

Supplementary Figures

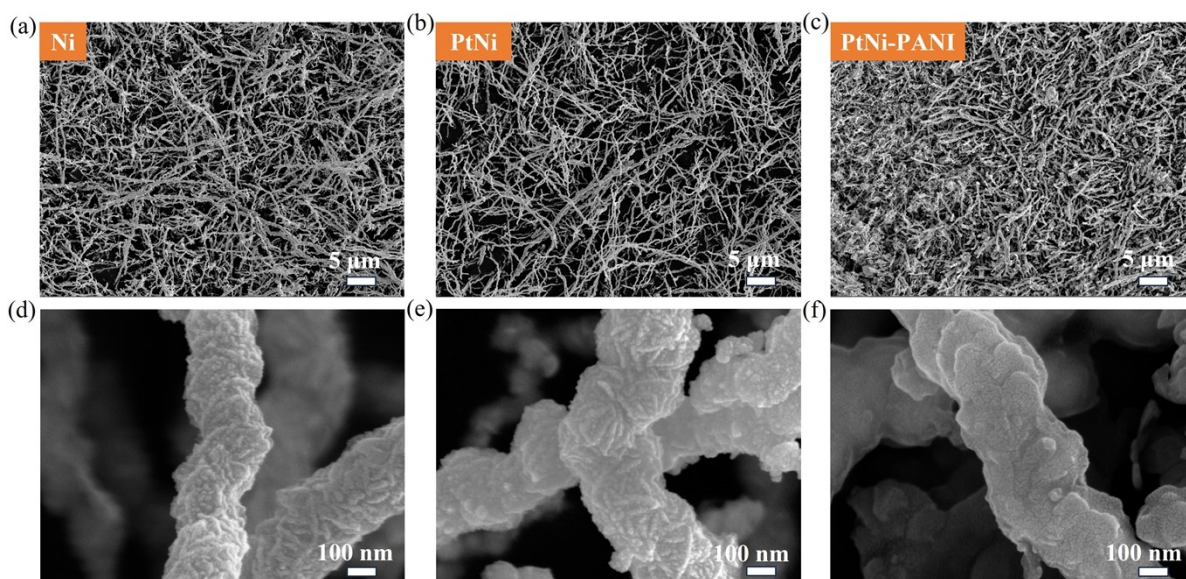


Fig. S1 SEM photographs of (a, d) bare Ni, (b, e) PtNi and (c, f) PtNi-PANI materials.

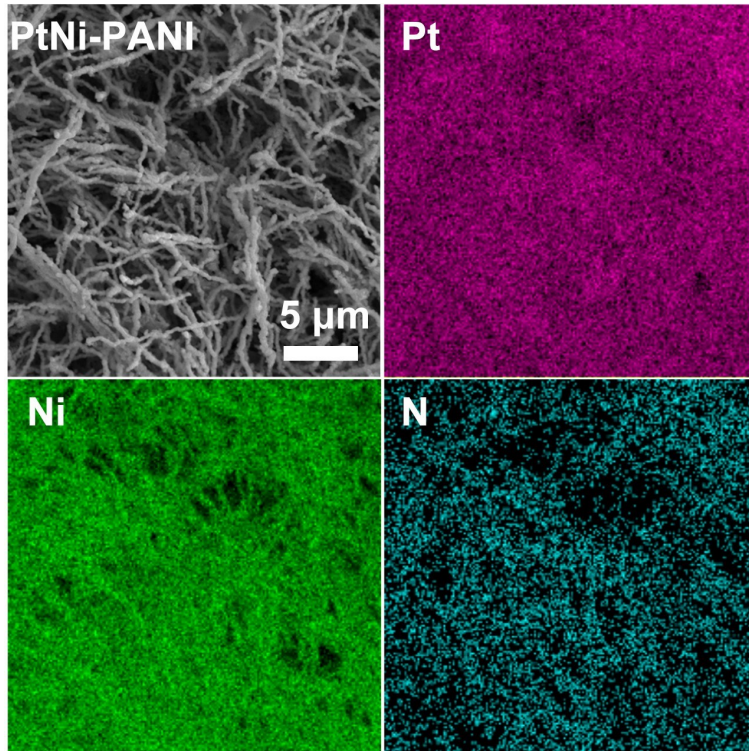


Fig. S2 Elemental-mapping images of PtNi-PANI film.

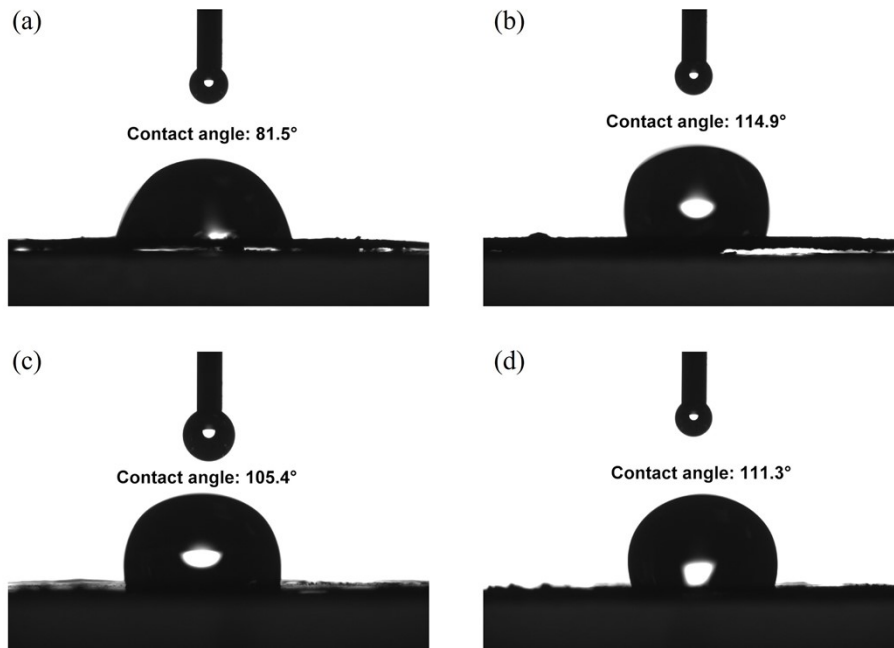


Fig. S3 The contact angles of (a)&(b) PtNi and (c)&(d) PtNi-PANI films by dropping (a, c) 0.6 M NaCl droplet and (b, d) pure water, respectively.

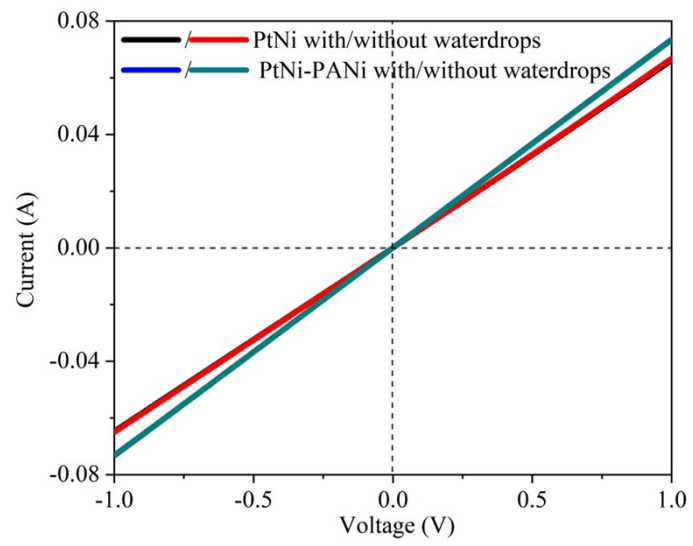


Fig. 54 The *I*-*V* curves without and with dropping 0.6 M NaCl aqueous solutions onto PtNi and PtNi-PANI films.

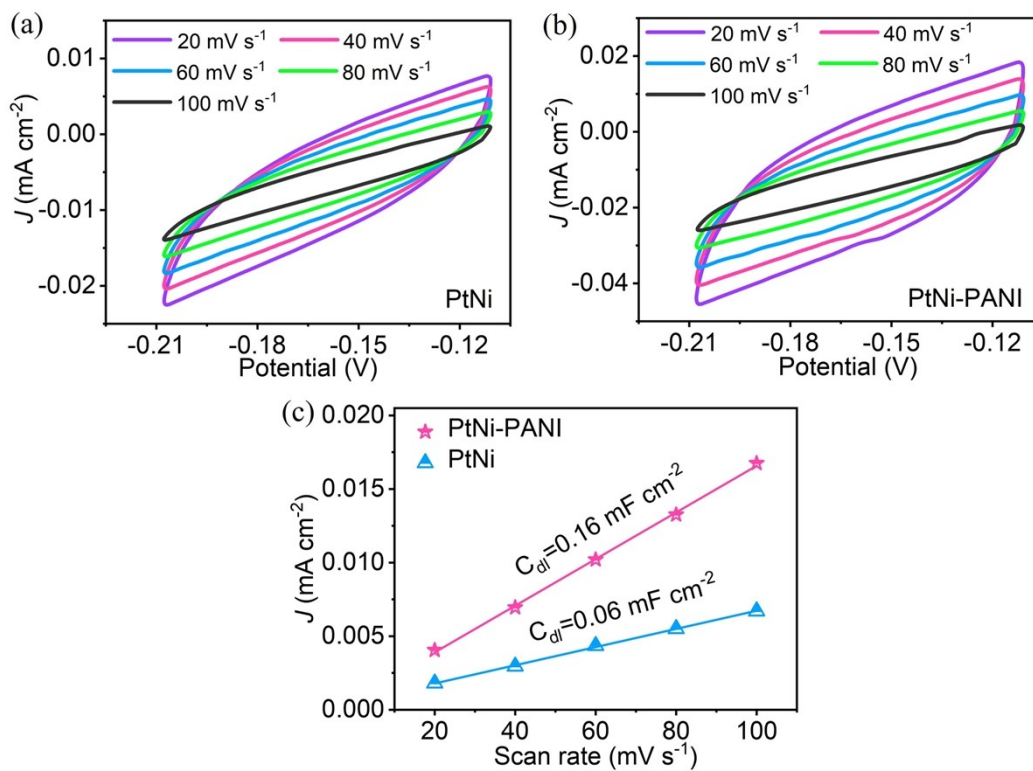


Fig. S5 CV curves of (a) PtNi and (b) PtNi-PANI films at different scan rates and (c) the corresponding linear fitting curve.

Supplementary Tables

Table S1 The composition of the real rain collected in Qingdao of China.

	KCl	NaCl	NaNO ₃	Na ₂ SO ₄	(NH ₄) ₂ SO ₄	MgCl ₂	CaCl ₂	CaSO ₄	Na ₂ CO ₃
Concentration (mg L ⁻¹)	4.10	2.05	8.33	1.42	13.73	32.78	47.90	34.43	10.60

Table S2 Electrical data by dropping real rain collecting from QingDao of China onto rain-sensitive PtNi-PANI tailored device.

	Current (μA)	Voltage (μV)	Power (pW)
Real rain	0.27 ± 0.06	36.20 ± 11.70	20.87 ± 3.70