

## Publications in 2008

1. Jie Liu, Bin Liu, and Li-Bin Fu, Many-body effects on nonadiabatic Feshbach conversion in bosonic systems, *Physical Review A*, 78, 013618, 2008.
2. D. F. Ye, X. Liu and J. Liu, Classical Trajectory Diagnosis of a Fingerlike Pattern in the Correlated Electron Momentum Distribution in Strong Field Double Ionization of Helium, *Physical Review Letters*, 101, 233003, 2008.
3. Jie Liu, Li-Bin Fu, Bin Liu and Biao Wu, Role of particle interactions in the Feshbach conversion of fermion atoms to bosonic molecules, *New Journal of Physics*, 101, 23018. (2008)
4. Yongli Ping, Lixin xu, Baorong Chang, Molin Liu and Hongya Liu, 5D Solutions to  $\Lambda$ CDM Universe Derived From Global Brane Model, *Modern Physics Letters A*, Vol.23, No.33, 2008, 2859-28653
5. Xin Hu, Shaoqiang Tang and Maxime Leroux, Stationary and Transient Simulations for a One-Dimensional Resonant Tunneling Diode, *Communications in Computational Physics*, Vol.4, No.5, 1034-1050, 2008.
6. Time history interfacial conditions in multiscale computations of lattice oscillations, Michael Dreher, Shaoqiang Tang, *Comput. Mech.* 41:683-698. 2008.
7. C. T. Zhou, X. T. He, Intense laser-driven relativistic electron beams in a two-layer target, *Physics of Plasmas*, 15, 123105 (2008)
8. 李恒, 蔡庆东, 鱼洗内颗粒流动的数值模拟, *力学学报*, 第 40 卷第 1 期, 2008.
9. L. Guo, J. Chen, J. Liu, and Y. Q. Gu, Origin of the double-peak structure in longitudinal momentum distributions for single ionization of He atom in strong laser field, *Physical Review A*, 77, 033413, 2008.
10. X. Y. Jia, W. D. Li, J. Fan, J. Liu, and J. Chen, Suppression Effect in the Non-Sequential Double Ionization of Molecules by Intense Laser Field, *Physical Review A*, 77, 063407, 2008.
11. Hongyun Li, J. Chen, Hongbing Jiang, Jie Liu, Panming Fu, Qihuang Gong, Zong-Chao Yan, and Bingbing Wang, Carrier-envelope phase dependence of non-sequential double ionization in few-cycle pulses, *Optics Express*, Vol. 16, No. 25, 2008.
12. F.X. Li, An inverse-pole-figure method for the analysis of domain switching in polycrystalline ferroelectrics/ferroelastics, *Scripta Materialia*, 59(2008)677-680.
13. Wei Gong, Ruo Li, Ningning Yan and Weibo Zhao, An improved error analysis for finite element approximation of bioluminescence tomography, *Journal of Computational Mathematics*, Vol.23, No.3, 1-13, 2008.
14. Shao-Ying Meng, Li-Bin Fu and Jie Liu, Adiabatic fidelity for atom-molecule conversion in a nonlinear three-level system, *Physical Review A*, 78, 053410, 2008.
15. Y. Chen, Y. Li, S. Yang, and J. Liu, High-order harmonic generation and molecular orbital tomography: Characteristics of molecular recollision electronic wave packets, *Physical Review A*, 77, 031402, 2008
16. Y. J. Chen and J. Liu, High-order harmonic generation from diatomic molecules with large internuclear distance: The effect of two-center interference, *Physical Review A*, 77, 013410, 2008.
17. Di-Fa Ye, Li-Bin Fu, and Jie Liu, Rosen-Zener transition in a nonlinear two-level system, *Physical Review A*, 77, 013402, 2008.
18. Li-Yun Yang, and Jie Liu, Anomalous conductance spectrum in ferromagnet/d-wave superconductor junctions carrying a supercurrent, *Journal of Physics: Condensed Matter*, 20, 335212, 2008.
19. Ju-Kui Xue, Ai-Xia Zhang and Jie Liu, Self-trapping of Bose-Einstein condensates in optical lattices: The effect of the lattice dimension, *Physical Review A*, 77, 013602, 2008.
20. D. F. Ye, J. Chen, and J. Liu, Classical trajectory perspective on double-ionization dynamics of diatomic molecules irradiated by ultrashort intense laser pulses, *Physical Review A*, 77, 013403, 2008.
21. Guan-Fang Wang, Li-Bin Fu and Jie Liu, Spin tunnelling dynamics for spin-1 Bose-Einstein condensates in a swept magnetic field, *Journal of Physics: Condensed Matter*, 20, 045223, 2008.
22. Sheng-Chang Li, Li-Bin Fu, Wen-Shan Duan and Jie Liu, Nonlinear Ramsey interferometry with Rosen Zener pulses on a two component Bose Einstein condensate, *Physical Review A*, 78, 063621, 2008.

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24. Qian Wang, Qiang Sun and P. Jena, Ligand induced ferromagnetism in ZnO nanostructures, *The Journal of Chemical Physics*, 129, 164714, 2008.
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26. Qiang Sun, Qian Wang and Puru Jena, Functionalized heterofullerenes for hydrogen storage, *Applied Physics Letters*, 93, 1, 2008.
27. Shaoqiang Tang, A finite difference approach with velocity interfacial conditions for multiscale computations of crystalline solids, *Journal of Computational Physics*, 227, (2008) 4038-4062.
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32. Yan Xue-Qing, Liu Bi-Cheng, He Zhao-Han, Sheng Zheng-Ming, Guo Zhi-Yu<sup>1</sup>, Lu Yuan-Rong, Fang Jia-Xun, Chen Jia-Erh, Mono-Energetic Proton Beam Acceleration in Laser Foil-Plasma Interactions, *Chin. Phys. Lett.* Vol.25, No.9, 2008, 3330.
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34. Zhigang Wang and Ping zhang, Edge states and the integer quantum Hall conductance in spin-chiral ferromagnetic kagomé lattice, *Physical Review B*, 77, 125119, 2008.
35. Bo Sun, Ping Zhang and Xiao-Geng Zhao, First-principles local density approximation+U and generalized gradient approximation +U study of plutonium oxides, *The Journal of Chemical Physics*, 128, 084705, 2008.
36. Ningning Hao, Ping Zhang, Zhigang Wang, Wei Zhang and Yupeng Wang, Topological edge states and quantum Hall effect in the Haldane model, *Physical Review B*, 78, 075438, 2008.
37. Cangtao Zhou, Tianxing Cai, Choy Heng Lai, Xingang Wang and Ying-Cheng Lai, Model-based detector and extraction of weak signal frequencies from chaotic data, *Chaos*, 18, 013104, 2008.
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44. Qian Wang, Qiang Sun, Puru Jena and Yoshiyuki Kawazoe, Dependence of Magnetism on Doping Concentration in V-Doped Bulk ZnO, *Materials Transactions*, Vol.49, No.11, 2008.

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