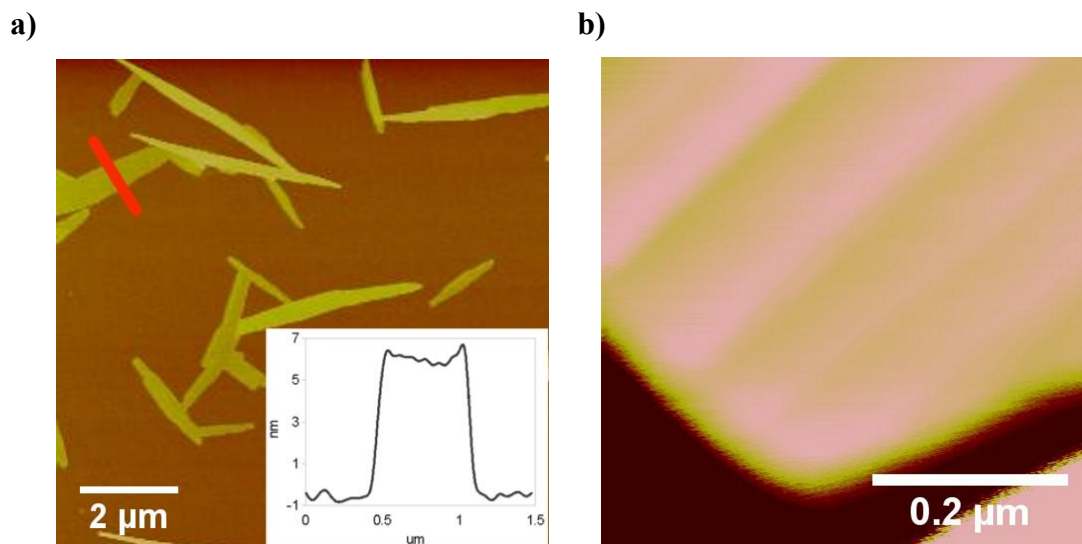


Integration of self-assembled discotic-based fibres into field effect transistors: a comparison of preparation approaches

Rebecca C. Savage, Jeffrey M. Mativetsky, Emanuele Orgiu, Matteo Palma, Gabin Gbabode, Yves H. Geerts, P. Samorì

Fibre morphology:



S1: (a) The top surfaces of SVA-formed fibres are seen to be flat with a roughness of less than 1 nm. Inset shows the cross-section taken along the red line (b) The tops of SIP prepared fibres were seen in AFM to be corrugated (fast SIP fibre on SiO_x).

Crystallographic structure:

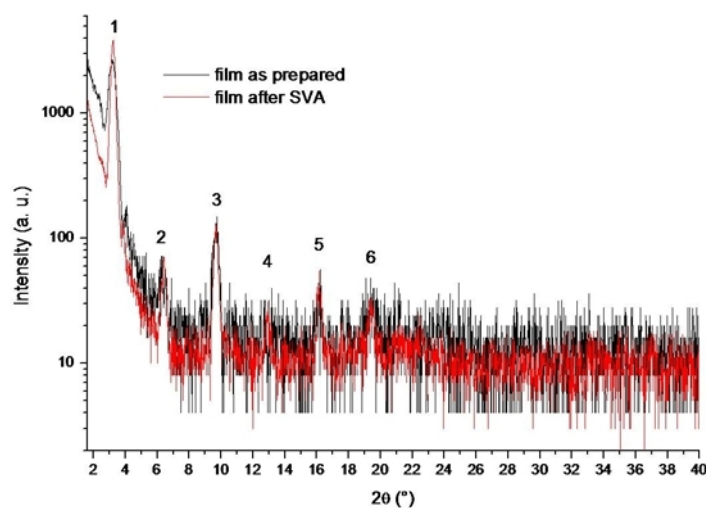


Figure S2. XRD patterns measured at 30°C for the spin-coated films before and after SVA treatment. Numbers above the diffraction peaks indicate the order of the correlated reflections.

Table S1. Crystallographic data and peak indexations determined from the XRD pattern of the slow SIP sample.

h	k	l	d _{obs} (Å)	d _{calc} (Å)	Lattice parameters
0	0	1	27.40	27.41	a= 27.75 (5) Å
1	0	1	19.35	19.39	b= 4.48 (1) Å
0	0	2	13.67	13.70	c= 27.41 (1) Å
1	0	2	12.28	12.23	β= 90.63 (7)°
0	0	3	9.16	9.14	P2 ₁
1	0	3	8.66	8.65	V= 3408 (11) Å ³
2	0	3	7.60	7.59	Z = 2
0	0	4	6.86	6.85	d = 1.230 (4) g/cm ³
1	0	4	6.65	6.64	
3	0	3	6.45	6.46	
0	0	5	5.48	5.48	
3	0	4		5.48	
1	0	5	5.36	5.37	
2	0	5	5.08	5.08	
-4	0	4	4.90	4.90	
3	0	5	4.69	4.69	
0	0	6	4.56	4.57	
6	0	1		4.55	
0	1	1	4.42	4.42	
2	0	6	4.33	4.32	
-4	0	5		4.32	
-1	1	2	4.21	4.21	
1	1	2		4.21	
7	1	3	2.82 ^a	2.82	
-3	1	7		2.82	
7	1	4	2.71 ^a	2.72	
-1	1	8		2.71	
-6	1	6	2.65 ^a	2.64	

^a Peaks observed in the XRD pattern of the fast SIP sample