

Optence: Innovations in Laser-Optic Technology for Ultraviolet Ultra-Short Pulsed Lasers - Components - Lasers - Applications - LOTU2S – Teilvorhaben B

Laufzeit: 01.08.2020 - 31.12.2023 Förderkennzeichen: 03INT701BB

Koordinator: Photonics Hub GmbH

The Nobel Prize in Physics 2018 impressively highlights the innovation potential of ultrashort pulsed lasers in medical and industrial application. Against this highly topical and motivating incident, the superordinate objective of this joint, international research proposal is the improvement of the lifetime and damage threshold of coated optical elements for high power laser applications. The particular selected optical elements are dedicated for ultrashort pulsed laser in the picosecond regime and the ultraviolet spectral region, substantially exceeding current state of the technology. As a result of this project, new high damage threshold, low absorption and improved lifetime optical elements for high power UV picosecond lasers and optical systems for the ultraviolet region will be marketable. In addition, based on these new elements innovative ultrashort pulsed lasers will be developed and become available for micro material processing, for which selected manufacturing processes will be evaluated and qualified. These key features exceed current state-of-the-art UV laser components and will stimulate marketability of such optical components, optical systems and UV ultrashort pulsed lasers. The LOTU2S project is part of the internationalization concept of Photonics Hub "OptInt - Internationalization for joint innovations in photonics" and shall profit from the comprehensive strategy and network in accelerating and exploiting the project results

Verbund: Optence: Innovations in Laser-Optic Technology for Ultraviolet Ultra-Short Pulsed Lasers - LOTU2S

Quelle: Bundesministerium für Bildung und Forschung (BMBF)

Redaktion: DLR Projektträger Länder / Organisationen: Litauen Themen: Förderung, Innovation

Zurück

Weitere Informationen