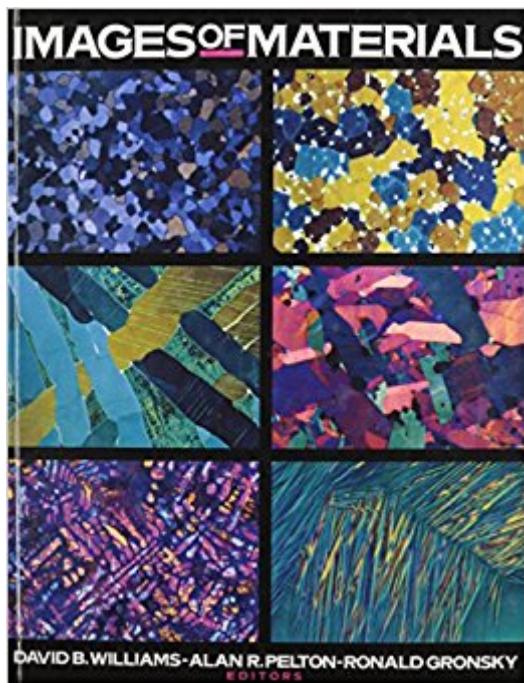


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Images Of Materials



Synopsis

This spectacularly illustrated book celebrates the structural beauty of everyday materials and the space-age technologies used to probe their surface features and internal structures. It introduces the reader to the various instruments and their uses: scanning electron, ion, and tunneling microscopies, acoustic microscopy and transmission electron microscopy. The book describes how images are processed and analyzed, and how modern materials science is based on these techniques and their ability to "see" materials at the atomic level. The book includes hundreds of illustrations and 32 pages of beautiful color plates depicting the complex microscopic realm within such everyday materials as the metals used in cars and planes, polymer fabrics, ceramics, and the ubiquitous silicon semiconductors, without which society today would fall into disarray and confusion. The many full-color and black-and-white illustrations make this book a pleasure for the eye, in addition to being a useful resource for scientists, students, researchers, and engineers involved in solid-state physics, materials science, geology, and chemistry.

Book Information

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