

侯章林（博士，副研究员）



教育背景

- 2016 年 9 月 -2020 年 7 月 博士研究生，天津大学化工学院，工学博士
- 2011 年 9 月 -2014 年 6 月 硕士研究生，温州大学物电学院, 理学硕士
- 2005 年 9 月 -2010 年 7 月 本科，首都师范大学物理系, 理学学位

经历

工作经历

- 2026 年 7 月 -现在 副研究员，温州大学数理学院
- 2023 年 1 月 -2026 年 6 月 副研究员，国科温州研究院，好村滋行课题组
- 2020 年 11 月 -2022 年 11 月 中国科学院大学&国科温州研究院，博士后

学术交流经历

- xxxx 年 x 月 交流形式（如：访问学者）， 院校名
- xxxx 年 x 月 交流形式， 院校名

教学经历

- 20xx 年 x 月 讲授课程

-至今

○ 课程名
○ 课程名

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○ 课程名

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研究方向

- 1 通过计算机模拟考察二维/三维各向异性胶体粒子自组装行为
- 2 复杂构成粒子的动力学行为
- 3 信息热力学，信息胶体粒子的计算机模拟

荣誉和奖励

- 1 荣誉名称（如：温州大学“511 人才工程”第一层次）（年份）
 - 2 荣誉名称（年份）
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主持和参与项目

教学项目

xxxx 年 x 月	项目名称，项目来源类别
-xxxx 年 x 月	主持或参与
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学术项目

2019 年 1 月-2022 年 12 月，非球形胶体形成的二维有序相的结构与动力学，国自然面上项目（批准号：11874277），参与

2022 年 1 月-2025 年 12 月，基于多组学数据的机器学习方法识别驱动癌症的表观遗传调控基因，国自然面上项目（批准号：32170665），参与

2022 年 1 月-2024 年 12 月，基于局域多形态模和运动信息解析二维各向异性胶体系统的相行为，国自然青年项目 C 类（批准号：12104453），主持

2025 年 1 月-2025 年 12 月，软物质学科和生物物理交叉前沿讲习班，国自然专项项目（批准号：1244720045），参与

2027 年 1 月-2030 年 12 月，面向信息驱动活性物质的广义 Onsager - Machlup 变分原理：理论与机器学习，国自然面上项目（批准号：12674268），参与

论文

学术论文

- [1] Yasuda, Kento; Zheng, Bin; Xiong, Zhongqiang; Hou, Zhanglin; Ishimoto, Kenta; Xu, Xinpeng; Andelman, David and Komura, Shigeyuki*; Covariant Onsager and Onsager–Machlup principles for active and inertial dynamics, Chinese Physics B, 2026. [10.1088/1674-1056/ae8da8]
- [2] Zheng, Bin; Xiong, Zhongqiang; Li Changhao; Hou, Zhanglin; Zhang, Ziluo; Xu, Xinpeng; Lin, Li-Shing; Ishimoto, kenta; Yasuda, Kento; Komura, Shigeyuki*; Neural optimization of the most probable paths of three-dimensional active Brownian particles, Physical Review E, 2026, 114(1): L012103. Editors' Suggestion. [10.1103/ys1b-1lrd]
- [3] Wang, Lingyi; Zhang, Ziluo; Xiong, Zhongqiang; Hou, Zhanglin; He, Linli*; Komura, Shigeyuki*; Fokker–Planck description of an active Brownian particle with rotational inertia, Communications in Theoretical Physics, 2026, 78(6): 065603. [10.1088/1572-9494/ae4f75]
- [4] Zhu, Yanwen#; Jiang, Shenhua#; Wang, Jieli#; Song, Xin; Huang, Xing; Zheng, Bin; He, Linli*; Komura, Shigeyuki*; Hou, Zhanglin*; Observing one-step melting pathway in two-dimensional hard circular particle system, iScience, 2025, 28(8):113107. [10.1016/j.isci.2025.113107]
- [5] Li, Jun#; Zhang, Ziluo#; Hou, Zhanglin; Hosaka, Yuto; Yasuda, Kento; He, Linli*; Komura, Shigeyuki*; Thermally Driven Two-Sphere Microswimmer with Internal Feedback Control, Journal of the Physical Society of Japan, 2025, 94(6): 064802. [10.7566/JPSJ.94.064802]
- [6] Hou, Zhanglin#; Zhang, Ziluo#; Li, Jun; Yasuda, Kento; Komura, Shigeyuki*; Ornstein-Uhlenbeck information swimmers with external and internal feedback controls, Europhysics Letters, 2025, 150(2): 27001. [10.1209/0295-5075/adc502]
- [7] Li, Jun#; Zhang, Ziluo#; Hou, Zhanglin; Yasuda, Kento; He, Linli*; Komura, Shigeyuki*; Time-correlation functions of stochastic

three-sphere micromachines, *Physical Review E*, 2024, 110(4): 044603.

[10.1103/PhysRevE.110.044603]

[8] Hou, Zhanglin#; Liu, Mingwei#; Zong, Yiwu; Ye, Fangfu*; Zhao, Kun*; The Cooperative Migration Dynamics of Particles Correlates to the Nature of Hexatic-isotropic Phase Transition in 2D Systems of Corner-rounded Hexagons, *Fundamental Research*, 2024, 4(2): 284-290.

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[9] Jiang, Shenhua#; Wang, Jieli#; Zeng, Ying; Zhao, Zhiyuan; Huang, Xing; Komura, Shigeyuki; Ye, Fangfu; He, Linle*; Zhao, Kun*; and Hou, Zhanglin*; Five scenarios revealed by hard truncated rhombs for an expanded picture of two-dimensional melting, *Cell Reports Physical Science*, 2023, 4(10).

[10.1016/j.xcrp.2023.101627]

[10] Liu, Maoji; Hou, Zhanglin; Kitahata, Hiroyuki; He, Linli*; Komura, Shigeyuki*; Non-reciprocal Phase Separations with Non-conserved Order Parameters, *Journal of the Physical Society of Japan*, 2023, 92(9): 093001.

[10.7566/JPSJ.92.093001]

[11] Hou, Zhanglin#, *; Wang, Jieli; Zeng, Ying; Zhao, Zhiyuan; Huang, Xing; Zhao, Kun*; Ye, Fangfu*; Solid-to-molecular-orientational-hexatic melting induced by local environment determined defect proliferations, *Chinese Physics B*, 2022, 31(12): 126401. [10.1088/1674-1056/ac8ce1]

[12] Huang, Xing; Wang, Pengfei; Liu, Junfeng; Xu, Fangmin; Liu, Cong; Xu, Zhongbin*; Hou, Zhanglin; Ye, Fangfu*; Patterning High-Resolution Microstructures on Thermoplastics by Ceramic Nanoparticles Filled Epoxy Coated Molds for Duplicating Nature-Derived Functional Surfaces, *ACS Applied Materials & Interfaces*, 2022, 14(24): 28270-28279.

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[13] Huang, Xing#; Liu, Linbo#; Wang, Jieli; Bi, Mingcheng; Liu, Cong; Liao, Wenya; Wang, Pengfei; Liu, Junfeng; Hou, Zhanglin; Xu, Zhongbin*; Ye Fangfu*; Designing Self-floating Anisotropic Macroporous Hydrogel by

Step Emulsification and Buoyancy-assisted Microfluidics, Chemical Engineering Journal, 2022, 446(4):137348. [10.1016/j.cej.2022.137348]

[14] Liu, Huaqing#; Zong, Yiwu#; Hou, Zhanglin; Mason, Thomas G.*; Zhao, Kun*; Phase Behavior of Rotationally Asymmetric Brownian Kites Containing 90° Internal Angles, Chinese Physics B, 2021, 30(12): 124701. [10.1088/1674-1056/ac306c]

[15] Duan, Yana#; Hou, Zhanglin##; Zong, Yiwu*; Ye, Fangfu; Zhao, Kun; Dynamic Heterogeneity Flow Promotes Binding Reactions in a Dense System of Hard Annular Sector Particles, Physical Chemistry Chemical Physics, 2021, 23(5): 3581-3587. [10.1039/D0CP05757F]

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[17] Li, Yanwei; Li, Ziqi; Hou, Zhanglin; Mason, Thomas G.; Zhao, Kun*; Sun, Zhaoyan*; Ciamarra, Massimo Pica*; Dynamics in Two-Dimensional Glassy Systems of Crowded Penrose Kites, Physical Review Materials, 2019, 3(12): 125603. [10.1103/PhysRevMaterials.3.125603]

[18] Hou, Zhanglin#; Zhao, Kun##; Zong, Yiwu; Mason, Thomas G.*; Phase Behavior of Two-dimensional Brownian Systems of Corner-Rounded Hexagons, Physical Review Materials, 2019, 3(1): 015601. [10.1103/PhysRevMaterials.3.015601]

[19] Hou, Zhanglin#; Ju, Ying#; Zong, Yiwu; Ye, Fangfu*; Zhao, Kun*; Molecular Dynamics Simulations on the Dynamics of Two-Dimensional Rounded Squares, Chinese Physics B, 2018, 27(8): 088203. [10.1088/1674-1056/27/8/088203]