

# 罗可

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华中科技大学    计算机系统结构 • 博士    1993-01-02    武汉

计算机系统结构专业博士，擅长磁存储及光存储系统建模与分析，热衷数据存储技术、信号处理与信息理论。

## 教育背景

至今	华中科技大学 • 武汉光电国家研究中心
2023.03	光学工程 • 博士后
2022.12	华中科技大学 • 武汉光电国家研究中心
2016.09	计算机系统结构 • 博士
2016.06	中南民族大学 • 电子信息工程学院
2012.09	电子信息工程 • 学士

## 科研项目

- 国家自然科学基金，面上项目，62272178, 超高密度三维热辅助磁记录写机制研究，2023/01 至 2026/12，在研，参与
- 国家自然科学基金，面上项目，61672246, 超高密度二维磁记录读磁头阵列及其记录系统关键技术研究，2017/01 至 2020/12，已结题，参与
- 国家自然科学基金，面上项目，61272068，比特图案介质的超高密度瓦记录关键技术研究，2013/01-2016/12，已结题，参与
- 企业横向，面向蓝光超多层 PRML 算法技术合作项目，2024/07 至 2025/01，在研，参与
- 企业横向，基于 BDXL 标准的 PRML 模型设计与实现合作项目，2022/08 至 2023/06，已结题，参与
- 企业横向，HDD 原型算法和先进磁记录技术合作项目，2022/03 至 2023/03，已结题，参与

## 科研成果

### 论文及专利

- LUO K**, ZHANG K, WU F, LIAO Y, GAO H, LI W, JIAN Y, LIU Z, ZHAO Y, CHEN J\*, LU P, WANG S. The Compatible Partial Response Maximum Likelihood Detection Schemes for Blu-Ray Discs[C]//The 21st International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology. Thailand, 2024: 1-5.
- LIAO Y, ZHANG K, JIAN Y, WANG S, CHEN J\*, LU P, **LUO K**. Decision-Feedback Single-Layer Read Reconstruction and Separation for Three-dimensional Magnetic Recording[C]//2024 IEEE International Magnetism Conference (INTERMAG): AD-03. Rio de Janeiro, Brazil, 2024: 1-2.
- LUO K**, WU Y, LIAO Y, WANG S, JIAN Y, CHEN J\*, LU P. Quaternary Neural Network Equalization for Three-Dimensional Magnetic Recording[C]//2024 IEEE International Magnetism Conference (INTERMAG): AD-11. Rio de Janeiro, Brazil, 2024: 1-2.
- LUO K**, JIAN Y, LIAO Y, ZHANG K, CHEN J\*, LU P. A Graded Precompensation Scheme by Pattern Classification on Nonlinear Transition Shift for Perpendicular Magnetic Recording[J]. IEEE Transactions on Magnetism, 2023: 1-1. DOI: 10.1109/TMAG.2023.3288371.
- JIAN Y, **LUO K**, LI W, LOMAKIN V, CHEN J\*, LU P. Pattern Constraints Limiting Nonlinear Transition Shift in High Density Magnetic Recording[J]. Journal of Magnetism and Magnetic Materials, 2023, 588: 171370. DOI: <https://doi.org/10.1016/j.jmmm.2023.171370>.
- CHEN W, CHEN J\*, GAN Z, MA Y, **LUO K**, HUANG Z, HE Y, LU P. A Simple and Effective Semi-Circle Resonator System for Bit-Patterned HAMR[J]. Physics Letters A, 2021, 391: 127129. DOI: <https://doi.org/10>

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- [10] WANG S, CHEN J\*, **LUO K**, XIE G, LU P, CHENG W. Joint Four-Reader Array Equalization and Detection for a Single Track in TDMR[J]. IEEE Transactions on Magnetics, 2019, 55(12): 1-6. DOI: 10.1109/TMAG.2019.2936181.
- [11] XIE G, **LUO K**, WANG S, LU P, CHENG W, CHEN J\*. Rounded Corner Effect on Write Performance for Shingled Magnetic Recording System[C]//2018 Asia-Pacific Magnetic Recording Conference (APMRC): S01-A01. USST, China, 2018: 1-2. DOI: 10.1109/APMRC.2018.8601116.
- [12] **LUO K**, WANG S, XIE G, CHEN J\*, LU P, CHENG W. Read Channel Modeling and Neural Network Block Predictor for TDMR[C]//2018 Asia-Pacific Magnetic Recording Conference (APMRC): S05-A01. USST, China, 2018: 1-2. DOI: 10.1109/APMRC.2018.8601082.
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- [16] **LUO K**, WANG S, CHAN K S, CHEN W, CHEN J\*, LU P, CHENG W. A Study on Block-Based Neural Network Equalization in TDMR System with LDPC Coding[C]//The 30th Magnetic Recording Conference (TMRC 2019): P1-7. Minneapolis, UM, USA, 2019: 1-2.
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