Edik Rafailov

Professor (Research), AIPT at Aston University
Birmingham, , GB

Professor Rafailov's research interests include CW and ultrashort-pulse lasers; generation of light from UV to THz and biomedical photonics.

Biography

Edik U. Rafailov received the Ph.D. degree from the Ioffe Institute in 1992. In 1997 he moved to St Andrews University (UK) and 2005, he established a new group in the Dundee University. In 2014 he and his Optoelectronics and Biomedical Photonics Group moved to the Aston University (UK). He has authored and co-authored over 450 articles in refereed journals and conference proceedings, including two books (WILEY), ten invited chapters and numerous invited talks. Prof. Rafailov coordinated the ?14.7M FP7 FAST-DOT project development of new ultrafast lasers for Biophotonics applications and the ?12.5M NEWLED project which aims to develop a new generation of white LEDs. Currently he coordinate the H2020 FET project Mesa-Brain (?3.3M, aims to develop 3D nano-printing technology for functional three-dimensional human stem cell derived neural networks) and EPSRC proposal (£960k, compact THz based systems for neuroscience applications). He also leads a few others projects funded by EU FP7, H2020 and EPSRC (UK). His current research interests include high-power CW and ultrashort-pulse lasers; generation of UV/visible/IR/MIR and THz radiation, nanostructures; nonlinear and integrated optics; biomedical photonics.

Areas of Expertise

Biomedical Photonics, Nanostructures, Ultrashort-Pulse Lasers, Photonics, THz Radiation, Nonlinear and Integrated Optics

Education

Ioffe Institute
PhD