

# Contents

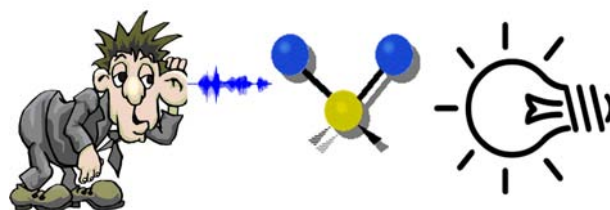
## Preface

Chin. J. Chem. Phys. **28**, I (2015)

## Converting Molecular Vibration to Mechanical Wave for Bond-Selective Imaging of Deep Tissue

Jie Hui, Ji-xin Cheng\*

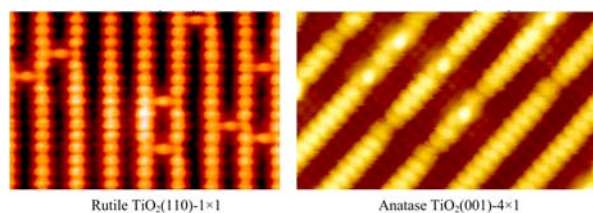
Chin. J. Chem. Phys. **28**, 375–382 (2015)



## Active Sites for Adsorption and Reaction of Molecules on Rutile $\text{TiO}_2(110)$ and Anatase $\text{TiO}_2(001)$ Surfaces

Shi-jing Tan, Bing Wang\*

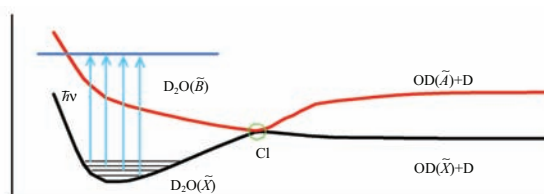
Chin. J. Chem. Phys. **28**, 383–395 (2015)



## State to State Photodissociation Dynamics of Vibrationally Excited $\text{D}_2\text{O}$ in B Band

Shan-yu Han, Lin-sen Zhou, Dai-qian Xie\*

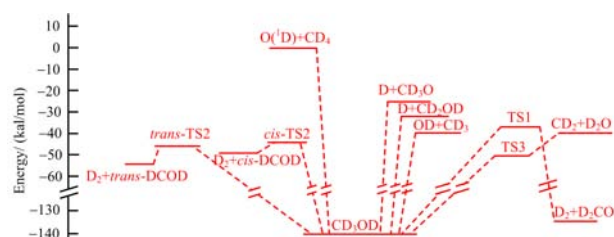
Chin. J. Chem. Phys. **28**, 396–402 (2015)



## Quasiclassical Trajectory Study of the Reaction of $\text{CD}_4$ with $\text{O}(^1\text{D})$

Ke-jie Shao, Bi-na Fu\*, Dong H. Zhang\*

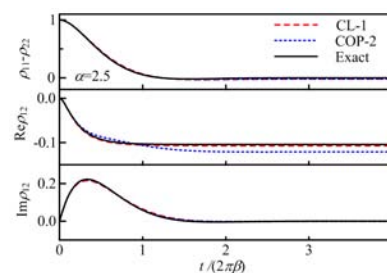
Chin. J. Chem. Phys. **28**, 403–408 (2015)



### Dissipaton Equation of Motion with Controlled Truncation

Yuan Kong, Hou-dao Zhang\*, Yi-meng Wang, Rui-xue Xu\*, YiJing Yan

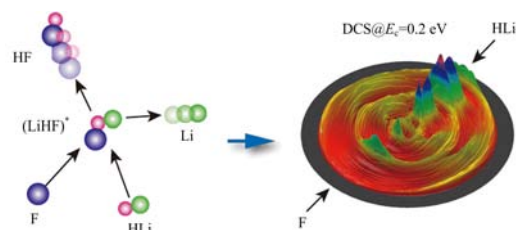
Chin. J. Chem. Phys. **28**, 409–414 (2015)



### Quantum Dynamics of Li+HF/DF Reaction Investigated by a State-to-State Time-Dependent Wave Packet Approach

Wen-tao Li, Mao-du Chen, Zhi-gang Sun\*

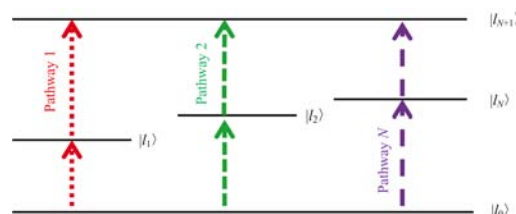
Chin. J. Chem. Phys. **28**, 415–425 (2015)



### Coherent Control of Multiple 2nd-Order Quantum Pathways

Fang Gao, Yao-xiong Wang, De-wen Cao, Feng Shuang\*

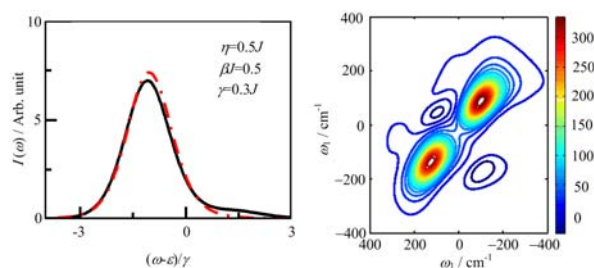
Chin. J. Chem. Phys. **28**, 426–430 (2015)



### Linear and Nonlinear Spectra in Photosynthetic Light Harvesting Complexes: Benchmark Tests of Modified Redfield Method

Yuan-yuan Jing, Kai Song, Shu-ming Bai, Qiang Shi\*

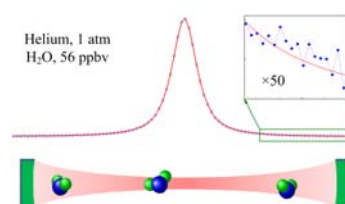
Chin. J. Chem. Phys. **28**, 431–439 (2015)



### Broad-Range Detection of Water Vapor using Cavity Ring-Down Spectrometer

Bing Chen, Jin Wang, Yu R. Sun, Peng Kang, An-wen Liu, Jian-ying Li, Xiao-lei He, Shui-ming Hu\*

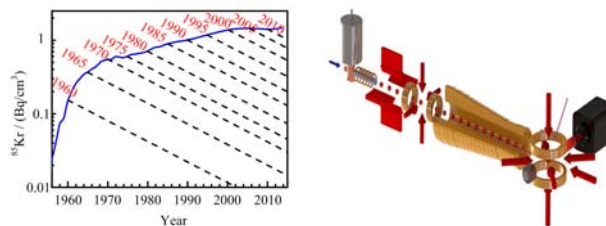
Chin. J. Chem. Phys. **28**, 440–444 (2015)



### Counting Radio-Krypton Atoms with a Laser

Guo-min Yang, Le-yi Tu, Cun-feng Cheng, Xiang-yang Zhang, Shui-ming Hu\*

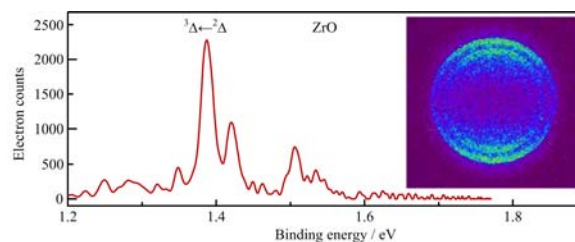
Chin. J. Chem. Phys. **28**, 445–452 (2015)



### Photoelectron Imaging Spectroscopy of $\text{ZrO}^-$ Diatomic Anion

Qing-yu Liu, Lian-rui Hu, Hui Chen\*, Sheng-gui He\*

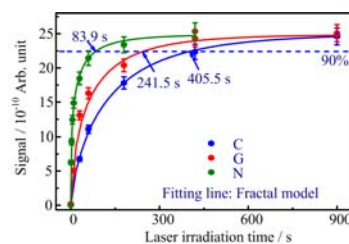
Chin. J. Chem. Phys. **28**, 452–458 (2015)



### Excitation Wavelength Dependence of Photocatalyzed Oxidation of Methanol on $\text{TiO}_2(110)$

Zhi-qiang Wang, Qun-qing Hao, Chuan-yao Zhou\*, Dong-xu Dai, Xue-ming Yang\*

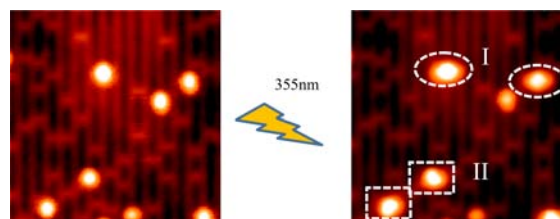
Chin. J. Chem. Phys. **28**, 459–464 (2015)



### Direct Observation of Ethanol Photocatalysis on Rutile $\text{TiO}_2(110)$ Surface

Dong Wei, Xian-chi Jin, Dong-xu Dai, Zhi-bo Ma\*, Xue-ming Yang\*

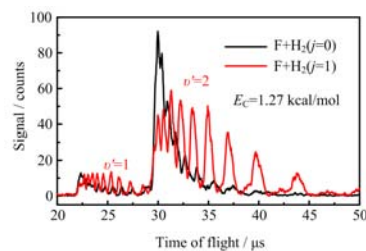
Chin. J. Chem. Phys. **28**, 465–470 (2015)



### Effect of Reagent Rotational Excitation on Dynamics of $\text{F} + \text{H}_2 \rightarrow \text{HF} + \text{H}$

Tian-gang Yang, Long Huang, Yu-run Xie, Tao Wang, Chun-lei Xiao, Zhi-gang Sun\*, Dong-xu Dai, Mao-du Chen\*, Dong H. Zhang, Xue-ming Yang\*

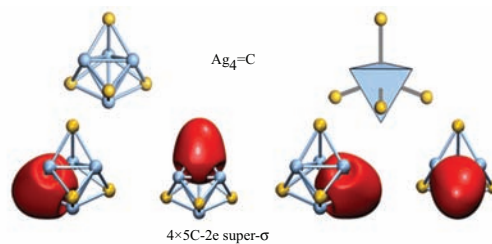
Chin. J. Chem. Phys. **28**, 471–475 (2015)



### SP<sup>3</sup>-Hybridization Feature of Ag<sub>4</sub> Superatom in Superatomic Molecules

Li-juan Yan, Long-jiu Cheng\*,  
Jin-long Yang\*

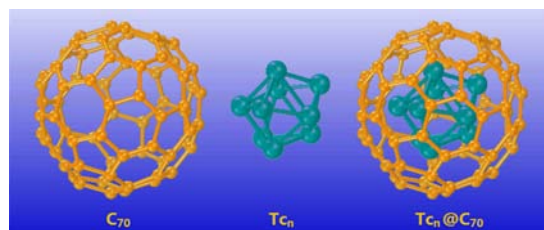
Chin. J. Chem. Phys. **28**, 476–480 (2015)



### Tc<sub>n</sub> and Tc<sub>n</sub>@C<sub>70</sub> Endohedral Metallofullerenes: *ab initio* Spin-density-functional Calculations

Li-jing Zeng, Ke Deng\*

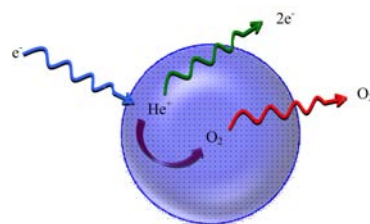
Chin. J. Chem. Phys. **28**, 481–488 (2015)



### Role of Helium Droplets in Mass Spectra of Diatomics: Suppression of Dissociative Reactions

Andrew M. Ellis, Sheng-fu Yang\*

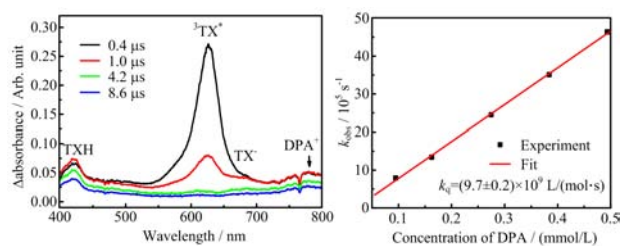
Chin. J. Chem. Phys. **28**, 489–492 (2015)



### Solvent Effect on the Photoinduced Electron Transfer Reaction Between Thioxanthen-9-one and Diphenylamine

Lin Chen, Qiao-hui Zhou, Xiang Liu,  
Xiao-guo Zhou\*, Shi-lin Liu

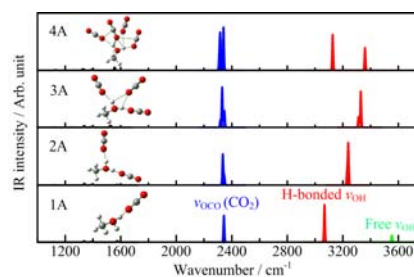
Chin. J. Chem. Phys. **28**, 493–500 (2015)



### Early Stage Solvation of Protonated Methanol by Carbon Dioxide

Zhi Zhao, Xiang-tao Kong, Xin Lei,  
Bing-bing Zhang, Ji-jun Zhao, Ling Jiang\*

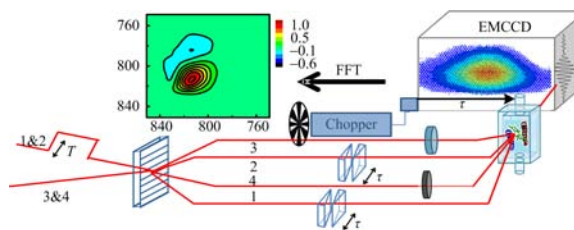
Chin. J. Chem. Phys. **28**, 501–508 (2015)



**Construction of the Apparatus for Two Dimensional Electronic Spectroscopy and Characterization of the Instrument**

Shuai Yue, Zhuan Wang, Xiao-chuan He, Gang-bei Zhu, Yu-xiang Weng\*

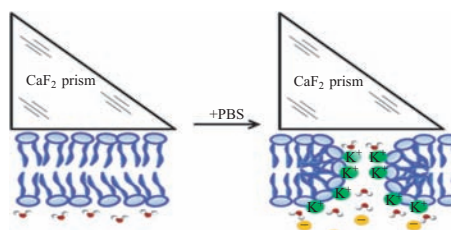
Chin. J. Chem. Phys. **28**, 509–517 (2015)



**Interaction between Potassium Phosphate Buffer Solution and Modeling Cell Membrane Investigated by Sum Frequency Generation Vibrational Spectroscopy**

Weilai Yang, Kangzhen Tian, Shuji Ye\*

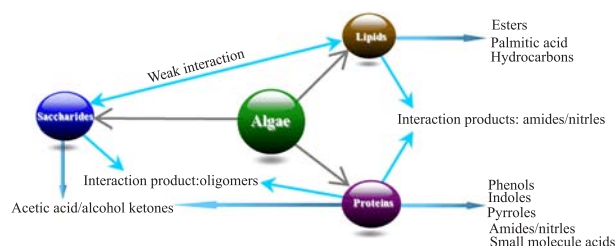
Chin. J. Chem. Phys. **28**, 518–524 (2015)



**Fractional Pyrolysis of Algae and Model Compounds**

Lin-ling Li, Rui Zhang, Dong-mei Tong, Chang-wei Hu\*

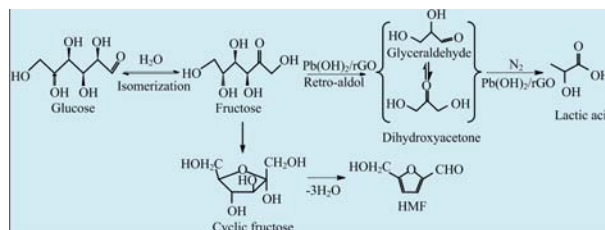
Chin. J. Chem. Phys. **28**, 525–532 (2015)



**Synthesis of Pb(OH)<sub>2</sub>/rGO Catalyst for Conversion of Sugar to Lactic Acid in Water**

Guan-hua Hou, Li-feng Yan\*

Chin. J. Chem. Phys. **28**, 533–538 (2015)



**Chinese Abstracts**

Chin. J. Chem. Phys. **28**, 4-III (2015)