

Supporting information

Excited State Dynamics of 9,9'-Bianthryl in Room Temperature Ionic Liquids as Revealed by Picosecond Time-Resolved Fluorescence Study

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- (iii)** Wavelength-dependent decay profiles of BA in [bmim][Tf₂N].
- (iv)** Time-resolved emission spectra (TRES) of BA in [bmim][Tf₂N] at different stages of dynamics.

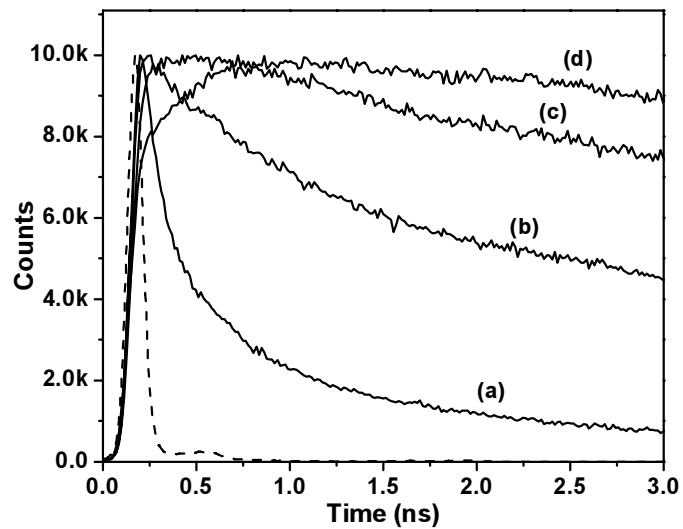


Figure S1. Wavelength-dependent decay profiles of BA in [bmim][BF₄]. (a) 410 nm, (b) 480 nm, (c) 520 nm, (d) 580 nm. The lamp profile is shown as dashed line.

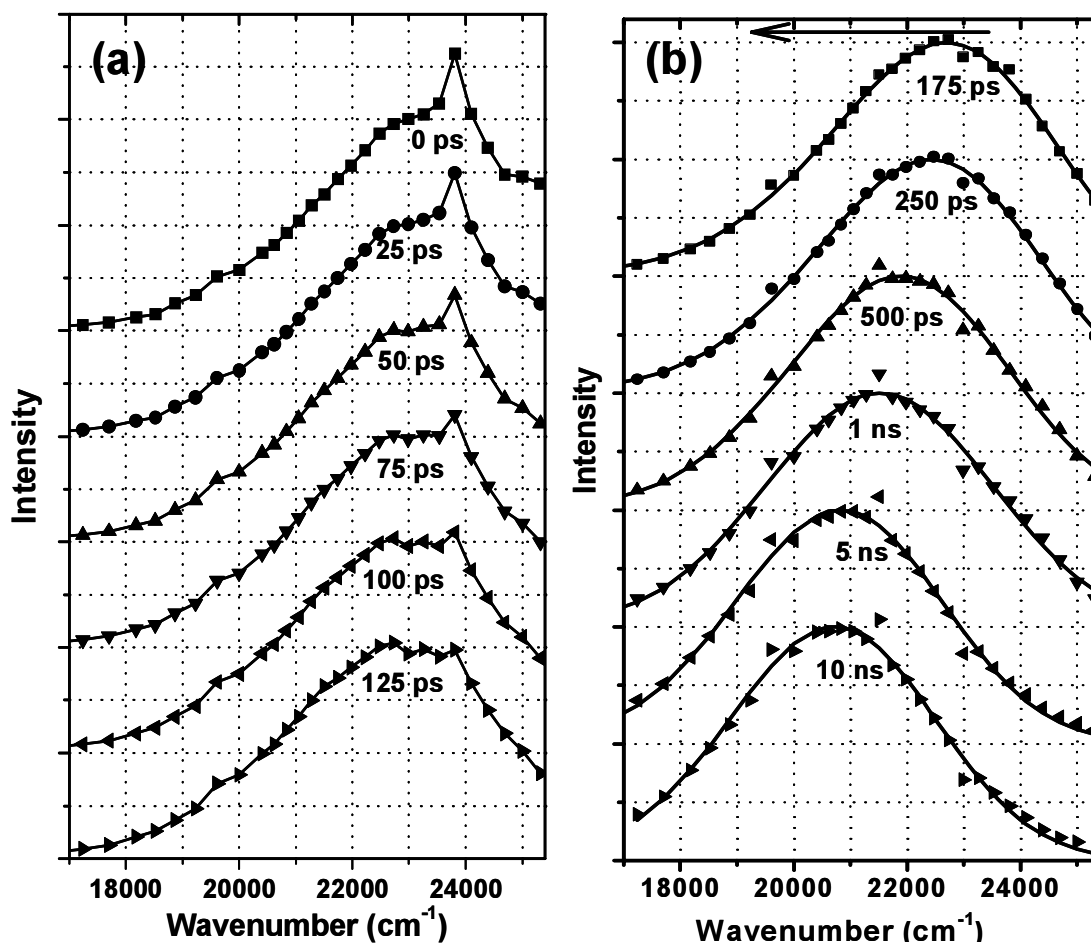


Figure S2. (a) Time-resolved emission spectra (TRES) of BA in [bmim][BF₄] at the early stage of dynamics. The sharp high-energy band ascribed and LE emission (centering around 23800 cm⁻¹) whereas the broad shoulder to the low-energy side is the CT emission. The maximum of CT bands are normalized in each case. (b) TRES for BA in [bmim][BF₄] in the long time-scale. All spectra are normalized at the corresponding peak maximum. ($\lambda_{\text{exc}} = 374$ nm for each case)

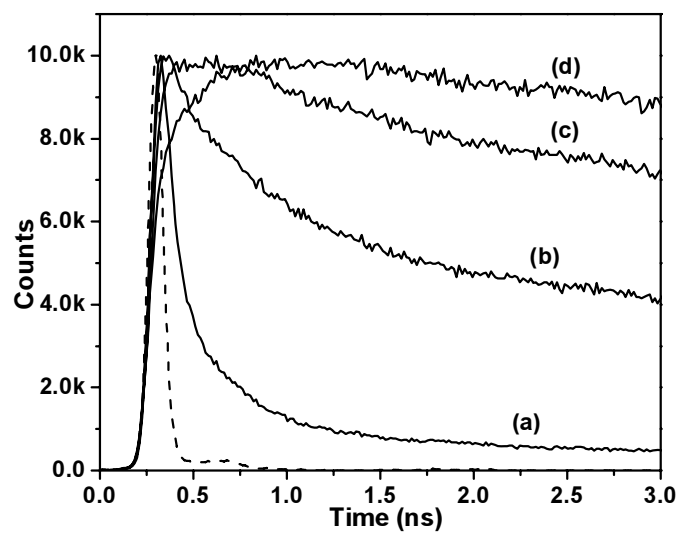


Figure S3. Wavelength-dependent decay profiles of BA in [bmim][Tf₂N]. (a) 410 nm, (b) 480 nm, (c) 520 nm, (d) 580 nm. The lamp profile is shown as dashed line.

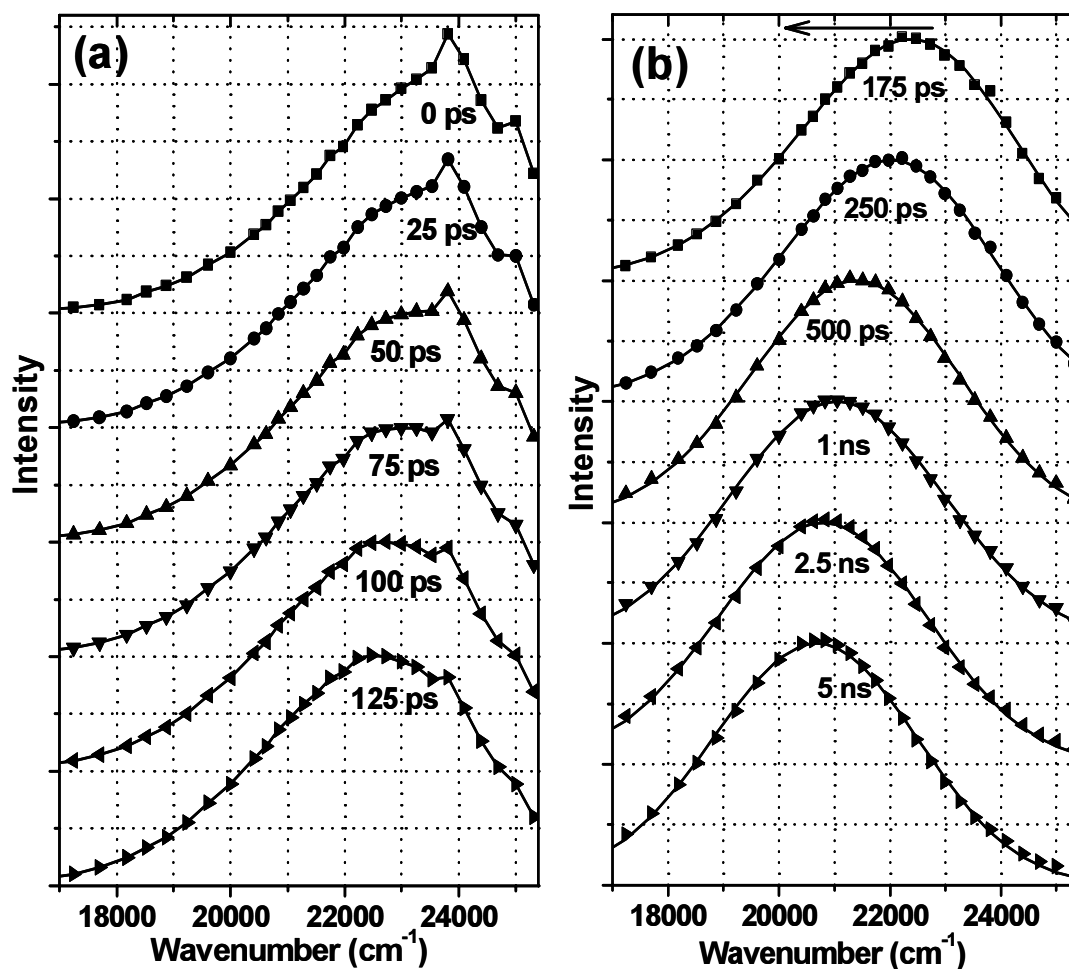


Figure S4. (a) Time-resolved emission spectra (TRES) of BA in [bmim][Tf₂N] at the early stage of dynamics. The sharp high-energy band ascribed and LE emission (centering around 23800 cm⁻¹) whereas the broad shoulder to the low-energy side is the CT emission. The maximum of CT bands are normalized in each case. (b) TRES for BA in [bmim][Tf₂N] in the long time-scale. All spectra are normalized at the corresponding peak maximum. ($\lambda_{\text{exc}} = 374 \text{ nm}$ for each case)