

Supporting Information

Electrospun Janus Nanofiber for White-Light Emission Through Efficient Spatial Isolation to Control Two-Step Energy Transfer

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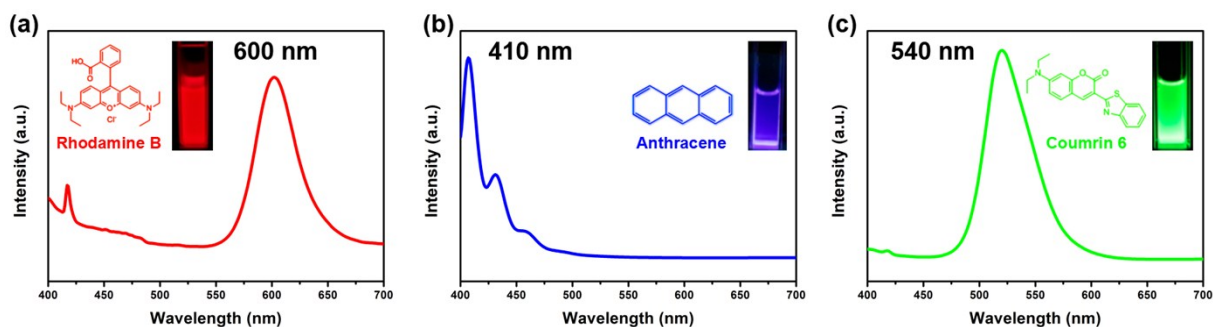


Fig. S1. The fluorescence emission spectra of rhodamine-B, anthracene, and coumarin-6, respectively, at 365 nm UV excitation.

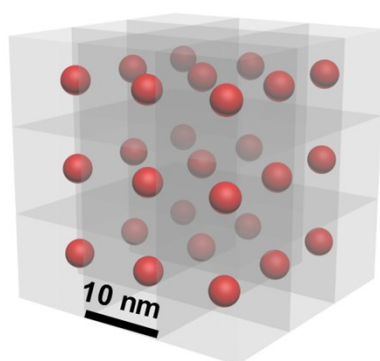


Fig. S2. A model representing the arrangement hypothesis of fluorescent molecules under an ideal dispersed state.

Number	Solute & solvent	Concentration (mg/mL)	Spacing
A	Blue + DMF	0.4	< 10 nm
B	Red + DMF	1.0	< 10 nm
C	Green + DMF	0.6	< 10 nm
D	Blue + DMF	0.2	> 10 nm
E	Red + DMF	0.5	> 10 nm
F	Green + DMF	0.3	> 10 nm

Table S1. The relationship between the spatial isolation distance of the fluorescent molecules and the concentration of the fluorescent solutions.

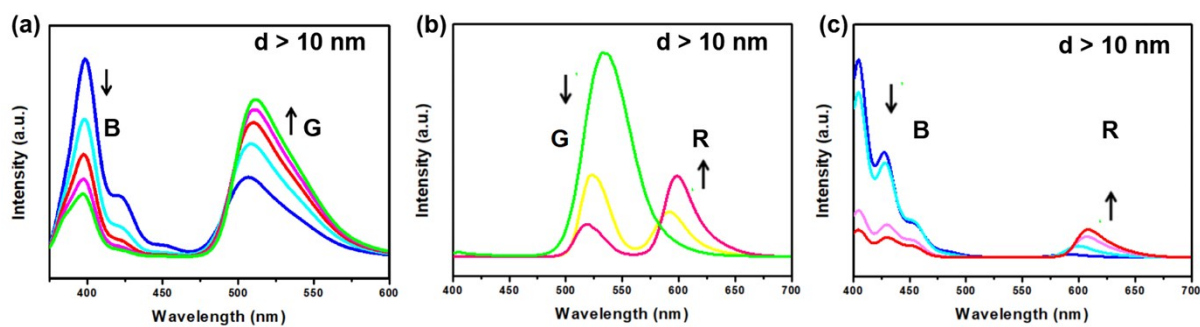


Fig. S3. Fluorescence emission spectra of the mixed (a) blue-green fluorescent solution, (b) green-red fluorescent solution, and (c) blue-red fluorescent solution

when the spatial separation distance of the fluorescent molecules was more than 10 nm.

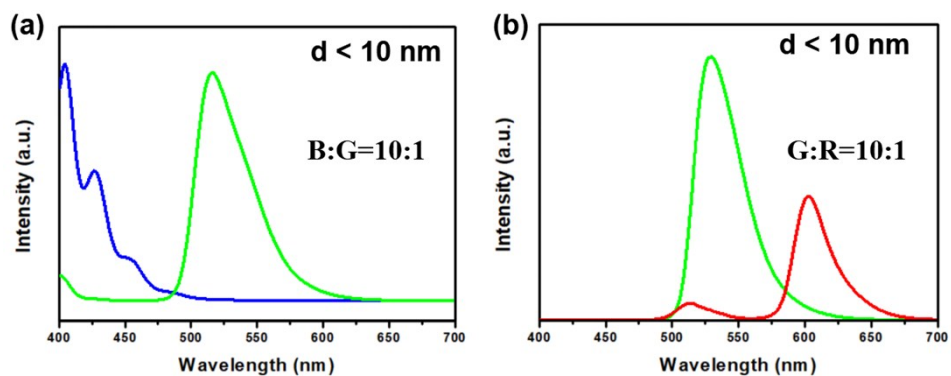


Fig. S4. Fluorescence emission spectrum of the mixed (a) blue-green fluorescent solution, and (b) green-red fluorescent solution when the spatial separation

distance of the fluorescent molecules was less than 10 nm.

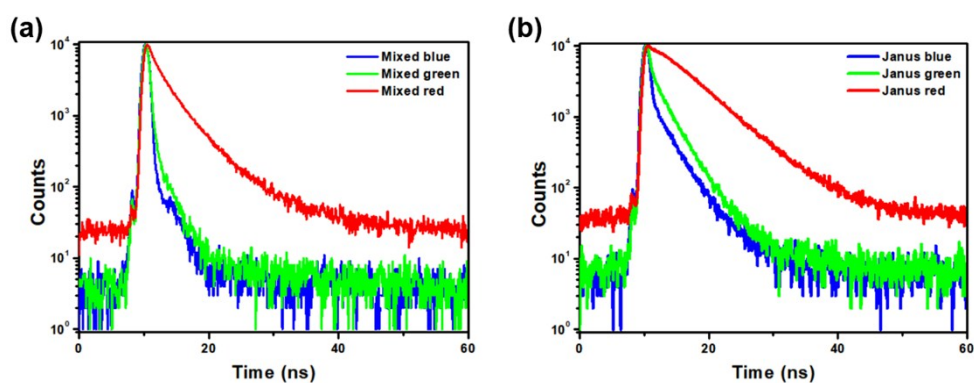


Fig. S5. The fluorescence lifetime of the RGB fluorescent molecules prepared by (a) single-nozzle or (b) Janus-nozzle methods.

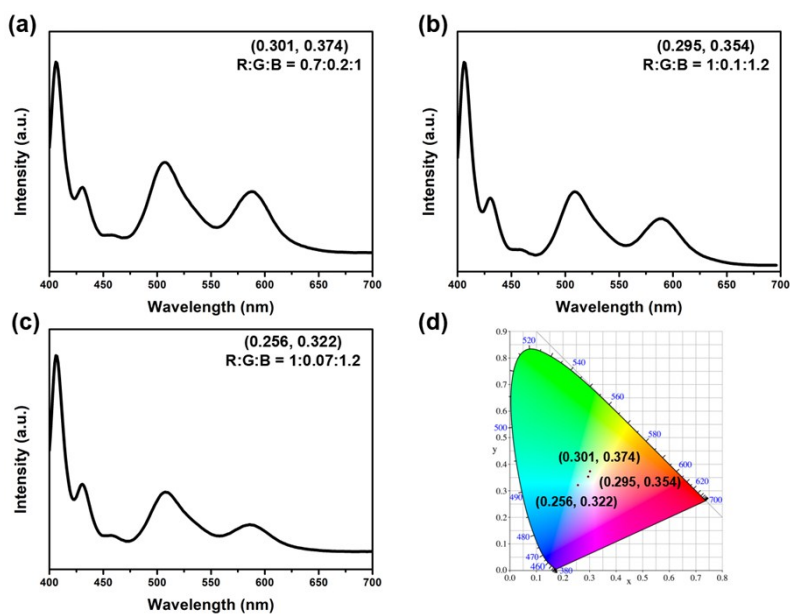


Fig. S6. The white-light emission spectrum ($\lambda_{ex}=365$ nm) and the corresponding chromaticity coordinate under different spinning solution concentration ratios.