

Thomas F Krauss, Professor of Optoelectronics



Thomas obtained a PhD in the area of semiconductor ring lasers at the University of Glasgow in 1992. He then initiated the field of semiconductor photonic crystals in the UK and gained SERC (1993) and Royal Society (1995) Research Fellowships in support of this work. He coordinated EU-FP5 "PICCO" and leads the current EU-FP6 "SPLASH", both studying fundamental and applied aspects of photonic crystals.

His research interest is the study of optical nanostructures and how they can be used to control the emission and propagation of light. This includes studying microemitters, slowing down light to enhance nonlinear effects and to create ultrafast modulators as well as the development of novel biosensors. His 15-strong group operate the nanofabrication facility at St. Andrews, including electron beam and photolithography, wet and dry etching, thin film deposition as well as a characterisation suite for active and passive microphotonic devices.

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Work Groups

Biophotonics	<input checked="" type="checkbox"/>
Integrated Photonics	<input checked="" type="checkbox"/>
Solar Cell Devices	<input checked="" type="checkbox"/>
Solid State laser Engineering	<input type="checkbox"/>
Photonic Sensors	<input checked="" type="checkbox"/>