

Springer

1st  
edition1st ed. 2018, XVIII, 517 p.  
247 illus., 46 illus. in color.**Printed book**

Hardcover

**Printed book**

Hardcover

ISBN 978-3-662-55920-8

~~\$ 129,00~~

Available

Sale price valid through February 29,  
2020

\$ 79,99

**Discount group**

Professional Books (2)

**Product category**

Graduate/advanced undergraduate textbook

**Series**

Graduate Texts in Physics

**Other renditions**

Softcover

ISBN 978-3-662-57255-9

**Physics : Solid State Physics**Dresselhaus, M., Dresselhaus, G., Cronin, S.B., Gomes Souza Filho, A., Massachusetts Institute of  
Technology, Cambridge, MA, USA

# Solid State Properties

**From Bulk to Nano**

- Covers both background and applications of main solid state properties
- Gives a hand-in-hand description of theory models and experiments
- Contains special sections on the novel developments in solid state nanoscience
- Based on a successful course at MIT

This book fills a gap between many of the basic solid state physics and materials science books that are currently available. It is written for a mixed audience of electrical engineering and applied physics students who have some knowledge of elementary undergraduate quantum mechanics and statistical mechanics. This book, based on a successful course taught at MIT, is divided pedagogically into three parts: (I) Electronic Structure, (II) Transport Properties, and (III) Optical Properties. Each topic is explained in the context of bulk materials and then extended to low-dimensional materials where applicable. Problem sets review the content of each chapter to help students to understand the material described in each of the chapters more deeply and to prepare them to master the next chapters.

**Order online at [springer.com/booksellers](https://www.springer.com/booksellers)****Springer Nature Customer Service Center LLC**

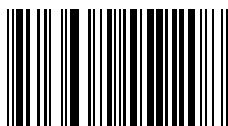
233 Spring Street

New York, NY 10013

USA

T: +1-800-SPRINGER NATURE

(777-4643) or 212-460-1500

[customerservice@springernature.com](mailto:customerservice@springernature.com)

ISBN 978-3-662-55920-8 / BIC: PNFS / SPRINGER NATURE: SCP25013

Prices and other details are subject to change without notice. All errors and omissions excepted. Americas: Tax will be added where applicable. Canadian residents please add PST, QST or GST. Please add \$5.00 for shipping one book and \$ 1.00 for each additional book. Outside the US and Canada add \$ 10.00 for first book, \$5.00 for each additional book. If an order cannot be fulfilled within 90 days, payment will be refunded upon request. Prices are payable in US currency or its equivalent.