



Ionization of Solids by Heavy Particles (Paperback)

By -

Springer-Verlag New York Inc., United States, 2012. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book. This book collects the papers presented at the NATO Advanced Research Workshop on Ionization of Solids by Heavy Particles , held in Giardini-Naxos (Taormina), Italy, on June 1 -5, 1992. The meeting was the first to gather scientists to discuss the physics of electron emission and other ionization effects occurring during the interaction of heavy particles with condensed matter. The central problem in the field is how to use observations of electron emission and final radiation damage to understand what happens inside the solid, like excitation mechanisms, the propagation of the electronic excitation along different pathways, and surface effects. The ARW began with a brief survey of the field, stressing the unknowns. It was pointed out that ionization theories can only address the very particular case of weak perturbations. For this problem, this meant high speed, low-charged projectiles (a perturbation treatment of interactions with slow, highly charged ions was later presented). Only semi-empirical models exist for velocities lower than the Fermi velocity in the solid, which can be used to predict kinetic electron emission yields. These models, however, do...



READ ONLINE
[8.36 MB]

Reviews

The book is fantastic and great. It is loaded with knowledge and wisdom You are going to like the way the article writer create this ebook.

-- **Amaya King**

Absolutely essential read through ebook. Better then never, though i am quite late in start reading this one. I am just delighted to inform you that this is actually the finest ebook i actually have read through during my own existence and might be he greatest publication for actually.

-- **Ms. Vernie Stracke**