

HL 1 Invited Talk Kneissl

Time: Monday 09:30–10:15

Room: HSZ 01

Invited Talk

HL 1.1 Mon 09:30 HSZ 01

From ultraviolet light emitting diodes to microcavity disk lasers - New frontiers in InAlGaN optoelectronics — ●MICHAEL KNEISSL — Institut für Festkörperphysik, Technische Universität Berlin, Hardenbergstr. 36, D-10123 Berlin, Germany

Over the past decade group III nitrides have evolved into one of the most important and versatile semiconductor materials. GaN-based blue, green and white light emitting diodes as well as violet laser diodes are already commonplace and have entered many areas of everyday life. Here we will discuss some of the new fields of research for InAlGaN materials and devices and review progress in the development of deep ultraviolet light emitting diodes and lasers, growth and optical properties of InN and indium rich alloys, the role of GaN-based quantum dots for novel light emitters, and work on spiral microcavity disk lasers.