

Supporting Information

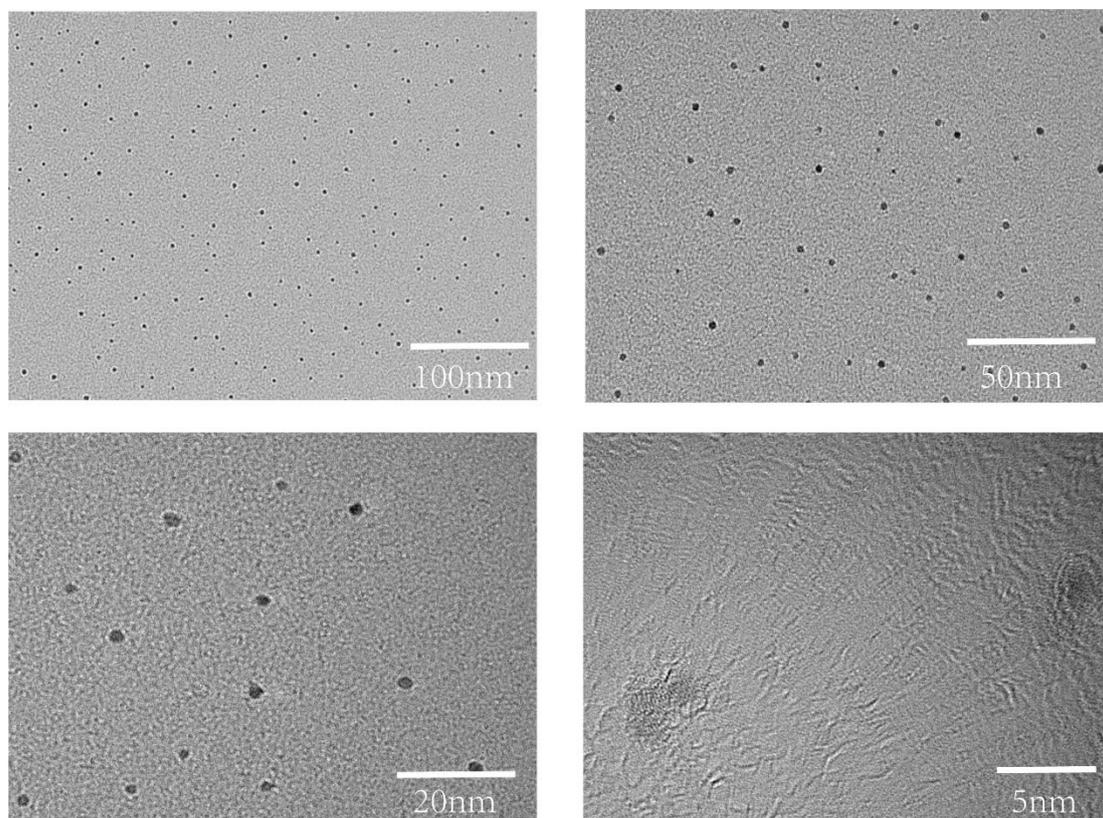


Figure S1. TEM images of CDs at different resolutions.

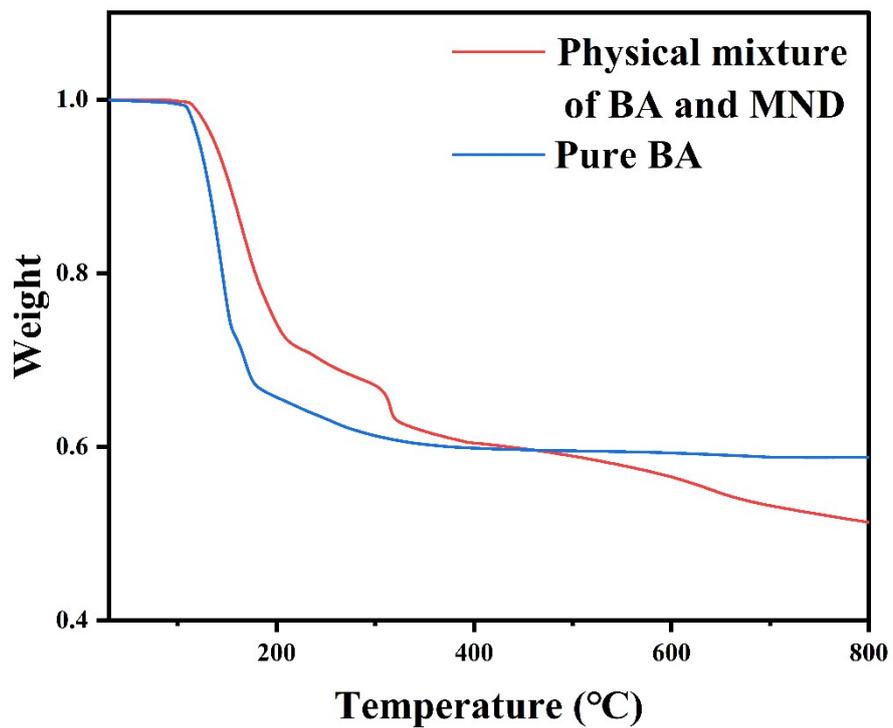


Figure S2. Thermogravimetric (TGA) curves of pure BA and BA/MND mixed powder.

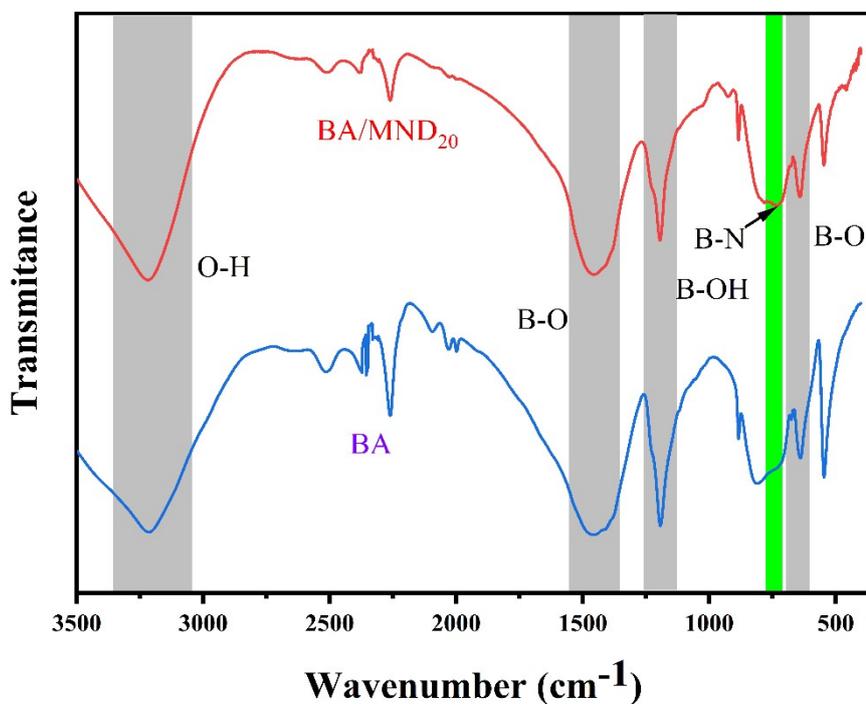


Figure S3. FTIR spectra of BA and the BA/MND₂₀.

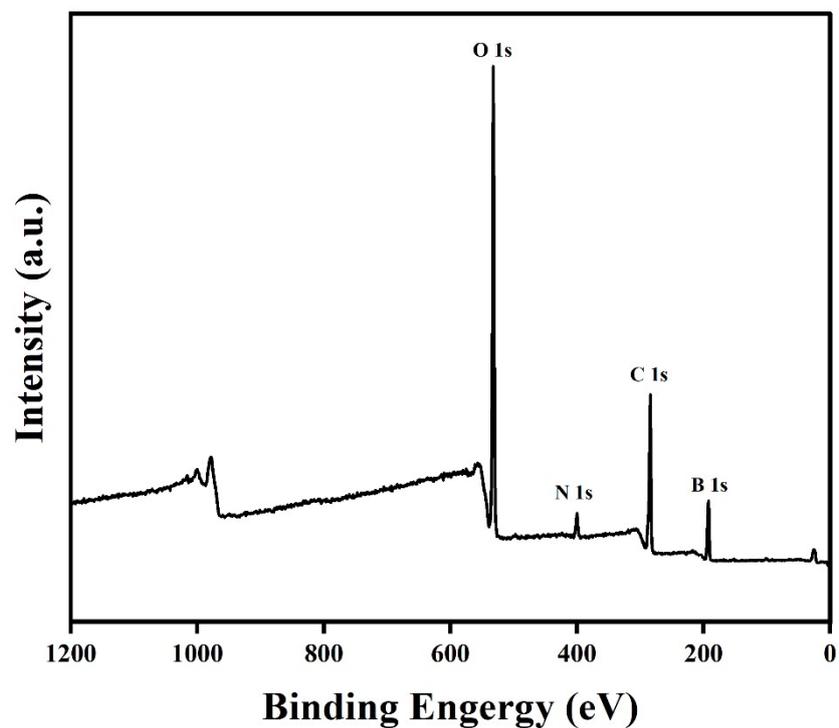


Figure S4. XPS survey scan of BA/MND₂₀.

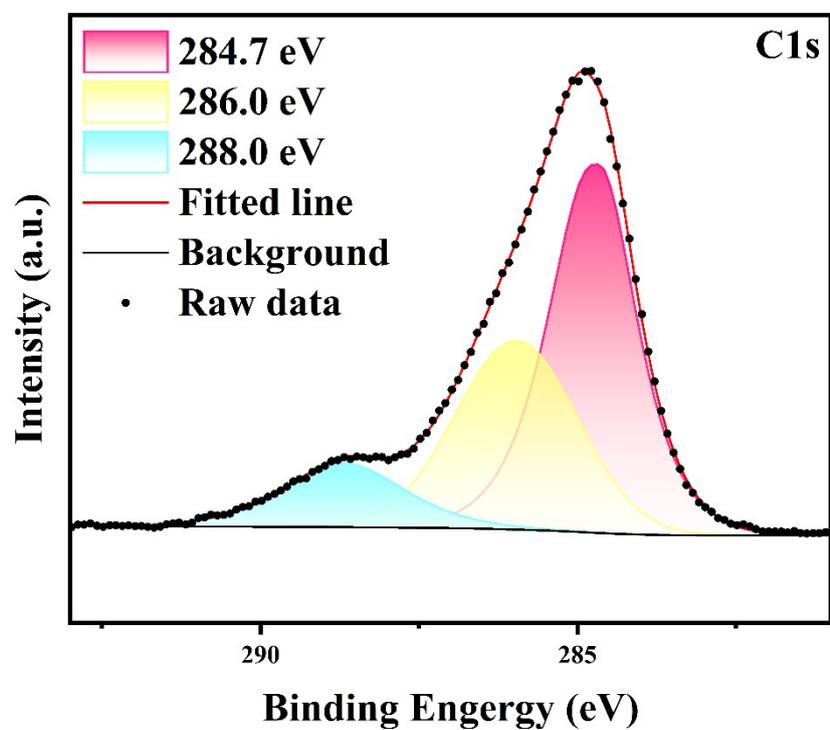


Figure S5. High-resolution XPS spectrum of C 1s for BA/MND₂₀.

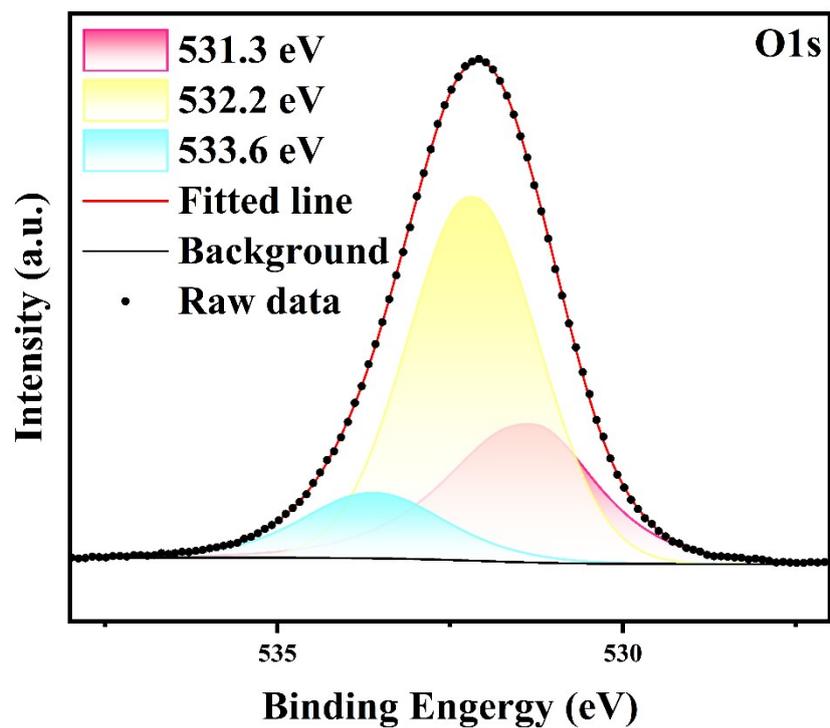


Figure S6. High-resolution XPS spectrum of O 1s for BA/MND₂₀

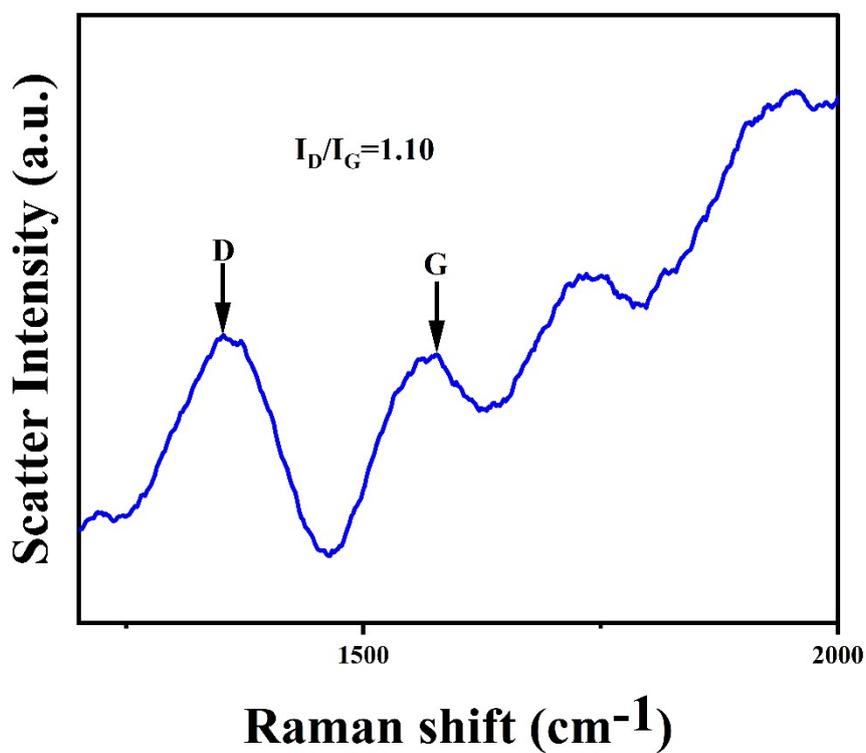


Figure S7. Raman spectrum of BA/MND.

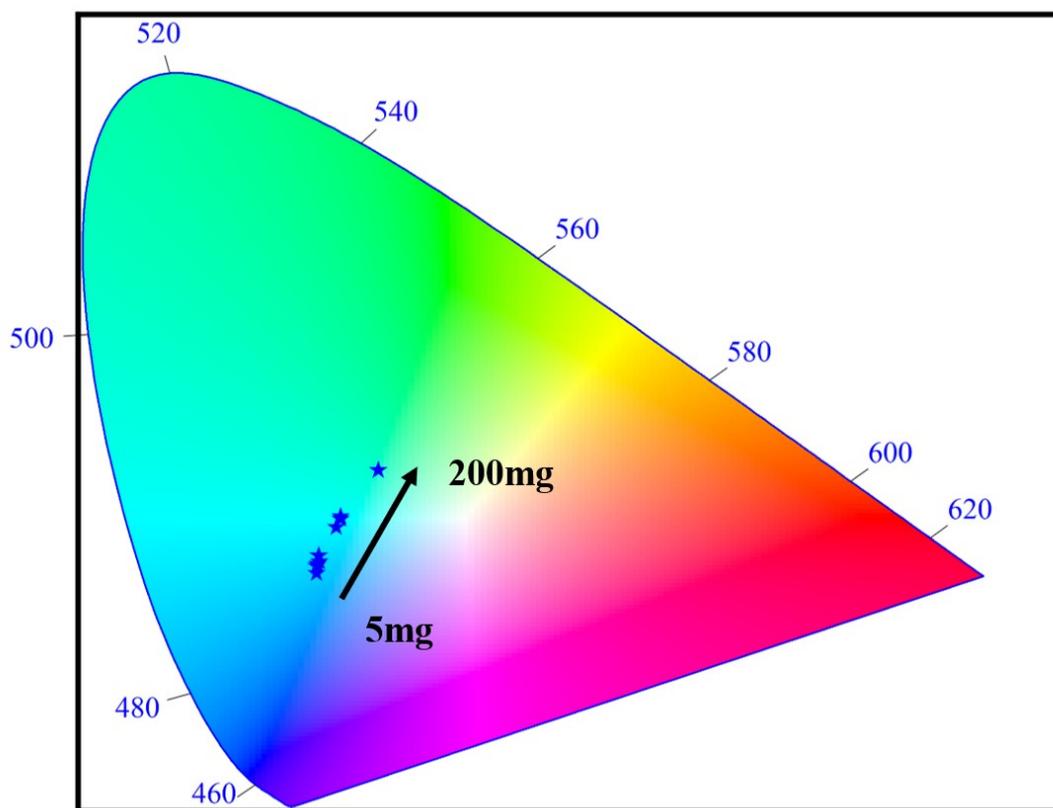


Figure S8. CIE coordinates of BA/MND with different ratios.

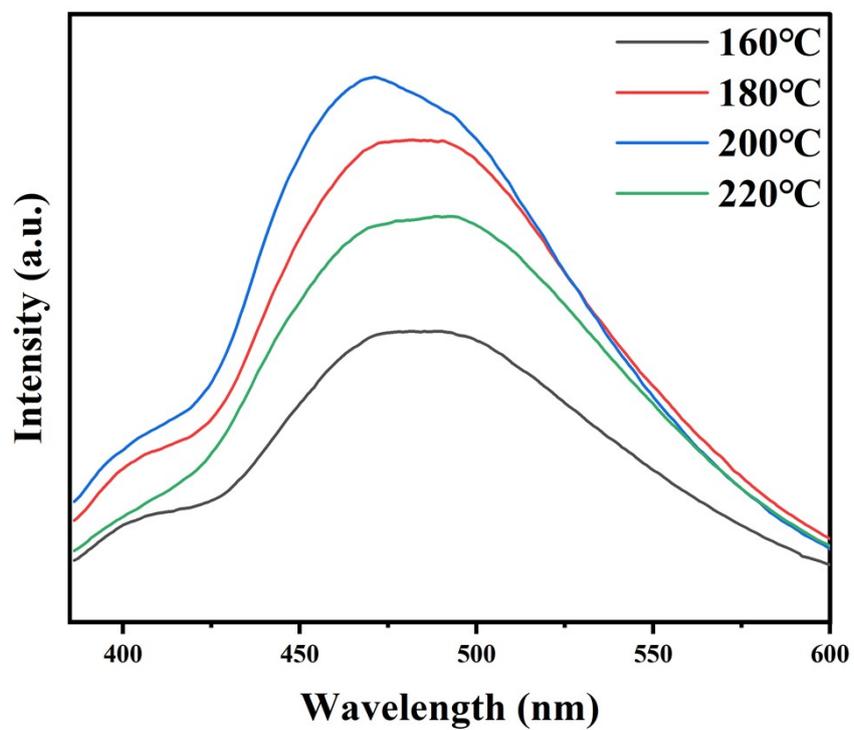


Figure S9. Phosphorescence spectra of BA/MND synthesized at different temperatures.

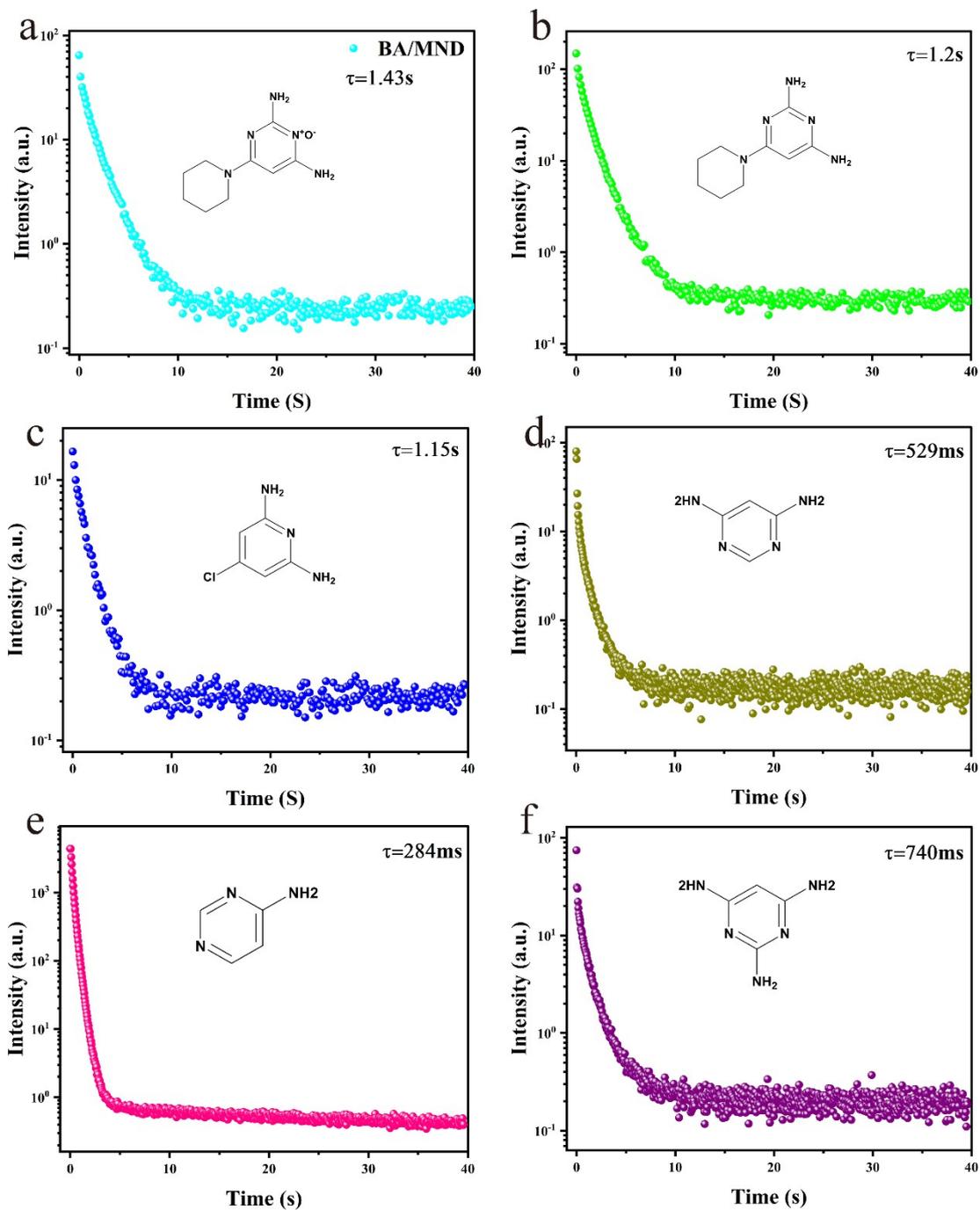


Figure S10. Phosphorescence Decay spectra of materials synthesized from different precursors.

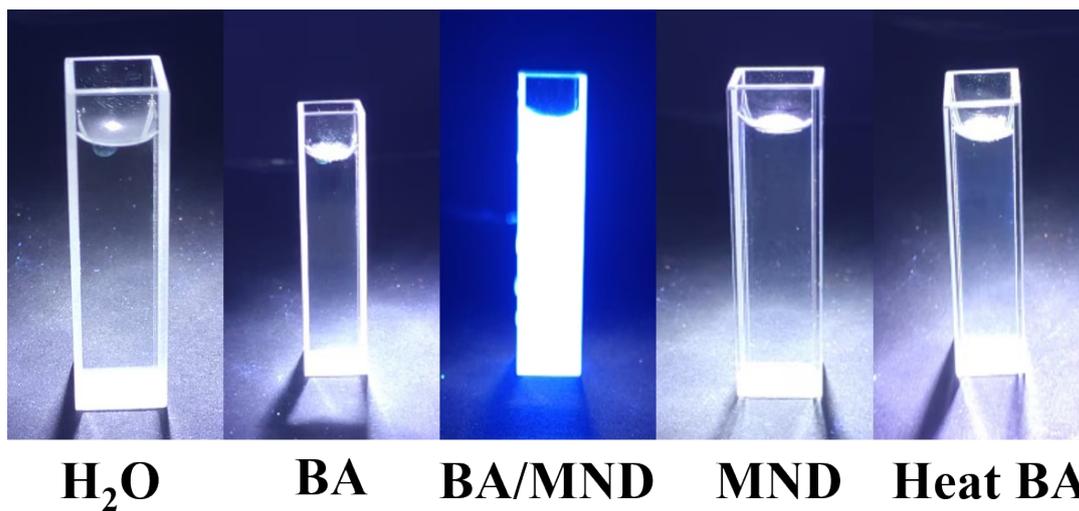


Figure S11. Comparison of fluorescence properties for different sample solutions under 365 nm UV light.

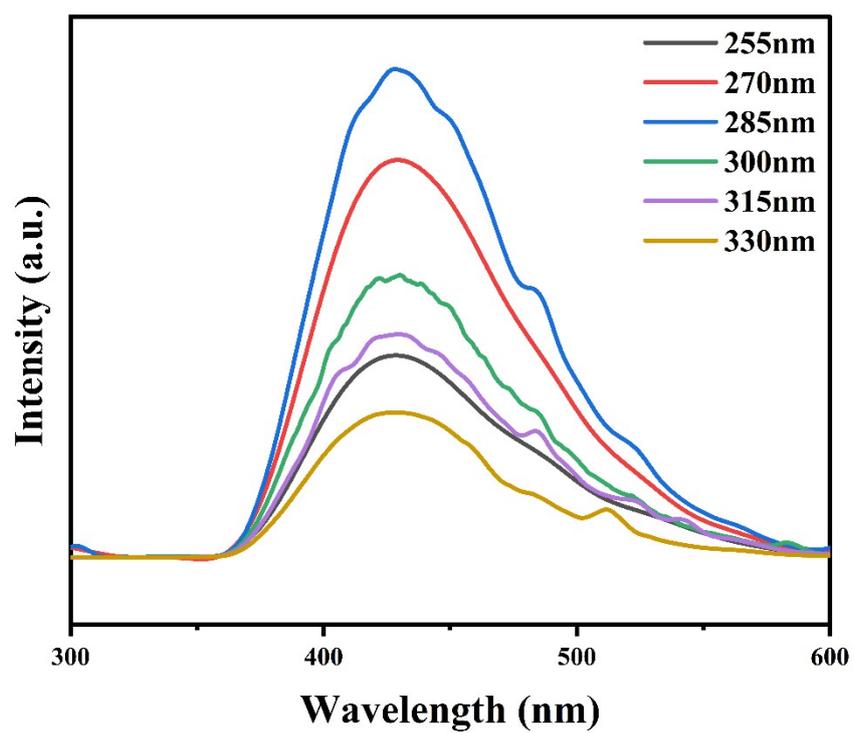


Figure S12. Phosphorescence spectra of MND at 77 K under different excitation wavelengths.

Table S1. Time-sequence afterglow images of BA/MND with different doping ratios after turning off the 365 nm UV lamp.

	UV on	UV off	1s	2s	3s	4s	5s	6s	7s	8s	9s	10s
BA/MND ₅												
BA/MND ₁₀												
BA/MND ₁₅												
BA/MND ₂₀												
BA/MND ₄₀												
BA/MND ₆₀												
BA/MND ₈₀												
BA/MND ₁₀₀												
BA/MND ₂₀₀												

Table S2. Afterglow images of composites prepared from different precursors under 365 nm UV light.

Structural formula	UV on	UV off	1s	2s	3s	4s	5s	6s	7s	8s	9s	10s
Heat BA												
 6-(piperidin-1-yl)pyrimidine-2,4-diamine												
 6-chloropyrimidine-2,4-diamine												
 pyrimidine-2,4,6-triamine												
 pyrimidine-4,6-diamine												
 pyrimidine-2,4-diamine												
 pyrimidine-4,5-diamine												
 pyrimidin-5-amine												
 pyrimidin-4-amine												
 pyrimidin-2-amine												