Record Nr. UNINA9910877505103321 Autore Aroca Ricardo Titolo Surface enhanced vibrational spectroscopy / / Ricardo Aroca Pubbl/distr/stampa Hoboken, NJ,: Wiley, 2006 **ISBN** 1-280-44903-9 9786610449033 0-470-03564-1 0-470-03565-X Descrizione fisica 1 online resource (261 p.) Disciplina 543/.54 Vibrational spectra Soggetti Molecular spectroscopy Raman effect, Surface enhanced 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 Theory of molecular vibrations, the origin of infrared and Raman spectra -- The interaction of light with nanoscopic metal particles and molecules on smooth reflecting surfaces -- Surface enhanced Raman scattering -- Chemical effects and the SERS spectrum -- Is SERS molecule specific? -- SERS/SERRS, the analytical tool -- Surface enhanced infrared spectroscopy. Sommario/riassunto Surface Enhanced Vibrational Spectroscopy (SEVS) has reached maturity as an analytical technique, but until now there has been no single work that describes the theory and experiments of SEVS. This book combines the two important techniques of surface-enhanced Raman scattering (SERS) and surface-enhanced infrared (SEIR) into one text that serves as

the definitive resource on SEVS.Discusses both the theory and the applications of SEVS and provides an up-to-date study of the state of

the artOffers interpretations of SEVS spectra for practicing

analystsDiscusses interpretation of