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Supporting Information

Anisometric C₆₀ Fullerene Colloids Assisted by Structure-Directing Agent

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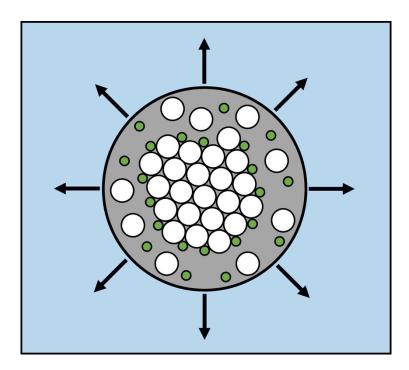


Fig. S1 Schematic growth of fullerene crystals in solvent mixtures in the presence of a structure-directing agent. Solutions of C₆₀ (white) in good solvent mixtures (grey) are dispersed in antisolvent (blue). Droplet shrinkage due to solvent interdiffusion induces nucleation. The structure-directing agent (green) shortens the nucleation period and associates with the interface, slowing growth.

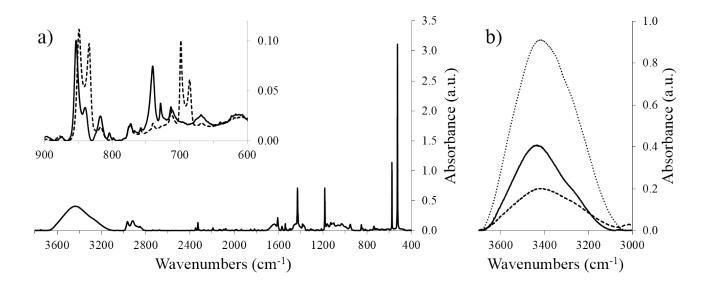


Fig. S2 IR absorption spectra of solvated microcrystals. (a) C_{60} /tetralin/TMP, inset the same composition (black) compared with C_{60} /mesitylene/TMP (dashed). The inset highlights characteristic features of the incorporated aromatic solvents. (b) O–H stretch bands for C_{60} /tetralin/TMP (solid), C_{60} /mesitylene/TMP (dashed) and C_{60} /mesitylene (dotted).

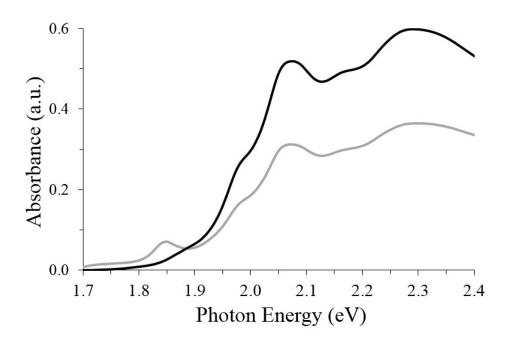


Fig. S3 Optical absorption spectra of solutions before addition of alcohol. C_{60} in pure mesitylene (black), and C_{60} in mesitylene with 20% v/v TMP (grey). Spectra were measured within 20 minutes of TMP addition.

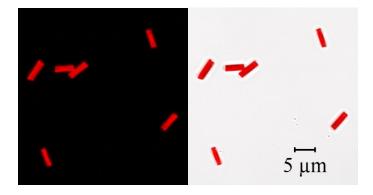


Fig. S4 Confocal microscope image of the C_{60} /mesitylene/TMP solvates shown in Figure 1b. λ_{ex} = 488 nm