books received

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 finding a suitable reviewer without great delay.

Inorganic structural chemistry. By Ulrich Müller. Pp. xi + 268. Chichester: John Wiley & Sons, 2nd ed., 2006. Price (soft cover) GBP 29.95. ISBN 978-0-470-01864-4.

This book describes the structural principles of inorganic molecules and solids using traditional concepts as well as modern approaches. It includes the systematic ordering of recognized structure types, relationships amongst them, and the link between structure and properties. In this second edition, the text has been revised and new findings have been taken into consideration. For example, many recently discovered modifications of the elements have been included, most of which occur at high pressures. Particular attention is given to the treatment of symmetry throughout the book. New sections deal with quasicrystals and other not strictly crystalline solids, with phase transitions and with the electron localization function. There is a new chapter on nanostructures. *Contents:* 1. Introduction, 2. Description of Chemical Structures, 3. Symmetry, 4. Polymorphism and Phase Transitions, 5. Chemical Bonding and Lattice Energy, 6. The Effective Size of Atoms, 7. Ionic Compounds, 8. Molecular Structures I, 9. Molecular Structures II, 10. Molecular Orbital Theory, 11. The Element Structures of the Nonmetals, 12. Diamond-like Structures, 13. Polyanionic and Polycationic Compounds. Zintl Phases, 14. Packings of Spheres. Metal Structures, 15. The Sphere-Packing Principle for Compounds, 16. Linked Polyhedra, 17. Packings of Spheres with Occupied Interstices, 18. Symmetry as the Organizing Principle for Crystal Structures, 19. Physical Properties of Solids, 20. Nanostructures, 21. Pitfalls and Linguistic Aberrations. References. Answers to the problems. Index.

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