

Preface

In the past decade, we have witnessed the giant advancement of silicon nanotechnology, which provides exciting new avenues for myriad electronic, energetic, environmental, biological, and biomedical applications. Among them, the exploration of silicon nanotechnology for bioapplications (so-called silicon nano-biotechnology) is one of the most important branches, receiving extensive attentions and revolutionizing basic research and clinical applications in recent years. Therefore, based on the previous elegant work of scientists worldwide and recent progress of our group, we publish this book that introduces silicon nanotechnology for biological and biomedical applications, particularly for biosensing, bioimaging, and cancer therapy. It is worthwhile to point out that, compared to the sufficiently published reports, only limited references are cited here due to the page limitation. Therefore, we express our apologies to all the scientists whose research work is not introduced in this book. The present book may potentially serve as a new starting point in the realm of silicon nano-biotechnology, and will be of interest to all chemists, material scientists, as well as biologists and clinicians.

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