



袁金龙

副教授

硕士生导师

yuanjinlong@dlnu.edu.cn

yuanjinlong0613@163.com

教育背景

大连理工大学理学博士（2018）

澳大利亚科廷大学联合培养博士（2016）

大连理工大学理学硕士（2013）

西北农林科技大学理学学士（2010）

研究领域

从事非线性最优化与最优控制理论、算法及其在工程应用中的研究

论文类：

第一作者

代表性成果

1. **Jinlong Yuan(袁金龙)**, Ke Guo*, Lixia Meng, Chongyang Liu, Kok Lay Teo, Jun Xie, A distributionally robust optimization model for batch nonlinear switched time-delay system considering uncertain output measurements, *Nonlinear Analysis: Hybrid Systems* 48 (2023) 101330 (SCI, JCR1 区, Top5 期刊)
2. **Jinlong Yuan(袁金龙)**, Changzhi Wu*, Chongyang Liu, Kok Lay Teo, Jun Xie, Robust suboptimal feedback control for a fed-batch nonlinear time-delayed switched system, *Journal of the Franklin Institute* 360 (2023) 1835-1869 (SCI, JCR1 区)
3. **Jinlong Yuan(袁金龙)**, Changzhi Wu*, Kok Lay Teo, Shuang Zhao and Lixia Meng, Perimeter Control With State-Dependent Delays: Optimal Control Model and Computational Method, *IEEE Transactions on Intelligent Transportation Systems*, 23(11), 20614-20627, 2022 (SCI, JCR1 区, top5 期刊)
4. **Jinlong Yuan(袁金龙)**, Lei Wang*, Jingang Zhai, Kok Lay Teo, Changjun Yu, Ming Huang, Jun Xie, Robust optimal control for a batch nonlinear enzyme-catalytic switched time-delayed process with noisy output measurements. *Nonlinear Analysis: Hybrid Systems*, 41(2021), 101059. (SCI, JCR1 区, Top5 期刊)
5. **Jinlong Yuan(袁金龙)**, Lei Wang*, Jun Xie, Kok Lay Teo, Optimal

- Minimal Variation Control with Quality Constraint for Fed-Batch Fermentation Processes Involving Multiple Feeds, *Journal of the Franklin Institute*, 357 (2020) 6571-6594 (SCI, JCR1 区)
6. **Jinlong Yuan(袁金龙)**, Changzhi Wu*, Jianxiong Ye, Jun Xie, Robust identification of nonlinear state-dependent impulsive switched system with switching duration constraints. *Nonlinear Analysis: Hybrid Systems*, 36(2020), 100879. (SCI, JCR1 区, Top5 期刊)
 7. **Jinlong Yuan(袁金龙)**, Jun Xie, Ming Huang*, Houming Fan, Enmin Feng, Zhilong Xiu, Robust optimal control problem with multiple characteristic time points in the objective for a batch nonlinear time-varying process using parallel global optimization, *Optimization and Engineering*, (2020) 21:905-937 (SCI, JCR2 区)
 8. **Jinlong Yuan(袁金龙)**, Jun Xie, Chongyang Liu, Kok Lay Teo, Ming Huang, Houming Fan*, Enmin Feng, Zhilong Xiu, Robust optimization for a nonlinear switched time-delay system with noisy output measurements using hybrid optimization algorithm, *Journal of the Franklin Institute*, 356 (2019) 9730 – 9762. (SCI, JCR1 区)
 9. **Jinlong Yuan(袁金龙)**, Jun Xie, Honglei Xu*, Enmin Feng, Zhilong Xiu, Optimization for Nonlinear Uncertain Switched Stochastic Systems with Initial State Difference in Batch Culture Process, *Complexity*, Volume 2019, Article ID 4979580, 15 pages (SCI, JCR2 区)
 10. **Jinlong Yuan(袁金龙)**, Yuduo Zhang, Jianxiong Ye, Jun Xie, Kok Lay Teo, Xi Zhu*, Enmin Feng, Hongchao Yin, Zhilong Xiu, Robust parameter identification using parallel global optimization for a batch nonlinear enzyme-catalytic time-delayed process presenting metabolic discontinuities. *Applied Mathematical Modeling*, 46(2017)554- 571 (SCI, JCR1 区, 中科院 Top 期刊)
 11. **Jinlong Yuan(袁金龙)***, Xu Zhang, Chongyang liu, Liang Chang, Jun Xie, Enmin Feng, Hongchao Yin, Zhilong Xiu, Robust optimization for nonlinear time-delay dynamical system of dha regulon with cost sensitivity constraint in batch culture. *Communications in Nonlinear Science and Numerical Simulation* 38(2016)140-171. (SCI, JCR1 区, 中科院 Top5 期刊)
 12. **Jinlong Yuan(袁金龙)***, Chongyang liu, Xu Zhang, Jun Xie, Enmin Feng, Hongchao Yin, Zhilong Xiu, Optimal control of a batch fermentation process with nonlinear time-delay and free terminal time and cost sensitivity constraint. *Journal of Process Control* 44(2016)41-52. (SCI, JCR2 区)
 13. **Jinlong Yuan(袁金龙)***, Lei Wang, Jun Xie, Xu Zhang, Enmin Feng, Hongchao Yin, Zhilong Xiu, Modelling and parameter identification of a nonlinear enzyme-catalytic time-delayed switched system and its parallel optimization. *Applied Mathematical Modelling* 40(19-20)(2016)8276-8295. (SCI, JCR1 区, 中科院 Top5 期刊)

14. **Jinlong Yuan(袁金龙)***, Xu Zhang, Xi Zhu, Enmin Feng, Hongchao Yin, Zhilong Xiu, Pathway identification using parallel optimization for a nonlinear hybrid system in batch culture. *Nonlinear Analysis: Hybrid Systems* 15(2015)112-131. (SCI, JCR1 区, Top5 期刊)
15. **Jinlong Yuan(袁金龙)***, Lei Wang, Xu Zhang, Enmin Feng, Hongchao Yin, Zhilong Xiu, Parameter identification using parallel optimization for a nonlinear enzyme-catalytic time-delays dynamic system in batch culture. *Journal of Global Optimization* 62(4) (2015)791-810. (SCI, JCR1 区)
16. **Jinlong Yuan(袁金龙)***, Xu Zhang, Xi Zhu, Enmin Feng, Hongchao Yin, Zhilong Xiu, Bing Tan, Identification and robustness analysis of nonlinear multi-stage enzyme-catalytic dynamical system in batch culture. *Computational and Applied Mathematics* 34(3)(2015)957-978. (SCI, JCR2 区)
17. **Jinlong Yuan(袁金龙)***, Xu Zhang, Xi Zhu, Enmin Feng, Hongchao Yin, Zhilong Xiu, Modelling and pathway identification involving the transport mechanism of a complex metabolic system in batch culture. *Communications in Nonlinear Science and Numerical Simulation* 19(6)(2014)2088-2103. (SCI, JCR1 区, 中科院 Top 期刊)
18. **Jinlong Yuan(袁金龙)***, Xi Zhu, Xu Zhang, Hongchao Yin, Enmin Feng, Zhilong Xiu, Robust identification of enzymatic nonlinear dynamical systems for 1,3-propanediol transport mechanisms in microbial batch culture. *Applied Mathematics and Computation* 232(2014)150-163. (SCI, JCR1 区, TOP 期刊)
19. **袁金龙***, 冯殊伦, 冯恩民, 甘油间歇发酵酶催化非线性动力系统的强稳定性, *控制与决策*, 29(8)(2014)1505-1508. (EI)

通讯作者

20. Su, Y., Zhu, X., **Jinlong Yuan*(袁金龙)**, Teo, K. L., Li, M., & Li, C. (2022). An extensible multi-block layout warehouse routing optimization model. *European Journal of Operational Research*, 305 (2023) 222-23918. (SCI, JCR1 区, 中科院 TOP 期刊)
21. Wang, L., **Jinlong Yuan*(袁金龙)**, Meng, L., Zhao, S., Xie, J., Huang, M., & Teo, K. L. (2022). MULTI-OBJECTIVE OPTIMIZATION OF A NONLINEAR BATCH TIME-DELAY SYSTEM WITH MINIMUM SYSTEM SENSITIVITY. *JOURNAL OF NONLINEAR AND VARIATIONAL ANALYSIS*, 6(2), 35-64.18. (SCI, JCR1 区)
22. Ming Huang, Yue Lu, **Jinlong Yuan*(袁金龙)**, Yang Li, A Decomposition Algorithm for the Sums of the Largest Eigenvalues, *Numerical Functional Analysis and Optimization*, 41 (16) (2020) 1936-1969 (SCI, JCR3 区)
23. Xie, J., **Jinlong Yuan(袁金龙)***, Wang, D., Liu, W., & Liu, C. Uniqueness of solutions to fuzzy relational equations regarding Max-av composition and strong regularity of the matrices in Max-av algebra.

- Journal of Industrial & Management Optimization, 14(3)(2018)1007-1022. (SCI, JCR3 区)
24. Z Dong, B Tan, Y Zhang, **Jinlong Yuan(袁金龙)***, E Feng, H Yin, Z Xiu, Strong stability of an optimal control hybrid system in fed-batch fermentation, International Journal of Biomathematics 11(04)(2018)1850045 22. (SCI, JCR3 区)
 25. Zhang, J., **Jinlong Yuan(袁金龙)***, Dong, Z., Feng, E., Yin, H., & Xiu, Z. Strong stability of optimal design to dynamic system for the fed-batch culture. International Journal of Biomathematics, 10(02)(2017)1750018. (SCI, JCR4 区)
 26. Jinxing Zhang, **Jinlong Yuan(袁金龙)***, Enmin Feng, Hongchao Yin, Zhilong Xiu, Strong Stability of a nonlinear multi-stage dynamic system in batch culture of glycerol bioconversion to 1,3-Propanediol. Mathematical Modelling and Analysis 21(2) (2016)159-173. (SCI, JCR2 区)

其他

27. Qi Yang, Qunbin Chen*, Teng Niu, Enmin Feng, **Jinlong Yuan(袁金龙)**, Robustness analysis and identification for an enzyme-catalytic complex metabolic network in batch culture, Bioprocess and Biosystems Engineering, 44(7)(2021)1511-1524. (SCI, JCR2 区)
28. Ming Huang, **Jinlong Yuan(袁金龙)**, Lingping Pang, Zhunquan Xia. UV-theory of a Class of Semidefinite Programming and Its Applications. Acta Mathematicae Applicatae Sinica, English Series, 37(4)(2021)717-737. (SCI, JCR3 区)
29. M Huang, **Jinlong Yuan(袁金龙)**, S Lin, X Liang, C Liu, On Solving the Convex Semi-Infinite Minimax Problems via Superlinear Incremental Bundle Technique with Partial Inexact Oracle, Asia-Pacific Journal of Operational Research, 38(5)(2021)2140015. (SCI, JCR4 区)
30. Huang, M., Lin, S., **Jinlong Yuan(袁金龙)**, Gong, Z.*, Chang, L. A VU-DECOMPOSITION TECHNIQUE FOR A CLASS OF EIGENVALUE OPTIMIZATIONS, PACIFIC JOURNAL OF OPTIMIZATION, 16(1)(2020)129-142 (SCI, JCR4 区)
31. Liu, Y., Liu, C.*, **Jinlong Yuan(袁金龙)**, Feng, E., Xiu, Z., Chang, L., & Huan, M. THE STRONG STABILITY OF A NONLINEAR TIME-DELAY SYSTEM IN BATCH PROCESS. PACIFIC JOURNAL OF OPTIMIZATION, 15(2)(2019)249-260. (SCI, JCR4 区)
32. Wang, L., **Jinlong Yuan(袁金龙)**, Wu, C.*, & Wang, X. Practical algorithm for stochastic optimal control problem about microbial fermentation in batch culture. Optimization Letters, 13(3) (2019)527-541. (SCI, JCR2 区, ESI 高被引论文)
33. Sun, Y. Q., Shen, J. T., Yan, L., Zhou, J. J., Jiang, L. L., Chen, Y., **Jinlong Yuan(袁金龙)**, Feng, E., Xiu, Z. L.* Advances in bioconversion

- of glycerol to 1, 3-propanediol: prospects and challenges. *Process Biochemistry*, 71(2018)134-146. (SCI, JCR2 区)
34. Zhu, X., Li, M., Liu, C.*, **Jinlong Yuan(袁金龙)**, & Li, C. Global behaviors analysis for tryptophan operon system with bounded noise. *Applied Mathematical Modelling*, 58(2018)33-46. (SCI, JCR1 区, Top 期刊)
35. Hongchao Yin*, **Jinlong Yuan(袁金龙)**, Xu Zhang, Jun Xie, Enmin Feng, Zhilong Xiu, Modelling and parameter identification for a nonlinear multi-stage system for dha regulon in batch culture. *Applied Mathematical Modelling* 40(1)(2016)468-484. (SCI, JCR1 区, 中科院 Top 期刊)
36. 冯恩民*, 修志龙, **袁金龙**, 微生物发酵非线性系统辨识、控制及并行优化研究. *数学建模及其应用* 4(2)(2015): 1-11. (专题综述)
37. Xi Zhu*, **Jinlong Yuan(袁金龙)**, Xinying Wang, Enmin Feng, Zhilong Xiu, l-Synthesis of dissimilation process of glycerol to 1,3-propanediol in microbial continuous culture. *World Journal of Microbiology and Biotechnology* 30(2)(2014)767-775. (SCI, JCR2 区)
38. Lei Wang*, **Jinlong Yuan(袁金龙)**, Yinfang Li, Enmin Feng, Zhilong Xiu, Parameter identification of nonlinear delayed dynamical system in microbial fermentation based on biological robustness. *Numerical Algebra, Control and Optimization* 4(2) (2014)103-113
39. Zhigang Jiang*, **Jinlong Yuan(袁金龙)**, Enmin Feng, Robust identification and its properties of nonlinear bilevel multi-stage dynamic system. *Applied Mathematics and Computation* 219(12)(2013) 6979-6985. (SCI, JCR1 区, TOP 期刊)

- (1) **国家自然科学基金青年项目**, 11901075, 基于Moreau-Yosida正则化的稀疏状态反馈最优控制研究及应用, 2020/01-2022/12, 在研, **主持**。
- (2) **中国博士后面上基金**, 2019M661073, 基于矩信息不确定的分布鲁棒最优控制及应用研究, 2019/11-2021/7, 结题, **主持**。
- (3) **辽宁省博士启动基金**, 2020-BS-074, 基于破产约束的分布鲁棒多期投资组合研究, 2020/04-2022/04, 结题, **主持**。
- (4) **辽宁省教育厅高等学校基本科研项目(青年项目)**, LJKQZ2021011, 基于组稀疏项的状态反馈最优控制理论、算法及应用研究, 2021/07-至今, 在研, **主持**。
- (5) **国家科技部国家重点研发计划课题**, 2022YFB3304602, 数据和知识驱动的云边协同信息处理技术, 2023/04-至今, 在研, **骨干参与**。
- (6) **国家自然科学基金面上项目**, 51979034, 船舶分段吊装工艺设计中的典型组合优化问题及多目标智能决策算法研究, 2020/01-2023/12, 在研, **参与** (排名第3)。

代表性项目

荣誉奖励

- (1)2022/01-2024/12 获大连海事大学“星海工程”教师培训计划第3层次
- (2)2019/01-2021/12 获大连海事大学“星海工程”教师培训计划第4层次
- (3)2020.12 获辽宁省“百千万人才工程”万人层次
- (4)2017.09 获大连理工大学优秀博士论文特等奖学金
- (5)2016.12 获辽宁省优秀博士毕业生
- (6)2016.09 获大连理工大学第九届博士研究生学术之星
- (7)2016.07 获大连理工大学优秀博士论文单项奖学金
- (8)2014.12 获博士研究生国家奖学金.

美国《数学评论》(MR: 117895) 评论员, 2016—

担任下列国际期刊审稿人:

- [1] «Automatica» SCI, 2018—
- [2] «Acta Mathematica Scientia» SCI, 2018—
- [3] «Optimization Letters» SCI, 2018—
- [4] «Journal of Process Control» SCI, 2017—
- [5] «Journal of Industrial and Management Optimization» SCI, 2017—
- [6] «Advances in Difference Equations» SCI, 2017—
- [7] «International Journal of Biomathematics», SCI, 2016—
- [8] «Applied Mathematical Modelling», SCI, 2016—
- [9] «Journal of the Franklin Institute», SCI, 2016—
- [10] «International Journal of Electrical Power and Energy Systems», SCI, 2014—
- [11] «Nonlinear Dynamics», SCI, 2013—

社会兼职

担任下列国际期刊编委:

- [1] «Big Data and Cloud Innovation», 2017—

