BOOK REVIEW

Michael V. Mirkin and Shigeru Amemiya (Eds.): Nanoelectrochemistry

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Bibliography
Nanoelectrochemistry
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Nanoelectrochemistry is an imposing book of some 850 pages and weighing more than 2 kg. One could feel intimidated by the amount of knowledge condensed into a single volume, but the high quality presentation and the numerous colour illustrations invite the reader to flick through the pages and to read a chapter at random among the 22 contained in the book. The first two chapters cover the theoretical background of electron transfer and double-layer processes down to the nanoscale; both these fundamental aspects are essential to the understanding of the following chapters. The remaining contributions cover subjects such as metallic nanoparticles (Chapters 3, 4 and 8), nanomaterials for electronics (Chapters 5–7), carbon-based nanomaterials (Chapter 9), nanoporous materials (Chapters 10, 11), biological materials including proteins and living

cells (Chapters 12–14), nanoelectrodes and liquid/liquid nanointerfaces (Chapter 15), microfabricated electrochemical systems (Chapter 16), nanoelectrodeposition (Chapter 17), various scanning probe techniques (Chapters 18–21) and finally nanoscale potentiometry (Chapter 22). The separation between objects and tools at the nanoscale is often used when referring to nanoelectrochemistry and this classical approach is effective in giving a sense of unity to the book. Each chapter is tutorial rather than critical, which should ensure that the book has a long shelf-life. The chapters are well written and the figures are selected with care, allowing the reader to enjoy the topics close to her/his own research interests as well as the more remote chapters.

For such a heavy volume, one can only regret that ownership of the printed book does not also give access to an online version. Unfortunately, scientific publishers rarely offer this opportunity so it cannot be held against this book in particular. This book stresses that the most exciting research in electrochemistry is happening at the nanoscale, whether it focuses on nano-objects or on tools to investigate them. *Nanoelectrochemistry* is a beautiful book with a high quality content that must have a place in research laboratories and in scientific libraries.

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