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Titolo	Fundamentals of Molecular Spectroscopy / / by Prabal Kumar Mallick
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ISBN	981-9907-91-8
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (496 pages)
Disciplina	780.71
Soggetti	Molecular spectroscopy
	Atoms
	Molecules
	Plasma waves
	Physics
	Molecular Spectroscopy
	Atoms and molecules in external fields
	Waves, instabilities and nonlinear plasma dynamics
	Applied and Technical Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1. Introduction Chapter 2. Rotational spectra Chapter 3.
	Intrared spectra of diatomic molecules Chapter 4. Raman spectra Chapter 5. Vibrational spectra of polyatomic molecules.
Sommario/riassunto	This book presents detailed aspects of different fields of molecular
	spectroscopy. It consists of eleven chapters starting from the Born-
	Oppenheimer approximation and its relevance to various spectra to
	some topics on nonlinear spectroscopy through rotational, vibrational,
	nuclear magnetic resonance, electron spin resonance, nuclear
	quadrupole resonance, and Mossbauer spectroscopy. The intention is
	to present a good background of the theoretical aspects of the
	concerned fields which will help the readers to understand the subject
	tirmly and apply them to their own fields according to their needs. For
	readers understand how the theories are applied in the relevant
	והמתהיש מותהושמות וחמיי ווה ווהסחובש מול משטוובת ווו נווה והופימווג

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practical cases. In this book, it is presumed that the readers are well acquainted with the fundamentals of the basic subjects of physics, for example, mathematical methods, classical mechanics, quantum mechanics, statistical mechanics, and electrodynamics. The purpose of writing is not only to bring a wider field in a single book but also to develop the theories starting from the fundamentals and also from the simple to the final forms through fairly elaborate powerful techniques so that the readers become self-sufficient and apply them accordingly. Since this book covers most of the major fields of molecular spectroscopy, it reduces the work of searching several publications and serves the purpose of getting detailed deductive pictures of various aspects of the subject in a single publication.