

Laser Printing

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In this lecture, I will start from a discussion of photon properties (mass, momentum, and energy) in a dielectric medium. Then, I will turn to the discussion of laser-based techniques which can be applied for the generation of complex 2D and 3D structures by printing very small and delicate objects like nanoparticles, living cells, and microorganisms. I will consider a few application examples of this technology for printing of metasurfaces, 3D scaffolds for tissue engineering, and biofabrication of biological systems.