

张伟风基本信息

张伟风, 男, 1965 年出生, 博士, 教授, 河南省特聘教授, 博士生导师。河南大学光伏材料省重点实验室常务副主任, 河南省物理学会副理事长及光学学会副理事长, 主要研究方向: 氧化物材料物理与化学。

1. 在研项目

- (1) 河南大学 2016 年度省校区合作项目: 宋代青瓷电窑还原烧成技术研究 (CX0000A65009), 12 万元, 2016 年 5 月-2017 年 12 月。
- (2) 河南省科技发展计划项目, 仿宋代官瓷柴煤电一体化高温设备设计及还原烧成的关键技术研究(172102210184), 10 万元, 2017 年 1 月-2018 年 12 月。

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王渊旭基本信息

王渊旭，男，1973年生，博士，教授，博士生导师。国家自然科学基金委通讯评审专家，主要研究方向：热电材料、钙钛矿氧化物材料界面性质。

1. 在研项目

- (1) 国家自然科学基金面上项目：钙钛矿氧化物界面磁性的电场调控(11674083)，68万元，2017年1月-2020年12月
- (2) 国家自然科学基金面上项目：调控能带结构优化几种三元 Zintl 合金热电性能(51371076)，80万元，2014年1月-2017年12月
- (3) 河南省杰出青年基金：高效氧化物热电材料(154100510013)，30万元，2015年1月-2017年12月；

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刘波基本信息

刘波，男，1975 年出生，博士，河南省特聘教授，博士生导师。国家自然科学基金委通讯评审专家、教育部学位中心通讯评议专家，主要研究方向：生物纳米材料及界面物理化学。本科和硕士毕业于复旦大学物理系，从事原子与分子加速器的相关研究工作。博士毕业于奥尔胡斯大学物理系，主要利用串列质谱（MS/MS）和静电储存环(ELISA)，研究真空中蛋白质与核酸的结构和光动力学特性。近年来主持国家自然科学基金二项，参与国家自然科学基金三项，入选教育部“新世纪优秀人才支持计划”，主持中西部高校综合实力提升规划建设项目。至今发表 SCI 论文 40 余篇，其中在物理类 PRL 上发表 4 篇，2 篇为第一作者；在化学类杂志 JACS 上发表 2 篇，Angewandte Chemie 上 1 篇；在物理化学或化学物理类杂志 JCP、CPC 上共发表 6 篇；质谱类 JASMS，IJMS 上共发表 5 篇；特邀评论 1 篇发表在 JPB 上。被 JASMS 杂志邀请做过文章的评委。目前主持国家自然科学基金面上项目一项(21373077)，83 万元，2014 年 1 月-2017 年 12 月。

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顾玉宗基本信息

顾玉宗，男，1963 年出生，博士，教授，博士生导师。河南省教育厅学术技术带头人，教育部高等学校物理学类专业教学指导委员会中南地区工作委员会委员，河南省物理学会常务理事、美国科学促进会特邀会员，河南大学学报编委。主持和参与国家及省级科研项目 10 余项，在国际著名学术期刊上发表 SCI 论文 100 余篇。主要研究方向：微纳结构光电材料的物理效应和光电特性。

1. 主持或参加科研项目

- (1) 河南省科技发展计划项目（国际科技合作），II-VI 族半导体/多壁碳纳米管复合材料的合成与非线性光学性质(144300510018)，10 万元，2014 年 2 月-2016 年 12 月，主持；
- (2) 河南省科技发展计划项目，II-VI 族半导体/透明聚合物纳米复合薄膜材料三阶非线性光学性能及应用研究(122300410105)，4 万元，2012 年 1 月-2014 年 1 月，主持；
- (3) 河南省科技发展计划项目，基于二氧化钛纳米晶电极的染料敏化太阳能电池研究（082300460070），3 万元，2008 年 1 月-2009 年 12 月，主持；
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- (6) 河南省科技发展计划项目，金属有机化合物非线性光学性质研究（211010700），1 万元，2002 年 1 月-2003 年 12 月，主持；
- (7) 河南省高校青年骨干教师项目，非线性光学材料掺杂有机改性溶胶凝胶体系的三阶非线性光学性质研究，2.4 万元，2001 年 1 月-2003 年 12 月，主持；
- (8) 河南省教育厅科研项目，被动光学限幅器研究（20011400004），1 万元，2001 年 05 月-2003 年 12 月，主持；
- (9) 国家自然科学基金项目，有机改性化合物半导体光限幅纳米材料研究（59702002），10 万元，1998 年 1 月-2000 年 12 月，主要参与。

2. 近五年发表论文

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个人简介

郭立俊，男，博士，教授，河南大学特聘教授，博士生导师。2002年毕业于复旦大学物理系光学专业并获博士学位。先后在德国、瑞典和美国等国家从事博士后和访问学者研究



工作。主要从事微纳结构光物理及光化学、单分子光物理、光催化动力学等方面的研究工作。在包括 *J. Am. Chem. Soc.*, *Proc. Natl. Acad. Sci. U.S.A.*, *J. Mater. Chem. C* 等在内的国内外学术期刊上公开发表学术论文 70 余篇，主持和参加多项国家自然科学基金和国际合作研究项目。

研究方向

- ◆ **单分子物理**：在单分子层次上研究微纳结构、大分子及复合体系中的光物理新现象及机制。
- ◆ **自组装结构与光物理**：设计与获得具有光响应的探针分子，研究自组装结构与光物理性质之间的关系。
- ◆ **光催化动力学**：利用稳态及瞬态光谱技术，研究光催化材料中的超快过程及其调控机制。

课题组在研国家基金项目：

1. 国家自然科学基金-河南联合基金，单分子水平实时研究蛋白在磷脂双层膜表面的吸附行为和机制，执行时间：2017/01-2019/12
2. 国家自然科学基金-河南联合基金，新型偶氮苯衍生物的光控自组装结构及其光物理性质，执行时间：2016/01-2018/12
3. 国家自然科学基金-河南联合基金，垂直 InAs 和 InSb 纳米线阵列的可控生长及应用特性研究，执行时间：2015/01-2017/12

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1. Zhen Chi, Xia Ran*, Lili Shi, Jie Lou, Yanmin Kuang, Lijun Guo*, Molecular Characteristics of a Fluorescent Chemosensor for the Recognition of Ferric Ion Based on Photoresponsive Azobenzene Derivative, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 2017,171: 25–30.
2. Xia Ran, Yajie Li, Qiongqiong Gao, Weihong Qiu* and Lijun Guo*, A Smart Phase-Selective Gelator for Recycling Aromatic Solvents, the Removal of Toxic Dyes, and Molecular Delivery, *Asian J. Org. Chem.* 2017, 6: 95-101.
3. Yajie Li, Xia Ran*, Qiuyue Li, Qiongqiong Gao and Lijun Guo*, Water-regulated self-assembly structure transformation and gelation behavior prediction based on a hydrazide derivative, *Chem. Asian J.*, 2016, 11, 2157-2166. (cover page)
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5. Lili Shi, Xia Ran* (co-first author), Yajie Li, Qiuyue Li, Weihong Qiu, and Lijun Guo*, Photoresponsive Structure Transformation and Emission Enhancement Based on a Tapered Azobenzene Gelator, *RSC Advances*, 2015, 5, 38283-38289.
6. Xia Ran, Lili Shi, Kun Zhang, Jie Lou, Bo Liu, and Lijun Guo*, The Gelation Ability and Morphology Study of Organogel System Based on Calamitic Hydrazide Derivatives, *Journal of Nanomaterials*, 2015, Article ID: 357875
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9. Lingjing Luo, Tianfeng Li, Xia Ran, Pan Wang, and Lijun Guo*, Probing Photocatalytic Characteristics of Sb-Doped TiO₂ under Visible Light Irradiation, *Journal of Nanomaterials* 2014, 2014:1-6, Article ID 947289.
10. Ting-Fang He, Lijun Guo (co-first author), Xunmin Guo, Chih-Wei Chang, Lijuan Wang, and Dongping Zhong, Femtosecond Dynamics of Short-Range Protein Electron Transfer in Flavodoxin, *Biochemistry*, 2013, 52, 9120–9128.
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 13. Lijun Guo, Yuanmin Wang, H. Peter Lu, Combined Single-Molecule Photon-Stamping Spectroscopy and Femtosecond Transient Absorption Spectroscopy Studies of Interfacial Electron Transfer Dynamics, *J. Am. Chem. Soc.*; 2010, 132(6):1999-2004 (cover page).
 14. Chih-Wei Chang, Lijun Guo, Ya-Ting Kao, Jiang Li, Chuang Tan, Tanping Li, Chaitanya Saxena, Zheyun Liu, Lijuan Wang, Aziz Sancar and Dongping Zhong, Ultrafast Solvation Dynamics at Binding and Active Sites of Photolyases, *Proc. Natl. Acad. Sci. U.S.A.* 2010, 107(7):2914-2919.
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黄明举基本信息

黄明举, 男, 1965 年出生, 博士, 教授, 博士生导师。国家自然科学基金委员会评专家、教育部学位中心通讯评议专家、河北省自然科学基金委员会通讯评审专家, 主要研究方向: 纳米复合光电信息材料研究。

1. 近几年课题组承担的课题科研项目

- (1) 国家自然科学基金面上项目: 纳米粒子掺杂宽带敏感抗褶皱光致聚合物数字全息存储材料的研究, 71 万元, 2012 年 1 月-2015 年 12 月 ;
- (2) 国家自然科学基金项目: 驻波场驱动的量子系统中亚波长局域及相关特性的研究, 30 万元, 2016 年 1 月- 2018 年 12 月;
- (3) 国家自然科学基金项目: 在双波长激发下细菌视紫红质膜的光学性质及其应用研究, 30 万元, 2013 年 1 月-2016 年 12 月。

2. 近五年发表论文

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毛艳丽基本信息

毛艳丽，女，1972年出生，博士，教授，博士生导师。中国物理学会光散射委员会委员，国家自然科学基金委通讯评审专家，主要研究方向：发光材料和太阳能电池材料研究。

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3. 钙钛矿太阳能电池用电子传输材料的改性研究，河南省科技发展计划项目，2017.1-2018.12

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李国强基本信息

李国强，男，1980 年出生，博士，副教授，博士生导师。河南省教育厅学术技术带头人、河南省高校青年骨干教师、河南省高校科技创新人才、河南省科技进步奖获得者、开封市青年科技奖获得者。主要研究方向：氧化物的光物理与光化学性质。

1. 在研项目

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白莹基本信息

白莹，女，1980 年出生，博士，教授，博士生导师。国家自然科学基金委通讯评审专家、教育部学位中心通讯评议专家、浙江省自然科学基金委员会通讯评审专家，主要研究方向：二次电池新材料及界面物理化学。

1. 在研项目

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- (2) 科技部“863”项目子课题：基于材料基因工程的高性能材料设计、制备与表征技术(2015AA034201)，100 万元，2015 年 4 月-2018 年 3 月；
- (3) 河南省高校科技创新人才项目：锂离子电池高电压尖晶石正极材料的界面特性研究(16HASTIT042)，60 万元，2016 年 1 月-2017 年 12 月；
- (4) 河南省科技厅科技攻关计划（国际科技合作）项目：锂离子动力电池用高电压正极材料的改性研究(162102410014)，10 万元，2016 年 1 月-2016 年 12 月；

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郑海务基本信息

郑海务，男，1976 年出生，博士，教授，博士生导师，校特聘教授。曾获得 2015 年度中国博士后基金资助者选介，2014 年度河南省优秀博士后和 2014 年度河南省高校科技创新人才等荣誉称号。主要研究方向：(1) 铁电压电光电子学，(2) 基于无铅压电材料的能量转换器件及应用研究。

1. 在研项目

- (1) 国家自然科学基金面上项目：Bi₅Ti₃FeO₁₅/CuO 异质结薄膜的制备、光伏特性与载流子输运机理研究(51372069)，80 万元，2014 年 1 月-2017 年 12 月；
- (2) 河南省科技厅科技攻关计划项目：基于压电势增强 BiFeO₃/ZnO 异质结光伏效应的纳米发电机研制(172102210013)，10 万元，2017 年 1 月-2018 年 12 月。

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程振祥基本信息

程振祥, 男, 1973 年出生, 博士, 教授, 博士生导师。Project Assessor of Australia Research Council(澳大利亚研究委员会项目评审人), Project Assessor of Australia Nuclear Science and Technology Project Assessor of Australia Nuclear Science and Technology(澳大利亚核技术研究机构项目评审人)。Physical Review Letters, Advanced Materials, Advanced Function Materials, Journal of Physics Chemistry C, Energy and Environment Science, Physical Review B 等学术杂志评审。主要研究方向: 自旋电子学。

1. 在研项目

- (1) 国家自然科学基金面上项目: 氧化物界面应力调控: 室温多铁界面材料及隧道结应用(51571083), 74.4 万元, 2016 年 1 月-2019 年 12 月;

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