

Faculty Research for 2017

1. C. Yang, X. Wang, D. Gao and **J. Wang**, Impact of awareness programs on cholera dynamics: Two modeling approaches, *Bulletin of Mathematical Biology*, vol. 79, pp. 2109-2131, 2017.
2. A. Timalcina, J. Tian and **J. Wang**, Mathematical and computational modeling of tumor virotherapy with mediated immunity, *Bulletin of Mathematical Biology*, vol. 79, pp. 1736-1758, 2017.
3. P. Lolika, S. Mushayabasa, C. Bhunu, C. Modnak and **J. Wang**, Modeling and analyzing the effects of seasonality on brucellosis infection, *Chaos, Solitons & Fractals*, vol. 104, pp. 338-349, 2017.
4. C. Yang, P. Lolika, S. Mushayabasa and **J. Wang**, Modeling the spatiotemporal variations in brucellosis transmission, *Nonlinear Analysis: Real World Applications*, vol. 38, pp. 49-67, 2017.
5. A. Timalcina, G. Hou and **J. Wang**, Computing fluid-structure interaction by the partitioned approach with direct forcing, *Communications in Computational Physics*, vol. 21(1), pp. 182-210, 2017.
6. L. Cai, C. Modnak and **J. Wang**, An age-structured model for cholera control with vaccination, *Applied Mathematics and Computation*, vol. 299, pp. 127-140, 2017.
7. X. Wang and **J. Wang**, Modeling the within-host dynamics of cholera: Bacterial-viral interaction, *Journal of Biological Dynamics*, vol. 11, pp. 484-501, 2017.
8. C. Modnak and **J. Wang**, Optimal treatment strategy of an avian influenza model with latency, *International Journal of Biomathematics*, vol. 10(5), 1750066, 2017.
9. X. Wang and **J. Wang**, Disease dynamics in a coupled cholera model linking within-host and between-host interactions, *Journal of Biological Dynamics*, vol. 11, pp. 238-262, 2017.
10. J. Luo, **J. Wang** and H. Wang, Seasonal forcing and exponential threshold incidence in cholera dynamics. *Discrete and Continuous Dynamical Systems B*, vol. 22, pp. 2261-2290, 2017.
11. **Lingju Kong**, Weak solutions for nonlinear Neumann boundary value problems with $p(x)$ -Laplacian operators, *Taiwanese J. Math.* **21** (2017), 1355--1379.
12. **Lingju Kong**, Jacob Parsley, Kaitlin Rizzo, and Nicholas Russell, Anti-periodic solutions for a higher order difference equation with p -Laplacian, *J. Appl. Anal.* **23** (2017), 111—125.
13. **John R. Graef**, **Lingju Kong** and Feliz Minhos, Generalized Hammerstein equations and applications, *Result. Math.* **72** (2017), 369--383.
14. **John R. Graef**, Shapour Heidarkhani, and **Lingju Kong**, Variational-hemivariational inequalities of Kirchhoff-type with small perturbation of nonhomogeneous Neumann boundary conditions, *Mathematics in Engineering, Science and Aerospace* **8** (2017), 345--357.
15. **John R. Graef**, Shapour Heidarkhani, and **Lingju Kong**, Infinitely many periodic solutions to a class of perturbed second-order impulsive Hamiltonian systems, *Differ. Equ. Appl.* **9** (2017), 195--212.
16. **John R. Graef**, **Lingju Kong**, Qingkai Kong, and Min Wang, On a fractional boundary value problem with a perturbation term, *J. Appl. Anal. Comput.* **7** (2017), 57—66.

17. I.V. Andronov, **Boris Belinskiy**, On Some Mathematical Aspects of High-Frequency Diffraction by Strongly Elongated Spheroids (with I. V. Andronov), 32nd URSI GASS, Montreal, 19-26 August (2017)
18. I.V. Andronov, **Boris Belinskiy**, Parabolic Equation Method for High-Frequency Diffraction by an Elongated Body (with I.V. Andronov), presented to IEAA 17 International Conf. on Electromagnetics in Advanced Applications, Verona, 09/11-15 (2017). Proceedings of IEAA, IEEE Xplore, pp. 464-467 (2017).
19. K. Day, J. Scott, L. Sargent and **C. Gao**, "Progressive Surgical Autonomy in a Plastic Surgery Resident Clinic", American Society of Plastic Surgeons, vol. 5 (5), 2017.
20. Y. Liang and **C. Gao** et al. , Book Chapter, "Civil Infrastructure Serviceability Evaluation Based on Big Data" of the book "Guide to Big Data Applications", Springer 2017 1st Edition.
21. **Panagiotou E.**, Millett K. C. and Atzberger P., 2017, Topological Methods for Polymeric Materials: Characterizing the Relationship Between Polymer Entanglement and Viscoelasticity, (submitted).
22. Taylor, J. David; **Van der Merwe, Lucas C.** A note on connected domination critical graphs. J. Combin. Math. Comput. 100 (2017), 3–8. 05C69 (05C40)
23. Desormeaux, Wyatt J.; Haynes, Teresa W.; **Van der Merwe, Lucas**, Global domination edge critical graphs. Util. Math. 104 (2017), 151–160.
24. **Aniekan A. Ebiefung**. Guidelines for evaluating the validity of a statistical study in a general education statistics course, Proceedings of the Southeast Decision Sciences Institute Conference, 2017.
25. **Aniekan A. Ebiefung**, George Habetler, Michael Kostreva, Bohdan Szanc. A Direct Algorithm for the Vertical Generalized Complementarity Problem Associated with P-matrices. Open Journal of Optimization, Vol. 6, pp101-114, 2017.