

Supporting Information

High Performance Microwave Absorption of Lightweight and Porous Non-carbon-based Polymeric Monoliths via Gel Emulsion Template

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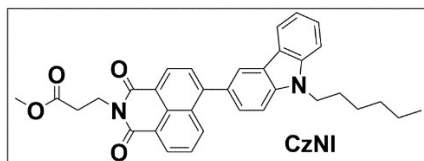
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Scheme S1. The structure of naphthalimide (CzNI) fluorescent probe.



Figure S1. Gelation behaviors of the acidified aramid III fiber to the mixtures of water with different monomers, which are (a) *tert*-butyl methacrylate (*t*-BMA); (b) acrylonitrile (AN); (c) methyl methacrylate (MMA); (d) styrene (St); (e) butyl acrylate (BA); (f) glycidyl methacrylate (GMA) and (g) phenyl methacrylate (PMA), respectively.



Figure S2. Gelation behaviors of the acidified aramid III fiber to the mixtures of St, DVB, 2DPrEnF and water. The total volume of each mixture was kept at 2500 μ L. Water content were (a) 0%, (b) 10%, (c) 20%, (d) 30%, (e) 40%, (f) 50%, (g) 60%, (h) 70%, (i) 80%, (j) 90% and (k) 100%, respectively.

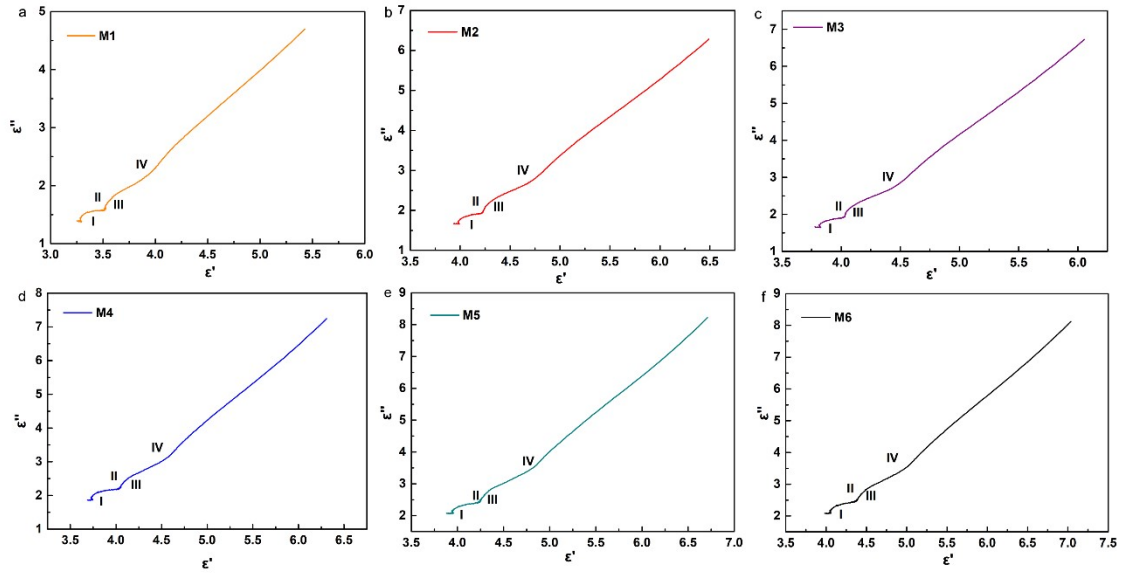


Figure S3. Cole-Cole curves of a) M1, b) M2, c) M3, d) M4, e) M5 and f) M6.

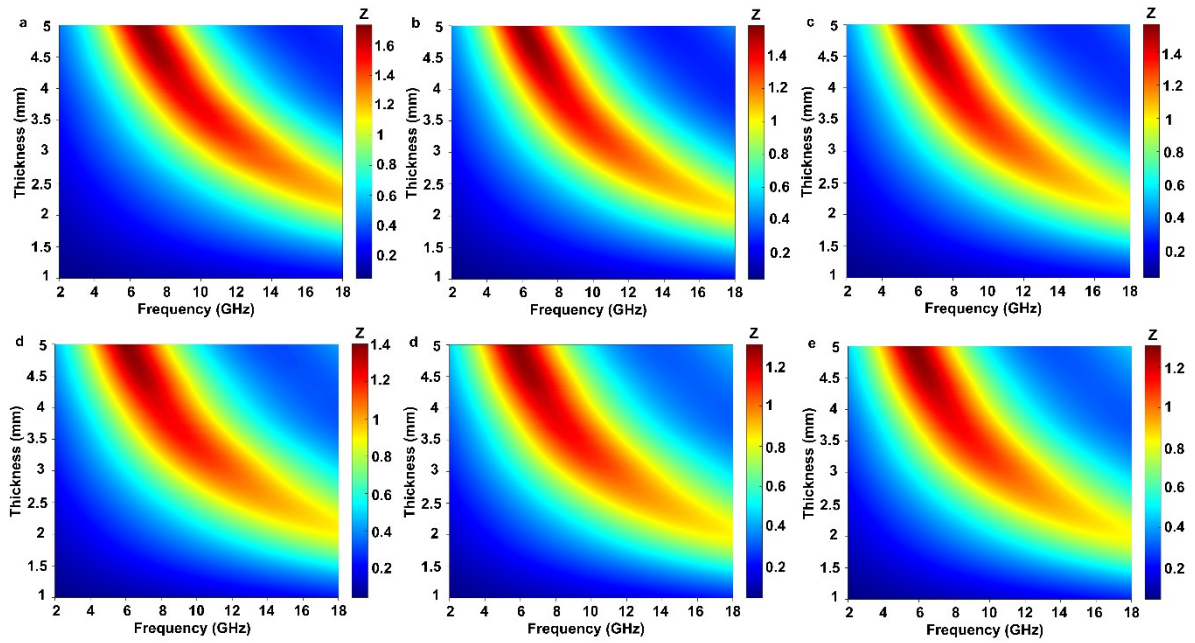


Figure S4. Impedance matching maps of a) M1, b) M2, c) M3, d) M4, e) M5 and f) M6.

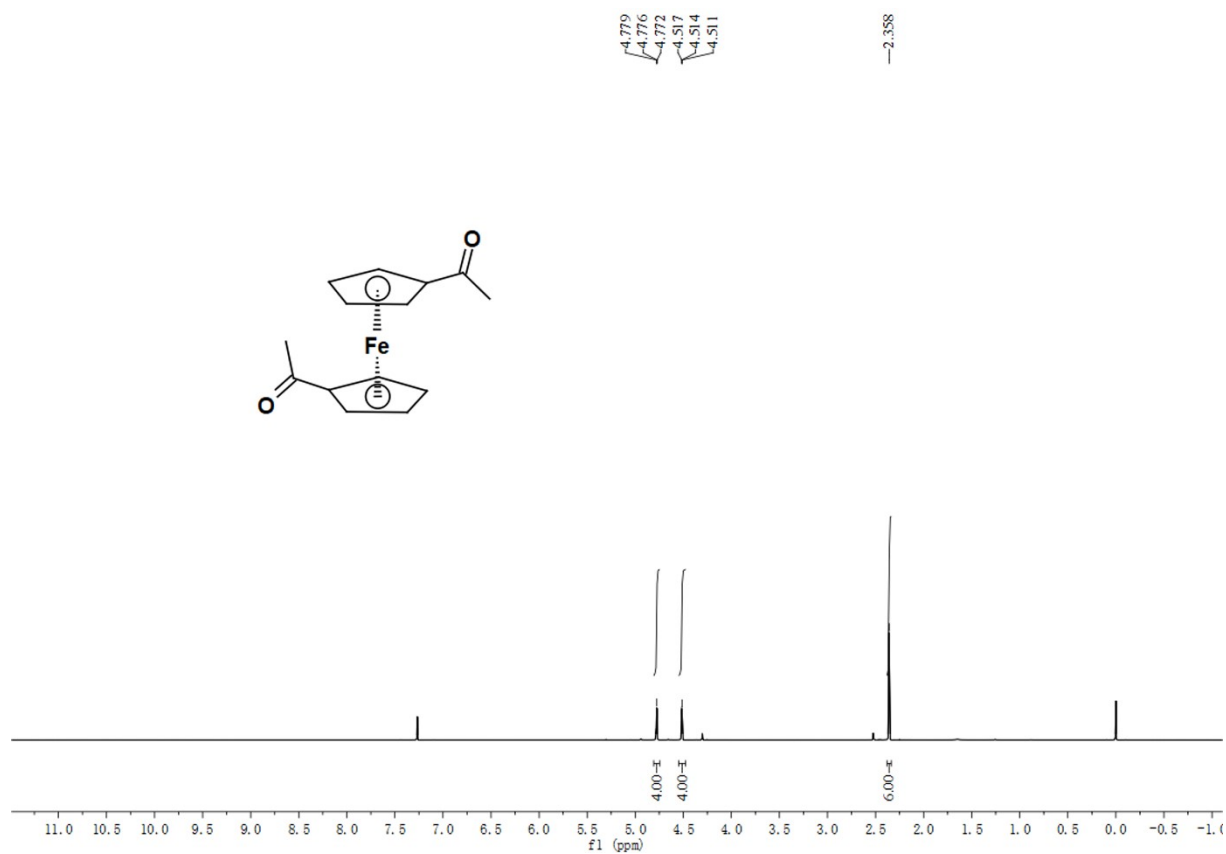


Figure S5. ^1H NMR spectrum of compound 1.

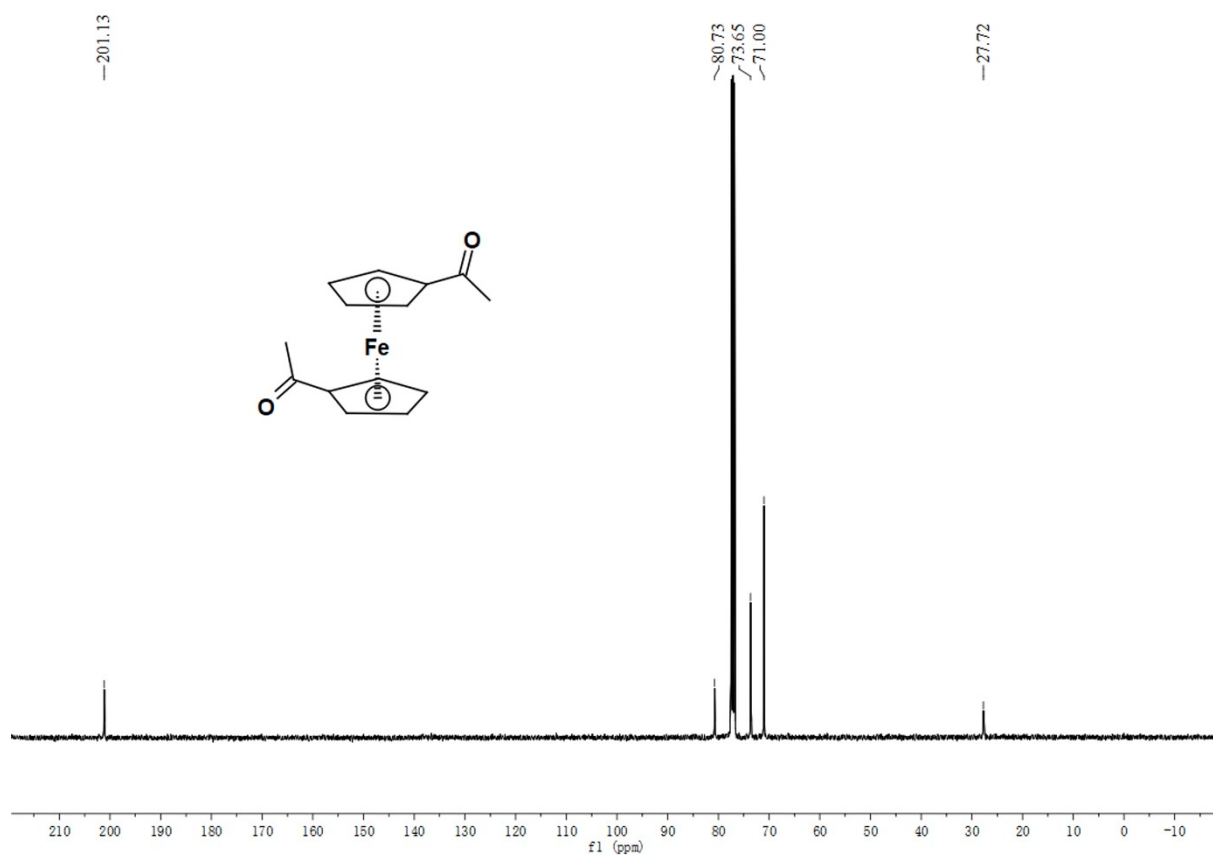


Figure S6. ^{13}C NMR spectrum of compound 1.

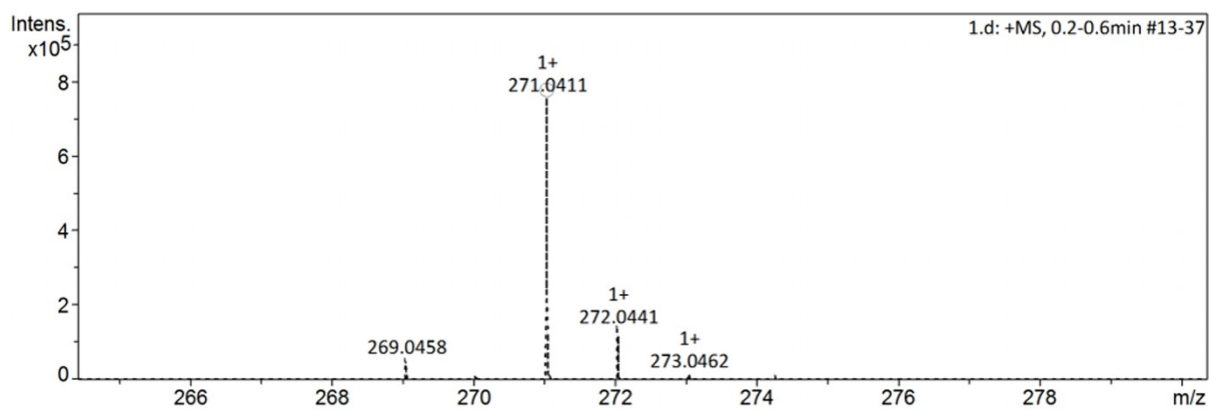


Figure S7. HRMS of compound 1.

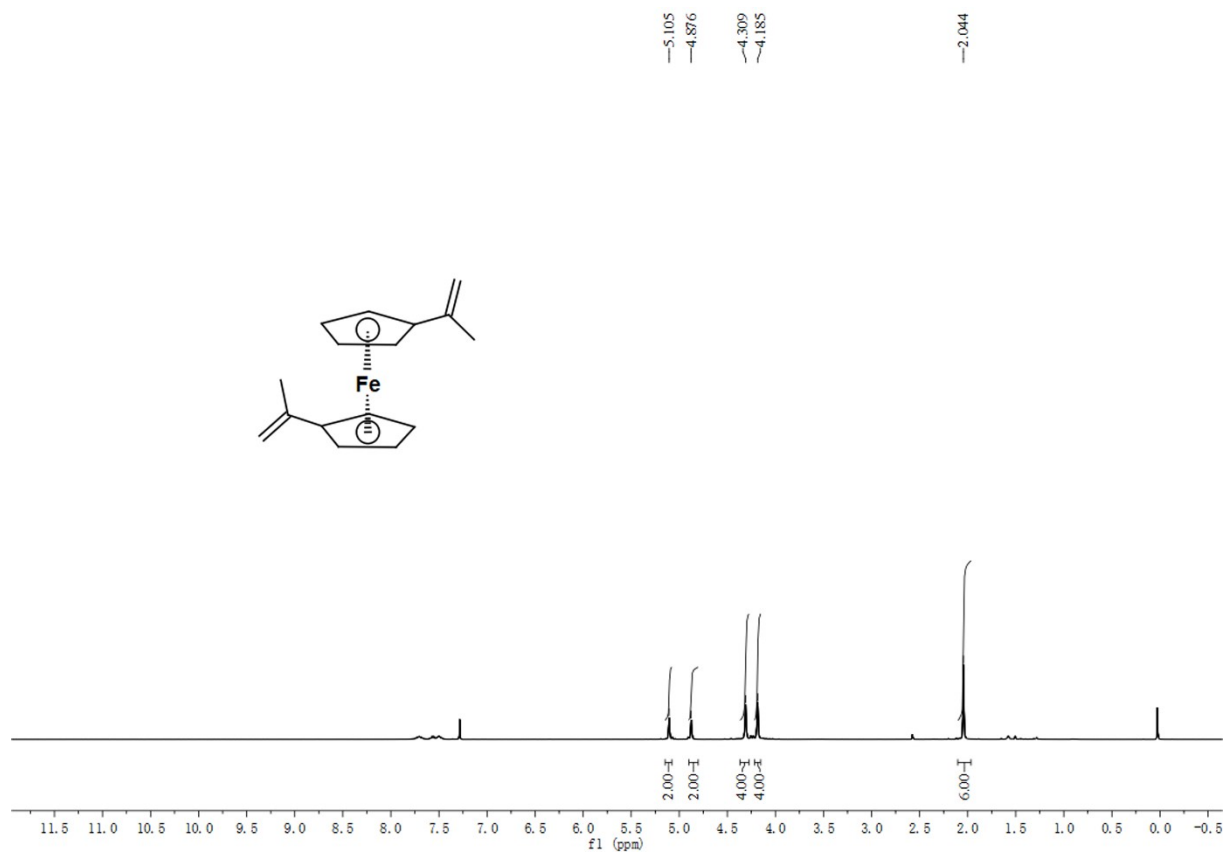


Figure S8. ¹H NMR spectrum of compound 2DPrEnF.

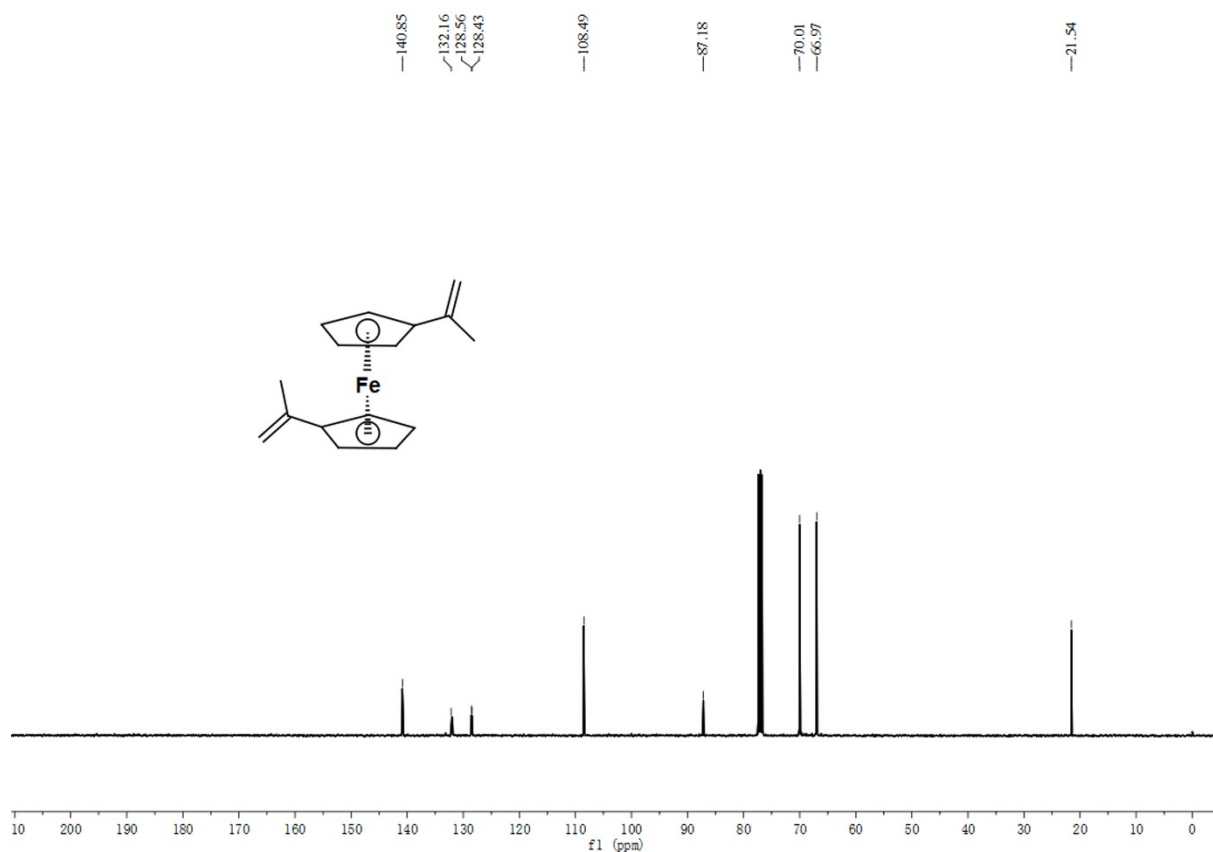


Figure S9. ^{13}C NMR spectrum of compound 2DPrEnF.

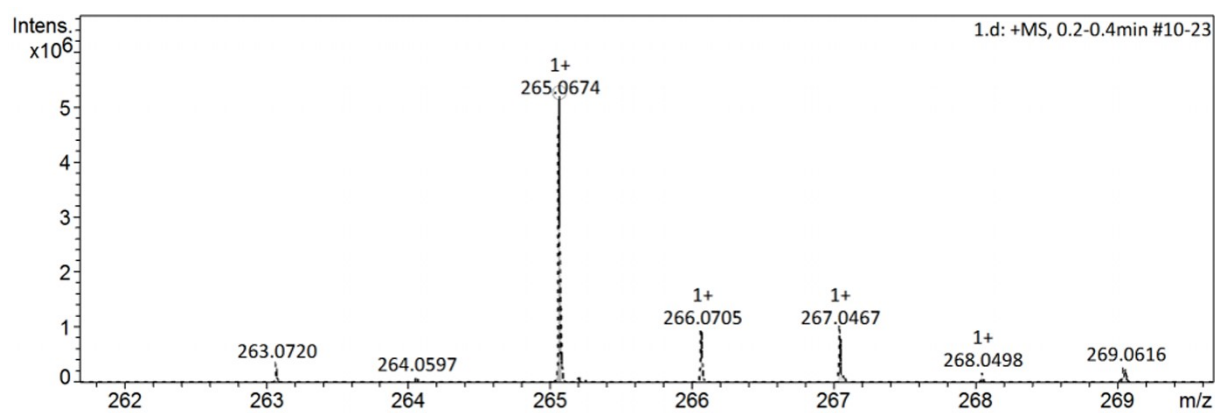


Figure S10. HRMS of compound 2DPrEnF.