

Electronic Supplementary Information (ESI) for

Construction of Dimetal-Containing Dithiolene and Schiff Base Conjugated Polymer Coating: Exploiting Metal Coordination as a Design Strategy for Improving Infrared Stealth Properties

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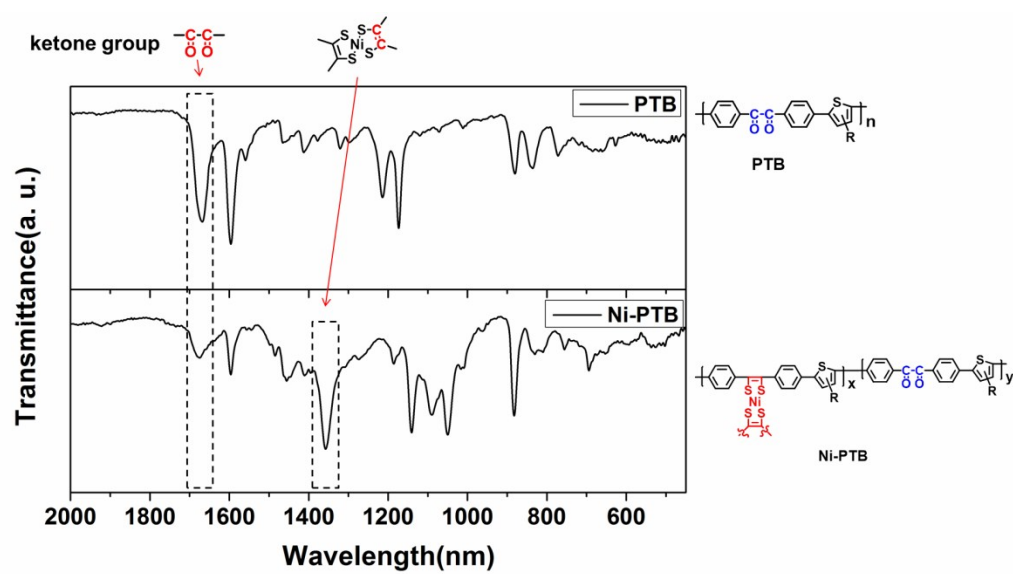
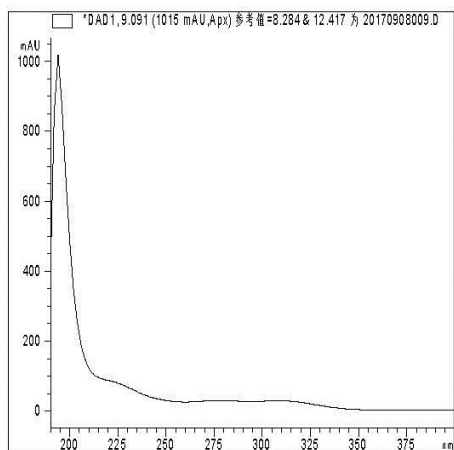
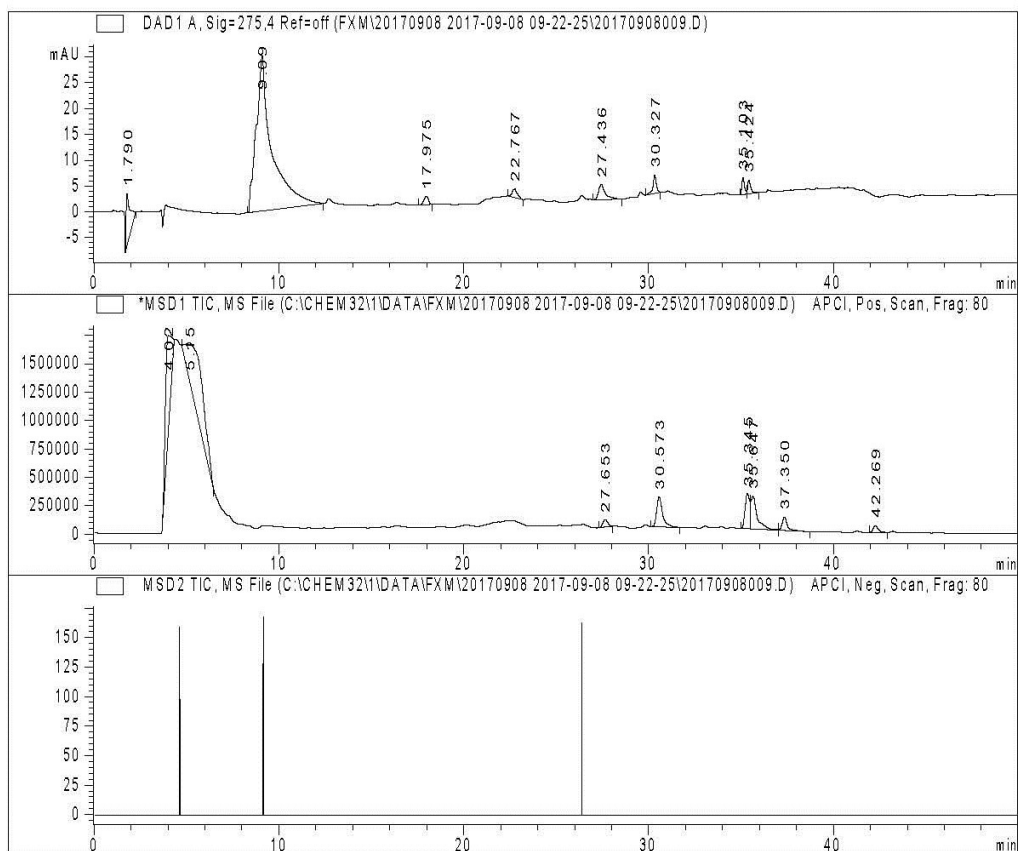
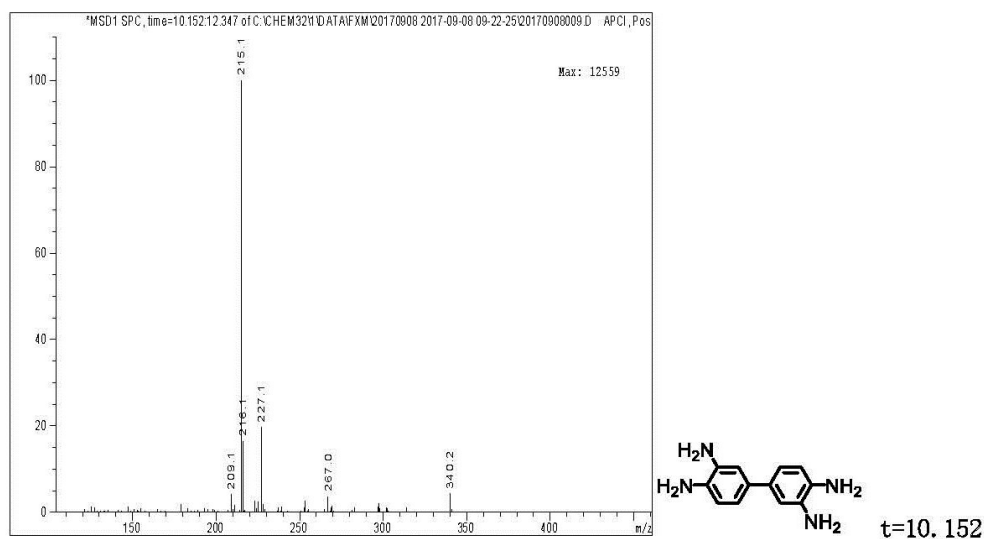


Figure S1. FT-IR spectra of PTB and Ni-PTB.



t=8.284



信号 1: DAD1 A, Sig=275, 4 Ref=off

峰 #	保留时间 [min]	类型	峰宽 [min]	峰面积 [mAU*s]	峰高 [mAU]	峰面积 %
1	1.790	BB	0.2086	148.51447	10.03726	6.8290
2	9.090	BB	0.7226	1779.84033	30.33154	81.8411
3	17.975	BB	0.2619	28.16806	1.61207	1.2952
4	22.767	BB	0.2458	33.11319	1.72655	1.5226
5	27.436	BB	0.3761	76.23282	2.92471	3.5054
6	30.327	BB	0.1801	45.41558	3.62733	2.0883
7	35.103	BV	0.1457	32.81525	3.36614	1.5089
8	35.424	VB	0.1627	30.65146	2.69562	1.4094
总量 :				2174.75116	56.32122	

Figure S2. HPLC-MS of polymers by Soxhlet extraction.

PS: products at other elution times are hard to confirm by their MS spectra, such as t=17.975 min, t=22.767 min and t=27.436 min.

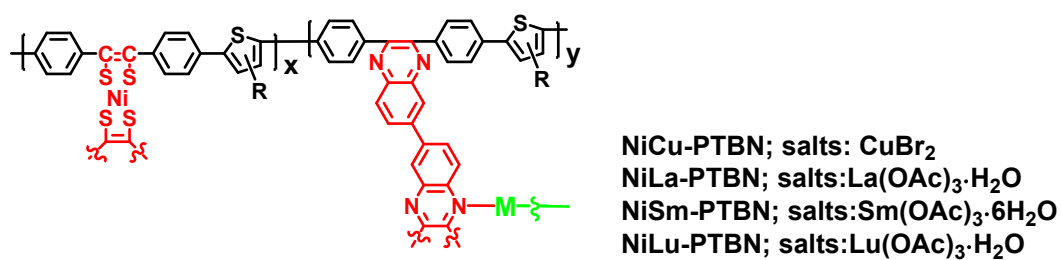
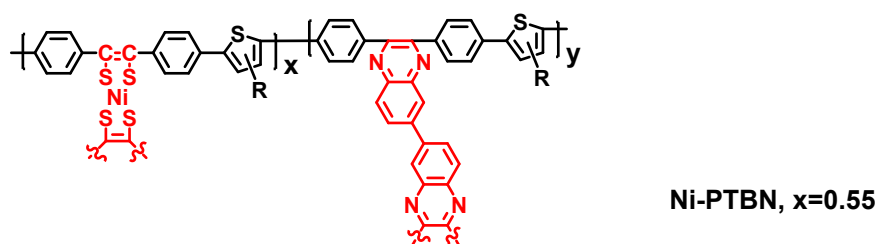
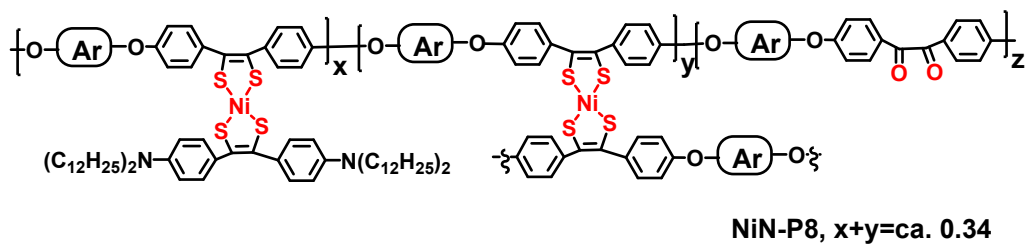
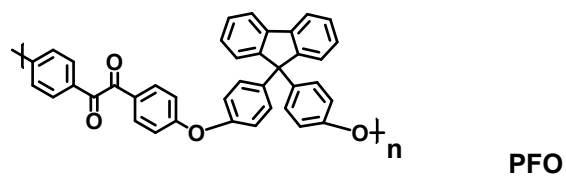


Figure S3. Structures of polymers in the comparison.

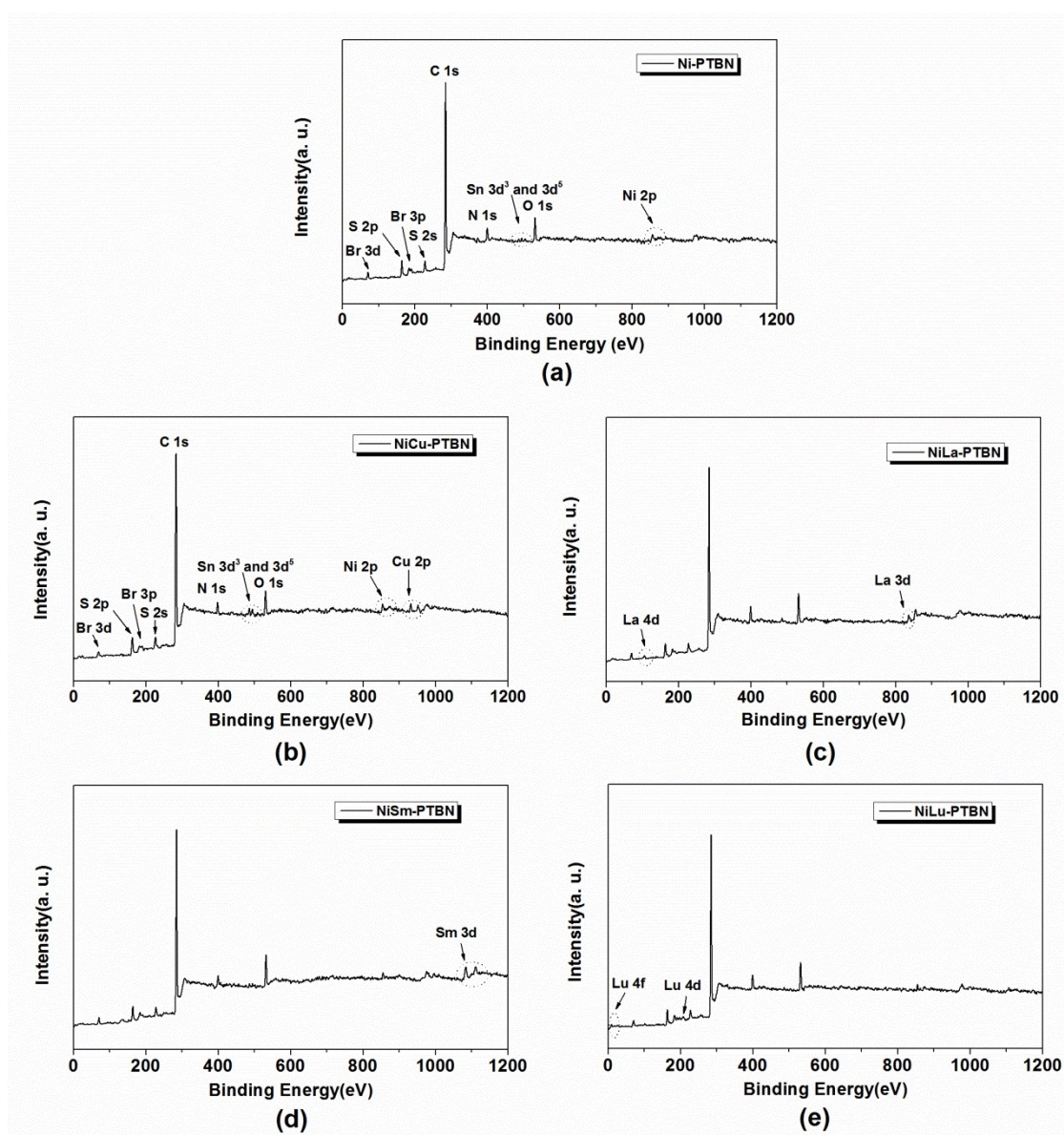


Figure S4. XPS spectra of polymers.



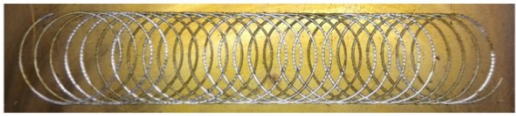


		Adhesion force (GB/T1720-1979)
Ni-PTBN		First grade
NiCu-PTBN		First grade
NiLa-PTBN		First grade
NiSm-PTBN		First grade
NiLu-PTBN		First grade

Figure S5. Adhesion force of polymer coatings.

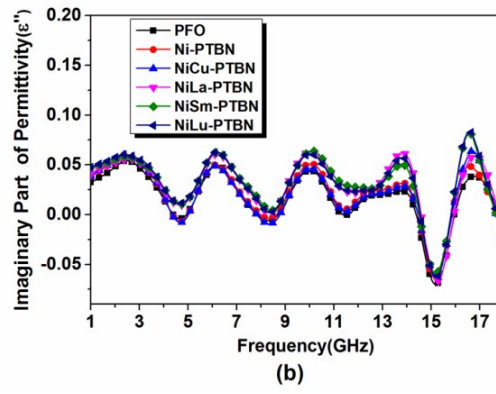
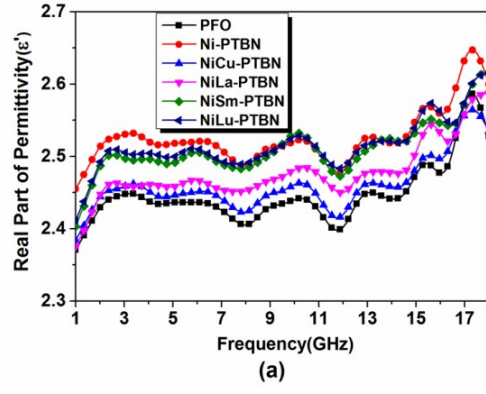
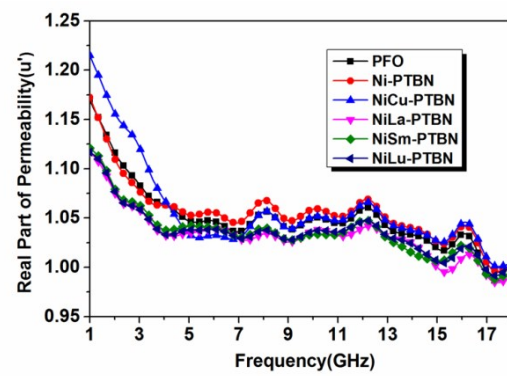
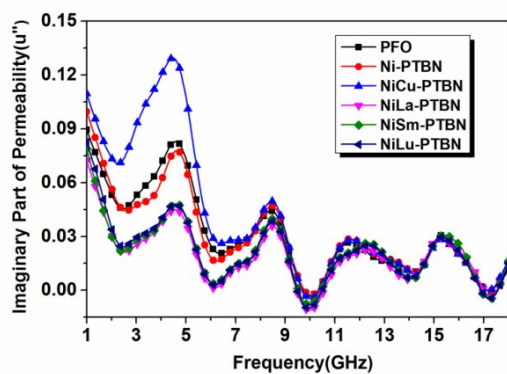


Figure S6. Real part ϵ' (a) and imaginary part ϵ'' (b) of complex permittivity for coating.



(a)



(b)

Figure S7. Real part μ' (a) and the imaginary part μ'' (b) of complex permeability for coating.