Supporting Information

Facile One-Pot Synthesis and Self-Healing Properties of Tetrazole-Based Metallopolymers in the Presence of Iron Salt

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Figure S1. IR spectra of the PAN-r-PnBA with the different ratio of MPs.



Figure S2. Storage modulus (G') and loss modulus (G'') values against the strain with PAN-*r*-PnBA during the dynamic strain sweep.





Figure S3. Storage modulus (G') and loss modulus (G'') values against the strain during the dynamic strain sweep. The values of storage modulus (G') and loss modulus (G'') were investigated by an immediate recovery after the 1000 % strain deformation (t = 200 s, $\gamma = 1$ %), (a) PAN-*r*-PnBA, (b) MPs (AN:Fe³⁺ = 75:1), (C) MPs (AN:Fe³⁺ = 50:1), (d) MPs (AN:Fe³⁺ = 25:1).



Figure S4. The stretch process of self-healing materials.



Figure S5. Self-healing processes of PAN-*r*-PnBA at ambient temperature (a) 0 min, (b) 10 min, (c) 30 min, (d) 1 hours, (e) 4 hours and (f) 12 hours, respectively.