1. Record Nr. UNINA9910253904803321

Autore	Goodsell David S
Titolo	Atomic Evidence : Seeing the Molecular Basis of Life / / by David S. Goodsell
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Copernicus, , 2016
ISBN	3-319-32510-8
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (VII, 182 p. 140 illus. in color.)
Disciplina	571.6
Soggetti	Cytology Systems biology Cell Biology Systems Biology Science, Humanities and Social Sciences, multidisciplinary
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. The Protein Data Bank -- Chapter 2. Seeing is Believing: Methods of Structure Solution -- Chapter 3. Visualizing the Invisible World of Molecules -- Chapter 4. The Twists and Turns of DNA -- Chapter 5. The Central Dogma -- Chapter 6. The Secret of Life: The Genetic Code -- Chapter 7. Evolution in Action -- Chapter 8. How Evolution Shapes Proteins -- Chapter 9. The Universe of Protein Folds -- Chapter 10. Order and Chaos in Protein Structure -- Chapter 11. Molecular Electronics -- Chapter 12. Green Energy -- Chapter 13. Peak Performance -- Chapter 14. Cellular Signaling Networks -- Chapter 15. GPCRs Revealed -- Chapter 16. Signaling with Hormones -- Chapter 17: Single Molecule Chemistry: Enzyme Action and the Transition State -- Chapter 18. Seven Wonders of the World of Enzymes -- Chapter 19. Building Bodies -- Chapter 20. Coloring the Biological World -- Chapter 21. Amazing Antibodies -- Chapter 22. Attack and Defense: Weapons of the Immune System -- Chapter 23. Reconstructing HIV.
Sommario/riassunto	This book will take an evidence-based approach to current knowledge about biomolecules and their place in our lives, inviting readers to explore how we know what we know, and how current gaps in

knowledge may influence the way we approach the information. Biomolecular science is increasingly important in our everyday life, influencing the choices we make about our diet, our health, and our wellness. Often, however, information about biomolecular science is presented as a list of immutable facts, discouraging critical thought. The book will introduce the basic tools of structural biology, supply real-life examples, and encourage critical thought about aspects of biology that are still not fully understood.