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Publication date:
2017

Document Version
Publisher's PDF, also known as Version of record

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At DTU Fotonik we developed and harnessed the new and emerging research area of so-called Light Robotics including the 3D-printed micro-tools coined Wave-guided Optical Waveguides that can be real-time laser-manipulated in a 3D-volume with six-degrees-of-freedom. To be exploring the full potential of this new micro drone-like approach in challenging microscopic geometries requires a versatile and real-time reconfigurable light coupling that can dynamically track a plurality of "drones" to ensure continuous optimal light coupling on the fly. Our latest developments + tech-transfer plans in this new and exciting area will be reviewed in this presentation.

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