

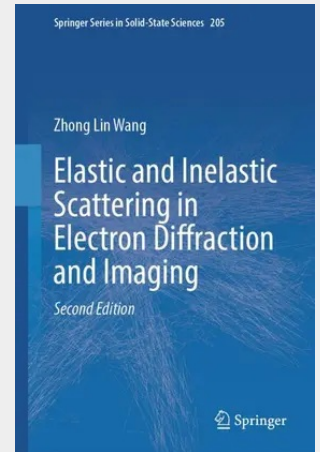
Elastic and Inelastic Scattering in Electron Diffraction and Imaging

This book provides an in-depth exploration of the physics underlying electron diffraction and imaging, with a focus on their applications in materials characterization. Originally published in 1995, the first edition systematically summarized various dynamic theories associated with quantitative electron microscopy and their applications in simulations of electron diffraction patterns and images. Since then, significant progress has been made in the field, necessitating this revised second edition.

The second edition introduces new content, particularly emphasizing the diffraction and imaging of inelastically scattered electrons, a topic that has not been extensively covered in existing literature. This edition also includes updated theories and methodologies, reflecting the advancements in the field over the past decades. The book assumes that readers have a foundational understanding of electron microscopy, electron diffraction, and quantum mechanics. It aims to serve as a comprehensive guide for approaching phenomena observed in electron microscopy from the perspective of diffraction physics.

This book provides an in-depth exploration of the physics underlying electron diffraction and imaging, with a focus on their applications in materials characterization. Originally published in 1995, the first edition systematically summarized various dynamic theories associated with quantitative electron microscopy and their applications in simulations of electron diffraction patterns and images. Since then, significant progress has been made in the field, necessitating this revised second edition.

The second edition introduces new content, particularly emphasizing the diffraction and imaging of inelastically scattered electrons, a topic that has not been extensively covered in existing literature. This edition also includes updated theories and methodologies, reflecting the advancements in the field over the past decades. The book assumes that readers have a foundational understanding of electron microscopy, electron diffraction, and quantum mechanics. It aims to serve as a comprehensive guide for approaching phenomena observed in electron microscopy from the perspective of diffraction physics.

**192,59 €**

179,99 € (zzgl. MwSt.)

*Lieferfrist: bis zu 10 Tage***Artikelnummer:** 9783031908187**Medium:** Buch**ISBN:** 978-3-031-90818-7**Verlag:** Palgrave Macmillan**Erscheinungstermin:** 02.11.2025**Sprache(n):** Englisch**Auflage:** 2. Auflage 2025**Serie:** Springer Series in Solid-State Sciences**Produktform:** Gebunden**Gewicht:** 1045 g**Seiten:** 495**Format (B x H):** 160 x 241 mm