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Abstract: Laser microprinting by laser-induced crystallization

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3D laser nanoprining is an established technique for the manufacturing of complex polymer-based three-dimensional micro- and nanoarchitectures. Applications include micro-optical components such as lenses or diffractive optical elements. In this talk, we emphasize recent progress towards direct laser printing of semiconductors and metals, with which functional microelectronics devices and circuits can be made. By virtue of newly developed inks, even single-crystalline materials can be laser printed under suitable conditions, opening a whole new world of possibilities.