# RAMAN SPECTROSCOPY IN HUMAN HEALTH AND BIOMEDICINE

edited by

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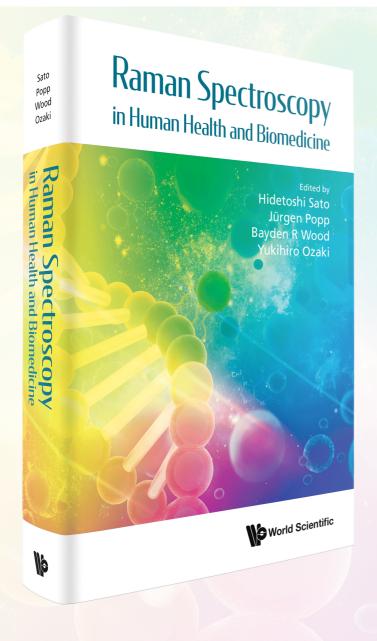
Monash University, Australia

# Jürgen Popp

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## Yukihiro Ozaki

Kwansei Gakuin University, Japan



"The book is very interesting and will provide a different scope as compared with other books in the literature. It will be a good general book for people working on Raman spectroscopy of biomedical and health sciences. The Editors are top scientists in their own fields."

## **Zexiang Shen**

Professor, Nanyang Technological University,
Singapore



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Since the inelastic scattering of light was predicted nearly 100 years ago, Raman spectroscopy has become a mainstay of characterization techniques, with applications in a vast array of fields from chemistry to materials science and nanotechnology, from forensics to geology and art. More recently, it has found usage in the life sciences, and this book hereby outlines the state-of-the-art advances in applications of Raman spectroscopy to human health and biomedicine. It covers a wide range of human health science including medicine (especially cancer), physiology, biological molecules, pharmaceutical science, cells, viruses, microorganisms, and food science. Another highlight is that it describes recent progress on various Raman techniques such as surface-enhanced Raman scattering, tip-enhanced Raman scattering, non-linear Raman spectroscopy, Raman microscopy, and Raman imaging. Novel spectral analysis methods such as chemometrics are also prominently discussed.

### Readership

Academics, researchers, lecturers, and graduate students in spectroscopy and data science. Doctors and allied health professionals will also be interested.





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