

Yasuhiro OHSHIMA



**Professor, Department of Photo-molecular Science
Institute for Molecular Science**

【E-mail】 ohshima@ims.ac.jp

【Speciality】 Molecular Spectroscopy, Reaction Dynamics

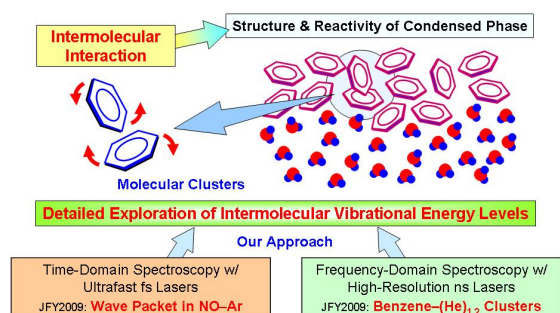
【Keywords】 High-Resolution Spectroscopy,
Molecular Clusters, Nonlinear Coherent Effects

【Research Subject】 Precise Determination of Intermolecular Interactions
by Utilizing Nonlinear Coherent Spectroscopy

Research Group Activity

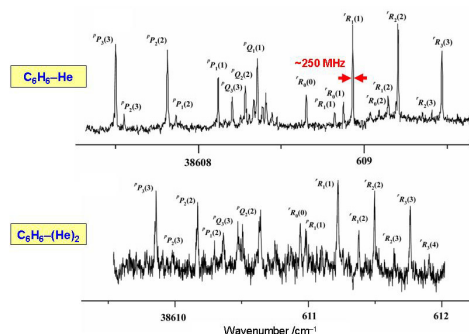
• Objective of the Research

Determination of intermolecular interaction via
new time- and frequency-domain spectroscopy



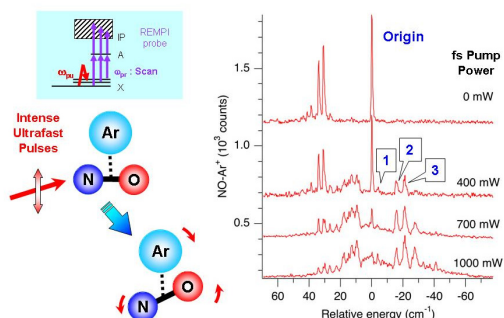
• High-Resolution Study

Resonant two-photon spectra by using a ns
coherent light source



• Nonadiabatic Vibrational Excitation of Intermolecular Motions

Population transfer pertinent to intermolecular
motion via impulsive Raman excitation



• Wave Packet Creation by Nonresonant Intense Femtosecond Pulses

Real-time observation of intermolecular wave
packets by double-pulse excitation

