

SPECIAL ISSUE ON RECENT PROGRESS IN OPTICAL BIO/CHEMICAL SENSORS

PREFACE



The aim of this special issue is to introduce recent progress in chemical and biomaterial sensors, focusing on optical sensing technologies with nano/micro optical functional devices. These devices show remarkable progress in the applications of sensors as well as developments in semiconductor technologies. Many advantages of optical nano/micro devices are mentioned, such as system size reduction, achieving high sensitivity, sample consumption reduction, and so on.

This special issue covers the research fields of plasmonics sensors (including localized plasmonics and propagation plasmonics), surface enhanced spectroscopy for sensing, photonic crystal nano sensors, optical ring resonator sensors, and optical fiber sensors. The light discussed in this issue includes the ultraviolet, visible, near infrared, telecommunication band, and mid-infrared wavelengths.

I hope this special issue will be helpful not only for all the researchers who work in the bio/chemical sensor field, but also for the beginner who wants to start research in this field.

I would like to thank all the authors for submitting excellent articles for this special issue. I would also like to thank the reviewers for their time and for having active discussions with the authors. I wish to specially thank the MYU K.K. editorial group for their kind assistance in publishing this special issue.

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