

Abbreviations and Acronyms

BO	Born–Oppenheimer
CARS	Coherent anti-Stokes Raman spectroscopy (or scattering)
CI	Conical intersection
DFT	Density functional theory
FC	Franck–Condon
fs	Femtosecond
HRTOF	High- <i>n</i> Rydberg time-of-flight
IC	Internal conversion
IR	Infrared
IVR	Intramolecular vibrational redistribution
LIF	Laser-induced fluorescence
LM	Local mode
μm	Micrometer
Nd:YAG	Neodymium-doped yttrium aluminum garnet; Nd:Y ₃ Al ₅ O ₁₂
NIR	Near-infrared
nm	Nanometer
NM	Normal mode
ns	Nanosecond
OPO	Optical parametric oscillator
PA	Photoacoustic
PARS	Photoacoustic Raman spectroscopy (or scattering)
PES	Potential-energy surface
ps	Picosecond
PTS	Photofragment translational spectroscopy
REMPI	Resonantly enhanced multiphoton ionization
RRKM	Rice–Ramsperger–Kassel–Marcus
SEP	Stimulated emission pumping
SRE	Stimulated Raman excitation
STIRAP	Stimulated Raman adiabatic passage
TOFMS	Time-of-flight mass spectrometer
UV	Ultraviolet
VIS	Visible
VMI	Velocity-map imaging
VMP	Vibrationally mediated photodissociation
ZOBS	Zero-order bright state
ZODS	Zero-order dark state