



Handbook of Surface and Nanometrology, Second Edition

By David J. Whitehouse



Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse

Since the publication of the first edition, miniaturization and nanotechnology have become inextricably linked to traditional surface geometry and metrology. This interdependence of scales has had profound practical implications.

Updated and expanded to reflect many new developments, **Handbook of Surface and Nanometrology, Second Edition** determines how the reduction in scale of size from macro to nano has affected all aspects of surface use and measurement. The book discusses how this shift has extended through characterization, standardization, manufacture, and performance. With nanotechnology now permeating the text, this edition covers new methods of production and measurement as well as new performance requirements.

Described as the *father of digital metrology* by the American Society for Precision Engineering, author David J. Whitehouse explores the range of surface size scales?macro, micro, nano, atomic, and combinations of these. He examines traditional, structured, patterned, and free-form surfaces, emphasizing the growing need to understand the behavior of multiple surfaces.

Still the definitive reference in the field, the second edition of this handbook continues to provide in-depth, extensive coverage of the engineering, physics, materials, mathematics, and computing involved in surface metrology and nanometrology. Nothing concerning current surface geometry escapes inclusion or scrutiny in this book.



...pdf

Handbook of Surface and Nanometrology, Second Edition

By David J. Whitehouse

Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse

Since the publication of the first edition, miniaturization and nanotechnology have become inextricably linked to traditional surface geometry and metrology. This interdependence of scales has had profound practical implications.

Updated and expanded to reflect many new developments, Handbook of Surface and Nanometrology, Second Edition determines how the reduction in scale of size from macro to nano has affected all aspects of surface use and measurement. The book discusses how this shift has extended through characterization, standardization, manufacture, and performance. With nanotechnology now permeating the text, this edition covers new methods of production and measurement as well as new performance requirements.

Described as the *father of digital metrology* by the American Society for Precision Engineering, author David J. Whitehouse explores the range of surface size scales?macro, micro, nano, atomic, and combinations of these. He examines traditional, structured, patterned, and free-form surfaces, emphasizing the growing need to understand the behavior of multiple surfaces.

Still the definitive reference in the field, the second edition of this handbook continues to provide in-depth, extensive coverage of the engineering, physics, materials, mathematics, and computing involved in surface metrology and nanometrology. Nothing concerning current surface geometry escapes inclusion or scrutiny in this book.

Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse Bibliography

• Sales Rank: #4209517 in Books • Published on: 2010-12-20 • Original language: English

• Number of items: 1

• Dimensions: 11.10" h x 2.00" w x 8.60" l, 5.50 pounds

• Binding: Hardcover

• 999 pages

▶ Download Handbook of Surface and Nanometrology, Second Edit ...pdf

Read Online Handbook of Surface and Nanometrology, Second Ed ...pdf

Download and Read Free Online Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse

Editorial Review

Review

Praise for the First Edition

Handbook of Surface and Nanometrology contains a wealth of information for both practical and research engineers. For Taylor Hobson, the volume epitomises the nature of the art of surface metrology and instrument engineering, as could only be recorded through a lifetime of dedication to the subject. This book will give both guidance and food for thought for anyone interested in the subject at whatever level. ?Bruce Wilson, Taylor Hobson

The book is very useful to the colleagues of my Institute. It will be one of the best books in our library. Professor Yuri Chugui

About the Author

Regarded as one of the world's top authorities on surface and nanometrology, **David J. Whitehouse** is professor emeritus of engineering science at the University of Warwick, where he was chief scientist in the School of Engineering. He has also been a consultant to numerous organizations, such as Rolls Royce, Taylor Hobson, Kodak, Unilever, General Motors, Caterpillar, 3M, Toshiba Japan, UBM Germany, and the Atomic Weapons Research Establishment. He has published 5 books and more than 250 technical papers, holds 23 patents, and was founding editor of the first peer-reviewed international journal on nanoscale science and technology, *Nanotechnology*. Professor Whitehouse has been a recipient of many awards, including the Lifetime Achievement Award from the American Society for Precision Engineering, the Champion of Metrology award from the National Physical Laboratory, and the Commemorative Medallion of the Mendeleev Institute of Metrology.

Users Review

From reader reviews:

Earl Goodman:

As people who live in typically the modest era should be change about what going on or data even knowledge to make all of them keep up with the era which is always change and move forward. Some of you maybe can update themselves by examining books. It is a good choice in your case but the problems coming to a person is you don't know what kind you should start with. This Handbook of Surface and Nanometrology, Second Edition is our recommendation so you keep up with the world. Why, because this book serves what you want and want in this era.

Virginia Hause:

This Handbook of Surface and Nanometrology, Second Edition is new way for you who has fascination to

look for some information mainly because it relief your hunger details. Getting deeper you upon it getting knowledge more you know or else you who still having little digest in reading this Handbook of Surface and Nanometrology, Second Edition can be the light food for you personally because the information inside this kind of book is easy to get simply by anyone. These books produce itself in the form that is reachable by anyone, yes I mean in the e-book contact form. People who think that in publication form make them feel sleepy even dizzy this reserve is the answer. So there is not any in reading a guide especially this one. You can find what you are looking for. It should be here for an individual. So , don't miss this! Just read this e-book variety for your better life along with knowledge.

Jerry Blair:

As we know that book is essential thing to add our knowledge for everything. By a guide we can know everything we would like. A book is a range of written, printed, illustrated or maybe blank sheet. Every year had been exactly added. This book Handbook of Surface and Nanometrology, Second Edition was filled regarding science. Spend your free time to add your knowledge about your research competence. Some people has various feel when they reading some sort of book. If you know how big advantage of a book, you can sense enjoy to read a book. In the modern era like today, many ways to get book that you simply wanted.

Helen Christopher:

A lot of guide has printed but it takes a different approach. You can get it by world wide web on social media. You can choose the most effective book for you, science, comedy, novel, or whatever by means of searching from it. It is referred to as of book Handbook of Surface and Nanometrology, Second Edition. You can add your knowledge by it. Without making the printed book, it could add your knowledge and make an individual happier to read. It is most crucial that, you must aware about book. It can bring you from one place to other place.

Download and Read Online Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse #O3WKXGLHM5F

Read Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse for online ebook

Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse books to read online.

Online Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse ebook PDF download

Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse Doc

Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse Mobipocket

Handbook of Surface and Nanometrology, Second Edition By David J. Whitehouse EPub