

Supporting information

Mesostructured Hybrids Containing Potential Donors and Acceptors with Molecular-scale and Meso-scale Segregation and Ordering: Toward the Development of Smart Materials through Hierarchical Self-assembly

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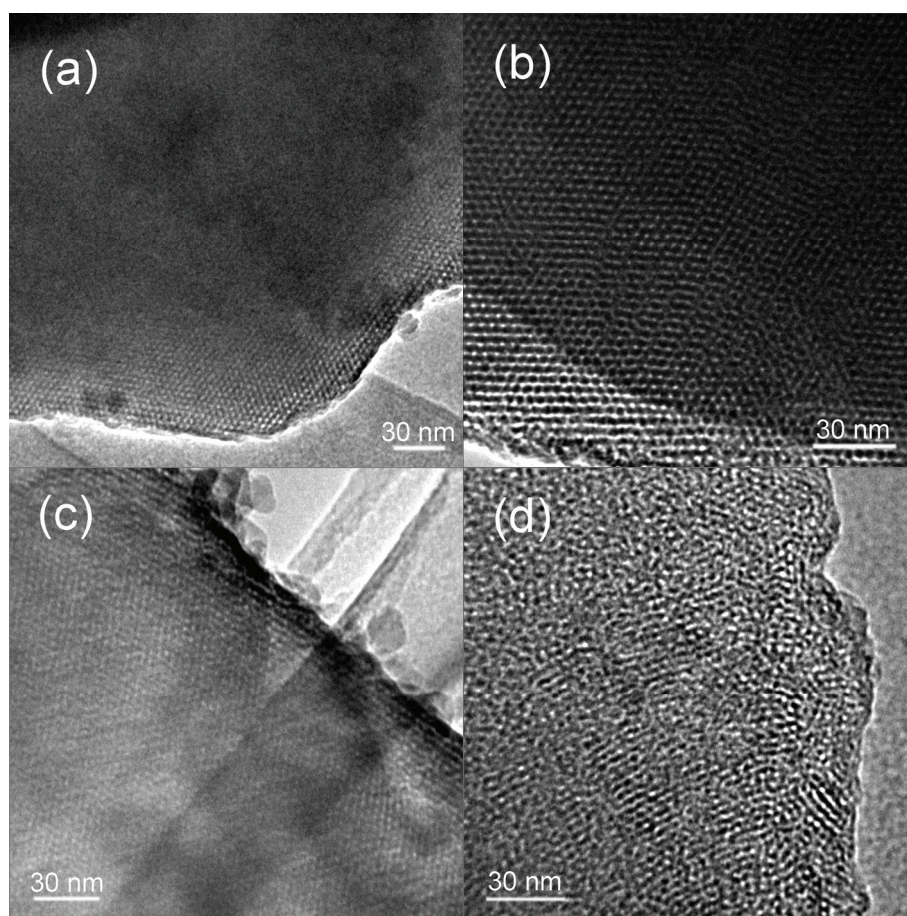


Figure S1. TEM images of the donor-acceptor hybrids (a) SVAT0, (b) SVA0, (c) SVAT10, and (d) SVA10.

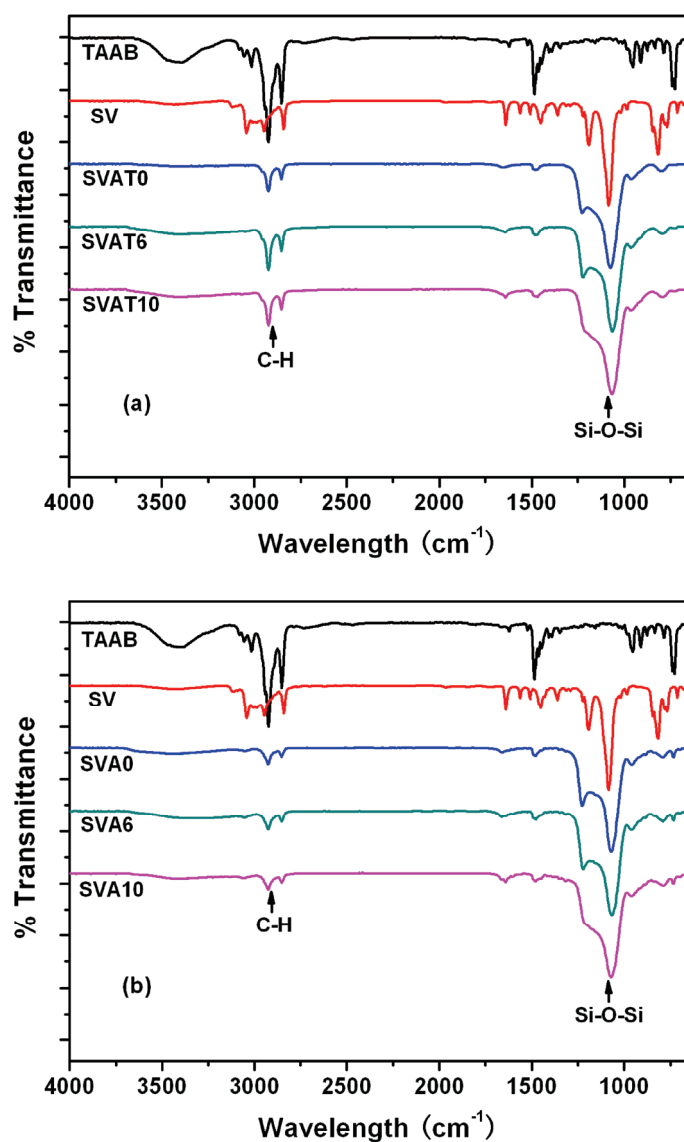


Figure S2. FT-IR spectra (recorded at 4000–600 cm^{-1}) of the starting self-assembling building blocks TAAB and SV used in the synthesis as well as the two series of donor-acceptor hybrids SVAT (a) and SVA (b) with increasing proportions of SV.

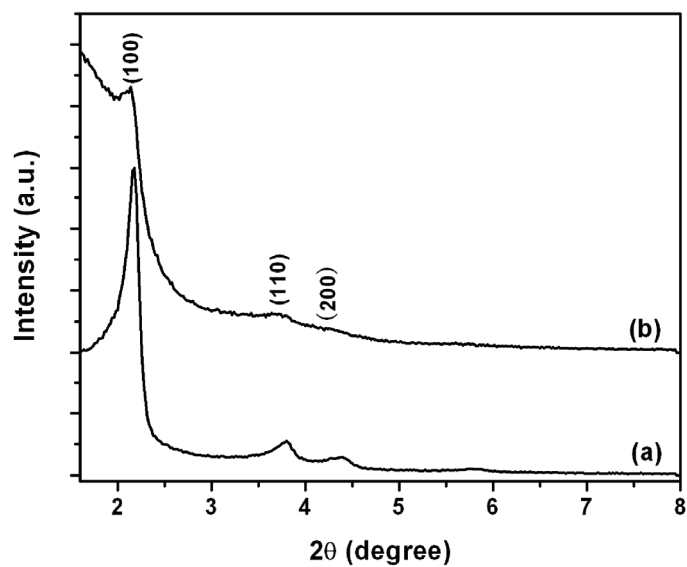


Figure S3. Small-angle XRD patterns of (a) extracted SVAT-6 sample and (b) extracted SVA-6 sample.

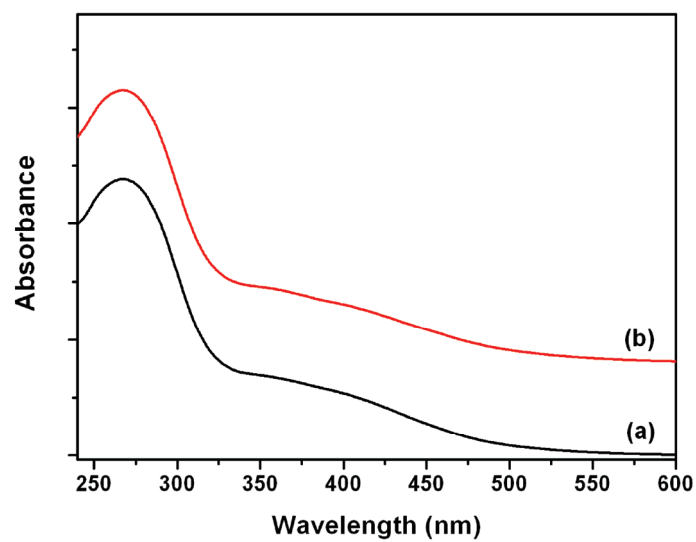


Figure S4. UV/vis absorption spectra of (a) extracted SVAT-6 sample and (b) extracted SVA-6 sample in solid state.

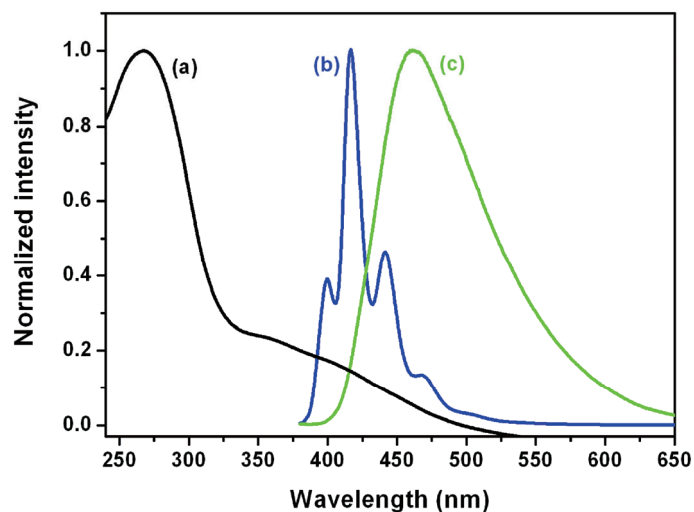


Figure S5. (a) Absorption spectra of extracted SVA-6 sample in solid state, (b) steady-state emission spectra of mesostructure SVAT0 ($\lambda_{\text{ex}} = 365$ nm), and (c) steady-state emission spectra of mesostructure SVA0 ($\lambda_{\text{ex}} = 365$ nm).

Table S1. Fluorescence decay analyses data of the two series of mesostructure SVAT and SVA.

sample name	lifetimes (ns)		relative weights (%) $\tau_1 : \tau_2$	χ^2
	τ_1	τ_2		
SVAT0	5.6			1.19
SVAT6	4.5			1.19
SVAT10	3.5			1.20
SVA0	13.4	2.9	62:38	1.20
SVA6	11.7	2.5	60:40	1.24
SVA10	10.2	2.1	61:39	1.21