Mid-IR Ultrafast Laser Technology for Science and Industry

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Abstract: The talk reviews fundamentals as well as recent advances in fiber based ultrafast mid-IR lasers and frequency combs, providing a flexible and robust fiber based technology platform to address demanding requirements set by the most advanced scientific and industrial applications, such as optogenetics, ultrasensitive molecular detection, nonlinear confocal microscopy, 3D-IR and multiphoton nonlinear spectroscopy, astrocombs, neurosurgery as well as fine material processing.

140.7090 Ultrafast lasers, 140.4050 Modelocked Lasers; 140.3070 Infrared and far-infrared lasers, 140.3580 Lasers, solid-state