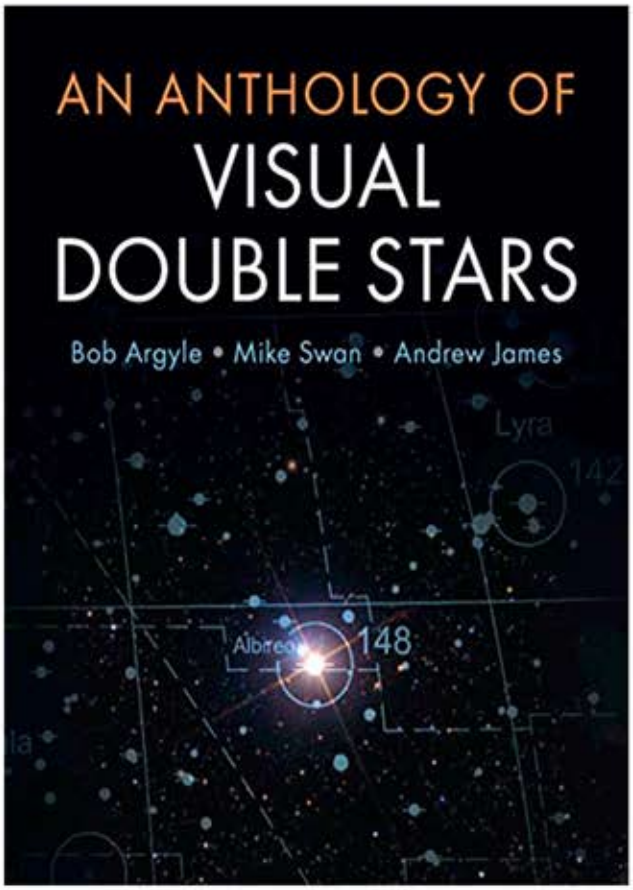
Boletín de Adquisiciones
Julio 2022

An Anthology of Visual Double Stars
Bob Argyle, Mike Swan, and Andrew James



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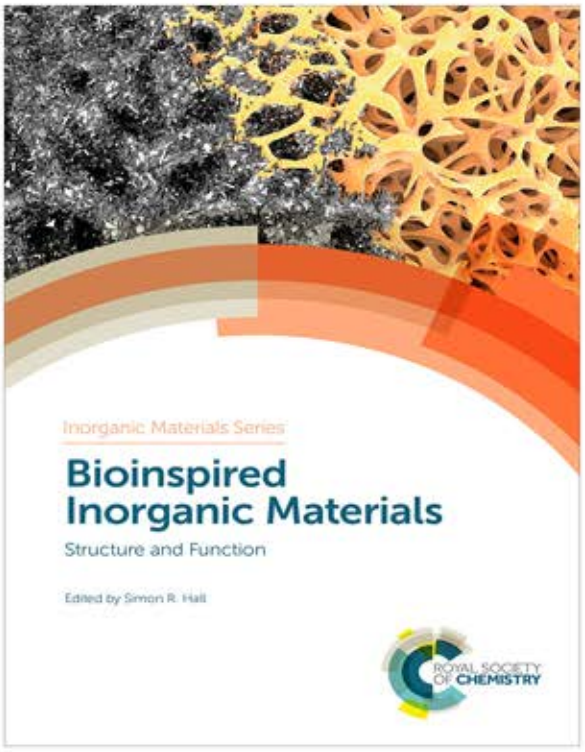

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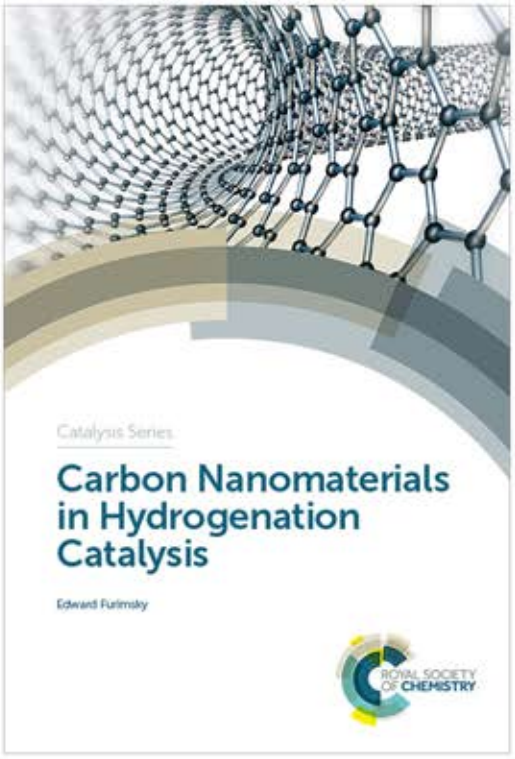

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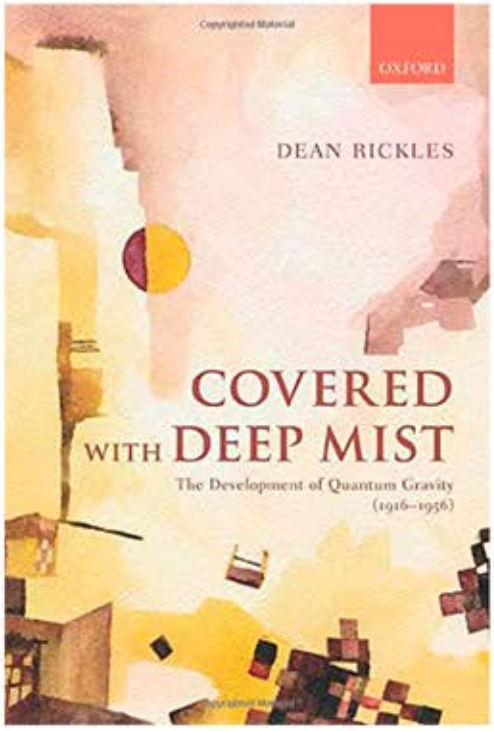

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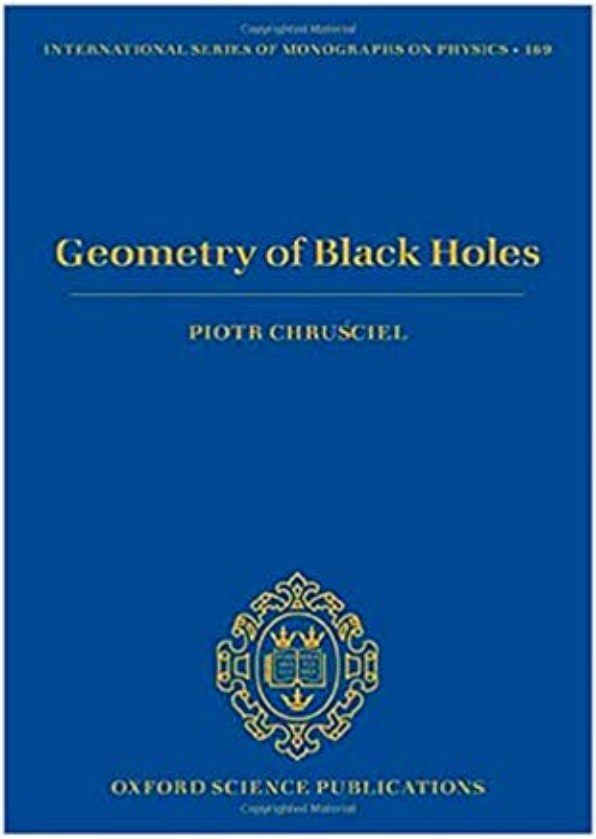

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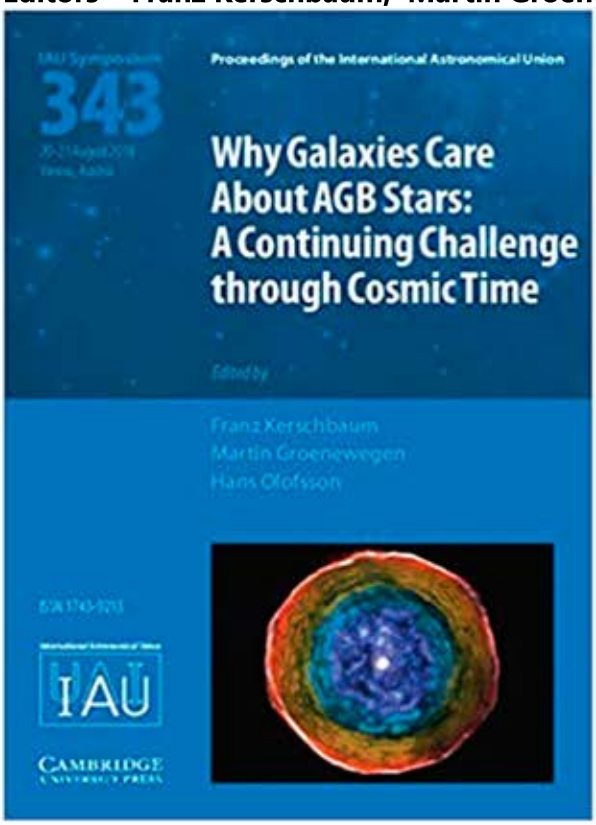

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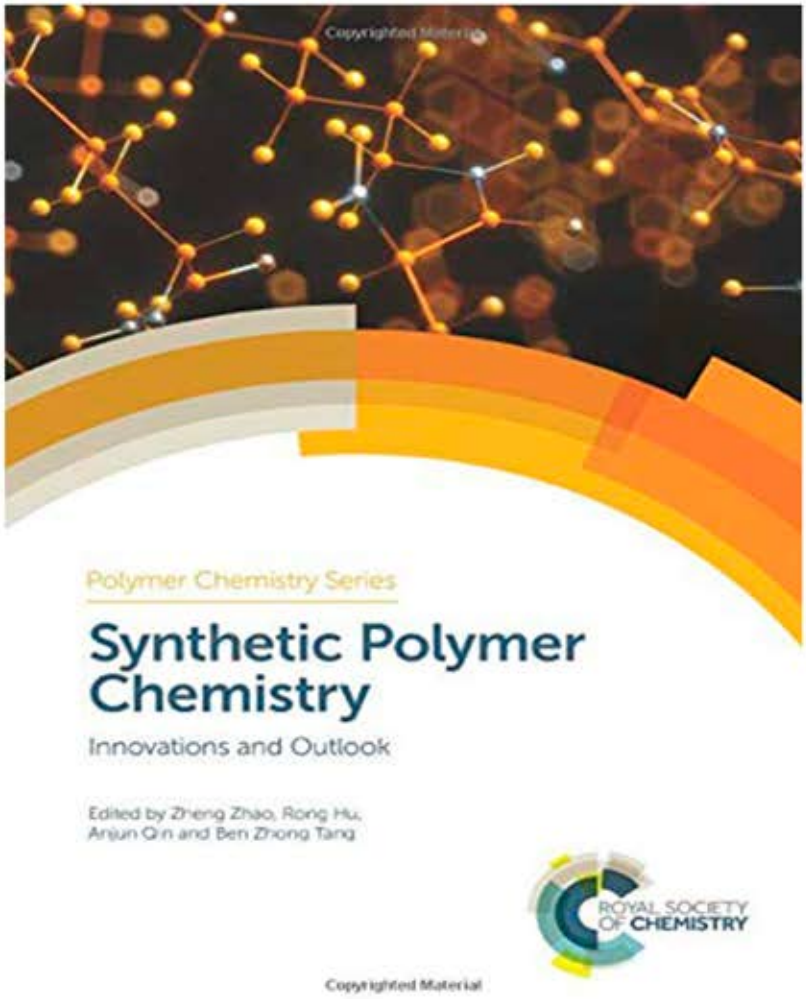

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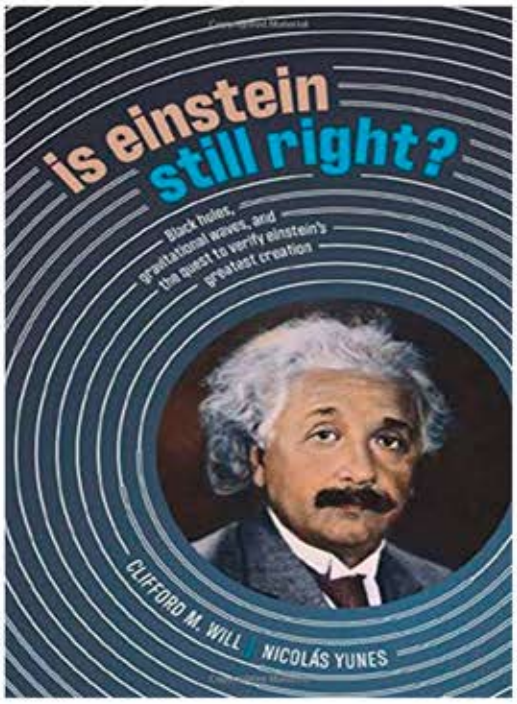

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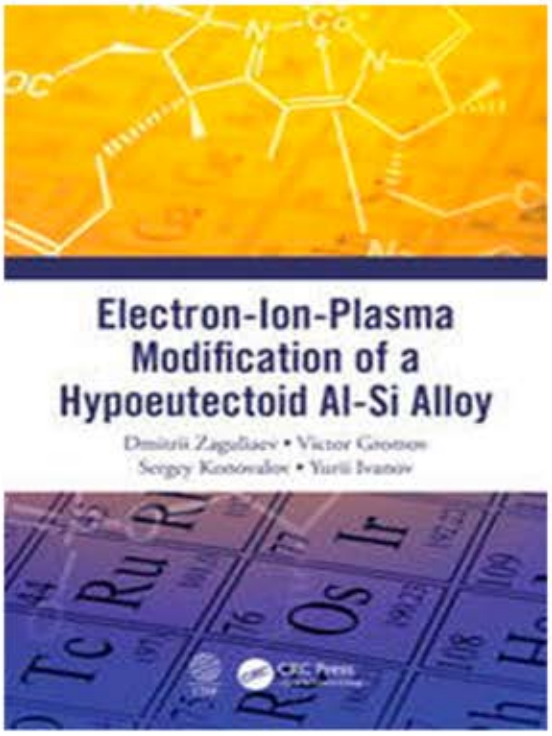

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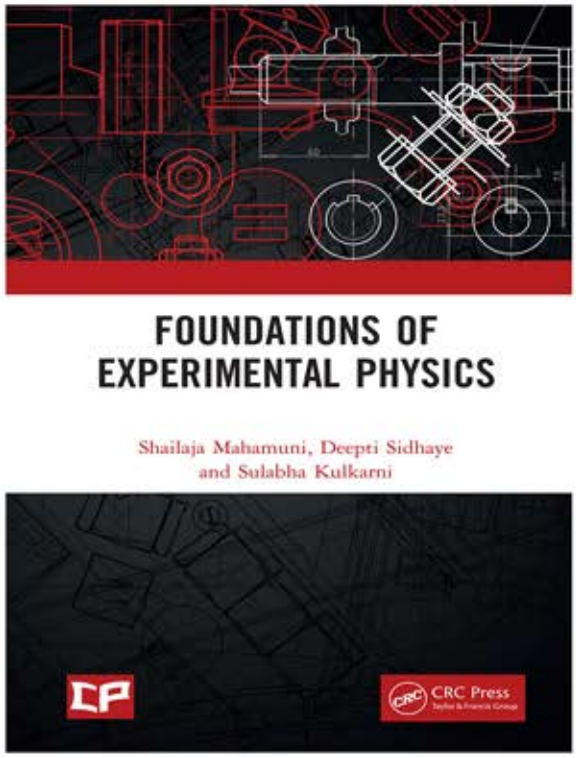

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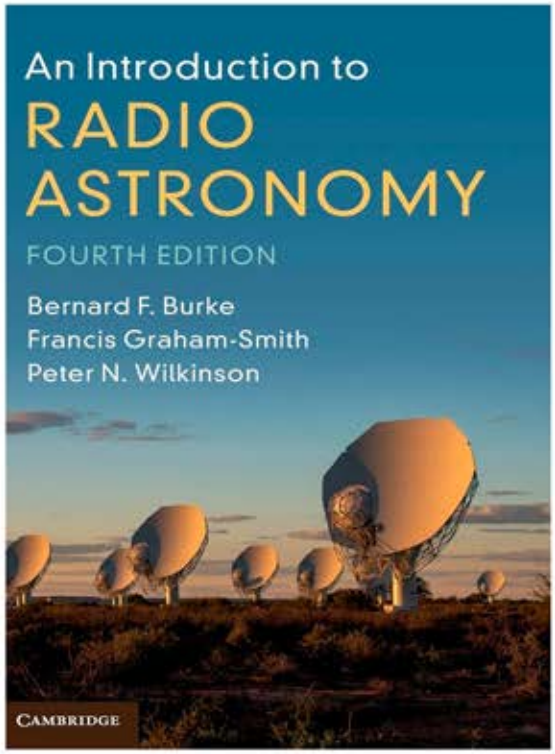

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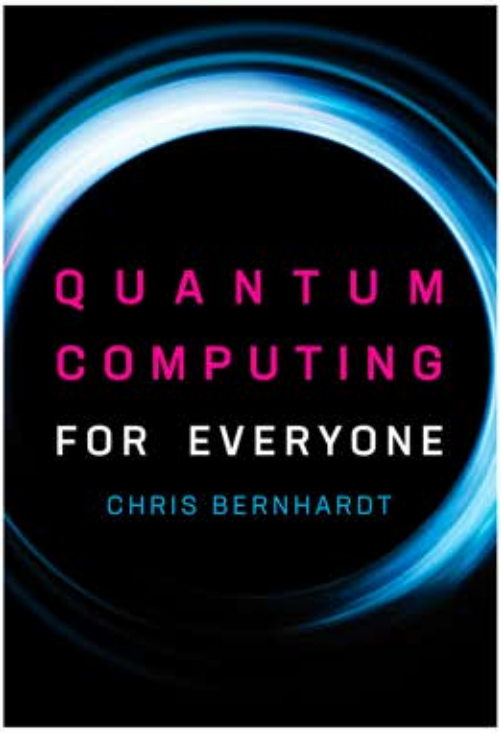

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Neutrino Physics
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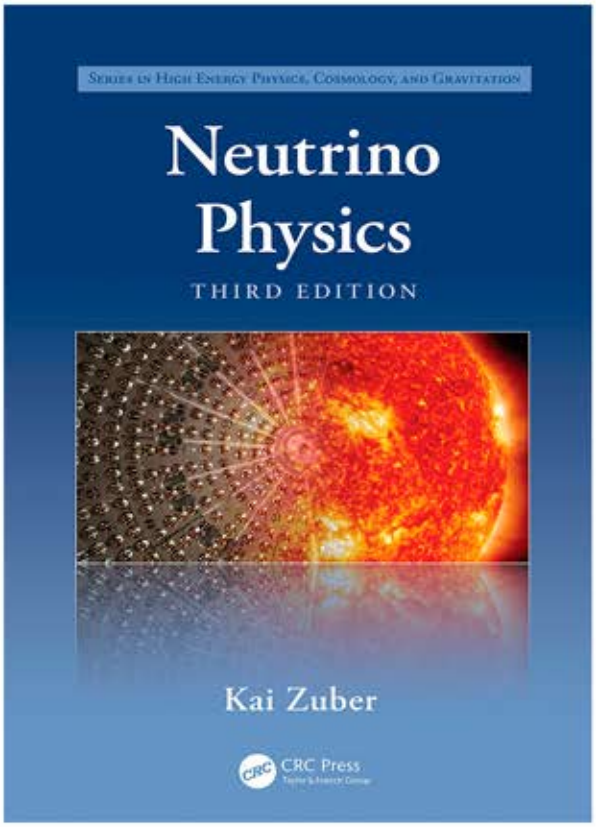

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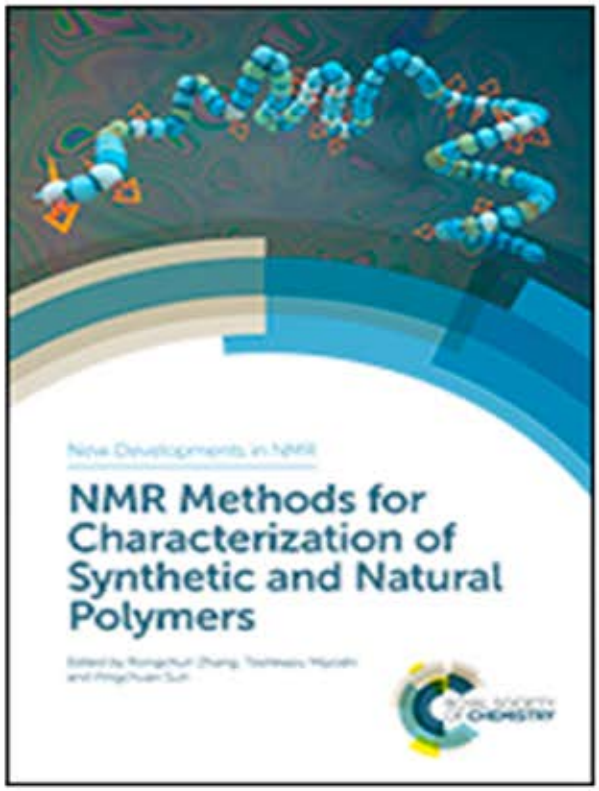

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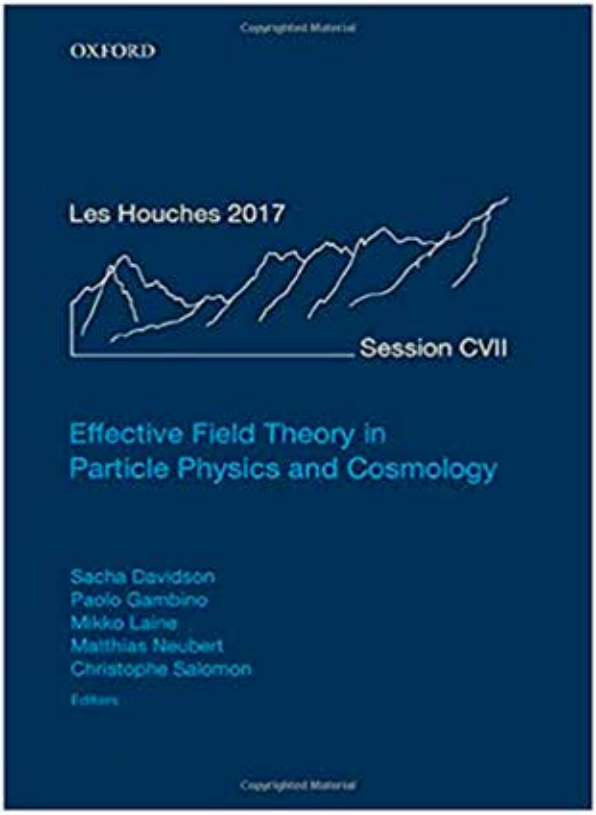

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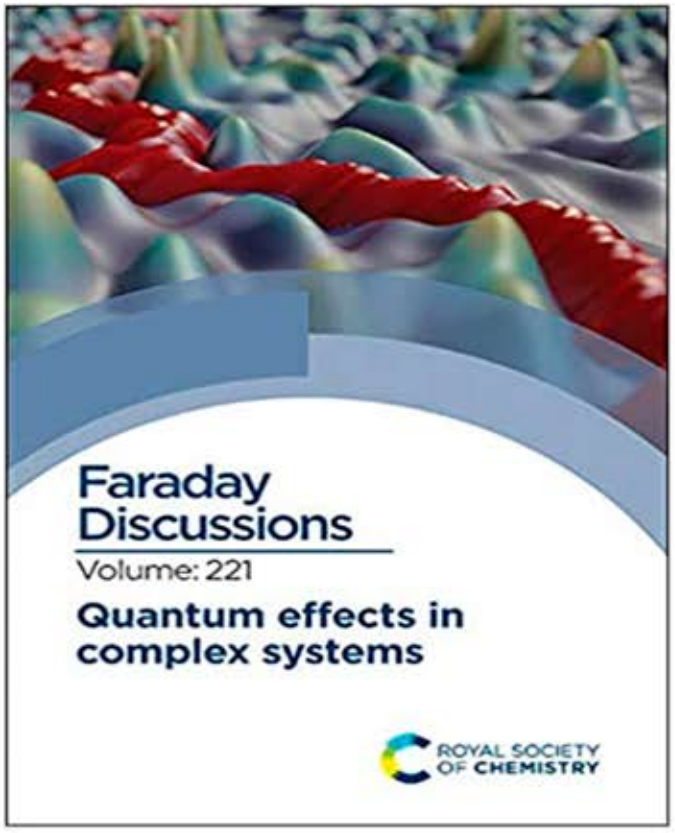
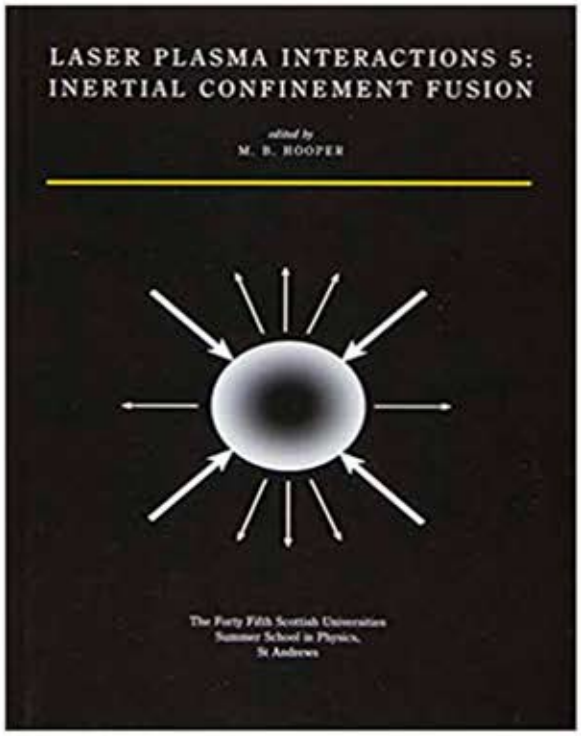


About this book

Nuclear quantum effects such as zero-point energy conservation, tunnelling, non-adiabaticity and coherence play an important role in many complex chemical systems of technological and biological importance. Zero-point energy differences are key to understanding the experimentally-observed differences in the thermodynamic properties of normal and heavy water, while both theoretical and experimental work has highlighted the role of quantum tunnelling in enzyme-catalysed hydrogen transfer reactions. Photochemical reactions, involving multiple potential energy surfaces, are implicitly quantum-mechanical in nature, while recent spectroscopic investigations are providing new insight into the role of quantum coherence in the efficient energy transfer processes observed in photosynthetic centres.
This volume brings together computational and experimental researchers who are interested in developing and applying methods to use in understanding the role of quantum effects in complex systems.

The topics covered in this volume include:
Quantum coherence in complex environments
Spectroscopic signatures of quantum effects
Zero-point energy and tunnelling
Emerging opportunities and future directions

Laser Plasma Interactions 5 Inertial Confinement Fusion: Proceedings of the Forty Fifth Scottish Universities Summer School in Physics, St. Andrews, August 1994
By M. B. Hooper



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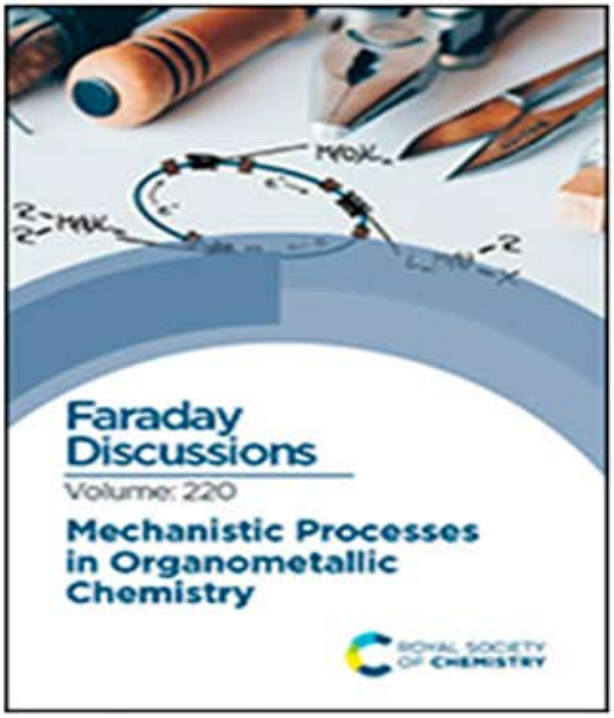


About this book

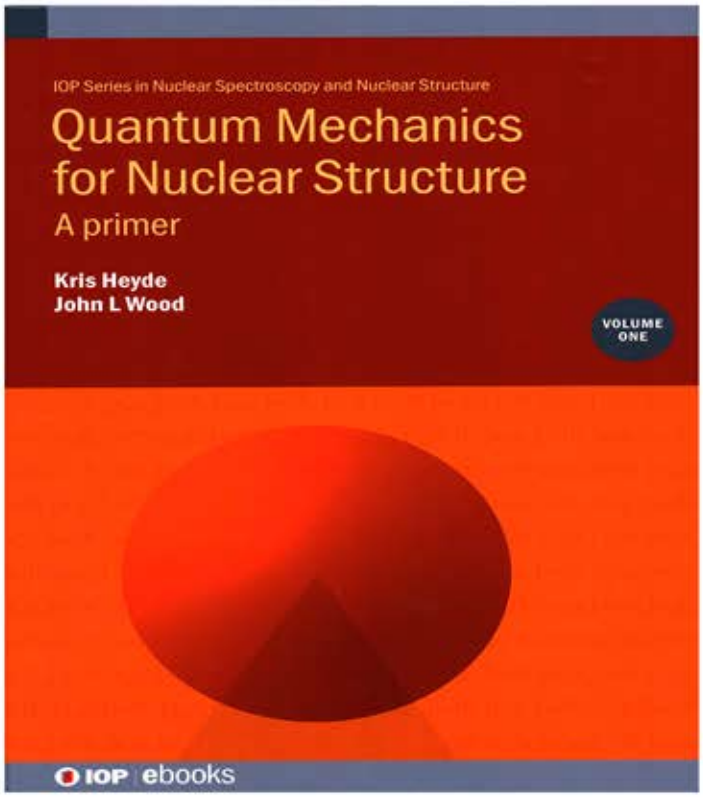
Organometallic chemistry underpins the majority of homogeneous catalysis, which is used in a range of areas from the multi-tonne-scale synthesis of polymers to the discovery and preparation of high-value molecules, such as pharmaceuticals and agrochemicals. The development and/or optimisation of many of these catalytic applications crucially depends on the discovery and understanding of mechanistic processes in organometallic chemistry. As such, mechanistic investigations have played a key role in the field of organometallic chemistry since its early days, but the recent and rapid growth in transition-metal catalysed organic reactions, where fundamental mechanistic insight is frequently lagging behind synthetic developments, emphasises their contemporary importance. In addition, there have been many significant developments recently in the physical methods that can be used to gain mechanistic understanding in organometallic chemistry (e.g. NMR spectroscopic developments, such as new hyperpolarisation techniques, in-situ IR for reaction monitoring, novel methodologies for kinetic analysis, and novel computational approaches).

This volume focusses on mechanistic studies coupled with novel experimental and computational methods and brings together experts with a wide range of interests and backgrounds, including those developing new physical methods for mechanistic investigations and the potential end users of these methods.

In this volume, the topics covered include:

Physical methods for mechanistic understanding
Understanding unusual element–element bond formation and activation
Computational and theoretical approaches for mechanistic understanding
Mechanistic insight into organic and industrial transformations
Book content
- **Physical Methods for Mechanistic Understanding**
- **Understanding Unusual Element-element Bond Formation and Activation**
- **Computational and Theoretical Approaches for Mechanistic Understanding**
- **Mechanistic Insight into Organic and Industrial Transformations**

Quantum Mechanics for Nuclear Structure, Volume 1
A primer
Kris Heyde and John L Wood



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