

Supporting information

Novel 1,8-naphthalimide derivatives for standard-red organic light-emitting device applications

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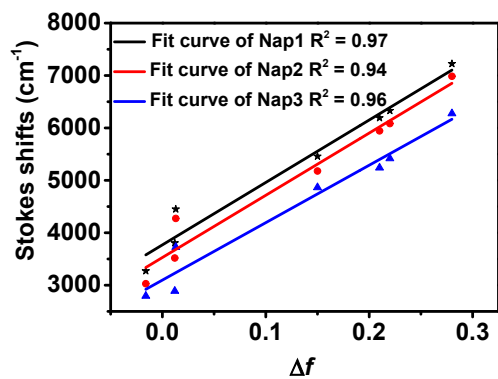


Figure S1 Lippert-Mataga plots of the wave number of the Stokes shifts ($\Delta\nu$) of **Nap1~3** versus solvent polarity parameter ($\Delta f = f(\epsilon) - f(n^2)$).

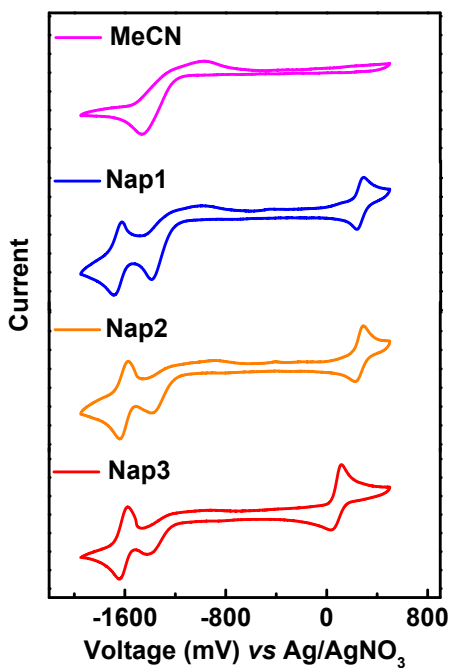


Figure S2 Cyclic voltammograms of blank MeCN solution and **Nap1~3** solution samples. The oxidation and reduction potentials were determined relative to Ag/Ag^+ in 5×10^{-4} M acetonitrile solutions, using Fc/Fc^+ as external reference.

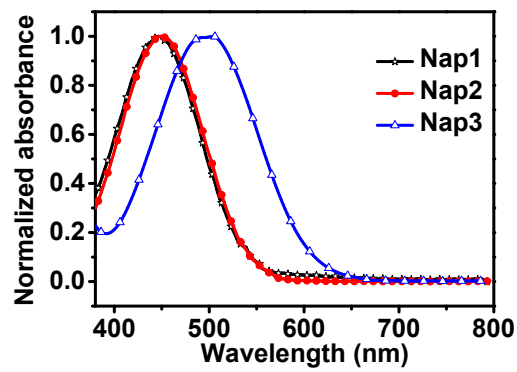


Figure S3 Normalized absorption spectra of Nap1~3 in 5×10^{-5} M acetonitrile solutions.

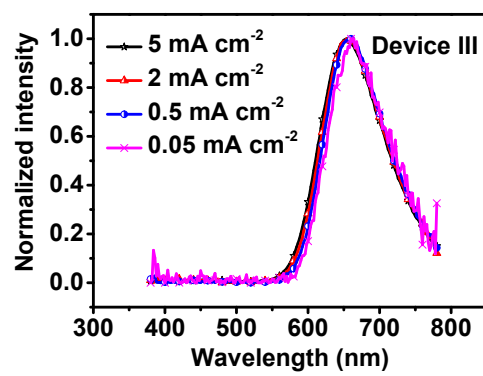
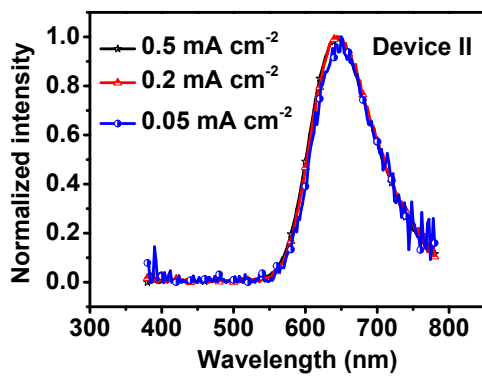
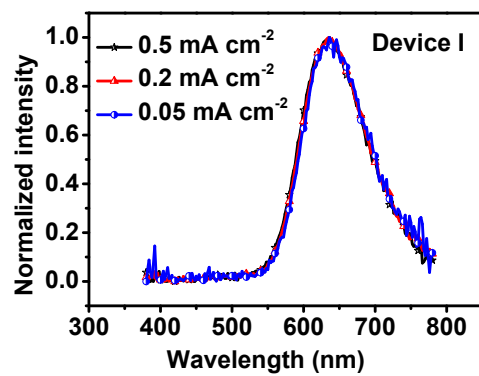


Figure S4 EL spectra of devices I , II and III under different driving current densities.

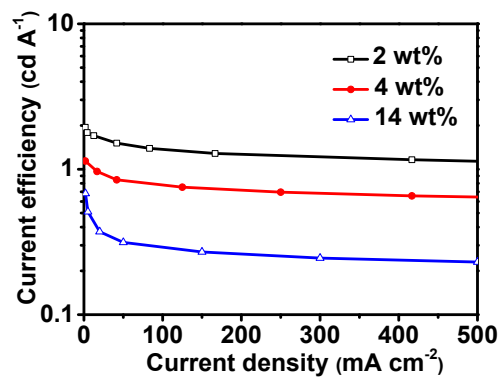
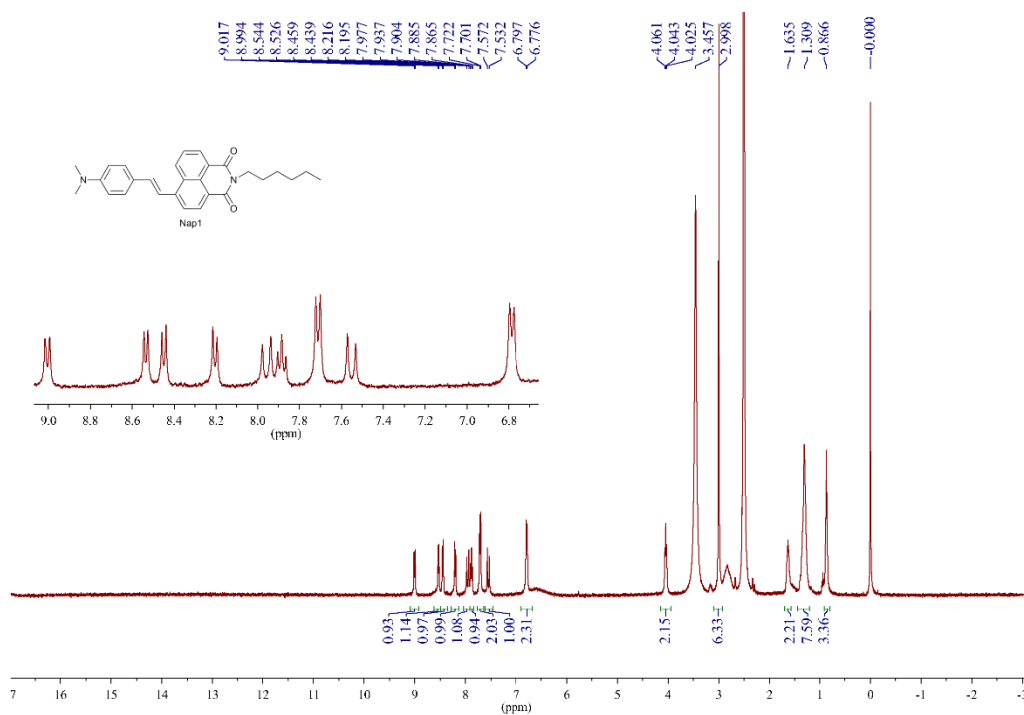
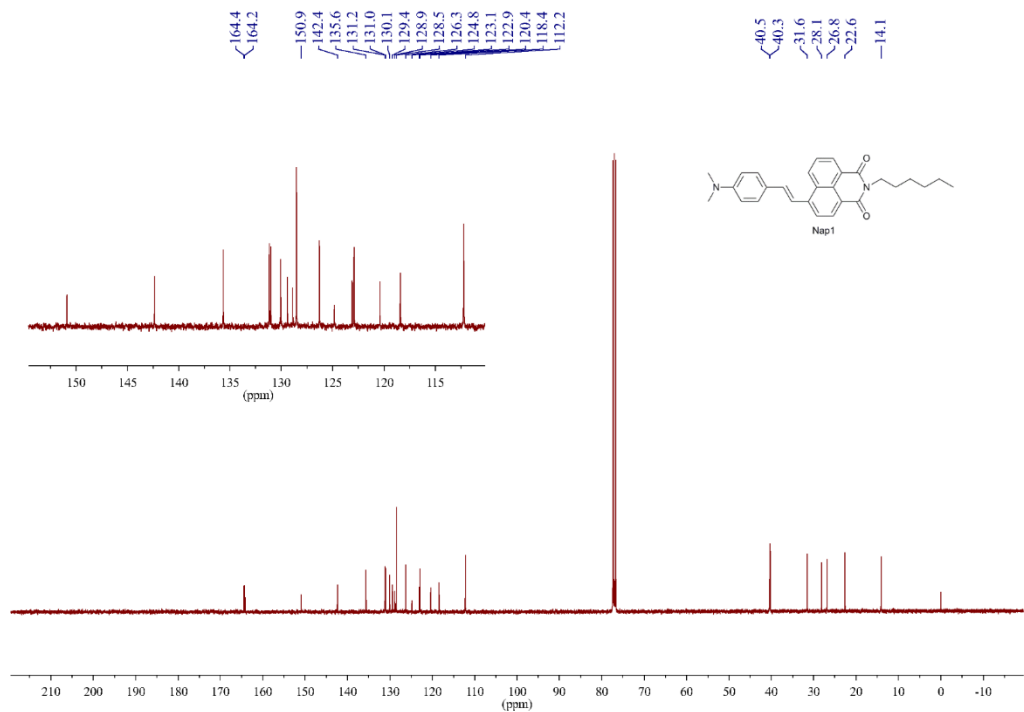


Figure S5 Current efficiency-current density characteristics of devices I, II, and III.

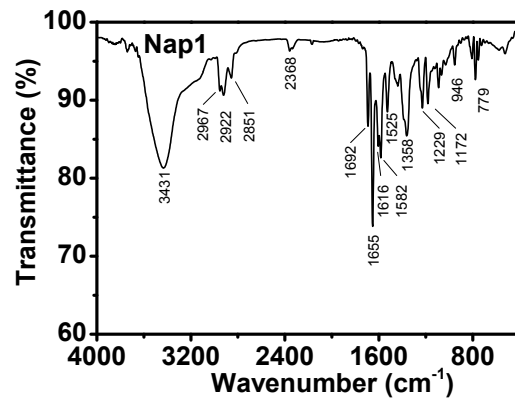
^1H NMR, ^{13}C NMR, FT-IR and HRMS spectra of Nap1~3.



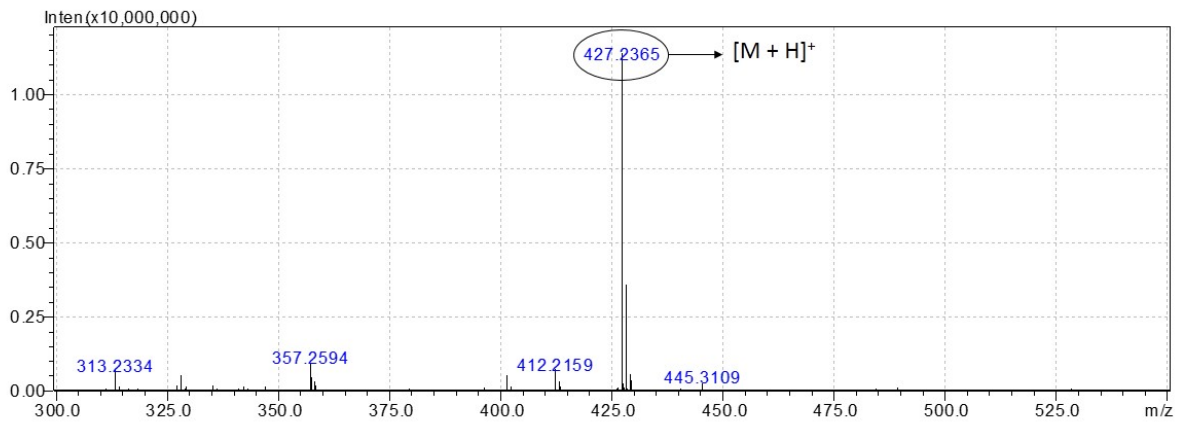
^1H NMR spectrum of Nap1.



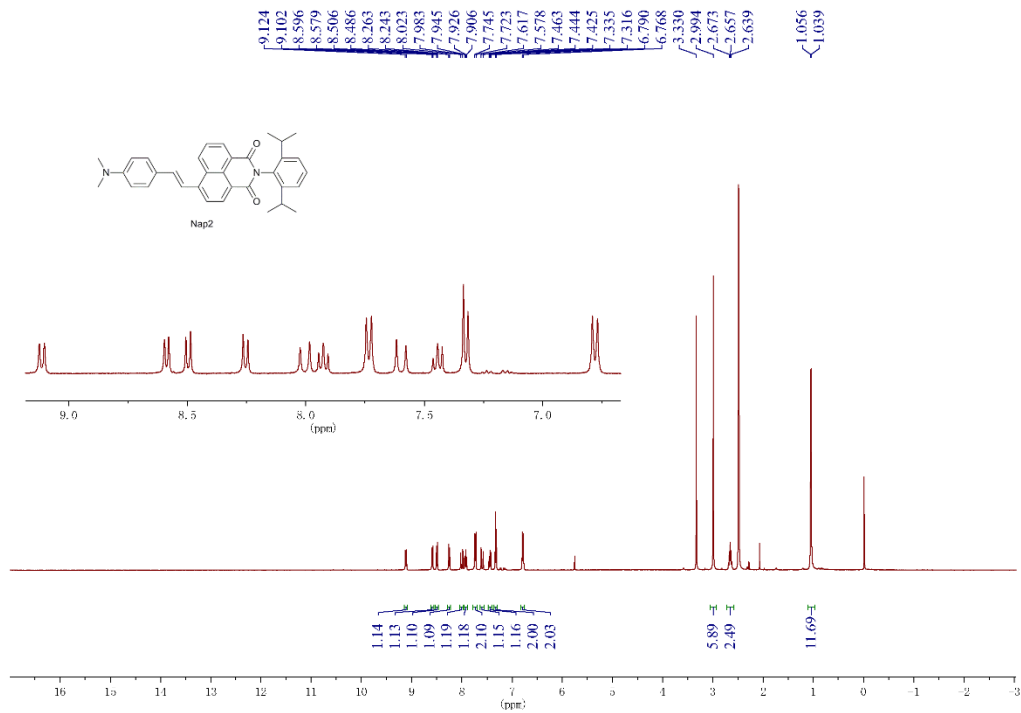
^{13}C NMR spectrum of Nap1.



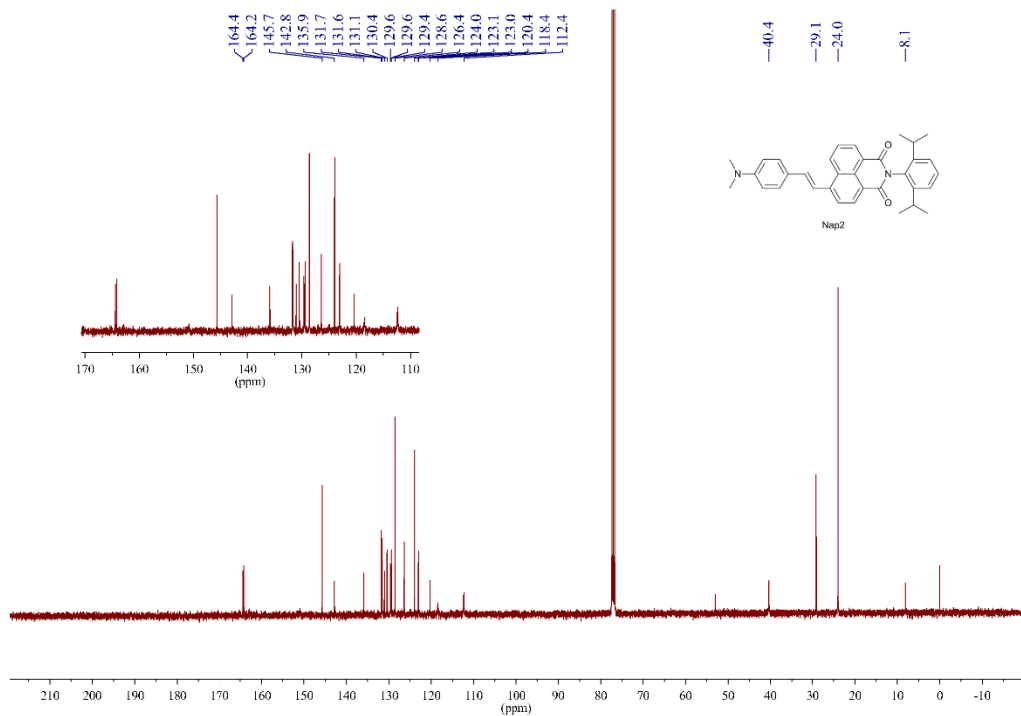
FT-IR spectrum of **Nap1**



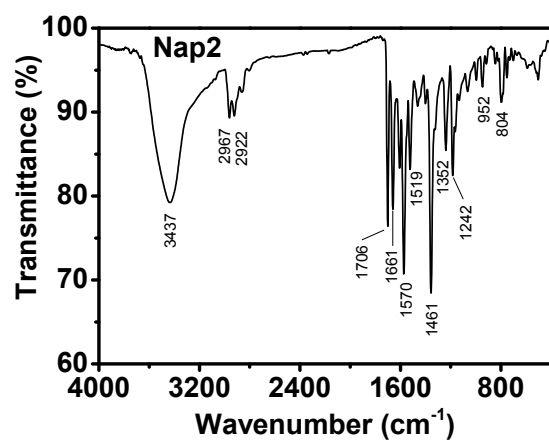
HRMS spectrum of **Nap1**.



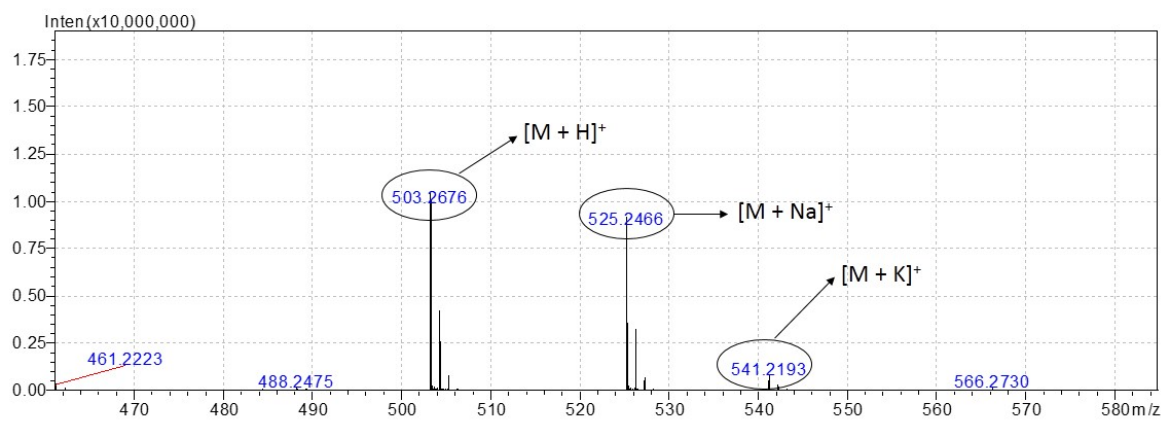
¹H NMR spectrum of Nap2.



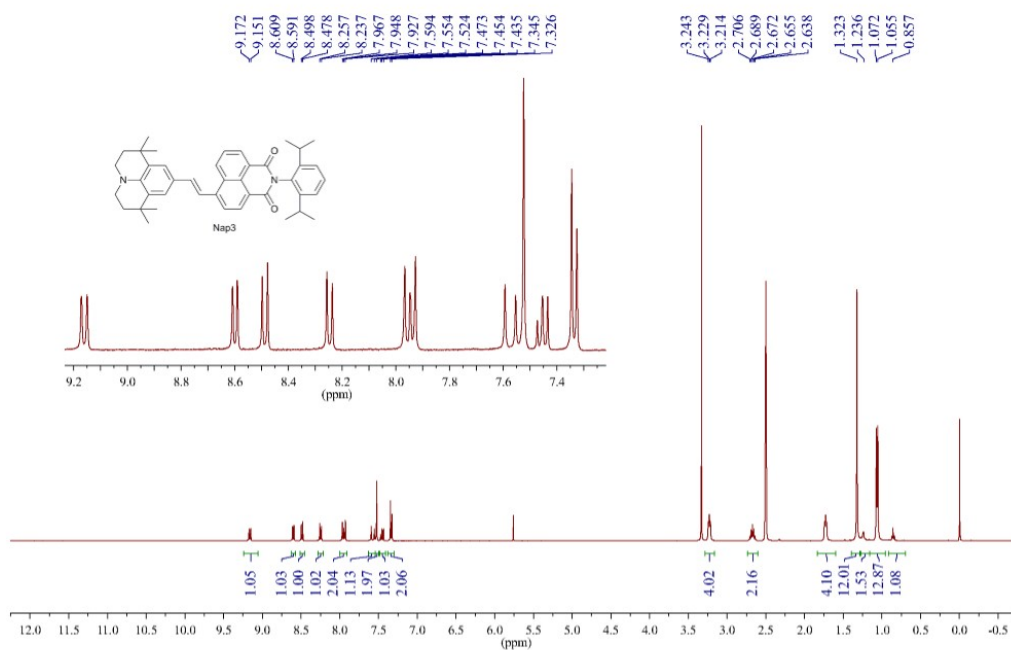
¹³C NMR spectrum of Nap2.



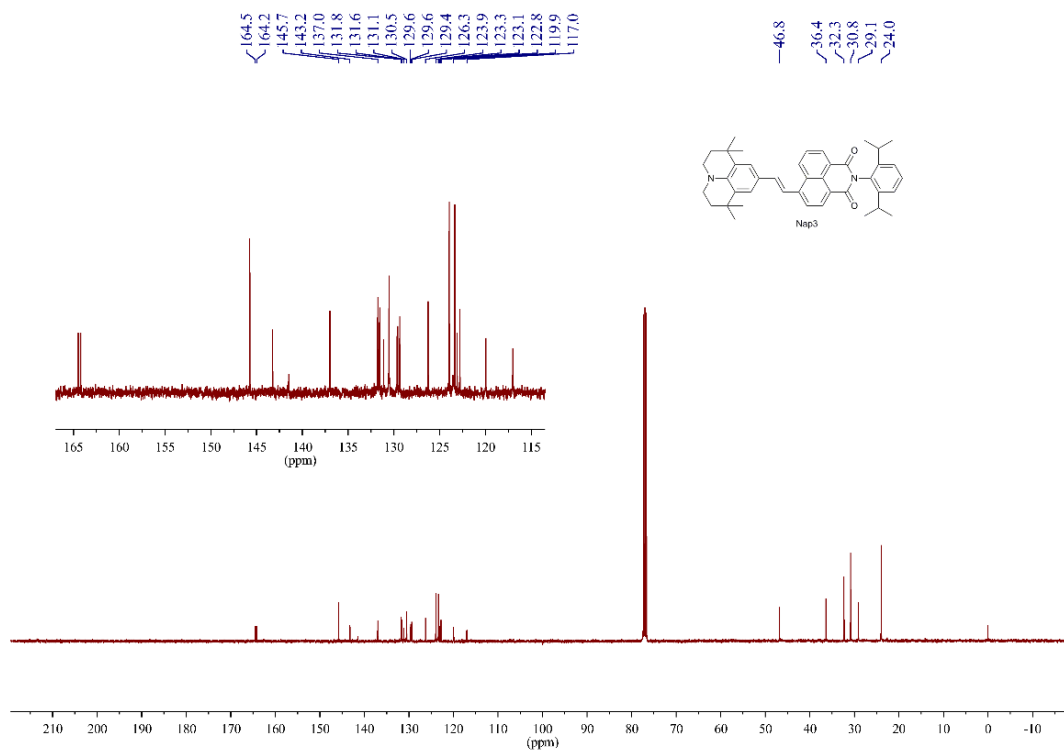
FT-IR spectrum of Nap2.



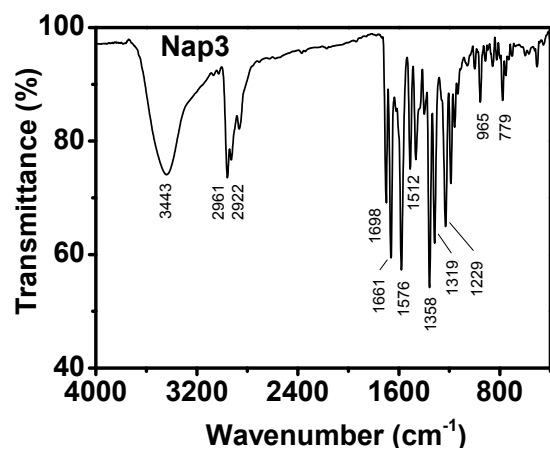
HRMS spectrum of Nap2.



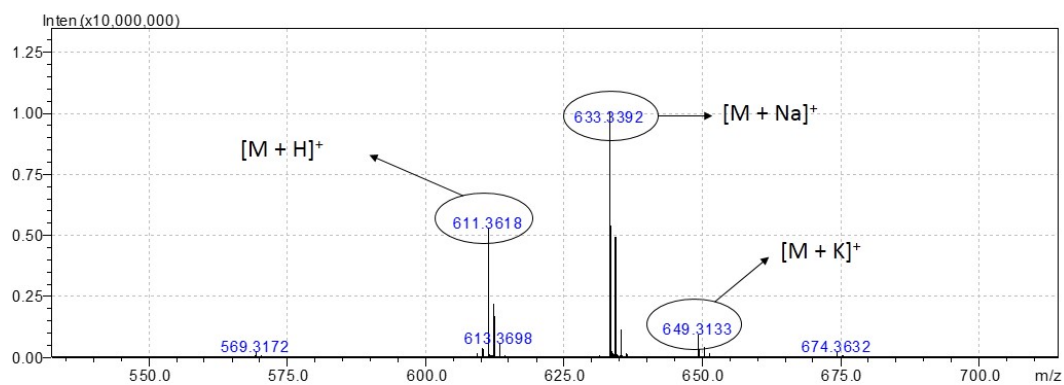
¹H NMR spectrum of Nap3.



¹³C NMR spectrum of Nap3.



FT-IR spectrum of Nap3.



HRMS spectrum of Nap3.