reducing the value of this book. Most of the subjects are presented too briefly; they can be found discussed in more detail in several books on spectroscopy and in review articles.

The book is well produced and proofread—it is recommended to advanced graduate students and researchers interested in the field.

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Solid State Chemistry and Physics, An Introduction, Volume 1

P. F. Weller, ed.500 pp. Marcel Dekker, New York, 1973.\$26.50

The topic of this book, solid-state chemistry and physics, has received lip service for many years, but because of the separation of the academic disciplines it has seldom been taken seriously. The changing employment market has, however, caused a corresponding change in attitude in academic departments where there is interest in what becomes of their graduates, and these changes are reflected in this volume. In short, the subject of this book is "Relevant." This fact has

not escaped the publishers, who have produced an unattractive photo-offset volume for which they expect, and probably will get, a handsome price.

Physicists who are concerned with adjusting to the changing attitude of society toward science would do well to consider this modest but effective volume. The average age of the seven contributing authors is less than 40, and all are competent if not very distinguished. The exceptional feature of the book is its simple, direct approach, which deliberately avoids not only sophisticated mathematics but also elegance. As a result, the average reader with little or no previous acquaintance with the subject will not feel overawed. Instead, he is likely to finish the book, and when finished he will have a vocabulary sufficient to encourage him to approach the many authoritative and elegant texts available at higher levels.

This is the first volume of a two-volume set, and it covers most of the properties that would be of interest from a materials viewpoint: structure and bonding, electrical, magnetic and optical properties, and some transport and magnetic resonance phenomena. The standard it sets is not high, and there is some unavoidable repetition from one author to the next, but it is likely to be useful to many students.

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new books

Elementary Particles and Fields

Fields and Particles: An Introduction to Electromagnetic Wave Phenomena and Quantum Physics. F. Bitter, H. A. Medicus. 688 pp. Elsevier, New York, 1973. \$17.95

Fundamental Interactions in Physics. (Conf. on Fundamental Interactions, Coral Gables, Fla., 22–26 January 1973). B. Kursunoglu, A. Perlmutter. 399 pp. Plenum, New York, 1973. \$25.00

Hadron Physics at Very High Energies.
D. Horn, F. Zachariasen. 378 pp. W. A.
Benjamin, Reading, Mass., 1973. \$17.50
hardcover, \$9.50 paperback

Nuclear Research Emulsions II: Particle Behavior and Emulsion Applications. W. H. Barkas. 462 pp. Academic, New York, 1973. \$36.00

Chemical Physics

Electron Spin Resonance in Chemistry. L. A. Blumenfeld. 322 pp. Halsted, New York, 1974. \$32.50

Electricity and Magnetism

The Electromagnetic Interaction. R. L. Armstrong, J. D. King. 493 pp. Prentice

Hall, Englewood Cliffs, N.J., 1973. \$11.95

Magnetism, Vol. 5: Magnetic Properties of Metallic Alloys. H. Suhl, ed. 400 pp. Academic, New York, 1973. \$34.00

Materials Science

Crystal Structures: A Working Approach. H. D. Megaw. 563 pp. W. B. Saunders, Philadelphia, 1973. \$19.50

Electrotransport in Metals and Alloys. J. N. Pratt, R. G. R. Sellors. 201 pp. Trans Tech, Riehen, Switzerland, 1973.

Festkörper-theorie III: Lokalisierte Zustände. O. Madelung. 195 pp. Springer-Verlag, New York, 1973. \$7.60

Solid State Surface Science, Vol 3. M. Green, ed. 222 pp. Marcel Dekker, New York, 1973. \$24.50

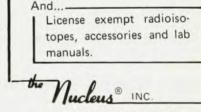
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IR—Theory and Practice of Infrared Spectroscopy. N. L. Alpert, W. E. Keiser, H. A. Szymanski. 380 pp. Plenum, New York, 1973. \$7.95

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Advances in Aerosol Physics, Vol. 4. V.





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