Supplementary Information

Al-MOF-derived spindle-like hierarchical porous activated carbon for advanced supercapacitors

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Fig. S1. XRD patterns of MIL-118 and MIL-120



Fig. S2. SEM images of (a.b) MIL-118, (c.d) MIL-120



Fig. S3. (a) Comparison of CV curves for different materials at scan rates of 10 mV s⁻¹, (b) Comparison of GCD curves for different materials under 10 A g^{-1}



Fig. S4. Raman spectra of SPC at different carbonization temperatures.



Fig. S5. The influence of different carbonization temperatures on the electrochemical performance of RPC (a) 700°C, (b) 800°C, (c) 900°C, (d) 1000°C, (e) RPC at different carbonization temperatures at 5 A g⁻¹, (f) Comparison of RPC discharge specific capacitances at different carbonization temperatures

	BET	Mico-BET	Meco-BET	Pore volume	Pore size
	$/m^2 g^{-1}$	$/m^2 g^{-1}$	$/ m^2 g^{-1}$	/ cm ³ g ⁻¹	/nm
Al-BTEC	728	621	106	0.23	2.8
Al@C	28	11	17	0.08	1.3
SPC	1895	1548	346	0.68	2.4

Table S1 Comparison of porosity of Al-BTEC, Al@C and SPC.