

From reviews of Interfaces in Crystalline Materials

Journal of Solid State Electrochemistry: Fritz Scholz

No other book attempts to give a comparable comprehensive and conscious description of this wide scientific field. The treatment is suitable for both postgraduate students and scientists who need information on interfaces.

Journal of the American Chemical Society: W T Reynolds

The authors are widely recognized authorities in the field of crystalline interfaces, and they have compiled an encyclopaedic reference that is remarkable in both its breadth and its depth. As a consequence of its comprehensiveness, the book is lengthy but well worth the price. The book is organized into four major parts: Interfacial Structure, Interfacial Thermodynamics, Interfacial Kinetics and Interfacial Properties. Successive parts build upon previous ones, but not so much as to prevent one from profitably reading only specific sections. Each part is divided into roughly three chapters. The chapters all end with an extensive list of references that give the reader an effective entrée to the literature for more detailed information.

Overall, *Interfaces in Crystalline Materials* is an excellent reference for researchers interested in almost any aspect of interfaces in crystalline materials. The authors present current theories and recent experiments in a clear fashion and provide a helpful perspective on the development of the field that makes the book very readable. Despite their pedagogical writing style, the level of the book is perhaps above that of an introductory graduate course; some of the concepts require a working knowledge of crystallography, crystal defects, thermodynamics or solid state physics beyond that of many new graduate students. Nevertheless, the book's breadth and comprehensive coverage make it invaluable to a wide audience and ensure it will become a classic materials science text.

Physics Today: J Murray Gibson

Sutton and Balluffi are both highly regarded scientists in the field of grain boundaries... In writing their book they have used their experience well and covered the extensive and challenging field of internal interfaces as well as we could hope, producing a wonderful addition to the literature of internal interfaces. Its 800 exhaustive pages contain hundreds of references and logical and detailed coverage of all the essential material.

Sutton and Balluffi focus on the underlying science of internal interfaces, using experimental data only as illustrative data. ...The obviously great efforts of Sutton and Balluffi in preparing their book have enormously aided the materials community.

MRS Bulletin: Roy A Vandermeer

Sutton and Balluffi have successfully created a scholarly, integrated and up-to-date text on the vast subject of interfaces in crystalline solids. The book is intended for advanced students and serious scholars and researchers in solid state physics, physical metallurgy, and materials science who have a strong interest in the subject of interfaces and interfacial phenomena. Important aspects of crystalline interfaces are presented descriptively and in theoretical derivations of sufficient detail to be comprehended by serious readers but which require a working knowledge of a number of advanced mathematical techniques. Ample examples and many references to experimental findings are presented throughout to

balance the theoretical mien. Because of the text's strong emphasis on fundamentals, it should be a useful reference for the science community.

Physics World: Manfred Rühle

It is certainly an impressive achievement. This volume, which provides a coherent and critical review of all the results in interface science, is long overdue. Sutton and Balluffi have succeeded in pulling all the established results into an impressive monograph. This book is sure to make an impact in the materials science and solid-state physics communities. It is written in an objective style and includes all the established facts about crystalline interfaces. Sutton and Balluffi focus on the essential issues ... The relevant literature is reviewed extremely carefully. It will be invaluable for scientists and students working in the area of interface science. The authors have shown that it is still possible to write an excellent and detailed monograph on a specific subject, but it must have been a heroic effort.