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Nota di contenuto	Contents; 1 Introduction; 1.1 Waves, Particles, and Units; 1.2 The Electromagnetic Spectrum; 1.3 Interaction of Radiation with Matter; Blackbody Radiation; Einstein A and B Coefficients; Absorption and Emission of Radiation; Beer's Law; Lineshape Functions; Natural Lifetime Broadening; Pressure Broadening; Doppler Broadening; Transit-Time Broadening; Power Broadening; 2 Molecular Symmetry; 2.1 Symmetry Operations; Operator Algebra; Symmetry Operator Algebra; 2.2 Groups; Point Groups; Classes; Subgroups; 2.3 Notation for Point Groups; 3 Matrix Representation of Groups; 3.1 Vectors and Matrices Matrix Eigenvalue ProblemSimilarity Transformations; 3.2 Symmetry Operations and Position Vectors; Reflection; Rotation; Inversion; Rotation-Reflection; Identity; 3.3 Symmetry Operators and Basis Vectors; 3.4 Symmetry Operators and Basis Functions; Function Spaces; Gram-Schmidt Procedure; Transformation Operators; 3.5 Equivalent, Reducible, and Irreducible Representations; Equivalent Representations; 3.6 Great Orthogonality Theorem; Characters; 3.7 Character Tables; Mulliken Notation; 4 Quantum Mechanics and Group Theory

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