

Preface

'Integrated optic (IO) waveguide-based sensor devices have moved to a more exciting, faster moving viable deployment phase. This book focuses on the development of an planar waveguide optical sensor that includes its application as an evidence while capturing an essence of on-chip Lab on a Chip (LOC) device platform with integrated functionality for glucose sensing in diabetes detection. Regardless of the maturation of this technology in this area in some other books, there is much prolific position for future research and development work in the area of IO waveguide sensor.'

The field of integrated optic (IO) waveguide sensor has progressed vividly from the time when the early stages of optical fiber communication research are going on. It is a hi-tech insurrection that has essentially transformed the core of optical communication, its basic science, and its application.

This book presents the works of three contributors. The reader is thus provided with basic knowledge as well as the advanced optical waveguide technology currently obtainable. The references at the end of each chapter and the index are included to provide a means of cross-referencing-related subjects. To our knowledge, no similar textbook dealing with integrated optics optical planar waveguide, from theory to sensing application and integrated with LOC device platform in a single volume, has ever been published.

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Planar Waveguide Optical Sensors

From Theory to Applications

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2016, XXV, 179 p. 84 illus., 51 illus. in color., Hardcover

ISBN: 978-3-319-35139-1