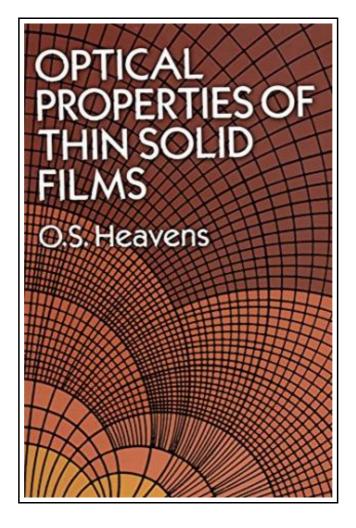
Optical Properties of Thin Solid Films Dover Books on Physics



Filesize: 4.91 MB

Reviews

This written book is excellent. It typically is not going to price a lot of. I found out this book from my dad and i encouraged this book to discover.

(Darrin Abbott)

OPTICAL PROPERTIES OF THIN SOLID FILMS DOVER BOOKS ON PHYSICS



Dover Publications. Paperback. Book Condition: New. Paperback. 288 pages. Dimensions: 8.4in. x 5.3in. x 0.6in.Thin solid films are both functional and intrinsically interesting. Their most familiar use is as coatings on the lenses of optical instruments, where they reduce reflections inside the instrument and produce sharper images. Their curious optical behavior has aroused interest since Newtons time, but has been understood only in modem times through examination of their structure by high-powered microscopes. This text treats the formation, structure, optical properties and uses of thin films, emphasizing the causes of their anomalous optical behavior. Beginning chapters describe the physical nature of thin films-their formation and structure. Heavens discusses thoroughly and practically the common thermal evaporation and sputtering processes. The equipment used is explained and diagrammed. Instruments employed to investigate the structure of thin films the optical microscope, electron microscope and field emission microscope are described. Photos taken through these instruments show the nonuniform patterns formed by crystallites of silver, gold, chromium, aluminum, nickel and other metals deposited in thin films. The next three chapters measure the effectiveness of alkaline and metallic thin solid films in transmitting and reflecting light. Maxwells equations of electromagnetic theory are presented to calculate the intensity of light transmitted or reflected by single, double and multilayered films. Thoroughly treated are methods used to measure the thicknesses of films, which include the refractometer and the interferometer. To determine the effect of thickness on the optical qualities of thin films, experiments with films of silver, gold and other metals of varying thicknesses are examined. In the final chapter, Heavens lists some less familiar uses of thin films: protection of delicate equipment from abrasions; films of metal which eliminate electrostatic charges in lab experiments; and multilayered films, used as filters, through which phenomena such as the suns corona can...



Read Optical Properties of Thin Solid Films Dover Books on Physics Online Download PDF Optical Properties of Thin Solid Films Dover Books on Physics

See Also



TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

Download Book »



Games with Books: 28 of the Best Childrens Books and How to Use Them to Help Your Child Learn - From Preschool to Third Grade

Book Condition: Brand New. Book Condition: Brand New.

Download Book »



Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications.

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****. This historic book may have numerous typos and missing text. Purchasers can usually...

Download Book »



Growing Up: From Baby to Adult High Beginning Book with Online Access

Cambridge University Press, 2014. UNK. Book Condition: New. New Book. Shipped from US within 10 to 14 business days. Established seller since 2000.

Download Book »



Everything Ser The Everything Green Baby Book From Pregnancy to Babys First Year An Easy and Affordable Guide to Help Moms Care for Their Baby And for the Earth by Jenn Savedge 2009 Paperback

Book Condition: Brand New. Book Condition: Brand New.

Download Book »