

1. Record Nr.	UNINA9910831087603321
Titolo	Atomic layer deposition of nanostructured materials / / edited by Nicola Pinna and Mato Knez
Pubbl/distr/stampa	Weinheim : , : Wiley-VCH, , [2012] ©2012
ISBN	3-527-63993-4 3-527-63992-6 3-527-63991-8
Descrizione fisica	1 online resource (979 p.)
Disciplina	621.31 621.31/2429 621.38152
Soggetti	Atomic layer deposition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Related Titles; Title Page; Copyright; Foreword; Preface; Introduction; 1 Introduction; 2 Basic Features of ALD; 3 Short History of the ALD Technology; 4 The ALD Community in the Academia and Industry; 5 Conclusions; References; List of Contributors; Part One: Introduction to ALD; Chapter 1: Theoretical Modeling of ALD Processes; 1.1 Introduction; 1.2 Overview of Atomistic Simulations; 1.3 Calculation of Properties Using Quantum Simulations; 1.4 Prediction of ALD Chemical Mechanisms; 1.5 Example of a Calculated ALD Mechanism: ALD of Al ₂ O ₃ Using TMA and Water; References Chapter 2: Step Coverage in ALD 2.1 Introduction; 2.2 Growth Techniques; 2.3 Step Coverage Models in ALD; 2.4 Experimental Verifications of Step Coverage Models; 2.5 Summary; References; Chapter 3: Precursors for ALD Processes; 3.1 Introduction; 3.2 General Requirements for ALD Precursors; 3.3 Metallic Precursors for ALD; 3.4 Nonmetal Precursors for ALD; 3.5 Conclusions; References; Chapter 4: Sol-Gel Chemistry and Atomic Layer Deposition; 4.1 Aqueous and Nonaqueous Sol-Gel in Solution; 4.2 Sol-Gel and ALD: An Overview; 4.3 Mechanistic and In Situ Studies; References

Chapter 5: Molecular Layer Deposition of Hybrid Organic-Inorganic Films
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Chapter 8: Atomic Layer Deposition for Microelectronic Applications
8.1 Introduction; 8.2 ALD Layers for Memory Devices; 8.3 ALD for Logic Devices; 8.4 Concluding Remarks; Acknowledgments; References; Chapter 9: Nanopatterning by Area-Selective Atomic Layer Deposition; 9.1 Concept of Area-Selective Atomic Layer Deposition; 9.2 Change of Surface Properties; 9.3 Patterning; 9.4 Applications of AS-ALD; 9.5 Current Challenges; Acknowledgment; References; Chapter 10: Coatings on High Aspect Ratio Structures; 10.1 Introduction; 10.2 Models and Analysis

10.3 Characterization Methods for ALD Coatings in High Aspect Ratio Structures

Sommario/riassunto

Atomic layer deposition, formerly called atomic layer epitaxy, was developed in the 1970s to meet the needs of producing high-quality, large-area flat displays with perfect structure and process controllability. Nowadays, creating nanomaterials and producing nanostructures with structural perfection is an important goal for many applications in nanotechnology. As ALD is one of the important techniques which offers good control over the surface structures created, it is more and more in the focus of scientists. The book is structured in such a way to fit both the need of the expert reader (du
