

Supporting Information

Synthesis of Amphibious Superamphiphilic Carbon-based Materials and Its Property

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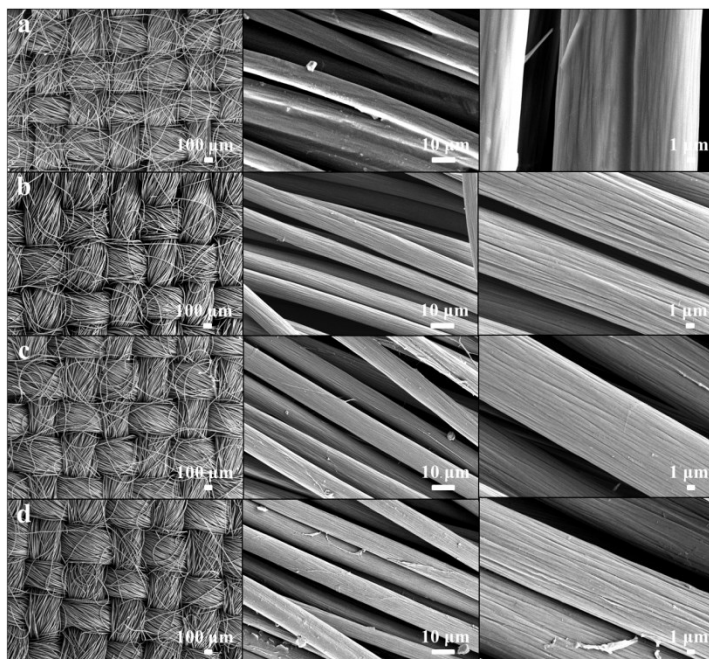


Fig. S1 SEM images of CC acidically oxidized at 120 °C for different time (a) 0 h, (b) 3 h, (c) 6 h, (d) 9 h

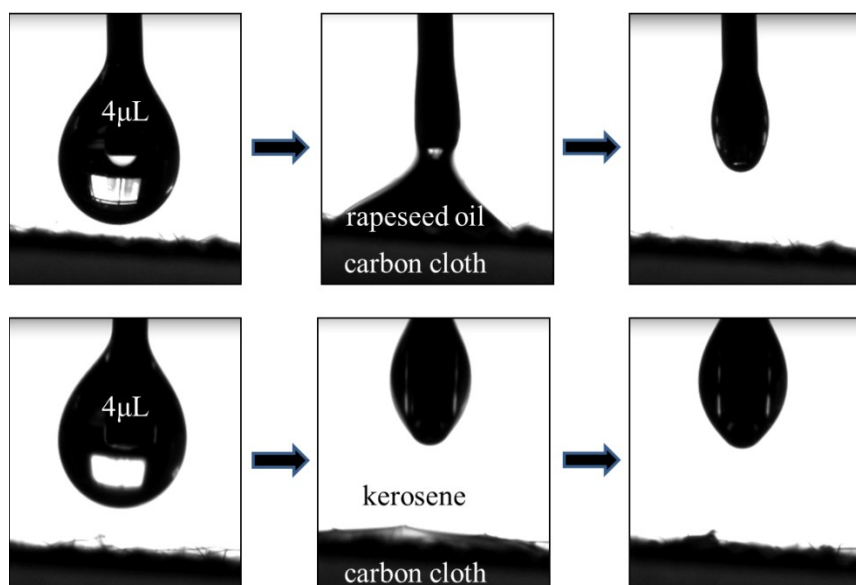


Fig. S2 The oil contact angle of carbon cloth tested at dry state in air

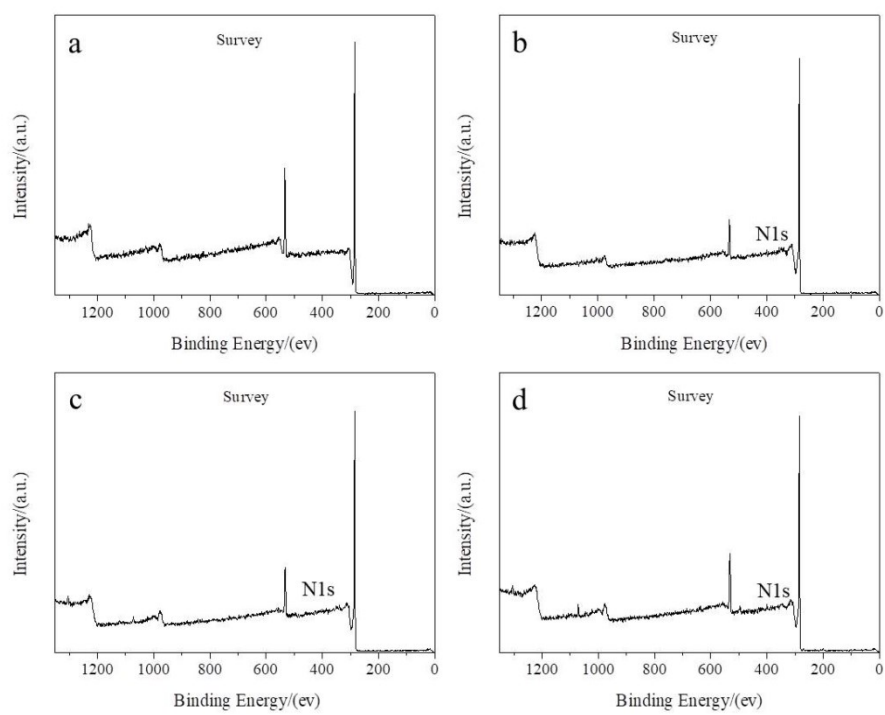


Fig. S3 XPS spectra of (a) carbon cloth, (b-d) carbon cloth oxidized at 120 °C for 3 h, 6 h, and 9 h, respectively.

Table S1 The composition of surface elements

样品编号	C (%)	O (%)	N(%)
CC	88.12	11.45	0.42
CCO _{cd} -3	93.5	6.09	0.42
CCO _{cd} -6	91.99	7.60	0.41
CCO _{cd} -9	90.45	8.78	0.77

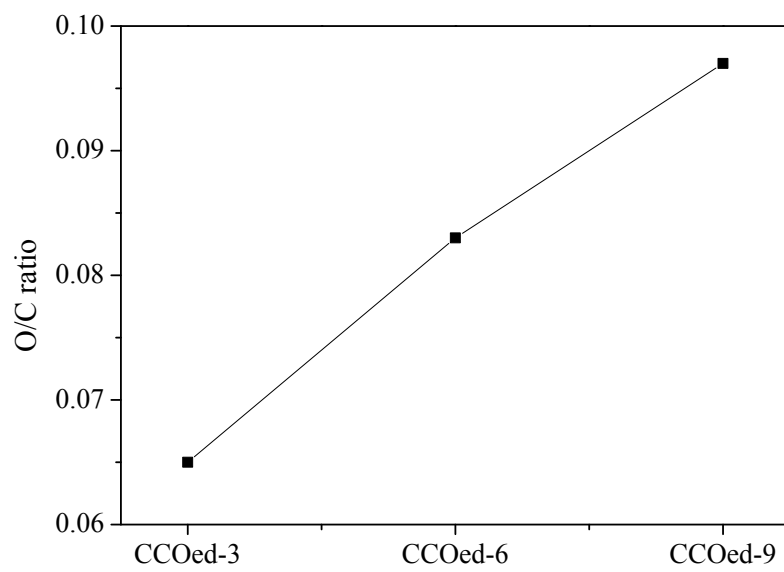


Fig. S4 The O/C ratios obtained from the XPS data

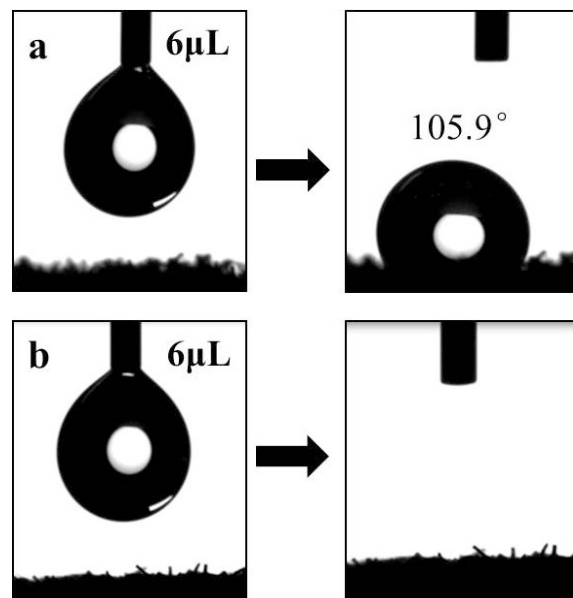


Fig. S5 The water contact angle of (a) PU foam and (b) oxidized PU foam in air

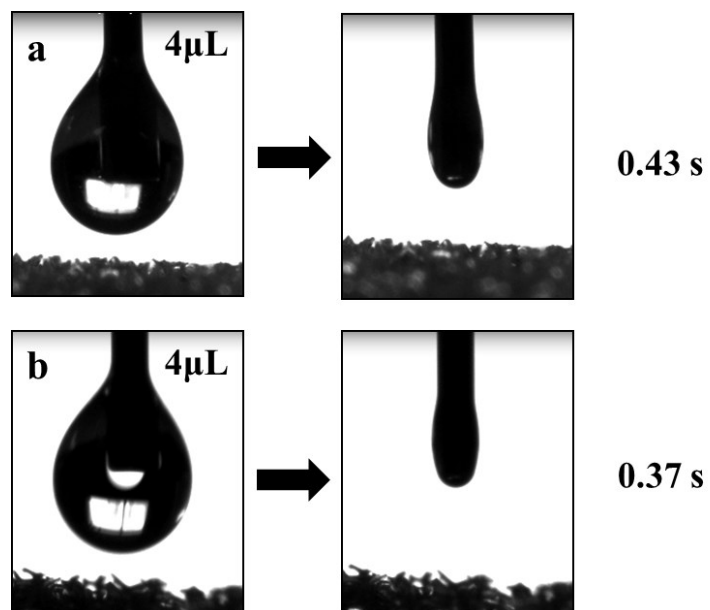


Fig. S6 The oil contact angle of (a) rapeseed oil and (b) kerosene on the surface of the oxidized PU foam in air

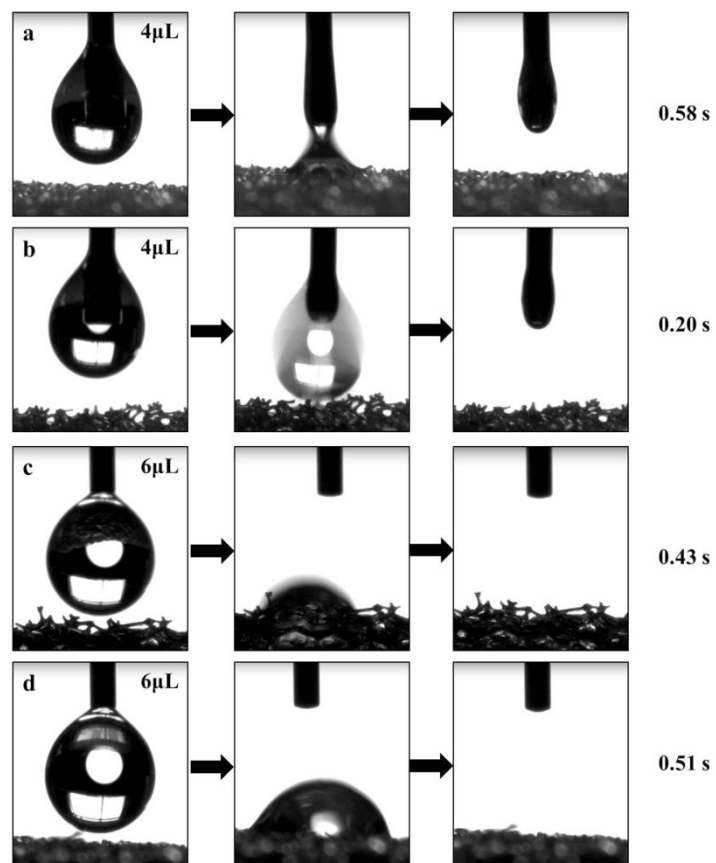


Fig. S7 The oil contact angle and water contact angle of PU foam oxidized at 80 °C for 3 h pre-wetted by water and oils, respectively. (a, b) oil contact angle of PU_{oed} foam pre-wetted with water tested by rapeseed oil and kerosene, respectively. (c, d) water contact angle of PU_{oed} foam pre-wetted with rapeseed oil and kerosene, respectively.