N. Yoshimura

Vacuum Technology

Nanotechnology has reached a level where almost every new development and even every new product uses features of nanoscopic properties of materials. As a consequence, an enormous amount of scientific instruments is used in order to synthesize and analyze new structures and materials. Due to the surface sensitivity of such materials, many of these instruments require ultrahigh vacuum that has to be provided under extreme conditions like very high voltages.

In this book, Yoshimura provides a review of the UHV related development during the last decades. His very broad experience in the design enables him to present us this detailed reference. After a general description how to design UHV systems, he covers all important issue in detail, like pumps, outgasing, Gauges, and Electrodes for high voltages.

Thus, this book serves as reference for everybody using UVH in his scientific equipment.

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