Curriculum Vitae

Zhai, Huanchen

Department of Chemistry and Biochemistry, UCLA
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Education

University of California, Los Angeles, Los Angeles, CA Sep. 2015 – Present
Department of Chemistry and Biochemistry, PhD student
Major: Chemistry

Shandong University, Jinan, P. R. China Sep. 2011 – Jun. 2015
Taishan College, and School of Physics, Bachelor of Science
Major: Physics

Awards, Honors and Scholarships

Meritorious Winner (team) in 2014 Interdisciplinary Contest in Modeling (ICM), International 2014
Scholarships for CSST Students, University of California at Los Angeles 2014
Honor for Outstanding Student Leaders, Shandong University 2013 – 2014
First-Grade Prize of Shandong Division in the 4th National Undergraduate Mathematical Contest 2012
Scholarships for Excellent Academic Performance, Shandong University 2012 – 2013

Research Experience

University of California at Los Angeles, Los Angeles, CA Jul. – Sep. 2014
Department of Chemistry and Biochemistry, (Adviser: Dr. Anastassia N. Alexandrova)
Searching global minimum of PES for clusters using Coalescence Kick (CK) method

Shandong University, Jinan, P. R. China Mar. 2013 – Nov. 2014
Institute of Atomic and Molecular Physics, School of Physics, (Adviser: Dr. Shi-Ying Lin)
Theoretical and computational method for atomic and molecular collision dynamics

European Organization for Nuclear Research (CERN), Geneva, Switzerland Jul. – Aug. 2013
Study and visit as an associated member of ATLAS Experiment

Shandong University, Jinan, P. R. China May 2012 – May 2013
Laboratory for Ion Beam Applications, School of Physics, (Adviser: Dr. Xuelin Wang)
Waveguide structure properties for near-infrared wavelength regions in lithium niobate crystals

Teaching Experience

University of California at Los Angeles, Los Angeles, CA Jan. 2016 – Present
Department of Chemistry and Biochemistry, (Instructor: Dr. Jennifer Casey, Dr. Bacher)
Chemistry Experiments for Life Science Majors, undergraduate-level course, teaching assistant

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Presentations

Poster, 12th National Conference of Quantum Chemistry, Taiyuan, P. R. China Jun. 2014
A fast hybrid method for constructing multidimensional PES from ab initio calculations

Talk, Peer Seminar of CSST Program, UCLA, Los Angeles, CA Sep. 2014
An improved Coalescence Kick method for the search for global minima of clusters

Skills

Computational Chemistry:	VASP, MOLPRO, Gaussian, Quantum Expresso, CP2K, Turbomole, JMol, and VMD
Programming:	C, C++, C#, Basic, Java, Python, Flash Actionscript, Fortran, Haskell, Bash Shell Script, MATLab, and Mathematica
WEB Programming:	PHP, Django, ASP, ASP .NET, JSP, Javascript, HTML, CSS, MySQL, Nginx, uWSGI, git, and jQuery

Publications

Huanchen Zhai, and Shi Ying Lin. "A Fast Hybrid Method for Constructing Multidimensional Potential Energy Surfaces From ab initio Calculations: A New Global Analytic PES of NH_2 System", *Chemical Physics*, 2015, **455** (7), pp 57-64.

Huanchen Zhai, Mai-Anh, Ha, and Anastassia N. Alexandrova. "AFFCK: Adaptive Force-Field-Assisted *ab initio* Coalescence Kick Method for Global Minimum Search", *J. Chem. Theory Comput.,* 2015, **11** (5), pp 2385–2393.