APPLICATION NOTE
E181VPJ-005

Observation of Possible Changes of Me-4-TFPTA Self-Assembled Organic Single Crystalline Nanosheets during Annealing

Abstract

Single Crystalline Nanosheets have been produced from (2E,2'E)-3,3'-(2,5-dimethoxy-1,4-phenylene)bis(2-(5-(4-(trifluoromethyl)phenyl)thiophen-2-yl)acrylonitrile). The described method was used to identify possible structural changes of these nanosheets due to a thermal annealing process.

Keywords

- Single Crystalline Nanosheets
- Me-4-TFPTA

Compound information

Classification	Compound name
Dicyanodistyrylbenzene derivative	Me-4-TFPTA = (2E,2'E)-3,3'-(2,5-dimethoxy-1,4-phenylene)bis (2-(5-(4-(trifluoromethyl)phenyl)thiophen-2-yl)acrylonitrile)

For the structure, please refer to Scheme S1 of the Supporting Information of the scientific publication (see References).

Chromatographic conditions

Column Particle Size, Length × inner diameter Order number	VDSpher® PUR 100 C18-E 5 µm, 250 × 4.6mm N2546E181VPJ
Separation mode descriptions	analytical, reversed phase
Mobile Phase	Acetonitrile
Elution conditions	Isocratic
Flow rate	1 ml/min
Injection	
Column temperature	ambient
Pressure	
HPLC system	Dionex Ultimate 3000 (pump, autosampler) Detection: UV/Vis, wavelength: 254 nm
Sample and sample preparation	

Chromatograms

Please refer to Figure S2 of the Supporting Information of the scientific publication (see References)

Origin

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References

"Self-Assembled Organic Single Crystalline Nanosheet for Solution Processed High-Performance n-Channel Field-Effect Transistors"
Jin Hong Kim, Sang Kyu Park, Jong H. Kim, Dong Ryeol Whang, Won Sik Yoon, Soo Young Park
Adv. Mater. **2016**, *28*(28), 6011-6015.
DOI: 10.1002/adma.201506387

Year of application: 2016

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