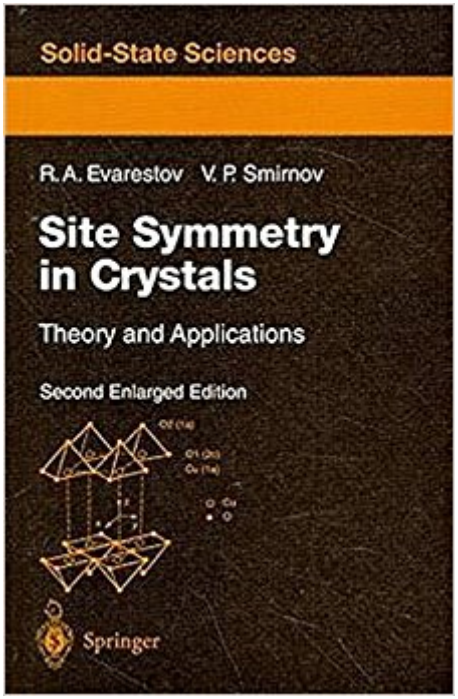
# Site Symmetry In Crystals: Theory And Applications (Springer Series In Solid-State Sciences)



## Synopsis

Site Symmetry in Crystals is the first comprehensive account of the group-theoretical aspects of the site (local) symmetry approach to the study of crystalline solids. The efficiency of this approach, which is based on the concepts of simple induced and band representations of space groups, is demonstrated by considering newly developed applications to electron surface states, point defects, symmetry analysis in lattice dynamics, the theory of second-order phase transitions, and magnetically ordered and non-rigid crystals. Tables of simple induced respresentations are given for the 24 most common space groups, allowing the rapid analysis of electron and phonon states in complex crystals with many atoms in the unit cell.

## Book Information

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## Customer Reviews

This was just what we wanted. We had already been using a library’s copy.

The authors have given a comprehensive introduction to the application of induced-representation method in space group. Although it involves some mathematics, I found that it is particular useful in analyzing crystalline states in complicated, non-tradiational lattice structures. I recommend that the reader should also have the book "Representations of the Crystallographic Space Groups" written by O. V. Kovalev to make this book more powerful.

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