tion for the newcomer only if the reader already has some background in crystalline solid-state physics. The good survey of the present knowledge of many aspects of properties of amorphous materials, with a detailed list of references to the original literature and the inclusion of several tables of physical parameters, make this book very useful for all those professionally involved in the amorphous domain.

The contents of the book are divided into seven chapters, which deal in turn, and in excellent detail, with: the preparation of amorphous materials; thermodynamic, kinetic and other factors (including glass transition phenomena) that influence ease of glass formation; the structure of amorphous materials, including methods for finding structure (diffraction of X-rays, electrons, neutrons) and the techniques (such as NMR and spectroscopy) that supply indirect information; the dynamic behaviour of atoms in the glassy state, including such details as the thermal anomalies that can appear at low temperature; electronic excitations, manifested as transport, or optical properties in amorphous semiconductors, including discussion of those particular glasses having ionic properties that offer the promise of technological applications such as superionic conduction; defects and defect control of the properties of amorphous materials; and, finally, a chapter on amorphous metal (metallic glasses).

It is remarkable how much theory, practical application and detailed example have been incorporated in 380 pages of this excellent work. The author has given the reader a good idea of the vitality of this rapidly expanding branch of solid-state science.

I enjoyed the book. It is carefully produced, fully illustrated with clear diagrams and well arranged tables. With its extensive bibliography, which is substantially complete through to the end of 1982, this book provides very up to date information in fundamental and experimental amorphous materials physics.

In conclusion, it can be said that this book must be strongly recommended as a sound practical guide for the novice in amorphous-material study and as a handy compendium of new theoretical concepts and practical hints for all those already concerned and familiar with the amorphous state.

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The following books have been received by the Editor. Brief and generally uncritical notices are given of works of marginal crystallographic interest; occasionally a book of fundamental interest is included under this heading because of difficulty in finding a suitable reviewer without great delay.
