

1. Record Nr.	UNINA9910337846903321
Titolo	Scale Space and Variational Methods in Computer Vision : 7th International Conference, SSVM 2019, Hofgeismar, Germany, June 30 – July 4, 2019, Proceedings / / edited by Jan Lellmann, Martin Burger, Jan Modersitzki
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-22368-X
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XVII, 574 p. 302 illus., 153 illus. in color.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics, , 3004-9954 ; ; 11603
Disciplina	006.37 006.6
Soggetti	Computer vision Numerical analysis Computer science - Mathematics Artificial intelligence Computer Vision Numerical Analysis Mathematical Applications in Computer Science Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Sommario/riassunto	This book constitutes the proceedings of the 7th International Conference on Scale Space and Variational Methods in Computer Vision, SSVM 2019, held in Hofgeismar, Germany, in June/July 2019. The 44 papers included in this volume were carefully reviewed and selected for inclusion in this book. They were organized in topical sections named: 3D vision and feature analysis; inpainting, interpolation and compression; inverse problems in imaging; optimization methods in imaging; PDEs and level-set methods; registration and reconstruction; scale-space methods; segmentation and labeling; and variational methods. .

2. Record Nr.	UNINA9911011650103321
Autore	Blachier Francois
Titolo	The Evolutionary Journey of Amino Acids : From the Origin of Life to Human Metabolism / / by François Blachier
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	9783031933936
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (313 pages)
Collana	Fascinating Life Sciences, , 2509-6753
Disciplina	612.015
Soggetti	Clinical biochemistry Metabolism Molecular evolution Nutrition Evolutionary genetics Medical Biochemistry Molecular Evolution Evolutionary Genetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I Amino Acids: From Chemistry to Biochemistry and Physiology -- Chapter 2. Characteristics of the Different Amino Acids Found in the Living World -- Chapter 3. Amino Acids Before Life and in the First Living Organisms -- Chapter 4. Amino Acids Metabolism for Archaeal Physiology. - Chapter 5. Amino Acids Metabolism For Bacterial Physiology -- Chapter 6. Eukaryotic Cells At A Crossroads Between Archaea And Bacteria -- Chapter 7. The Broad Diversification Of Eukaryotic Cells From Unicellular To Multicellular Living Organisms: A Focus On Amino Acid Metabolism -- Chapter 8. Amino Acid Metabolism For Human Physiology -- Part II Amino Acid Metabolism In The Small And Large Intestine: Involvement For Host Physiology And For Communication Between Microbes Of The Intestinal Microbiota And Host -- Chapter 10. Amino Acid Metabolism In The Small Intestine and Associated Physiological Functions -- Chapter 11. Amino Acid Metabolism In The Large Intestine And Physiological Consequences -- Chapter 12. Amino Acid Metabolism And Communication Between

Microbes Of The Intestinal Microbiota And Host Cells -- Part III  
Conclusion and Prospects -- Chapter 11. Conclusions: The Evolutionary  
Significance Of Amino Acid Metabolism In Life's Complexity -- Chapter  
12. Perspectives On Amino Acid Metabolism: From Basic Research To  
Applied Science.

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### Sommario/riassunto

This book takes readers on a journey from the very fundamental and chemical beginnings of amino acids on Earth to their role in human metabolism. It provides background on how amino acid metabolism has changed across the evolutionary tree and discusses their physico-chemical properties as well as their biochemical roles across various forms of life. Amino acids are emerging as key players in numerous physiological functions and are being increasingly recognized as playing a mechanistic role for the communication between the gut microbiota and the host in healthy state and in some pathophysiological situations. However, understanding these associations requires a multidisciplinary approach, combining chemistry, biochemistry, physiology, nutrition, molecular/cellular biology and microbiology. This book aims to describe the science behind amino acids from their first appearance and evolutionary significance, all the way through the tree of life to humans, and then to consider how gut microbial amino acid metabolism regulates human physiology and risk in some chronic diseases. It covers key concepts such as the characteristics of different amino acids found in living organisms, their existence in the pre-living world, and their vital roles in metabolism and physiology. It also explores intriguing questions about microbial communication and the effect of amino acid-derived microbial metabolites on mammalian cells. With this multidisciplinary approach and accessible structure, this book will appeal not only to students and researchers with a background in biochemistry and related fields, but also to non-specialists with an interest in the foundations of life at the intersection of evolutionary biology and metabolism.

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