

1. Record Nr.	UNINA9910459722103321
Titolo	Iron-sulfur clusters in chemistry and biology // edited by Tracey Rouault
Pubbl/distr/stampa	Berlin, [Germany] ; ; Boston, [Massachusetts] : , : De Gruyter, , 2014 ©2014
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Descrizione fisica	1 online resource (672 p.)
Classificazione	WD 5050
Disciplina	612.3/924
Soggetti	Iron-sulfur proteins Electronic books.
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	Front matter -- Preface -- Tracey A. Rouault biography -- Contents -- Contributing authors -- 1. Iron-sulfur proteins: a historical perspective / Bonomi, Francesco / Rouault, Tracey A. -- 2. Chemistry of iron-sulfur clusters / Ichiye, Toshiko -- 3. Quantitative interpretation of EPR spectroscopy with applications for iron-sulfur proteins / Petasis, Doros T. / Hendrich, Michael P. -- 4. The utility of Mössbauer spectroscopy in eukaryotic cell biology and animal physiology / Chakrabarti, Mrinmoy / Lindahl, Paul A. -- 5. The interstitial carbide of the nitrogenase M-cluster: insertion pathway and possible function / Hu, Yilin / Ribbe, Markus -- 6. The iron-molybdenum cofactor of nitrogenase / Spatzal, Thomas / Andrade, Susana L. A. / Einsle, Oliver -- 7. Biotin synthase: a role for iron-sulfur clusters in the radical-mediated generation of carbon-sulfur bonds / Jarrett, Joseph T. -- 8. Molybdenum-containing iron-sulfur enzymes / Hille, Russ -- 9. The role of iron-sulfur clusters in the biosynthesis of the lipoyl cofactor / Lanz, Nicholas D. / Booker, Squire J. -- 10. Iron-sulfur clusters and molecular oxygen: function, adaptation, degradation, and repair / Nicolet, Yvain / Fontecilla-Camps, Juan C. -- 11. A retrospective on the discovery of [Fe-S] cluster biosynthetic machineries in <i>Azotobacter vinelandii</i> / Dos Santos,

Patricia C. / Dean, Dennis R. -- 12. A stress-responsive Fe-S cluster biogenesis system in bacteria - the suf operon of Gammaproteobacteria / Outten, F. Wayne -- 13. Sensing the cellular Fe-S cluster demand: a structural, functional, and phylogenetic overview of Escherichia coli IscR / Mettert, Erin L. / Perna, Nicole T. / Kiley, Patricia J. -- 14. Fe-S assembly in Gram-positive bacteria / Dos Santos, Patricia C. -- 15. Fe-S cluster assembly and regulation in yeast / Pain, Debkumar / Dancis, Andrew -- 16. The role of Fe-S clusters in regulation of yeast iron homeostasis / Outten, Caryn E. -- 17. Biogenesis of Fe-S proteins in mammals / Rouault, Tracey A. -- 18. Iron-sulfur proteins and human diseases / Tong, Wing-Hang -- 19. Connecting the biosynthesis of the molybdenum cofactor, Fe-S clusters, and tRNA thiolation in humans / Leimkühler, Silke -- 20. Iron-sulfur proteins and genome stability / Gari, Kerstin -- 21. Eukaryotic iron-sulfur protein biogenesis and its role in maintaining genomic integrity / Lill, Roland / Uzarska, Marta A. / Wohlschlegel, James -- 22. Iron-sulfur cluster assembly in plants / Ye, Hong -- 23. Origin and evolution of Fe-S proteins and enzymes / Boyd, Eric S. / Schut, Gerrit J. / Shepard, Eric M. / Broderick, Joan B. / Adams, Michael W. W. / Peters, John W. -- Index

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### Sommario/riassunto

This volume on iron-sulfur proteins includes chapters that describe the initial discovery of iron-sulfur proteins in the 1960's to elucidation of the roles of iron sulfur clusters as prosthetic groups of enzymes, such as the citric acid cycle enzyme, aconitase, and numerous other proteins, ranging from nitrogenase to DNA repair proteins. The capacity of iron sulfur clusters to accept and delocalize single electrons is explained by basic chemical principles, which illustrate why iron sulfur proteins are uniquely suitable for electron transport and other activities. Techniques used for detection and stabilization of iron-sulfur clusters, including EPR and Mossbauer spectroscopies, are discussed because they are important for characterizing unrecognized and elusive iron sulfur proteins. Recent insights into how nitrogenase works have arisen from multiple advances, described here, including studies of high-resolution crystal structures. Numerous chapters discuss how microbes, plants, and animals synthesize these complex prosthetic groups, and why it is important to understand the chemistry and biogenesis of iron sulfur proteins. In addition to their vital importance in mitochondrial respiration, numerous iron sulfur proteins are important in maintenance of DNA integrity. Multiple rare human diseases with different clinical presentations are caused by mutations of genes in the iron sulfur cluster biogenesis pathway. Understanding iron sulfur proteins is important for understanding a rapidly expanding group of metabolic pathways important in all kingdoms of life, and for understanding processes ranging from nitrogen fixation to human disease.

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2. Record Nr.	UNINA9910484410203321
Titolo	Advances in Speech and Language Technologies for Iberian Languages : Third International Conference, IberSPEECH 2016, Lisbon, Portugal, November 23-25, 2016, Proceedings / / edited by Alberto Abad, Alfonso Ortega, António Teixeira, Carmen García Mateo, Carlos D. Martínez Hinarejos, Fernando Perdigão, Fernando Batista, Nuno Mamede
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-49169-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XV, 288 p. 53 illus.)
Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 10077
Disciplina	006.35
Soggetti	Natural language processing (Computer science) Artificial intelligence User interfaces (Computer systems) Human-computer interaction Pattern recognition systems Digital humanities Natural Language Processing (NLP) Artificial Intelligence User Interfaces and Human Computer Interaction Automated Pattern Recognition Digital Humanities
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Speech Production -- Analysis, Coding and Synthesis -- Automatic Speech Recognition -- Paralinguistic Speaker Trait Characterization -- Speech and Language Technologies in Different Application Fields. .
Sommario/riassunto	This book constitutes the refereed proceedings of the IberSPEECH 2016 Conference, held in Lisbon, Portugal, in November 2016. The 27 papers presented were carefully reviewed and selected from 48 submissions. The selected articles in this volume are organized into four different

topics: Speech Production, Analysis, Coding and Synthesis; Automatic  
Speech Recognition; Paralinguistic Speaker Trait Characterization;  
Speech and Language Technologies in Different Application Fields .

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