

Contents

Microelectronics – Status and trends	1
Prof. Dr.-Ing. Dieter Seitzer, Erlangen	
Contemporary German basic research on semiconductors	17
Prof. Dr. Hans Joachim Queisser	
State of the art of large volume hyperpure silicon production	35
Dr. Heinz Herzer, Tokyo Dr. Christoph Weigel, Tokyo	
Semiconductor technology	63
Dr. Peter Tischer, München	
Production-technology for integrated circuits	81
Dr. Hans Rebstock, München	
VLSI design methods for ASICs	103
Dr. Egon Hörbst, München Dr. Fritz Düster, München	
Microelectronics: Standard and customized integrated circuits	117
Dr.-Ing. Hans Weinerth, Hamburg	
Digital technology in TV receivers	133
Hermannus Schat, Freiburg	
Power electronic components properties and production	157
Dr.-Ing. Heinrich Heilbronner, Nürnberg	
Ultra high frequency semiconductor devices	175
Dr. Klaus Berchtold, Heilbronn	
Trends in optoelectronic devices	187
Dipl.-Ing. Klaus Bomhardt, Heilbronn Dr. Klaus Berchtold, Heilbronn	
Curricula vitae	199