Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supporting Information

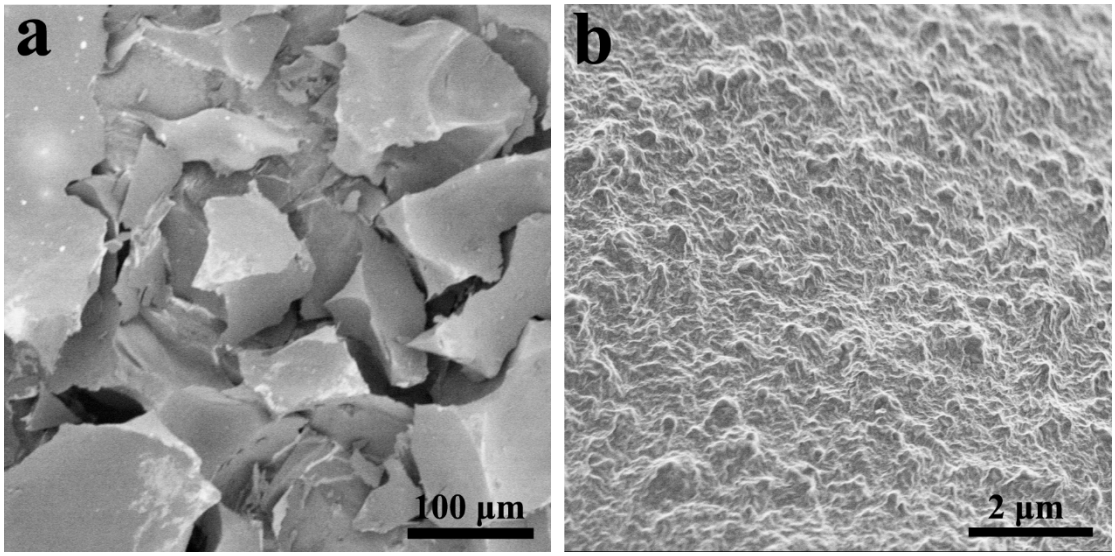

Figure S1. SEM images of polyazomethine directly synthesized from TPA-DAT.

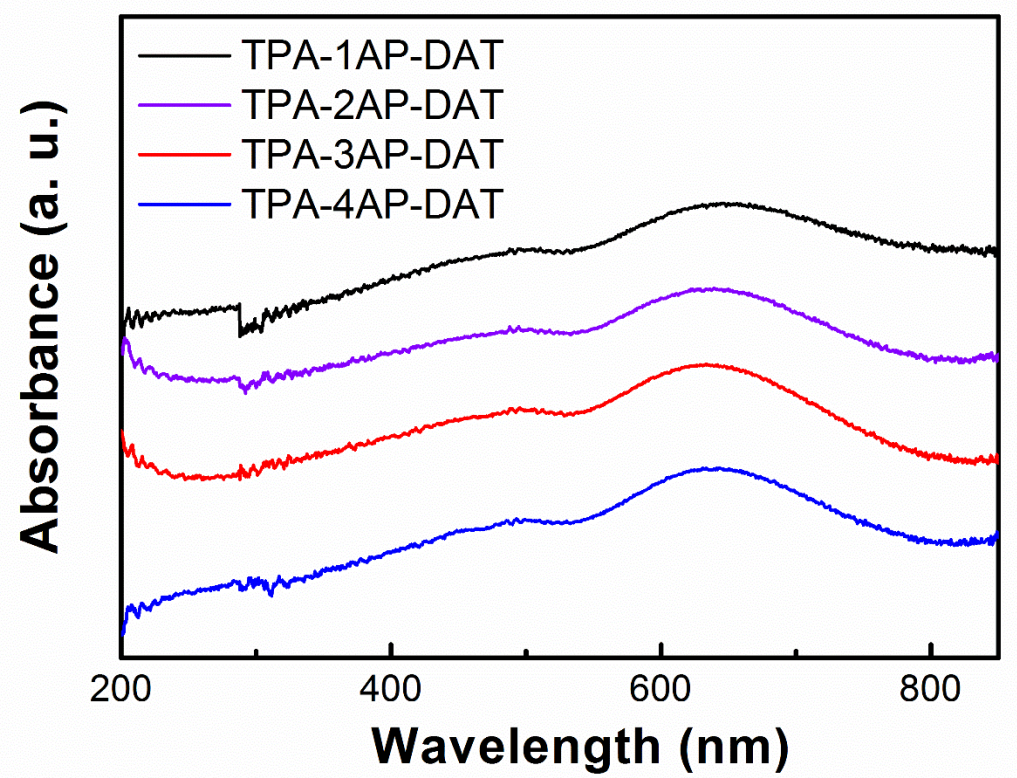

Figure S2. Typical UV-vis spectral of polyazomethine microsphere thin film.

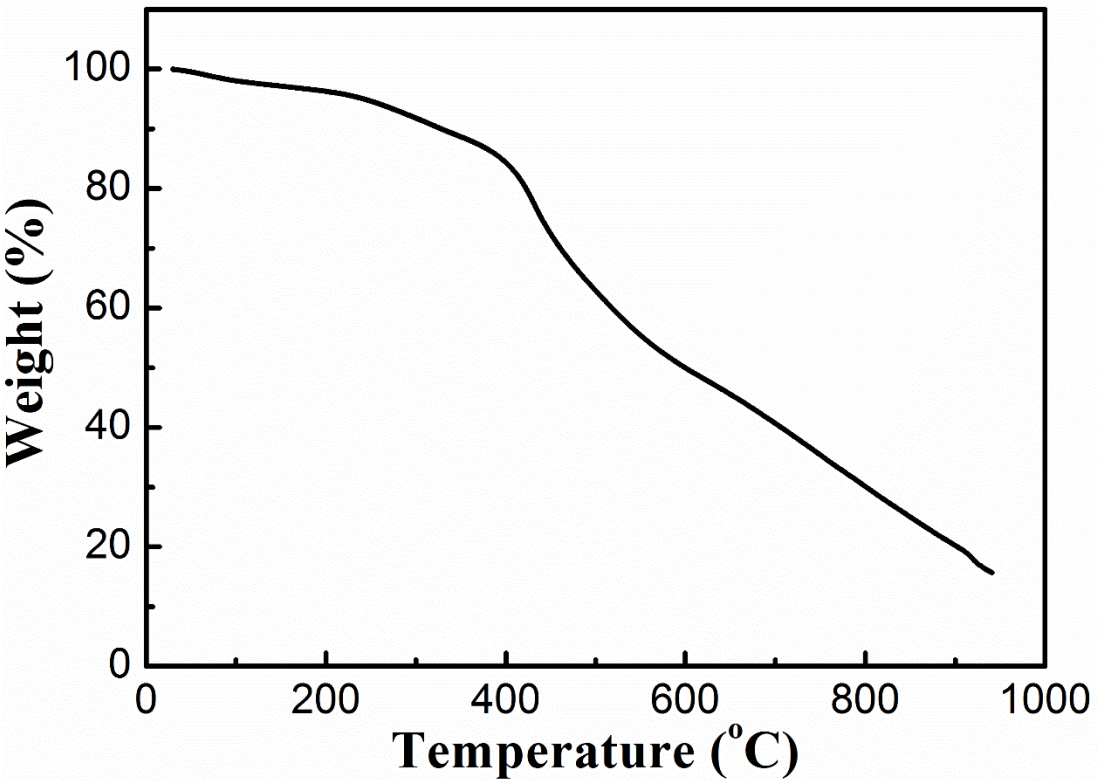

Figure S3. Thermogravimetric analysis of polyazomethine synthesized from TPA-DAT.

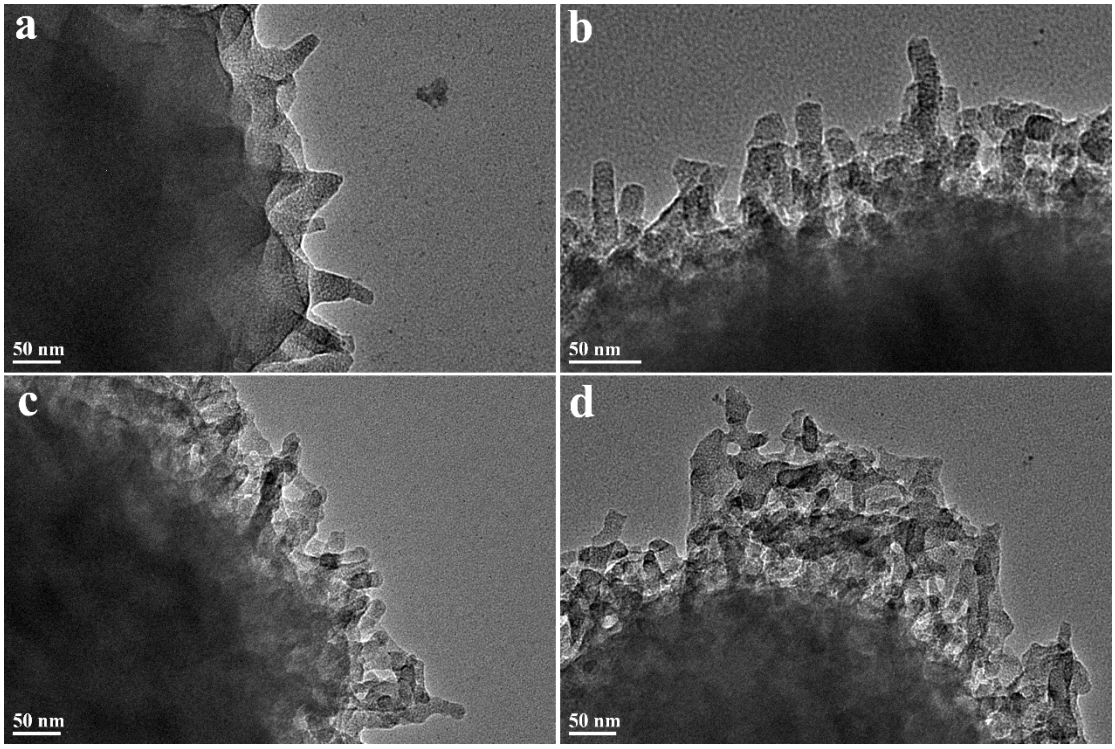

Figure S4. High-resolution TEM images of carbon microspheres after carbonization of TPA-xAP-DAT polyazomethines at 800 °C. **a**, TPA-1AP-DAT. **b**, TPA-2AP-DAT. **c**, TPA-3AP-DAT. **d**, TPA-4AP-DAT.

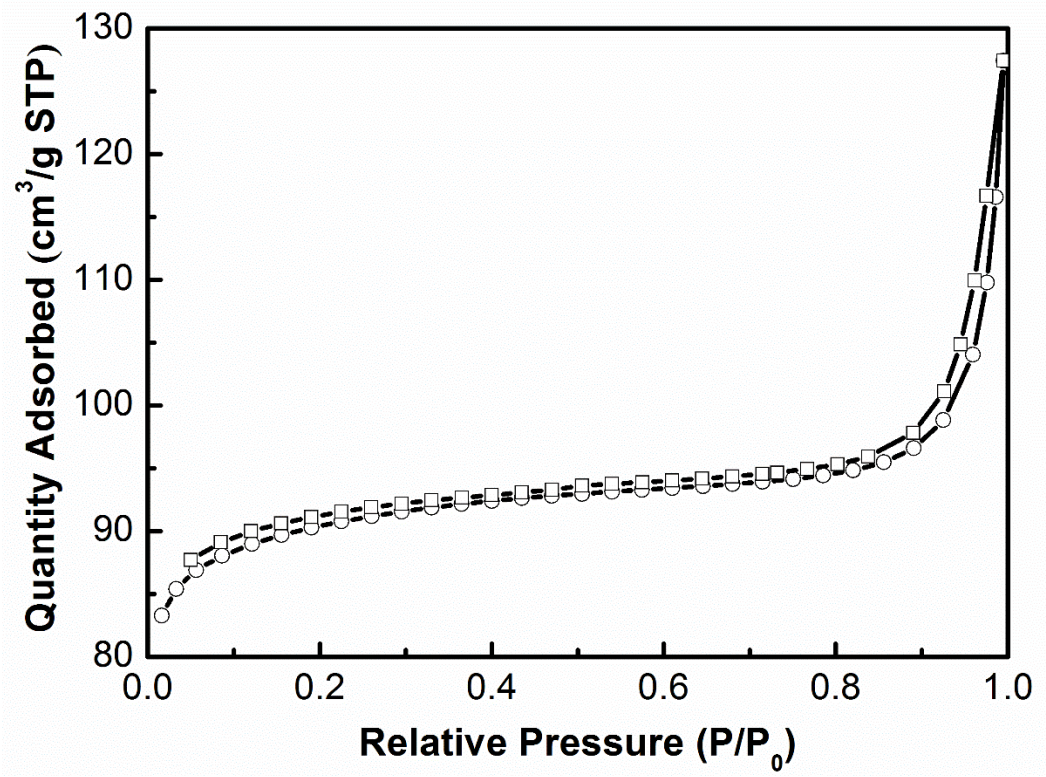

Figure S5. Typical sorption isotherms of carbon microspheres after carbonization of TPA-xAP-DAT polyazomethines at 800 °C.

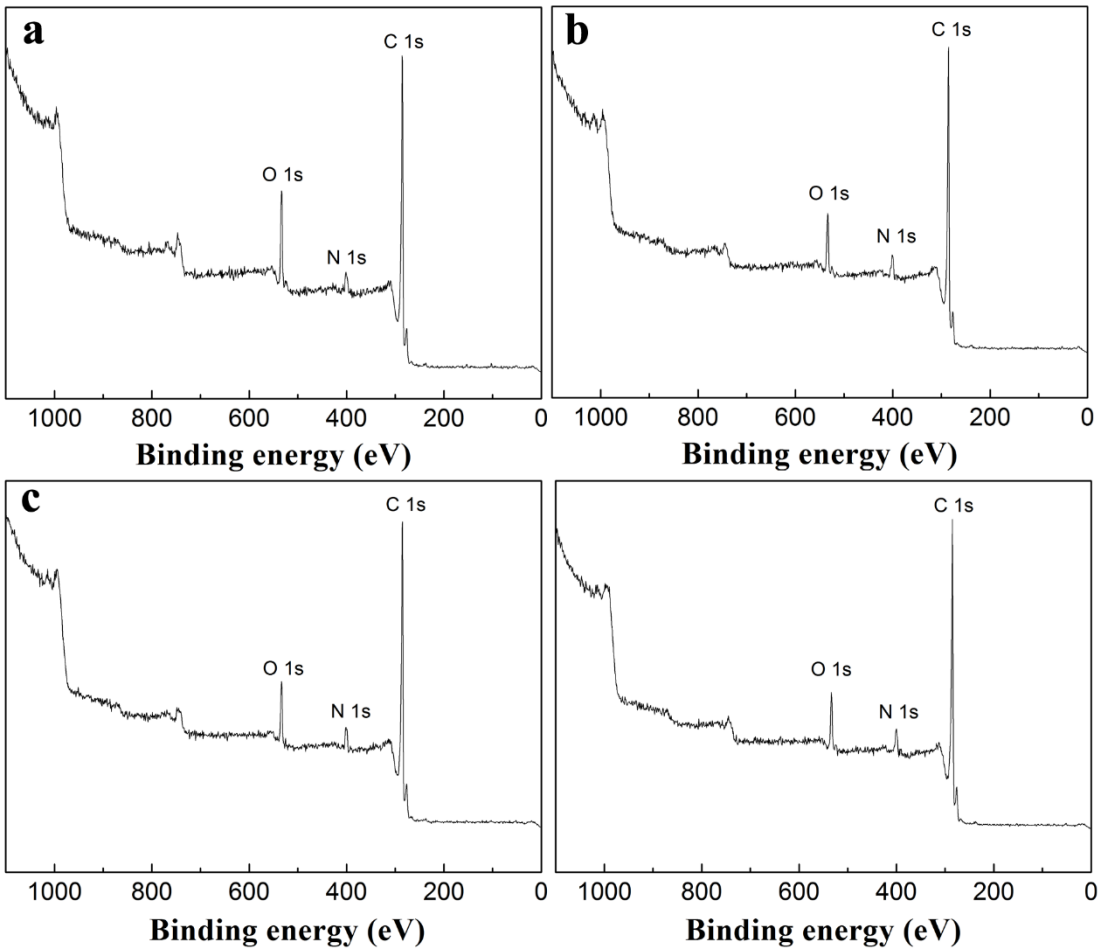

Figure S6. XPS spectra of polyazomethine microspheres after carbonization at 800 °C. **a**. TPA-1AP-DAT. **b**. TPA-2AP-DAT. **c**. TPA-3AP-DAT. **d**. TPA-4AP-DAT.

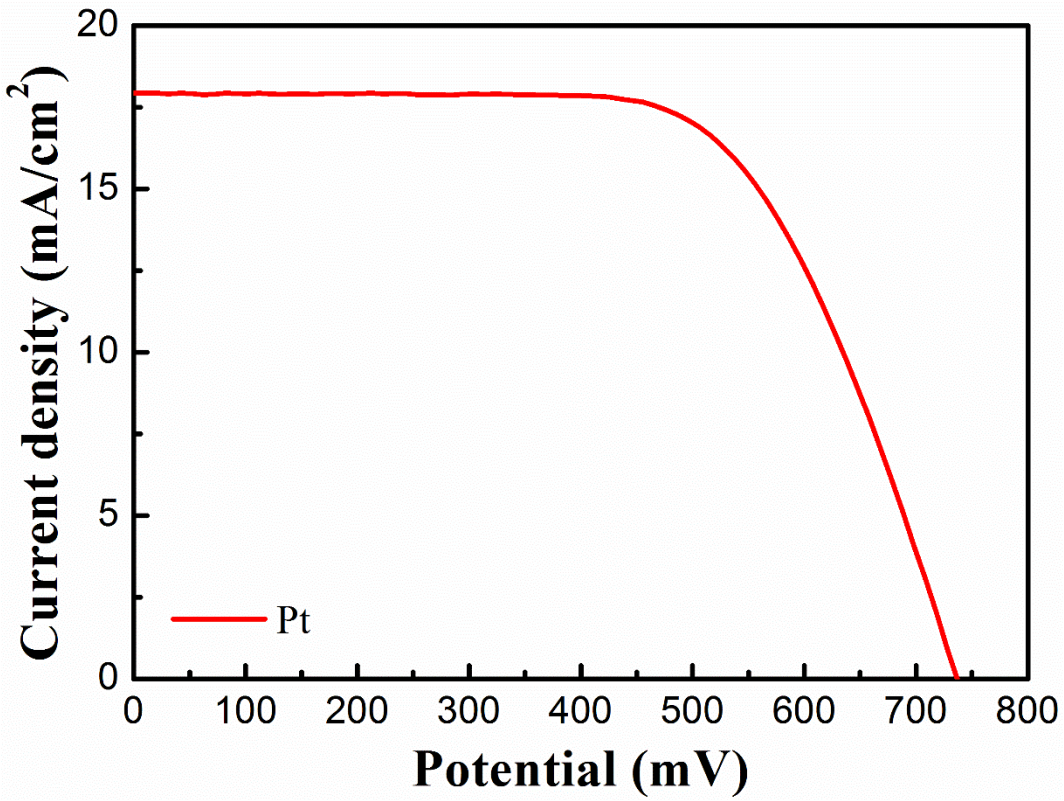

Figure S7. Typical J-V curve of DSC assembled with platinum as the counter electrode.

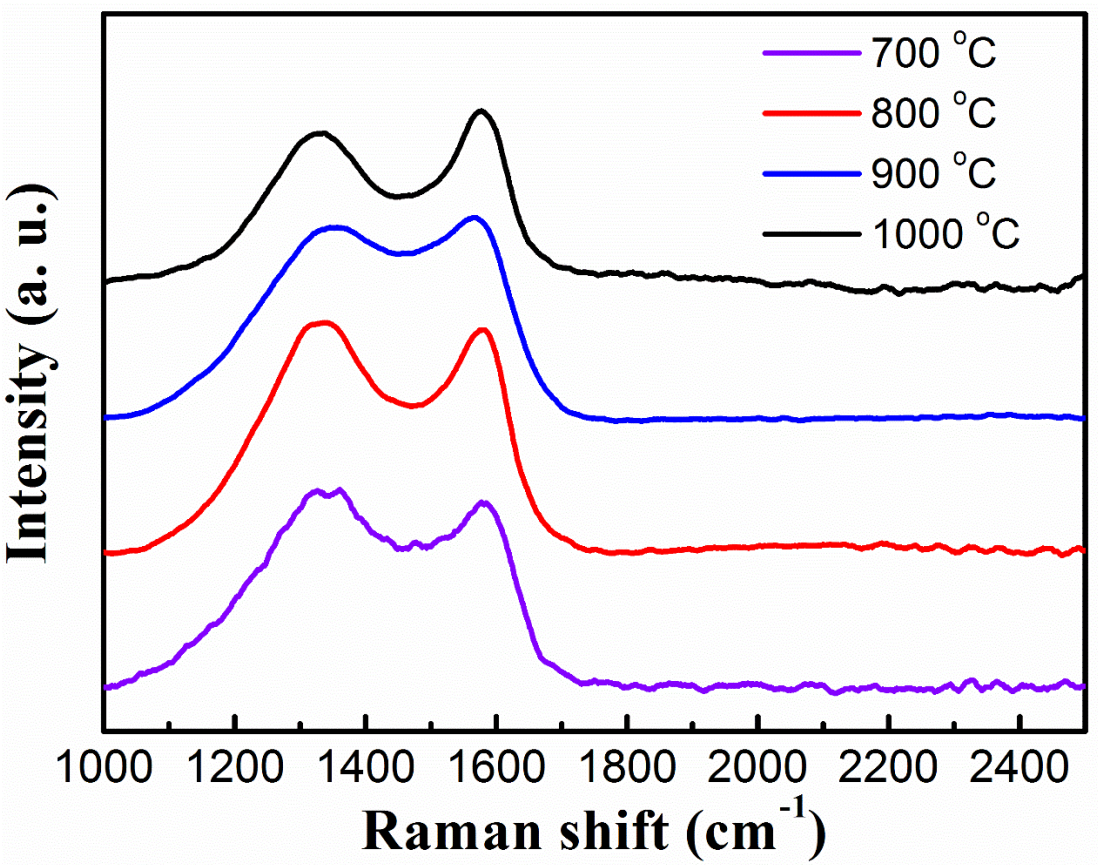

Figure S8. Raman spectra of carbon spheres carbonized from TPA-4AP-DAT microspheres in different temperatures in an argon atmosphere.

Table S1. Elemental analysis of carbon spheres carbonized in argon atmosphere at 800 °C.

	N/wt%	C/wt%	H/wt%
TPA-1AP-DAT	15.83	70.11	2.41
TPA-2AP-DAT	17.16	70.84	2.85
TPA-3AP-DAT	12.85	71.16	2.60
TPA-4AP-DAT	14.29	72.31	2.29