Multipolar polarizabilities from interaction-induced Raman scattering

Submitted by Jean-Luc Godet on Wed, 09/23/2015 - 17:17

Titre	Multipolar polarizabilities from interaction-induced Raman scattering
Type de publication	Chapitre
Type	Ouvrage scientifique
Année	2001
Langue	Anglais
Pagination	267-307
Volume	119
Numéro du chapitre	6
Titre de l'ouvrage	Modern Nonlinear Optics, Part 1
Edition	second
Auteur	Bancewicz, Tadeusz [1], Le Duff, Yves [2], Godet, Jean-Luc [3]
Pays	Etats-Unis
Editeur	John Wiley & Sons, Inc.
ISBN	9780471389309
Mots-clés	collision-induced scattering (CIS) [4], isotropic molecules [5], Light scattering [6], Raman vibrational bands [7], Rayleigh frequencey region [8]
Résumé en anglais	In this chapter the authors first give a general presentation of collision-induced scattering (CIS), also named interaction induced scattering. The different types of molecular interaction are mentioned, with a special emphasis on the multipolar polarizabilities contributions studied in the authors' laboratories since the beginning of 1990s. The authors describe the setup and the experimental procedure used for the measurement of the scattering on an absolute scale. They also discuss the multipolar contributions to depolarized and isotropic CIS for specific molecular symmetries. Studies in the Rayleigh wings of isotropic molecules such as CF4 and SF6 and of linear molecules such as N2 and CO2 are presented. The authors also report on observations made in the wings of vibrational Raman bands of CF4 and SF6.
URL de la notice	http://okina.univ-angers.fr/publications/ua13939 [9]
DOI	10.1002/0471231479.ch6 [10]
Collection	Advances in Chemical Physics
Lien vers le document	http://onlinelibrary.wiley.com/doi/10.1002/0471231479.ch6/summary [11]

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