



所属学院 材料科学与工程学院
学科领域 材料科学与工程（能量转换、存储和应用及其功能材料；复合材料；纳米材料）、材料工程
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个人简介

分别于 1996、1999 和 2002 年在哈尔滨工业大学、抚顺石油学院和复旦大学获得学士、硕士和博士学位。长期从事具有光电能功能和转换材料（新能源材料、光催化材料、储能材料）方面的研究工作。2002.6-2006.6 在中科院上海光机所工作，2006.7- 至今在华东理工大学材料学院工作，期间于 2012.1-2013.1 在澳大利亚 Wollongong 大学 ISEM 研究所访问。2002 年至今，在国际刊物发表 SCI 论文 60 余篇，引用 2100 多次；作为第一发明人申请并获授权美国专利 10 项、申请并获授权中国发明专利 30 项。

目前正在承担和完成的项目包括：与美国波音公司合作项目 2 项、与美国 Xinova 公司合作项目 1 项、欧盟框架 FP7 项目 -- 居里夫人行动计划 1 项（华东理工大学负责人）、上海市自然科学基金 2 项、承担并完成国家自然科学基金 1 项、上海市纳米专项课题 1 项、技术服务项目 4 项、技术转移项目（专利实施许可）1 项；主持并完成上海市外专局引智项目 5 项。参加并在研上海市纳米专项课题 2 项；参加并完成国家自然科学基金项目 1 项，上海市纳米专项课题 2 项，上海市国际合作项目 1 项，上海市光科技课题各 1 项。

研究方向

材料体系：

- （1）石墨烯基复合材料的研究；金属氧（硫）化合物及其复合材料的研究；
- （2）导电高分子材料及其复合材料的合成和性能研究；
- （3）纳米化材料及效应研究；

技术领域

- （1）储能材料、技术和器件（超级电容器、新型锂离子、锂硫、钠离子等高效能电池）
- （2）碳纤维的高效回收和再利用技术
- （3）（可见）光催化降解、光（电）催化分解水；光—电转换；
- （4）石墨烯防腐；

研究成果及主要发表文章

1. Papers

2020 年

- (1) Kefu Zhang, Zhaoqiang Zhu, Jiahao Lin, Ruizhi Zhang, Chongjun Zhao, One-step simultaneously heteroatom doping and phosphating to construct 3D FeP/C nanocomposite for lithium storage, *Applied Surface Science*.500 (2020) 144055.

2019 年

- (1) Zhaoqiang Zhu, Kefu Zhang, Ruizhi Zhang, Jiahao Lin, Chunhua Zhao, Guorong Chen, Chongjun Zhao, A general strategy to inner tuned hydrothermal preparation of $MxOy@M$ electrodes and improved electrochemical performances, *Electrochimica Acta*. 310 (2019) 162-172.
- (2) Zhaoqiang Zhu, Ruizhi Zhang, Jiahao Lin, Kefu Zhang, Nan Li, Chunhua Zhao, Guorong Chen, Chongjun Zhao, Ni,Zn-codoped $MgCo_2O_4$ electrodes for aqueous asymmetric supercapacitor and rechargeable Zn battery, *Journal of Power Sources*. 437 (2019) 226941.
- (3) Yanan Zhou, Zhaoqiang Zhu, Chunhua Zhao*, Kefu Zhang, Bailing Wang, Chongjun Zhao*, Guorong Chen, Reclaimed carbon fiber-based 2.4 V aqueous symmetric supercapacitor, *ACS Sustainable Chem. Eng.* 7 (2019) 5095-5102.
- (4) Shengqi Wang, Yaping Song, Yue Ma, Zhaoqiang Zhu, Chunhua Zhao, Chongjun Zhao*, Attaining a high energy density of 106 Wh kg^{-1} for aqueous supercapacitor based on $VS_4/rGO/CoS_2@Co$ electrode, *Chem. Eng. J.* 365 (2019) 88-98.
- (5) Danmin Shao, Pengwei Li, Ruizhi Zhang, Chunhua Zhao*, Deqiang Wang, Chongjun Zhao*, One-step preparation of Fe-doped $Ni_3S_2/rGO@NF$ electrode and its superior OER performances, *Int. J. Hydrogen Energy* 44 (2019) 2664-2674.
- (6) Chongjun Zhao*, Pengwei Li, Danmin Shao, Ruizhi Zhang, Shengqi Wang, Zhaoqiang Zhu, Chunhua Zhao, Phytic acid-derived $Co_2-xP_2O_7-C/RGO$ and its superior OER electrocatalytic performance, *Int. J. Hydrogen Energy* 44 (2019) 844-452.

2018 年

- (1) Chongjun Zhao*, Yaoxuan Huang, Chunhua Zhao, Xiaoxiao Shao, Zhaoqiang Zhu, Rose-derived 3D carbon nanosheets for high cyclability and extended voltage supercapacitor, *Electrochim. Acta* 291 (2018) 287-296.
- (2) Shengqi Wang, Zhaoqiang Zhu, Pengwei Li, Chunhua Zhao, Chongjun Zhao*, Hui Xia, In situ conversion of sub-4nm $Co(OH)_2$ nanosheet arrays from phytic acid-derived $Co_3(HPO_4)_2(OH)_2$ for superior high loading supercapacitors, *J. Mater. Chem. A*. 6 (2018) 20015-20025.
- (3) Xiaoxiao Shao, Zhaoqiang Zhu, Chongjun Zhao*, Chunhua Zhao, Xiuzhen Qian, Hierarchical $FeS/RGO/FeS@Fe$ foil as high-performance negative electrode for asymmetric supercapacitors, *Inorg. Chem. Frontiers* 5 (2018) 1912-1922.
- (4) Xian Wu, Fenglei Li, Chongjun Zhao*, Xiuzhen Qian, One-step construction of hierarchical $Ni(OH)_2/RGO/Cu_2O$ on Cu foil for Ultra-Sensitive Non-enzymatic Glucose and Hydrogen peroxide Detection, *Sensors Actuators B* 274 (2018) 163-171.
- (5) Zhaoqiang Zhu, Yanan Zhou, Shengqi Wang, Chunhua Zhao, Zhen Li*, Guorong Chen, Chongjun Zhao*, Ni counterpart-assisted synthesis of nanoarchitected $Co_3O_4/CoS/Ni(OH)_2@Co$ electrode for superior supercapacitor, *Electrochim. Acta* 284 (2018) 444-453.
- (6) Lijuan Deng, Yifan Xu, Caixia Sun, Baofeng Sun, Qiao Sun, Chongjun Zhao*, Zhen Li*, Functionalization of small black phosphorus nanoparticles for targeted imaging and photothermal therapy of cancer, *Sci. Bull* 63(14) (2018) 917-924.
- (7) Xian Wu, Xiaojuan Zhang, Chongjun Zhao*, Xiuzhen Qian, One-pot hydrothermal synthesis of $ZnO/RGO/ZnO$ sensor for sunset yellow in soft drinks, *Talanta* 179 (2018) 836-844.
- (8) Chunhua Zhao, Yanan Zhou, Zhengxiang Ge, Chongjun Zhao*, Xiuzhen Qian, Facile construction of MoS_2/RCF electrode for high-performance supercapacitor, *Carbon* 127 (2018) 699-706.

2017 年

- (1) Peiwen Ju, Zhaoqiang Zhu, Xiaoxiao Shao, Shengqi Wang, Chunhua Zhao, Xiuzhen Qian, Chongjun Zhao*, 3D walnut-shaped $TiO_2/RGO/MoO_2@Mo$ electrode exhibiting extraordinary supercapacitor performance, *J Mater. Chem. A* 5 (2017) 18777-18785.
- (2) Chongjun Zhao*, Shengqi Wang, Zhaoqiang Zhu, Peiwen Ju, Chunhua Zhao and Xiuzhen Qian, Roe-shaped $Ni_3(PO_4)_2/RGO/Co_3(PO_4)_2$ (NRC) nanocomposite grown in situ on Co foam for superior supercapacitors, *J Mater. Chem. A* 5 (2017)18594-18602.
- (3) Chongjun Zhao*, Xian Wu, Xiaojuan Zhang, Pengwei Li, Xiuzhen Qian, one-pot hydrothermal synthesis of $CuO/RGO/Cu_2O$ on Cu foil for ultra-sensitive non-enzymatic glucose and hydrogen peroxide, *Microchimica Acta* 184(7), 2341-2348.
- (4) Chongjun Zhao*, Zhengxiang Ge, Yanan Zhou, Youfu Huang, Gefei Wang, Xiuzhen Qian, Solar-assisting pyrolytically reclaimed carbon fiber and their hybrids of MnO_2/RCF for supercapacitor electrodes, *Carbon* 114 (2017) 230-241.
- (5) Chongjun Zhao*, Xian Wu, Xiaojuan Zhang, Pengwei Li, Xiuzhen Qian, Facile synthesis of layered $CuS/RGO/CuS$ nanocomposite on Cu foam for ultrasensitive nonenzymatic detection of glucose, *Journal of Electroanalytical Chemistry* 785 (2017) 172-179.
- (6) Chongjun Zhao*, Xiaoxiao Shao, Zhaoqiang Zhu, Chunhua Zhao, Xiuzhen Qian, One-pot hydrothermal synthesis of RGO/FeS composite on Fe foil for high performance supercapacitors, *Electrochim. Acta* 246 (2017) 497-506.

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- (1) Caixia Sun, Ling Wen, Jianfeng Zeng, Yong Wang, Qiao Sun, Lijuan Deng, Chongjun Zhao*, Zhen Li*, One-pot solventless preparation of PEGylated black phosphorus nanoparticles for photoacoustic imaging and photothermal therapy of cancer, *Biomaterials* 91 (2016) 81-89.
- (2) Chongjun Zhao*, Qian Wang, Huang Zhang, Stefano Passerini, Xiuzhen Qian, Two-dimensional titanium carbide/RGO composite for high-performance supercapacitors, *ACS Appl. Mater. Interfaces* 8 (24) (2016) 15661-15667.
- (3) Chongjun Zhao*, Xiaoxiao Shao, Yuxiao Zhang, Xiuzhen Qian, $Fe_2O_3/reduced$ graphene oxide/ Fe_3O_4 composite in situ grown on Fe foil for high-performance supercapacitors, *ACS Appl. Mater. Interfaces* 8 (24) (2016) 30133-30142.
- (4) Yuxiao Zhang, Peiwen Ju, Chongjun Zhao*, Xiuzhen Qian, In-situ grown of $MoS_2/RGO/MoS_2@Mo$ nanocomposite and its supercapacitor performance, *Electrochimica Acta* 219 (2016) 693-700.
- (5) Chongjun Zhao*, Peiwen Ju, Shengqi Wang, Yuxiao Zhang, Shudi Min, Xiuzhen Qian, One-step hydrothermal preparation of $TiO_2/RGO/Ni(OH)_2/NF$ electrode with high performance for supercapacitors, *Electrochimica Acta* 218 (2016) 216-227.
- (6) Shengqi Wang, Peiwen Ju, Zhaoqiang Zhu, Chongjun Zhao*, $Co_3O_4/RGO/Co_3O_4$ pseudocomposite grown in situ on a Co foil for high-performance supercapacitors, *RSC Advances* 6 (2016) 99640-99647.
- (7) Chongjun Zhao*, Yuxiao Zhang, Xiuzhen Qian, $MoS_2/RGO/Ni_3S_2$ nanocomposite in-situ grown on Ni foam substrate and its high electrochemical performance, *Electrochimica Acta* 198 (2016) 135-143.
- (8) Kun Wang, Chongjun Zhao*, Zhuomin Zhang, Shudi Min, Xiuzhen Qian, A facile one-step route to synthesize three-layer nanostructure of $CuS/RGO/Ni_3S_2$ and its high electrochemical performance, *RSC Adv.* 6 (2016) 16963-16971.
- (9) Shudi Min, Chongjun Zhao*, Peiwen Ju, Guorong Chen, Xiuzhen Qian, Zaiping Guo*, Facile synthesis of nickel foam based nano-architected composites as binder-free anodes for high capacity Li-ion batteries, *J Power Sources* 304 (2016) 311-318.

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- (1) Youfu Huang, Chongjun Zhao*, jianbo Dong, Muzi Shitian, Weifeng Ma, Xiuzhen Qian, Solvothermal Recovery of CFs from Thermoset polymer-based CFRPs, *J. Reinforced Plastic Comp.* 34 (2015) 1673-1683.
- (2) Shudi Min, Zhuomin Zhang, Chongjun Zhao*, Guorong Chen, Xiuzhen Qian, Zaiping Guo*, Hydrothermal growth of $MnO_2/RGO/Ni(OH)_2$ on nickel foam with superior supercapacitors performance, *RSC Adv.* 5 (2015) 62571-62576.
- (3) Chongjun Zhao*, Zhuomin Zhang, Yuxiao Zhang, Xiuzhen Qian, Vertically oriented $Ni_3S_2/RGO/Ni_3S_2$ nanosheets on Ni foam for superior supercapacitor, *RSC Adv.* 5 (2015) 63528-63536.
- (4) Xiaojuan Zhang, Xiuzhen Qian, Junping Dong, Chongjun Zhao*, One-step synthesis of RGO/ZnO composite films on Zn foil for nonenzymatic sensing of xanthine, *Sensor and Actuator B* 221 (2015) 528-536.
- (5) Kun Wang, Chongjun Zhao*, Shudi Min, Xiuzhen Qian, Facile Synthesis of $Cu_2O/RGO/Ni(OH)_2$ Nanocomposite and Its Double Synergistic Effect on Supercapacitor Performances, *Electrochim. Acta* 165 (2015) 314-322.
- (6) Zhuomin Zhang, Qian Wang, Chongjun Zhao*, Shudi Min, Xiuzhen Qian, One-step Hydrothermal Synthesis of 3D Petal-like $Co_9S_8/RGO/ Ni_3S_2$ Composite on Nickel Foam for High-performance Supercapacitors, *ACS Appl. Mater. Interfaces.* 7 (2015) 4861-4868.
- (7) Shudi Min, Chongjun Zhao*, Zhuomin Zhang, Guorong Chen, Xiuzhen Qian, Zaiping Guo*, Synthesis of $Ni(OH)_2/RGO$ pseudocomposite on nickel foam for supercapacitor with superior performance, *J. Mater. Chem. A.* 5 (2015) 3641-3650.
- (8) Kun Wang, Xiangmao Dong, Chongjun Zhao*, Xiuzhen Qian, Yunlong Xu, Facile synthesis of $Cu_2O/CuO/RGO$ nanocomposite and its superior supercapacitors, *Electrochimica Acta.* 152 (2015) 433-442.

2014 年

- (1) Zhuomin Zhang, Chongjun Zhao*, Shudi Min, Xiuzhen Qian, A facile one-pot route to RGO/Ni_3S_2 for high-performance supercapacitor. *Electrochim. Acta.* 144 (2014) 100-110.
- (2) Xiangmao Dong, Li Li, Chongjun Zhao*, Hua-kun Liu, Zaiping Guo*, Controlled synthesis of $RGO/FexOy$ nanocomposites as a high-performance anode material for lithium ion batteries, *J. Mater. Chem. A* 2 (2014) 9844-9850.
- (3) Shudi Min, Chongjun Zhao*, Guorong Chen, Zhuomin Zhang, Xiuzhen Qian, One-pot hydrothermal synthesis of 3D flower-like $RGO/Co_3O_4/Ni(OH)_2$ composite film on nickel foam for high-performance supercapacitor, *Electrochim. Acta* 135 (2014) 336-344.
- (4) Xiangmao Dong, Kun Wang, Chongjun Zhao*, Xiuzhen Qian, Zhen Li, Direct synthesis of Cu_2O/RGO composite film on Cu foil and its supercapacitor performance, *J. Alloys Compd.* 586 (2014) 745-753.
- (5) Shudi Min, Chongjun Zhao*, Guorong Chen, Xiuzhen Qian, One-pot hydrothermal preparation of $Ni(OH)_2/RGO$ composite film for supercapacitor with high rate performance. *Electrochim. Acta.* 115 (2014) 155-163.

2013 年

- (1) Yonghuan Lan, Xiuzhen Qian, Chongjun Zhao*, Zhuomin Zhang, Xin Chen, Zhen Li*, High performance visible light driven photocatalysts silver halides and graphitic carbon nitride ($X = Cl, Br, I$) nanocomposites, *J. Colloid Interface. Sci.* 395 (2013) 75-80.
- (2) Chongjun Zhao*, Shulei Chou, Yunxiao Wang, Cuifeng Zhou, Huakun Liu, Shixue Dou, A facile route to synthesis transition metal oxide/reduced graphene oxide nanocomposite, *RSC Adv.* 3 (2013) 16597-16603.

2. International Patents

- (1) Chongjun Zhao, Youfu Huang, Jianbo Dong, Xiuzhen Qian, Jinchao Zhang, Method and systems for recovering carbon fibers from objects, Appl. Number: WO2014CN78983, Appl. Date: May 30, 2014. Publication number: WO 2015180159(A1), Date: Dec. 3, 2015. (US2017198416 (A1), Jul. 13, 2017)
- (2) Chongjun Zhao, Youfu Huang, Jianbo Dong, Jinchao Zhang, Xiuzhen Qian, Yunlong Xu, Method and systems for recycling carbon fiber, Appl. Number: WO2014CN78985, Appl. Date: May 30, 2014. Publication number: WO 2015180161(A1), Date: Dec. 3, 2015. (US2017203384 (A1), Jul. 20, 2017)
- (3) Chongjun Zhao, Jianbo Dong, Youfu Huang, Xiuzhen Qian, Method and systems for converting carbon dioxide into graphene, Appl. Number: WO2014CN78987, Appl. Date: May 30, 2014. Publication number: WO 2015180163(A1), Date: Dec. 3, 2015. (US2017189886 (A1), Jul. 6, 2017)
- (4) Chongjun Zhao, Jianbo Dong, Xiangmao Dong, Xiuzhen Qian, Methods and apparatuses for producing patterned graphene, Appl. Number: WO2013CN86317, Appl. Date: Oct. 31, 2013. Publication number: WO 2015062022 (A1), Date: May. 7, 2015 (US2016265103 (A1), Sep. 15, 2016).
- (5) Chongjun Zhao, Shudi Min, Xiangmao Dong, Xiuzhen Qian, Methods and system for preparing graphene, Appl. number: WO2013CN86328, Appl. Date: Oct. 31, 2013. Publication number: WO 2015062027 (A1), Date: May. 7, 2015 (US 2016257569 (A1), Sep. 8, 2016; CN 105764849 (A), Jul. 13, 2016).
- (6) Chongjun Zhao, Jianbo Dong, Youfu Huang, Jingwei Ma, Xiuzhen Qian, Methods and systems for producing carbon aerogel, Appl. number: WO2013CN86331, Appl. data: Oct. 31, 2013. Publication number: WO 2015062029 (A1), Date: May. 7, 2015 (US 2016244332 (A1), Aug. 25, 2016).
- (7) Chongjun Zhao, Muzi Shitian, Weifeng Ma, Xiuzhen Qian, Jinchao Zhang, Chemical solvothermal method for recovering carbon fiber from CFRP composites, Appl. Number: WO2013CN75297, Appl. Date: May 8, 2013. Publication number: WO 2014179939 (A1), Date: Nov. 13, 2014 (US 2016115301 (A1), Apr. 28, 2016, US 9790346 (B2), Oct. 17, 2017).
- (8) Chongjun Zhao, Xiangmao Dong, Shudi Min, Zhuomin Zhang, Kun Wang, Jianbo Dong, Xiuzhen Qian, Xin Chen, Preparation of metal oxide-graphene composite films, Appl. Number: WO2013CN72182, Appl. Date: Mar. 5, 2013. Publication number: WO 2014134782 (A1), Date: Sep. 12, 2014 (US 2016020040 (A1), Jan. 21, 2016).
- (9) Chongjun Zhao, Methods and compositions for making metal oxide-graphene composites, Appl. number: WO2012CN82464, Appl. Date: Sep 29, 2012, Publication number: WO 2014047930 (A1), Date: Apr. 3, 2014. (US 2015251919 (A1), Sep. 10, 2015; CN 104769755 (A), Jul. 8, 2015, US 9499410 (B2), Nov.22, 2016).
- (10) Chongjun Zhao, Zhen Shao, Yang Xia, Yunlong Xu, Xiuzhen Qian, Photocatalytic compositions and methods for their preparation and use, Appl. number: WO2012CN76919, Appl. Date: Jun. 14 2012. Publication number: WO 2013185328 (A1), Date: Dec. 19, 2013. (US 2015165420 (A1), Jun. 18, 2015)