

THE MANCHESTER PHYSICS SERIES

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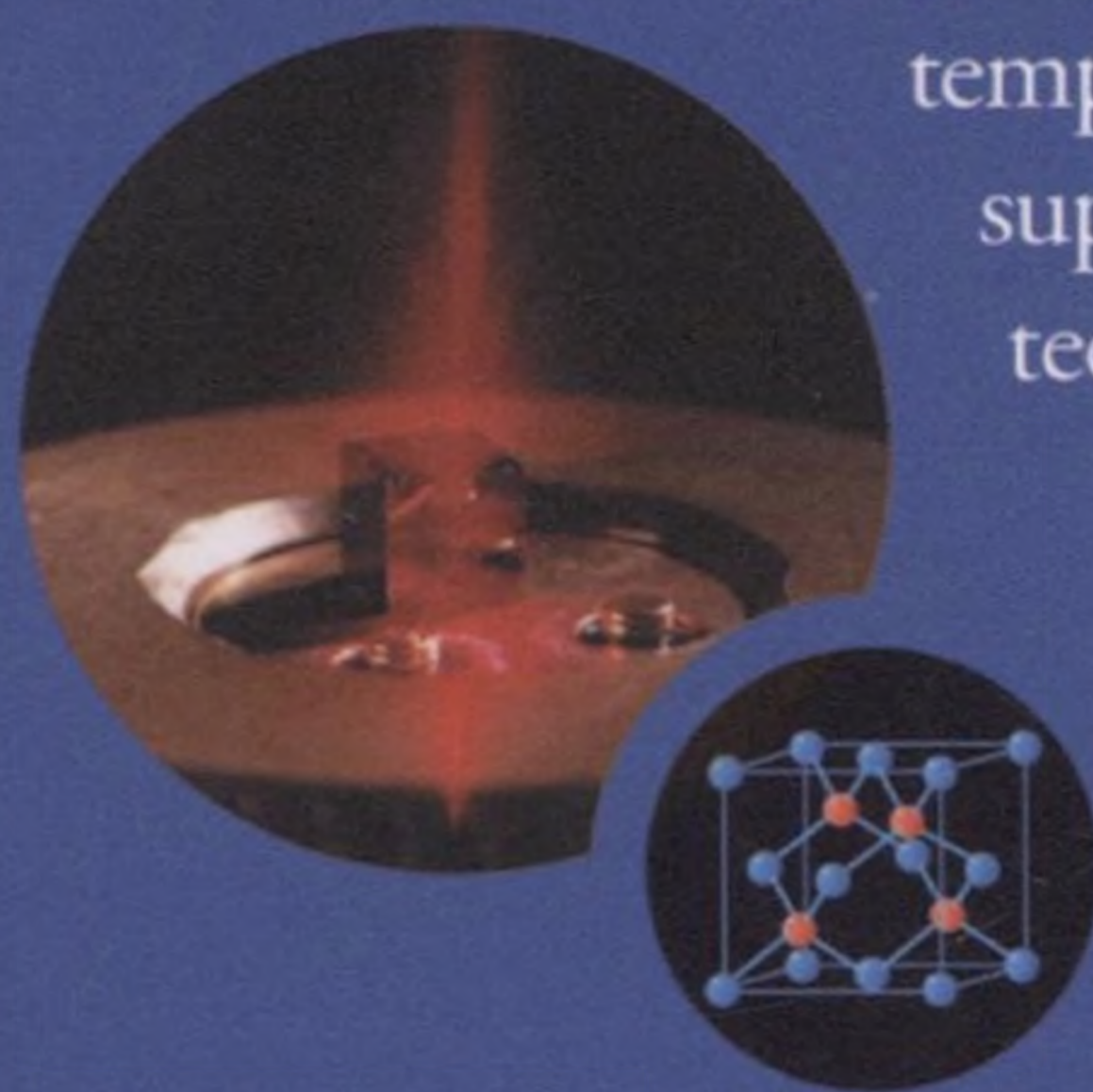
Solid State Physics, Second Edition is aimed at students taking a first course in this subject, although it will also be of interest to professional physicists and electronic engineers requiring a grasp of the fundamentals of this important area of physics. Basic concepts are introduced in an easily accessible context: for example, wave propagation in crystals is introduced using one- and two-dimensional geometries. Only when these basic ideas are familiar are generalisations to three dimensions and the elegant framework of the reciprocal lattice made.

Extensively rewritten, the *Second Edition* now includes new and expanded coverage of semiconductor devices, the quantum Hall effect, quasicrystals, high temperature superconductors and techniques for the

study of the surfaces of solids. A chapter on dielectrics and ferroelectrics has also been added.

Solid State Physics, Second Edition features:

- A carefully written and structured text to help students fully understand this exciting subject.
- A flow diagram allowing topics to be studied in different orders or omitted altogether.
- Optional “starred” and highlighted sections containing more advanced and specialised material for the more ambitious reader.
- Carefully selected problems at the end of each chapter designed to assist learning. Solutions are provided at the end of the book.



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