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Compact quantum dot based ultrafast lasers for biophotonics application

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In recent years, there has been a growing interest in the development of compact and low-cost, versatile, broadly tunable CW and ultrashort pulse laser sources generating light across the near-infrared and visible spectral ranges.In this talk we are presenting the recent progress on the development of novel compact quantum dot based laser sources generating light across broad spectral rangesin CW and ultrashort pulse regimes. We will also discuss applicability of such lasers in Biophotonics.

Biography

Edik U Rafailov received PhD degrees from the Ioffe Institute. In 2005, he established new Photonics and Nanoscience Group and in 2014 will move to Aston University. He has authored and co-authored over 350 articles in refereed journals and conference proceedings. He coordinated a €14.7M FP7 FAST-DOTproject-Development of new ultrafast lasers for Biophotonics applications. Currently, he coordinated the €11.8M NEWLED project which aims to develop a new generation of white LEDs. He also leads a few others projects funded by FP7 EU and EPSRC. His current research interests include high-power CW, ultrashort-pulse lasers; generation of UV/visible/IR/MIR and THz radiation, nano-structures; nonlinear and integrated optics; Biophotonics.

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