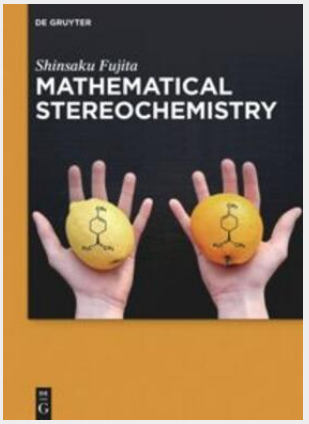
Fujita

Mathematical Stereochemistry

Mathematical Stereochemistry uses both chemistry and mathematics to present a challenge towards the current theoretical foundations of modern stereochemistry, that up to now suffered from the lack of mathematical formulations and minimal compability with chemoinformatics. The author develops novel interdisciplinary approaches to group theory (Fujita's unit-subduced-cycle-index, USCI) and his proligand method before focussing on stereoisograms as a main theme. The concept of RS-stereoisomers functions as a rational theoretical foundation for remedying conceptual faults and misleading terminology caused by conventional application of the theories of van't Hoff and Le Bel. This book indicates that classic descriptions on organic and stereochemistry in textbooks should be thoroughly revised in conceptionally deeper levels. The proposed intermediate concept causes a paradigm shift leading to the reconstruction of modern stereochemistry on the basis of mathematical formulations. •Provides a new theoretical framework for the reorganization of mathematical stereochemistry. •Covers point-groups and permutation symmetry and exemplifies the concepts using organic molecules and inorganic complexes. •Theoretical foundations of modern stereochemistry for chemistry students and researchers, as well as mathematicians interested in chemical application of mathematics. Shinsaku Fujita has been Professor of Information Chemistry and Materials Technology at the Kyoto Institute of Technology from 1997-2007; before starting the Shonan Institute of Chemoinformatics and Mathematical Chemistry as a private laboratory.



109,95 €
102,76 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783110371970
Medium: Buch
ISBN: 978-3-11-037197-0
Verlag: De Gruyter
Erscheinungstermin: 30.07.2015
Sprache(n): Englisch
Auflage: 1. Auflage 2015
Produktform: Gebunden
Gewicht: 947 g
Seiten: 437
Format (B x H): 175 x 246 mm

Kundenservice Fachmedien Otto Schmidt
Neumannstraße 10, 40235 Düsseldorf | kundenservice@fachmedien.de | 0800 000-1637 (Inland)