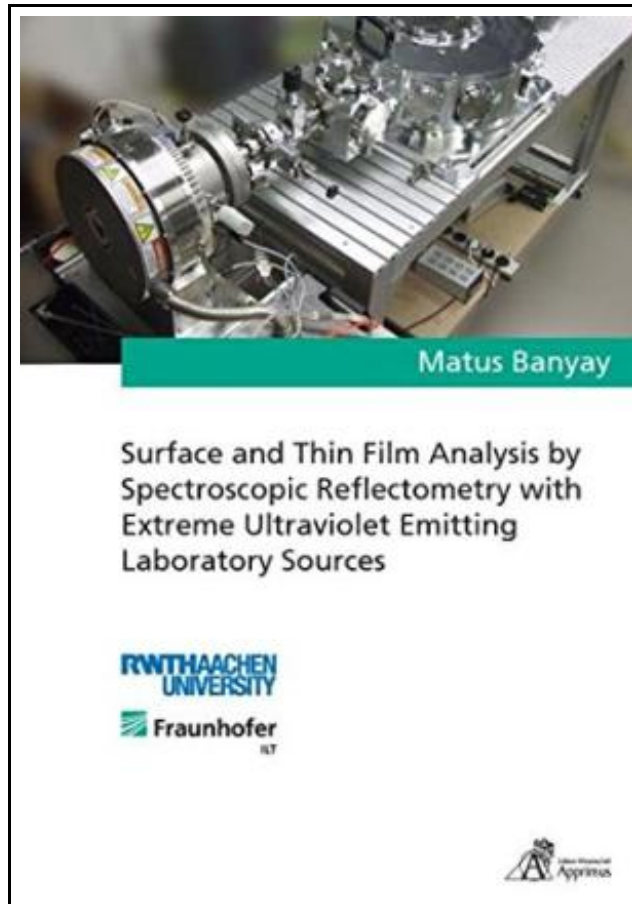


Surface and Thin Film Analysis by Spectroscopic Reflectometry with Extreme Ultraviolet Emitting Laboratory Sources



Filesize: 7.71 MB

Reviews


I just started out looking at this ebook. This can be for those who statte there had not been a worthy of reading through. You can expect to like the way the blogger publish this ebook.


(Dr. Freddie Greenholt Jr.)

SURFACE AND THIN FILM ANALYSIS BY SPECTROSCOPIC REFLECTOMETRY WITH EXTREME ULTRAVIOLET EMITTING LABORATORY SOURCES



Apprimus Wissenschaftsver Jul 2011, 2011. Taschenbuch. Book Condition: Neu. 208x146x10 mm. Neuware - Methods to investigate thin-films or surfaces using electromagnetic radiation can be traced back many decades. Some methods are even more than a hundred years old, such as ellipsometry or reflectometry. Their potential has been recognized by the industry and remained one of the main workhorses for many applications. With the invention of the laser in the 60s, more sophisticated metrology methods became available and known optical, non-destructive, techniques could be improved. Probably the worlds economically and technologically most important material so far, silicon, has created an enormous industry that is ever more in the need for laboratory based tools to characterize e.g. wafers, masks or thin-films. As the downsizing of devices continues even further, classical techniques in the visible range are reaching their limit. Hence, it becomes necessary to push some of the known methods towards shorter wavelengths well below 100 nm. The use of extreme ultraviolet radiation (XUV) enables a variety of new optical and analytical techniques, e.g. in lithography, microscopy and reflectometry. Although this radiation has been a strong domain of synchrotron sources so far, there is an increasing industrial and scientific progress in the development of laboratory-sized XUV light sources. This opens up new possibilities for in-laboratory tools mimicking some of the known techniques from accelerators and transferring them straight to the user. In this work, spectroscopic reflectometry based on laboratory extreme ultraviolet sources for metrology applications is studied. A realized prototype utilizing XUV radiation from a compact plasma discharge source was built for demonstration experiments that underline the capability of the novel technique. Such a method shows great potential especially for the analysis of ultra-thin films, or interlayers, with thicknesses well below 10 nm. High sensitivity to thickness, roughness and chemical changes in...

 [Read Surface and Thin Film Analysis by Spectroscopic Reflectometry with Extreme Ultraviolet Emitting Laboratory Sources Online](#)

 [Download PDF Surface and Thin Film Analysis by Spectroscopic Reflectometry with Extreme Ultraviolet Emitting Laboratory Sources](#)

You May Also Like



Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

[Download ePub »](#)



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

[Download ePub »](#)



Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English] (Paperback)

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Download ePub »](#)



Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English] (Paperback)

Createspace, United States, 2013. Paperback. Book Condition: New. 248 x 170 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Download ePub »](#)



NIV Soul Survivor New Testament in One Year

Paperback. Book Condition: New. Not Signed; 'The whole Bible, in just one year? You've got to be kidding.' Don't panic! How about just the New Testament to start off with? Take thousands of young people...

[Download ePub »](#)