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Abstract for an Invited Paper  
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**Organic Field Effect Transistors Based on Micro and Nano-sized Single Crystalline Semiconductors.**

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Organic single crystals are of interest for fundamental charge transport studies. Recently, we have shown that organic semiconductor single crystals can be patterned over a large area using vapor phase growth method. This opens up new possibilities of using organic single crystals for high performance devices. In this talk, I will present our recent work in solution deposition of single crystals by various methods and their device performance.