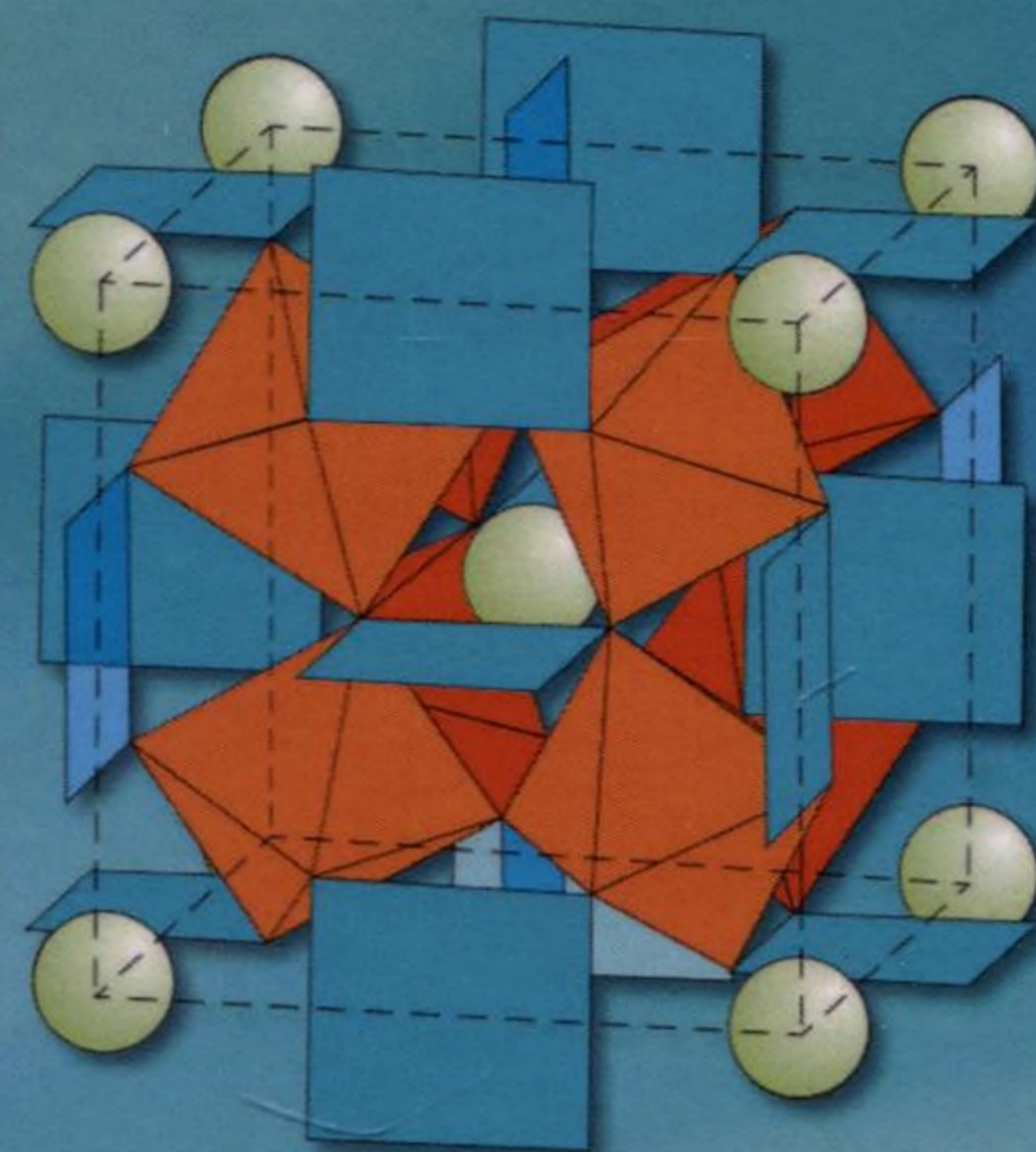


PEROVSKITES

Structure–Property Relationships

Richard J.D. Tilley



Perovskites are a class of compounds of the general formula ABX_3 with structures related to that of the mineral perovskite. These materials couple a huge range of physical properties with chemical stability and are thus vital in many areas of application involving electronics and photonics. Inorganic/organic hybrid perovskites are being actively explored for photovoltaic and solar cell applications. In addition, the synergies and emergent properties of perovskite interfaces and surfaces are increasingly relevant in many areas of study.

This book provides a compact and up-to-date overview of the large body of literature pertaining to these phases, building upon a comprehensive description of the many crystal structures adopted by perovskites. All topics are explained concisely in a way that requires a minimum of prior expertise, to suit both a newcomer to the field and more experienced readers who require a handy reference.


Topics include the following:

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- Phase relations
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