

刘志苏，特任教授。湖南大学博士，意大利因苏布利亚大学博士后、国防科技大学博士后，曾访问中科院数学与系统科学研究院，香港理工大学等。研究方向是非局部微分方程的存在性与稳定性理论以及多智能体系统的集群稳定性问题。在国内外学术刊物上发表 SCI 论文 40 余篇，部分研究成果发表在 *J. Differential Equations*, *Calc. Var. PDE*, *Ann. Mat. Pura Appl*, *Nonlinearity*, *Israel J. Math*, *Proc.Roy.Soc.Edinburgh Sect A*, *J.Geom.Anal.* 等国际数学刊物上, 3 篇高被引论文, 1 篇热点论文。现为德国 Zentralblatt MATH 评论员, 美国数学评论员, 国际差分方程协会会员。

工作经历:

- 1、2021.03-20 至今特任教授, 中国地质大学数理学院
- 2、2022 年 4 月-2023 年 3 月 意大利因苏布利亚大学博士后 (合作导师: Daniele Cassani 教授)
- 3、2018 年 3 月-6 月, 访问香港理工大学 (合作导师: 楼一均教授)
- 4、2018 年 6 月-2020 年 6 月, 国防科技大学博士后 (合作导师: 刘易成、黄建华教授)
- 5、2017 年 7 月-8 月, 访问中科院数学与系统科学研究院 (合作导师: 张志涛教授)
- 6、2015 年 7 月-2021 年 03 月, 在南华大学讲师、副教授
- 7、2011 年 9 月-2015. 年 06 月, 湖南大学读博士 (导师: 郭上江教授)
- 8、2008 年 9 月-2011 年 06 月, 中南大学读硕士 (导师: 陈海波教授)
- 9、2004 年 9 月-2008 年 06 月, 怀化学院读本科

科研项目:

- 湖南省优秀青年基金 (编号: 2020JJ3029), 在研, 主持, 2020/01-2022/12
- 国家自然科学基金青年基金 (编号:11701267), 结题, 主持, 2018/01-2020/12
- 国家自然科学基金天元基金 (编号: 11626127), 结题, 主持, 2017/01-2017/12
- 湖南省自然科学基金青年基金 (编号: 2017JJ3265), 结题, 主持, 2017/01-2017/12
- 博士后一等资助 (编号: 2018M643831); 结题, 主持, 2018/12-2020/06
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主要荣誉:

- 2021 年获湖南省自然科学三等奖 (第二完成人)
- 2019 年获湖南省自然科学一等奖 (第四完成人)
- 2018 年获衡阳市五四青年奖章
- 2017 年获首届南华大学十佳优秀教师
- 2016 年获湖南大学优秀博士论文

部分学术论文:

1. Daniele Cassani, Zhisu Liu, Giulio Romani, Nonlocal planar Schrödinger-Poisson systems in the fractional Sobolev limiting case. *J. Differential Equations* 383 (2024), 214-269.

2. Yu Su, **Zhisu Liu***. Semi-classical states to nonlinear Choquard equation with critical growth. *Israel Journal of Mathematics*. [Israel J. Math. 255 \(2023\), no. 2, 729–762.](#)
3. **Liu, Zhisu**; Rădulescu, Vicențiu D.; Zhang, Jianjun, Groundstates of the planar Schrödinger–Poisson system with potential well and lack of symmetry, *Proc. Roy. Soc. Edinburgh Sect. A*, DOI:10.1017/prm.2023.43
4. Hui Zhang; **Liu, Zhisu**; Tang, Chunlei; Zhang, Jianjun; Existence and multiplicity of sign-changing solutions for quasilinear Schrödinger equations with sub-cubic nonlinearity, *J. Differential Equations*, (2023) 365 (2023), 199–234.
5. **Liu zhisu**, On the eigenvalue problem of Schrödinger–Poisson system, *Proceedings of the American Mathematical Society*, 151 (2023), no. 7, 3059–3068.
6. **Liu, Zhisu**; Rădulescu, Vicențiu D.; Zhang, Jianjun; A planar Schrödinger–Newton system with Trudinger–Moser critical growth. *Calc. Var. Partial Differential Equations* 62 (2023), no. 4, Paper No. 122.
7. Su, Yu; **Liu, Zhisu***; Semi-classical states for the Choquard equations with doubly critical exponents: existence, multiplicity and concentration. *Asymptot. Anal.* 132 (2023), no. 3-4, 451–493.
8. **Liu, Zhisu**; Wei, Juncheng; Zhang, Jianjun A new type of nodal solutions to singularly perturbed elliptic equations with supercritical growth. *J. Differential Equations* 339 (2022), 509–554.
9. **Zhisu Liu**, Yijun Lou, Jianjun Zhang. A perturbation approach to studying sign-changing solutions of Kirchhoff equations with a general nonlinearity. *Ann. Mat. Pura Appl.* 201 (2022), no. 3, 1229–1255.
10. **Liu, Zhisu**; Haijun Luo; Jianjun Zhang; Existence and Multiplicity of Bound State Solutions to a Kirchhoff Type Equation with a General Nonlinearity. *J. Geom. Anal.* 32 (2022).
11. Shuibo Huang, Zhitao Zhang, and **Zhisu Liu**, Qualitative properties of singular solutions to fractional elliptic equations, *Proc. Roy. Soc. Edinburgh Sect. A*, 52 (2022), no. 5, 1155–1190.
12. **Liu, Zhisu**, Siciliano, Gaetano, A perturbation approach for the Schrödinger–Born–Infeld system: solutions in the subcritical and critical case. *J. Math. Anal. Appl.* 503 (2021)
13. **Liu, Zhisu**; Rădulescu, Vicențiu D.; Tang, Chunlei; Zhang, Jianjun Another look at planar Schrödinger–Newton systems. *J. Differential Equations* 328 (2022), 65–104.
14. **Liu, Zhisu**; Rădulescu, Vicențiu D.; Yuan, Ziqing Concentration of solutions for fractional Kirchhoff equations with discontinuous reaction. *Z. Angew. Math. Phys.* 73 (2022), no. 5, Paper No. 211, 23 pp.
15. **Liu, Zhisu**, Liu, Yicheng; Li, Xiang; Flocking and line-shaped spatial configuration to delayed Cucker–Smale models. *Discrete Contin. Dyn. Syst. Ser. B* 26 (2021), 3693–3716.
16. Daniele Cassani, **Zhisu Liu**, Cristina Tarsi, Jianjun Zhang, Multiplicity of sign-changing solutions for Kirchhoff-type Equations, *Nonlinear Analysis*, 186, (2019), 145–161.
1. **Zhisu Liu**, Zigen Ouyang, Jianjun Zhang, Existence and multiplicity of sign-changing standing waves for a gauged nonlinear Schrödinger equation in \mathbb{R}^2 . *Nonlinearity* 32 (2019) 3082–3111
17. **Zhisu Liu**, Zhitao Zhang, Shuibo Huang, Existence and nonexistence of positive solutions for a static Schrödinger–Poisson–Slater equation, *J. Differential Equations* 266 (2019) 5912–5941.
18. **Zhisu Liu**, Haijun Luo, Zhitao Zhang, Dancer–Fucik spectrum for fractional Schrödinger operators with a steep potential well on \mathbb{R}^N , *Nonlinear Analysis* 189 (2019) 111565.
19. **Zhisu Liu**, Jianjun Zhang, Multiplicity and concentration of positive solutions for the fractional Schrödinger–Poisson systems with critical growth, *ESAIM: Control, Optimisation and Calculus of Variations*, 23:(2017) 1515–1542.
20. **Zhisu Liu**, Marco Squassina, Jianjun Zhang, Ground states for fractional Kirchhoff equations with critical nonlinearity in low dimension, *Nonsmooth Nonlinear Differential Equations and Applications*, 50 (2017).
21. **Zhisu Liu**, Chaoliang Luo, Existence of positive ground state solutions for Kirchhoff type equation with general critical growth, *Topological Methods in Nonlinear Analysis*, 49:(2017), 165–182.
22. **Zhisu Liu**, Shangjiang Guo, Existence and concentration of positive ground states for a Kirchhoff equation involving critical Sobolev exponent, *Zeitschrift für angewandte Mathematik und Physik* 66: (2015), 747–769.

23. **Zhisu Liu**, Shangjiang Guo, Multiple semiclassical states for coupled Schrödinger-Poisson equations with critical exponential growth. *Journal of Mathematical Physics*, 56: 041505 (2015).
24. **Zhisu Liu**, Shangjiang Guo, Existence of positive ground state solutions for Kirchhoff type problems, *Nonlinear Analysis*, 120: (2015), 1-13.
25. **Zhisu Liu**, Shangjiang Guo, On ground state solutions for the Schrödinger- Poisson equations with critical growth, *Journal of Mathematical Analysis and Applications*, 412:(2014) 435-448.
26. **Zhisu Liu**, Shangjiang Guo, On ground states for the Kirchhoff- type problem with a general critical nonlinearity, *Journal of Mathematical Analysis and Applications*, 426: (2015), 267-287.

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