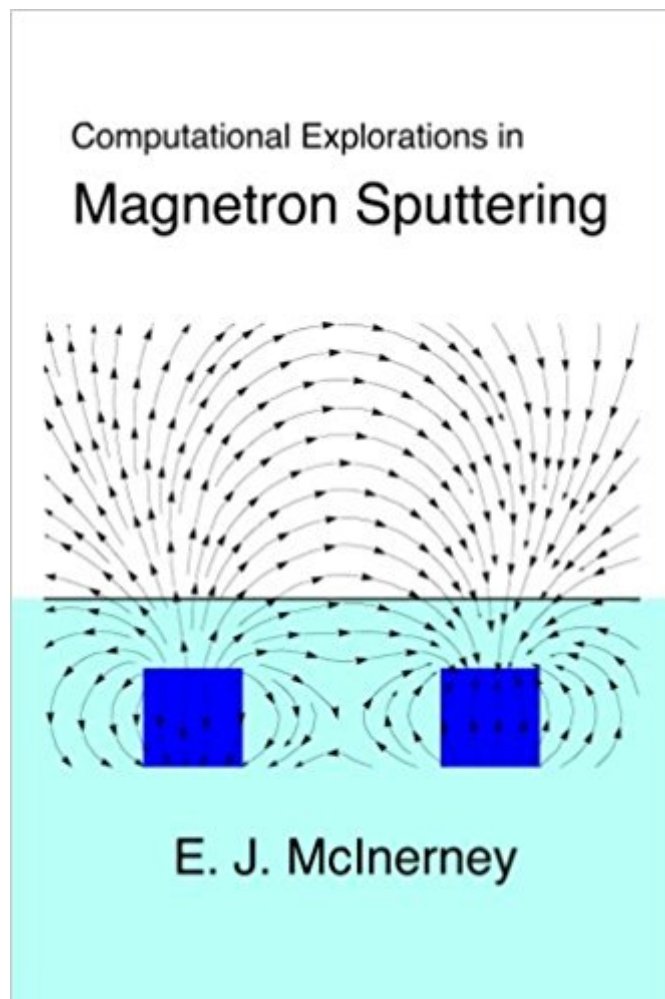




The book was found

Computational Explorations In Magnetron Sputtering



Synopsis

Magnetron Sputtering is a widely used industrial process for depositing thin films. PVD films are found in everything from the moisture barriers in potato chip bags to the interconnects of modern semiconductor devices. This book walks you through the physics of Magnetron Sputtering in a step-by-step fashion. Starting with the magnetic fields crucial to efficient operation, the book then looks at the electric fields that power the sputter process, the motion of electrons in the plasma, target erosion and finally deposition. The reader is encouraged to explore this fascinating topic by actively following along. A series of simple computer models is developed, ultimately leading to predictive models of target erosion and deposition uniformity. By working through these models, readers can build their intuition of PVD processes and develop a deeper appreciation of the underlying physics.

Book Information

Paperback: 156 pages

Publisher: Basic Numerics Press; 1 edition (October 31, 2014)

Language: English

ISBN-10: 0692289925

ISBN-13: 978-0692289921

Product Dimensions: 6 x 0.4 x 9 inches

Shipping Weight: 10.4 ounces (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #2,091,973 in Books (See Top 100 in Books) #91 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Superconductivity #717 in Books > Science & Math > Physics > Solid-State Physics

Customer Reviews

Jack McInerney is a senior staff scientist in the Computational Modeling group of Lam Research. His computational explorations have ranged broadly from barbecuing meat to plasma physics. He has authored over 30 technical papers and holds more than a dozen patents.

[Download to continue reading...](#)

Computational Explorations in Magnetron Sputtering
Sputtering Materials for VLSI and Thin Film Devices
Explorations: Through the Wormhole (Explorations Volume One)
Explorations: War (Explorations Volume Three)
Scientific Discovery: Computational Explorations of the Creative

Processes The Computational Beauty of Nature: Computer Explorations of Fractals, Chaos, Complex Systems, and Adaptation The Computational Beauty of Nature: Computer Explorations of Fractals, Chaos, Complex Systems, and Adaptation (MIT Press) Computational Fluid Mechanics and Heat Transfer, Third Edition (Series in Computational and Physical Processes in Mechanics and Thermal Sciences) Current Topics in Computational Molecular Biology (Computational Molecular Biology) Theoretical Neuroscience: Computational and Mathematical Modeling of Neural Systems (Computational Neuroscience Series) Simulating Enzyme Reactivity: Computational Methods in Enzyme Catalysis (Theoretical and Computational Chemistry Series) Computational Approaches to Protein Dynamics: From Quantum to Coarse-Grained Methods (Series in Computational Biophysics) The Power of Computational Thinking: Games, Magic and Puzzles to Help You Become a Computational Thinker Explorations of the Highlands of the Brazil (Volume II): With a full account of the gold and diamond mines. Also, canoeing down 1500 miles of the great river São Francisco, from Sabará to the sea Map Art Lab: 52 Exciting Art Explorations in Mapmaking, Imagination, and Travel (Lab Series) One River: Explorations and Discoveries in the Rain Forest Love in a Dark Time: And Other Explorations of Gay Lives and Literature Drawing in Black & White: Creative Exercises, Art Techniques, and Explorations in Positive and Negative Design Cave Explorations: in Missouri, Indiana, Illinois, Kentucky, Tennessee, and Alabama Riverwalk: Explorations Along the Cache La Poudre River

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)