

## Modeling and Multiresolution Characterization of Micro/nano Surface

By Mukherjee, Rajib / Romagnoli, José A.

## Rajib Mukherjee Jose A Romagnoli

222

Modeling and Multiresolution Characterization of Micro/ nano Surface for Polymer Thin Films and Interfaces



Condition: New. Publisher/Verlag: VDM Verlag Dr. Müller | for Polymer Thin Films and Interfaces | Various statistical features can be used to characterize the surface in quantitative way. Such an analysis can be done by the multi-resolution capabilities of wavelet transforms (WT) of the surface microscopic image. A multi-scale molecular model can help to investigate the physical and chemical mechanism in manufacturing process. Multiresolution characterization can be performed on the model structure to compare with image analysis. In this book, we have used a soft polymeric surface and applied multiresolution characterization for surface feature extraction and multiscale modeling for optimizing system variables to get desired surface characteristics. In microfabrication, the efficiency of the product reduced by line-edge roughness (LER). Off-line LER characterization is usually based on the top-down SEM image. This book shows wavelet based segmentation method for edge searching region as well as wavelet based characterization. For mesoscale modeling, the Flory-Huggins interaction parameters of the clusters of atoms or molecules are used. We have identified the phase separation by spinodal decomposition resulting in the formation of LER on polymer surface. | Format: Paperback | Language/Sprache: english | 177 gr | 124 pp.



## Reviews

This book is amazing. it was writtern very completely and helpful. Your way of life period is going to be enhance as soon as you full reading this pdf. -- Antonia Lindgren II

Completely essential study publication. This is for anyone who statte that there was not a well worth reading through. I am very easily could get a satisfaction of reading through a written publication.

-- Hallie Stanton