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教学职位：副教授

学院职位：硕士生导师

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教育背景

学习经历:

2015.09-2021.04 俄罗斯莫斯科鲍曼国立技术大学 物理数学博士

工作经历:

2022.03-至今 大连海事大学 硕士生导师
2021.08-至今 大连海事大学 副教授
2022.12-至今 大连海事大学 博士后
2017.09-2020.12 俄罗斯莫斯科鲍曼国立技术大学 助教

研究领域

偏微分方程数值解法，计算流体力学，计算流变学，复合材料力学建模以及非线性连续介质力学等。主要关于有限差分法，渐近均质化方法和有限元方法。

代表性成果

2025 年

[1] Li S.G.*, Lv L.J., Liao M.Y., Numerical simulation of heat transfer and entropy generation due to the nanofluid natural convection with viscous dissipation in an inclined square cavity. *Numerical Heat Transfer, Part A: Applications*, 2025, 86(14): 4956-4986.

[2] Lv L.J., Li S.G.*, A New Compact Energy-Preserving Difference Scheme for the Generalized Rosenau-Kawahara-RLW Equation. *Bulletin of the Iranian Mathematical Society*, 2025, 51(1): 19.

2024 年

[1] 李树光, 曲凯. 多孔介质中单相气体局部流动的均质化建模. *应用数学和力学*, 2024, 41(1): 54-69.

[2] Qu K.*, Li S.G., Lv L.J., Liu X., A fourth-order compact difference scheme for solving 2D EFK equation. *Results in Applied Mathematics*, 2024, 22: 100441.

[3] Sun Y.*, Li S.G., Lv L.J., Soliton solutions of the (2+1)-dimensional Kaup system for water waves. *European Physical Journal Plus*, 2024, 139(8): 1-12.

2023 年

[1] Li S.G.*, Kravchenko O.V., Qu K., On the L^∞ convergence of a novel fourth-order compact and conservative difference scheme for the generalized Rosenau-KdV-RLW equation. *Numerical Algorithms*, 2023, 94: 789-816.

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| | <p>[2] Li S.G.*, Dimitrienko Y.I., Least squares finite element simulation of local transfer for a generalized Newtonian fluid in 2D periodic porous media. <i>Journal of Non-Newtonian Fluid Mechanics</i>, 2023, 316: 105032.</p> <p>[3] Li S.G.*, Fu H.S., A new high-order compact and conservative numerical scheme for the generalized symmetric regularized long wave equations. <i>International Journal of Computer Mathematics</i>, 2023, 100(5): 968-990.</p> |
| 2022 年 | <p>[1] Li S.G.*, Dimitrienko Y.I., Mathematical modeling for the local flow of a generalized Newtonian fluid in 3D porous media. <i>Applied Mathematical Modelling</i>, 2022, 105: 551-565.</p> <p>[2] Li S.G., Xu D., Zhang J., Sun C.J.*, A new three-level fourth-order compact finite difference scheme for the extended Fisher-Kolmogorov equation. <i>Applied Numerical Mathematics</i>, 2022, 178: 41-51.</p> |
| 2021 年 | <p>[1] Dimitrienko Y.I., Li S.G.*, Niu Y., Study on the dynamics of a nonlinear dispersion model in both 1D and 2D based on the fourth-order compact conservative difference scheme. <i>Mathematics and Computers in Simulation</i>, 2021, 182: 661-689.</p> <p>[2] Dimitrienko Y.I., Li S.G.*. Modeling of non-Newtonian fluid flows in porous textile structures under RTM technologies. <i>Journal of Physics: Conference Series</i>, 2021, 1990(1): 012053. (EI)</p> |
| 2020 年 | <p>[1] Dimitrienko Y.I., Li S.G.*. Numerical simulation of MHD natural convection heat transfer in a square cavity filled with Carreau fluids under magnetic fields in different directions. <i>Computational and Applied Mathematics</i>, 2020, 39(4): 1-26.</p> <p>[2] Dimitrienko Y.I., Li S.G.*. Modeling the nonlinear permeability of porous composite structures with non-Newtonian fluids. <i>IOP Conference Series: Materials Science and Engineering</i>, 2020, 934(1): 012014. (EI)</p> |
| 2019 年 | <p>[1] Li S.G.*. Numerical study of a conservative weighted compact difference scheme for the symmetric regularized long wave equations. <i>Numerical Methods for Partial Differential Equations</i>, 2019, 35(1): 60-83.</p> <p>[2] Димитриенко Ю.И., Шугуан Ли. Моделирование проницаемости не ньютоновских жидкостей в трех мерных композитных структурах на основе метода асимптотической гомогенизации. <i>Математическое моделирование и численные методы</i>, 2019, № 23(3), с. 19-38. (БАК)</p> <p>[3] Dimitrienko Y.I., Li S.G.*. Mathematical Simulation of local transfer for non-Newtonian uid in porous fabrics. <i>Journal of Physics: Conference Series</i>, 2019, 1392(1): 012023. (EI)</p> <p>[4] Dimitrienko Y.I., Li S.G.*. Modeling of Non-Newtonian resin flows in Composite Microstructures. <i>IOP Conference Series: Materials Science and Engineering</i>, 2019, 683(1): 012008. (EI)</p> |
| 2018 年 | <p>[1] Li S.G.*, Wu X.G., L^∞ error bound of conservative compact difference scheme for the generalized symmetric regularized long-wave (GSRLW) equations. <i>Computational and Applied Mathematics</i>, 2018, 37(3):</p> |

	2816-2836.
	[2] Димитриенко Ю.И., Шугуан Ли . Конечно-элементное моделирование неизоэнтальпического стационарного течения неньютоновской жидкости в сложных областях . <i>Математическое моделирование и численные методы</i> , 2018, № 18(2), с. 70 – 95. (БАК)
2017 年	[1] Wang H., Li S.G. , Wang J., A conservative weighted finite difference scheme for the generalized Rosenau-RLW equation. <i>Computational and Applied Mathematics</i> , 2017, 36(1): 63-78.
2016 年	[1] Li S.G.* . Numerical analysis for fourth-order compact conservative difference scheme to solve the 3D Rosenau-RLW equation. <i>Computers & Mathematics with Applications</i> , 2016, 72(9): 2388-2407. [2] Li S.G. , Wang J.*. Long-time convergence of numerical approximations for 2D GBBM equation. <i>Computational Mathematics and Mathematical Physics</i> , 2016, 56(3): 426-436.
2015 年	[1] Wang H., Wang J.*, Li S.G. , A new conservative nonlinear high-order compact finite difference scheme for the general Rosenau-RLW equation. <i>Boundary Value Problems</i> , 2015, 2015(1): 77. [2] Li S.G.* , Wang J.*, Luo Y.S., A fourth-order conservative compact finite difference scheme for the generalized RLW equation. <i>Mathematical Problems in Engineering</i> , 2015, 2015.
专利:	[1] 谭立国; 冷雪松; 霍建文; 李树光 ; 无人机船载着陆系统, 2019-3-15, 中国, CN201611021275.9 (发明专利).
代表性项目	[1] 国家自然科学基金, 青年科学基金项目, 在研, 主持. [2] 中国博士后科学基金, 面上项目, 在研, 主持. [3] 辽宁省教育厅高校基本科研项目, 青年项目, 在研, 主持. [4] 辽宁省自然科学基金, 博士科研启动基金计划项目, 结题, 主持.
荣誉奖励	[1] 2022 年大连市中国籍海外高层次人才 [2] 2021 年大连市引进高层次人才 “青年才俊” [3] 2020 年第六届中国国际 “互联网+” 大学生创新创业大赛总决赛 (国际参赛项目) 铜奖 [4] 2020 年国际论坛 «Ключевые тренды в композитах : наука и технологии» 优秀会议报告 [5] 2019 年国际会议 «Математика в приложениях » 优秀会议报告 [6] 2015 年 “国家建设高水平大学公派研究生项目” 赴俄罗斯专业人才培养计划
学术交流	

社会兼职

中国数学会计算机数学专业委员会委员
中国工业与应用数学学会油水资源数值方法专业委员会委员
中国力学学会会员
中国工业与应用数学学会会员
辽宁省数学会会员
大连市数学学会会员
Computers & Mathematics with Applications,
Numerical Algorithms,
Numerical Methods for Partial Differential Equations,
Applied Numerical Mathematics,
Applied Mathematics and Computation,
Mathematical Methods in the Applied Sciences,
Journal of Nonlinear Mathematical Physics
等国际期刊审稿人

团队成员

其他

