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<p>2004 华东师范大学 化学系 学士</p> <p>2009 中国科学院上海硅酸盐研究所 博士</p> <p>2009 中国科学院上海硅酸盐研究所 助理研究员</p> <p>2012 美国华盛顿大学 材料科学与工程系 博士后</p> <p>2015 上海大学材料基因组工程研究院 教授</p>		
研究方向		
<p>高通量计算平台搭建与算法发展</p> <p>高性能热电材料设计</p> <p>微观电子-声子及其耦合作用的理论探索</p>		
代表性成果		
<p>本人主要从事以第一性原理计算及电热输运理论为基础的理论工作。具体研究内容涉及高通量计算平台搭建与算法发展，高性能热电材料设计，以及微观电子-声子及其耦合作用的理论探索。截止2018年2月，在Energy. Environ. Sci., Adv. Funct. Mater., J. Am. Chem. Soc., NPJ Comp. Mater., Chem. Mater., Appl. Phys. Lett., Phys. Rev. B等SCI刊物上发表论文70余篇。总引用数2400余次，H因子25，并发表国际热电专著一章。在APS、PACRIM、TMS等国际会议上做邀请报告8次。</p> <p>部分文章列表：</p> <ol style="list-style-type: none"> Li You, Yefeng Liu, Xin Li, Pengfei Nan, Binghui Ge, Ying Jiang, Pengfei Luo, Shanshan Pan, Yanzhong Pei, Wenqing Zhang, G. Jeffrey Snyder, Jiong Yang*, Jiye Zhang*, and Jun Luo*, "Boosting the thermoelectric performance of PbSe through dynamic doping and hierarchical phonon scattering", Energy & Environmental Science, 2018, DOI: 10.1039/c8ee00418h Yongxing Sun, Lili Xi, Jiong Yang*, Lihua Wu, Xun Shi, Lidong Chen, Jeffrey Snyder, Jihui Yang, and Wenqing Zhang*, "The 'electron crystal' behavior in copper chalcogenides Cu₂X (X=Se, S)", Journal of Materials Chemistry A, 5, 5098, 2017 Pingjun Ying, Xin Li, Yancheng Wang, Jiong Yang*, Chenguang Fu, Wenqing Zhang, Xinbing Zhao, and Tiejun Zhu*, "Hierarchical Chemical Bonds Contributing to the Intrinsically Low Thermal Conductivity in a-MgAgSb Thermoelectric Materials", Advanced Functional Materials, 27, 1604145, 2017 Lihua Wu, Xin Li, Shanyu Wang, Tiansong Zhang, Jiong Yang*, Wenqing Zhang*, Lidong Chen, and Jihui Yang, "Resonant level-induced high thermoelectric response in indium-doped GeTe", NPG Asia Materials, 9, e343, 2017 Lili Xi, Jiong Yang*, Lihua Wu, Jihui Yang, and Wenqing Zhang*, "Band engineering and rational design of high-performance thermoelectric materials by first-principles", J. Materiomics, 2, 114, 2016 		

6. Bo Duan, **Jiong Yang (co-first)**, James R. Salvador, Yang He, Bo Zhao, Shanyu Wang, Ping Wei, Fumio S. Ohuchi, Wenqing Zhang*, Raphaël P. Hermann, Olivier Gourdon, Scott X. Mao, Yingwen Cheng, Chongmin Wang, Jun Liu, Pengcheng Zhai, Xinfeng Tang, Qingjie Zhang*, and Jihui Yang*, "Electronegative guests in CoSb₃", *Energy & Environmental Science*, 9, 2090, 2016
7. **Jiong Yang**, Lili Xi, Wujie Qiu, Lihua Wu, Xun Shi, Lidong Chen*, Jihui Yang*, Wenqing Zhang*, Ctirad Uher, and David Singh, "On the tuning of electrical and thermal transport in thermoelectrics: an integrated theory-experiment perspective", *NPJ Computational Materials*, 2, 15015, 2016
8. Shanyu Wang, **Jiong Yang (co-first)**, Trevor Toll, Jihui Yang*, Wenqing Zhang*, and Xinfeng Tang*, "Conductivity-limiting bipolar thermal conductivity in semiconductors", *Scientific Reports* 5, 10136, 2015
9. **Jiong Yang**, Ruiheng Liu, Zhuo Chen, Lili Xi, Jihui Yang*, Wenqing Zhang, and Lidong Chen, "Power factor enhancement in light valence band p-type skutterudites", *Appl. Phys. Lett.* 101, 022101-022104, 2012
10. **Jiong Yang**, P. Qiu, R. Liu, L. Xi, S. Zheng, W. Zhang*, L. Chen, D. J. Singh, and Jihui Yang, "Trends in electrical transport of p-type skutterudites $R\text{Fe}_4\text{Sb}_{12}$ (R=Na, K, Ca, Sr, Ba, La, Ce, Pr, Yb) from first-principles calculations and Boltzmann transport theory", *Phys. Rev. B* 84, 235205-235214, 2011
11. **J. Yang**, H. M. Li, T. Wu, W. Q. Zhang*, L. D. Chen, and J. H. Yang*, "Evaluation of Half-Heusler Compounds as Thermoelectric Materials: A theoretical Approach", *Adv. Funct. Mater.*, 18, 2880, 2008

完整文章列表 : <http://www.researcherid.com/rid/K-6330-2014>

电输运程序 :

(1) BoltzTrap_vasp , 将流行的基于Wien2k的BoltzTrap程序与VASP接口。

http://www.mgi.shu.edu.cn/Portals/675/BoltzTrap_vasp.zip

(2) Transoptic , 基于VASP电子结构计算与跃迁矩阵元方法处理电输运, 并利用常数电声耦合近似方法处理弛豫时间, 推荐。 <http://www.mgi.shu.edu.cn/Portals/675/transoptic.zip>