1. Record Nr. UNINA9910674010803321

Titolo	Biomimetic Radical Chemistry and Applications / / Chryssostomos Chatgilialoglu, editor
Pubbl/distr/stampa	[Place of publication not identified] : , : MDPI - Multidisciplinary Digital Publishing Institute, , 2020
Descrizione fisica	1 online resource (300 pages)
Disciplina	574
Soggetti	Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	The enormous importance of free radical chemistry for a variety of biological events, including ageing and inflammation, has attracted a strong interest in understanding the related mechanistic steps at the molecular level. Modelling the free radical chemical reactivity of biological systems is an important research area. When studying free-radical-based chemical mechanisms, biomimetic chemistry and the design of established biomimetic models come into play to perform experiments in a controlled environment that is suitably designed to be in strict connection with cellular conditions. This Special Issue gives the reader a wide overview of biomimetic radical chemistry, where molecular mechanisms have been defined and molecular libraries of products are developed to also be used as traces for the discovery of some relevant biological processes. Several subjects are presented, with 12 articles and 6 reviews written by specialists in the fields of DNA, proteins, lipids, biotechnological applications, and bioinspired synthesis, having "free radicals" as a common denominator.