

Chinese Journal of Chemical Physics

VOLUME 25, NUMBER 1, FEBRUARY 27, 2012

ARTICLES

- 1 **Resonance Raman Spectroscopic and Theoretical Study of Geometry Distortion of Thiourea in 2^1A State**
Hai-bo Zhang, Yan-ying Zhao, Xu-ming Zheng*
- 11 **VUV Photoionization and Dissociation of Tyramine and Dopamine: the Joint Experimental and Theoretical Studies**
Hui-jun Guo, Li-li Ye, Liang-yuan Jia, Li-dong Zhang*, Fei Qi
- 19 **Structural and Magnetic Property of Ion Irradiated TiO_2 Single Crystals**
Bin-feng Ding*, Feng-hua Xiang
- 25 **Carbon, Nitrogen, and Chalcogen Substitution Effects on 2,1,3-Benzothiadiazole Derivative: Theoretical Investigations of Electronic, Optical, and Charge Transport Properties**
Bo Hu*, Chan Yao, Qing-wei Wang, Hao Zhang, Jian-kang Yu
- 31 **Raman Scattering at Resonant or Near-Resonant Conditions: A Generalized Short-Time Approximation**
Abdelsalam Mohammed, Yu-Ping Sun, Quan Miao*, Hans Ågren, Faris Gel'mukhanov
- 48 **First-principles Study on Neutral Nitrogen Impurities in Zinc Oxide**
Ping Li*, Sheng-hua Deng, Yi-bao Li, Li Zhang, Guo-hong Liu, Jing Huang
- 53 **Stability and Flipping Dynamics of Delayed Genetic Toggle Switch**
Rui-ting Zhang, Han-shuang Chen, Zhong-huai Hou*
- 60 **$B_{12}N_{12}$ Nano-cage as Potential Sensor for NO_2 Detection**
Javad Beheshtian, Mohammad Kamfiroozi, Zargham Bagheri, Ali Ahmadi Peyghan*
- 65 **Diffusion Monte Carlo Study of Bond Dissociation Energies for BH_2 , $B(OH)_2$, BCl_2 , and BCl**
Hui-ran Li, Xin-lu Cheng, Hong Zhang*
- 70 **Array-enhanced Logical Stochastic Resonance in Coupled Bistable Systems**
Hao Wu, Hui-jun Jiang, Zhong-huai Hou*
- 77 **Gas Phase Conformations of Tetrapeptide Glycine-Phenylalanine- Glycine-Glycine**
Hui-bin Chen, Yao Wang, Xin Chen, Zi-jing Lin*
- 86 **Hydrogenation and Ammoniation of $SrTiO_3$ for an Enhanced Visible-light Photocatalysis**
Tao Sun, You-yuan Zhao, Ming Lu*
- 91 **Formation Mechanism Study of TiO_2 Film Comprising Nanotubes and Nanoparticles**
Di Yang*, Yi-quan Wang, Guo-bin Ren, Shuai Feng, Yuan-yuan Chen, Wen-zhong Wang
- 96 **Preparation, Characterization and Photocatalytic Activity of Lanthanum Doped Mesoporous Titanium Dioxide**
Zhong-liang Shi, Hong Lai, Shu-hua Yao*, Shao-feng Wang*
- 103 **Effect of Calcination Temperature on Surface Oxygen Vacancies and Catalytic Performance Towards CO Oxidation of Co_3O_4 Nanoparticles Supported on SiO_2**
Jin-bing Li, Zhi-quan Jiang, Kun Qian, Wei-xin Huang*

(Contents continued on inside back cover)

(Contents continued from outside back cover)

- 110 **Influence of Pressure on SiN_x:H Film by LF-PECVD**
Zhen-li Wen*, Xiao-ning Cao, Chun-lan Zhou, Wen-jing Wang
- 115 **Magnetostatic Coupling in CoFe₂O₄/Pb(Zr_{0.53}Ti_{0.47})O₃ Magnetolectric Composite Thin Films of 2-2 Type Structure**
Yu-dong Xu*, Lei Wang, Min Shi, Hai-lin Su*, Guang Wu
- 120 **Preparation of Hollow Silica Microspheres via Poly(*N*-isopropylacrylamide)**
Mo-zhen Wang*, Yu-chen Chen, Xue-ping Ge, Xue-wu Ge
- i **Chinese Abstracts**