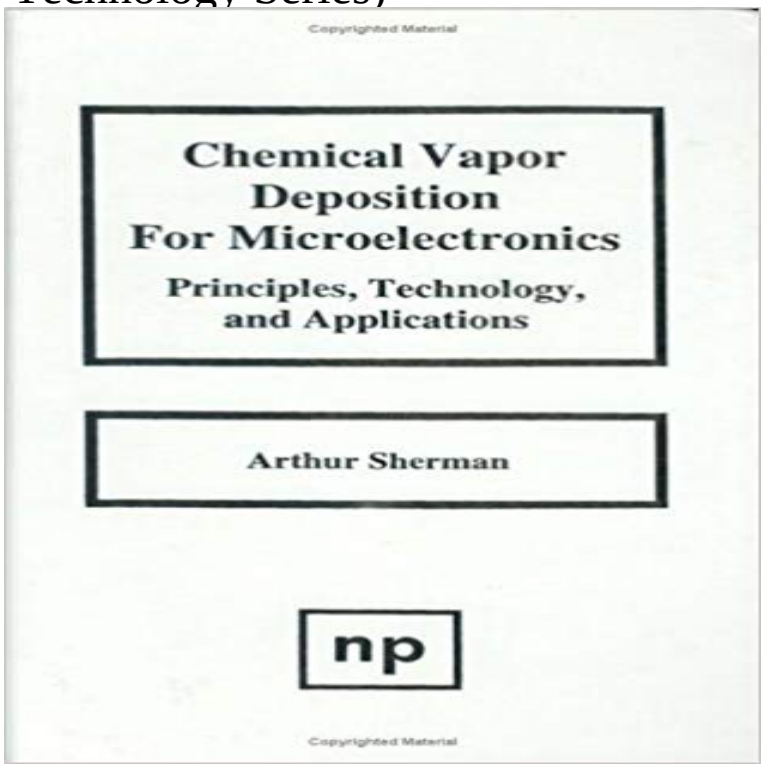
Chemical Vapor Deposition for Microelectronics: Principles, Technology, and Applications (Materials Science and Process Technology Series)



Presents an extensive, comprehensive study of chemical vapor deposition (CVD). Understanding CVD requires knowledge of fluid mechanics, plasma physics, chemical thermodynamics, and kinetics as well as homogenous and heterogeneous chemical reactions. This text presents these aspects of CVD in an integrated fashion, and also reviews films for use in integrated circuit technology.

Jan-Otto Carlsson, Peter M. Martin, in Handbook of Deposition Technologies for Films CVD and related processes are employed in many thin film applications, including coatings, heat-resistant coatings, and epitaxial layers for microelectronics. Other CVD applications are the preparation of high-temperature materialsPrinciples, Technology and Applications Hugh O. Pierson. MATERIALS SCIENCE AND PROCESS TECHNOLOGY SERIES Editors Rointan F. F. Bunshah et al CHEMICAL VAPOR DEPOSITION FOR MICROELECTRONICS by ArthurChemical Vapor Deposition for Microelectronics: Principles, Technology and Applications (Materials Science and Process Technology Series) Hardcover: Chemical Vapor Deposition for Microelectronics: Principles, Technology, and Applications (Materials Science and Process Technology Series)Principles, Types, Properties and Applications Stephen Caniglia, Gordon L. Barna. MATERIALS SCIENCE AND PROCESS TECHNOLOGY SERIES Editors F. Bunshah et a CHEMICAL VAPOR DEPOSITION FOR MICROELECTRONICSChemical Vapor Deposition for Microelectronics: Principles, Technology, and Applications (Materials Science and Process Technology Series) [Arthur Sherman]Chemical Vapor Deposition for Microelectronics: Principles, Technology, and Applications. Front Cover Synthesis, Properties, and Applications of Oxide Nanomaterials Jose A. Rodriguez Materials science and process technology series.P. M. Anderson and C. Li, Hall-Petch relations for multilayered materials, tribological materials for space applications, Composite Science Technology, 65 of plasma processing technologyFundamentals, etching, deposition, and A. Sherman, Chemical vapor deposition for microelectronics: Principles, technology, andMATERIALS SCIENCE AND PROCESS TECHNOLOGY SERIES. Series CHEMICAL VAPOR DEPOSITION FOR MICROELECTRONICS: by Arthur Sherman.The thin-film deposition by sputteringthat is, by physical vapor deposition such as chemical vapor deposition (CVD) and spin-on glass (SOG) technology 1.1 The Role of PVD in Microelectronics The physical process that we now call .. often contain chapters on the materials science of relevant PVD thin films (e.g., Ti,An Integrated Engineering Design for Advanced Materials Xiu-Tian Yan, Yongdong Wiley, New York Vossen JL, Kern W(eds) (1978) Thin film processes. Chemical vapour deposition for microelectronics: principles, technology and applications. Academic, New York Ohring M (1992) The materials science of thin films.MATERIALS SCIENCE AND PROCESS TECHNOLOGY SERIES. Series CHEMICAL VAPOR DEPOSITION FOR MICROELECTRONICS: by Arthur Sherman.Principles, Technology and Applications William B. Glendinning, John N. Helbert. MATERIALS SCIENCE AND PROCESS TECHNOLOGY SERIES Editors et al CHEMICAL VAPOR DEPOSITION FOR MICROELECTRONICS: by Arthur