

Summary_

Lasers focused on the macro- and micro-world	
Applications of laser-induced breakdown spectroscopy – LIBS	
Laser Raman spectroscopy	
Optical micromanipulation techniques	
Special Technologies	14
■ Electron beam welding	
Vacuum brazing and annealing	
Design and manufacture of feedthroughs	
Thin layers deposited by magnetron sputtering and their dynamic impact testing	19
Electron microscopy	
High resolution scanning electron microscopy and X-ray microanalysis	
Scanning microscopy with slow electrons	24
Environmental scanning electron microscopy and detection systems	
Electron microscopy under ultrahigh vacuum conditions	
Cryogenics and Superconductivity	
Low temperature thermometry	
Design and realisation of cryogenic systems	
Determination of thermal-radiation properties of materials	
Vacuum technique	
Stationary magnetic fields	
Consulting and training courses on safety in cryogenics	
· · · · · · · · · · · · · · · · · · ·	
Lasers for measurement and metrology	
Lasers with high coherence for measuring purposes	
High-power ECL lasers	
Laser etalons of optical frequencies	
Absorption cells for spectroscopy and etalons of optical frequencies	
Laser interferometric measuring systems	. 4 5
Deposition of interference coatings by electron beam evaporation and spectrophotometric measurement of spectral reflectance and transmittance	47
Special electronics and software	
·	
Electron beam lithography	
E-beam pattern generator	
E-beam lithography technology	
Optical diffractive structures	
Advanced high power laser technologies	
■ Advanced high power laser technologies	55
Measurement and data processing inmedicine	58
Software – methodology & processing	
Data acquisition systems	
Experimental devices for measurement of biomedical signals	
Nuclear magnetic resonance	
Imaging and data analysis	
Application fields	