蔡苗

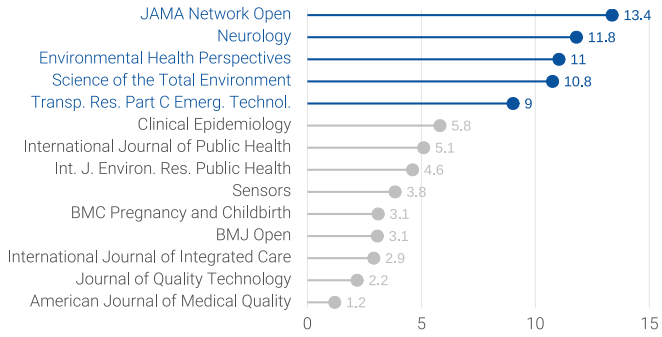
中山大学公共卫生学院流行病系　　E-mail: miao.cai@outlook.com
广东省广州市越秀区中山二路 74 号　　电话: +86 151 7141 9447
相关网站: Google Scholar, GitHub, ResearchGate, LinkedIn, ORCID, Scopus
出生日期: 1993 年 7 月 14 日—中国湖北省武汉市

学术影响

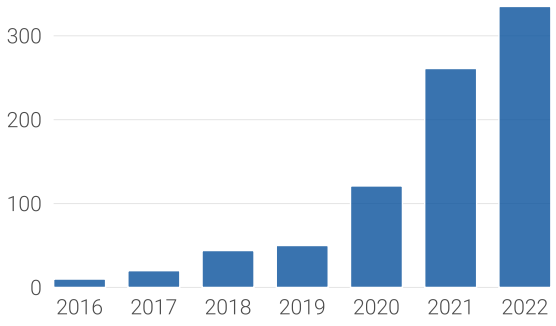
研究产出　**43** 篇 SCI/SSCI 期刊研究论文(14 篇第一作者,包括*Environ. Health. Persp.*, *Neurology*, *JAMA Netw. Open*等)
15 篇中文核心期刊研究论文（5 篇第一作者），1 篇英文专著章节

研究项目　参与多个 NIH R01，VA HSR&D，中国和美国国家自然科学基金，国家和地方卫健委的研究项目

学术影响　被引次数：总被引: **873**；H-指数: **17**；I10-指数: **23** （谷歌学术数据，截止于 2022 年 10 月 5 日）
被引期刊：文章得到 *Nature*, *Nature Medicine*, *BMJ*, *Circulation Research* 等期刊文章的正面引用
期刊审稿：为 *eClinicalMedicine*, *J. Am. Soc. Nephrol.*, *JAMA Netw. Open* 等 20 余种英文期刊审稿
媒体报道：研究成果得到 *CNN*, *AAN*, *U.S. News*, *Physicians Weekly* 等主流媒体报道。



(a) 第一作者论文 (N=14) 影响因子分布



(b) 不同年度论文被引次数分布（总被引 824 次）

研究领域

临床流行病，环境流行病，贝叶斯统计，可靠性理论，卫生管理与政策

教育经历

2017 – 2020　美国圣路易斯大学　生物统计方向　公共卫生学博士
2014 – 2017　中国华中科技大学　医院管理学方向　管理学硕士
2010 – 2014　中国华中科技大学　卫生事业管理学方向　管理学学士

工作经历

2021 – 2022　中山大学公共卫生学院 (合作导师：林华亮 教授) 博士后
2019 – 2021　美国退伍军人事务部圣路易斯分部，临床流行病学研究中心 生物统计研究员
2017 – 2019　圣路易斯大学公共卫生与社会正义学院 (美国国家自然科学基金资助) 研究助理
2016　湖北武汉雕龙数据科技有限公司 数据科学家

编程技能

R	每日 R 使用者，熟练使用: tidyverse, data.table, shiny, stan, INLA, . . .
Python	运用常见包进行机器学习和深度学习： pytorch, keras, tensorflow, pyspark, h2o. . .
SAS	美国退伍军人事务部全国超过 20 亿门诊和住院病人病历数据的处理和统计建模
SQL	超过 20 亿条美国退伍军人事务部门诊和住院病历首页数据管理、数据清洗和整合
Linux	学院及课题组 CentOS 高性能服务器的维护，熟练掌握 conda 配置 Python 和 R 环境和依赖
Stata & SPSS	计量经济和统计建模，指导研究生和入门水平的研究人员
LaTeX	期刊印刷和书籍出版水准的文档排版

荣誉 & 获奖

2020	The Delta Omega Honorary Society in Public Health –*The Alpha Delta Chapter member*
2018	国家留学基金委 国家建设高水平大学公派攻读学位博士研究生奖学金
2017	圣路易斯大学公共卫生与社会正义学院 博士研究生全额奖学金
2017	华中科技大学 优秀硕士毕业生
	华中科技大学 全日制硕士一等奖学金（2015、2016、2017 三个学年）
2016	国家留学基金委 国家建设高水平大学公派联合培养硕士研究生奖学金
2014	华中科技大学 优秀本科毕业生
2014	湖北省教育厅 优秀本科毕业论文二等奖
2013	华中科技大学 国家奖学金
	华中科技大学 国家励志奖学金（2011 与 2012 两个学年）
2012	香港道德会 香港道德会奖学金

参与的研究项目

1. 美国退伍军人事务部 *VA's Health Services Research and Development Service* "Comparative Effectiveness and Safety of Newer and Older Antihyperglycemic Medications". PI: Ziyad Al-Aly. 2021 – 2024.
2. 美国国家自然科学基金 *(National Science Foundation, NSF)* "GOALI/Collaborative Research: Human Maintenance - A Prognostics Framework to Model Changes in Drivers' Safety Performance and Optimize Dispatching Policies". PI：陶红兵。项目批号 1635927，资助金额 31 万美元
3. 中国国家自然科学基金面上项目 "基于结构方程模型的紧密型医疗联合体绩效评价以及影响因素研究". PI：陶红兵。项目批号：71473099，资助金额 60 万人民币
4. 中国国家自然科学基金面上项目 "基于病种质量管理的城市综合医院住院医疗资源利用评价模型与管理路径研究". PI：陶红兵。项目批号：71173081，资助金额 42 万人民币
5. 中国国家卫生与计划委员会项目 "公立医院功能定位及其规模设置研究"
6. 中国国家卫生与计划委员会项目 "我国医疗中心设置与规划布局研究"

出版物和演讲

国际同行评议期刊文章（共 42 篇，其中第一作者 14 篇）

第一作者（14 篇，其中共同一作 1 篇）

2022

1. **Cai, M.**[#], Zhang, S., Lin, X., Qian, Z., McMillin, S.E., Yang, Y., Zhang, Z., Pan, J.*, Lin, H.*. (2022) "Association of ambient particulate matter pollution of different sizes with in-hospital case fatality among stroke patients in China", ***Neurology***. (SCI Q1, IF: 11.8, rank: 10/212, 中科院医学大类 1 区 top), 98(4), e2474-e2486. DOI: 10.1212/WNL.0000000000200546

   Accompanying Editorial: Leira, E., Latorre, J.G. (2022) "Ambient Pollution and Stroke: Time to Clear the Air on Causal Mechanisms", ***Neurology***. DOI: 10.1212/WNL.0000000000200801

2. **Cai, M.**[#], Li, H., Wu, Y., Zhang, S., Wang, X., Zhang, Z., Lin, H.*. (2022) "Ambient air pollution associated with body fat percentages at different body compartments: a cohort study of UK Biobank participants", ***Environmental Health Perspectives***. (SCI Q1, IF: 11.035, rank: 25/279, 中科院环境科学与生态学大类 1 区 top), 130(6): 067702. DOI: 10.1289/EHP10920

3. **Cai, M.**[#], Lin, X.[#], Wang, X., Zhang, S., Qian, Z., McMillin, S.E., Aaron, H.E., Zhang, Z., Wei, J.*, Pan, J.*, Lin, H.*. (2022) "Ambient particulate matter pollution of different sizes associated with recurrent stroke hospitalization in China: a cohort study of 1.07 million stroke patients", ***Science of the Total Environment***. (SCI Q1, IF: 10.753, rank: 25/279, 中科院环境科学小类 1 区 top). DOI: Forthcoming.

4. **Cai, M.**[#], Liu, E., Bai, P., Zhang, N., Wang, S., Li, W., Lin, H., Lin, X.*. (2022) "The Chasm in Percutaneous Coronary Intervention and In-hospital Mortality Rates among Acute Myocardial Infarction Patients in Rural and Urban Hospitals in China: A Mediation Analysis", ***International Journal of Public Health***. (SSCI Q1, IF: 5.1, rank: 35/182, 中科院医学大类 2 区), DOI: 10.3389/ijph.2022.1604846

2021

5. **Cai, M.**[#], Xie, Y., Bowe, B., Yan, Y., Al-Aly, Z.*. (2021) "Temporal Trends in Incidence Rates of Lower Extremity Amputation and Associated Risk Factors Among Patients Using Veterans Health Administration Services From 2008 to 2018", ***JAMA Network Open***. (SCI Q1, IF: 13.366, rank: 15/172, 中科院医学大类 1 区 top), 4(1), e2033953-e2033953. DOI: 10.1001/jamanetworkopen.2020.33953

6. **Cai, M.**[#], Alamdar Yazdi, M., Hu, Q., Mehdizadeh, A., Vinel, A., Davis, K.C., Megahed, F.M., Rigdon, S.E.*. (2021) "The association between crashes and safety-critical events: synthesized evidence from crash reports and naturalistic driving data among commercial truck drivers", ***Transportation Research Part C: Emerging Technologies***. (SCI Q1, IF: 9.022, rank: 6/40, 中科院工程技术大类 1 区 top), 126(5): 103016. DOI: 10.1016/j.trc.2021.103016

7. **Cai, M.**[#], Mehdizadeh, A., Hu, Q., Alamdar Yazdi, M., Vinel, A., Davis, K., Megahed, F., Rigdon, S.*. (2021) "Hierarchical Point Process Models for Recurring Safety Critical Events Involving Commercial Truck Drivers: A Reliability Framework for Human Performance Modeling". ***Journal of Quality Technology***. (SCI Q2, IF: 2.182, rank: 38/125, 中科院工程技术大类 2 区), 54(4): 466-484. DOI: 10.1080/00224065.2021.1939815

8. **Cai, M.**[#], Zhang, B., Yang, R., Zheng, T., Dong, G., Lin, H., Rigdon, S., Xian, H., Hinyard, L., Xaverius, P., Burroughs, T., Liu, E., Jansson, D., Yang, S.*, Qian, Z.*. (2021) "Association between maternal outdoor physical exercise and the risk of preterm birth: a case-control study in Wuhan, China", ***BMC Preg-***

nancy and Childbirth. (SSCI/SCI Q2, IF: 3.105, rank: 36/85, 中科院医学大类 3 区), 21(1), 1-9. DOI: 10.1186/s12884-021-03678-9

9. **Cai, M.**[#], Bowe, B., Xie, Y., Al-Aly, Z.*. (2021) "Temporal Trends in COVID-19 Mortality: A Report from the US Department of Veteran Affairs", ***BMJ Open***. (SCI Q2, IF: 3.017, rank: 85/172, 中科院医学大类 4 区), 11(8), 1-10. DOI: 10.1136/bmjopen-2020-047369

2020 10. **Cai, M.**[#], Liu, E., Zhang, R.*, Lin, X., Rigdon, S.E., Qian, Z., Belue, R., Chang, J.J. (2020) "Comparing the Performance of Charlson and Elixhauser Comorbidity Indices to Predict In-Hospital Mortality Among a Chinese Population", ***Clinical Epidemiology***. (SCI Q1, IF: 5.814, rank: 46/210, 中科院医学大类 2 区), 12, 307–316. DOI: 10.2147/CLEP.S241610

11. Mehdizadeh, A.[#], **Cai, M.**[#], Hu, Q., Alamdar Yazdi, M.A., Mohabbati-Kalejahi, N., Vinel, A., Rigdon, S.E., Davis, K.C. and Megahed, F.M.* (2020). "A Review of Data Analytic Applications in Road Traffic Safety. Part 1: Descriptive and Predictive Modeling", ***Sensors***. (SCI Q2, IF: 3.847, rank: 19/64, 中科院工程技术大类 3 区, 共同第一作者), 20(4), 1-24. DOI: 10.3390/s20041107

2018 12. **Cai, M.**[#], Liu, E., Li, W.* (2018). "Rural Versus Urban Patients: Benchmarking the Outcomes of Patients with Acute Myocardial Infarction in Shanxi, China from 2013 to 2017", ***International Journal of Environmental Research and Public Health***. (SSCI Q1, IF: 4.614, rank: 45/182, 中科院医学大类 3 区), 15(9), 1-16. DOI: 10.3390/ijerph15091930

13. **Cai, M.**[#], Liu, E., Tao, H.*, Qian, Z., Fu, Q., Lin, X., Wang, M., Xu, C., Ni, Z. (2018). "Does A Medical Consortium Influence Health Outcomes of Hospitalized Cancer Patients? An Integrated Care Model in Shanxi, China", ***International Journal of Integrated Care***. (SSCI Q2, IF: 2.913, rank: 42/88, 中科院医学大类 3 区), 18(2), 1-10. DOI: 10.5334/ijic.3588

14. **Cai, M.**[#], Liu, E., Tao, H.*, Qian, Z., Lin, X., Cheng, Z. (2018). "Does Level of Hospital Matter? A Study of Mortality of Acute Myocardial Infarction Patients in Shanxi, China". ***American Journal of Medical Quality***. (SCI Q4, IF: 1.2, rank: 104/109, 中科院医学大类 4 区), 33(2), 185-192. DOI: 10.1177/1062860617708608

合作作者（28 篇）

2022 1. Tian, F., **Cai, M.**, Li, H., Qian, Z., Chen, L., Zou, H., Zhang, Z., Wang, C., Xian, H., McMillin, S.E., and Lin, H. (2022) "Air pollution associated with incident stroke, post-stroke cardiovascular events, and death: A trajectory analysis of a prospective cohort". *Neurology*. (SCI Q1, IF: 11.8, rank: 10/212, 中科院医学大类 1 区 top) DOI: 10.1212/WNL.0000000000201316

2. Liu, W., Jing, W., **Cai, M.**, Qian, Z., Long, Z., Wang, L., Vaughn, M.G., Aaron, H.E., Tong, X., Li, Y., Yin, P.*, Lin, H.*, Zhou, M. (2022) "Particulate matter pollution and asthma mortality in China: A nationwide time-stratified case-crossover study from 2015 to 2020". *Chemosphere*. 136316. DOI: 10.1016/j.chemosphere.2022.136316

3. Zhang, J., Cai, A., Chen, G., Wang, X., **Cai, M.**, Li, H., Nissen, S.E., Lip, G.Y.H., Lin, H.* (2022). "Habitual fish oil supplementation and the risk of incident atrial fibrillation: Findings from a large prospective longitudinal cohort study". *European Journal of Preventive Cardiology*. DOI: 10.1093/eurjpc/zwac192

4. Zou, H., **Cai, M.**, Qian, Z., Zhang, Z., Vaughn, M.G., Wang, X., Li, H., Lin, H.* (2022). "The effects of

ambient fine particulate matter exposure and physical activity on heart failure: a risk-benefit analysis of a prospective cohort study". *Science of the Total Environment.* (SCI Q1, IF: 10.753, rank: 2/27), 158366. DOI: 10.1016/j.scitotenv.2022.158366

5. Li, R., **Cai, M.**, Qian, Z. M., Wang, X., Zhang, Z., Wang. C., Wang, Y., Arnold, L.D., Howard, S.W., Li, H., Lin, H.* (2022). "Ambient air pollution, lifestyle, and genetic predisposition associated with type 2 diabetes: findings from a national prospective cohort study". *Science of the Total Environment.* (SCI Q1, IF: 10.753, rank: 2/27), 157838. DOI: 10.1016/j.scitotenv.2022.157838

6. Wang, X., Guo, Y., **Cai, M.**, Qian, Z. M., Zhang, S., Zhang, Z., Yang, Y., Vaughn, M. G., Aaron, H.E., Wu, F.*, Zhang, Y.*, Lin, H.* (2022). "Constituents of fine particulate matter and asthma in six low-and middle-income countries". *Journal of Allergy and Clinical Immunology.* (SCI Q1, IF: 14.290, rank: 2/27), 150(1), 214-222.e5. DOI: 10.1016/j.jaci.2021.12.779

7. Chen, L., **Cai, M.**, Li, H., Wang, X., Tian, F., Wu, Y., Zhang, Z., Lin, H.* (2022) "Risk/benefit tradeoff of habitual physical activity and air pollution on chronic pulmonary obstructive disease: findings from a large prospective cohort study. *BMC Medicine.* (SCI Q1, IF: 11.150, rank: 21/172), 20(1), 1-12. DOI: 10.1186/s12916-022-02274-8

8. Zhang, Z., Chen, L., Qian, Z.M., Li, H., **Cai, M.**, Wang, X., McMillin, S.E., Vaughn, M.G., Liu, K., Shao, Z. and Lin, H.* (2022). "Residential green and blue space associated with lower risk of adult-onset inflammatory bowel disease: Findings from a large prospective cohort study". *Environment international.* (SCI Q1, IF: 13.352, rank: 16/279), 160: 107084. DOI: 10.1016/j.envint.2022.107084

9. Wang, X., Qian, Z.M., Zhang, Z., **Cai, M.**, Chen, L., Wu, Y., Li, H., Liu, E., McMillin, S.E. and Lin, H.* (2022). "Population attributable fraction of lung cancer due to genetic variants, modifiable risk factors, and their interactions: A nationwide prospective cohort study". *Chemosphere.* (SCI Q1, IF: 8.943, rank: 33/279), 301:134773. DOI: 10.1016/j.chemosphere.2022.134773

10. Wu, Y., Zhang, S., Zhuo, B., **Cai, M.**, Qian, Z. M., Vaughn, M. G., McMillin, S.E., Zhang, Z., Lin, H.* (2022). "Global burden of chronic obstructive pulmonary disease attributable to ambient particulate matter pollution and household air pollution from solid fuels from 1990 to 2019". *Environmental Science and Pollution Research.* (SCI Q2, IF: 5.190, rank: 87/279), 29(22), 32788-32799. DOI: 10.1007/s11356-021-17732-8

2021

11. Ma, Q., Li, R., Wang, L., Yin, P., Wang, Y., Yan, C., Ren, Y., Qian Z., Vaughn, M.G., McMillin, S.E., Hay, S.I., Naghavi, M., **Cai, M.**, Wang, C., Zhang, Z., Zhou, M.*, Lin, H.*, Yang, Y.* (2021). "Temporal trend and attributable risk factors of stroke burden in China, 1990-2019: an analysis for the Global Burden of Disease Study 2019". *The Lancet Public Health.* (SSCI Q1, IF: 72.427, rank: 1/182), 6(12), e897-e906. DOI: 10.1016/S2468-2667(21)00228-0

12. Chen, Y., **Cai, M.**, Li, Z., Lin, X.*, Wang, L.* (2021). "Impacts of the COVID-19 Pandemic on Public Hospitals of Different Levels: Six-Month Evidence from Shanghai, China". *Risk Management and Healthcare Policy.* (SSCI Q2, IF: 2.853, rank: 57/159). 14:3635-3651. DOI: 10.2147/RMHP.S314604

13. Mehdizadeh, A., Alamdar Yazdi, M.A., **Cai, M.**, Hu, Q., Vinel, A., Rigdon, S.E., Davis, K.C. and Megahed, F.M.*. (2021) "Predicting unsafe driving risk among commercial truck drivers using machine learning:

Lessons learned from the surveillance of 20 million driving miles", *Accident Analysis and Prevention.* (SSCI Q1, IF: 6.376, rank: 1/16), 159, 1-12. DOI: 10.1016/j.aap.2021.106285

14. Bowe, B., Xie, Y., Gibson A.K., **Cai, M.**, van Donkelaar, A., Martin, R.V., Burnett, R., Al-Aly, Z.*. (2021) "Ambient Fine Particulate Matter Air Pollution and the Risk of Hospitalization among COVID-19 Positive Individuals", *Environment International.* (SCI Q1, IF: 13.352, rank: 16/279), 154, 1-9. DOI: 10.1016/j.envint.2021.106564

15. Bowe, B., **Cai, M.**, Xie, Y., Gibson, A., Maddukuri, G., Al-Aly, Z.*. (2021)"Acute Kidney Injury in a National Cohort of Hospitalized United States Veterans with COVID-19. *Clinical Journal of the American Society of Nephrology.* (SCI Q1, IF: 10.671, rank: 7/90), 16(1), 14-25. DOI: 10.2215/CJN.09610620

2020

16. Hu, Q., **Cai, M.**, Mohabbati-Kalejahi, N., Mehdizadeh, A., Alamdar Yazdi, M.A., Vinel, A.*, Rigdon, S.E., Davis, K.C. and Megahed, F.M.* (2020) "A Review of Data Analytic Applications in Road Traffic Safety. Part 2: Prescriptive Modeling", *Sensors.* (SCI Q2, IF: 3.847, rank: 19/64) DOI: 10.3390/s20041096

17. Xie, Y., Bowe, B., Yan, Y., **Cai, M.**, Al-Aly, Z.* (2020) "County-level Contextual Characteristics and Disparities in Life Expectancy", *Mayo Clinic Proceedings.* (SCI Q1, IF: 11.104, rank: 22/172). 96(1), 92-104. 10.1016/j.mayocp.2020.04.043

18. Lin, X., Green, J.C., Xian, H., **Cai, M.**, Skrzypek, J., Tao, H.* (2020) "Holiday and weekend effects on mortality for acute myocardial infarction in Shanxi, China from 2014 to 2017". *International Journal of Public Health.* (SSCI Q1, IF: 5.1, rank: 35/182), 65(6), 847-857. DOI: 10.1007/s00038-020-01443-x

19. Bowe, B., Artimovich, E., Xie, Y., Yan, Y., **Cai, M.**, Al-Aly, Z.* (2020) "The global and national burden of chronic kidney disease attributable to ambient fine particulate matter air pollution: a modelling study", *BMJ Global Health.* (SSCI/SCI Q1, IF: 8.064, rank: 11/182). 5(3), 1-13. DOI: 10.1136/bmjgh-2019-002063

20. Boakye, E.A., Osazuwa-Peters, N., Chen, B., **Cai, M.**, Tobo, B.B., Challapalli, S.D., Buchanan, P. and Piccirillo, J.F.* (2020). "Multilevel correlates of and development of a nomogram for in-hospital mortality among hospitalized head and neck cancer patients", *JAMA Otolaryngology-Head & Neck Surgery.* (SCI Q1, IF: 8.961, rank: 1/62), 146(5): 444-454. DOI: 10.1001/jamaoto.2020.0132

21. Xu, C., Zhong, W., Fu, Q., Yi, L., Deng, Y., Cheng, Z., Lin, X., **Cai, M.**, Zhong, S., Wang, M.*, Tao, H. (2020). "Differential effects of different delivery methods on progression to severe postpartum hemorrhage between Chinese nulliparous and multiparous women: a retrospective cohort study. *BMC pregnancy and childbirth.* (SSCI/SCI Q2, IF: 3.105, rank: 36/85), 20(1), 1-13. 10.1186/s12884-020-03351-7

2018

22. Lin, X., **Cai, M.**, Fu, Q., He, K., Jiang, T., Lu, W., Ni, Z., Tao, H. (2018). "Does Hospital Competition Harm Inpatient Quality? Empirical Evidence from Shanxi, China", *International Journal of Environmental Research and Public Health.* (SSCI Q1, IF: 4.614, rank: 45/182), 15(10), 1-14. DOI: 10.3390/ijerph15102283.

23. Zhang, N., Hu, X., Zhang, Q., Bai, P., **Cai, M.**, Zeng T., Zhang J., Tian S., Min J., Huang H., Zheng J., Peng M., Li M., Chen L. (2018). "Non-high-density lipoprotein cholesterol to high-density lipoprotein cholesterol ratio is an independent risk factor for diabetes mellitus: results from a population-based cohort", *Journal of Diabetes.* (SCI Q2, IF: 4.610, rank: 63/146), 10(9), 708-714 DOI: 10.1111/1753-0407.12650

2017 24. Lin, X., **Cai, M.**, Tao, H.*, Liu, E., Cheng, Z., Xu, C., Wang, M., Xia, S., Jiang, T. (2017). "Insurance status, inhospital mortality and length of stay in hospitalised patients in Shanxi, China: a cross-sectional study", *BMJ Open.* (SCI Q2, IF: 3.017, rank: 85/172) DOI: 10.1136/bmjopen-2017-015884

25. Wang, M., Fang, H., Tao, H.*, Cheng, Z., Lin, X., **Cai, M.**, Xu, C., Jiang, S. (2017). "Bootstrapping data envelopment analysis of efficiency and productivity of county public hospitals in Eastern, Central, and Western China after the public hospital reform", *Journal of Huazhong University of Science and Technology-Medical Sciences.* (SCI Q4, IF: 1.151, rank: 274/297) DOI: 10.1007/s11596-017-1789-6

2016 26. Cheng, Z., **Cai, M.**, Tao, H.*, He, Z., Lin, X., Lin, H., Zuo, Y. (2016). "The efficiency and productivity measurement of rural township hospitals in China: a bootstrapping data envelopment analysis", *BMJ Open.* (SCI Q2, IF: 3.017, rank: 85/172) DOI: 10.1136/bmjopen-2016-011911

27. Lin, X., Tao, H.*, **Cai, M.**, Liao, A., Cheng, Z., Lin, H. (2016). "A Systematic Review and Meta-analysis of the Relationship Between Hospital Volume and Outcome for Percutaneous Coronary Intervention", *Medicine.* (SCI Q3, IF: 1.817, rank: 122/172) DOI: 10.1097/MD.0000000000002687

28. Cheng, Z., Tao, H.*, **Cai, M.**, Lin, H., Lin, X., Shu, Q., Zhang, R. (2015). "Technical efficiency and productivity of Chinese county hospitals: an exploratory study in Henan province, China", *BMJ Open.* (SCI Q2, IF: 3.017, rank: 85/172) DOI: 10.1136/bmjopen-2014-007267

2015 29. Shu, Q., **Cai, M.**, Tao, H.*, Cheng, Z., Chen, J., Hu, Y., Li G. (2015). "What does a Hospital Survey on Patient Safety reveal about patient safety culture of surgical units compared with that of other units?", *Medicine.* (SCI Q3, IF: 1.817, rank:122/172) DOI: 10.1097/MD.0000000000001074

中文同行评议期刊文章（共 15 篇，第一作者 5 篇）

第一作者（5 篇）

2017 1. 蔡苗 #, Echu Liu, 陶红兵 *, 程兆辉, 林小军. "市场竞争对医院技术效率的影响——基于河南省和江苏省的实证研究". 中国医院管理. 2017, 37(6): 22-24. Link

2015 2. 蔡苗 #, 陶红兵 *. "重症监护室不良事件报告现状分析和应对策略". 中国卫生质量管理. 2015, 22(2): 11-14. Link

2013 3. 蔡苗 #, 陶红兵 *. "内科和外科系统医护人员不良事件报告情况及阻碍因素". 中国医院. 2013, 17(8): 31 –33. Link

4. 蔡苗 #*, 徐小兵, 蔡海洋, 常瑞, 林小军, 黄艳然. "医疗不良事件识别途径及干预策略". 医学与社会. 2013, 26(9): 20 –22. Link

5. 蔡苗 #, 陶红兵 *, 林小军, 徐小兵, 蔡海洋, 陈飞翔. "阻碍医护人员报告医疗不良事件的影响因素分析". 中国卫生质量管理. 2013, 20(5): 41 –43. Link

合作作者（10 篇）

2020 1. 许昌，庄俊汉，傅强，程兆辉，**蔡苗**，林小军，罗斌，陈芸，钟婉婷. 基于省级 DRG 平台的死亡类与非计划重返类指标评价应用研究. 中华医院管理杂志, 2020, 36(02):117-121. Link

2019 2. 陈默, **蔡苗**, 黄阿红, 沈梦雪, 吴其, 张泽苗, 乐虹 *. “基于 K-means 聚类与支持向量机的大病患者住院费用影响因素与控制策略研究”. 中国医院管理. 2019, 39(5): 45-47. Link

2017 3. Leidy S. Delgado, 陶红兵 *, **蔡苗**, Ashleigh Oguagha. “肿瘤多学科团队实施现状及影响因素研究”. 中国医疗管理科学. 2017, 7(3): 41-46. Link

4. 夏述旭, 陶红兵 *, 都丽婷, **蔡苗**, 林小军, 林海锋. “‘互联网 +’背景下移动医疗质量与安全问题分析及强策研究”. 中国卫生质量管理. 2017, 24(3): 82 - 85. Link

5. 何金露, 陶红兵 *, 林小军, 肖婷, **蔡苗**. “不同所有制医院医疗质量差异比较与思考”. 中国卫生质量管理. 2017, 24(4): 18 - 20. Link

2016 6. 林海锋, 陶红兵 *, 程兆辉, 林小军, **蔡苗**. “河南部分县级中医院的医疗资源利用效率及其影响因素分析”. 中华医院管理杂志. 2016, 32(2): 117 - 120. Link

7. 左玉玲, 陶红兵 *, 程兆辉, 林海锋, **蔡苗**. “基于 Malmquist 指数的河南省民营医院效率变化分析”. 中国医院管理.2016; 36(6):35-37. Link

8. 张潘, 陶红兵 *, 林小军, **蔡苗**. “我国医疗联合体的质量与安全现状及对策探讨”. 中国医院管理. 2016, 36(11): 52-54. Link

9. 林小军, 陶红兵 *, 张士靖, 程兆辉, **蔡苗**, 刘海通, 林海锋. “医院效率研究演进路径可视化分析”. 中国医院管理. 2016, 36(4): 27-29. Link

2015 10. 林海锋, 陶红兵 *, 程兆辉, **蔡苗**, 林小军. “武汉地区医院产科资源利用效率及影响因素研究”. 中国医疗管理科学. 2015, 5(5): 9 - 13. Link

专著章节

2019 1. Megahed, F.M.*, Jones-Farmer, L. A., **Cai, M.**, Rigdon, S. E., & Mohamed, M. (2019, August). A Statistical (Process Monitoring) Perspective on Human Performance Modeling in the Age of Cyber-Physical Systems. In International Workshop on Intelligent Statistical Quality Control (pp. 197-228). Springer, Cham.

会议摘要（共 5 篇，第一/通讯作者 2 篇）

1. **Cai, M.**#, Johnston, K., Lin, X.*, et al. (2020), “Does the medical consortium reform improve hospital efficiency? Evidence from secondary general hospitals in Shanxi, China, 2013-2017”. *International Conference on Health Policy Statistics* by American Statistical Association in San Diego, California, 2020. link

2. **Cai, M.**#, Adjei Boakye, E., Peng, Z., et al. (2019), “Disparity of The Disparities: A Comparison of Rural-Urban Disparity Regarding In-Hospital Mortalities Among Acute Myocardial Infarction Patients, An Observational Study Between China and The United States, 2013-2015”. *International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 2019* .

3. Lin, X., Tao, H.*, **Cai, M.**, et al. (2016), “Health insurance and quality and efficiency of medical care for patients with acute myocardial infraction in tertiary hospitals in Shanxi, China: a retrospective study”. *The Lancet-CAMS Health Summit.* DOI: 10.1016/S0140-6736(16)31997-3

4. Wang, M., Tao, H.*, Fang, H., Cheng, Z., **Cai, M.**, et al. (2016), "Patient safety culture in surgical departments versus other departments in county hospitals of Hubei province, China: a cross-sectional survey". *The Lancet-CAMS Health Summit.* DOI: 10.1016/S0140-6736(16)31998-5

5. Cheng, Z., Tao, H.*, **Cai, M.**, et al. (2015), "Using a two-stage data envelopment analysis to estimate the efficiency of county hospitals in China: A panel data study". *The Lancet-CAMS Health Summit.* DOI:10.1016/S0140-6736(15)00645-5

会议报告

1. Rigdon, S.E., **Cai, M.**, Xian, H., Alamdar Yazdi, M., Megahed, F., Davis, K., Vinel, A., Mehdizadeh, A., Hu, Q. (July 2020). "Factors Affecting Transportation Safety: Results of a Large Naturalistic Driving Study", *Joint Statistical Meeting 2020* by American Statistical Association

2. Lin, X., Johnston, K., **Cai, M.** (March 2019). "Does the medical consortium reform improve hospital efficiency? Evidence from secondary general hospitals in Shanxi, China, 2013-2017", *The 1st Health Economics and Policy Forum* at Peking University, Beijing, China

3. **Cai, M.**, Liu, E., Tao, H.*, et al. (May, 2018). "Does A Medical Consortium Influence Health Outcomes of Hospitalized Cancer Patients: An Integrated Care Model in Shanxi, China", *2018 Biennial Conference "Advances in Health Policy and Healthcare: The Road Ahead"* by China Health Policy and Management Society (CHPAMS) at Yale University, New Haven, Connecticut, USA

媒体报道

2022 1. American Academy of Neurology's Press Release: Air Pollution Linked to Trajectory of Stroke
2. New Scientist: Air pollution raises our risk of a stroke and its later complications
3. PÚBLICO (a Portuguese newspaper): Poluição do ar fortemente associada à progressão de AVC (Air pollution strongly associated with stroke progression)
4. Science Daily: Air pollution linked to trajectory of stroke
5. AZO Clean Tech: Air Pollution may Play a Major Role in the Progression of Stroke
6. Stroke Rehab Times: Bad air: pollution linked with trajectory of stroke
7. Techi AI: Air pollution linked to stroke trajectory
8. Morocco Detail Zero: Air Pollution Linked to Trajectory of Stroke
9. Medical Xpress: Study links air pollution to trajectory of stroke
10. Medical Life Sciences News: Study explores the role of air pollution on the trajectory of stroke

2022 11. American Academy of Neurology's Press Release: Does the Size of Air Pollution Particles Affect a Person's Risk of Death from Stroke?

12. U.S. News: Some Types of Air Pollution Are Even Worse for Your Health
13. HealthDay: Some Types of Air Pollution Are Even Worse for Your Health
14. Physicians Weekly: Exposure to Air Pollution May Increase In-Hospital Stroke-Related Deaths

15. Medscape: Air Pollution Particle Size Tied to Higher Stroke Mortality
16. MedPage Today: Particulate Matter Size Tied to Stroke Mortality —Association stronger among individuals with ischemic strokes
17. Medical Life Sciences News: Size of air pollution particles may affect a person's risk of dying from stroke, study finds
18. The Hill: Air pollution linked to increase risk of death from stroke
19. Air Quality News: Size of air pollution particles affects risk of death from stroke
20. Lincoln Journal Star: Exposure to Air Pollution May Increase In-Hospital Stroke-Related Deaths

2019 21. Cincinnati Public Radio: Miami University Is On The Road To Safer Driving.

2019 22. Miami University, News and Communications: Miami researchers study factors affecting truck driver alertness.

2019 23. Saint Louis University, College for Public Health and Social Justice, College Connect: SLU Study Finds Vertically Integrated Hospital Care Improves Cancer Patient Outcomes.

R 包开发

1. R Package: *MiaoCom*. "A R package for calculating comorbidity indexes (i.e. Charlson Comorbidity Index, Elixhauser Comorbidity Index, and C_3 Index) for epidemiologists".
   Source: https://github.com/caimiao0714/MiaoCom

网站开发和维护

1. Supplementary materials for "Bridging the Gap between Transportation Safety Research and its Incorporation in Optimization Models: a Detailed Review and Perspective", published on *Sensors*.
   Source: https://caimiao0714.github.io/TrafficSafetyReviewRmarkdown/

学术组织会员

2019– • 美国统计协会 (American Statistical Association): 会员,

2017– • 美国公共卫生协会 (American Public Health Association): 会员,

2017– • 中国留美经济学会 (The Chinese Economists Society): 会员,

2017– • 中国卫生政策与管理学会 (China Health Policy and Management Society): 会员.

学术期刊审稿

2022 – 1. *Lancet Regional Health - Europe*,

2022 – 2. *Frontiers in Public Health* (SCI Q1, IF: 6.461),

2022 – 3. *Lancet Regional Health - Southeast Asia*,

2022 – 4. *Environmental Health Perspectives* (SCI Q1, IF: 11.035, rank: 25/279),

2021 – 5. *eClinicalMedicine - The Lancet* (SCI Q1, IF: 17.033, rank: 12/172),

2021 – 6. *Journal of the American Society of Nephrology* (SCI Q1, 5/90, IF: 14.978),

2021 – 7. *Journal of Quality Technology* (SCI Q2, IF: 2.182, rank: 38/125),

2021 – 8. *Journal of Diabetes* (SCI Q2, IF: 4.610, rank: 63/146),

2021 – 9. *Environmental Science and Pollution Research* (SCI Q2, IF: 5.190, rank: 87/279),

2021 – 10. *International Journal of General Medicine* (SCI Q3, IF: 2.145, rank: 112/172),

2021 – 11. *BMC Pregnancy and Childbirth* (SCI Q2, IF: 3.105, rank: 36/85),

2020 – 12. *JAMA Network Open* (SCI Q1, IF: 13.366, rank: 15/172),

2020 – 13. *International Journal of Health Policy and Management* (SSCI Q1, IF: 4.967, rank: 20/109),

2020 – 14. *Scientific Reports* (SCI Q2, IF: 4.996, rank: 19/73),

2020 – 15. *BMC Health Services Research* (SCI Q3, IF: 2.908, rank: 63/109),

2020 – 16. *American Journal of Managed Care* (SCI/SSCI Q2, IF: 3.247, rank: 48/109),

2019 – 17. *International Journal of Integrated Care* (SSCI Q2, IF: 2.913, rank: 42/88),

2019 – 18. *JAMIA Open*,

2019 – 19. *Clinical Epidemiology* (SCI Q1, IF: 5.814, rank: 46/210),

2019 – 20. *International Journal of Geriatric Psychiatry* (SCI Q2, IF: 3.850, rank: 11/37),

2018 – 21. *BMJ Open* (SCI Q2, IF: 3.017, rank: 85/172),

2017 – 22. *International Journal for Equity in Health* (SSCI Q1, IF: 4.700, rank: 42/182).