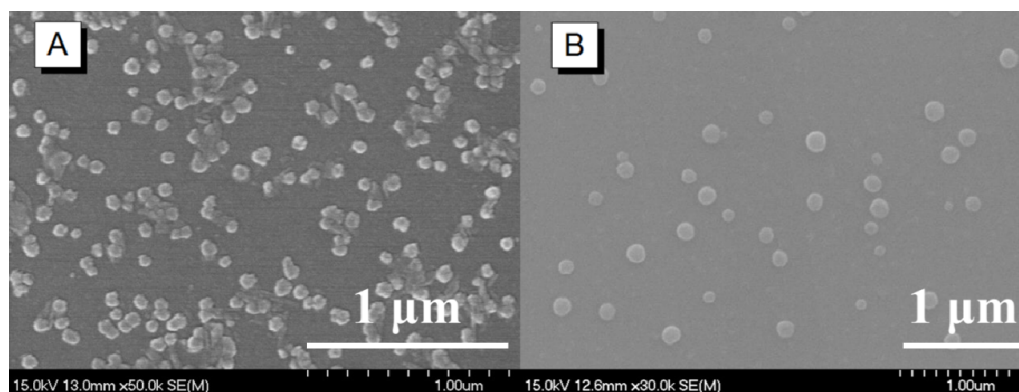


Fig.S6 SEM images of the spherical nanostructures prepared from (a) THF/H₂O (4:6) and (b) THF/H₂O (2:8) mixtures of luminophor CNS-4 after a mixing time of 3 day, Solution concentration: 10 μ M.

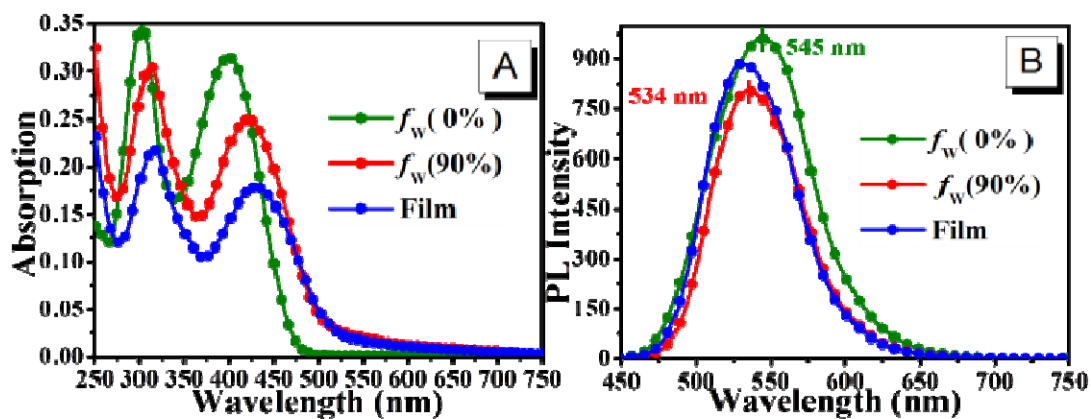


Fig.S7 a) Absorption and b) emission spectra of CNS-4 respectively in the different states, solution concentration: 10 μ M.

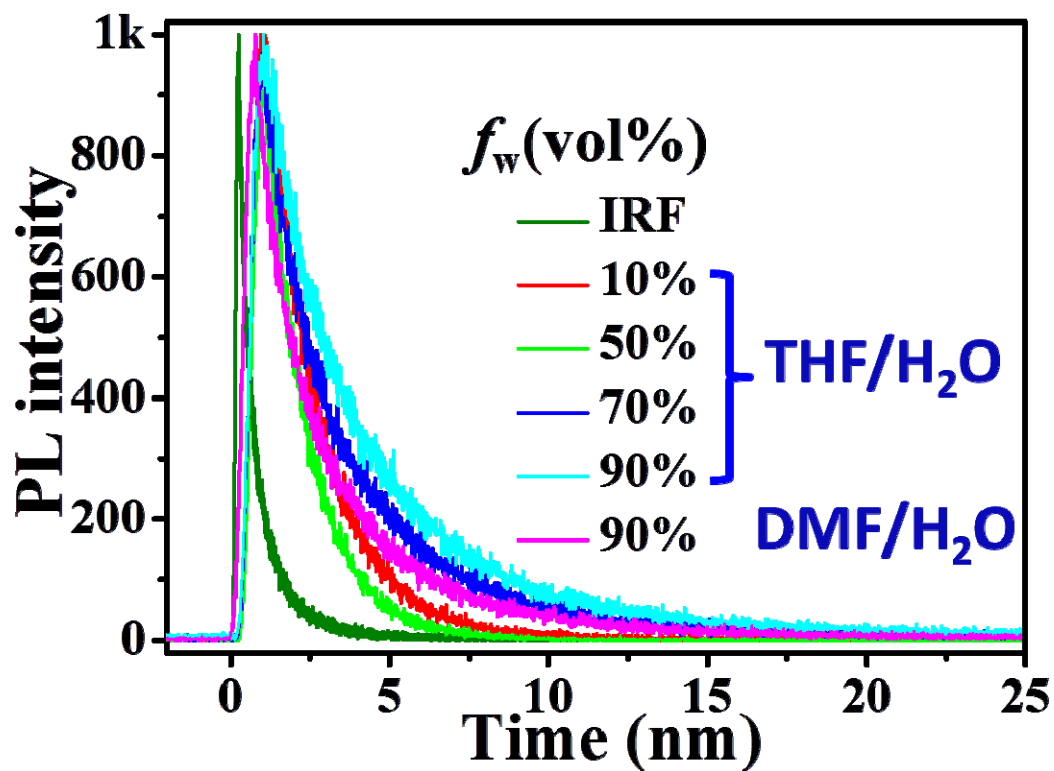


Fig.S8 Fluorescence decay profiles of CNS-4 in the different mixtures

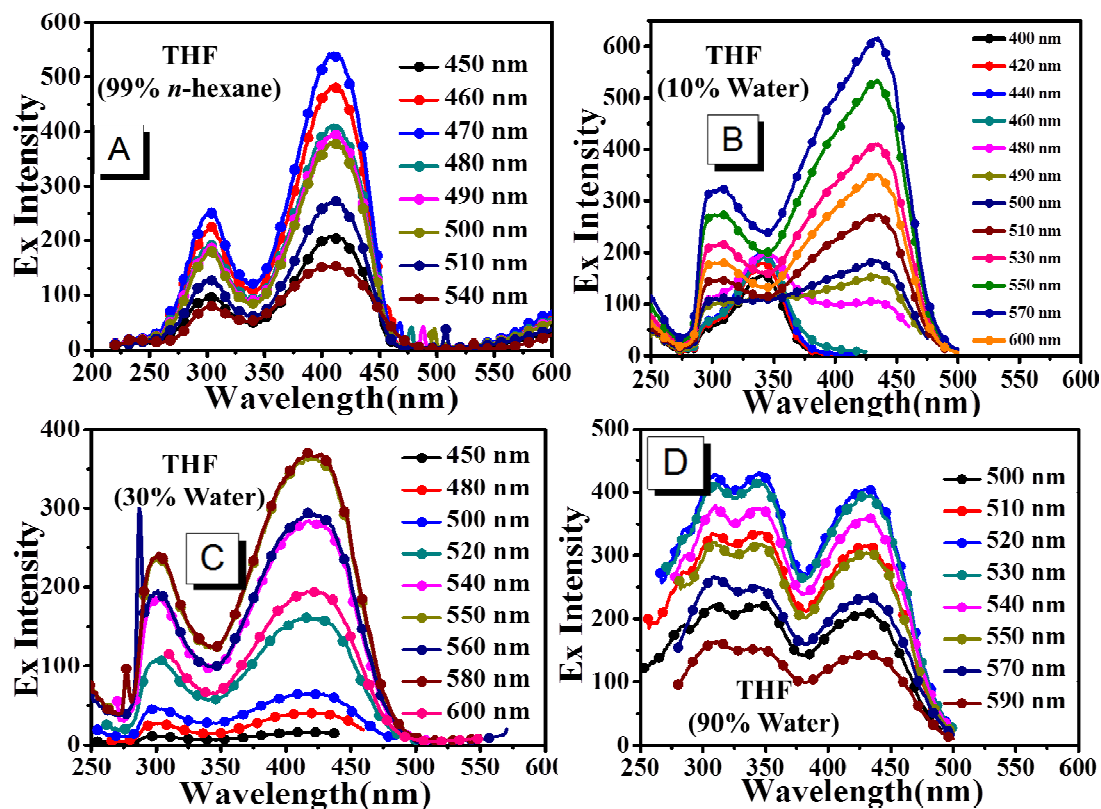


Fig.S9 Dependence of excitation spectra as function of emission wavelength for CNS-4 in a) THF/n-hexane mixture with $f_H=99\%$ and THF/water mixture with f_W b) 10%, c) 30% and d) 90%.

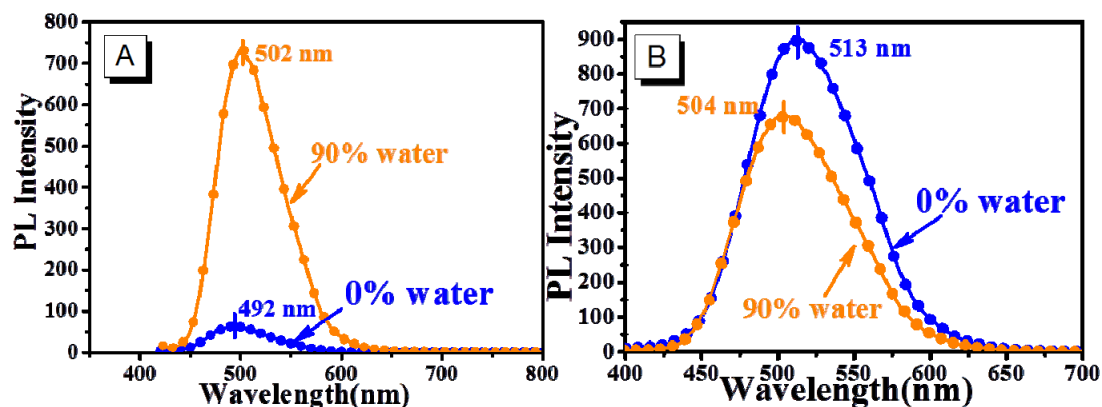


Fig.S10 Fluorescence spectra of CNS-2(A) and CNS-3(B) in the THF/water with 0% and 90% water fraction, Solution concentration: 10 μ M.

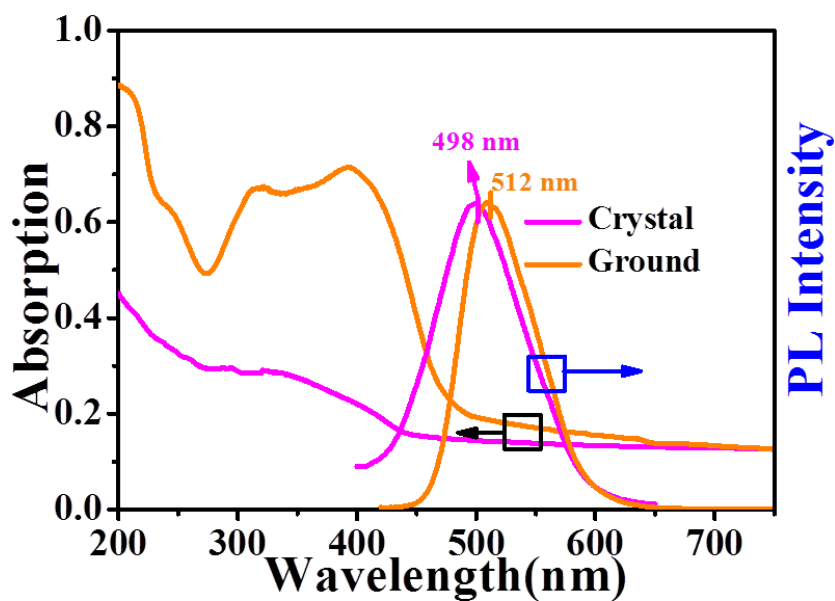


Fig.11 the absorption and PL spectra of compound CNS-3 in the different state.

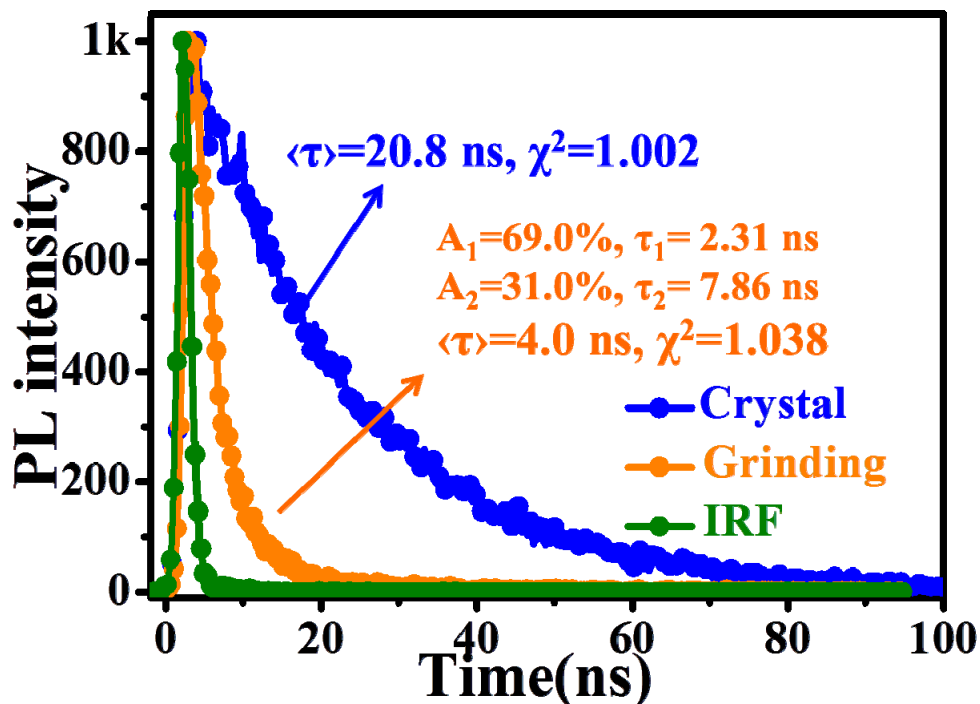


Fig.S12 Fluorescence decay profiles of CNS-3 in the different state