free access!
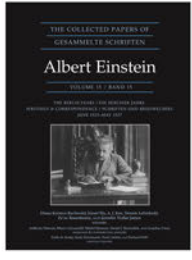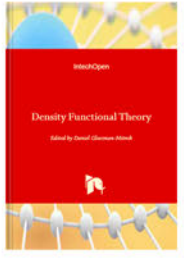
ebooks in the library
March/April 2020

The Abdus Salam
**International Centre
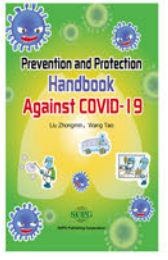for Theoretical Physics**

As you may have more time in these days to dedicate to reading, we suggest what could be the equivalent for scientists of Proust's *La Recherche* for humanists: the 15 volumes of *The Collected Papers of Albert Einstein*, holding many surprises for readers on Einstein's science, politics, and public life.

An attempt to present examples on the utility of *Density Functional Theory* for the understanding of the chemical reactivity through descriptors that constitute the basis of the so-called Conceptual DFT.

At the crossroads between physics, mathematics, chemistry, engineering, biology and earth sciences, *Flowing Matter* relies on a multidisciplinary approach to describe the emergence of the macroscopic behaviours in a system from the coordinated dynamics of its microscopic constituents.
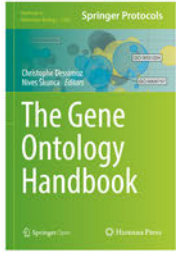
Originally published in Chinese, now distributed freely in English by World Scientific Publishing, this practical guide aims to help the public better understand the knowledge about the novel coronavirus, and guide them to protect themselves effectively.
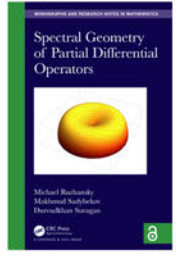
Curious to deepen your understanding of IoT? This is a collection of recent technical research and industrial papers covering new results in computing and storage data management for low-cost devices and sensors.
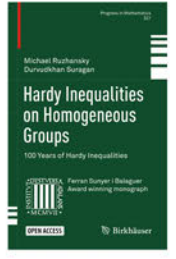
Examines key aspects of international cooperation to enhance nuclear safety, security, and non-proliferation, towards a nuclear weapon-free world, in celebration of 60 years of IAEA Atoms for Peace and Development and the EURATOM Treaty.
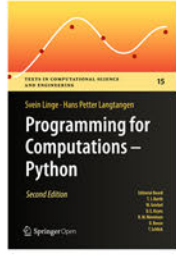
An overview of Gene Ontology (GO), a project to provide a uniform way to describe the functions of gene products from organisms across all kingdoms of life and thereby enable analysis of genomic data.

Introduction to the ideas underpinning spectral geometric inequalities arising in the theory of partial differential equations.

Winner of the 2018 Ferran Sunyer i Balaguer Prize, an extensive treatment of Hardy inequalities and closely related topics from the point of view of Folland and Stein's homogeneous (Lie) groups.

From the Preface: "Written for students, teachers, engineers, and scientists who know nothing about programming and numerical methods from before but who seek a minimum of the fundamental skills required to get started with programming as a tool for solving scientific and engineering problems."

SPRINGER NATURE

"The most original linear algebra book to appear in years, it certainly belongs in every undergraduate library."
Choice

This and other >500 key textbooks from Springer Nature freely accessible for educators, students and academics through 31 July 2020.