

# 个人简历

## 个人信息

姓名：游雄 性别：男  
民族：汉 政治面貌：党员  
学历：研究生 毕业院校：南京大学  
学位：博士 职称：教授

从事专业：应用数学与计算数学

研究领域：微分方程保结构计算、数学生物学与计算系统生物学

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## 教育背景

1987	本科	苏州大学	数学系
2001	硕士	南京理工大学	应用数学系
2009	博士	南京大学	数学系

## 工作经历

1987.8—1998.8	江苏省姜堰市大伦中学	一级教师
2001.—	南京农业大学理学院	讲师、副教授、教授、博导
2005.1—5	美国 Illinois 大学(UIUC)	访问学者
2010—2011	南京大学	博士后

## 科研项目

- 主持：国家自然科学基金面上项目：基因调控网络振子的结构理论与保结构模拟研究（批准号：11171155，起止时间：2012年—2015年）
- 参加：国家自然科学基金面上项目：高振荡量子动力系统的保结构算法与应用（批准号：11271186，起止时间：2013年—2016年，第一参加人）
- 参加：中央高校基本业务费自主创新重点研究项目：细胞酶促反应动力学的定性分析与高效数值模拟（批准号：KYZ201424，起止时间：2014年—2016年，第二参加人）
- 参加：中央高校基本业务费自主创新重点研究项目：具有负反馈环的非线性基因调控振荡系统的保结构数值模拟研究（批准号：Y0201100265，起止时间：2012年—2015年，第一参加人）
- 参加：教育部高校博士点专项基金项目：量子动力系统的保结构算法（批准号：20100091110033，起止时间：2011年—2013年，第一参加人）

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## 近期著作

### 专著

Xingyuan Wu, **Xiong You** and Bin Wang, Structure-Preserving Algorithms for Oscillatory Differential Equations, Springer, 2013.

### 期刊论文

1. Ruqiang Zhang, Wenjuan Jiang, Julius Osato Ehigie, Yonglei Fang and **Xiong You\***, Novel phase-fitted symmetric splitting methods for chemical oscillators, Journal of Mathematical Chemistry (2016) 1–21, in Press. DOI: 10.1007/s10910-016-0684-x
2. Yonglei Fang, Yanping Yang and **Xiong You\***, Revised trigonometrically fitted two-step hybrid methods with equation dependent coefficients for highly oscillatory problems, Journal of Computational and Applied Mathematics (2016), in Press. Available online 17 September 2016.
3. Yanwei Zhang, **Xiong You** and Yonglei Fang, Exponentially fitted multi-derivative linear methods for the resonant state of the Schrödinger equation, Journal of Mathematical Chemistry (2016) 1-15, in Press. DOI:10.1007/s10910-016-0683-y
4. Zhaoxia Chen, Ruqiang Zhang, Wei Shi and **Xiong You\***, New optimized symmetric and symplectic trigonometrically fitted RKN methods for second order oscillatory differential equations, International Journal of Computer Mathematics (2016) in Press. DOI: 10.1080/00207160.2016.1167197
5. Yanping Yang, Yonglei Fang and **Xiong You\***, Runge–Kutta–Nyström methods with equation dependent coefficients and reduced phase lag for oscillatory problems (2016), in Press. DOI: 10.1007/s10910-016-0685-9
6. Yanping Yang, Yonglei Fang, **Xiong You** and Bin Wang, Novel Exponentially Fitted Two-Derivative Runge-Kutta Methods with Equation-Dependent Coefficients for First-Order Differential Equations, Discrete Dynamics in Nature and Society 2016 (2016) Article ID 9827952, 6 pages.
7. Zhaoxia Chen, Juan Li, Ruqiang Zhang and **Xiong You\***, Exponentially Fitted Two-Derivative Runge–Kutta Methods for Simulation of Oscillatory Genetic Regulatory Systems, Computational & Mathematical Methods in Medicine 2015 (2015) Article ID 689137, 14 pages.

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8. Zhaoxia Chen, Zeyu Qiu, Juan Li and **Xiong You\***, Two-derivative Runge-Kutta-Nystrom methods for second-order ordinary differential equations, Numerical Algorithms 70 (2015) 897–927
9. **Xiong You\***, Yuanmei Zhou, Xiaohao Cheng, A novel family of P-stable symmetric extended linear multistep methods for oscillators, Applied Mathematics and Computation 249 (2014) 597–610
10. **Xiong You\***, Yonglei Fang, Jinxi Zhao, Special extended Nyström tree theory for ERKN methods, Journal of Computational and Applied Mathematics 263 (2014) 478–499.
11. **Xiong You**, Jinxi Zhao, Hongli Yang, Yonglei Fang, Xinyuan Wu\*, Order conditions for RKN methods solving general second-order oscillatory systems, Numerical Algorithms 66 (2014) 147–176.
12. Yonglei Fang, **Xiong You\***, Qinghe Ming, Trigonometrically fitted two-derivative Runge-Kutta methods for solving oscillatory differential equations, Numerical Algorithms 65 (2014) 651–667.
13. **Xiong You\***, Xueping Liu, Ibrahim Hussein Musa, Splitting Strategy for Simulating Genetic Regulatory Networks, Computational and Mathematical Methods in Medicine 2014 (2014) Article ID 683235, 9 pages.
14. Yonglei Fang, **Xiong You\***, New optimized two-derivative Runge-Kutta type methods for solving the radial Schrödinger equation equation, Journal of Mathematical Chemistry 52 (2014) 240–254.
15. Yanwei Zhang, Haitao Che, Yonglei Fang, **Xiong You\***, A new Trigonometrically Fitted Two-Derivative Runge-Kutta Method for the Numerical Solution of the Schrödinger Equation and Related Problems, Journal of Applied Mathematics 2013 (2013) Article ID 937858, 9 pages.
16. **Xiong You\***, Zhaoxia Chen, Director integrators of Runge-Kutta type for special third-order ordinary differential equations, Applied Numerical Mathematics 74 (2013) 128–150.
17. Yonglei Fang, **Xiong You\***, Qinghe Ming, A new phase-fitted modified Runge-Kutta pair for the numerical solution of the radial Schrödinger equation

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18. Yonglei Fang, **Xiong You\***, Qinghe Ming, Exponentially fitted two-derivative Runge-Kutta methods for the Schrodinger equation, *International Journal of Modern Physics C* 24 (2013) Article ID 1350073, 9 pages.
19. **Xiong You\***, Bingzhen Chen, Symmetric and symplectic exponentially fitted Runge-Kutta methods for Hamiltonian problems, *Mathematics and Computers in Simulation* 94 (2013) 76–95.
20. **Xiong You\***, Zhaoxia Chen, New explicit adapted Numerov methods for second-order oscillatory differential equations, *Applied Mathematics and Computation* 219 (11) (2013) 6241–6255.
21. Yonglei Fang, **Xiong You\***, Qinghe Ming, New optimized explicit modified RKN methods for the numerical solution of the Schrödinger equation, *Journal of Mathematical Chemistry* 51 (2013) 390–411.
22. **Xiong You\***, Limit-cycle-preserving simulation of gene regulatory oscillators, *Discrete Dynamics in Nature and Society*, 2012 (2012) Article ID 673296, 22 pages.
23. Yonglei Fang, **Xiong You\***, Zhaoxia Chen, New phase fitted and amplification fitted Numerov-type methods for periodic IVPs with two frequencies, *Abstract and Applied Analysis*, 2012 (2012), Article ID 742585, 15 pages.
24. Zhaoxia Chen, **Xiong You\***, Xin Shu, Mei Zhang, A new family of phase-fitted and amplification-fitted Runge-Kutta type methods for oscillators, *Journal of Applied Mathematics* 2012 (2012) Article ID 236281, 24 pages.
25. Xinyuan Wu\*, Bin Wang, Wei Shi, **Xiong You**, On extended RKN integrators for multidimensional perturbed oscillators with applications, *Applied Mathematical Modeling* 36 (2012) 1504–1513.
26. Zhaoxia Chen, **Xiong You\***, Wei Shi, Zhongli Liu, Symmetric and symplectic ERKN methods for oscillatory Hamiltonian systems, *Computer Physics Communications* 183 (2012) 86–98.
27. Jiyong Li, Bin Wang, **Xiong You**, Xinyuan Wu\*, Two-step extended RKN methods for oscillatory systems, *Computer Physics Communications* 182 (2011) 2486–2507.

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