

# Novel Yellow Azo Pyridone Derivatives with Different Halide Atoms for Image-Sensor Color Filters

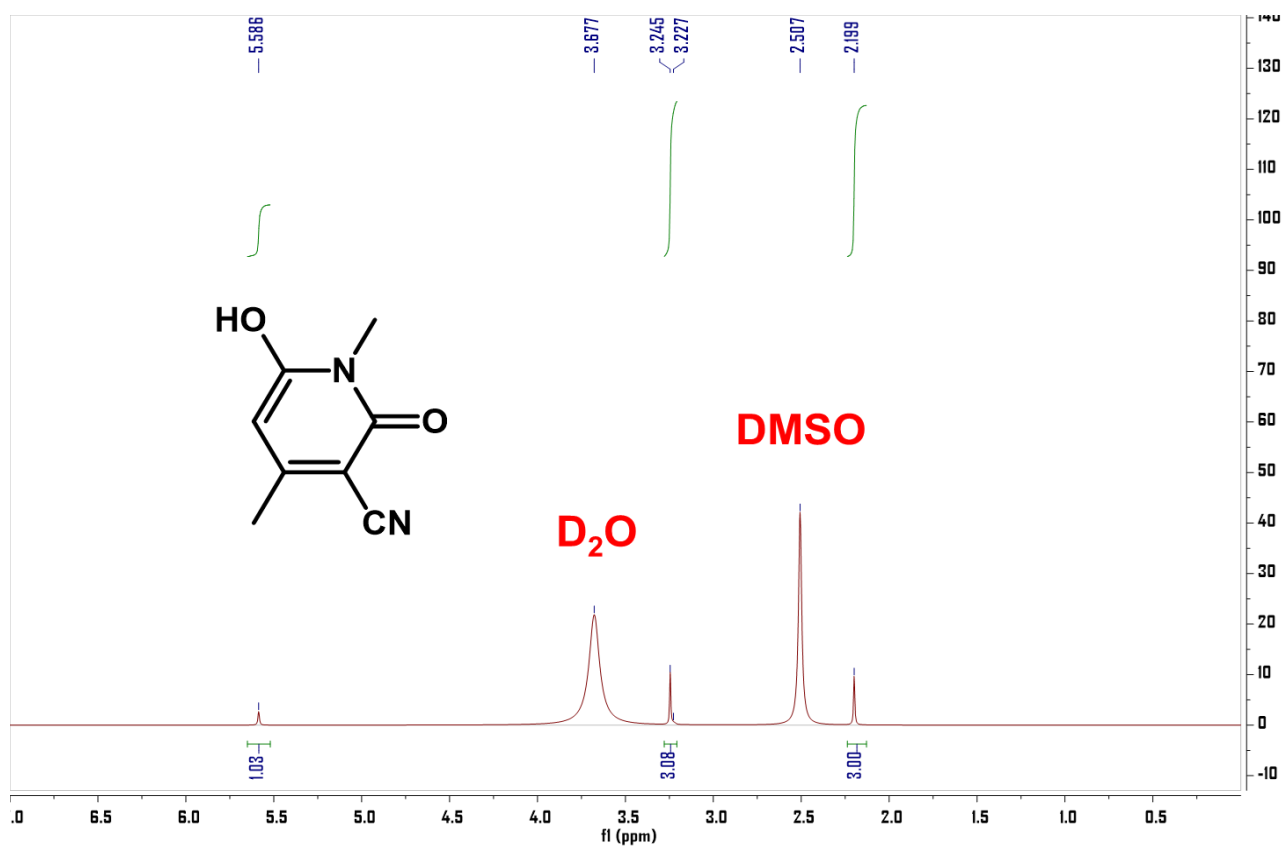
Sunwoo Park<sup>a,1</sup>, Yuna Kang<sup>a,1</sup>, Hyukmin Kwon<sup>a</sup>, Seokwoo Kang<sup>a</sup>, Hayoon Lee<sup>a</sup>, Chun Yoon<sup>b</sup> and Jongwook Park<sup>a,\*</sup>

<sup>a</sup>Integrated Engineering, Department of Chemical Engineering, Kyung Hee University, Yongin 17104, Korea

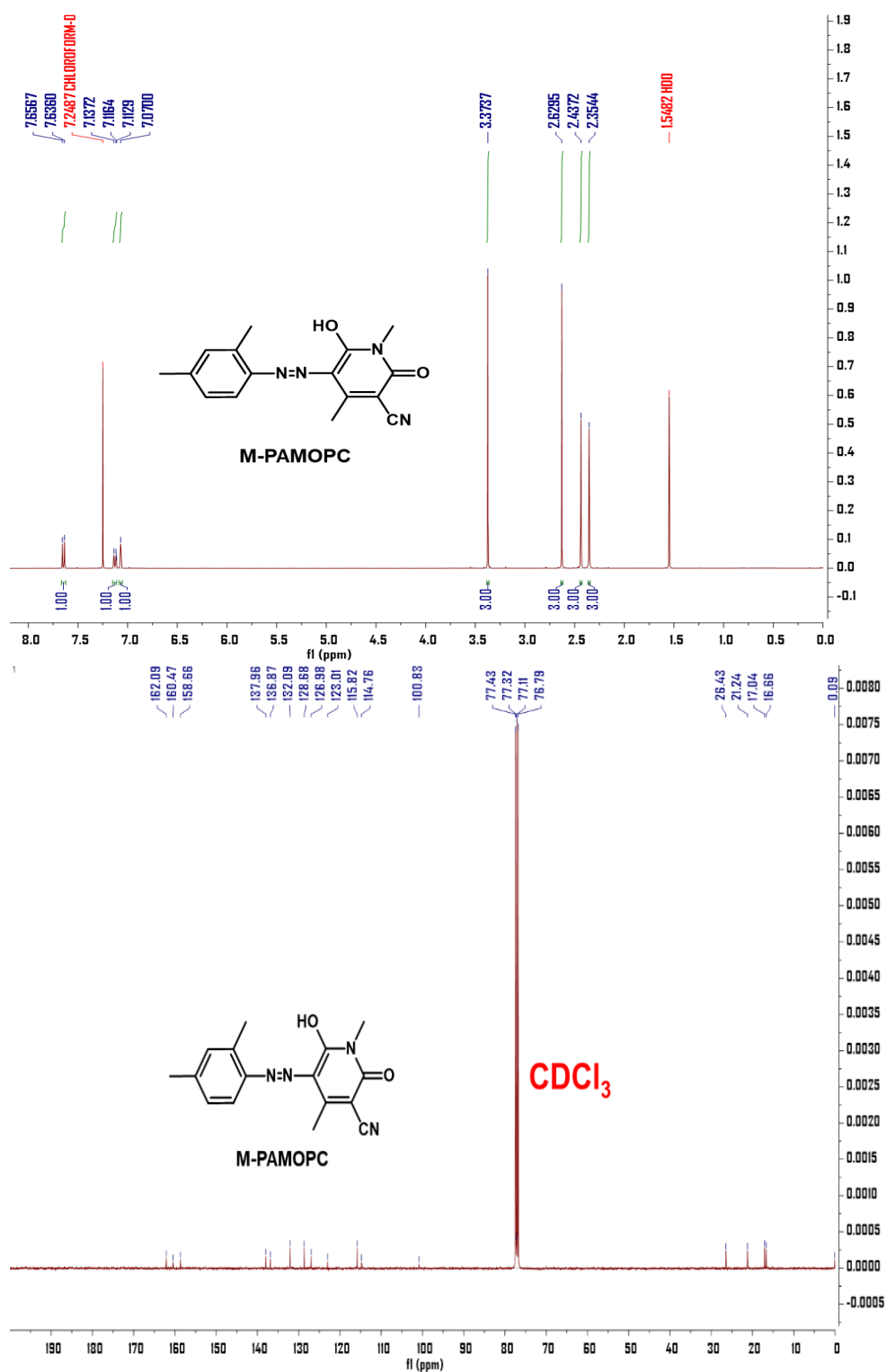
<sup>b</sup>Department of Chemistry, Sejong University, 98 Gunja-dong, Gwangjin-gu, Seoul 143-747, Korea

\*E-mail: jongpark@khu.ac.kr

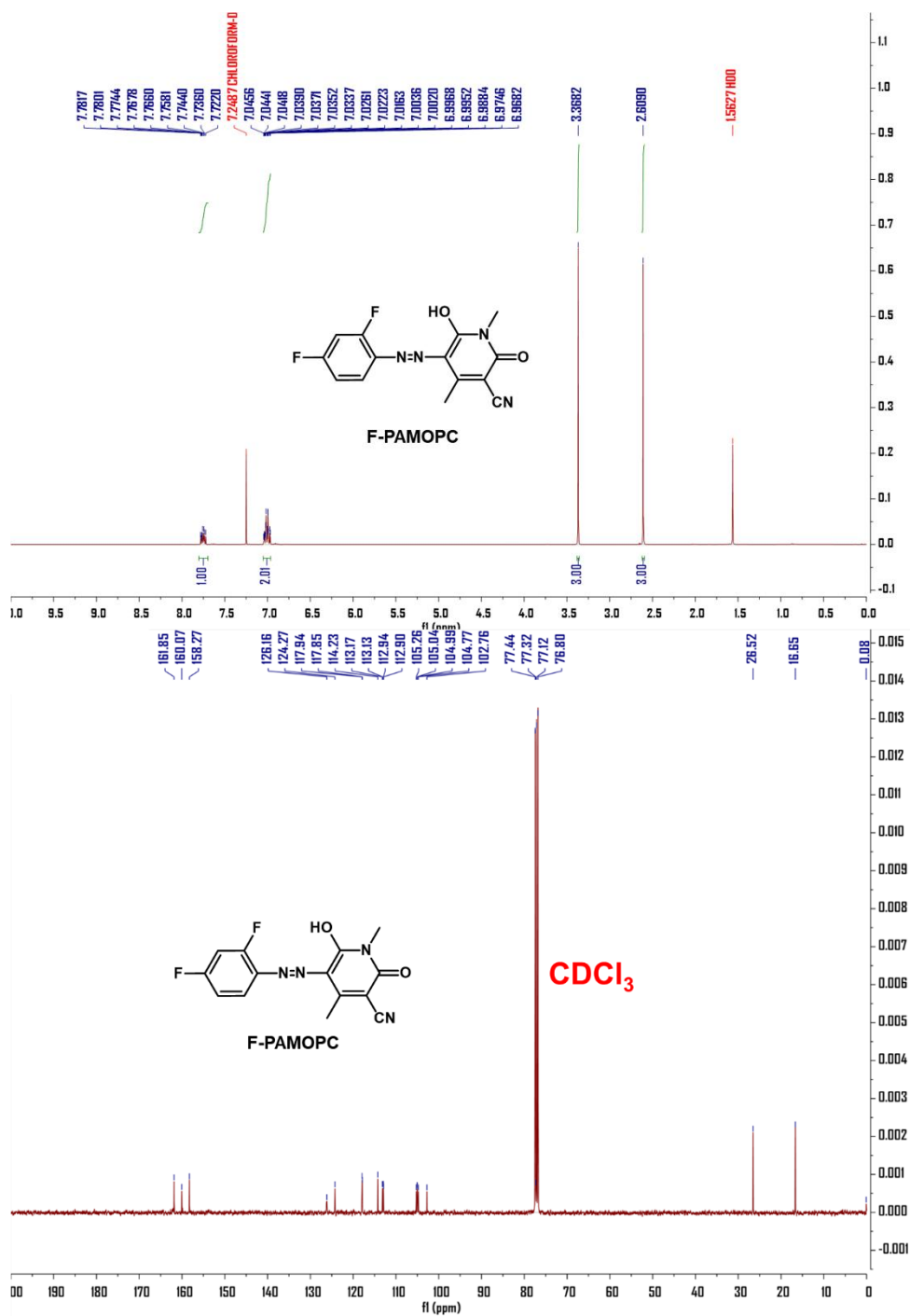
<sup>1</sup>Sunwoo Park and Yuna Kang contributed equally to this work as first authors.



**Figure S1.** <sup>1</sup>H NMR spectra of 6-hydroxy-1,4-dimethyl-2-oxo-1,2-dihydropyridine-3-carbonitrile



**Figure S2.** <sup>1</sup>H NMR(up) and <sup>13</sup>C NMR (down) spectra of M-PAMOPC



**Figure S3.** <sup>1</sup>H NMR(up) and <sup>13</sup>C NMR (down) spectra of F-PAMOPC

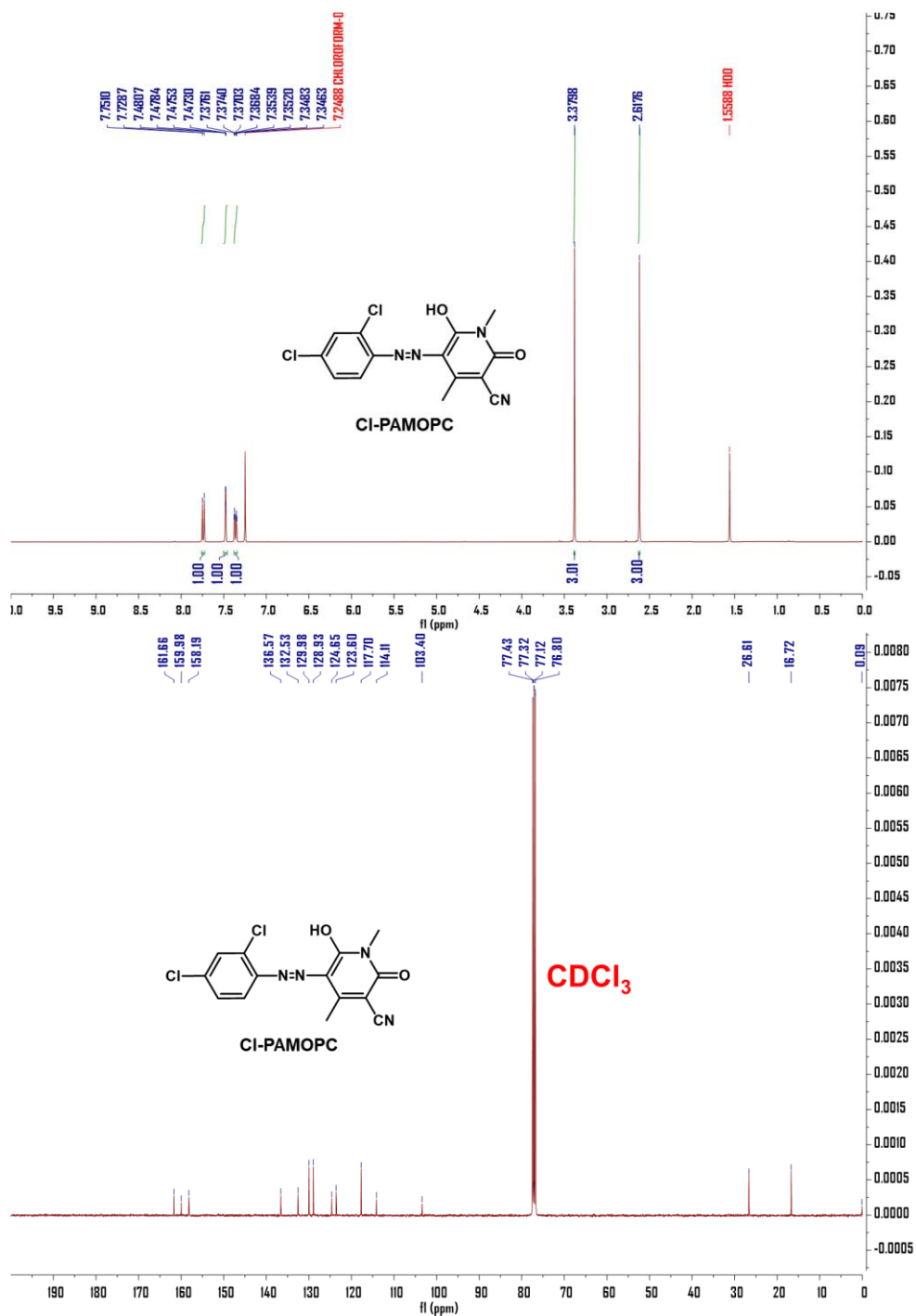
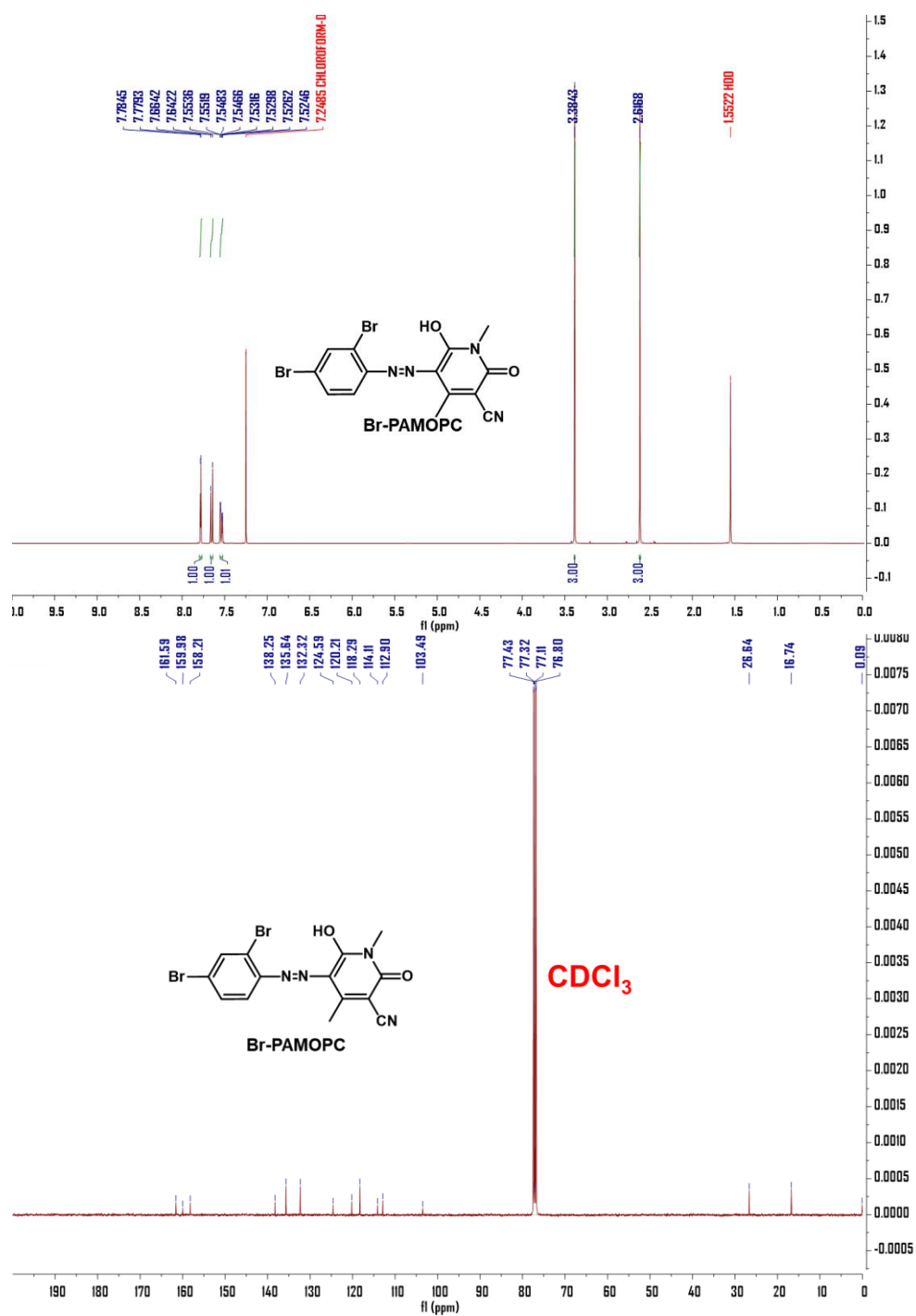
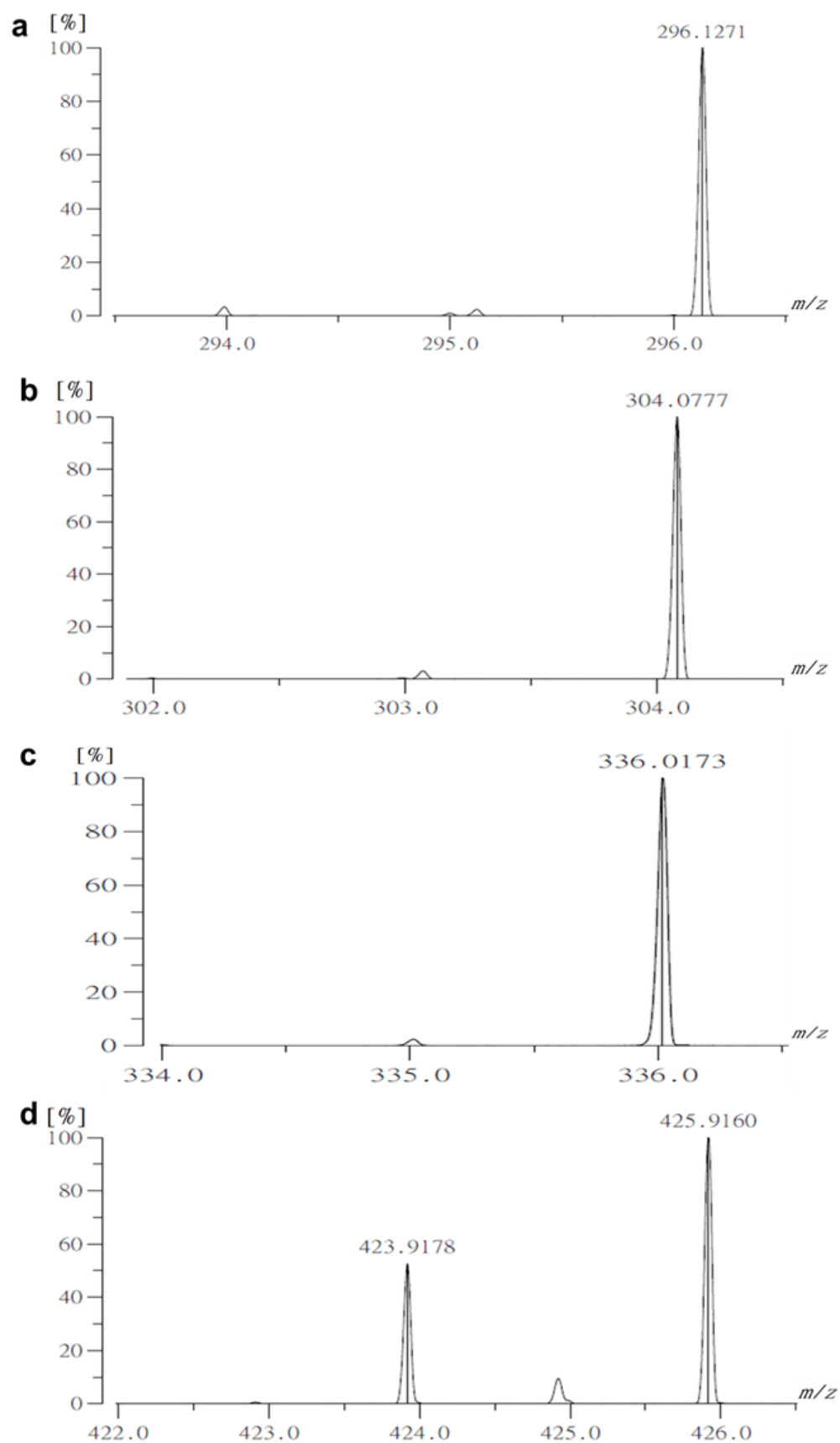


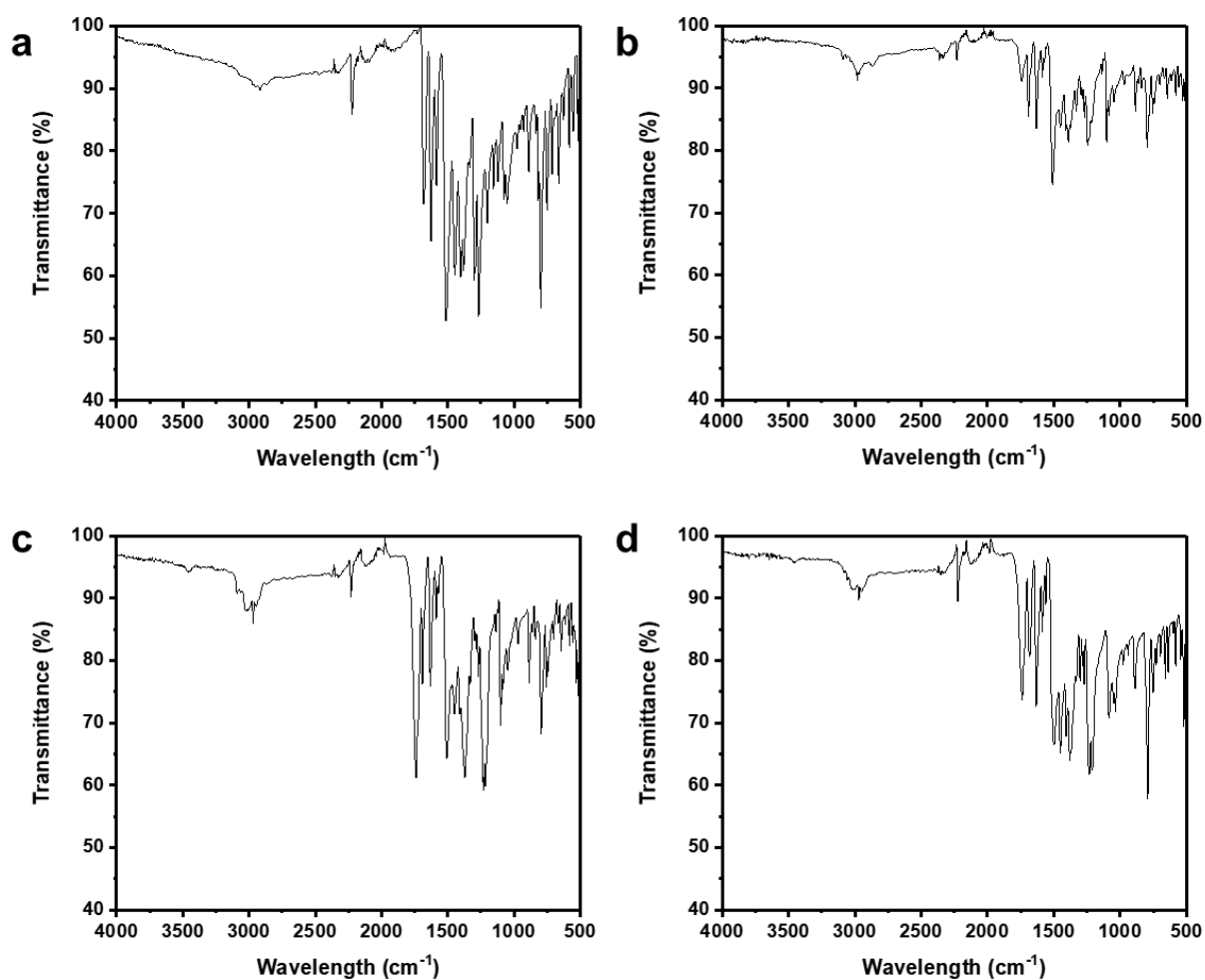
Figure S4. <sup>1</sup>H NMR(up) and <sup>13</sup>C NMR (down) spectra of Cl-PAMOPC



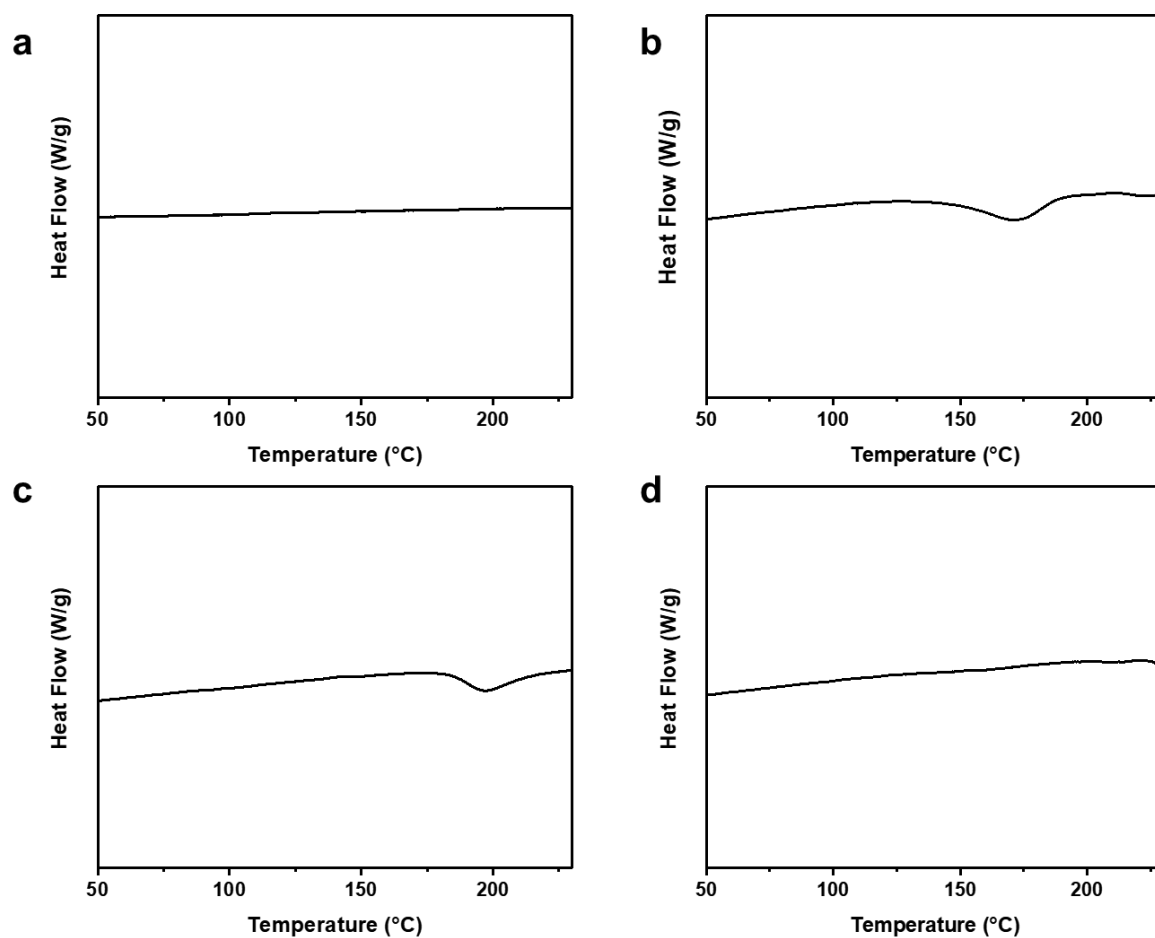
**Figure S5.** <sup>1</sup>H NMR(up) and <sup>13</sup>C NMR (down) spectra of Br-PAMOPC



**Figure. S6.** high resolution mass spectroscopy (HR-MS) spectra of (a) M-PAMOPC, (b) F-PAMOPC, (c) Cl-PAMOPC, and (d) Br-PAMOPC

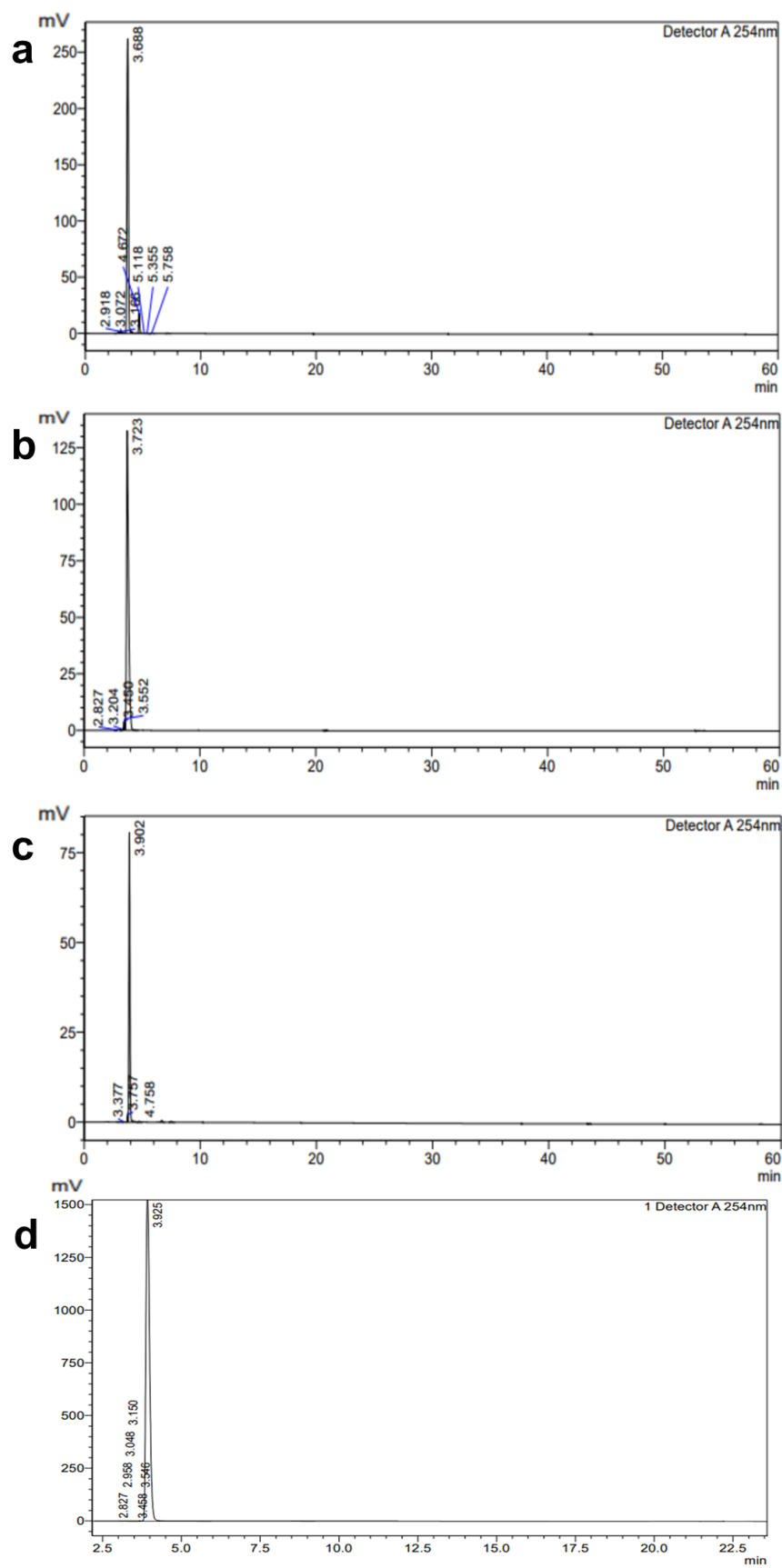


**Figure S7.** Fourier transform infrared spectroscopy (FTIR) spectra of (a) M-PAMOPC, (b) F-PAMOPC, (c) Cl-PAMOPC, and (d) Br-PAMOPC



**Figure S8.** Differential scanning calorimetry (DSC) curves of (a) M-PAMOPC, (b) F-PAMOPC, (c) Cl-PAMOPC, and (d) Br-PAMOPC





**Figure S9.** High performance liquid chromatography (HPLC) chromatograms of (a) M-PAMOPC, (b) F-PAMOPC, (c) Cl-PAMOPC, and (d) Br-PAMOPC