1. Record Nr. UNINA9910688234703321

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Titolo	New edge of antibiotic development : antimicrobial peptides and corresponding resistance / / topic editors: Nádia S. Parachin and Octavio L. Franco
Pubbl/distr/stampa	Frontiers Media SA, 2014 France : , : Frontiers Media SA, , 2014
ISBN	9782889193011
Descrizione fisica	1 online resource (144 pages) : illustrations (colour); digital file(s)
Collana	Frontiers Research Topics
Soggetti	Pharmacy, Therapeutics, & Pharmacology Health & Biological Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	Increased pathogen resistance to conventional drugs is partially due to increased numbers of immune-compromised patients, therefore the development of alternative antibiotic therapies able to circumvent this problem is one of the intriguing challenges of modern medicine. The discovery of antimicrobial peptides has been considered, in recent years, to be essential for the solution to infections caused by bacterial and fungal diseases, owing to their commonly observed and naturally occurring resistance against pathogens. In addition to the obvious antimicrobial activity commonly associated with membrane disruption, such peptides also have shown auxiliary activities such as immunomodulatory, anti-tumor and biofilm-disruption. Moreover, antibiotic peptides have been considered critical as therapeutic agents for the control of infectious bacterial diseases; the resistance to antibiotics has become a globally recognized public health problem. In most bacterial species, after exposing microorganisms to antibiotic peptides, several systems are affected such as energy and nitrogen metabolism regulation, glucan biosynthesis, amino acid, protein, and nucleotide synthesis, and, moreover, various proteins show a stress response. Despite some articles having been published about bacterial

	resistance toward antimicrobial peptides, multiple gaps need to be filled in order to better understand this mechanism. In this view, this edition proposes the analyses of these unusual and interesting peptides and will provide a clearer understanding of such bacterial resistance towards AMPs. In summary, this proposal focuses on AMPs and their multiple activities as well as on AMP bacterial resistance, attracting several researchers from different areas.

2.	Record Nr.	UNINA9910554497503321
	Titolo	Metal ions in bio-imaging techniques / / Edited by Astrid Sigel, Eva Freisinger and Roland K. O. Sigel
	Pubbl/distr/stampa	Berlin ; ; Boston : , : De Gruyter, , [2021] ©2021
	ISBN	3-11-068570-1
	Descrizione fisica	1 online resource (XLIV, 503 p.)
	Collana	Metal ions in life sciences ; ; Volume 22
	Disciplina	616.0754
	Soggetti	Imaging systems in medicine
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Frontmatter -- About the Editors -- Historical Development and Perspectives of the Series Metal Ions in Life Sciences -- Preface to Volume 22 Metal Ions in Bio-Imaging Techniques -- Contents -- Contributors to Volume 22 -- Titles of Volumes 1-44 in the Metal Ions in Biological Systems Series -- Contents of Volumes in the Metal Ions in Life Sciences Series -- 1 Metal Ions in Bio-Imaging Techniques: A Short Overview -- 2 Gadolinium(III)-Based Contrast Agents for Magnetic Resonance Imaging. A Re-Appraisal -- 3 Manganese Complexes as Contrast Agents for Magnetic Resonance Imaging -- 4 Metal Ion Complexes in Paramagnetic Chemical Exchange Saturation Transfer (ParaCEST) -- 5 Lanthanide Complexes Used for Optical Imaging -- 6 Radiometals for Positron Emission Tomography (PET) Imaging -- 7 99mTechnetium-Based Imaging Agents and Developments in 99Tc Chemistry -- 8 Paramagnetic Metal Ion Probes for 19F Magnetic

Resonance Imaging -- 9 Iron Oxide Nanoparticles for Bio-Imaging -- 10 Magnetic Resonance Contrast Enhancement and Therapeutic Properties of Corrole Nanoparticles -- 11 Positron Emission Tomography (PET) Driven Theranostics -- 12 Magnetic Resonance Theranostics: An Overview of Gadolinium(III)-Based Strategies and Magnetic Particle Imaging -- 13 Luminescence Imaging of Cancer Cells -- 14 Iridium(III) Complexes in Bio-Imaging Including Mitochondria -- 15 Imaging Bacteria with Contrast-Enhanced Magnetic Resonance -- 16 Transition Metals and Imaging Probes in Neurobiology and Neurodegenerative Diseases -- 17 Heavy Elements for X-Ray Contrast -- Subject Index

Sommario/riassunto

Volume 22, entitled Metal Ions in Bio-Imaging Techniques, of the series Metal Ions in Life Sciences deals with metal ions as tools in imaging. This dates back to the first half of the past century, when barium sulfate was orally given to patients undergoing X-ray examination. The use of contrast agents has since developed into a large interdisciplinary field encompassing not only medicine, but also chemistry, material sciences, physics, biology, engineering, and computer sciences. MILS-22 provides deep and current insights in 17 stimulating chapters on the new research frontiers of this fast growing field on bio-imaging . and beyond. For example, adding bio-sensing yields theranostic agents, meaning diagnosis and therapy linked in the same molecule; ions of Gd, Mn, Fe, Co, Ir, 99mTc, etc., are involved. Other important topics are, e.g., metal complexes in paramagnetic Chemical Exchange Transfer (paraCEST), radiometals for Positron Emission Tomography (PET) imaging, or paramagnetic metal ion probes for 19F magnetic resonance imaging. MILS-22 is written by 57 internationally recognized experts from 12 countries, that is, from the US via Europe to China. The impact of this vibrant research area is manifested by more than 2300 references and nearly 120 figures, mostly in color, and several informative tables. To conclude, Metal Ions in Bio-Imaging Techniques is an essential resource for scientists working in the wide range from material sciences, enzymology, analytic, organic, and inorganic biochemistry all the way through to medicine including the clinic . not forgetting that also excellent information for teaching is provided.