1. **Record Nr.** UNINA9910806108403321

Titolo Ultra clean processing of semiconductor surfaces XII : selected, peer reviewed papers from the 12th International Symposium on Ultra Clean Processing of Semiconductor Surfaces (UCPSS) September 21-24, 2014, Brussels, Belgium / / edited by Paul Mertens, Marc Meuris and Marc Heyns

Pubbl/distr/stampa Pfaffikon, Switzerland : , : TTP, , 2014

Enfield, New Hampshire : , : Trans Tech Publications Ltd, , [date of distribution not identified]
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ISBN 3-03826-626-4

Descrizione fisica 1 online resource (331 p.)

Collana Solid State Phenomena, , 1662-7799 ; ; Volume 219

Disciplina 621.38152

Soggetti Semiconductors

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 at the end of each chapters and index.

Nota di contenuto Ultra Clean Processing of Semiconductor Surfaces XII; Preface, Committee and Acknowledgement; Table of Contents; Chapter 1: Cleaning for FEOL Applications; Necessity of Cleaning and its Application in Future Memory Devices; Removal of Interfacial Layer in HfO2 Gate Stack by Post-Gate Cleaning Using NF3/NH3 Dry Cleaning Technique; Catalyst Assisted Low Temperature Pre Epitaxial Cleaning for Si and SiGe Surfaces; HF-Last Wet Clean in Combination with a Low Temperature GeH4-Assisted HCl In Situ Clean Prior to Si0.8Ge0.2-on-Si Epitaxial Growth
Retardation Phenomenon of Oxide Removal during the Formation of Dual Gate Oxide via PR-Mask Wet Etching Aluminum Reduction in SC1; Metal Removal Efficiency in Deep Submicron Trenches by Wet Chemicals; Impact of Surface Treatment of Si3N4 on Subsequent SiO2 Deposition; Operation of a New Electrolyzed Cell Using Boron Doped Diamond Electrodes ; Chapter 2: Cleaning for FEOL Applications: Beyond-Si Active Area; InGaAs (110) Surface Cleaning Using Atomic Hydrogen; Surface Chemistry of GaAs(100) and InAs(100) Etching with

Tartaric Acid; Nanoscale Etching and Reoxidation of InAs
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Monolayers Cross-Contamination Risk Evaluation during Fabrication of
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Process; Effects of Chamber Pressure on the Performance of CO2 Beam
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Uniformity Using Agitation and Wafer Rotation; Novel Slurry Injection
System for Improved Slurry Flow and Reduced Defects in CMP
Effect of Viscoelasticity of PVA Brush on Friction during Post-CMP
Cleaning: A Guideline for Nodule Configuration

| Sommario/riassunto | Collection of selected, peer reviewed papers from the 12th InternationalSymposium on Ultra Clean Processing of Semiconductor Surfaces (UCPSS), September 21-24, 2014, Brussels, Belgium. The 71 papers are grouped as follows: Chapter 1: Cleaning for FEOL Applications, Chapter 2: Cleaning for FEOL Applications: Beyond-Si Active Area, Chapter 3: Wet Etching for FEOL Applications, Chapter 4: Wet Processing of High Aspect Ratio Structures, Chapter 5: Fluid Dynamics, Cleaning Mechanics, Chapter 6: Photo Resist Performance and Rework, Chapter 7: Cleaning for BEOL Interconnect Applications, Chapter 8: C |