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师资队伍

材料学院

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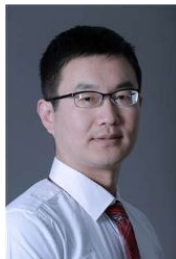
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### 学历及学术经历

2002年毕业于齐鲁工业大学, 获学士学位; 2007年获中国科学院上海光机所博士学位。先后在英国南安普顿大学光电研究中心、日本神户大学做博士后和JSPS特别研究员。2009年10月至2012年3月任日本国立材料科学研究所青年科学家中心研究员(tenure-track), 合作者为国际陶瓷科学院院士Yoshio Sakka教授。2012年4月任北海道大学助理教授(tenure-track)。2013年8月回国, 任苏州大学材料与化学化工学部特聘教授、博士生导师。

### 研究工作和成果

近五年来, 一直在新型无机光功能材料相关领域开展研究工作, 从理论预测重p区元素激活特种发光材料的物化性质、实验探索光功能材料的合成技术到开拓它们在硅基薄膜和生物成像方面的应用, 取得了一系列的研究成果。近五年来, 以通讯作者在Progress in Materials Science、JACS、Adv. Mater., Small, J. Mater. Chem., APL, Opt. Lett.等国际权威期刊上发表论文多篇, 应邀为国际权威综述期刊Progress in Materials Science撰写长篇综述1篇, 并应Sci. Tech. Adv. Mater.主编邀请撰写荧光金属团簇综述1篇; 发表的论文中3篇被选为杂志热点文章、重点收录和Asia Research News介绍。目前是JACS、Adv. Funct. Mater., Small, J. Mater. Chem., Opt. Lett.等知名期刊以及日本学术振兴会基金的评审人, 担任中国硅酸盐学会特种玻璃分会理事。

近五年来先后主持北海道大学助理教授启动经费、日本国立材料科学研究所重点研究项目、日本学术振兴会特别助成基金等项目; 作为共同研究者参与英国EPSRC和日本兵库科技财团等项目。应邀担任第三届国际陶瓷会议分会主席, 获得的奖励包括英国皇家化学会国际作者杂志奖、中国科学院刘永龄奖学金特别奖、上海-应用材料研究与发展基金研究生奖学金、澳大利亚和中国科学院必和必拓奖学金、日本学术振兴会特别研究员奖学金等。

**研究领域:** 无机材料化学、无机光电子材料、硅基光子材料与器件、激光材料、量子化学计算

**招生方向:** 本课题组在无机光电子材料领域具有良好的实验条件, 欢迎化学、物理学和材料学等相关专业的本科生和硕士生报考, 欢迎本科生提前来课题组参加带薪科研和完成毕业论文。非常欢迎您与我取得联系。

### 近期代表性论文 (\*通讯作者)

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5. **Hong-Tao Sun**,\*Y. Sakka, H. Gao, Y. Miwa, M. Fujii, N. Shirahata, Z. Bai and J. Li, Ultrabroad near infrared photoluminescence from Bi<sub>5</sub>(AlCl<sub>4</sub>)<sub>3</sub> crystal, *Journal of Materials Chemistry*, 2011, 21, 4060-4063. (热点文章)
6. **Hong-Tao Sun**,\* Y. Sakka, N. Shirahata, M. Fujii, T. Yonezawa, Near-infrared photoluminescence from molecular crystals containing tellurium, *Journal of Materials Chemistry*, 2012, 22, 24792-24797.
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10. **Hong-Tao Sun**,\* B. B. Xu,T. Yonezawa, Y. Sakka, N. Shirahata, M. Fujii,J. R. Qiu, H. Gao, Photoluminescence from Bi<sub>5</sub>(GaCl<sub>4</sub>)<sub>3</sub> molecular crystal, *Dalton Transactions*,2012, 41, 11055-11061.
11. **Hong-Tao Sun**,\* Y. Sakka, M. Fujii, N. Shirahata,and H. Gao, Ultrabroad near-infrared photoluminescence from ionic liquids containing subvalent bismuth, *Optics Letters*,2011, 36, 100-102.
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**Hong-Tao Sun**,\* F. Shimaoka, Y. Miwa, J. Ruan, M. Fujii,Jianrong Qiu,and S. Hayashi, Sensitized superbroadband near-IR emission in bismuth glass/Si nanocrystal superlattices, *Optics Letters*, 2010, 35, 2215-2217.