

VOLUME 2: OPTICAL MEASUREMENTS

FAST PHOTOGRAPHY

Advances in High Speed Photography: 1972 - 1982	595
J. S. Courtney-Pratt	
Recent Techniques for High-Speed Photography and Low-Level Image Recording :	609
W. Pfeiffer	
Laser Photographic and Cinematographic Applications to the Investigation of Transient Phenomena	643
M. Hugenschmidt	

REFRACTIVE INDEX MEASUREMENTS

Concepts and Illustrations of Optical Probing Diagnostics for Laser-Produced Plasmas	691
J. A. Stamper, E. A. McLean, S. P. Okenschain, and B. H. Ripin	
Sub-Nanosecond, Four-Frame, Holographic Interferometry Diagnostics	729
G. Allen, H. P. Davis, L. P. Mix, and J. Chang	
Laser Interferometry: Streaked Shadowgraphy and Schlieren Imaging	743
C. Popovics and R. Benattar	
Moire-Schlieren, Time-Differential Interferometry, and Enhanced Sensitivity of Faraday Rotation Measurements	771
P. R. Forman	
Twenty-Picosecond Pulsed UV Holographic Interferometry of Laser-Induced Plasmas	789
G. E. Busch	

X-RAY DIAGNOSTICS

Nondispersive X-Ray Diagnostics of Short-Lived Plasmas	795
R. H. Day	
High Energy X-Ray Diagnostics of Short-Lived Plasmas	827
R. H. Day	

Fiber Optics in X-Ray Diagnostics Applications	835
R. H. Day	
Flash Radiography	845
F. Jamet	
3-ns Flash X-Radiography	863
J. Chang	

SPECTROSCOPY

Principles of Plasma Spectroscopy	885
H. R. Griem	
Spectroscopy of Laser-Produced Plasmas	911
G. Tondello	

ACTIVE OPTICAL TECHNIQUES

Laser Induced Fluorescence Techniques	951
S. J. Davis	
Multiphoton Techniques for the Detection of Atoms	971
W. K. Bischel	
Coherent Anti-Stokes Raman Scattering	1001
J. J. Valentini	
Thomson Scattering Diagnostic for Intense Relativistic Electron Beam Experiment	1023
G. R. Allen, H. P. Davis, and J. Chang	
Appendix A: Ranking of Diagnostic Techniques	1037
A. K. Hyder, M. F. Rose, M. Kristiansen	
Participants	1053
Index	I