1. Record Nr. UNINA9910634050103321

Titolo	Sputtering by particle bombardment : experiments and computer calculations from threshold to MeV energies / / Rainer Behrisch, Wolfgang Eckstein (eds.)
Pubbl/distr/stampa	Berlin, : Springer, c2007
ISBN	1-280-96030-2 9786610960309 3-540-44502-1
Edizione	[1st ed. 2007.]
Descrizione fisica	1 online resource (526 p.)
Collana	Topics in applied physics ; ; v. 110
Altri autori (Persone)	BehrischRainer EcksteinWolfgang
Disciplina	530.416
Soggetti	Solid state physics Sputtering (Physics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	and Overview -- Computer Simulation of the Sputtering Process -- Sputtering Yields -- Results of Molecular Dynamics Calculations -- Energy and Angular Distributions of Sputtered Species -- Chemical Sputtering -- Electronic Sputtering with Swift Heavy Ions.
Sommario/riassunto	This volume gives a comprehensive overview about the physical processes causing sputtering of solids at bombardment with energetic ions. The most important quantities are the sputtering yields, i.e. the average number of atoms eroded per incident ion. The latest results for the sputtering yields and their dependence on the incident energy and angle of incidence, as well as the energy and angular distributions of the sputtered atoms are presented. This concerns experimentally determined yields as well as a critical evaluation of the computational methods used to calculate the yields and distributions. The energies of the incident ions cover the range between a few eV up to several MeV. The influence of chemical effects between the incident ions and the atoms of the bombarded solid on the sputtering yields are also reviewed.