

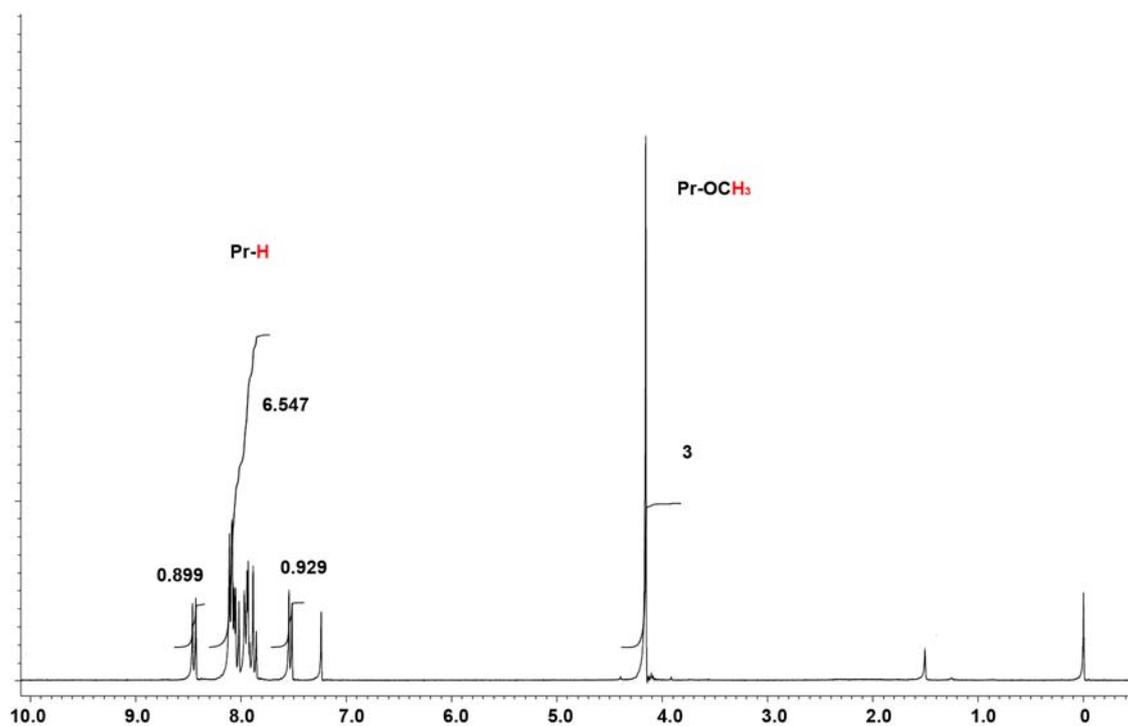
**Electronic Supplementary Information for**  
**Electrosynthesis of oligo(methoxyl pyrene) for turn-on**  
**fluorescence detection of volatile aromatic compounds**

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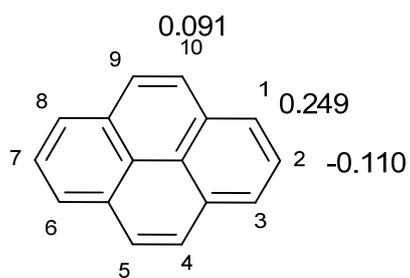
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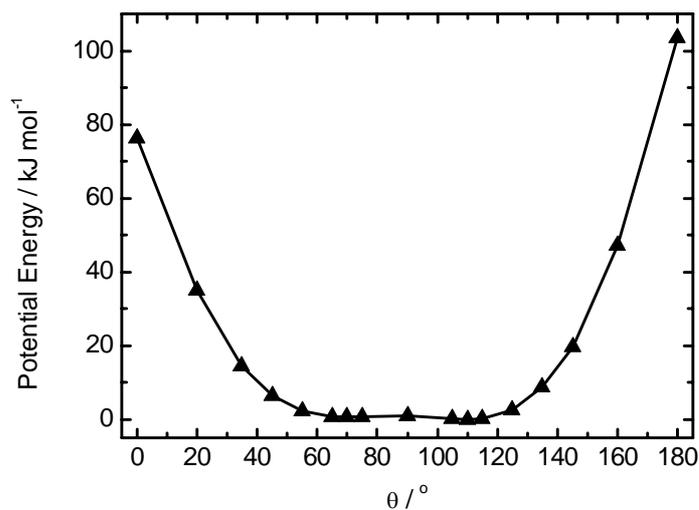
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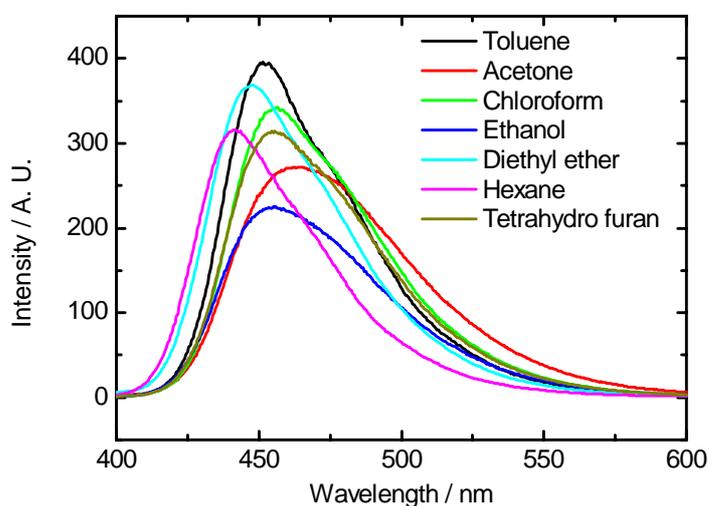
**Fig. S1.** <sup>1</sup>H NMR spectrum of MOPr.



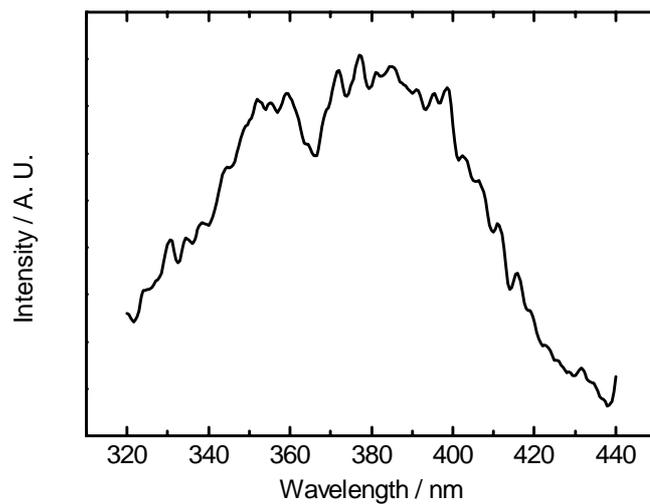
**Fig. S2.** Spin density distribution of pyrene radical cation.



**Fig. S3.** Potential energy curve of 6-6' MOPr<sub>2</sub> obtained by density functional theory calculation (B3LYP/6-31G\*). During the calculation, dihedral angle C8-C6-C6'-C8' was frozen at desired value, while geometry optimization was performed and total energy was calculated.



**Fig. S4.** Fluorescence emission spectra of 5 × 10<sup>-5</sup> M OMOPr in different solvents.



**Fig. S5.** Fluorescence excitation spectrum of  $5 \times 10^{-5}$  M OMOPr monitored at 594 nm in THF/water mixed solvent (1:9 by volume).