包铭阳

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教育背景

华中科技大学　　　　　　　　　　　　　　　　　　　2021.9 - 2025.6

▲ 本科　　　　　加权：　4/5

学院: 电气与电子工程学院　**专业:** 电气工程及其自动化

课程: 电机学，电力拖动，电力电子技术

技能

英语:　　六级

🐍 Python	node Nodejs	Ⓡ Rust	GO Golang	C/C++
Matlab	FEMM Femm	Ansys	Ps Photoshop	Ai Illustrator

科研经历

Hi-Motor 系列产品研发　　　　　　　　　　　　　2022.3 - now

▲ 负责人/主要完成人

• 带领由 18 位本科生组成的学生团队开发电机设计软件、开展相关科研和洽谈商业合作。

• Develop *hi-motor designer* for design and optimization of high-efficiency motors, especially synchronous reluctance motors based on Python and Femm.

• Support intelligent selection of high-efficiency motors with motor database and knowledge sharing platform based on MongoDB，Nodejs and Golang.

Design and Optimization of Flux-Barrier End shape in　　2023.8 - 2023.9
Synchronous Reluctance Motor Based on B-spines

▲ 主要完成人

• Propose a novel design method of flux-barrier end shape based on B-spline curves.

• achieve an effective electro-mechanical co-optimization workflow with sensitivity analysis，surrogate model，intelligent algorithms and multi-level optimization.

博世（中国）投资有限公司战略实习生　　　　　　　2023.7 - 2023.8
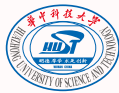　　　　　　　　　　　　　　　　　　　　　　　　2024.6 - 2024.8

▲ 全栈开发　　　上海中央研究院

• Set up an Ansys optimization workflow for switched reluctance motors on HPC cluster.

• Build power factor correction circuit for switched reluctance motors.

华中科技大学本科生自然科学基金　　　　　　　　　2024.5 - 2025.5

▲ 主要完成人　　获批 50000 元经费

• 基于不等匝绕组的永磁辅助同步磁阻电机设计及其优化研究。

荣誉和奖项

IEEE 电机和系统学生会议　　　　　　　　　　　　　　　　2023.12.7 - 12.9
▲ 最佳论文奖　　中国湖州

美国数学建模大学　　　　　　　　　　　　　　　　　　　2024.2.2 - 2.5
▲ **Finalist(2%)**　　指导老师

▲ 思源奖学金 (8/412)　　　　　　▲ 自强标兵 (7/412)

课外活动

华中科技大学数学建模协会　　　　　　　　　　　　　　　2022.10 - 2023.9
▲ 副会长　　Mathematical Modeling/Event Planing
- Organize school-wide and cross-school lectures for contests like MCM/ICM.
- Participate in textbook and video course development in mathematical modeling.

华中科技大学电气学院宣传部/新闻宣传中心　　　　　　　2022.9 - 2023.8
▲ 部长　　Writing/Graphic Design
- Generate positive publicity and media coverage of students and major events, such as the 70th anniversary celebration.
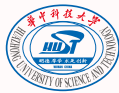
发表著作

J Journal　　　　　　**C** Conference　　　　　　**P** Patent　　　　　　**S** Software Copyright

C **M. Bao**, Y. Wang, C. Mao, J. Li *et. al.*, "Novel Design Method of Flux-Barrier End Shape of Synchronous Reluctance Motor Based on B-spline Curves", *2023 IEEE 6th Student Conference on Electric Machines and Systems (SCEMS)*, Huzhou, China, pp. 1--8, Dec. 2023, doi: 10.1109/SCEMS60579.2023.10379317

C T. He, Y. Wang, **M. Bao**, J. Li *et. al.*, "Design and Validation of a High-Efficiency Synchronous Reluctance Motor", *2023 IEEE 26th International Conference on Electric Machines and Systems (ICEMS)*, Zhuhai ,China, pp. 1--8, Nov. 2023, doi: 10.1109/ICEMS59686.2023.10345091

C Y. Yi, Z. Huang, **M. Bao**, X. Li *et. al.*, "Multi-step Short-term Load Forecasting Based on Attention Mechanism，TCN-BiLSTM Network and Decomposition-based Error Correction", *2024 IEEE 7th Asia Conference on Energy and Electrical Engineering (ACEEE 2024)*, Chengdu，China, pp. 1--9, July. 2023

P Y. Wang, J. Li, X. Li, **M. Bao** *et. al.*, "Rotor with Adjacent Electrode Mirror Image of Synchronous Reluctance Motor and Permanent Magnet Assisted Synchronous Reluctance Motor", China Patent，Publication, No. CN116722678A, Sep. 2023

P Y. Wang, X. Li, J. Li, **M. Bao** *et. al.*, "A Permanent Magnet Assisted Synchronous Reluctance Motor of Low Torque Ripple", China Patent，Publication, No. CN116505683B, Apr. 2023

S **M. Bao**, S. Lu and Y. Wang, "Hi-Motor Hub: intelligent Selection Tool for High-efficiency Motors V1.0", China Software Copyright，Publication, No. 2023SR1417580, Nov. 2023

S **M. Bao**, J. Li, Y. Chen and Y. Wang, "Hi-Motor Designer: intelligent Software for Design and Optimization of Synchronous Reluctance Motor V1.0", China Software Copyright ,Publication, No. 2023SR0446741, Apr. 2023

S Y. Yi, **M. Bao**, S. Lou, Z. Huang *et. al.*, "Intelligent Analysis Platform for New Energy Consumption", China Software Copyright，Publication, No. 2024SR0786617, June. 2024