

Contents

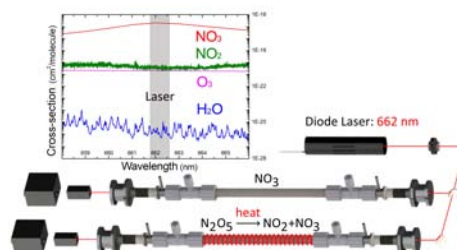
Preface to Special Issue of “the 3rd Asian Workshop on Molecular Spectroscopy” and “the International Workshop on Astrochemistry (2019)”

Chin. J. Chem. Phys. **33**, i (2020)

Cavity Ring-Down Spectroscopy Measurements of Ambient NO_3 and N_2O_5

Hao Wu, Jian Chen, An-wen Liu, Shui-ming Hu*, Jing-song Zhang

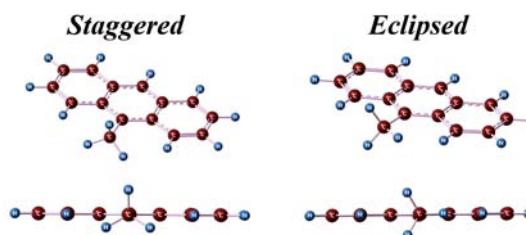
Chin. J. Chem. Phys. **33**, 1–7 (2020)



Large Amplitude Motion in 9-Methylanthracene: High-Resolution Spectroscopy and *Ab Initio* Theoretical Calculation

Masaaki Baba*, Ayumi Kanaoka, Akiko Nishiyama, Masatoshi Misono, Takayoshi Ishimoto, Taro Udagawa

Chin. J. Chem. Phys. **33**, 8–12 (2020)

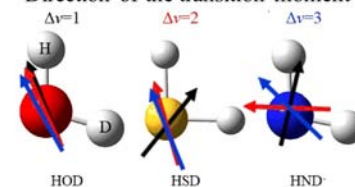


Theoretical Study on Direction of Vibrational Transition Dipole Moment of XH Stretching Vibration in HXD

Kaito Takahashi*

Chin. J. Chem. Phys. **33**, 13–22 (2020)

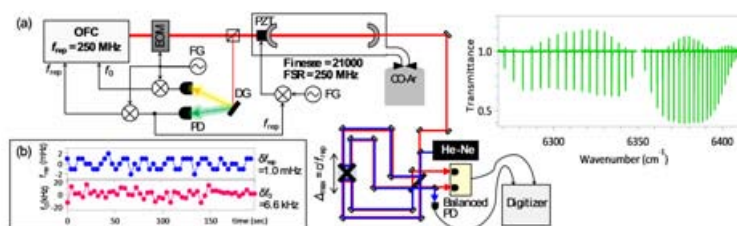
Direction of the transition moment



Optical Frequency Comb-Based Cavity-Enhanced Fourier-Transform Spectroscopy: Application to Collisional Line-Shape Study

Akiko Nishiyama*, Grzegorz Kowzan, Dominik Charczun, Ryszard S. Trawiński, Piotr Masłowski*

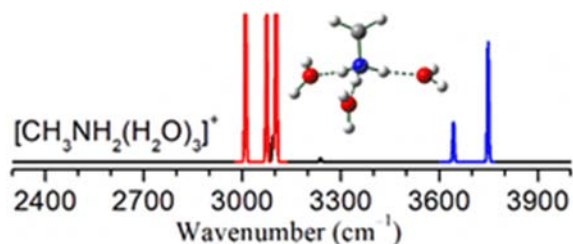
Chin. J. Chem. Phys. **33**, 23–30 (2020)



Structures, Energetics, and Infrared Spectra of the Cationic Monomethylamine-Water Clusters

Shu-kang Jiang, Dong Yang,
Xiang-tao Kong, Chong Wang,
Xiang-yu Zang, Hui-jun Zheng, Gang Li,
Hua Xie, Wei-qing Zhang,
Xue-ming Yang, Ling Jiang*

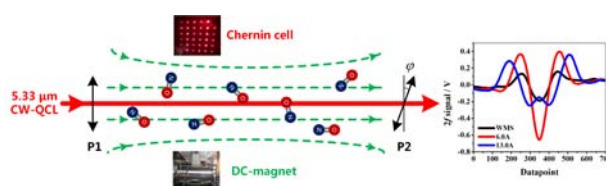
Chin. J. Chem. Phys. **33**, 31–36 (2020)



Detection of Nitric Oxide with Faraday Rotation Spectroscopy at 5.33 μm

Bo Fang, Na-na Yang, Chun-hui Wang,
Wei-xiong Zhao*, Xue-zhe Xu,
Yang Zhang, Wei-jun Zhang*

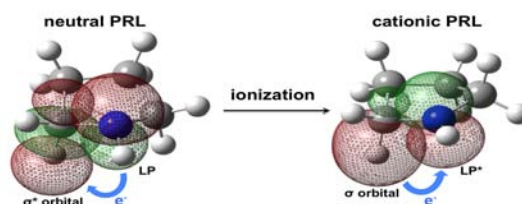
Chin. J. Chem. Phys. **33**, 37–42 (2020)



Infrared Spectroscopy of Neutral and Cationic Pyrrolidine Monomer in Supersonic Jet

Min Xie*, Zhao-li Zhang, Yu Zhang,
Xiao-nan Sun, Fu-fei Sun, Yong-jun Hu*

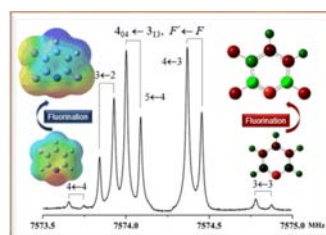
Chin. J. Chem. Phys. **33**, 43–47 (2020)



Rotational Spectra of 2,3,6-Trifluoropyridine: Effect of Fluorination on Ring Geometry

Jun-hua Chen, Juan Wang,
Gang Feng, Qian Gou*

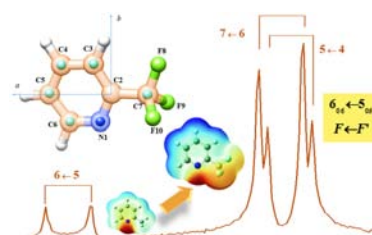
Chin. J. Chem. Phys. **33**, 48–52 (2020)



Microwave Spectrum and Structure of 2-(Trifluoromethyl)pyridine

Juan Wang, Xiao-long Li,
Qian Gou, Gang Feng*

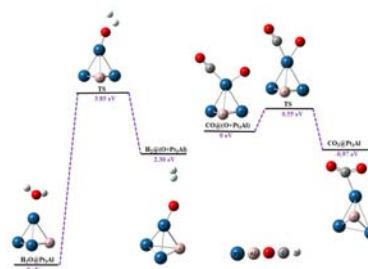
Chin. J. Chem. Phys. **33**, 53–57 (2020)



Hydrogen Generation from Water Splitting by Catalysts of Platinum-Based Clusters Pt_3X ($X=Al, Si, Cu$) and CO Oxidation by Their By-Products

Wen-Li Xie, Zhen-Dong Sun*

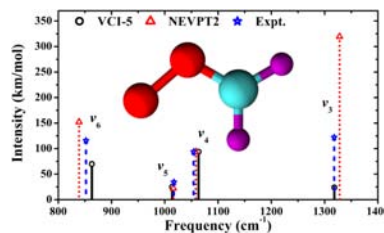
Chin. J. Chem. Phys. **33**, 58–64 (2020)



Ro-vibrational Spectra of the Simplest Deuterated Criegee Intermediate CD_2OO

Jun Li*

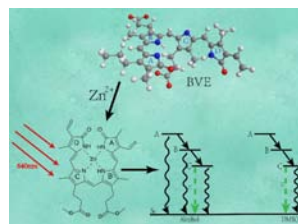
Chin. J. Chem. Phys. **33**, 65–68 (2020)



Ultrafast Excited State Dynamics of Biliverdin Dimethyl Ester Coordinate with Zinc Ions

Zhuang Chen, Yang-yi Liu, Xiao-xiao He*, Jin-quan Chen*

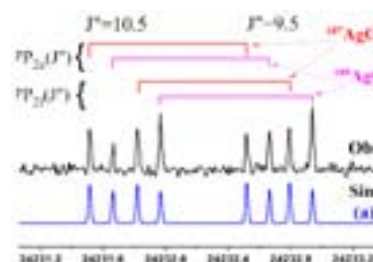
Chin. J. Chem. Phys. **33**, 69–74 (2020)



Reinvestigate the $C^2\Pi-X^2\Pi(0,0)$ Band of AgO

Qiang Zhang, De-ping Zhang, Bo-xing Zhu, Jing-wang Gu, Dong-feng Zhao*, Yang Chen*

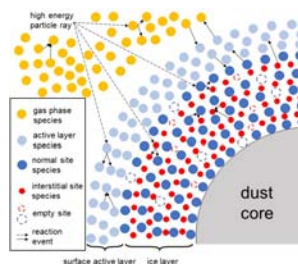
Chin. J. Chem. Phys. **33**, 75–78 (2020)



The Modeling of Grain Surface Chemistry

Long-fei Chen*, Fang-fang Li, Qiang Chang

Chin. J. Chem. Phys. **33**, 79–84 (2019)



Volatile Depletion in Planet-Forming Disks

Fujun Du*

Chin. J. Chem. Phys. **33**, 85–90 (2020)

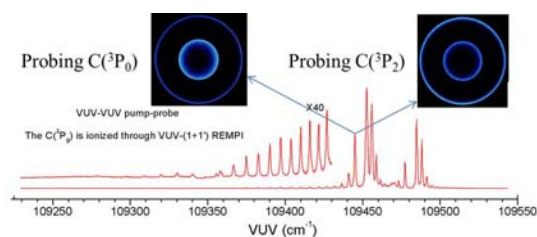


Structure of protoplanetary disk

Photodissociation Branching Ratios of $^{12}\text{C}^{16}\text{O}$ from 108000 cm^{-1} to 113200 cm^{-1} Measured by Two-Color VUV-VUV Laser Pump-Probe Time-Slice Velocity-Map Ion Imaging Method: Observation of Channels for Producing $\text{O}(^1\text{D})$

Hong Gao*, Yu Song, William M. Jackson, Cheuk-Yiu Ng

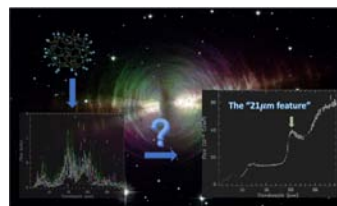
Chin. J. Chem. Phys. **33**, 91–100 (2020)



Are Fullerenes Responsible for the 21 Micron Feature?

Yong Zhang*

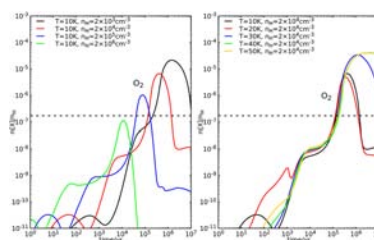
Chin. J. Chem. Phys. **33**, 101–106 (2020)



Gas-Grain Modeling of Interstellar O_2

Xia Zhang, Donghui Quan*, Jarken Esimbek

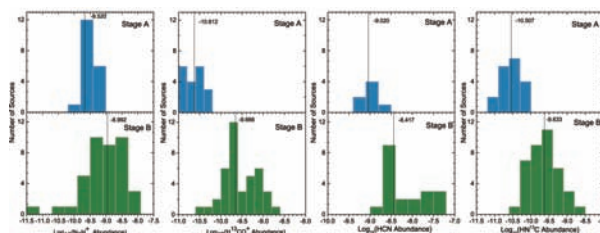
Chin. J. Chem. Phys. **33**, 107–113 (2020)



Effect of Optical Depth on Study of Chemical Properties of Massive Star Forming Clumps

Jian-jun Zhou, Run-xia Li*, Donghui Quan, Jarken Esimbek, Yu-xin He, Da-lei Li, Xin-di Tang, Gang Wu, Wei-guang Ji, Zheng-xue Chang, Xia Zhang

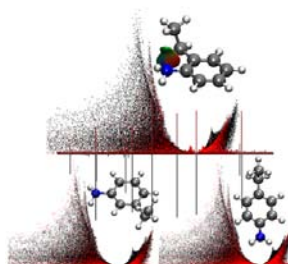
Chin. J. Chem. Phys. **33**, 114–118 (2020)



Rotational Spectra and Molecular Structures of Ethylanilines

Juan Wang, Sven Herbers,
Philipp Buschmann, Kevin Lengsfeld,
Jens-Uwe Grabow*, Gang Feng, Qian Gou*

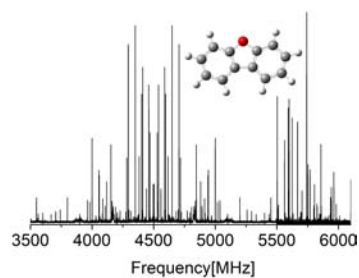
Chin. J. Chem. Phys. **33**, 119–124 (2020)



Pure Rotational Spectrum of Dibenzofuran in Range of 2–6 GHz

Hai-hua Zhou, Zeng-kui Liu, Zi-qiu Chen*,
Ming Sun*, Qian Chen*, Sheng-wen Duan,
Chao Jiao

Chin. J. Chem. Phys. **33**, 125–128 (2019)



Chinese Abstracts

Chin. J. Chem. Phys. **33**, ii (2019)