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## **Electronic Supplementary Information (ESI)**

## Electronic Interactions between A Quaternary Pyridyl-β-diketonate and Anionic Clay Nanosheets Facilitates Intense Photoluminescence

## by

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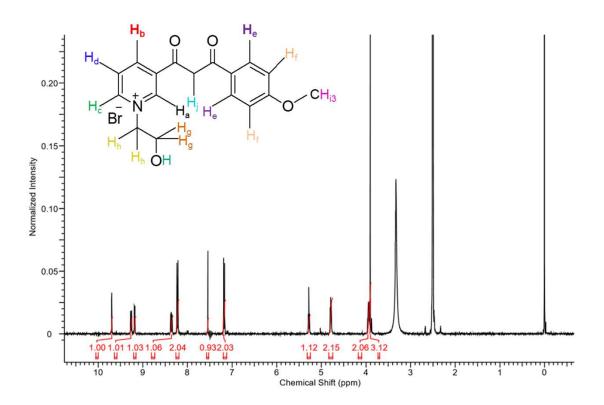
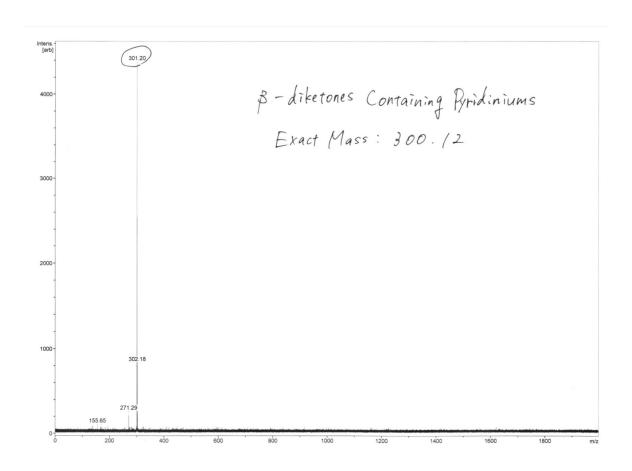
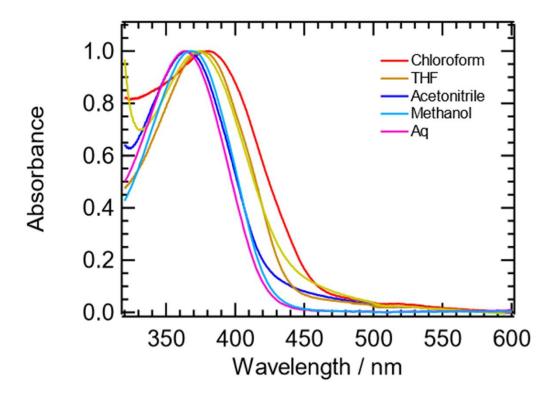


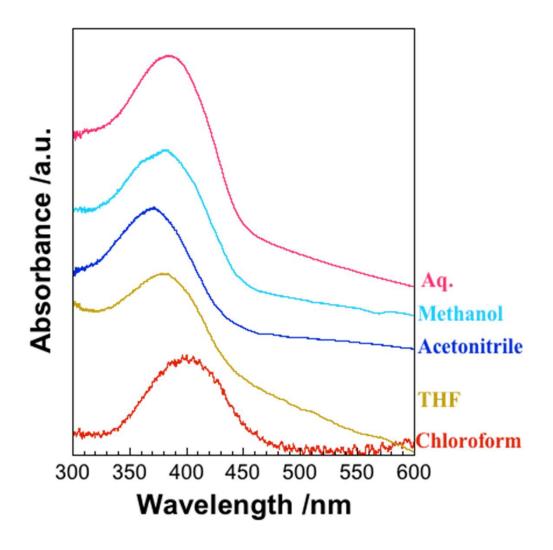
Fig. S1. <sup>1</sup>H NMR spectrum of BDKPy<sup>+</sup>Br.



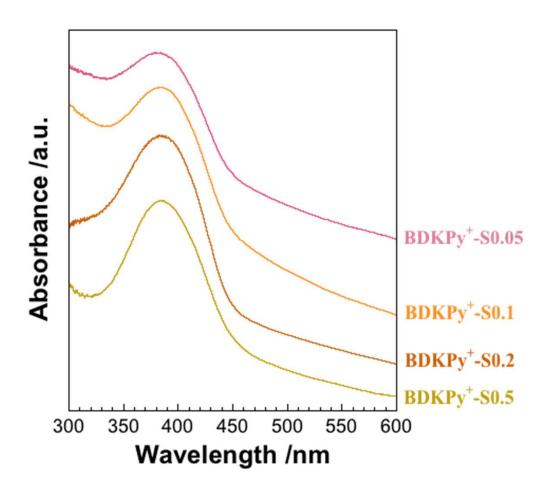
**Fig. S2.** MS spectrum of BDKPy<sup>+</sup>Br<sup>-</sup>.



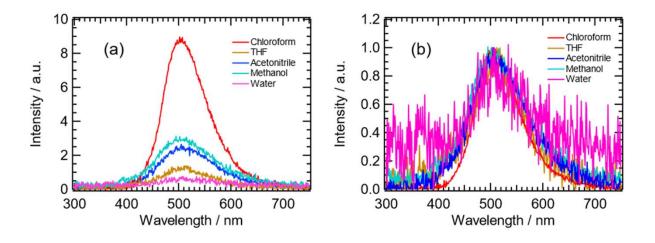
**Fig. S3.** Absorption spectra of BDKPy $^+$ Br $^-$  (1.0 × 10 $^{-2}$  mM) in water, methanol, acetonitrile, tetrahydrofuran, and chloroform.



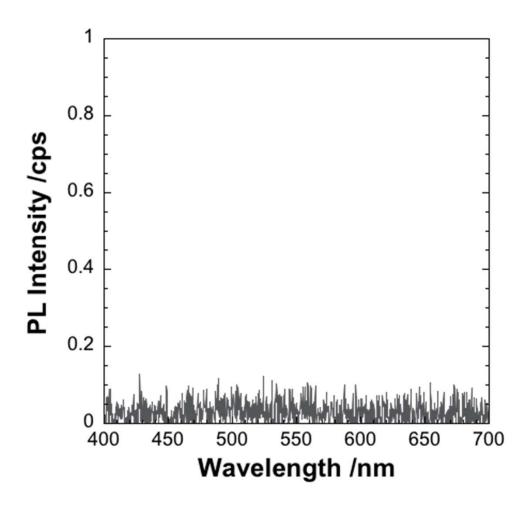
**Fig. S4.** Absorption spectra of BDKPy<sup>+</sup>-S0.1 in water, methanol, acetonitrile, tetrahydrofuran, and chloroform.



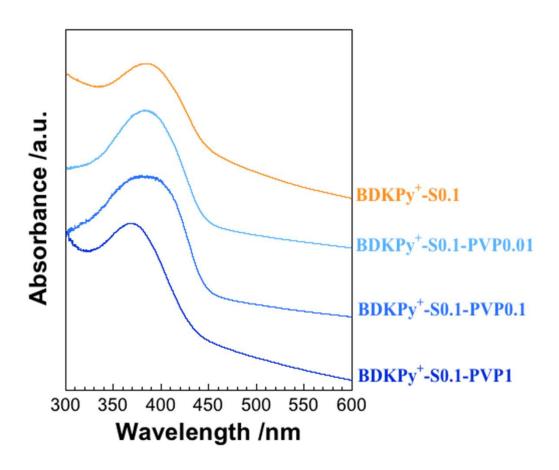
**Fig. S5.** Absorption spectra of BDKPy $^+$ -Sn in the water/ethanol mixture.



**Fig. S6.** (a) Photoluminescence ( $\lambda_{\rm ex} = 365$  nm) spectra of BDKPy<sup>+</sup>Br (1.0 × 10<sup>-2</sup> mM) in water, methanol, acetonitrile, tetrahydrofuran, and chloroform. Part (b) is the normalized spectrum of (a).



**Fig. S7.** Photoluminescence ( $\lambda_{\rm ex} = 365$  nm) spectrum of mixed solution (water/ethanol = 9:1) of BDKPy<sup>+</sup>Br (1.0 × 10<sup>-2</sup> mM).



**Fig. S8.** Absorption spectra of BDKPy $^+$ -S0.1-PVPn in the water/ethanol mixture.