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Summary

I'm a professor and researcher at the Department of Mathematics, Jahrom University, Jahrom, Iran. My research field is partial differential equations and inverse problems. Currently, I'm working on PDEs and inverse problems with variable exponent nonlinearities.

Education

B. S. (Bachelor of Science): **Pure Mathematics** 2003-2007

Ferdowsi University of Mashhad, Iran.

M. S. (Master of Science): **Applied Mathematics** 2008-2010

Shiraz University, Shiraz, Iran.

Ph. D. (Doctor of Philosophy): **Applied Mathematics** 2010-2013

Shiraz University, Shiraz, Iran.

Publications

1. Mohammad Shahrouzi, Faramarz Tahamtani, *Global nonexistence and stability of solutions of inverse problems for a class of Petrovsky systems*, **Georgian**

Mathematical Journal, 19, 575–586, (2012).

2. Faramarz Tahamtani, **Mohammad Shahrouzi**, *Existence and blow up of solutions to a Petrovsky equation with memory and nonlinear source term*, **Boundary Value Problems**, 2012:50, 1–15, (2012).
3. Faramarz Tahamtani, **Mohammad Shahrouzi**, *Asymptotic stability and blow up of solutions for a Petrovsky inverse source problem with dissipative boundary condition*, **Mathematical Methods in the Applied Sciences**, 36, 829–839, (2013).
4. Mohammad Shahrouzi, *Blow-up of Solutions for a Class of Fourth-order Equation Involving Dissipative Boundary Condition and Positive Initial Energy*, **Journal of Partial Differential Equations**, 27(4), 347–356, (2014).
5. Mohammad Shahrouzi, *On the Petrovsky Inverse Problem with Memory Term and Nonlinear Boundary Feedback*, **Iranian Journal of Science and Technology**, 39(A1), 45–50, (2015).
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7. Mohammad Shahrouzi, *Asymptotic stability and blowup of solutions for a class of viscoelastic inverse problem with boundary feedback*, **Mathematical Methods in the Applied Sciences**, 39, 2368–2379, (2016).
8. Mohammad Shahrouzi, *Blow-up analysis for a class of higher-order viscoelastic inverse problem with positive initial energy and boundary feedback*, **Annali di Matematica**, 196, 1877–1886, (2017).
9. Mohammad Shahrouzi, *On behaviour of solutions for a nonlinear viscoelastic equation with variable-exponent nonlinearities*, **Computers and Mathematics with Applications**, 75, 3946–3956, (2018).
10. Mohammad Shahrouzi, *General decay and blow-up results for nonlinear fourth-order integro-differential equation*, **Indian Journal of Pure and Applied Mathematics**, 49(4), 1–14, (2018).
11. Mohammad Shahrouzi, *Blow up of Solutions to a Class of Damped Viscoelastic Inverse Source Problem*, **Differential Equations and Dynamical Systems**, 28, 889–899, (2020).
12. Mohammad Shahrouzi, *Global nonexistence of solutions for a class of viscoelastic Lamé' system*, **Indian Journal of Pure and Applied Mathematics**, 51(4), 1383-1397, (2020).

13. Mohammad Shahrouzi, Firouzeh Kargarfard, *Blow up of solutions for a Kirchhoff type equation with variable-exponent nonlinearities*, **Journal of Applied Analysis**, 27(1), 97–105, (2021).
14. Stanislav Antontsev, Jorge Ferreira, Erhan Piskin, Hazal Yuksekkaya, **Mohammad Shahrouzi**, *Blow up and asymptotic behavior of solutions for a $p(x)$ -Laplacian equation with delay term and variable exponents*, **Electronic Journal of Differential Equations**, 2021(84), 1–20, (2021).
15. Mohammad Shahrouzi, *Blow up of solutions for an $r(x)$ -Laplacian Lamé' equation with nonlinearities and arbitrary initial energy level*, **International Journal of Nonlinear Analysis and Applications**, 1(13), 441–450, (2022).
16. Mohammad Shahrouzi, *General decay and blow up of solutions for a class of inverse problem with elasticity term and variable-exponent nonlinearities*, **Mathematical Methods in the Applied Sciences**, 45(4), 1864–1878, (2022).
17. Erhan Piskin, Hazal Yuksekkaya, Jorge Ferreira, **Mohammad Shahrouzi**, *Existence and asymptotic behavior for a logarithmic viscoelastic plate equation with distributed delay*, **International Journal of Nonlinear Analysis and Applications**, 13(2), 763–788, (2022).
18. Mohammad Shahrouzi, *A Study on the Blow-up of Solutions for a Lamé' System of Inverse Problem*, **Kragujevac Journal of Mathematics**, 49(1), 81–92, (2025).
19. Mohammad Shahrouzi, Jorge Ferreira, *A nonlinear $r(x)$ -Kirchhoff type hyperbolic equation: Stability result and blow up of solutions with positive initial energy*, **Communications in Advanced Mathematical Sciences**, 4(4), 208–216, (2021).
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dissipation in noncylindrical domain, **Electronic Journal of Differential Equations**, 2022(09), 1–13, (2022).

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25. Jorge Ferreira, Nazli Irkil, Erhan Piskin, Carlos Raposo, **Mohammad Shahrouzi**, *Blow up of solutions for a Petrovsky type equation with logarithmic nonlinearity*, *Bulletin of the Korean Mathematical Society*, 59(6), 1495–1510, (2022).
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29. Jorge Ferreira, J. P. Andrade, W. S. Panni, **Mohammad Shahrouzi**, *Strong and periodic solutions of Navier-Stokes equations, in 2D, with non-local viscosity*, **Open Journal of Mathematical Analysis**, 6(1), 62–69, (2022).
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31. Mohammad Shahrouzi, Jorge Ferreira, Erhan Piskin, Nouri Boumaza, *Blow-up analysis for a class of plate viscoelastic $p(x)$ -Kirchhoff type inverse source problem with variable-exponent nonlinearities*, **Siberian Electronic Mathematical Reports**, 19(2), 912–934, (2022).

32. Jorge Ferreira, Mohammad Shahrouzi, Sebastiao Cordeiro, Daniel V. Rocha, *Blow up of solution for a nonlinear viscoelastic problem with internal damping and logarithmic source term*, **Journal of Mathematics, Mechanics and Computer Science**, 116(4), 15–24, (2022).
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34. Mohammad Shahrouzi, Jorge Ferreira, Erhan Piskin, Khaled Zennir, *On the behavior of solutions for a class of nonlinear viscoelastic fourth-order $p(x)$ -Laplacian equation*, **Mediterranean Journal of Mathematics**, 20(214), 1–28, (2023). <https://doi.org/10.1007/s00009-023-02423-0>
35. Mohammad Shahrouzi, Jorge Ferreira, Faramarz Tahamtani, *Global existence, asymptotic stability and blow up of solutions for a nonlinear viscoelastic plate equation involving $(p(x), q(x))$ -Laplacian operator*, **Zeitschrift für Analysis und ihre Anwendungen (ZAA)**, 1–25, (2023). <https://doi.org/10.4171/ZAA/1722>
36. Faramarz Tahamtani, **Mohammad Shahrouzi**, *Global existence and general decay results for a quasi-linear weak-viscoelastic parabolic system*, **Applied Mathematics E-Notes**, Accepted, (2023).
37. Mohammad Shahrouzi, Faramarz Tahamtani, Jorge Ferreira, Mirelson M. Freitas, *Blow-up results for a Boussinesq-type plate equation with logarithmic damping term and variable-exponent nonlinearities*, **Applicationes Mathematicae**, 1–16, (2023). <https://doi.org/10.4064/am2470-6-2023>
38. Jorge Ferreira, Erhan Piskin, **Mohammad Shahrouzi**, *General decay and blow up of solutions for a plate viscoelastic $p(x)$ -Kirchhoff type equation with variable exponent nonlinearities and boundary feedback*, **Quaestiones Mathematicae**, 1–18 , (2023). <https://doi.org/10.2989/16073606.2023.2256983>
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40. Faramarz Tahamtani, **Mohammad Shahrouzi**, Jorge Ferreira, *Global existence and general decay for a weak viscoelastic equation with acoustic boundary conditions and a logarithmic source term*, **Zeitschrift für Angewandte**

Mathematik und Physik (ZAMP), 74(207), 1–16, (2023).
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41. Mohammad Shahrouzi, *Asymptotic behavior of solutions for a nonlinear viscoelastic higher-order $p(x)$ -Laplacian equation with variable-exponent logarithmic source term*, **Boletín de la Sociedad Matemática Mexicana**, Online, 1–13, (2023). <https://doi.org/10.1007/s40590-023-00551-x>
42. Mohammad Shahrouzi, Jorge Ferreira, Faramarz Tahamtani, *Coupled system of nonlinear viscoelastic plate equations of $(p(x), q(x))$ -Kirchhoff-type: Global existence, general decay and blow-up*, **Mathematical Methods in the Applied Sciences**, Accepted, (2023).
43. Carlos Alberto Nonato, Carlos Alberto Raposo, Mohammad Shahrouzi, Jorge Ferreira, *Thermoelastic Laminated Beam with Internal Distributed Delay*, **Boletín de la Sociedad Matemática Mexicana**, Revised, (2023).
44. Sebastiao Cordeiro , Carlos Raposo, Jorge Ferreira, Daniel V. Rocha and **Mohammad Shahrouzi**, *Local existence for a viscoelastic Kirchhoff type equation with the dispersive term, internal damping, and logarithmic nonlinearity*, **Opuscula Mathematica**, Vol. 44, No. 1, 1–28, (2024).

Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
(not set)	(not set)	Tenured	Full Time	10

Papers in Journals

1. جواد توکلی , جواد خانی , محمد شهروزی، بررسی تاثیر عصاره حاصل از جوانه معمولی و قرار گرفته تحت امواج اولتراسونیک سه رقم مختلف گندم کشت شده در ایران بر پایداری اکسایشی روغن سویا، علوم و صنایع غذایی ایران، ۱۳۹۸.
2. Mohammad Shahrouzi, Blow up of solutions for a $r(x)$ -Laplacian Lamé' equation with variable-exponent nonlinearities and arbitrary initial energy level, *International Journal of Nonlinear Analysis and Applications*, Vol. 1, No. 13, pp. 441-450, 2022.
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4. BLOW UP AND ASYMPTOTIC BEHAVIOR OF SOLUTIONS FOR A $p(x)$ -LAPLACIAN EQUATION WITH DELAY TERM AND VARIABLE EXPONENTS, *Electronic Journal of Differential Equations*, Vol. 84, No. 2021, pp. 1-20, 2021.
5. Mohammad Shahrouzi, GLOBAL NONEXISTENCE OF SOLUTIONS FOR A CLASS OF VISCOELASTIC LAMÉ' SYSTEM, *Indian Journal of Pure and Applied Mathematics*, 2020.
6. Mohammad Shahrouzi, GENERAL DECAY AND BLOW-UP RESULTS FOR NONLINEAR FOURTH-ORDER

INTEGRO-DIFFERENTIAL EQUATION, Indian Journal of Pure and Applied Mathematics, 2018.

7. Mohammad Shahrouzi, On behaviour of solutions for a nonlinear viscoelastic equation with variable-exponent nonlinearities, Computers and Mathematics with Applications, 2018.
8. Mohammad Shahrouzi, Blow up of Solutions to a Class of Damped Viscoelastic Inverse Source Problem, Differential Equations and Dynamical Systems, 2017.
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14. Faramarz Tahamtani, & Mohammad Shahrouzi, Asymptotic stability and blow up of solutions for a Petrovsky inverse source problem with dissipative boundary condition, Mathematical Methods in the Applied Sciences, 2013.
15. Faramarz Tahamtani, & Mohammad Shahrouzi, Existence and blow up of solutions to a Petrovsky equation with memory and nonlinear source term, Boundary Value Problems, 2012.
16. Faramarz Tahamtani, & Mohammad Shahrouzi, Global nonexistence and stability of solutions of inverse problems for a class of Petrovsky systems, Georgian Mathematical Journal, 2012.