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Descrizione fisica	1 online resource (xxiv, 597 p. ) : ill. (some col.) ;
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Nota di bibliografia	Includes bibliographical references (p. 579-584) and index.
Nota di contenuto	; pt. 1. Theory. ; 1. Survey of Light-scattering Phenomena. ; 2. Introduction to Theoretical Treatments of Incoherent Light Scattering. ; 3. Classical Theory of Rayleigh and Raman Scattering. ; 4. Quantum Mechanical Theory of Rayleigh and Raman Scattering. ; 5. Vibrational Raman Scattering. ; 6. Rotational and Vibration-Rotation Raman Scattering. ; 7. Vibrational Resonance Raman Scattering. ; 8. Rotational and Vibration-Rotation Resonance Raman Scattering. ; 9. Normal and Resonance Electronic and Vibronic Raman Scattering. ; 10. Rayleigh and Raman Scattering by Chiral Systems -- ; pt. 2. Appendices -- ; A1. The Right-handed Cartesian Axis System and Related Coordinate Systems -- ; A2. The Summation Convention -- ; A3. Direction Cosines.
Sommario/riassunto	Presents a unified theoretical treatment, which is complete and rigorous but nonetheless readable. The theoretical treatment requires a variety of mathematical and physical tools. To keep the main text uncluttered, these tools are developed in comprehensive Appendices to which cross-references are made in the main text. These Appendices also ensure that the main text is useful to readers with a wide variety of scientific backgrounds and experience. These include not only spectroscopists, but also chemists, physicists, biochemists and analytical chemists. The presentation is such that postgraduate and postdoctoral students as well as more established research workers will find it valuable. About the AuthorThe author was formerly Professor of

Structural Chemistry and Director of the Molecular Spectroscopy unit in the University of Bradford. He is distinguished for his original scientific work in a number of areas of Raman spectroscopy. His book, 'Raman Spectroscopy', published in 1978 and long out of print, was highly successful. He has been co-editor of many books including the Specialist Reports on Molecular Spectroscopy, published by the Royal Society of Chemistry; he retired as Editor-in-Chief of the Journal of Raman Spectroscopy in December 1999..

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