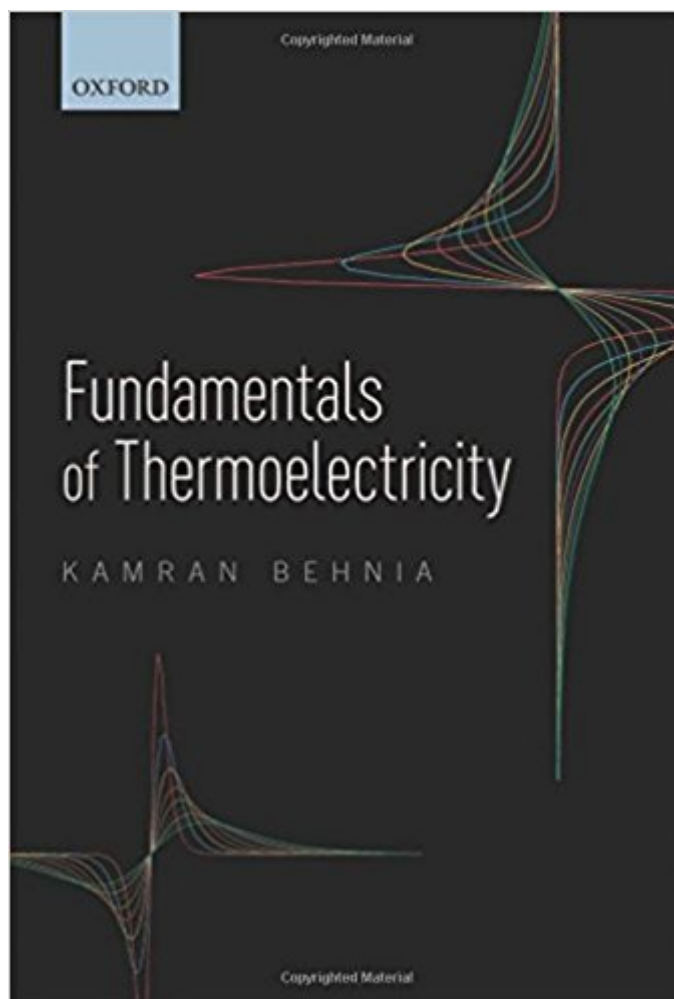


The book was found

# Fundamentals Of Thermoelectricity



## Synopsis

What kind of information on the electrons' organisation in solids is yielded by measuring their thermoelectric response? *Fundamentals of Thermoelectricity* gives an account of our current understanding of thermoelectric phenomena in solids by presenting basic theoretical concepts and numerous experimental results. Many readers will be surprised to learn that even in the case of simple metals (considered to be domesticated long ago by the quantum theory of solids) our understanding lags far behind known experimental facts. The two theories of phonon drag, the positive Seebeck coefficient of noble metals, and the three-orders-of-magnitude gap between theory and experiment regarding the thermoelectric response of Bogoliubov quasi-particles of a superconductor are among the forgotten puzzles discussed in this book. Among other novelties, it contains an original discussion of the role of the de Broglie thermal wave-length in setting the magnitude of the thermoelectric response in Fermi liquids.

## Book Information

Hardcover: 256 pages

Publisher: Oxford University Press; 1 edition (March 29, 2015)

Language: English

ISBN-10: 0199697663

ISBN-13: 978-0199697663

Product Dimensions: 9.8 x 0.5 x 6.9 inches

Shipping Weight: 1.5 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 1 customer review

Best Sellers Rank: #646,345 in Books (See Top 100 in Books) #76 in [Books > Science & Math > Physics > Electromagnetism > Magnetism](#) #200 in [Books > Science & Math > Physics > Electromagnetism > Electricity](#) #213 in [Books > Science & Math > Physics > Solid-State Physics](#)

## Customer Reviews

This new volume clearly explains the fundamental principles and richly illustrates these ideas with numerous detailed examples. It is easily the best book on the subject. \* Stephen J. Blundell, *Contemporary Physics* \* While thermoelectricity is one of the oldest topics known in condensed matter physics and materials science, investigation of thermoelectric phenomena is a very active research frontier for both fundamental understanding and applications. Kamran Behnias book comes in as an excellent modern textbook, balancing both theoretical description and experimental

surveys for this ever progressing and exciting scientific field \* Philip Kim, Harvard University \*

Kamran Behnia, Senior Researcher (Directeur de Recherche), ESPCI, Paris  
Kamran Behnia grew up in Tehran and witnessed the revolution of 1979, and the repression which followed it. He became a political refugee in France in the middle of the 1980s and obtained a PhD from Paris-Sud University in 1990. After a postdoctoral stay at the University of Geneva, he was employed in 1992 by the Centre National de la Recherche Scientifique (CNRS) as a junior researcher in the Laboratoire de Physique des Solides at Orsay, near Paris. He moved to his current institution (ESPCI) in 2000 and has been doing research there since. He is an experimentalist interested in the collective behaviour of electrons, and in particular in the way they carry heat and charge.

So far so good. I am beyond pleased with this product So pretty! Just what I expected. Well designed. Great product. It's work properly, exactly according to the description. I did a overall test after I recieved it and found it is really good, especially its design.

[Download to continue reading...](#)

Fundamentals of Thermoelectricity Plastic Injection Molding: Product Design & Material Selection Fundamentals (Vol II: Fundamentals of Injection Molding) (Fundamentals of injection molding series) Plastic Injection Molding: Mold Design and Construction Fundamentals (Fundamentals of Injection Molding) (2673) (Fundamentals of injection molding series) Metaphysics: The Fundamentals (Fundamentals of Philosophy) Volleyball Fundamentals (Sports Fundamentals) Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics, 7e (Fundamentals of Clinical Chemistry (Tietz)) Fundamentals of Special Radiographic Procedures, 5e (Snopek, Fundamentals of Special Radiographic Procedures) Fundamentals of Complementary and Alternative Medicine, 5e (Fundamentals of Complementary and Integrative Medicine) Softball Fundamentals (Sports Fundamentals) Experiments in Electronics Fundamentals and Electric Circuits Fundamentals Electric Circuit Fundamentals (7th Edition) (Floyd Electronics Fundamentals Series) Forensic Science: Fundamentals and Investigations (Forensic Science, Fundamentals and Investigations) Student's Solutions Manual for Fundamentals of Differential Equations 8e and Fundamentals of Differential Equations and Boundary Value Problems 6e Fundamentals of Musculoskeletal Ultrasound E-Book (Fundamentals of Radiology) Fundamentals of Biostatistics (Rosner, Fundamentals of Biostatics) Fundamentals of Oral and Maxillofacial Radiology (Fundamentals (Dentistry)) Archery Fundamentals (Sports Fundamentals Series) Bowling: The Absolute Beginners Guide to Bowling: Bowling Tips to Build Fundamentals and Execution Like a Pro in 7 Days or Less

(Bowling Basics, Bowling Fundamentals, Bowling Tips, Bowling Execution) Bowling Fundamentals (Sports Fundamentals) Bowling: Bowling Box Set (2 in 1): Bowling for Beginners, Bowling Basics & Fundamentals - A Complete Bowling Guide (Bowling, Bowling Basics, Bowling Fundamentals, ... Bowling like a pro, bowling tips, Bowl)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)