

Preface

Within the last 15 years in the field of “sputtering by particle bombardment” several new and important results have been published in internal reports, in PhD thesis, as well as in the open literature. This relates especially to a more detailed understanding of the sputtering process by computational means such as molecular dynamics and binary collision approximation (BCA) programs. BCA programs allow confirmation of a large amount of measured data and predictions of sputtering yields and distributions. Progress has been achieved in chemical effects in sputtering, in sputtering by very high energy ions, in electronic sputtering, and in applications of sputtering for surface layer analysis and modifications of surfaces, such as machining, polishing and creation of surface structures such as dots and ripples. In this volume it is intended to summarise the new results by the experts in the fields. We hope that this will be of help for all colleagues who are working or plan to work in this interesting and important field of science and technology.

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