

Book Review of Luminescence Applied in Sensor Science

Luminescence Applied in Sensor Science. Edited by Luca Prodi, Marco Montalti, and Nelsi Zaccheroni (all at Università degli Studi di Bologna, Italy). From the series, Topics in Current Chemistry, 300. Springer: Heidelberg, Dordrecht, London, New York. 2011. xii + 222 pp. \$259. ISBN 978-3-642-19419-1.

The stated goal of the editors is to “try to provide the reader with an understanding of how deeply the merging of the three main scientific areas *sensing*, *luminescence*, and *nanotechnology* can impact on our everyday life.” They have admirably achieved this goal, although not always simultaneously. This is actually an advantage, as the chapters would be too narrow if they focused solely on such combinations of all three. The range of topics is good.

There are chapters on luminescent molecular logic gates, up-converting nanoparticles, luminescence amplification strategies integrated with micro- and nanoparticle platforms, silica nanoparticles, sensor arrays, and enantiomeric sensing. The chapters are of high quality, are well referenced, and generally have a significant number of references from 2009 and 2010.

The book is a cornucopia of techniques and ideas from a variety of areas. It reads well and would make a stimulating source for graduate students to get an overview of different areas and provide them with a wealth of ideas to apply to different fields of research. Senior scientists will find it valuable for keeping up with the latest work in a number of disciplines. I found much of it an enjoyable and stimulating reading.

The layout is clear, and the majority of figures are good and pleasing to look at. However, a real complaint is with some of the figures. A number of them are small and hard to read, especially for older eyes. Some of them are so unreadable that even with magnification they are blurred, and one at best can only make an educated guess as to what they are. A more liberal use of space would not have increased the book's size appreciably and would have solved the problem.

In summary, this is a book that I think should be available to any serious student of luminescence. It is a useful addition to my library.

James N. Demas

University of Virginia

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