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Titolo	Advanced Time-Correlated Single Photon Counting Applications / / edited by Wolfgang Becker
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ISBN	3-319-14929-6
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (639 p.)
Collana	Springer Series in Chemical Physics, , 0172-6218 ; ; 111
Disciplina	539.7217
Soggetti	Chemistry, Physical and theoretical Optics Electrodynamics Atomic structure Molecular structure Physical measurements Measurement Signal processing Image processing Speech processing systems Physical Chemistry Classical Electrodynamics Atomic/Molecular Structure and Spectra Measurement Science and Instrumentation Signal, Image and Speech Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction into TCSPC -- Clinical and Preclinical Application of TCSPC -- Protein Structure and Protein Interaction -- NADH Dynamics -- Measurement of Local Environment Parameters in Biological Systems -- Oxygen Concentration Measurement in Biological tissue by Phosophorescence Lifetime Measurement.
Sommario/riassunto	This book is an attempt to bridge the gap between the instrumental

principles of multi-dimensional time-correlated single photon counting (TCSPC) and typical applications of the technique. Written by an originator of the technique and by sucessful users, it covers the basic principles of the technique, its interaction with optical imaging methods and its application to a wide range of experimental tasks in life sciences and clinical research. The book is recommended for all users of time-resolved detection techniques in biology, bio-chemistry, spectroscopy of live systems, live cell microscopy, clinical imaging, spectroscopy of single molecules, and other applications that require the detection of low-level light signals at single-photon sensitivity and picosecond time resolution.