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| Autore Titolo | Baev Alexei K Specific intermolecular interactions of nitrogenated and bioorganic |
| | compounds / / Alexei K. Baev |
| Pubbl/distr/stampa | Heidelberg [Germany] : , : Springer, , 2014 |
| ISBN | 3-642-37472-7 |
| Edizione | [1st ed. 2014.] |
| Descrizione fisica | 1 online resource (xxvii, 579 pages) : illustrations (some color) |
| Collana | Gale eBooks |
| Disciplina | 547.13 |
| Soggetti | Physical organic chemistry |
| | Bioorganic chemistry |
| 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 and index. |
| Nota di contenuto | From the Contents: Hydrogen Bonds and Specific Intermolecular Interactions of Nitrogenated and Bio-organic Compounds and the Methodology of their Investigation Specific Intermolecular Interactions of Cyclic Alkylamines and Nitriles Specific Intermolecular Interactions of Cyclic Aromatic Compounds with Nitrogen Atom in their Functional Groups Specific Intermolecular Interactions of Nitrogen Containing Five-membered Heterocycles. |
| Sommario/riassunto | After his first book on the topic "Specific Intermolecular Interactions of Organic Compounds", Baev extends in this book the development of the thermodynamic theory of specific intermolecular interactions to a wider spectrum of nitrogenated and bioorganic compounds: amino alcohols, amino acids, peptides and urea derivatives. The fundamentals of an unconventional approach to the theory of H-bonding and specific interactions are formulated based on a concept of pentacoordinated carbon atoms. New types of hydrogen bonds and specific interactions are substantiated and on the basis of the developed methodology their energies are determined. The new concept of the extra stabilizing effect of isomeric methyl groups on the structure and stability of nitrogenated organic molecules and bioorganic compounds is introduced and the destabilization action on specific interactions is outlined. |

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