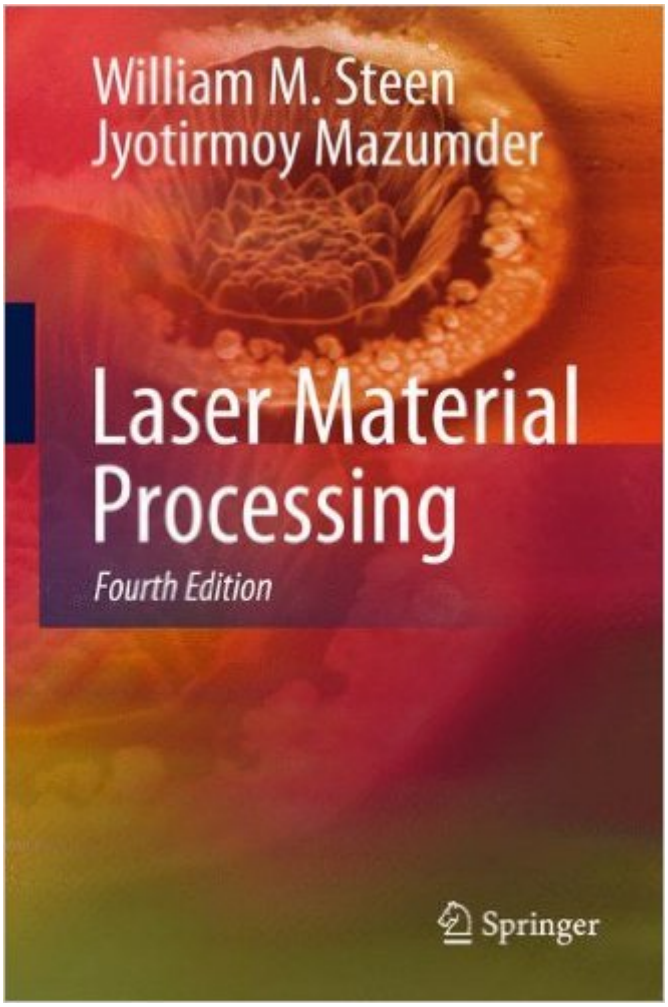
Laser Material Processing



Synopsis

This text moves from the basics of laser physics to detailed treatments of all major materials processing techniques for which lasers are now essential. New chapters cover laser physics, drilling, micro- and nanomanufacturing and biomedical laser processing.

Book Information

Paperback: 558 pages

Publisher: Springer; 4th ed. 2010 edition (September 6, 2010)

Language: English

ISBN-10: 1849960615

ISBN-13: 978-1849960618

Product Dimensions: 6.1 x 1.3 x 9.2 inches

Shipping Weight: 2.2 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 starsÂ Â See all reviewsÂ (4 customer reviews)

Best Sellers Rank: #917,893 in Books (See Top 100 in Books) #71 inÂ Books > Engineering & Transportation > Engineering > Materials & Material Science > Testing #73 inÂ Books > Engineering & Transportation > Engineering > Materials & Material Science > Extraction & Processing #129 inÂ Books > Engineering & Transportation > Engineering > Mechanical > Welding

Customer Reviews

You can’t think of a process in the laser business that isn’t described in this book. Especially if you are an not a pro in laserstuff but still interested in the basics of laserprocessing, like welding, hardening, cutting etc.Every chapter ends with a funny cartoon on something to do with the subject of that chapter. This comes in handy for presentations or other intermezzos.But this cannot be called a shallow book, some real tough formulas can be found here, they are explained so well though, you can really understand them after only reading them twice or so. Actually if you want to publish stuff in this field you might consider using this book as a reference. It is that good. Ronald Popma (PhD-student University of Twente the Netherlands)

This is the best material processing book for lasers that I know of. A good starter and reference book. The only other good source of reading that I know of are the LIA publications. Most importantly it describes in a surprisingly clear way the properties of a beam as they relate to processing, and good basic equations for heat transfer.

This book is amazingly good for those who are new in this field. It starts from the scratch and then makes your concepts. I think everybody should have one copy.

exactly I am looking for

Laser Material Processing ISO 11146-1:2005, Lasers and laser-related equipment - Test methods for laser beam widths, divergence angles and beam propagation ratios - Part 1: Stigmatic and simple astigmatic beams Handbook of Laser Wavelengths (Laser & Optical Science & Technology) Ultrafast Laser Processing: From Micro- to Nanoscale Laser Processing of Engineering Materials: Principles, Procedure and Industrial Application Biosignal and Medical Image Processing (Signal Processing and Communications) SBI: Advanced Word Processing Simulation (with CD-ROM) (Word Processing I) Bayesian Signal Processing: Classical, Modern and Particle Filtering Methods (Adaptive and Cognitive Dynamic Systems: Signal Processing, Learning, Communications and Control) Multidimensional Digital Signal Processing (Prentice-Hall Signal Processing Series) Digital Signal Processing with Examples in MATLABÂ®, Second Edition (Electrical Engineering & Applied Signal Processing Series) Discrete-Time Signal Processing (3rd Edition) (Prentice-Hall Signal Processing Series) Signal Processing Algorithms in Fortran and C (Prentice-Hall Signal Processing Series) Speech and Audio Signal Processing: Processing and Perception of Speech and Music Handbook of Neural Networks for Speech Processing (Artech House Signal Processing Library) Materials Processing: A Unified Approach to Processing of Metals, Ceramics and Polymers Digital Signal Processing: with Selected Topics: Adaptive Systems, Time-Frequency Analysis, Sparse Signal Processing Extensible Processing for Archives and Special Collections: Reducing Processing Backlogs Halloween Laser-Cut Plastic Stencils (Dover Stencils) Dinosaurs Laser-Cut Plastic Stencils (Dover Stencils) Favorite Birds Laser-Cut Plastic Stencils (Dover Stencils)