

1. Record Nr.	UNINA9910797021303321
Autore	Sitek Arkadiusz
Titolo	Statistical computing in nuclear imaging / / by Arkadiusz Sitek
Pubbl/distr/stampa	Boca Raton, FL : , : CRC Press, an imprint of Taylor and Francis, , 2014
ISBN	0-429-09154-0 1-4987-2930-4
Edizione	[First edition.]
Descrizione fisica	1 online resource (264 p.)
Collana	Series in medical physics and biomedical engineering
Disciplina	616.07/57501519542
Soggetti	Magnetic resonance imaging - Technological innovations Magnetic resonance imaging - Statistical methods Medical statistics - Data 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 (pages 231-238) and index.
Nota di contenuto	Front Cover; Statistical Computing in Nuclear Imaging; Series in Medical Physics and Biomedical Engineering; Dedication; Contents; List of Figures; List of Tables; About the Series; Preface; About the Author; Chapter 1 Basic statistical concepts; Chapter 2 Elements of decision theory; Chapter 3 Counting statistics; Chapter 4 Monte Carlo methods in posterior analysis; Chapter 5 Basics of nuclear imaging; Chapter 6 Statistical computing; Appendix A Probability distributions; Appendix B Elements of set theory; Appendix C Multinomial distribution of singlevoxel Appendix D Derivations of sampling distribution ratios Appendix E Equation (6.11); Appendix F C++ OE code for STS; References; Back Cover
Sommario/riassunto	Statistical Computing in Nuclear Imaging introduces aspects of Bayesian computing in nuclear imaging. The book provides an introduction to Bayesian statistics and concepts and is highly focused on the computational aspects of Bayesian data analysis of photon-limited data acquired in tomographic measurements.