

[教师主页 \(/\)](#) [收藏 \(/\)](#)

[登录](#)



卓生荣

的个人主页 <http://teacher.nwpu.edu.cn/shengrongzhuo>

基本信息 The basic information

姓名: 卓生荣

学院: 自动化学院

学历: 博士研究生毕业

学位: 博士

职称: 副教授

职务:

学科: 电气工程

邮箱: srzhuo@nwpu.edu.cn

电话: 17702976720



[相册 \(../user/photos/shengrongzhuo.html\)](#)

工作经历 Work Experience

2021.02至今 西北工业大学, 自动化学院, 副教授, 硕士生导师

教育经历 Education Experience

2017.10 至 2020.11 法国Université Bourgogne Franche-Comté, 博士, 电气工程

2014.09 至 2017.03 西北工业大学, 硕士, 电气工程 (电力电子与电力传动)

2010.09 至 2014.06 中国矿业大学, 学士, 电气工程与自动化

招生信息 Admission Information

研究方向主要有:

1. 电力电子变换器建模与先进控制
2. 电力电子变换器故障诊断与容错
3. 电力电子变换器在新能源微网中的应用
4. 电力电子变换器在电气化交通中的应用
5. 氢燃料电池飞机动力系统与能量管理

招生专业: 电气工程 (学硕)、能源动力-电气方向 (专硕)

招收硕士生名额: 2~3人/年

指导本科毕业设计: 2~3人/年

欢迎报考我的研究生，联系电话 (+86) 177 0297 6720，微信同号。

荣誉获奖 Awards Information

陕西高校科学技术奖，二等奖，陕西省教育厅，2020年

西安市科学技术奖，三等奖，陕西省西安市，2018年

学术成果 Academic Achievements

SCI索引的期刊论文

- [J1] **S. Zhuo**, A. Gaillard, L. Xu, D. Paire, and F. Gao, "Extended state observer-based control of DC-DC converters for fuel cell application," *IEEE Transactions on Power Electronics*, vol. 35, no. 9, pp. 9923-9932, Sept. 2020. (中科院SCI一区Top期刊, IF=7.224)
- [J2] **S. Zhuo**, A. Gaillard, L. Guo, L. Xu, D. Paire, and F. Gao, "Active disturbance rejection voltage control of a floating interleaved boost converter with switch fault consideration," *IEEE Transactions on Power Electronics*, vol. 34, no. 12, pp. 12396-12406, Dec. 2019. (中科院SCI一区Top期刊, IF=7.224)
- [J3] **S. Zhuo**, A. Gaillard, L. Xu, H. Bai, D. Paire, and F. Gao, "Enhanced robust control of a DC-DC converter for fuel cell application based on high-order extended state observer," *IEEE Transactions on Transportation Electrification*, vol. 6, no. 1, pp. 278-287, March 2020. (中科院SCI一区Top期刊, IF=5.27)
- [J4] **S. Zhuo**, L. Xu, A. Gaillard, Y. Huangfu, D. Paire, and F. Gao, "Robust open-circuit fault diagnosis of multi-phase floating interleaved boost converter based on sliding mode observer," *IEEE Transactions on Transportation Electrification*, vol. 5, no. 3, pp. 638-649, Sept. 2019. (中科院SCI一区Top期刊, IF=5.27)
- [J5] **S. Zhuo**, L. Xu, Y. Huangfu, A. Gaillard, D. Paire, and F. Gao, "Robust adaptive control of interleaved boost converter for fuel cell application," *IEEE Transactions on Industry Applications*, vol. 57, no. 6, Nov./Dec., 2021. (中科院SCI二区, IF=3.654)
- [J6] **S. Zhuo**, A. Gaillard, Q. Li, R. Ma, D. Paire, and F. Gao, "Current ripple optimization of four-phase floating interleaved dc-dc boost converter under switch fault," *IEEE Transactions on Industry Applications*, vol. 56, no. 4, pp. 4214-4224, July/Aug., 2020. (中科院SCI二区, IF=3.347)
- [J7] **S. Zhuo**, A. Gaillard, L. Xu, C. Liu, D. Paire, and F. Gao, "An observer-based switch open-circuit fault diagnosis of dc-dc converter for fuel cell application," *IEEE Transactions on Industry Applications*, vol. 56, no. 3, pp. 3159-3167, May/June, 2020. (中科院SCI二区, IF=3.347)
- [J8] C. Liu, H. Bai, **S. Zhuo**, X. Zhang, R. Ma, and F. Gao, "Real-time simulation of power electronic systems with predictive behavior",

IEEE Transactions on Industrial Electronics, vol. 67, no. 9, pp. 8044-8053, Sept. 2020. (中科院SCI一区Top期刊, IF=7.503)

[J9] H. Bai, C. Liu, **S. Zhuo**, R. Ma, D. Paire, and F. Gao, "FPGA-based device-level electro-thermal modeling of floating interleaved boost converter for fuel cell hardware-in-the-loop applications", *IEEE Transactions on Industry Applications*, vol. 55, no. 5, pp. 5300-5310, Sept./Oct. 2019. (中科院SCI二区, IF=3.347)

[J10] Y. Huangfu, **S. Zhuo**, F. Chen, S. Pang, D. Zhao, and F. Gao, "Robust voltage control of floating interleaved boost converter for fuel cell systems," *IEEE Transactions on Industry Applications*, vol. 54, no. 1, pp. 665-674, Jan./Feb. 2018. (中科院SCI二区, IF=3.347)

EI索引的会议论文

[C1] **S. Zhuo**, A. Gaillard, D. Paire, and F. Gao, "Control of interleaved converters with constant power load for DC microgrid applications", in 55th IEEE Industry Application Society Annual Meeting(IAS), Detroit, Michigan, USA, 11 – 15 Oct. 2020, pp. 1-7. (EI)

[C2] **S. Zhuo**, A. Gaillard, D. Paire, and F. Gao, "Topology and control of the fault-tolerant dc-dc converter for fuel cell application", in Symposium de Génie Electrique, Nante, France, 30 June-2 July 2020.

[C3] **S. Zhuo**, A. Gaillard, L. Xu, C. Liu, D. Paire, and F. Gao, "Observer-based robust switch open-circuit fault diagnosis of dc-dc converter for fuel cell application", in 54th IEEE Industry Application Society Annual Meeting(IAS), Baltimore, Maryland, USA, 29 Sept. – 3 Oct. 2019, pp. 1-6. (EI)

[C4] **S. Zhuo**, A. Gaillard, D. Paire, and F. Gao, "Fault tolerant control of dc-dc power converter for fuel cell application", in école Thématique CNRS 2019 Fiabilité et Sureté de Fonctionnement, Saint-Pierre d'Oléron, France, 17-21 June 2019.

[C5] **S. Zhuo**, A. Gaillard, D. Paire, and F. Gao, "High-order ESO-based voltage control for high-gain dc-dc floating interleaved boost converter with time-varying disturbance", in IEEE Transportation Electrification Conference and Expo (ITEC), Detroit, MI, USA, 19 – 21 June 2019, pp. 1-6. (EI)

[C6] **S. Zhuo**, A. Gaillard, L. Xu, D. Paire, and F. Gao, "Control of interleaved dc-dc boost converter based on extended state observer for fuel cell application", in 20th IEEE International Conference on Industrial Technology (ICIT), Melbourne, Australia, 13 – 15 Feb.2019, pp. 1689-1694. (EI)

[C7] **S. Zhuo**, R. Ma, A. Gaillard, D. Paire, Y. Huangfu, and F. Gao, "Evaluation and optimization of a floating interleaved dc-dc boost converter under switch fault for fuel cell applications", in IEEE International Conference on Electrical Systems for Aircraft, Railway, Ship Propulsion and Road Vehicles & International Transportation Electrification Conference (ESARS-ITEC), Nottingham, UK, 7 – 9 Nov. 2018, pp. 1-6. (EI)

[C8] **S. Zhuo**, A. Gaillard, D. Paire, E. Breaz, and F. Gao, "Design and control of a floating interleaved boost dc-dc converter for fuel cell applications", in 44th Annual Conference of the IEEE Industrial Electronics Society (IECON), Washington DC, USA, 21 – 23 Oct. 2018, pp. 2026-2031. (EI)

[C9] L. Xu, R. Ma, **S. Zhuo**, R. Xie, X. Wang and Y. Huangfu, "Observer Based Switch Open-Circuit Diagnosis for Interleaved Boost Converter," in 46th Annual Conference of the IEEE Industrial Electronics Society (IECON), Singapore, 18-21 Oct. 2020, pp. 5012-5017.

[C10] Y. Huangfu, J. Xu, **S. Zhuo**, M. Xie, Y. Liu, "A novel adaptive sliding mode observer for SOC estimation of lithium batteries in electric vehicles", in 7th International Conference on Power Electronics Systems and Applications (PESA), Hong Kong, China, 12 – 14 Dec. 2017, pp. 1-6.

[C11] Q. Li, Y. Huangfu, J. Zhao, **S. Zhuo** and F. Chen, "Controller design and fault tolerance analysis of 4-phase floating interleaved boost converter for fuel cell electric vehicles," in 43rd Annual Conference of the IEEE Industrial Electronics Society (IECON), Beijing, China, 29 Oct.-1 Nov. 2017, pp. 7753-7758.

[C12] F. Chen, Y. Huangfu, **S. Zhuo**, L. Xu and D. Zhao, "Analysis and control of a high voltage ratio and low stress DC-DC converter for fuel cell applications," in IEEE International Conference on Industrial Technology (ICIT), Toronto, ON, 22-25 March 2017, pp. 42-47.

国家发明专利

[P1] 皇甫宜耿, 陈福熙, **卓生荣**, "一种浮地交错变换器单管开路故障检测方法", 专利号ZL 2016 1 0756182.4, 2019年2月.

社会兼职 Social Appointments

1. IEEE工业电子学会(IES)交通电气化技术委员会(TCTE)委员

2. 陕西省电源学会理事

3. SCI国际期刊审稿人

IEEE Transactions on Industrial Electronics (TIE)

IEEE Transactions on Power Electronics (TPEL)

IEEE Transactions on Industry Applications (TIA)

IEEE Transactions on Transportation Electrification (TTE)等

版权所有 © 西北工业大学 地址: 西安市友谊西路127号 邮编: 710072