PHOTONIK SEMINAR

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Hosts for TM2+:II-VI active media: methods of growth and physical properties

Novel active media that allow laser operation in new spectral regions is one of the ongoing research topics laser materials science. From a practical point of view the mid-infrared area of 2-6 microns is especially interesting because it encompasses a large number of molecular absorption bands. Discovery of tunable mid-infrared lasing in the II-VI crystals, doped with transition metals by a research team from Lawrence Livermore National Laboratory gave a new momentum to this field. The Institute of Single Crystals has rich experience in the field of II-VI crystal growth, and has recently entered this exciting field. This report will highlight the current progress at the Institute of Single Crystals in the growth of known binary materials and solid solutions based on them, that are aimed at developing the industrial-grade production technologies and extending the operation range of the TM2+:II-VI active media. We will compare physical properties of active elements obtained by different manufacturing methods.

Tuesday, September 30th, 2014, 15:30 p.m.

Seminarraum Institut für Photonik
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