

Supporting Information

**Aggregation-Induced Emission, Mechanochromism and
Blue Electroluminescence of Carbazole and
Triphenylamine-Substituted Ethenes**

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Figure S1. (A) PL spectra of **2** in THF and THF/H₂O mixtures with different water fractions. Concentration: 10⁻⁵ M; excitation wavelength: 340 nm. (B) Plot of I/I_0 values versus the compositions of the THF/H₂O mixtures of **2**.

Figure S2. (A) PL spectra of **3** in THF and THF/H₂O mixtures with different water fractions. Concentration: 10⁻⁵ M; excitation wavelength: 350 nm. (B) Plot of I/I_0 values versus the compositions of the THF/H₂O mixtures of **3**.

Figure S3. Effect of grinding and fuming on the XRD diffractogram of crystals of **3**.

Table S1. Summary of crystal data and intensity collection parameters for **1–3**.

	1	2	3
Empirical formula	C ₃₂ H ₂₃ N	C ₃₈ H ₃₅ N	C ₃₈ H ₂₉ N
Formula weight	421.51	505.67	499.62
Crystal dimensions, mm	0.35 x 0.25 x 0.12	0.25 x 0.09 x 0.07	0.35 x 0.28 x 0.16
Crystal system	Triclinic	Monoclinic	Triclinic
Space group	P-1	P2(1)	P -1
a, Å	12.7827(12)	12.5655(5)	10.9230(6)
b, Å	12.9142(10)	8.9233(3)	11.5156(6)
c, Å	16.2498(11)	14.0093(5)	12.0082(7)
α, deg	92.293(6)	90	98.178(4)
β, deg	107.582(7)	114.622(4)	98.136(5)
γ, deg	112.892(8)	90	108.704(5)
V, Å ³	2317.6(3)	1427.98(9)	1387.63(13)
Z	4	2	2
D _{calcd.} , gcm ³	1.208	1.176	1.196
F ₀₀₀	888	540	528
Temp, (K)	173(2)	143	173
Radiation (λ), Å	1.54178	1.5418	1.5418
μ (Mo Kα) mm ⁻¹	0.529	0.506	0.520
2θ _{max} , deg (completeness)	66.5 (97.2%)	66.5 (97.6%)	66.5 (99.0%)
No. of collected reflns.	13991	5028	9505
No. of unique reflns. (R _{int})	8118 (0.0563)	2680 (0.0229)	4949 (0.0614)
Data/restraints/parameters	8118/0/595	2680/7/351	4949/0/352
R ₁ , wR ₂ [obs I > 2σ (I)]	0.0447, 0.0765	0.0523, 0.1404	0.0472, 0.1322
R ₁ , wR ₂ (all data)	0.0829, 0.0817	0.0547, 0.1430	0.0518, 0.1373
Residual peak/hole e. Å ⁻³	0.233/-0.216	0.372/ -0.248	0.204/-0.213
Transmission ratio	1.00/0.96	1.00/0.30	1.00/0.65
Goodness-of-fit on F ²	1.014	1.054	0.991

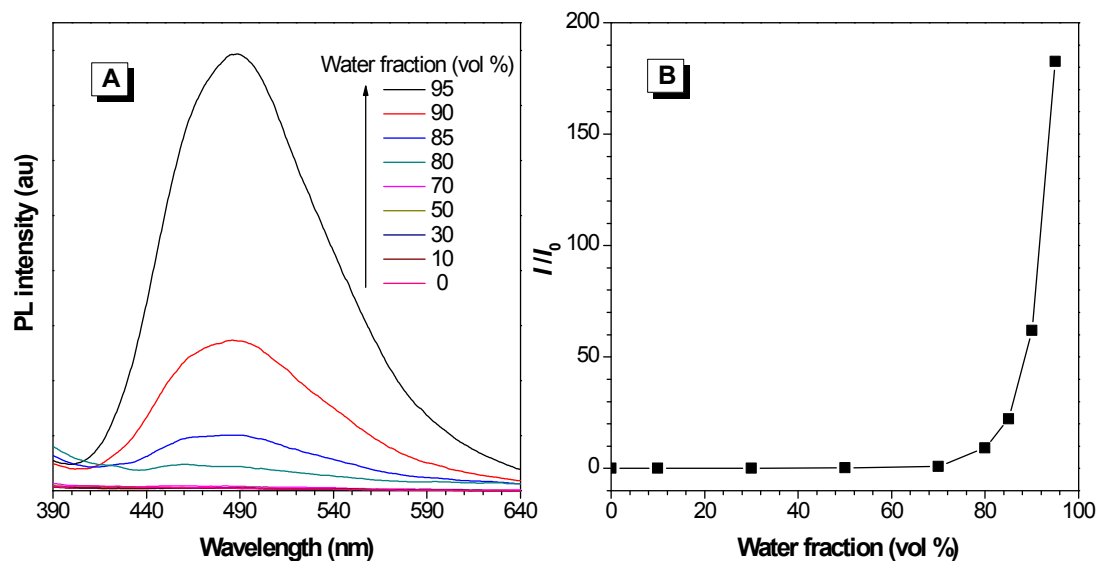


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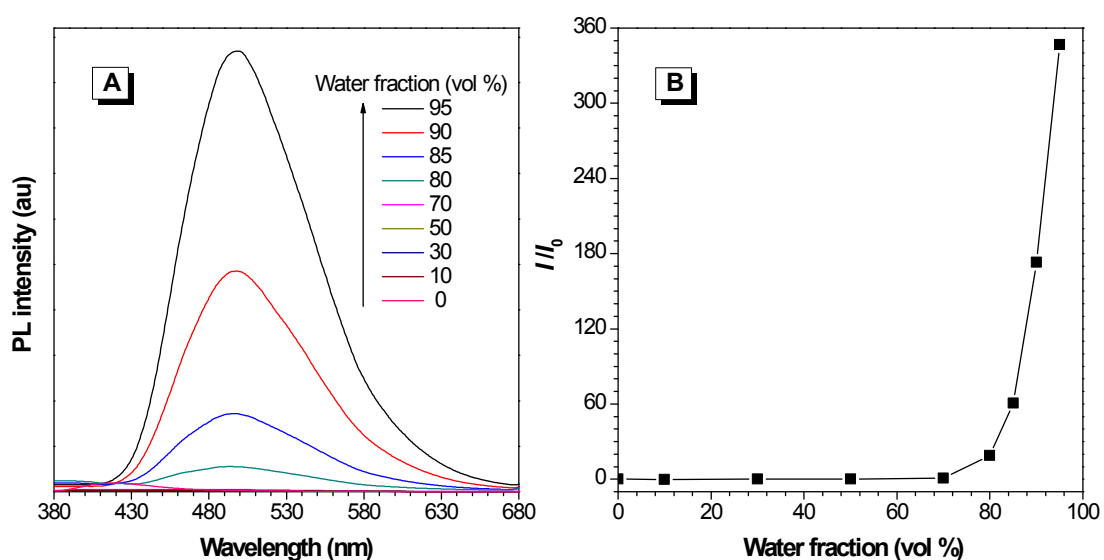


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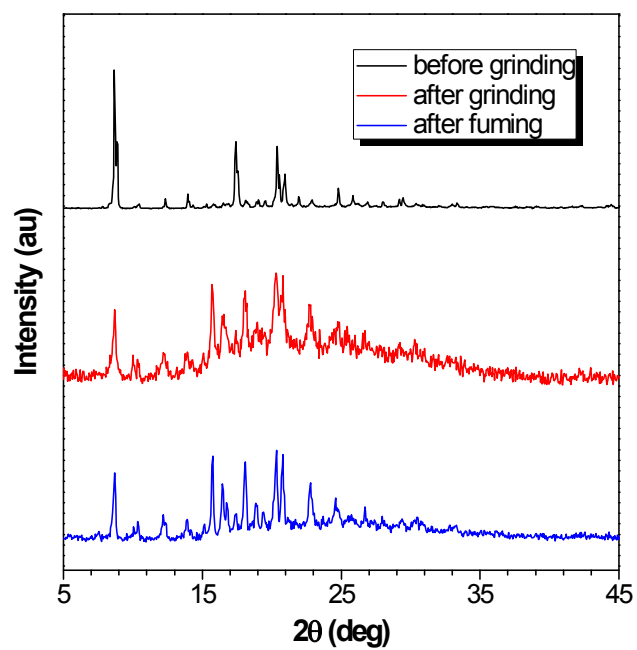


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