Methods, FMF, Fiederle

PR-Spectroscopy Photomodulated Reflection Spectroscopy	Model: Unit and Room: Responsible: Further information:	FMF model FMF, 1rd floor, R. 01027 Dr. M. Fiederle, 203 4775 www.fmf.uni-freiburg.de/service/ servicegruppen/sg_matchar/chat/
Short Description:		Picture of the Equipment
Measurement of semiconductor band structure and measurement of surface reflection and material transmission		
Available Experiments/Techniques:		
Excitation with LASER or LED in combination with white light reflection. Phase locked signal detection.		
Special Equipment:		
Lock-In Amplifier SR830 0.85m double monochromator SPEX 1404 Low temperature unit (77K - 300K) Optics, gratings, bandpass filters Si photodiode, liquid nitrogen cooled Ge photodiode Ar-ion laser Thermal white light sources		
Measurements on the equipment are currently done by:		StudentsStudents after IntroductionStudents after extensive trainingXTrained scientific service personal
Recent Publications, where this instrument was important (optional): Give citation		J. Appl. Phys. 103, 073103 (2008); doi:10.1063/1.2895002
Typical problems that may be solved with this instrument:		- Investigations on semiconductor band structure - Reflection / Transmission analysis