

GEMaC

Groupe d'Étude
de la Matière Condensée

FOURIER TRANSFORM INFRARED INTERFEROMETRY



A Bomem DA8 interferometer is used either for transmission or emission (photoluminescence) measurements. The spectral range in wavenumber is 25.000 – 10

cm⁻¹, depending on the optical elements (source, beamsplitter and detector) and the resolution can reach 0.02 cm⁻¹, in the best case

The transmission measurements can be achieved at low temperature in the range 5 – 300 K. For infrared photoluminescence, the exciting source is a YAG: Nd laser at 10.6 μm, the measurements are carried out in a helium bath cryostat in the range 2 – 300 K. The wavelength range can spread from the visible up to 12 μm (800 cm⁻¹).

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