

1. Record Nr.	UNINA9910688440903321
Titolo	Enterotoxins : microbial proteins and host cell dysregulation // edited by Teresa Krakauer
Pubbl/distr/stampa	Basel, Switzerland : , : MDPI, , [2016] ©2016
ISBN	3-03842-164-2
Descrizione fisica	1 online resource (306 pages) : illustrations
Disciplina	616.0194
Soggetti	Enterotoxins
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	Annotation The special issue "Enterotoxins: Microbial Proteins and Host Cell Dysregulation" is comprised of research articles and reviews covering a diverse group of toxins that affect the gut and dysregulate host immune response in mechanistically different ways. Excellent in-depth reviews of staphylococcal superantigens and Clostridium perfringens toxins are the cornerstones of this issue. The present editorial highlights these papers grouped by toxin class and, within each toxin class, papers are discussed in order of publication date, with reviews appearing first, followed by original articles.

2. Record Nr.	UNINA9911018833203321
Autore	Polushkin Vladimir
Titolo	Nuclear electronics : superconducting detectors and processing techniques // Vladimir Polushkin
Pubbl/distr/stampa	Chichester, West Sussex, England ; ; Hoboken, NJ, : J. Wiley & Sons, c2004
ISBN	9786610270743 9786610270767 9780470857625 0470857625 9781280270741 1280270748 9780470857694 0470857692 9780470300077 0470300078 9781280270765 1280270764 9780470336519 047033651X 9780470857687 0470857684
Descrizione fisica	1 online resource (404 p.)
Disciplina	539.7/7
Soggetti	Superconductors Nuclear counters Molecular electronics Nanotechnology
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 and index.
Nota di contenuto	Nuclear Electronics; Contents; Preface; 1 Detection Methods with Cryogenic Particle and Radiation Sensors; 1.1 Quasiparticle detectors:

Interaction of nuclear radiation with superconductors; 1.2 Superconducting tunnel junction detectors; 1.3 Microcalorimeters based on transition edge sensor; 1.4 Other cryogenic detectors; 2 Front-end Read-out Electronic Circuits; 2.1 FET transconductance preamplifiers; 2.2 Dynamics and noise of JFET amplifiers; 2.3 SQUID current amplifier; 2.4 SQUID read-out electronics; 2.5 SQUID amplifier in the small-signal limit (noise) 2.6 SQUID current amplifier in the large-signal limit (dynamics) 2.7 SQUID current amplifier at ultralow temperature; 2.8 SQUID voltage amplifier; 3 Energy Resolution (FWHM) of Superconducting Detectors; 3.1 Signal-to-noise ratio, equivalent noise charge and noise linewidth of spectrometers: General formulations; 3.2 Signal-to-noise ratio, ENC, energy resolution at FWHM of Tunnel Junctions; 3.3 Noise equivalent power, energy resolution of superconductor microcalorimeters; 3.4 Dynamics and noise of time-variant detector systems 3.5 Signal-to-noise ratio of detector arrays with multiplexed read-out 4 Pulse Processing Electronics; 4.1 Pulse processing techniques; 4.2 Analogue-to-digital conversion; 4.3 Digital rise (fall) time discrimination; 4.4 Superconductor digital spectrometer; 4.5 Selected topics on the hardware design; 5 Applications of Systems Based on Superconducting Detectors; 5.1 Electron-Probe Nanoanalysis with Superconductor detectors; 5.2 Biopolymer mass spectrometer; 6 Selected Topics of Analysis and Synthesis of Detector Systems; 6.1 Analogue electronic circuitry analysis and design principles 6.2 Discrete-time systems and Systems with periodically changing parameters 6.3 Inductance calculations of the superconducting structures; Index

Sommario/riassunto

With the commercialisation of superconducting particles and radiation detectors set to occur in the very near future, nuclear analytical instrumentation is taking a big step forward. These new detectors have a high degree of accuracy, stability and speed and are suitable for high-density multiplex integration in nuclear research laboratories and astrophysics. Furthermore, superconducting detectors can also be successfully applied to food safety, airport security systems, medical examinations, doping tests & forensic investigations. This book is the first to address a new generation of analy
