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Autore	Miller Audrey
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Addition; 6. Acid-Catalyzed Reactions of Carbonyl Compounds; 7. Electrophilic Aromatic Substitution; 8. Carbenes; 9. Electrophilic Heteroatoms; Chapter 5. Radicals and Radical Anions; 1. Introduction; 2. Formation of Radicals; 3. Radical Chain Processes; 4. Radical Inhibitors; 5. Determining the Thermodynamic Feasibility of Radical Reactions; 6. Addition of Radicals; 7. Fragmentation Reactions; 8. Rearrangement of Radicals; 9. The S_N1 Reaction; 10. The Birch Reduction; 11. A Radical Mechanism for the Rearrangement of Some Anions; Chapter 6. Pericyclic Reactions; 1. Introduction; 2. Electrocyclic Reactions; 3. Cycloadditions; 4. Sigmatropic Rearrangements; 5. The Ene Reaction; 6. A Molecular Orbital View of Pericyclic Processes; Chapter 7. Additional Problems; Appendix A: Lewis Structures of Common Functional Groups; Appendix B: Symbols and Abbreviations Used in Chemical Notation; Appendix C: Relative Acidities of Common Organic and Inorganic Substances; Index

Sommario/riassunto

Writing Reaction Mechanisms in Organic Chemistry, Second Edition, is an invaluable guide to charting the movements of atoms and electrons in the reactions of organic molecules. Miller and Solomon illustrate that understanding organic reactions is based on applying general principles rather than the rote memorization of unrelated processes, and, in turn, emphasize that writing mechanisms is a practical method of applying knowledge of previously encountered reactions and reaction conditions to new reactions. Students and research chemists alike will find this book useful in providing a me
