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This handbook is the first of nanophysics. On the one hand, it leads the reader to the most significant recent developments in research. It provides a broad and in-depth coverage of the physical principles and associated applications. In each chapter, the authors focus on the treatment of the physics underlying the applications, rather than experimental results, rather than focusing on particular applications themselves.

The handbook now encourages communication across borders among nanoscience experts with disparate interests to begin

the discussion of the future of nanophysics. On the other hand, it deals with the technological applications of nanophysics. The chapters are written by authors from various fields of nanoscience to encourage new links between fundamental research

After the first book, which covers the general principles of theory and measurements of nanoscale systems, the organization roughly follows the historical development of nanoscience. Chapter 1 presents the field in the 1990s, followed by extensive