

Supporting Information

From 3D Hierarchical Microspheres to 1D Microneedles: The Unique Role of Water in Morphology Control of Ferrocenylpyrrolidine C₆₀ Microcrystals

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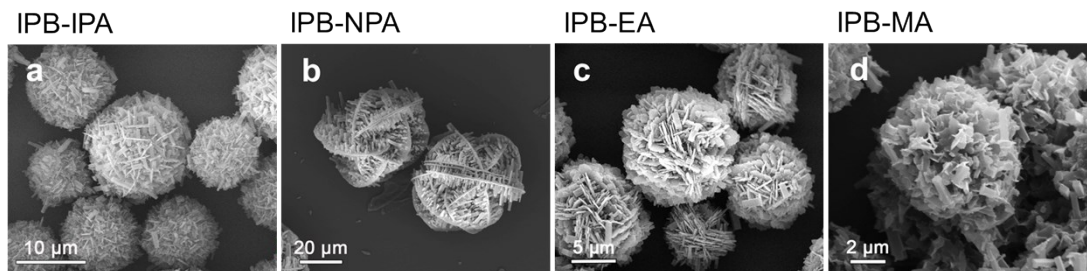


Fig. S1 FESEM images of FC microstructures prepared by utilizing IPB as a good solvent and IPA (a) NPA (b), EA (c) and MA (d) as the corresponding poor solvents, respectively.

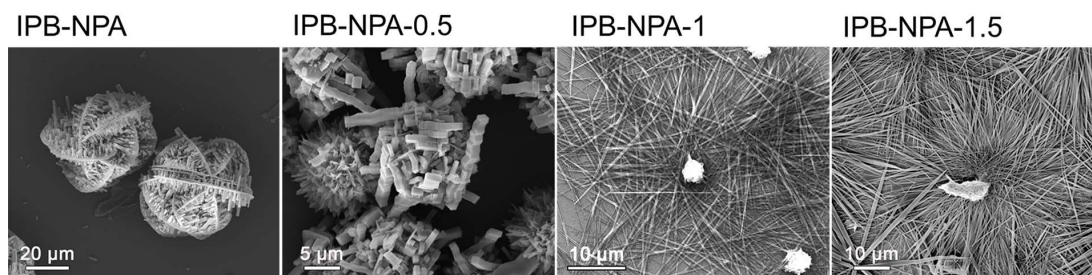


Fig. S2 FESEM images of FC microstructures utilizing IPB as a good solvent, and the corresponding poor solvents are NPA, NPA-0.5mL H₂O, NPA-1mL H₂O, and NPA-1.5mL H₂O, respectively.

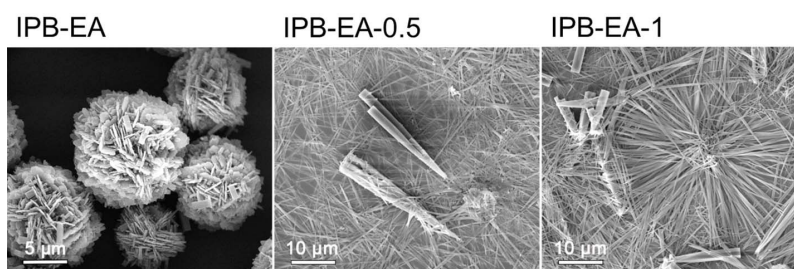


Fig. S3 FESEM images of FC microstructures utilizing IPB as a good solvent, and EA, EA-0.5mL H₂O and EA-1.5mL H₂O as poor solvents, respectively.



Fig. S4 FESEM images of FC microstructures utilizing IPB as a good solvent, and the MA, MA-0.1mL H₂O and MA-0.4mL H₂O as good solvents, respectively.

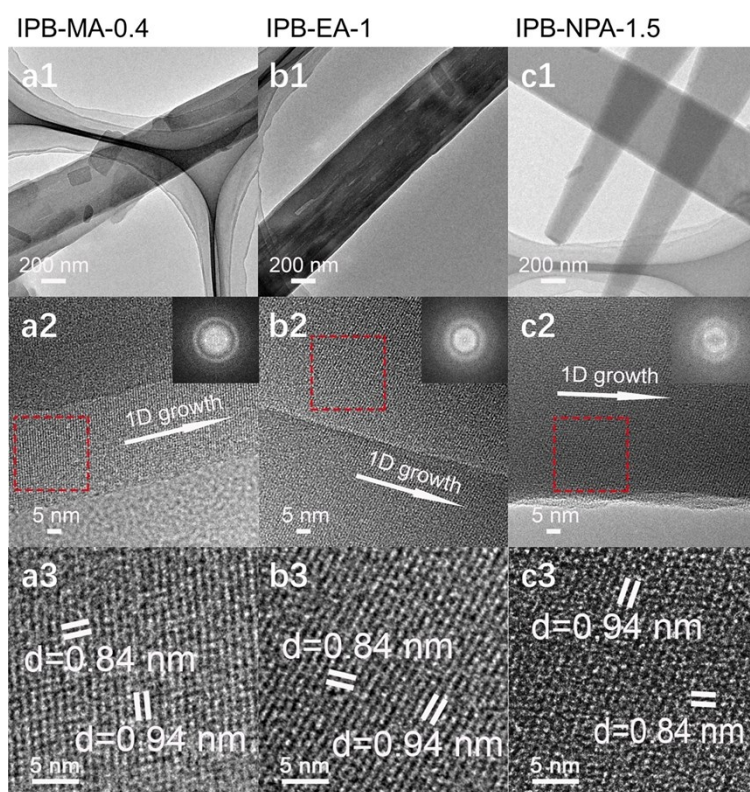


Fig. S5 TEM and HRTEM images of IPB-MA-0.4 (a1-a2), IPB-EA-1 (b1-b2), and IPB-NPA-1.5 (c1-c2). HRTEM images of IPB-MA-0.4 (a3), IPB-EA-1 (b3), and IPB-NPA-1.5 (c3) corresponding to the dashed box from a2-c2.

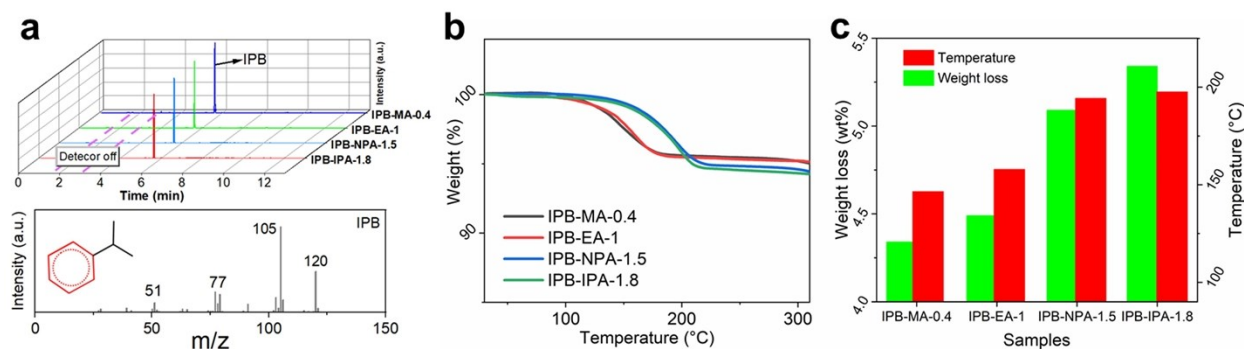


Fig. S6 (a) GC-MS of IPB-MA-0.4, IPB-EA-1, IPB-NPA-1.5 and IPB-IPA-1.8 (The detector was off during the retention time between 1.8 and 3 min to avoid the over-strong chloroform peak) (b) TGA analysis at the heating rate of 5 °C/min and (c) the corresponding weight loss contents (wt%) and temperatures of IPB-MA-0.4, IPB-EA-1, IPB-NPA-1.5 and IPB-IPA-1.8.

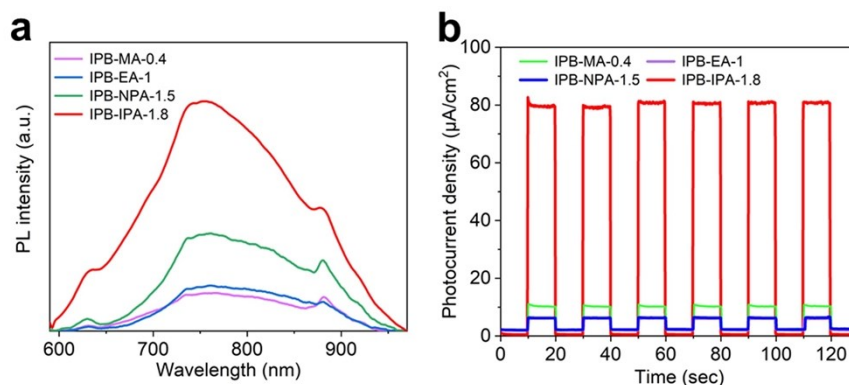


Fig. S7 (a) Photoluminescence spectra and (b) photocurrent densities under full-band light irradiation of IPB-MA-0.4, IPB-EA-1, IPB-NPA-1.5, and IPB-IPA-1.8.

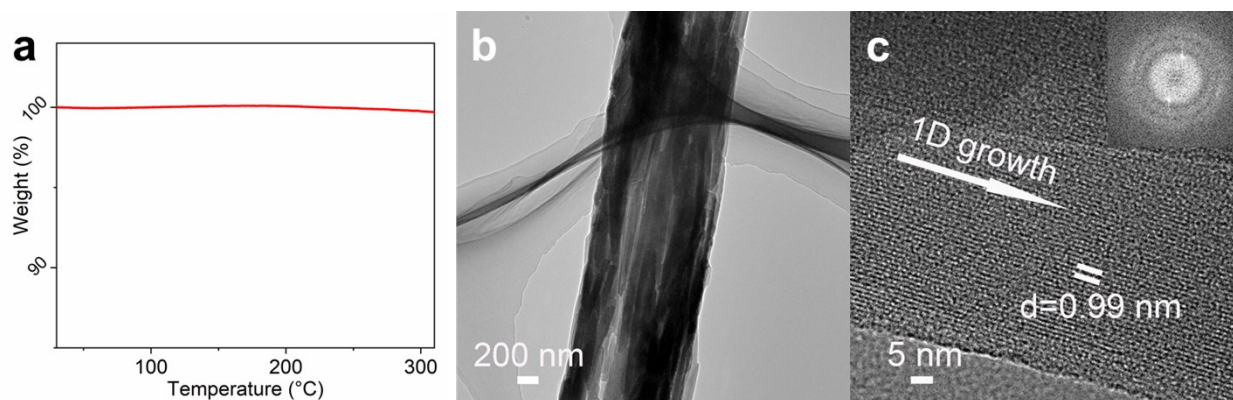


Fig. S8 (a) TGA analysis at the heating rate of 5 °C/min, (b) TEM and (c) HRTEM images of IPB-IPA-1.8 after heating.