

New OTFT Material containing Triethylsilylacetylanthracene Derivatives for Solution Process

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Oligomeric OTFT material containing triethylsilylacetylanthracene (TESAN) has been designed, synthesized and characterized. p-type of OTFT material was prepared by Suzuki cross-coupling reaction. The obtained material was characterized by various spectroscopic methods, cyclovotametry, and XRD, and showed high thermal stability above 380 °C. In single crystal OTFT devices, a charge carrier mobility of 1.23 cm²/Vs, on/off ratio of about 10⁵ are observed.