Junping Shi[1]

Contact Information

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Research Interests

- Nonlinear Partial Differential Equations (Elliptic and Parabolic Type).
- Applied Nonlinear Analysis; Bifurcation Theory; Infinite Dimensional Dynamical Systems.
- Mathematical Biology; Natural Resource Modeling; Spatiotemporal Pattern Formation.
- Other Applied Mathematics (Variational methods, Optimization, Celestial mechanics, etc.).

Education

- Ph.D. in Mathematics, Brigham Young University, Provo, Utah, USA, 1993-1998
  Advisers: Peter W. Bates, Tiancheng Ouyang
- Undergraduate in Mathematics, Nankai University, Tianjin, China, 1990-1993

Academic Positions

1. August 2012 – : Tenured Professor, College of William and Mary
2. August 2013 – August 2014: Acting BioMath Director, College of William and Mary
3. September 2006 – August 2012: Tenured Associate Professor, College of William and Mary
4. August 2000 – August 2006: Assistant Professor, College of William and Mary
5. July 1998 – July 2000: Visiting Assistant Professor, Tulane University
6. September 2001 – : Guest Professor, Harbin Normal University, China
   (March 2006–March 2009, Longjiang Scholar Chair Professor)
7. January 2011 – : Guest Professor, Shanxi University, China
8. Feb–May, 2013: Visiting Professor, National Center of Theoretical Science, Hsinchu, Taiwan
9. Sept–Dec, 2007: Visiting Associate Professor, National Tsing Hua University, Hsinchu, Taiwan
10. Feb–Apr, 2005: Visiting Scholar, National Tsing Hua University, Hsinchu, Taiwan; University of Sydney, Sydney, NSW, Australia; University of New England, Armidale, NSW, Australia; and Tokyo Metropolitan University, Tokyo, Japan
11. May–June 2001: Visiting Scholar, Beijing (Peking) University, China

Honors and Awards

1. Margaret Hamilton Professor of Mathematics, 2016–2019.
2. Nominee for the State Council of Higher Education in Virginia (SCHEV) Outstanding Faculty Awards (OFA), 2015.
3. Plumeri Awards for Faculty Excellence, College of William and Mary, 2013-2015.
4. 100 Talent Program, Shanxi Province, China, 2010–2013.
5. Arts and Sciences Distinguished Associate Professor of Mathematics, College of William and Mary, 2010–2013.
6. Second class scientific research award, Heilongjiang province, China, 2008. (with Yuwen Wang, Ping Liu, Renhao Cui, Yuhua Zhao.)
7. Faculty Award for the Advancement of Scholarship by the Alpha Chapter of Phi Beta Kappa, College of William and Mary, 2008.
8. Second class research award from Department of Education of Heilongjiang province, China, 2003. (with Yuwen Wang, Wen Song, Mingyao Xu and Shaorong Pan.)
9. Ralph E. Powe Junior Faculty Enhancement Award, Oak Ridge Associated Universities, 2002.

[1] Date: January 3, 2017

Editorial Positions

1. (2016-) Associate Editor, Communications on Pure and Applied Analysis
2. (2016-) Associate Editor, Japan Journal of Industrial and Applied Mathematics
3. (2009-) Associate Editor, Journal of Mathematical Analysis and Applications
4. (2008-) Associate Editor, Applicable Analysis
5. (2008-) Editorial board, International Journal of Differential Equations
6. (2010-) One of editors, problem session, Electronic Journal of Differential Equations. (`http://math.uc.edu/ode/odeprobs/odeprobs.html`)

Courses Taught

College of William and Mary (all are undergraduate courses, 3-4 credits)

1. Spring 2017: Math 212 (Multivariate Calculus), Math 442(Partial Differential Equations)
2. Fall 2016: Math 214 (Foundation of Mathematics), Math 302 (Differential Equations)
3. Spring 2016: Math 214(Foundation of Mathematics), Math 442(Partial Differential Equations)
4. Fall 2015: Math 212 (Multivariate Calculus), Math 302 (Differential Equations)
5. Spring 2015: Math 214(Foundation of Mathematics), Math 442(Partial Differential Equations)
   Math 410 (Data Science: theory and applications, 1 credit, co-teach with Gexin Yu)
6. Fall 2014: Math 214(Foundation of Mathematics), Math 345(Intro to Mathematical Biology)
7. Spring 2014: Math 214(Foundation of Mathematics), Math 442(Partial Differential Equations)
   Math 410 (Big Data Analysis, 1 credit, co-teach with Tanujit Dey)
8. Fall 2013: Math 214(Foundation of Mathematics),
   Math 441(Ordinary Differential Equations II)
9. Fall 2012 and Spring 2013: sabbatical leave, no teaching
10. Spring 2012: Math 112(Calculus II), Math 442(Partial Differential Equations),
    Math 496 (Matt Becker, Tim Becker, Patrick King, Tim McDade),
    Math 410(Topics in Computational Mathematics, 1 credit, co-teach with Jesse Berwald)
11. Fall 2011: Math 214(Foundation of Mathematics),
    Math 441(Ordinary Differential Equations II),
    Math 495 (Matt Becker, Tim Becker, Patrick King, Tim McDade)
12. Spring 2011: Math 214(Foundation of Mathematics), Math 442(Applied Mathematics, II),
    Math 410(Topics in Computational Mathematics, 1 credit, co-teach with Drew LaMar)
13. Fall 2010: Math 214(Foundation of Mathematics), Math 441(Applied Mathematics, I)
14. Spring 2010: Math 302(Differential Equations), Math 442(Applied Mathematics, II),
    Math 410(Topics in Computational Mathematics, 1 credit),
    Math 496 (Michael Essman, William Jordan-Cooley, Yuanyuan Liu)
15. Fall 2009: Math 302(Differential Equations), Math 441(Applied Mathematics, I),
    Math 410(Problem Solving Seminar, 1 credit, co-teach with Dey, Hasler, Yu)
    Math 495 (Michael Essman, William Jordan-Cooley, Yuanyuan Liu)
16. Spring 2009: Math 311 (Elementary Analysis), Math 490(Math. Biology and PDE)
    Math 496 (Daniel Hariprasad)
17. Fall 2008: Math 111 (Calculus I), Math 311 (Elementary Analysis)
    Math 410(Problem Solving Seminar, 1 credit, co-teach with Dey, Hasler, Vinroot, Yu)
    Math 495 (Daniel Hariprasad)
18. Spring 2008: Math 213(Multi-variable Calculus), Math 302(Differential Equations)
19. Spring and Fall 2007: sabbatical leave, no teaching
20. Fall 2006: Math 131 (Calculus for Life sciences I), Math 345 (Math. Models in biology)
    Math 410(Problem Solving Seminar, 1 credit)
21. Spring 2006: Math 302(Differential Equations), Math 490(Math. Biology and PDE)

22. Fall 2005: Math 302(Differential Equations), Math 490(Problem solving seminar)
23. Spring 2005: pre-tenure junior research leave, no teaching
24. Fall 2004: Math 112(Calculus II, 2 sections), Math 302(Differential Equations)
25. Spring 2004: Math 213(Multi-variable Calculus), Math 490(Math. Biology and PDE)
26. Fall 2003: Math 112(Calculus II), Math 302(Differential Equations)
27. Spring 2003: Math 112(Calculus II, 2 sections)
28. Fall 2002: Math 111(Calculus I), Math 441(Applied Mathematics, I)
29. Spring 2002: Math 302(Differential Equations), Math 490(Math. Biology and PDE)
30. Fall 2001: Math 302(Differential Equations), Math 410(510)(Math. Models in biology)
31. Spring 2001: Math 111(Calculus I), Math 112(Calculus II)
32. Fall 2000: Math 111(Calculus I, 2 sections)

Tulane University (all are undergraduate courses)

1. Spring 2000: Math 111(Probability and statistics), Math 224(Differential Equations)
2. Fall 1999: Math 221(Multi-variable calculus), Math 224(Differential Equations)
3. Spring 1999: Math 122(Calculus II), Math 224(Differential Equations)
4. Fall 1998: Math 121(Calculus I), Math 224(Differential Equations)

Brigham Young University (all are undergraduate courses)

1. Fall 1997: Math 312(Advanced engineering mathematics)
2. Summer 1997: Math 112(Calculus I)
3. Spring 1997: Math 110(College Algebra)
4. Fall 1996: Math 110(College Algebra)

National Tsing Hua University, Taiwan (graduate course)

1. Spring 2013: Math 637 (Reaction-diffusion models and bifurcation theory)
2. Fall 2007: Math 6101-01 (Bifurcation Theory in Banach Spaces and Application to Semilinear Elliptic Equations and Systems)

Undergraduate Students Supervised

REU students (co)-supervised in College of William and Mary: (27)

2004–2010:

Name	Year	support source	position after graduation
Young He Lee	2004	NSF	
Lena Shebakov	2004	NSF	Ph.D(applied math), U. Washington
Jackie Taber	2004	NSF	M.S.(COR), William & Mary
Kristina Little	2006	NSF	Ph.D(bioengineering), U. Virginia
Derek LaMontagne	2006	NSF	Ph.D(chemistry), U. Florida
Fumie Hirata	2006		M.S(math), Keio U., Japan
Michael Essman	2008	NSF-CSUMS	Researcher in military research center
Daniel Hariprasad	2009	NSF-CSUMS,UBM	Ph.D(applied math) U. Arizona
William Jordan-Cooley	2009	NSF-CSUMS,UBM	M.S.(education) Columbia U.
Yuanyuan Liu	2009	W&M Biomath	Ph.D(economics), Georgetown U.
Ruoyan Sun	2010	W&M Biomath	M.S.(public health) John Hopkins
Matt Becker	2010	NSF-CSUMS,NSF	Ph.D(applied math), U. Maryland
Tim Becker	2010	NSF-CSUMS,W&M	Ph.D(applied math), Rice U.

2011–

Name	Year	support source	position after graduation
Patrick King	2011	NSF-CSUMS	Ph.D(physics), U. Virginia
Tim McDade	2011	NSF-CSUMS	Microsoft
James Janopaul-Naylor	2011	Monroe Freshman	M.D., U. Penn
Cathrine King	2011	Monroe Freshman	M.S.(COR), William & Mary
Nicholas Ducharme-Barth	2012	NSF-CSUMS	Ph.D(marine sci), U. Florida
Wei Xia	2012	NSF	Ph.D(indu engi), Lehigh U.
Wade Hodson	2014	NSF	Ph.D(physics), U. Maryland
Jing Yi Zhou	2014	NSF	
Haomiao Li	2014	NSF	M.S.(Statistics), Yale U.
Mayee Chen (high school)	2014		Princeton U. (undergrad.)
Kristina Kelly	2015	NSF-EXTREEMS-QED	
Ben Dykstra	2015	NSF-EXTREEMS-QED	
Danella Singer	2015	NSF-EXTREEMS-QED	
Margaret Swift	2015	NSF	
Yi Zhang	2016	NSF	
Jasper Short	2016	NSF-EXTREEMS-QED	
Xiang Liu	2016		

REU students supervised in China: (2)

Name	Year	Institute	Position after graduation
Jiayin Jin	2008	Harbin Institute of Technology	Ph.D(math), Michigan State U.
Yongnan Zhao	2008	Harbin Normal University	

Honors students advised in College of William and Mary: (8)

Name	Year	position after graduation	co-advisers
Daniel Hariprasad	2009	Ph.D(applied math) U. Arizona	
Michael Essman	2010	Researcher in military research center	
William Jordan-Cooley	2010	M.S.(education), Columbia U.	R.Lipcius,L.Shaw
Yuanyuan Liu	2010	Ph.D(economics), Georgetown U.	
Matt Becker	2012	Ph.D(applied math), U. Maryland	L.Shaw
Tim Becker	2012*	Ph.D(applied math), Rice U.	R.Lipcius,L.Shaw
Patrick King	2012	Ph.D(physics), U. Virginia	D.Vassiliu
Tim McDade	2012	Microsoft	

*: supported by 2011 William and Mary Honors Fellowship

Serve in committee of Marc McGuigan (BS, Physics, 2003), Heather Wiseman (BS, Biology, 2006), David Gould (BS, Mathematics, 2009), Niha Zubair (BS, Mathematics, 2009), Georgia Pfeiffer (BS, Mathematics, 2011), Ben Holman (BS, Mathematics, 2011), Matt Peppe (BS, Mathematics, 2011), Brian Waldman (BS, Mathematics, 2012), Kyle Zora (BS, Physics, 2012), Ryan Gryder (BS, Mathematics, 2014), Peibo An (BS, Physics, 2016), Eve Chase (BS, Physics, 2016)

Graduate Students Supervised

Master degree students supervised in Harbin Normal University: (25, all jointly with Yuwen Wang)

Jinfeng Wang, Yuhua Zhao (MS, 2005); Renhao Cui, Guanqi Liu, Jia Duo (MS 2006);
Rui Diao, Hui Ding, Jili Fu, Linan Sun, Yanan Wang (MS 2008);
Xinying Hao, Ting Li, Yuhang Liu, Da Yu, Fuju Zhang, Xin Zhang (MS 2009);
Rui Wang, Min Cheng, Li Li, Xiuhong Feng, Ping Li, Hongbo Duan (MS 2010);
Bao Ma, Xiaoling Wang, Dong Pan (MS 2011).

Ph.D students supervised in China (6 completed, 3 current)

Name	Year	Institute	Co-adviser	Current Position
Ping Liu	2008	NNU	Yuwen Wang	Professor, Harbin Normal U.
Fengqi Yi	2008	HIT	Junjie Wei	Professor, Harbin Engineering U.
Jinfeng Wang	2011	HIT	Junjie Wei	Asso. Prof., Harbin Normal U.
Yuhua Zhao	2012	NNU	Yuwen Wang	Lecturer, Harbin Normal U.
Shanshan Chen	2013	HIT	Junjie Wei	Asso. Prof., Harbin Inst. Tech. Weihai
Renhao Cui	2014	HIT	Boying Wu	Asso. Prof., Harbin Normal U.
Sainan Wu	current	HIT	Boying Wu	
Wenjie Ni	current	HIT	Mingxin Wang	
Qingyan Shi	current	TJU	Yongli Song	

HIT=Harbin Institute of Technology, NNU=Northeast Normal University, TJU=Tongji University

Ph.D students supervised in US (1 current): Yan Wang (College of William and Mary, 2014-)

Serve as Ph.D Thesis external reviewer (4)

Name	Year	Institute	Adviser
Rui Hu	2009	Memorial University of New Foundland, Canada	Yuan Yuan
Rui Peng	2010	University of New England, Australia	Yihong Du
Jerome Goddard II	2011	Mississippi State University, USA	R. Shivaji
Sarath Sasi	2012	Mississippi State University, USA	R. Shivaji

Serves as College of William and Mary Ph. D committee member for Xiao Wang (2015), Diane Christine Pelejo (2016),

Grants, Fellowships

All fellowships, grants, contracts awarded by outside agencies. (various travel supports not listed)

Funding in US (as PI, co-PI or senior personnel)

1. *EXTREEMS-QED: Computational and Statistical theory and techniques in the study of large data sets*, DMS-1331021, National Science Foundation, 2013-2016, $512,613. (PI: J. Shi, co-PI: T. Dey, C. Li and G. Yu) (possible additional funding for 2016-2018, $366,885)
2. *Collaborative Research: Multiscale Modeling of Oyster Reef Dynamics*, DMS-1313243, National Science Foundation, 2013-2016, $151,328. (PI: L. Shaw, co-PI: J. Shi) (collaborating with Virginia Institute of Marine Science, $128,672, PI: R. Lipcius, co-PI: J. Shen)
3. *Mathematical Studies of Spatial Bistability in Ecological Systems*, DMS-1022648, National Science Foundation, 2010-2014, $157,492. (PI: J. Shi)
4. *CSUMS: Theory, Techniques, and Research in Computational Mathematics*, DMS-0703532, National Science Foundation, 2007-2013, $884,029. (PI: C. Li, co-PIs: S. Day, R. Lewis, D. Lutzer, D. Philips, J. Shi (acting PI for 2010-2012), G. Smith)
5. *UBM: Undergraduate Research in Metapopulation Ecology*, EF-0436318, National Science Foundation, 2004-2009, $647,000. (PI: D. Cristol, co-PIs: J. Swaddle, S. Schreiber, senior personnel: R. Chambers, T. Killingback, J. Shi.)
6. *Persistence and pattern formation in biological systems*, DMS-0314736, National Science Foundation, 2003-2007, $108,545. (PI: J. Shi)
7. American Mathematical Society Ky Fan fund (with Chi-Kwong Li), 2003-2004. $3,500 plus $4,000 matching fund from College of William and Mary.
8. Ralph E. Powe Junior Faculty Enhancement Award, Oak Ridge Associated Universities, 2002. $5,000.
9. *Theory and Applications of Semilinear Elliptic and Parabolic Equations*, Board of Regents of Louisiana, 1999-2001, $15,501. (PI: J. Shi)

All summer grants and Faculty Research Assignments received from William and Mary

1. *Data analysis and visualization from the perspective of NSF EXTREEMS-QED grant.* Charles Center Fellowships / May Seminar, College of William and Mary, 2014, $2,000. (Project coordinators: J. Shi, T. Dey, C.-K. Li, Participants: 10)
2. Faculty Semester Research Assignment, Fall 2012 and Spring 2013.
3. *Bistability in Biological and Chemical Systems*, Summer Research Grant, College of William and Mary, 2008, $5,000. (PI: J. Shi)
4. Faculty Semester Research Assignment, Spring 2007 and Fall 2007.
5. Junior Research Leave, Spring 2005.
6. *Reaction Diffusion Equations and Applications*, Summer Research Grant, College of William and Mary, 2003, $4,000. (PI: J. Shi)
7. *Studies of Nonlinear Partial Differential Equations from Fishery Management*, Summer Research Grant, College of William and Mary, 2002, $4,500. (PI: J. Shi)
8. *Qualitative Studies of Nonlinear Partial Differential Equations*, Summer Research Grant, College of William and Mary, 2001, $6,000. (PI: J. Shi)
9. *Developing a revised calculus curriculum for business and economics students at W&M*, Charles Center Fellowships / May Seminar, College of William and Mary, 2001, $2,700. (Project Coordinator: C.-K. Li, Participants: D. Lutzer, J. Shi, B. Robeson, C. Moody)
10. Startup grant, College of Arts and Sciences, College of William and Mary, 2000-2003, $25,000. (PI: J. Shi)

Funding in China

1. *Quasilinear generalized inverse, Banach manifold and bifurcation analysis of nonlinear Equations*, Natural Science Foundation of China, 2015-2017, 700,000 Chinese Yuan (about $114,000 in 2014). (PI: Y. Wang, co-PI: J. Shi, P. Liu)
2. *Bifurcation analysis for reaction-diffusion systems with non-monotone structure*, NSFY-11201101, National Natural Science Foundation of China, 2013-2015, 220,000 Chinese Yuan (about $35,000 in 2012). (PI: J. Wang, co-PI: J. Shi)
3. *Analytic Bifurcation Theory in Infinite Dimensional Space and Applications in Ecological Models*, NSFY-11101110, National Natural Science Foundation of China, 2012-2014, 230,000 Chinese Yuan (about $36,000 in 2011). (PI: P. Liu, co-PI: J. Shi, S. Shi)
4. *Nonlinear Generalized Inverse and Solution Set of Nonlinear Equations and Applications*, 11071051, National Natural Science Foundation of China, 2011-2013, 320,000 Chinese Yuan (about $47,000 in 2010). (PI: Y. Wang, co-PI: J. Ma, J. Shi)
5. *Applications of Singularity Theory, Generalized Inverse in Bifurcation Problems and Nonlinear Analysis*, 10671049, National Natural Science Foundation of China, 2007-2009, 267,000 Chinese Yuan (about $33,000 in 2006). (PI: Y. Wang, co-PI: J. Ma, J. Shi)
6. *Oversea Chinese Research Fund*, Heilongjiang province, China, 2003-2006. 50,000 Chinese Yuan (about $6,200). (PI: Y. Wang, co-PI: J. Shi)

Refereed Publications (Journal or Book Chapters)

Electronic version: Click on URL to access the full text of papers
Or downloadable from `http://jxshix.people.wm.edu/publication.html`
$*$: PhD student, $**$: MS student, and $***$: undergraduate student, at time of preparation of papers.

1. Xiangping Yan, Junping Shi,
   Stability switches in a Logistic population model with mixed instantaneous and delayed density dependence. To appear in **Journal of Dynamics and Differential Equations**.
   `http://dx.doi.org/10.1007/s10884-015-9432-3`

2. Zhanping Liang, Fuyi Li, Junping Shi,
Positive solutions of Kirchhoff type nonlocal elliptic equation: a bifurcation approach.
To appear in **Proceedings of Royal Society of Edinburgh Section A.**

3. Sainan Wu*, Junping Shi, Boying Wu,
Global existence of solutions to a quasilinear attraction-repulsion chemotaxis model with growth.
To appear in **Communications on Pure and Applied Analysis**.

4. Jitao Sun, Qing-guo Wang, Junping Shi, Fangfang Jiang,
On the existence and uniqueness of a limit cycle for a Liénard system with a discontinuity line.
Communications on Pure and Applied Analysis. 15, (2016), 2509–2526.
`http://dx.doi.org/10.3934/cpaa.2016047`

5. Junping Shi, Ratnasinham Shivaji,
Uniqueness of positive solutions to cooperative Hamiltonian elliptic systems.
Electronic Journal of Differential Equations Conference. 23, (2016), 155–173.
`http://ejde.math.txstate.edu/conf-proc/23/s2/abstr.html`

6. Sainan Wu, Junping Shi, Boying Wu,
Global existence of solutions to a diffusive predator-prey model with prey-taxis.
Journal of Differential Equations. 260, (2016), 5847–5874.
`http://dx.doi.org/10.1016/j.jde.2015.12.024`

7. Jinfeng Wang, Junjie Wei, Junping Shi,
Global bifurcation analysis and pattern formation in homogeneous diffusive predator-prey systems. **Journal of Differential Equations**. 260, (2016), 3495–3523.
`http://dx.doi.org/10.1016/j.jde.2015.10.036`

8. Yulian An, Chan-Gyun Kim, Junping Shi,
Exact Multiplicity of Positive Solutions for a p-Laplacian Equation with Positive Convex Nonlinearity. **Journal of Differential Equations**. 260, (2016), 2091–2118.
`http://dx.doi.org/10.1016/j.jde.2015.09.058`

9. Jun Wang, Junping Shi,
Standing waves of a weakly coupled Schrodinger system with distinct potential functions.
Journal of Differential Equations. 260, (2016), 1830–1864.
`http://dx.doi.org/10.1016/j.jde.2015.09.052`

10. Chan-Gyun Kim, Zhanping Liang, Junping Shi,
Existence of positive solutions to a Laplace equation with nonlinear boundary condition.
Zeitschrift fuer Angewandte Mathematik und Physik (ZAMP). 66 (2015), 3061–3083.
`http://dx.doi.org/10.1007/s00033-015-0578-y`

11. Jun Zhou, Junping Shi,
Pattern Formation in a general glycolysis reaction-diffusion system.
IMA Journal of Applied Mathematics. 80, (2015), 1703–1738.
`http://dx.doi.org/10.1093/imamat/hxv013`

12. Jianjun Paul Tian, Junping Shi, Jingan Cui,
A mathematical model for high pathogenicity avian influenza viruses emerging from outbreaks with low pathogenicity avian influenza viruses. **Dynamics of Continuous, Discrete and Impulsive Systems Series B: Applications & Algorithms**. 22, (2015), 359–379.

13. Fangfang Jiang*, Junping Shi, Jitao Sun, On the number of limit cycles for discontinuous generalized Lienard polynomial differential systems.
International Journal of Bifurcation and Chaos. 25, (2015), 1550131 (10 pages).
`http://dx.doi.org/10.1142/S021812741550131X`

14. Feng-Bin Wang, Junping Shi, Xingfu Zou,
Global Dynamics of Insect Pathogens in Spatial Habitats.
Communications on Pure and Applied Analysis. 14 (2015), 2535–2560.
`http://dx.doi.org/10.3934/cpaa.2015.14.2535`

15. Leiga Zhao, Fukun Zhao, Junping Shi,
Higher dimensional solitary waves generated by second-harmonic generation in quadratic media. **Calculus of Variations and Partial Differential Equations**. 54 (2015), 2657–2691.
http://dx.doi.org/10.1007/s00526-015-0879-1

16. Chuncheng Wang, Rongsong Liu, Junping Shi, and Carlos Martinez del Rio,
Traveling waves of a mutualistic model of mistletoes and birds.
Discrete and Continuous Dynamical Systems A. 35, (2015), 1743–1765.
http://dx.doi.org/10.3934/dcds.2015.35.1743

17. Fuyi Li, Yuhua Li, and Junping Shi,
Existence of positive solutions to Schrodinger-Poisson type systems with critical exponent.
Communications in Contemporary Mathematics. 16, (2014) 1450036 (28 pages)
http://dx.doi.org/10.1142/S0219199714500369

18. Sze-Bi Hsu, Junping Shi and Feng-Bin Wang,
Further studies of a reaction-diffusion system for an unstirred chemostat with internal storage.
Discrete and Continuous Dynamical Systems B. 19, (2014), 3169–3189.
http://dx.doi.org/10.3934/dcdsb.2014.19.3169

19. Xin Zhang**, Jinfeng Wang, Junping Shi and Yuwen Wang,
Properties of limit cycle in a class of general predator-prey systems.
Applied Mathematics and Computation. 242, (2014), 397–406.
http://dx.doi.org/10.1016/j.amc.2014.05.020

20. Chuncheng Wang, Rongsong Liu, Junping Shi and Carlos Martinez del Rio,
Spatiotemporal Mutualistic Model of Mistletoes and Birds.
Journal of Mathematical Biology. 68, No. 6, (2014), 1479–1520.
http://dx.doi.org/10.1007/s00285-013-0664-8

21. Zhanping Liang, Fuyi Li, Junping Shi,
Positive solutions to Kirchhoff type equations with nonlinearity having prescribed asymptotic behavior. **Annales de l'Institut Henri Poincare / Analyse non lineaire**. 31, No. 1, (2014), 155–167. http://dx.doi.org/10.1016/j.anihpc.2013.01.006

22. Shanshan Chen, Junping Shi and Junjie Wei,
Bifurcation analysis of the Gierer-Meinhardt system with a saturation in the activator production. **Applicable Analysis**. 93, No. 6, (2014), 1115-1134.
http://dx.doi.org/10.1080/00036811.2013.817559

23. Jun Zhou, Chan-Gyun Kim, Junping Shi,
Positive steady state solutions of a diffusive Leslie-Gower predator-prey model with Holling type II functional response and cross-diffusion.
Discrete and Continuous Dynamical Systems A. 34, No. 9, (2014), 3875–3899.
http://dx.doi.org/10.3934/dcds.2014.34.3875

24. Jun Zhou and Junping Shi,
Qualitative Analysis of an Autocatalytic Chemical Reaction Model with Decay.
Proceedings of Royal Society of Edinburgh Section A. 144, No. 2, (2014), 427–446.
http://dx.doi.org/10.1017/S0308210512001667

25. Ping Liu, Junping Shi, Rui Wang** and Yuwen Wang,
Bifurcation Analysis of a Generic Reaction-Diffusion Turing model.
International Journal of Bifurcation and Chaos. 24, No. 4, (2014), 1450042 (12 pages).
http://dx.doi.org/10.1142/S0218127414500424

26. Renhao Cui*, Junping Shi and Boying Wu,
Strong Allee effect in a diffusive predator-prey system with a protection zone.
Journal of Differential Equations. 256, No. 1, (2014), 108–129.
http://dx.doi.org/10.1016/j.jde.2013.08.015

27. Fuyi Li, Yuhua Li and Junping Shi,
Existence of positive solutions to Kirchhoff type problems with zero mass.

Journal of Mathematical Analysis and Applications. 410, No. 1, (2014), 361–374.
http://dx.doi.org/10.1016/j.jmaa.2013.08.030

28. Ping Liu, Junping Shi and Zhian Wang,
Pattern formation of the attraction-repulsion Keller-Segel system.
Discrete and Continuous Dynamical Systems B. 18, No. 10, (2013), 2597–2625.
http://dx.doi.org/10.3934/dcdsb.2013.18.2597

29. Renhao Cui, Ping Li**, Junping Shi, Yunwen Wang,
Existence, uniqueness and stability of positive solutions for a class of semilinear elliptic systems. **Topological Methods in Nonlinear Analysis**. 42, No. 1, (2013), 91–104.

30. Jiayin Jin***, Junping Shi, Junjie Wei, and Fengqi Yi,
Bifurcations of patterned solutions in diffusive Lengyel-Epstein system of CIMA chemical reaction. **Rocky Mountain Journal of Mathematics**. 43, No. 5, (2013), 1637–1674.
http://dx.doi.org/10.1216/RMJ-2013-43-5-1637

31. Jun Zhou and Junping Shi,
Uniqueness of the positive solution for a non-cooperative model of nuclear reactors.
Applied Mathematics Letter. 26, No. 10, (2013), 1005–1007.
http://dx.doi.org/10.1016/j.aml.2013.05.007

32. Jinfeng Wang, Junping Shi and Junjie Wei,
Nonexistence of periodic orbits for predator-prey system with strong Allee effect in prey populations. **Electronic Journal of Differential Equations**. 2013, No. 164, (2013), 1–14.
http://ejde.math.txstate.edu/Volumes/2013/164/abstr.html

33. Ping Liu, Junping Shi, Yuwen Wang and Xiuhong Feng**,
Bifurcation Analysis of Reaction-Diffusion Schnakenberg Model.
Journal of Mathematical Chemistry. 51, No. 8, (2013), 2001–2019.
http://dx.doi.org/10.1007/s10910-013-0196-x

34. Chan-Gyun Kim and Junping Shi,
Multiple Positive Solutions for p-Laplacian Equation with Weak Allee Effect Growth Rate.
Differential and Integral Equations. 26, No. 7/8, (2013), 707–720.
http://projecteuclid.org/euclid.die/1369057813

35. Linan Sun**, Junping Shi, Yuwen Wang,
Existence and uniqueness of steady state solutions of a nonlocal diffusive logistic equation.
Zeitschrift fuer Angewandte Mathematik und Physik (ZAMP). 64, No. 4, (2013), 1267–1278. http://dx.doi.org/10.1007/s00033-012-0286-9
Erratum: 64, No. 4, (2013), 1279–1281. http://dx.doi.org/10.1007/s00033-013-0336-y

36. Chan-Gyun Kim and Junping Shi,
Existence and Multiplicity of Positive Solutions to a Quasilinear Elliptic Equation with Strong Allee Effect Growth Rate. **Results in Mathematics**. 64, No. 1 (2013), 165–173.
http://dx.doi.org/10.1007/s00025-013-0306-x

37. Jun Zhou, Junping Shi,
The existence, bifurcation and stability of positive stationary solutions of a diffusive Leslie-Gower predator-prey model with Holling-type II functional responses.
Journal of Mathematical Analysis and Applications. 405, No. 2, (2013), 618–630.
http://dx.doi.org/10.1016/j.jmaa.2013.03.064

38. Junping Shi,
Absolute Stability and Conditional Stability in General Delayed Differential Equations. In "Advances in Interdisciplinary Mathematical Research", Edited by Bourama Toni. Springer Proceedings in Mathematics & Statistics, Volume 37, 2013, 117–131.
http://dx.doi.org/10.1007/978-1-4614-6345-0_5

39. Ping Liu, Junping Shi, Yuwen Wang,
A double saddle-node bifurcation theorem.
Communication of Pure and Applied Analysis. 12, No. 6, (2013), 2923–2933.
http://dx.doi.org/10.3934/cpaa.2013.12.2923

40. Ping Liu, Junping Shi, Yuwen Wang,
Bifurcation from a Degenerate Simple Eigenvalue.
Journal of Functional Analysis. 264, No. 10, (2013), 2269–2299.
http://dx.doi.org/10.1016/j.jfa.2013.02.010

41. Shanshan Chen*, Junping Shi,
Global Attractivity of Equilibrium in Gierer-Meinhardt System with Activator Production Saturation and Gene Expression Time Delays.
Nonlinear Analysis Series B: Real World Applications. 14, No. 4, (2013), 1871–1886.
http://dx.doi.org/10.1016/j.nonrwa.2012.12.004

42. Shanshan Chen*, Junping Shi, Junjie Wei,
Time delay induced instabilities and Hopf bifurcations in general reaction-diffusion systems.
Journal of Nonlinear Science. 23, No. 1, (2013), 1–38.
http://dx.doi.org/10.1007/s00332-012-9138-1

43. Xin Li*, Weihua Jiang, Junping Shi,
Hopf bifurcation and Turing instability in the reactiondiffusion Holling-Tanner predator-prey model. **IMA Journal of Applied Mathematics**. 78, No. 2, (2013), 287–306.
http://dx.doi.org/10.1093/imamat/hxr050

44. Shanshan Chen*, Junping Shi, Junjie Wei,
The effect of delay on a diffusive predator-prey system with Holling type-II predator functional response. **Communications on Pure and Applied Analysis**, 12, No. 1, (2013), 481–501.
http://dx.doi.org/10.3934/cpaa.2013.12.481

45. Michael Essman***, Junping Shi,
Bifurcation diagrams of coupled Schrödinger equations
Applied Mathematics and Computation, 219, No. 8, (2012), 3646–3654.
http://dx.doi.org/10.1016/j.amc.2012.09.061

46. Ying Su, Junjie Wei, Junping Shi,
Hopf bifurcation in a diffusive logistic equation with mixed delayed and instantaneous density dependence. **Journal of Dynamics and Differential Equations**, 24, No. 4, (2012), 897–925. http://dx.doi.org/10.1007/s10884-012-9268-z

47. Shanshan Chen*, Junping Shi,
Stability and Hopf Bifurcation in a diffusive logistic population model with nonlocal delay effect.
Journal of Differential Equations, 253, No. 12, (2012), 3440–3470.
http://dx.doi.org/10.1016/j.jde.2012.08.031

48. Chan-Gyun Kim, Junping Shi,
Global continuum and multiple positive solutions to a p-Laplacian boundary-value problem.
Electronic Journal of Differential Equations, 2012 (2012), No. 106, pp. 1–12.
http://ejde.math.txstate.edu/Volumes/2012/106/kim.pdf

49. Yuhua Li, Fuyi Li, Junping Shi,
Existence of a positive solution to Kirchhoff type problems without compactness conditions.
Journal of Differential Equations, 253, (2012), 2285–2294.
http://dx.doi.org/10.1016/j.jde.2012.05.017

50. Yuhua Zhao*, Yuwen Wang, Junping Shi,
Steady states and dynamics of an autocatalytic chemical reaction model with decay.
Journal of Differential Equations, 253, (2012), 533–552.
http://dx.doi.org/10.1016/j.jde.2012.03.018

51. Shanshan Chen*, Junping Shi, Junjie Wei,
Global stability and Hopf bifurcation in a delayed diffusive Leslie-Gower predator-prey system.
International Journal of Bifurcation and Chaos, 22, (2012), 1250061 (11 pages).
http://dx.doi.org/10.1142/S0218127412500617

52. Shanshan Chen*, Junping Shi, *Global stability in a diffusive Holling-Tanner predator-prey model.* **Applied Mathematics Letters**, 25, (2012), 614–618.
http://dx.doi.org/10.1016/j.aml.2011.09.070

53. William Jordan-Cooley***, Romuald N. Lipcius, Leah Shaw, Jian Shen, Junping Shi,
Bistability in a differential equation model of oyster reef height and sediment accumulation.
Journal of Theoretical Biology, 289, (2011), 1–11.
http://dx.doi.org/10.1016/j.jtbi.2011.08.013

54. Shanshan Chen*, Junping Shi, Junjie Wei,
A Note on Hopf bifurcations in a delayed diffusive Lotka-Volterra predator-prey system.
Computers and Mathematics with Applications, 62, (2011), 2240–2245.
http://dx.doi.org/10.1016/j.camwa.2011.07.011

55. Ruoyan Sun***, Junping Shi,
Global stability of multigroup epidemic model with group mixing and nonlinear incidence rates.
Applied Mathematics and Computation, 218, (2011) 280–286.
http://dx.doi.org/10.1016/j.amc.2011.05.056

56. Jinfeng Wang*, Junping Shi and Junjie Wei,
Dynamics and Pattern Formation in a Diffusive Predator-Prey System with Strong Allee Effect in Prey. **Journal of Differential Equations**, 251, (2011), 4-5, 1276-1304.
(No. 2 in Top 25 Hottest Articles of *Journal of Differential Equations*, for Apr.-Jun., 2011)
http://dx.doi.org/10.1016/j.jde.2011.03.004

57. Chunxiang Li*, Junping Shi, Jitao Sun,
Stability of impulsive stochastic differential delay systems and its application to impulsive stochastic neural networks.
Nonlinear Analysis: Theory, Methods & Applications, 74, (2011), 10, 3099–3111.
http://dx.doi.org/10.1016/j.na.2011.01.026

58. Renhao Cui*, Junping Shi and Yuwen Wang,
Existence and Uniqueness of positive solutions for a class of semilinear elliptic systems.
Acta Mathematica Sinica, 27, (2011), 6, 1079–1090.
http://dx.doi.org/10.1007/s10114-011-9299-0

59. Junping Shi, Zhifu Xie, and Kristina Little***,
Cross-diffusion induced instability and stability in reaction-diffusion systems.
Journal of Nonlinear Analysis and Computation, 1, (2011), 1, 95–119.

60. Jann-Long Chern, Chang-Shou Lin, Junping Shi, and Yong-Li Tang*,
Existence, Uniqueness and Stability of Positive Solutions to Sublinear Elliptic Systems.
Proceedings of Royal Society of Edinburgh A, 141A, (2011), 1, 45–64.
http://dx.doi.org/10.1017/S0308210509001115

61. Jinfeng Wang*, Junping Shi and Junjie Wei,
Predator-prey system with strong Allee effect in prey.
Journal of Mathematical Biology, 62, (2011), 3, 291–331.
http://dx.doi.org/10.1007/s00285-010-0332-1

62. Zhi-You Chen*, Jann-Long Chern, Junping Shi, and Yong-Li Tang*,
On the Uniqueness and Structure of Solutions to a Coupled Elliptic System.
Journal of Differential Equations, 249, (2010), 12, 3419–3442.
http://dx.doi.org/10.1016/j.jde.2010.09.001

63. Ping Liu, Junping Shi and Yuwen Wang,
Periodic solutions of logistic type population model with harvesting.
Journal of Mathematical Analysis and Applications, 369, (2010), 2, 730–735.
http://dx.doi.org/10.1016/j.jmaa.2010.04.027

64. Yanan Wang**, Yuwen Wang, and Junping Shi,
Exact multiplicity of solutions to a diffusive logistic equation with harvesting.
Applied Mathematics and Computation, 216, (2010), 5, 1531–1537.
http://dx.doi.org/10.1016/j.amc.2010.03.002

65. Lijuan Shen*, Junping Shi and Jitao Sun,
Complete Controllability of Impulsive Stochastic Integro-differential Systems.

Automatica, 46, (2010), 6, 1068–1073.
http://dx.doi.org/10.1016/j.automatica.2010.03.002

66. Ying Su*, Junjie Wei and Junping Shi,
Bifurcation analysis in a delayed diffusive Nicholson's blowflies equation.
Nonlinear Analysis: Real World Applications, 11, (2010), 3, 1692–1703.
http://dx.doi.org/10.1016/j.nonrwa.2009.03.024

67. Junping Shi, Zhifu Xie,
Classification of four-body central configurations with three equal masses.
Journal of Mathematical Analysis and Applications, 363, (2010), 2, 512–524.
http://dx.doi.org/10.1016/j.jmaa.2009.09.040

68. Guanqi Liu**, Junping Shi and Yuwen Wang,
Existence and nonexixtence of positive solutions of semilinear elliptic equation with inhomogeneous strong Allee effect. **Applied Mathematics and Mechanics**, 30, (2009), 11, 1461-1468. (Chinese edition: 30, (2009), 11, 1374-1380).
http://dx.doi.org/10.1007/s10483-009-1112-z

69. Junping Shi,
Bifurcation in infinite dimensional spaces and applications in spatiotemporal biological and chemical models. **Frontier of Mathematics in China** 4, (2009), 3, 407–424.
http://dx.doi.org/10.1007/s11464-009-0026-4

70. Ying Su*, Junjie Wei and Junping Shi,
Hopf Bifurcations in a Reaction-Diffusion Population Model with Delay Effect.
Journal of Differential Equations 247, (2009), 5, 1156–1184. (No. 3 in Top 25 Hottest Articles of *Journal of Differential Equations*, for Apr.-Jun., 2009; No. 2 for Jul.–Sep. 2009; No. 6 for Oct.–Dec., 2009)
http://dx.doi.org/10.1016/j.jde.2009.04.017

71. Rui Peng, Junping Shi, *Non-existence of Non-constant Positive Steady States of Two Holling Type-II Predator-prey Systems: Strong Interaction Case.* **Journal of Differential Equations** 247, (2009), 3, 866–886. (No. 2 in Top 25 Hottest Articles of *Journal of Differential Equations*, for Apr.-Jun., 2009)
http://dx.doi.org/10.1016/j.jde.2009.03.008

72. Hsu, Sze-Bi; Shi, Junping,
Relaxation oscillator profile of limit cycle in predator-prey system.
Discrete and Continuous Dynamical Systems B, 11, (2009), no. 4, 893–911.
http://dx.doi.org/10.3934/dcdsb.2009.11.893

73. Jifa Jiang and Junping Shi,
Bistability dynamics in some structured ecological models.
In **Spatial Ecology** (Chapman & Hall/CRC Mathematical and Computational Biology), edited by Robert Stephen Cantrell, Chris Cosner, and Shigui Ruan, Chapman & Hall/CRC, 33–62, 2009.
http://www.math.wm.edu/~shij/shi/bistability-survey-3.pdf

74. Chjan Lim and Junping Shi, *The role of higher vorticity moments in a variational formulation of the Barotropic Vorticity Model on a rotating sphere.*
Discrete and Continuous Dynamical Systems B, 11, (2009), no. 3, 717–740.
http://dx.doi.org/10.3934/dcdsb.2009.11.717

75. Junping Shi and Xuefeng Wang,
On global bifurcation for quasilinear elliptic systems on bounded domains.
Journal of Differential Equations, 246, (2009), no. 7, 2788–2812.
(No. 12 in Top 25 Hottest Articles of *Journal of Differential Equations*, for the period of Jan.–March, 2009; No. 10 for the period of Oct.–Dec, 2008)
http://dx.doi.org/10.1016/j.jde.2008.09.009

76. Fengqi Yi*, Junjie Wei and Junping Shi,
Bifurcation and spatiotemporal patterns in a homogeneous diffusive predator-prey system. **Journal of Differential Equations**, 246, (2009), no. 5, 1944–1977.
(No. 2 in Top 25 Hottest Articles of *Journal of Differential Equations*, for Jan.–March, 2009; No. 12 for Oct.–Dec, 2008; No. 16 for Apr.-Jun., 2009; No. 6 for Jul.–Sep., 2009)
`http://dx.doi.org/10.1016/j.jde.2008.10.024`

77. Fengqi Yi*, Junjie Wei and Junping Shi,
Global asymptotical behavior of the Lengyel-Epstein reaction-diffusion system.
Applied Mathematics Letters, 22, (2009), no. 1, 52–55.
`http://dx.doi.org/10.1016/j.aml.2008.02.003`

78. Ping Liu, Junping Shi and Yuwen Wang,
Exact multiplicity of solutions to perturbed logistic type equations on a symmetric domain. **Science in China Series A: Mathematics**, 51 (2008), no. 10, 1753–1762. (Chinese edition: 38 (2008) no. 8, 930–939.)
`http://dx.doi.org/10.1007/s11425-008-0101-4`

79. Jia Duo**, Junping Shi and Yuwen Wang,
Structure of the solution set of semilinear elliptic equations with asymptotic linear nonlinearity.
Nonlinear Analysis: Theory, Methods & Applications, 69, (2008), no. 8, 2369–2378.
`http://dx.doi.org/10.1016/j.na.2007.08.014`

80. Kazuhiro Kurata and Junping Shi,
Optimal Spatial Harvesting Strategy and Symmetry-Breaking.
Applied Mathematics and Optimization, 58 (2008), no. 1, 89–110.
`http://dx.doi.org/10.1007/s00245-007-9032-7`

81. Rui Peng, Junping Shi and Mingxin Wang,
On Stationary Patterns of a Reaction-diffusion Model with Autocatalysis and Saturation Law.
Nonlinearity, 21 (2008), no. 7, 1471–1488.
(One of 18 'high-profile articles' of 2008 for **Nonlinearity**)
`http://dx.doi.org/10.1088/0951-7715/21/7/006`

82. Jifa Jiang and Junping Shi,
Dynamics of a reaction-diffusion system of autocatalytic chemical reaction.
Discrete and Continuous Dynamical Systems A, 21 (2008), no. 1, 245–258. `http://dx.doi.org/10.3934/dcds.2008.21.245`

83. Fengqi Yi*, Junjie Wei and Junping Shi,
Diffusion-Driven Instability and Bifurcation in the Lengyel-Epstein System.
Nonlinear Analysis: Real World Applications, 9 (2008), no. 3, 1038–1051.
`http://dx.doi.org/10.1016/j.nonrwa.2007.02.005`

84. Junping Shi and Shin-Hwa Wang,
Exact multiplicity of boundary blow-up solutions for bistable equation.
Computers and Mathematics with Applications, 54 (2007), no. 9-10, 1285–1292.
`http://dx.doi.org/10.1016/j.camwa.2007.04.017`

85. Ping Liu*, Junping Shi and Yuwen Wang,
Imperfect transcritical and pitchfork Bifurcations.
Journal of Functional Analysis, 251 (2007), no. 2, 573–600.
`http://dx.doi.org/10.1016/j.jfa.2007.06.015`

86. Rui Peng, Junping Shi and Mingxin Wang,
Stationary Pattern of a Ratio-dependent Food Chain Model with Diffusion.
SIAM Journal of Applied Mathematics, 67 (2007), no. 5, 1479–1503.
`http://dx.doi.org/10.1137/05064624X`

87. Yihong Du and Junping Shi,
Allee Effect and Bistability in a Spatial Heterogeneous Predator-Prey Model.
Transactions of American Mathematical Society, 359 (2007), no. 9, 4557–4593.
`http://dx.doi.org/10.1090/S0002-9947-07-04262-6`

88. Renhao Cui**, Yuwen Wang and Junping Shi,
Uniqueness of positive solution for a class of semilinear elliptic systems.
Nonlinear Analysis: Theory, Methods & Applications, 67 (2007), no. 6, 1710–1714.
http://dx.doi.org/10.1016/j.na.2006.08.010

89. Yuhua Zhao**, Yuwen Wang and Junping Shi, *Exact multiplicity of solutions and S-shaped bifurcation curve for a class of semilinear elliptic equations.* **Journal of Mathmatical Analysis and Applications**, 331 (2007), no. 1, 263–278.
http://dx.doi.org/10.1016/j.jmaa.2006.08.081

90. Junping Shi and Xuefeng Wang,
Hair-Triggered Instability of Radial Steady States, Spread and Extinction in Semilinear Heat Equations, **Journal of Differential Equations**, 231 (2006), no. 1, 235–251.
http://dx.doi.org/10.1016/j.jde.2006.06.008

91. E. Norman Dancer and Junping Shi,
Uniqueness of positive solution to sublinear semipositone problem.
Bulletins of London Mathematical Society, 38 (2006), no. 6, 1033–1044.
http://dx.doi.org/10.1112/S0024609306018984

92. Yihong Du and Junping Shi,
Spatially Heterogeneous Predator-Prey Model with Protect Zone for Prey.
Journal of Differential Equations, 229 (2006), no. 1, 63–91. (No. 11 in Top 25 Hottest Articles of *Journal of Differential Equations*, for the period of Jul.–Sep, 2006)
http://dx.doi.org/10.1016/j.jde.2006.01.013

93. Yihong Du and Junping Shi,
Spatially Heterogeneous Predator-Prey Model (A survey paper). **Nonlinear Dynamics and Evolution Equations**, Edited by Hermann Brunner, Xiaoqiang Zhao, and Xingfu Zou, Fields Institute Communications, 48, 95–135, American Mathematical Society, 2006.
http://www.resnet.wm.edu/~jxshix/du-shi-proof.pdf

94. Junping Shi and Ratnasingham Shivaji,
Diffuive population models with Allee effects.
Journal of Mathematical Biology, 52 (2006), no. 6, 807–829.
http://dx.doi.org/10.1007/s00285-006-0373-7

95. Young He Lee***, Lena Sherbakov***, Jacquelyn G. Taber*** and Junping Shi,
Bifurcation Diagrams of Population Models with Nonlinear Diffusion.
Journal of Computational & Applied Mathematics, 194 (2006), no. 2, 357–367.
http://dx.doi.org/10.1016/j.cam.2005.08.004

96. Junping Shi,
A new proof of anti-maximum principle via a bifurcation approach.
Resultate der Mathematik, 48 (2005), no. 1-2, 162–167.

97. Philip Korman and Junping Shi,
On Lane-Emden type systems. **Discrete and Continuous Dynamical Systems A**, Proceedings of 5th AIMS International Conference on Dynamic Systems and Differential Equations, 510–517, (2005).

98. Junping Shi and Ratnasingham Shivaji,
Semilinear elliptic equations with generalized cubic nonlinearities.
Discrete and Continuous Dynamical Systems A, Proceedings of 5th AIMS International Conference on Dynamic Systems and Differential Equations, 798–805, (2005).

99. Junping Shi and Miaoxin Yao,
Positive Solutions of Elliptic Equations with Singular Nonlinearity.
Electronic Journal of Differential Equations. 2005, No. 4, 1–11, (2005).
http://ejde.math.txstate.edu/Volumes/2005/04/abstr.html

100. Junping Shi,
A radially symmetric anti-maximum principle and applications to fishery management models.

Electronic Journal of Differential Equations. 2004, No. 27, 1–13, (2004).
http://ejde.math.txstate.edu/Volumes/2004/27/abstr.html

101. Shohba Oruganti, Junping Shi and Ratnasingham Shivaji,
Logistic equation with the p-Laplacian and constant yield harvesting.
Abstract and Applied Analysis, 2004, No. 9, 723–727, (2004).
http://dx.doi.org/10.1155/S1085337504311097

102. Junping Shi and Ratnasingham Shivaji,
Global bifurcation of concave semipositon problems.
Advances in Evolution Equations: Proceedings in honor of J.A.Goldstein's 60th birthday, Edited by G.R. Goldstein, R. Nagel, and S. Romanelli, Marcel Dekker, Inc., New York, Basel, 385–398, 2003.

103. Junping Shi,
Exact multiplicity of positive solutions to superlinear problem.
Electronic Journal of Differential Equations. 2002, Conf 10, 257-265, (2002).
http://ejde.math.txstate.edu/conf-proc/10/s1/abstr.html

104. Peter W. Bates and Junping Shi,
Existence and instability of spike layer solutions to singular perturbation problems.
Journal of Functional Analysis, 196, No. 2, 429–482, (2002).
http://dx.doi.org/10.1016/S0022-1236(02)00013-7

105. Junping Shi,
Global bifurcation of semilinear Neumann boundary problem.
Transactions of American Mathematical Society, 354, No. 8, 3117–3154, (2002).
http://dx.doi.org/10.1090/S0002-9947-02-03007-6

106. Shohba Oruganti*, Junping Shi and Ratnasingham Shivaji,
Diffusive Logistic equation with constant effort harvesting, I: steady states.
Transactions of American Mathematical Society, 354, No. 9, 3601–3619, (2002).
http://dx.doi.org/10.1090/S0002-9947-02-03005-2

107. Junping Shi,
Saddle solutions of the balanced bistable diffusion equation.
Communication of Pure and Applied Mathematics, 55, No. 7, 815–830, (2002).
http://dx.doi.org/10.1002/cpa.3027

108. Junping Shi,
Exact multiplicity of solutions to superlinear and sublinear problems.
Nonlinear Analysis: Theory, Methods & Applications, 50, No. 5, 665–687, (2002).
http://dx.doi.org/10.1016/S0362-546X(01)00775-1

109. Philip Korman and Junping Shi,
New exact multiplicity results with an application to a population model.
Proceedings of Royal Society of Edinburgh A, 131, No. 5, 1167–1182, (2001).
http://dx.doi.org/10.1017/S0308210500001323

110. Junping Shi and Ratnasingham Shivaji,
Exact Multiplicity of solutions for classes of problems with concave-convex nonlinearity.
Discrete and Continuous Dynamical Systems A, 7, No. 3, 559–571, (2001).
http://dx.doi.org/10.3934/dcds.2001.7.559

111. Philip Korman and Junping Shi,
Instability and exact multiplicity of solutions of semilinear equations.
Electronic Journal of Differential Equations, Con-05, 311–322, (2000).
http://ejde.math.txstate.edu/conf-proc/05/k3/abstr.html

112. Junping Shi,
Blow-up points of solution curves for a semilinear problem.
Topological Methods in Nonlinear Analysis, 15, No. 2, 251-266, (2000).

113. Junping Shi,
Persistence and bifurcation of degenerate solutions.
Journal of Functional Analysis, 169, No. 2, 494–531, (1999).
`http://dx.doi.org/10.1006/jfan.1999.3483`

114. Junping Shi* and Junping Wang*,
Morse indices and exact multiplicity of solutions to semilinear elliptic problems.
Proceedings of American Mathematics Society, 127, No. 12, 3685–3695, (1999).
`http://dx.doi.org/10.1090/S0002-9939-99-05542-2`

115. Tiancheng Ouyang and Junping Shi*,
Exact multiplicity of positive solutions for a class of semilinear problems:II.
Journal of Differential Equations, 158, No. 1, 94–151, (1999).
`http://dx.doi.org/10.1006/jdeq.1999.3966`

116. Peter W. Bates, Edward Norman Dancer and Junping Shi*,
Multi-spike stationary solution of Cahn- Hilliard equation and instability.
Advances in Differential Equations, 4, No. 1, 1–69, (1999).

117. Junping Shi* and Miaoxin Yao,
On a singular nonlinear semilinear elliptic problem.
Proceedings of Royal Society of Edinburgh A, 128, No. 6, 1389–1401, (1998).

118. Tiancheng Ouyang and Junping Shi*,
Exact multiplicity of positive solutions for a class of semilinear problems.
Journal of Differential Equations, 146, No. 1, 121–156, (1998).
`http://dx.doi.org/10.1006/jdeq.1998.3414`

119. Tiancheng Ouyang and Junping Shi*,
A bifurcation approach to the exact multiplicity of semilinear elliptic equations.
Discrete and Continuous Dynamical Systems, Proceedings of International Conference on Dynamic Systems and Differential Equations, 2, 162–173, (1998).

Book or Book Chapters (Non-refereed)

1. Junping Shi,
Solution set of semilinear elliptic equations: Global Bifurcation and Exact Multiplicity. Series on Partial Differential Equations and Applications, World Scientific Publication Company, Singapore, to be published in 201X. approximately 300 pages.
ISBN 978-981-277-594-8, 981-277-594-3.
`http://www.worldscibooks.com/mathematics/6640.html`

2. Junping Shi,
Asymptotic Spatial Patterns and Entire Solutions of Semilinear Elliptic Equations.
Proceedings of the Ryukoku Workshop 2003: New perspectives of nolinear partial differential equations, Edited by Y. Morita, H. Ninomiya, E. Yanagida and S. Yotsutani, Joint research center for sciences and technology of Ryukoku University, 27–35, 2004.

3. Junping Shi,
Multi-Parameter Bifurcation and Applications.
ICM 2002 Satellite Conference on Nonlinear Functional Analysis: Topological Methods, Variational Methods and Their Applications, Edited by H. Brezis, K.C. Chang, S.J. Li and P. Rabinowitz, World Scientific, Singapore, 211–222, 2003.

4. Tiancheng Ouyang and Junping Shi*,
Exact multiplicity of solutions and global bifurcation of $\Delta u + \lambda f(u) = 0$. **Proceedings of the US-Chinese Conference: Differential Equations and Applications**, Edited by P.W. Bates, S-N. Chow, K. Lu and X. Pan, World Scientific, Singapore, 356–363, 1998.

Invited Conference Talks

1. Workshop on Mathematical Analysis, Tokyo Institute of Technology, Tokyo, Japan, December 13, 2016. (50 minute plenary talk)
2. Special Session on Nonlinear Boundary Value Problems, AMS Fall Southeastern Sectional Meeting at North Carolina State University, Raleigh, NC, November 12-13, 2016. (30 min invited talk)
3. Summer short course in Harbin Inistitute of Technology, July 21-26, 2016. (16 hour short course)
4. Special session on Dissipative Systems and Applications, The 11th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Orlando, Florida, USA, July 1-4, 2016. (30 min invited talk)
5. Special session on Recent advances in dynamical systems with applications to ecology and epidemiology, The 11th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Orlando, Florida, USA, July 1-4, 2016. (30 min invited talk)
6. Tenth International Conference on Recent Advances in Applied Dynamical Systems, Jiangsu Normal University, Xuzhou, China, June 10-12, 2016. (40 minute invited talk)
7. International Conference on Reaction-Diffusion Equations and their Applications to the Life, Social and Physical Sciences, Institute of Mathematical Sciences (IMS) at the Renmin University of China, Beijing, China, May 26-29, 2016. (50 minute plenary talk)
8. Workshop in Application of Mathematics in Economics and Finance, Harbin Normal University, Harbin, China, January 13-14, 2016. (50 minute invited talk)
9. Special Session on Random and Complex Dynamics of Reaction-Diffusion Systems, 2016 Joint Mathematics Meetings, Seattle, WA, January 6-9, 2016. (30 min invited talk)
10. Special Session on Recent advances in dynamical systems and mathematical biology, 2016 Joint Mathematics Meetings, Seattle, WA, January 6-9, 2016. (30 min invited talk)
11. Workshop on Shapes and other properties of solutions of PDEs, Research Institute for Mathematical Sciences (RIMS), Kyoto University, Kyoto, Japan, November 11-13, 2015. (50 min invited talk)
12. The 5th International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems, University of Western Ontario, London, Ontario, Canada, October 2-4, 2015. (30 min invited talk)
13. Workshop on nonlinear and global analysis, Harbin Normal University, Harbin, China, August 19-20, 2015. (30 min invited talk)
14. The Second International Workshop on Biomathematics Modelling and Its Dynamical Analysis, Heilongjiang University, Harbin, China, May 16-17, 2015. (30 min invited talk)
15. Mini-symposium on Recent Developments in the Modeling, Simulation and Analysis of Mathematical Models Arising from Biology, 8th International Congress on Industrial and Applied Mathematics (ICIAM), Beijing, China, August 11-14, 2015. (30 min invited talk)
16. Workshop on Mathematical Modeling in Life Sciences, Harbin Normal University, Harbin, China, August 1-2, 2015. (50 min invited talk)
17. Differential Equations and Applications to Biological Models, Tongji University, Shanghai, China, May 25-27, 2015. (Two 50 min invited talks)
18. Special Session on Advances in the Theory and Applications of Dynamical Systems, AMS Spring Southeastern Sectional Meeting, University of Alabama in Huntsville, Huntsville, AL, March 27-29, 2015. (30 min invited talk)
19. Special Session on Spatial Evolutionary Models and Biological Invasions, AMS Spring Eastern Sectional Meeting, Georgetown University, Washington, DC, March 7-8, 2015. (30 min invited talk)
20. Special Session on Theory and Application of Reaction Diffusion Models, 2015 Joint Mathematics Meetings, San Antonio, TX, January 10-13, 2015. (30 min invited talk)

21. Special Session on Applications of Dynamical Systems to Biological Model, 2015 Joint Mathematics Meetings, San Antonio, TX, January 10-13, 2015. (30 min invited talk)
22. Workshop on Mathematical Biology and Nonlinear Analysis, and celebration for Steve Cantrell, University of Miami, Miami, FL, December 19-21, 2014. (30 min invited talk)
23. AMS Fall Southeastern Section Meeting, University of North Carolina at Greensboro, Greensboro, NC, November 8-9, 2014. (30 min invited talk)
24. 10th Mississippi State Conference on Differential Equations and Computational Simulations, Mississippi State University, Starkville, MS, October 23-25, 2014. (50 min plenary talk)
25. 13th National Conference in Functional Differential Equations, Qinghai Minority University, Xining, China, July 29-31, 2014. (40 min invited talk)
26. Workshop in Functional Differential Equations, Harbin Institute of Technology at Weihai, Weihai, China, July 23-27, 2014. (50 min invited talk)
27. 18th China National Conference on Nonlinear Functional Analysis, Harbin, China, July 14-16, 2014. (50 min plenary talk)
28. Special session on Qualitative Analysis of Reaction Diffusion Systems, 10th AIMS International Conference on Dynamical Systems, Differential Equations, and Applications, Madrid, Spain, July 7-11, 2014. (30 min invited talk)
29. Special session on Nonlinear Elliptic and Parabolic Problems, 10th AIMS International Conference on Dynamical Systems, Differential Equations, and Applications, Madrid, Spain, July 7-11, 2014. (30 min invited talk)
30. Eighth International Conference on Recent Advances in Applied Dynamical Systems, Guilin University of Electronic Technology, Guilin, China, June 2-4, 2014. (40 min invited talk)
31. NCTS International Conference of Nonlinear Dynamics with Application to Biology, NCTS, National Tsing Hua University, Hsinchu, Taiwan, May 28-30, 2014. (40 min invited talk)
32. 2014 International Symposium on Mathematical Biology, Guangzhou, China, May 24-28, 2014. (50 min invited talk)
33. Minisymposium on Recent Advances in Mathematical Biology, 38th Annual SIAM Southeastern Atlantic Section Conference, Florida Institute of Technology, Melbourne, Florida, March 28-30, 2014.
34. Special session on Reaction Diffusion Equations and Applications, 2014 Joint Mathematics Meetings, Baltimore, MD, January 15-18, 2014. (30 min invited talk)
35. International Workshop on New Mathematical Developments Arising from Ecology, Epidemiology and Environmental Science, Beijing International Center for Mathematical Research, Peking University, Beijing, China, October 17-20, 2013. (45 min invited talk)
36. Special session on Recent Advances in Mathematical Epidemiology and Ecology, The Fourth International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems (ICMA IV), Texas Tech University, Lubbock, TX, October 4-6, 2013. (30 min invited talk)
37. The Seventh International Conference on Recent Advances in Applied Dynamical Systems, Linyi, China, June 8-10, 2013. (40 min invited talk)
38. Special session on pattern Formation in Biology, Fourth Conference on Computational and Mathematical Population Dynamics (CMPD4), Taiyuan, China, May 29–June 2, 2013. (30 min invited talk)
39. Special session on Understanding Planet Earth via Reaction Diffusion Equations, 2013 Joint Mathematics Meetings, San Diego, CA, January 9–12, 2013. (30 min invited talk)
40. Special session on Recent progress in nonlinear analysis and PDE's arising from dispersal models, Everything Disperses to Miami: The Role of Movement and Dispersal in Ecology, Epidemiology and Environmental Science, University of Miami, Miami, FL, December 14–16, 2012. (30 min invited talk)

41. International Conference in Nonlinear Analysis, Xuzhou Normal University, Xuzhou, China, October 9–13, 2012. (30 min invited talk)
42. Special Session on Nonlinear Elliptic and Parabolic Problems in Mathematical Sciences, 9th AIMS International Conference on Dynamical Systems, Differential Equations, and Applications, Orlando, FL, July 1–5, 2012. (30 min invited talk)
43. Special Session on Reaction Diffusion Equations and Applications, 9th AIMS International Conference on Dynamical Systems, Differential Equations, and Applications, Orlando, FL, July 1–5, 2012. (30 min invited talk)
44. The Sixth International Conference on Recent Advances in Applied Dynamical Systems, Guangzhou University, Guangzhou, China, June 25-27, 2012. (40 min invited talk)
45. Workshop on PDE Problems in Mathematical Biology and Physics, Hong Kong Polytechnic University, HongKong, China, June 22-23, 2012. (1 hour invited talk)
46. Minisymposium on Modeling Complex Biological Systems: Theoretical and Computational Studies, 36th Annual SIAM Southeastern Atlantic Section Conference, University of Alabama, Huntsville, AL, March 24-25, 2012. (30 min invited talk)
47. Special Session on Recent Advances in Mathematical Biology, Ecology, and Epidemiology, 2012 Joint Mathematics Meetings, Boston, MA, January 4–7, 2012. (30 min invited talk)
48. Special Session on Nonlinear Boundary Value Problems, 2011 AMS Fall Southeastern Sectional Meeting, Wake Forest University, Winston-Salem, North Carolina, USA, September 24–25, 2011. (30 min invited talk)
49. 8th East China Partial Differential Equations Conference, Xi'an, China, July 11–14, 2011. (45 min invited talk)
50. Special Session on Nonlinear PDEs and Variational Methods, 2011 AMS Spring Western Section Meeting, Las Vegas, Nevada, USA, April 30–May 1, 2011. (30 min invited talk)
51. Minisymposium on Simulation and analysis in biological systems, 35th SIAM Southeastern Atlantic Section Conference, Charlotte, North Carolina, USA, March 26–27, 2011. (20 min invited talk)
52. Special session on Structured Models in Ecology, Evolution, and Epidemiology: Periodicity, Extinction, and Chaos, 2011 Joint Mathematics Meeting, New Orleans, Louisiana, USA, Jan 6–9, 2011. (20 min invited talk)
53. Special session on Analysis of Reaction-Diffusion Models, 2011 Joint Mathematics Meeting, New Orleans, Louisiana, USA, Jan 6–9, 2011. (20 min invited talk)
54. A PDE Day in NCTS, NCTS, National Tsing Hua University, Hsinchu, Taiwan, Dec 20, 2010. (2 one-hour invited talks)
55. NCTS Workshop on PDE Models of Biological Process, NCTS, National Tsing Hua University, Hsinchu, Taiwan, Dec 13–17, 2010. (30 min invited talk)
56. 2010 Mathematical Conference and Annual Meeting of the Taiwan Mathematical Society, Changhua Normal University, Changhua, Taiwan, Dec 11–12, 2010. (45 min invited talk)
57. Special session on Differential Equations and Applications to Physics and Biology, AMS Southeastern Section Meeting, Richmond, Virginia, USA, Nov 6–7, 2010. (20 min invited talk)
58. International conference on Functional Analysis and Applications, Harbin Institute of Technology, Harbin, China, July 25–28, 2010. (1-hour invited talk)
59. 7th East China Partial Differential Equations Conference, Central China Normal University, Wuhan, China, July 6–9, 2010. (45 min invited talk)
60. Fourth International Conference on Recent Advances in Applied Dynamical Systems, Jinhua, China, June 16–20, 2010. (30 min invited talk)
61. International Conference on Variational and Topological Methods in Nonlinear Analysis, Beijing, China, May 20-22, 2010. (45 min invited talk)

62. International Workshop on Reaction-Diffusion Models and Mathematical Biology, Harbin, China, June 24-27, 2009. (45 min invited talk)
63. International Conference on Nonlinear and Stochastic Dynamics, Sichuan university, Chengdu, China, June 1-5, 2009. (45 min invited talk)
64. Interdisciplinary Conference on Applied Analysis and Mathematics, NCTS, Tsing Hua University, Hsinchu, Taiwan, May 13, 2009. (30 min invited talk)
65. AMS southeastern sectional meeting, Special Session on Dynamics and Applications of Differential Equations, Huntsville, AL, October 26, 2008. (30 min invited talk)
66. *Lectures on bifurcation in reaction-diffusion models from biology.*
    Mathematical Applications in Ecology and Evolution Workshop, Center for Computational Sciences, Mississippi State University, August 4–6, 2008. (three 1-hour invited lectures, one of two main speakers)
    `http://www.ccs.msstate.edu/conferences/Bio-Conference-Collage.jpg`
67. International Conference on Nonlinear Partial Differential Equations and Geometric Analysis, Harbin, China, June 30–July 4, 2008. (45 min invited talk)
68. 7th AIMS International Conference on Dynamical Systems and Differential Equations, Special session on Differential Equations of Mixed Type Arising in Engineering, Biology and Ecology, Arlington, Texas, May 18-21, 2008 (30 min invited talk)
69. 7th AIMS International Conference on Dynamical Systems and Differential Equations, Special session on Nonlinear Evolution Equations and Related Topics, Arlington, Texas, May 18-21, 2008 (30 min invited talk)
70. 7th AIMS International Conference on Dynamical Systems and Differential Equations, Special session on Pattern Formation in Biology and Ecology: from Interfaces to Meta-solutions, Arlington, Texas, May 18-21, 2008 (30 min invited talk)
71. AMS southeastern sectional meeting, Special Session on Mathematical Modeling in Biology, Baton Rouge, LA, March 29, 2008. (30 min invited talk)
72. Workshop on Variational Methods, Capital Normal University, Beijing, China, December 28-29, 2007. (45 min invited talk)
73. PDE Day in Taida Institute of Mathematical Sciences, National Taiwan University, Taipei, Taiwan, November 28, 2007 (1-hour invited talk)
74. International Workshop on Banach Space, Operator Theory and Applications in Nonlinear Analysis, Harbin Normal University, Harbin, Heilongjiang, China, July 25-27, 2007 (50 min invited talk)
75. The Second International Conference on Recent Advance in Applied Dynamical Systems, Zhejiang Normal University, Jinhua, Zhejiang, China, June 4-8, 2007 (40 min invited talk)
76. The Fourth International Conference on Mathematical Biology, Wuyi Mountain, Fujian, China, May 29-June 1, 2007 (30 min invited talk)
77. AMS eastern sectional meeting, Special Session on Nonlinear Elliptic and Parabolic Equations, Storrs, CT, October 29, 2006. (20 min invited talk)
78. AMS western sectional meeting, Special Session on Nonlinear Differential Equations: Methods & Applications, Salt Lake City, UT, October 7, 2006. (20 min invited talk)
79. Workshop on Analysis and PDE, Harbin Normal University, July 22, 2006. (Two 1-hour invited talk)
80. Recent Developments In Differential Equations and Applications, Guangzhou University, Guangzhou, China, July 17-21, 2006. (45 min invited talk)
81. 6th AIMS International Conference on Dynamical Systems and Differential Equations, Special session on Modeling and Analysis of Predators-Preys Systems: Stability, Bifurcation, Chaos and Complexity, Poitiers, France, June 25-28, 2006 (30 min invited talk)

82. 6th AIMS Internatinal Conference on Dynamical Systems and Differential Equations, Special session on Nonlinear Parabolic and Elliptic PDEs and Applications, Poitiers, France, June 25-28, 2006 (30 min invited talk)
83. International Conference on Nonlinear and Stochastic Dynamics, Sichuan University, Chengdu, China, June 5-9, 2006 (45 min invited talk)
84. International Conference on Dynamical Systems: Bifurcation, Application and Computation, Shanghai Normal University, Shanghai, China, June 2-5, 2006 (45 min invited talk)
85. International Conference on Nonlinear Partial Differential Equations, Qufu Normal University, Rizhao, Shandong, China, July 11-16, 2005. (45 min invited talk)
86. HuaZhong International Conference on Nonlinear Partial Differential Equations, Zhangjiajie, Hunan, China, July 9-12, 2005. (45 min invited talk)
87. First International Conference on Recent Advances in Bifurcation Theory and Applications of Dynamical System, Zhejiang Normal University, Jinhua, Zhejiang, China, June 8-12, 2005. (45 min invited talk)
88. International Conference of Nonlinear Evolution Equations and Infinite Dimensional Dynamical Systems, Nanjing Normal University, Nanjing, Jiangsu, China, June 2-6, 2005. (45 min invited talk)
89. Workshop on Mathematical and Numerical Analysis on Nonlinear Phenomena, Tokyo Metropolitan University, Tokyo, Japan, February 7, 2005. (Two 1-hour invited talks, only invited foreign speaker)
90. Workshop on Spatial Ecology: The Interplay between Theory and Data, Institute of Theoretical and Mathematical Ecology (ITME), University of Miami, Coral Gables, FL, January 7-10th, 2005. (one hour plenary talk)
    `http://www.math.miami.edu/anno/spatial/participants.htm`
91. AMS-SIAM Special Session on Reaction Diffusion Equations and Applications, Joint Mathematics Meetings, Atlanta, GA, January 5-8th, 2005. (30 min invited talk)
92. International Conference On Nonlinear Dynamics And Evolution Equations,
    Memorial University of Newfoundland , St. John's, Newfoundland and Labrador, Canada, June 6-10th, 2004. (30 min invited talk)
93. Special session on Recent Developments on Nonlinear Elliptic Equations and Variational Problems, AIMS' Fifth International Conference on Dynamical Systems and Differential Equations California State Polytechnic University, Pomona, CA, June 16-19th, 2004. (30 min invited talk)
94. Special session on PDE with Application in Biology, AIMS' Fifth International Conference on Dynamical Systems and Differential Equations California State Polytechnic University, Pomona, CA, June 16-19th, 2004. (30 min invited talk)
95. Workshop on Nonlinear Analysis - Hamiltonian Systems and Celestial Mechanics,
    Nankai Institute of Mathematics, Nankai University, Tianjin, China, June 9-13th, 2004. (1-hour invited talk)
96. International Workshop of bifurcation theory and applications, Shanghai Jiaotong University, Shanghai, China, May 23-26th, 2004. (30 min invited talk)
97. Workshop on Defects and their Dynamics, Banff International Research Station, Banff, Canada, August 9-16th, 2003. (1-hour invited talk)
98. Program on Nonlinear Functional Analysis and PDE, Morningside Center, Institute of Mathematics, Chinese Academy of Sciences, Beijing, China, July 4th, 2003. (Two 1-hour invited talks)
99. Workshop: New Perspective of Nonlinear Partial Differential Equations, Ryukoku University, Otsu, Shiga, Japan, June 23-25th, 2003. (one hour plenary talk), One of two invited foreign speakers.

100. Special Session on Nonlinear Elliptic Partial Differential Equations, AMS Sectional Meeting, Salt Lake City, UT, October 26th, 2002. (30 min invited talk)
101. International conference of Nonlinear Functional Analysis, (satellite conference of ICM 2002) Shanxi University, Taiyuan, Shanxi, China, August 14-18th, 2002. (45 min invited talk)
102. Dynamical Systems and Differential Equations Conference, University of North Carolina at Wilmington, NC, May 24-27th, 2002. (30 min invited talk)
103. Special session of Nonlinear Elliptic Equations, AMS Annual joint meeting, San Diego, CA, January 5-10th, 2002. (30 min invited talk)
104. Workshops in Nonlinear PDE, PIMS, Univercity of British Columbia, Vancouver, British Columbia, Canada, July 11-27th, 2001. (30 min invited talk)
105. International Conference in Differential Equations and Dynamical Systems, Lahsa, Tibet, China, July 2-7th, 2001. (45 min invited talk)
106. Special Session of Singular and Degenerate Nonlinear Elliptic Boundary Value Problems, AMS Sectional Meeting, Hoboken, NJ, April 28th, 2001. (30 min invited talk)
107. Special Session of Analysis and Applications of Nonlinear PDEs, AMS Sectional Meeting, Las Vegas, NV, April 22nd, 2001. (30 min invited talk)
108. Special session of PDE Models in Population Biology and Epidemiology, AMS Joint meeting, New Orleans, LA, January 11th, 2001. (30 min invited talk)
109. Minisymposium on Transitions and Reaction Diffusion Equations, SIAM Pacific Rim Dynamical Systems Conference, Maui, HI, August 11th, 2000. (30 min invited talk)
110. Minisymposium on Spike Layer in Reaction-Diffusion Systems, SIAM Pacific Rim Dynamical Systems Conference, Maui, HI, August 11th, 2000. (30 min invited talk)
111. Special session of Nonlinear Differential Equations and Their Applications, AMS sectional meeting, University of Louisiana, Lafayette, LA, April, 2000. (30 min invited talk)
112. Special session of Nonlinear Eigenvalue Problems and Applications, AMS Joint meeting, Washington, DC, January, 2000. (30 min invited talk)
113. Special session of Nonlinear PDE, AMS sectional meeting, Las Vegas, NV, April, 1999. (30 min invited talk)
114. Conference honoring Professor Alan Lazer, University of Miami, Coral Gabels, FL, January, 1999. (30 min invited talk)
115. Special session of Nonlinear Elliptic and Parabolic Equations, International Conference of Differential Equations and Dynamical Systems, Southwest Missouri State University, Springfield, MO, July 1996. (30 min invited talk)
116. Utah Nonlinear Analysis Conference, Brigham Young University, Provo, UT, January 1996. (45 min invited talk)

Invited Colloquium Talks

1. University of Alberta, Edmonton, Canada, October 3, 2016.
2. Heilongjiang University, Harbin, China, China, July 24, 2016.
3. Central China Normal University, Wuhan, China, May 22, 2016.
4. Jiangsu University, Zhenjiang, China, June 3, 2016.
5. Southeast University, Nanjing, China, June 4, 2016.
6. Nanjing University of Aeronautics & Astronautics, China, June 4, 2016.
7. University of Tennessee at Chattanooga, Chattanooga, TN, February 19, 2016.
8. Harbin Institute of Technology, Weihai, July 27, 2015.
9. John Hopkins University, Baltimore, MD, April 6, 2015.
10. University of South Florida, Tampa, FL, February 6, 2015.
11. Ohio State University, Columbus, OH, October 15, 2014.

12. Beijing University of Chemical Engineering, Beijing, August 14, 2014.
13. Northwest Normal University, Lanzhou, China, August 5, 2014.
14. Lanzhou University, Lanzhou, China, August 3, 2014. (2 talks)
15. Lanzhou Institute of Technology, Lanzhou, China, August 3, 2014.
16. Qinghai Normal University, Xining, China, July 30, 2014.
17. National Defense Technology University, Changsha, China, June 7, 2014. (2 talks)
18. Central South University, Changsha, China, June 6, 2014.
19. Southwest University, Chongqing, China, July 14, 2013.
20. Hong Kong Polytechnic University, Hong Kong, China, May 22, 2014; July 3, 2013. (two talks)
21. Institute of Mathematics, Academic Sinica, Taiwan, March 28, 2013.
22. National Center for Theoretical Sciences, National Tsing-Hua University, Hsinchu, Taiwan, March 8, March 29 and May 3, 2013. (3 talks)
23. Virginia Commonwealth University, Richmond, VA, Jan. 18, 2013.
24. North China Electric Power University, Beijing, China, Nov. 5, 2012.
25. Sichuan University, Chengdu, China, Nov. 2, 2012.
26. University of Electronic Science and Technology of China, Chengdu, China, Nov. 1, 2012. (2 talks)
27. Harbin Engineering University, Harbin, China, July 18, 2014; October 18, 2012; July 29, 2015; May 17, 2016. (5 talks)
28. University of Science and Technology of China, Hefei, China, August 7, 2014; October 15, 2012. (2 talks)
29. Shandong University, Jinan, China, October 8, 2012.
30. University of Western Ontario, London, Ontario, Canada, August 21, 2012.
31. Summer short course on bifurcation theory and its applications, University of New Brunswick, Fredericton, Canada, August 13-17, 2012. (6 talks, 15 hours)
32. North University of China, Taiyuan, China, July 22, 2012.
33. Guangdong University of Technology, Guangzhou, China, June 26, 2012.
34. Old Dominion University, Norfolk, VA, March 3, 2012; January 19, 2016. (2 talks)
35. Virginia State University, Petersburg, VA, October 31, 2014; February 17, 2012. (2 talks)
36. 2011 Nonlinear Reaction-Diffusion Equations Summer School, Shanxi University, Taiyuan, Shanxi, China, July 17-27, 2011. (5 talks, 10 hours)
37. Providence University, TaiChung, Taiwan, December 10, 2010. (2 talks)
38. Jilin University, Changchun, China, July 28 and 29, 2010. (3 talks)
39. Taiyuan University of Science and Technology, Taiyuan, China, July 11, 2010.
40. Shanxi University, Taiyuan, China, May 13, 2015; August 18 and 19, 2014; June 3, 2013; October 29 and 30, 2012; June 28 and July 21, 2012; May 11, 2011; July 10 and 11, 2010. (11 talks)
41. Tongji University, Shanghai, China, July 28, 2016; July 7 and July 8, 2013; May 14, 2011; June 30 and July 5, 2010. (6 talks)
42. Shanghai Normal University, Shanghai, China, July 1, 2010.
43. Shanghai Jiaotong University, Shanghai, China, June 30, 2010.
44. Yunnan University, Kunming, Yunnan, China, June 25, 2010.
45. Yunnan Normal University, Kunming, Yunnan, China, June 24, 2010.
46. Kunming University of Science and Technology, Kunming, Yunnan, China, June 24, 2010.

47. Guilin University of Electrical Technology, Guilin, Guangxi, China, June 21, 2010.
48. Zhejiang Normal University, Jinhua, Zhejiang, China, June 14, 2010; May 28, 2007. (4 talks)
49. Harbin Institute of Technology, Harbin, Heilongjiang, China, January 16, July 22, July 25, 2016; May 16, 2015; July 17, 2014; October 17, 2012; May 21, 2011; June 4 and June 13, 2010; January 2 and June 21, 2008; April 20 and April 27, 2007; June 11, 2006; June 19, 2005; July 2, 2003. (15 talks)
50. Harbin Normal University, Harbin, Heilongjiang, China, May 19, 2016; October 23, 2012; May 23, 2011; May 31, 2010; May 16, 2007; June 16, 2005; May 18 and 20, 2004; June 30 and July 1, 2003. (10 talks)
51. Tsinghua University, Beijing China, Nov. 6, 2012; May 27, 2010; May 26, 2005; May 31, 2001. (4 talks)
52. University of Wyoming, Laramie, WY, March 11, 2010.
53. Memorial University of Newfoundland, Canada, December 14, 2009.
54. National Central University, Chungli, Taiwan, December 9, 2010; May 14, 2009; December 6, 2007. (3 talks)
55. University of Alabama at Birmingham, Birmingham, AL, October 24, 2008.
56. Chinese Academy of Sciences, Beijing, China, July 17, 2008; December 27, 2007; May 27, 2005; May 8, 2004; July 21, 2002. (5 talks)
57. Capital Normal University, Beijing, China, June 12, 2008; April 15, 2007; May 30, 2005. (3 talks)
58. George Washington University, February 28th, 2008.
59. Beijing Normal University, Beijing, China, December 28, 2007.
60. National Chiao Tung University, Hsinchu, Taiwan, November 27, 2007; April 19th, 2005. (2 talks)
61. National Taiwan University, Taipei, Taiwan, September 20th, 2007.
62. National Tsing Hua University, Hsinchu, Taiwan, September 17th, 2007; April 18th and 25th, 2005. (3 talks)
63. *Degree Theory and Bifurcation theory for Fredholm operators, and Reaction-diffusion systems*, 12-hour Lecture series, Harbin Normal University, Harbin, Heilongjiang, China, May 7-19, 2007.
64. *Bifurcation theory in Banach space and application to semilinear equations*
    14-hour Lecture series, Harbin Institute of Technology, Harbin, Heilongjiang, China, April 17-29, 2007.
65. Georgia Institute of Technology, Atlanta, GA, March 6, 2006.
66. Beihang University, Beijing, China, July 1, 2005.
67. Yangzhou University, Yangzhou, Jiangsu, China, June 7 and June 8, 2005. (2 talks)
68. Taiwan Normal University, Taipei, Taiwan, April 20th, 2005.
69. University of New England, Armidale, NSW, Australia, March 17th, 2005.
70. *Lectures on solution set of semilinear elliptic equations*, 12 hour lecture series for graduate students, Tokyo Metropolitan University, Tokyo, Japan, Feb. 7-18, 2005.
71. Rensselaer Polytechnic Institute, Troy, NY, January 24, 2005.
72. East China Normal University, Shanghai, China, May 26 and 28, 2004. (2 talks)
73. Mississpi State University, Miss State, MS, March 9, 2004; April 1999. (2 talks)
74. Lecture series (12 hours), Harbin Normal University, Harbin, Heilongjiang, China, July 30th-August 5th, 2002.
75. University of Virginia, Charlottesville, VA, September 20 and 21, 2001. (two talks)

76. University of Texas at San Antonio, San Antonio, TX, September 7th, 2001.
77. Peking University, Beijing, China, June 9th, 2001.
78. Nankai University, Tianjin, China, July 23, 2014; May 28, 2001. (2 talks)
79. Georgia State University, Atlanta, GA, March, 2000.
80. Portland State University, Portland, OR, March, 2000.
81. University of Memphis, Memphis, TN, March, 2000.
82. University of Texas at Arlington, Arlington, TX, February, 2000.
83. Georgia Southern University, Statesboro, GA, February, 2000; December 1999. (2 talks)
84. College of William and Mary, Williamsburg, VA, February, 2000.
85. Georgetown University, Washington, DC, February, 2000.
86. Brigham Young University, Provo, UT, May 1999.

Contributed Talks

1. Colloquium, College of William and Mary, September 20, 2013.
2. 2013 Annual Meeting of The Society for Mathematical Biology, Arizona State University, June 10-13, 2013.
3. Colloquium, College of William and Mary, February 8, 2013.
4. Workshop on Mathematical Biology, Dalhousie University, Halifax, Canada, August 18-19, 2012.
5. Colloquium, College of William and Mary, November 12, 2010.
6. Math 410 (CSUMS seminar), College of William and Mary, Feb. 3, 2010.
7. Math 410 (CSUMS seminar), College of William and Mary, Feb. 18, 2009.
8. Biomath Luncheon, College of William and Mary, March 31, 2008.
9. Math 410 (CSUMS seminar), College of William and Mary, January 22, 2008.
10. 25th Annual Southeastern-Atlantic Regional Conference on Differential Equations, Dayton University, Dayton, OH, October 8th, 2005.
11. Colloquium, College of William and Mary, Williamsburg, VA, September, 2005.
12. Sixth Mississippi State-UAB Conference on Diff. Equations & Computational Simulations, Mississippi State University, Mississippi State, MS, May 13-14th, 2005.
13. Mathematical-Computational Biology (MCB) seminar, College of William and Mary, Williamsburg, VA, October 27th, 2004.
14. 23rd Annual Southeastern-Atlantic Regional Conference on Differential Equations, Kennesaw State University, Kennesaw, GA, October 17-18th, 2003.
15. 22nd Southeastern-Atlantic Regional Conf. on Differential Equations, University of Tennessee, Knoxville, TN, October 11th, 2002.
16. Nonlinear Differential Equations, Mechanics and Bifurcation, Duke University, Durham, NC, May 20-22th, 2002.
17. 21st Southeastern-Atlantic Regional Conference on Differential Equations, Wake Forest University, Winston-Salem, NC, November 3rd, 2001.
18. Fifth Mississippi State Conference on Differential equations and computational simulations, Mississippi State University, Mississippi State, MS, May 18-19th, 2001.
19. Colloquium, College of William and Mary, Williamsburg, VA, February 16th, 2001.
20. Colloquium, College of William and Mary, Williamsburg, VA, September, 2000.
21. 20th Southeastern-Atlantic Regional Conf. on Differential Equations, Virginia Tech, Blacksburg, VA, October 21st, 2000.
22. SIAM Dynamical system conference, Snowbird, UT, May, 1999.

23. Applied Mathematics Seminar, Tulane University, New Orleans, LA, October 1998.
24. Colloquium, Tulane University, New Orleans, LA, September 1998.
25. Conference on Waves in Mathematical Biology, University of Pittsburgh, Pittsburgh, PA, September 1998.

Published Software

Java applet drawing bifurcation diagram for elliptic equations (1998)
`http://www.math.wm.edu/~shij/java/bifurcation.html`

Submitted Articles

$*$: PhD student, $**$: MS student, and $***$: undergraduate student, at time of preparation of papers.

1. Nicholas Ducharme-Barth***, Romuald N. Lipcius, Leah B. Shaw, Junping Shi,
   Habitat degradation due to exploitation elevates risk of population collapse and lowers Maximum Sustainable Yield of oyster populations.
2. Yulian An, Jann-Long Chern, Junping Shi,
   Uniqueness of positive solution to a coupled cooperative variational elliptic system on an interval.
3. Mayee Chen***, Junping Shi,
   Effect of Rotational Grazing: a Mathematical Study.
4. Wenjie Zuo, Junping Shi,
   Traveling wave solutions of a diffusive ratio-dependent Holling-Tanner system with distributed delay.
5. Yuhua Li, Fuyi Li, Junping Shi,
   Existence and multiplicity of positive solutions to Schrodinger-Poisson type systems with critical nonlocal term.
6. Jun Wang, Junping Shi,
   Standing waves for a coupled nonlinear Hartree equations with nonlocal interaction.
7. Xiaoli Wang, Junping Shi, Guohong Zhang,
   Interaction of water and plants: rich dynamics in a simple model.
8. Yuhua Li, Fuyi Li, Junping Shi,
   Ground states of nonlinear Schödinger equation on star metric graphs.
9. Deqiong Ding, Junping Shi, Yan Wang*,
   Bistability in a model of grassland and forest transition.

Committee Service

College committee service

- Art and Sciences library Policy committee (Fall 2006)
- College admission policy advisory committee (2008-2011, 2013-2016, chair 2016)
- Academic Calendar Advisory Committee (2011-2012, 2013-2014)
- Art and Science Committee on Honors and Interdisciplinary Studies (2016-)

Department of Mathematics committees

- Merit Evaluation committee: 2009-2010
- Personnel committee: 2010-2011 (coordinator), 2011-2012, 2013-2014
- Colloquium Committee: 2008-2012(chair), 2013-2017(chair)
- Mathematics Contests adviser(VPI, Putnam): 2004-2007
- Mathematics Contests Committee: 2008-2012(chair), 2013-2014(chair)
- Applied Math hiring committee: 2005-2006

- Biomath hiring committee: 2006-2007, 2013-2014(chair)
- Computer committee: 2001-current
- Department webmaster: 2001-current
- Student information: 2005-2007
- Library representative: 2005-2007
- Online newsletter editor: 2002-2007
- Institute representative of AMS, SIAM and MAA: 2002-2007
- Space committee: 2000-2005
- Handbook committee: 2000-2001
- Undergraduate adviser: 2003-2004, 2005-2007, 2008-2012, 2013-2014, 2015-2016
- Math 112 (Calculus II) course coordinator: Spring 2003, Fall 2003, Fall 2004

Conference Organizing

1. Co-organizer of special session on Nonlinear partial differential equations arising from life science, AMS Sectional Meeting at SUNY Buffalo in Buffalo, NY, September 16-17, 2017.
2. Co-organizer of The Eleventh International Conference on Recent Advances in Applied Dynamical Systems, Xi'an Jiaotong University, Xi'an, China, June 9-12, 2017.
3. Co-organizer of International Workshop on Nonlinear Analysis and Reaction-Diffusion Equations, Jiangsu University, Zhenjiang, China, June 3-5, 2017.
4. Co-organizer of special session on Emergence and Dynamics of Patterns in Nonlinear Partial Differential Equations from Mathematical Science, 11th AIMS International Conference on Dynamical Systems, Differential Equations and Applications, Orlando, FL, USA, July 1–5, 2016.
5. Co-organizer of The Tenth International Conference on Recent Advances in Applied Dynamical Systems, Jiangsu Normal University, Xuzhou, China, June 11-13, 2016.
6. Co-organizer of Workshop in Application of Mathematics in Economics and Finance, Harbin Normal University, Harbin, China, January 13-14, 2016.
7. Chair of Organizing Committee of International Symposium on Application of Nonlinear Partial Differential Equations in Life Science, Chern Institute of Mathematics, Nankai University, Tianjin, China, August 4-7, 2015.
8. Organizing committee member of Workshop on Hamiltonian Systems and Variational Methods, Southeast University, Nanjing, China, May 30-31, 2015.
9. Organizing committee member of Recent advances in reaction-diffusion equations and applications, Jiangsu Normal University, Xuzhou, China, May 21-24, 2015.
10. Organizing committee member of International Workshop on Mathematics in Life and Physical Sciences, Institute for Mathematical Sciences, Renmin University of China, May 19-21, 2015.
11. Co-organizer of special session on *Qualitative Behavior of Solutions of Partial Differential Equations*, AMS Spring Northeastern Section Meeting, Georgetown University, Washington, DC, USA, March 7-8, 2015.
12. Co-organizer of special session on *Qualitative analysis of reaction diffusion systems*, 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Madrid, Spain, July 7-11, 2014.
13. Co-organizer of The Eighth International Conference on Recent Advances in Applied Dynamical Systems, Guilin University of Electronic Technology, Guilin, China, June 2-4, 2014.
14. Co-organizer of Workshop on Nonlinear Elliptic Systems, Taiyuan, China, July 24-26, 2013.
15. Co-organizer of The Seventh International Conference on Recent Advances in Applied Dynamical Systems, Linyi, China, June 8-10, 2013.

16. Co-organizer of Special session on pattern Formation in Biology, Fourth Conference on Computational and Mathematical Population Dynamics (CMPD4), Taiyuan, China, May 29–June 2, 2013.
17. Co-organizer of Special Session on *Understanding Planet Earth via Reaction Diffusion Equations*, 2013 Joint Mathematics Meeting, San Diego, CA, USA, Jan 9–12, 2013.
18. Co-organizer of 9th Eastern China PDE Conference, Shanxi University, Taiyuan, China, July 16–19, 2012.
19. Co-organizer of special session on *Nonlinear Elliptic and Parabolic Problems in Mathematical Sciences*, 9th AIMS International Conference on Dynamical Systems, Differential Equations, and Applications, Orlando, FL, USA, July 1–5, 2012.
20. Co-organizer of Undergraduate Mathematics Conference in Washington, April 21–22, 2012.
21. Co-organizer of special session on *Self-organization phenomena in reaction diffusion equations*, 2012 Spring AMS Eastern Section Meeting, Washington, DC, USA, March 17–18, 2012.
22. Co-organizer of special session *Reaction Diffusion Equations and Applications*, 2012 Joint Mathematics Meeting, Boston, MA, USA, Jan 4–7, 2012.
23. Co-organizer of 2011 Nonlinear Reaction-Diffusion Equations Summer School, Shanxi University, Taiyuan, Shanxi, China, July 17-27, 2011.
24. Co-organizer of Fifth International Conference on Recent Advances in Applied Dynamical Systems, Shanghai, China, May 16–18, 2011.
25. Co-organizer of GMU-WM 2011 CSUMS Spring Workshop, Williamsburg, Virginia, USA, April 16, 2011.
26. Co-organizer of special session *Analysis of Reaction-Diffusion Models*, 2011 Joint Mathematics Meeting, New Orleans, Louisiana, USA, Jan 6–9, 2011.
27. Co-organizer of special session *Differential Equations and Applications to Physics and Biology*, 2010 Fall AMS Southeastern Section Meeting, Richmond, Virginia, Nov 6–7, 2010.
28. Co-organizer of Fourth International Conference on Recent Advances in Applied Dynamical Systems, Zhejiang Normal University, Jinhua, China, June 17–20, 2010.
29. Main organizer of International Workshop on Reaction-Diffusion Models and Mathematical Biology, Harbin, China, June 24–June 27, 2009.
30. Co-organizer of International Conference on Nonlinear Partial Differential Equations and Geometric Analysis, Harbin, China, June 30–July 4, 2008.
31. Organizer of special session *Nonlinear Elliptic and Parabolic PDEs with Applications*, The Seventh AIMS International Conference on Dynamical Systems and Differential Equations, University of Texas at Arlington, Arlington, TX, May 2008.
32. Co-Organizer of International Workshop on Banach Space, Operator Theory and Applications in Nonlinear Analysis, Y.Y. Tsengs Functional Analysis Research Center, Harbin Normal University, Harbin, China, July 25-27, 2007.
33. Co-organizer of Second International Conference on Recent Advances in Applied Dynamical Systems, Zhejiang Normal University, Jinhua, China, June 4-8, 2007.
34. Co-Organizer of Workshop on Analysis and PDE, Y.Y. Tsengs Functional Analysis Research Center, Harbin Normal University, Harbin, China, July 21–22, 2006.
35. Co-Organizer of AMS-SIAM Special Session on *Reaction Diffusion Equations and Applications*, Joint Mathematics Meetings, Atlanta, January 5-8, 2005.
36. Organizer of special session on *Recent Developments on Nonlinear Elliptic Equations and Variational Problems*, The Fifth AIMS International Conference on Dynamical Systems and Differential Equations, California State Polytechnic University, Pomona, CA, June 2004.
37. Co-organizer of mini-symposium on Steady States in *Reaction-Diffusion Systems*, SIAM Pacific Rim Dynamical Systems Conference, Maui, HI, August 2000.

Host for Academic Visitors (longer than 1 week)

- Zhitao Zhang (Chinese Academy of Sciences, China, Spring 2004)
- Yuwen Wang (Harbin Normal University, China, Dec. 2005–Jan. 2006)
- Jiabao Su (Capital Normal University, China, March-April 2006)
- Jitao Sun (Tongji University, China, Nov. 2009–May 2010)
- Shanshan Chen (PhD student, Harbin Institute of Technology, China, Aug. 2010–Aug. 2011)
- Xiaorong Gan (Kunming University of Science and Technology, China, Dec. 2010–May 2011)
- Jibin Li (Zhejiang Normal University, China, Oct. 2010)
- Maoan Han (Shanghai Normal University, China, Oct. 2010)
- Chuncheng Wang (University of Wyoming, May 2011–June 2011)
- Ping Liu (Harbin Normal University, China, Aug. 2011–Aug. 2012, Dec. 2016-Dec. 2017)
- Qiang Mu (Harbin Normal University, China, Aug. 2011–Aug. 2013)
- Chan-Gyun Kim (National Pusan University, Korea, Sept. 2011–July 2013)
- Jeong-Mi Jeong (National Pusan University, Korea, Sept. 2011–July 2013)
- Jun Zhou (Southwest University, China, Jan. 2012–Jan. 2013)
- Fengqi Yi (Harbin Engineering University, China, March 2012)
- Jann-Long Chern (National Central University, Taiwan, May 2008 and July 2012)
- Yihong Du (University of New England, Australia, November 2012)
- Xiangping Yan (Lanzhou Jiaotong University, China, Aug. 2013–Aug. 2014)
- Leiga Zhao (Beijing Chemical Engineering University, China, Aug. 2013–Feb. 2014)
- Fukun Zhao (Yunnan Normal University, China, Aug. 2013–Feb. 2014)
- Hong Li (University of Electronic Science and Technology of China, Sept. 2013–Sept. 2014)
- Jun Wang (Jiangsu University, China, Dec. 2013–Dec. 2014)
- Yulian An (Shanghai Institute of Technology, China, Dec. 2013–Jan. 2015)
- Zhanping Liang (Shanxi University, China, Jan. 2014–Jan. 2015)
- Yujuan Chen (Nantong University, China, Jan. 2014, Oct. 2014, Sept.-Oct. 2015)
- Guohong Zhang (Southwest University, China, Aug. 2014–Aug. 2015)
- Xiaoli Wang (Southwest University, China, Aug. 2014–Aug. 2015)
- Shunyong Li (Shanxi University, China, Sept. 2014–Sept. 2015)
- Sainan Wu (PhD student, Harbin Institute of Technology, China, Sept. 2014–Sept. 2016)
- Fangfang Jiang (PhD student, Tongji University, China, Jan. 2015-Apr. 2015)
- Xiaoqin Zhang (Shanxi University, China, Feb. 2015–Feb. 2016)
- Yuhua Li (Shanxi University, China, Feb. 2015–Feb. 2016)
- Deqiong Ding (Harbin Institute of Technology at Weihai, China, Feb. 2015–Feb. 2016)
- Wenjie Zuo (China University of Petroleum (East China), Aug. 2015-Aug. 2016)
- Xiaoyuan Chang (Harbin University of Science and Technology, China, Feb. 2016-Feb. 2017)
- Jimin Zhang (Heilongjiang University, China, Feb. 2016-Feb. 2017)
- Wenjie Ni (PhD student, Harbin Institute of Technology, China, Aug. 2016-Feb. 2018)
- Qingyan Shi (PhD student, Tongji University, China, Sept. 2016-Sept. 2018)
- Xiaoyan Zhang (Shandong University, Dec. 2016-Aug. 2017)

Refereeing for Journals

Totally > 500 manuscripts for > 70 journals in mathematics, physics and biology (2000-2016), about $30 - 40$ each year since 2008

1. Transactions of American Mathematical Society
2. Proceedings of American Mathematical Society
3. Journal of London Mathematical Society
4. Proceedings of London Mathematical Society
5. Proceedings of Royal Society of Edinburgh
6. Proceeding of Royal Society, A
7. Journal of Differential Equations
8. Communications of Partial Differential Equations
9. Discrete and Continuous Dynamical Systems A
10. Discrete and Continuous Dynamical Systems B
11. Discrete and Continuous Dynamical Systems S
12. Electronic Journal of Differential Equations
13. Journal of Mathematical Analysis and Applications
14. Nonlinear Analysis, Theory, Methods & Applications
15. Nonlinear Analysis, Real World Applications
16. Boundary Value Problems
17. Communications on Pure and Applied Analysis
18. Applicable Analysis
19. Abstract and Applied Analysis
20. Computers and Mathematics with Applications
21. Applied Mathematics Letters
22. Mathematical and Computer Modeling
23. International Journal of Mathematics and Mathematical Sciences
24. Global Journal of pure and applied mathematics
25. International Journal of Dynamical Systems and Differential Equations
26. Mathematical Methods in the Applied Sciences
27. Nonlinear Dynamics
28. International Journal of Differential Equations
29. Mathematical Modelling and Analysis
30. IMA Journal Applied Mathematics
30. Numerical Algorithms
31. Journal of Franklin Institute
32. Taiwannese Journal of Mathematics
33. Rocky Mountain Journal of Mathematics
34. Frontier of Mathematics in China
35. Science in China (Mathematics)
36. Acta Mathematica Applicatae Sinica
37. Physica A
38. Theoretical Population Biology
39. Journal of Mathematical Biology
40. Mathematical Biosciences
41. Ecological Modelling
42. IMA Journal Mathematical Medicine and Biology
43. Journal of Biological Dynamics
44. International Journal of Biomathematics
45. Automatica
46. Acta Applicandae Mathematicae
47. SIAM Journal of Applied Mathematics
48. SIAM Journal of Mathematical Analysis
49. Bulletins of Mathematical Biology
50. Chaos
51. Advanced Nonlinear Studies
52. Dynamics of PDE

53. Advances in Nonlinear Analysis
54. Modelling and Simulation in Engineering
55. Ecological Complexity
56. Networks and Heterogeneous Media
57. Bulletin of the Malaysian Mathematical Sciences Society
58. Ecosystems
59. Journal of Functional Analysis
60. International Journal of Bifurcation and Chaos
61. ZAMP
62. Memoir of American Mathematical Society
63. Mathematical Methods in the Applied Sciences
64. Topological and Mathematical Nonlinear Analysis
65. Advances in Nonlinear Analysis
66. European Journal of Applied Mathematics
67. Archive for Rational Mechanics and Analysis
68. PLOSone
69. Dynamical Systems
70. Esturies and Coasts
71. Nonlinear Analysis Series: Hybrid Systems
72. Journal of Fixed Point Theory and Applications
73. Nonlinearity

Other Review Activities

1. Panelist of NSF panels (Nov 2009, April 2011, April 2015, Nov 2016)
2. Reviewer for Fulbright Scholar Program (2015)
3. Reviewer for Changjiang Professorship, China (2014)
4. Reviewer for Alberta Innovates Strategic Research Projects (2016)
5. External reviewer of tenure promotion (2015)
6. Reviewer for *Mathematical Reviews* (MathSciNet). (40+ reviews since 2000)
7. Reviewer for PSC-CUNY research Award (2008, 2009)
8. Reviewer for Book: a collection of essays in spatial ecology (2008)
9. Reviewer for Conference: ICNAAM 2008 (2008)
10. Reviewer for textbooks: (a) Differential Equations Manuscript, Cengage Learning, Inc. (2007); (b) Applied Differential Equations text by Michael Greenberg, Addison Wiley (2008); (c) Calculus For the Life Sciences: A Modeling Approach, by James L. Cornette and Ralph A. Ackerman, John Wiley & Sons (2008); (d) Biocalculus, Brooks/Cole& Cengage Learning, (2009).