师资队伍

各系教师

博士生导师

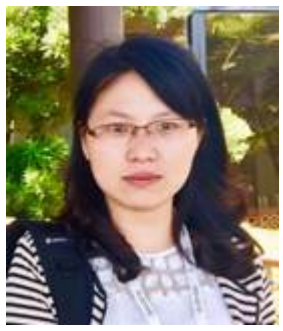
硕士生导师

可再生能源系

黄云

2018-02-27 15:09 点击：[5865]

姓名	黄 云	性别	女
所在部门	可再生能源系	职称	副教授
职务		联系电话	023-65103120
邮箱	yunhuang@cqu.edu.cn		



个人简介：

博士、副教授、硕士生导师。2016年被评为重庆大学先进工作者，目前承担国家自然科学基金青年基金项目1项，四川省科技支撑项目1项，重庆市博士后特别资助项目1项，主研参与国家重点研发计划子课题“高效固定烟气CO_2的微藻光合反应器开发”，国家自然科学基金委国际（地区）合作与交流项目“太阳能水热水解及生化转化耦合制取微藻生物燃料基础研究”等。2016年受邀参与Springer Nature出版社新著《Bioreactors for Microbial Biomass and Energy Conversion》的编写并负责其中一章的编写工作；兼任中国环境增值产业技术创新战略联盟委员，国际SCI期刊如Bioreasource Technology、Applied energy、Energy conversion and management等的审稿人。在国内外高水平期刊及学术会议上发表研究论文40余篇，其中SCI收录37篇，其中ESI高被引论文2篇，论文他引次数100余次，H-index 12。主要从事绿色清洁可再生能源的开发：即微藻减排转化制取生物燃料中的：高效光合生物反应器开发、高密度培养和低成本高效生物质收获及其过程强化及能质传递等研究工作。

工作经历：

2017/09-至今，重庆大学，动力工程学院，副教授
2014/07-2017/09，重庆大学，动力工程学院，讲师
2011/11-2012/3，瑞典皇家工学院生态环境系项目合作交流

教育经历：

2014/10-2017/10，重庆大学，动力工程学院，在职博士后
2009/09-2014/06，浙江大学，能源清洁利用国家重点实验室，博士；
2005/09-2009/06，江苏大学，能源与动力工程学院，学士；

研究方向：

主要从事节能减排方向的相关研究：

1. 废水废气CO_2的微生物能源化转化制生物燃料；
2. 绿色清洁的生物质能源开发；
3. 微藻减排燃煤烟气CO_2过程中流动及传输现象；
4. 光生物反应器内气液两相流动及传质强化；
5. 微生物能源转化及其工程热物理问题等

研究生培养：

欢迎对以上方向有兴趣的各位同学报考研究生！并常年向本科生提供助研、STRP、节能减排等科研项目训练机会和指导，欢迎随时联系与交流!

在研科研项目：

作为项目负责人主持的项目：

1. **国家自然科学基金青年项目**：含光合自养/异养微藻生物膜的双重结构多孔介质内气液传输和生化转化特性（项目批准号：51606020），21万元（直接经费），（执行时间：2017.01~2019.12）
2. **四川省科技支撑计划项目**：养殖场粪污多相流工业示范系统及多相沼气实验研究（项目批准号：2016GZ0317），30万，（执行时间：2016.1-2018.12）
3. **重庆市博士后科研项目特别资助:**非饱和微藻异养辅助自养双重多孔生物膜内多相传递及油脂生产能力强化（项目批准号：Xm2015070），5万，（执行时间：2016.1-2017.12）
4. **中央高校一般项目**：微藻生物膜的物质传递和油脂生产强化研究（项目批准号：106112015CDJXY140003），8万元，（执行时间：2015.6-2017.6）

排名前三主研人项目：

1. **国家自然科学基金委国际（地区）合作与交流项目**:太阳能水热水解及生化转化耦合制取微藻生物燃料基础研究（项目批准号：51561145013），299.6万元（直接经费258万元）（执行时间：2015.10.1-2018.9.30）（排名第三）
2. **科技部国家重点研发计划（子课题）**:高效固定烟气CO_2的微藻光合反应器开发-微藻烟气CO_2多相传递与固碳机理（项目批准号：2016YFB0601002-02），80万元（直接经费）（执行时间：2016.7-2020.6）（排名第二）

发表论文：

近5年发表的主要论文：

1. **Yun Huang,** Jun Cheng, Hongxiang Lu, Yong He, Junhu Zhou, Kefa Cen. Transcriptome and key genes expression related to carbon fixation pathways in Chlorella PY-ZU1 cells and their growth under high concentrations of CO_2. 2017. 10:181. **Biotechnology for biofuels.** (通讯作者，SCI一区收录)
2. **Yun Huang,** Sha Zhao, Yu-dong Ding, Qiang Liao, Yong Huang, Xun Zhu. Optimizing the gas distributor based on CO_2 bubble dynamic behaviors to improve microalgal biomass production in an air-lift photo-bioreactor. 2017. Bioresource Technology. 233: 84–91 (通讯作者，SCI一区收录)
3. **Yun Huang,** Wei Xiong, Qiang Liao, Qian Fu, Ao Xia, Xun Zhu. Comparison of Chlorella vulgaris biomass productivity cultivated in biofilm and suspension from the aspect of light transmission and microalgae affinity to carbon dioxide. 2016. Bioresource Technology**.**222: 367–373. (通讯作者，SCI一区收录)
4. **Yun Huang**, Yahui Sun, Qiang Liao, Qian Fu, Ao Xia, Xun Zhu. Improvement on light penetrability and microalgae biomass production by periodically pre-harvesting Chlorella vulgaris cells with culture medium recycling. 2016. Bioresource Technology. 216: 669–676 (通讯作者，SCI一区收录)
5. **Yun Huang**, Jun Cheng, Hongxiang Lu, Rui Huang, Junhu Zhou, Kefa Cen. Simultaneous enhancement of microalgae biomass growth and lipid accumulation under continuous aeration with 15% CO_2. **RSC Advances**. 2015, **5**, 50851 - 50858(SCI收录) (通讯作者，SCI三区收录)
6. Yahui Sun, **Yun Huang***, Qiang Liao, Ao Xia, Qian Fu, Xun Zhu, Jingwei Fu. Boosting Nannochloropsis oculata growth and lipid accumulation in a lab-scale open raceway pond characterized by improved light distributions employing built-in planar waveguide modules. 2018 **Bioresource Technology** 249 :880-889 (通讯作者，SCI一区收录)
7. Chaoyang Wei, **Yun Huang***, Qiang Liao, Qian Fu, Ao Xia, Yahui Sun. The kinetics of the polyacrylic superabsorbent polymers swelling in microalgae suspension to concentrate cells density. 2018 **Bioresource Technology** 249:713-719 (通讯作者，SCI一区收录)
8. Yong Huang, **Yun Huang***, Qiang Liao, Qian Fu, Ao Xia, Xun Zhu. Improving phosphorus removal efficiency and Chlorella vulgaris growth in high-phosphate MFC wastewater by frequent addition of small amounts of nitrate. 2017 **International Journal of Hydrogen Energy** 42 (45): Pages 27749-27758. (通讯作者，SCI二区收录)
9. Yaping Zheng, **Yun Huang***, Qiang Liao, Qian Fu, Ao Xia, Xun Zhu. Impact of the accumulation and adhesion of released oxygen during Scenedesmus obliquus photosynthesis on biofilm formation and growth. 2017 **Bioresource Technology** 244(1): pp198-205**.** (通讯作者，SCI一区收录)
10. Xiao-jian Ding, **Yun Huang***,Qiang Liao, Qian Fu, Ao Xia, Chao Xiao. Medium-low temperature hydrothermal hydrolysis kinetic characteristics of concentrated wet microalgae biomass Chlorella vulgaris. 2017 International journal of agricultural and biological engineering 10:154-162. (通讯作者，SCI三区收录)
11. Hai-Xing Chang, **Yun Huang***, Qian Fu, Qiang Liao, Xun Zhu. Kinetic characteristics and modeling of microalgae Chlorella vulgaris growth and CO_2 biofixation considering the coupled effects of light intensity and dissolved inorganic carbon. **2016** Bioresource Technology**. 206:231–238**. (通讯作者，SCI收录，ESI高被引论文)
12. Ya-Hui Sun, **Yun Huang*,** Qiang Liao, Qian Fu, Xun Zhu. Enhancement of microalgae production by embedding hollow light guides to a flat-plate photobioreactor. 2016. Bioresource Technology**.** 207:31–38. (通讯作者，SCI一区收录)
13. Yaping Zheng, **Yun Huang,** Qiang Liao, Xun Zhu, Qian Fu, Ao Xia. The effects of substrate surface wettability and hydrodynamic conditions on the growth of Scenedesmus Obliquus biofilm. 2016. International Journal of Hydrogen Energy, 2016-6. http://dx.doi.org/10.1016/j.ijhydene (SCI收录)

14. Jun Cheng, **Yun Huang**, Jia Feng, et al. Mutate Chlorella sp. by nuclear irradiation to fix high concentrations of CO_2. Bioresoure Technology. 2013,136: 496-501. (SCI收录)

15. Jun Cheng, **Yun Huang**, Jia Feng, et al. Improving C_{O2} fixation efficiency by optimizing Chlorella PY-ZU1 culture conditions in sequential bioreactors. Bioresource Technology. 2013, 144:321-327. (SCI收录)

16. Jun Cheng, **Yun Huang**, Hongxiang Lu, Rui Huang, Junhu Zhou and Kefa Cen. The oxidation product (NO_3^-) of NO pollutant in flue gas used as a nitrogen source to improve microalgal biomass production and CO_2 fixation. RSC Advances, 2014, **4**: 42147-42154. (SCI收录)

17. Ya-Hui Sun, Qiang Liao, **Yun Huang,** Ao Xia, Qian Fu, Xun Zhu. Integrating planar waveguides doped with light scattering nanoparticles into a flat-plate photobioreactor to improve light distribution and microalgae growth. 2016. Bioresource Technology 220:215-224. (SCI收录)

18. Ha-Xing Chang, Qian Fu, **Yun Huang**, Ao Xia, Qiang Liao, Xun Zhu, Ya-Ping Zheng, Chi-He Sun, An annular photobioreactor with ion-exchange-membrane for non-touch microalgae cultivation with wastewater. 2016. Bioresource Technology. 219: 668-676. (SCI收录)

19. Jun Cheng, Jing Sun, **Yun Huang,** Jia Feng, JunHu Zhou, Kefa Cen. Dynamic microstructures and fractal characterization of cell wall disruption for microwave irradiation-assisted lipid extraction from wet microalgae. Bioresource Technology. 2013, 150: 67-72. (SCI收录)

20. Jun Cheng, Jin Sung, **Yun Huang,** Jia Feng, JunHu Zhou, Kefa Cen. Fractal microstructure characterization of wet microalgal cells disrupted with ultrasonic cavitation for lipid extraction. Bioresource Technology 2014;170: 138-143. (SCI收录)

21. Jun Cheng, Jiao Xu, **Yun Huang,** YuYou Li, JunHu Zhou, Kefa Cen. Growth optimisation of microalga mutant at high CO_2 concentration to purify undiluted anaerobic digestion effluent of swine manure. Bioresource Technology 2015;177: 240-246. (SCI收录)

22. Ruilin Cheng, Jia Feng, Bingxin Zhang, **Yun Huang**, Jun Cheng, Chuanxi Zhang. Transcriptome and gene expression analysis of an oleaginous diatom under different salinity conditions. Bioenergy resource 2014;7: 192-205. (SCI收录)

23. Jun Cheng, Zongbo Yang, **Yun Huang**, Lei Huang, Lizuo Hu, Donghua Xu, Junhu Zhou, Kefa Cen. Improving growth rate of microalgae in a 1191 m^2 raceway pond to fix CO_2 from flue gas in a coal-fired power plant. Bioresource Technology 190 2015: 235–241. (SCI收录)

24. Sha Zhao, Yu-Dong Ding, Qiang Liao, Xun Zhu, **Yun Huang**. Experimental and theoretical study on dissolution of a single mixed gas bubble in microalgae suspension. RSC Advances, 2015, 5：32615 - 32625. (SCI收录)

25. Qiang Liao,Nianbing Zhong, Xun Zhu, **Yun Huang**, Rong Chen. Enhancement of hydrogen production by optimization of biofilm growth in a photobioreactor. International Journal of Hydrogen Energy 2015-04-01. 40(14). (SCI收录)

26. Jun Cheng, Hongxiang Lu, **Yun Huang**, Ke Li, Rui Huang, Junhu Zhou, Kefa Cen. Enhancing growth rate and lipid yield of Chlorella with nuclear irradiation under high salt and CO_2 stress. Bioresoure Technology. 2016. (SCI收录)

27. 丁小建, **黄云***, 廖强*, 夏鼐, 付乾, 朱恂. 微藻中低温水热水解动力学及焓熵分析, 工程热物理学报. 2017 (EI收录)

28. 熊伟,**黄云***,付乾,钟年丙,朱恂,廖强.微藻生物膜营养环境对微藻生长和油脂积累影响，**中国环境科学**，36(8):2463~2469. 2016-8-20. (EI收录)

29. 曹刚, **黄云**, 廖强*，付乾，朱恂. 光生物反应器内传递及转化过程的熵产率分析，工程热物理学报, Vol. 37, No. 3, pp. 573-580, 2016.3. (EI收录)

30. 程军，庄良，**黄云**等. 平板式微藻光反应器的流场优化及闪光效应. 浙江大学学报(工学版)，2013, 47(11): 1958-1964. (EI收录)

发明专利：

31. **黄云**，常海星，付乾，熊伟，廖强，朱恂，李俊，叶丁丁，耦合微藻培养和微生物燃料电池的集成系统及方法，发明专利，申请号：CN201510409538.2，专利号：ZL201510409538.2. 专利证书号：2674538. 申请日：2015.7.10，公开日期：2015.11.18，获权日：2017.11.15

32. **黄云**、孙亚辉，付乾，廖强，朱恂，利用纳米导光板实现太阳光分频均布的跑道池微藻反应器，发明专利，申请号：201510909638.1，申请日：2015.12, 公开号：CN 105462816 A，公开日：2016.04.06

33. **黄云**，常海星，付乾，熊伟，廖强，朱恂，李俊、叶丁丁，耦合微藻培养和微生物燃料电池的集成系统及方法，**发明专利**，申请号：201510409538.2，申请日：2015.7.10, 公开号：CN105070936A，公开日：2015.11.18

34. 付乾、孙亚辉，**黄云**，廖强，朱恂，利用纳米导光板作光分散介质的微藻光生物反应器，发明专利，申请号：201510909787.8，申请日：2015.12, 公开号：CN 105368699 A，公开日：2016.03

35. 廖强，常海星，付乾，黄云，朱恂，李俊，叶丁丁，陈蓉.自适应式微藻光生物反应系统及方法.发明专利 申请日期：2015-07-10.专利申请号：201510403971.5;

学术会议交流：

1. Yun Huang, Xiao-jian Ding, Qiang Liao*, Ao Xia, Qian Fu, Xun Zhu. Cells' wall disruption and directional regulation of medium-low temperature microalgae hydrothermal hydrolysis process. 1st International Symposium on Biomass Utilization Technologies (ISBUT 2017), Zhejiang University, Ministry of Education of China on Nov. 17-19, 2017 at Hangzhou; ORAL
2. Yun Huang *. Carbon bioconversion from exhaust flue gas to microalgae biomass for biofuel production. 2014 Asia Biohylinks (ABHL) Meeting: Asia Biohydrogen and Biorefinery (ABB) Symposium.马来西亚马六甲. 2015.12.15-12.20 ORAL
3. Yun Huang, Yahui Sun, Qiang Liao. 5th A novel cultivation mode separating cells from microalgal suspension periodically to improve light distribution and microalgal production. International Conference on Algal Biomass, Biofuels and Bioproducts 2015.6.7-6.10美国圣迭戈 (Poster)
4. Yun Huang, Yahui Sun, Qiang Liao. Enhanced microalgae cultivation in a novel airlift photobioreactor with built-in light guide plates containing nano-particles. 6th International Conference on Algal Biomass, Biofuels and Bioproducts 2016.6.26-6.28 ORAL
5. Yun Huang, Yahui Sun, Qiang Liao. Enhancing light distribution and microalgae growth in Closed photobioreactor with built-in planar waveguides. The 4th E^2-Energy Conference 2016.7.6-7. 8 中国 北京 ORAL
6. Chaoyang Wei, Yun Huang, Qiang Liao*, Qian Fu, Ao Xia, Yahui Sun; The kinetics of the swelling of polyacrylic superabsorbent polymers in microalgae suspension to concentrate cells concentration; 1st International Symposium on Biomass Utilization Technologies (ISBUT 2017), Zhejiang University, Ministry of Education of China on Nov. 17-19, 2017 at Hangzhou; (Poster)
7. 黄云*，孙亚辉，叶杨丽，夏寡，廖强. 微藻光合固碳过程中多相传递特性及强化. 主题报告，第三届海峡两岸藻类学与藻类产业论坛，哈尔滨，2017.6.28-30

上一条：程旻 下一条：李俊
【关闭】

低品位能源利用技术及系统教育部重点实验室

能源与动力电气虚拟仿真实验教学中心

地址：重庆市沙坪坝区沙正街174号 邮编：400044
电话：(023)65102473
传真：(023)65102473
Email：cte@cqu.edu.cn