

LISTĂ LUCRĂRI

Conf. Dr. GAVREA Bogdan Ionuț

I. Lista lucrărilor relevante pentru activitatea științifică

- 1) (ISI) B. Gavrea, *A mean value theorem for the Chebyshev functional*, Mathematical Inequalities & Applications, Volume 18, Number 2, 751-757, 2015, doi: 10.7153/mia-18-55.
- 2) (ISI) B. Gavrea, *A Hermite–Hadamard type inequality with applications to the estimation of moments of continuous random variables*, Applied Mathematics and Computation, vol. 254, 92-98, 2015, doi:10.1016/j.amc.2014.12.129.
- 3) (ISI) B. Gavrea, *Improvement of some inequalities of Chebyshev–Grüss type*, Computers & Mathematics with Applications (CAMWA), 64(6), 2003-2010, 2012, DOI:10.1016/j.camwa.2012.03.101
- 4) (ISI) D. J. Cappelleri, P. Cheng, J. Fink, B. Gavrea, V. Kumar, "Automated Assembly for Mesoscale Parts", IEEE T. Automation Science and Engineering, 8(3), 598-613, 2011.
- 5) (ISI) C. Petra, B. Gavrea, M. Anitescu, F. Potra, *A computational study of the use of an optimization-based method for simulating large multibody systems*, Optimization Methods and Software, 24(6), 871-894, 2009, DOI 10.1080/10556780902806094.
- 6) (ISI) B. Gavrea, M. Anitescu, F.A. Potra, *Convergence of a Class of Semi-Implicit Time-Stepping schemes for Nonsmooth Rigid Multibody Dynamics*, SIAM Journal on Optimization (SIOPT), 19(2), 969-1001, 2008, DOI 10.1137/060675745.
- 7) (ISI) B. Gavrea, J. Jaksetic, J. Pecaric, *On a Global Upper Bound for Jessen's Inequality*, The ANZIAM Journal, 50(02), 246-257, 2008, DOI 10.1017/S1446181109000091.
- 8) (ISI) F.A. Potra, M. Anitescu, B. Gavrea, J. Trinkle, *A linearly implicit trapezoidal method for stiff multibody dynamics with contact, joints and friction*, International Journal for Numerical Methods in Engineering, 66(7), 1079-1124, 2006, DOI 10.1002/nme.1582.
- 9) B. Gavrea, M. D. Rus, *On an l_1 -minimization problem from optical flow*, Automat. Comput. Appl. Math. (ACAM), 22(1):327-335, 2013.
- 10) B. Gavrea, *Switching Events in Rigid-body Time-stepping Schemes*, Automat. Comput. Appl. Math. (ACAM), 19(1), 2010.

II. Teza de Doctorat:

1. Bogdan Gavrea, *Simulation of rigid body systems with joints, contacts and friction*, University of Maryland, Baltimore County, Baltimore, USA, conducător științific: Prof. Dr. Florian A. Potra.

III. Cărți publicate:

2. Bogdan Gavrea, *Lecture Notes. Transforms and Basic Probability Theory*, Editura Mediamira, 2009, ISBN978-973-713-238-3.
3. Bogdan Gavrea, *Integration Schemes for Rigid-Body Systems*, Editura Mediamira 2010, ISBN 978-973-713-270-3.

IV. Articole publicate în reviste din fluxul științific internațional principal:

4. (ISI) B. Gavrea, *A mean value theorem for the Chebyshev functional*, Mathematical Inequalities & Applications, Volume 18, Number 2, 751-757, 2015, doi: 10.7153/mia-18-55.
5. (ISI) B. Gavrea, *A Hermite–Hadamard type inequality with applications to the estimation of moments of continuous random variables*, Applied Mathematics and Computation, vol. 254, 92-98, 2015, doi:10.1016/j.amc.2014.12.129.
6. (ISI) B. Gavrea, *Improvement of some inequalities of Chebyshev–Grüss type*, Computers & Mathematics with Applications (CAMWA), 64(6), 2003-2010, 2012, DOI:10.1016/j.camwa.2012.03.101
7. (ISI) D. J. Cappelleri, P. Cheng, J. Fink, B. Gavrea, V. Kumar, *Automated Assembly for Mesoscale Parts*, IEEE T. Automation Science and Engineering, 8(3), 598-613, 2011.
8. (ISI) C. Petra, B. Gavrea, M. Anitescu, F. Potra, *A computational study of the use of an optimization-based method for simulating large multibody systems*, Optimization Methods and Software, 24(6), 871-894, 2009, DOI 10.1080/10556780902806094.
9. (ISI) B. Gavrea, M. Anitescu, F.A. Potra, *Convergence of a Class of Semi-Implicit Time-Stepping schemes for Nonsmooth Rigid Multibody Dynamics*, SIAM Journal on Optimization (SIOPT), 19(2), 969-1001, 2008, DOI 10.1137/060675745.
8. (ISI) B. Gavrea, J. Jaksetic, J. Pecaric, *On a Global Upper Bound for Jessen's Inequality*, The ANZIAM Journal, 50(02), 246-257, 2008, DOI 10.1017/S1446181109000091.
9. (ISI) F.A. Potra, M. Anitescu, B. Gavrea, J. Trinkle, *A linearly implicit trapezoidal method for stiff multibody dynamics with contact, joints and friction*, International Journal for Numerical Methods in Engineering, 66(7), 1079-1124, 2006, DOI 10.1002/nme.1582.
10. B. Gavrea, M. D. Rus, *On an l_1 -minimization problem from optical flow*, Automat. Comput. Appl. Math. (ACAM), 22(1):327-335, 2013.
11. B. Gavrea, *Switching Events in Rigid-body Time-stepping Schemes*, Automat. Comput. Appl. Math. (ACAM), 19(1), 2010.
12. B. Gavrea, C. Petra, *Large Quadratic Programming Problems Generated by Rigid Body Simulation*, General Mathematics, 16(4), 2008.
13. B. Gavrea, *Pointedness of the Friction in Rigid Body Simulation*, Automat. Comput. Appl. Math. (ACAM), 17(3), 2008.
14. B. Gavrea, *LCP Based Integration Schemes for Rigid Body Systems*, Automat. Comput. Appl. Math. (ACAM), 16(2), 2007.
15. B. Gavrea, *On Hadamard's inequality for the convex mappings defined on a convex domain in the space*, Journal of Inequalities in Pure and Applied Mathematics, 1(1), article 9, 2000.
16. B. Gavrea, I. Gavrea, *An inequality for linear positive functionals*, Journal of Inequalities in Pure and Applied Mathematics, 1(1), article 5, 2000.
17. B. Gavrea, I. Gavrea, *Ostrowski type inequalities from a linear functional point of view*, Journal of Inequalities in Pure and Applied Mathematics, 1(2), article 11, 2000.

V. Lucrări apărute în proceedings:

18. B. Gavrea, *Some Convergence Results in Rigid-Body Dynamics*, International Conference on Numerical Analysis and Applied Mathematics 2009: Volume 1 and Volume 2. AIP Conference Proceedings, Volume 1168, pp. 1396-1399 (2009).
19. B. Gavrea, *On Some Integral Inequalities*, Conference on Inequalities and Applications, Noszvaj (Hungary), September 2007, in International Series of Numerical Mathematics, vol. 157, Birkauer-Verlag, ISSN 978-3-7643-8772-3.
20. P. Cheng, D. Cappelleri, B. Gavrea, V. Kumar, *Planning and Control of Mesoscale Manipulation Tasks with Uncertainties*, Proceedings of Robotics: Science and Systems (3rd: 2007, Atlanta GA), MIT PRESS, 2008, ISBN 978-026-252-4841.
21. B. Gavrea, D. Negrut, F.A. Potra, *The Newmark integration for simulation of multibody systems: analytical considerations*, In Proceedings of IMECE, ASME International Congress and Exposition, *Orlando (FL), 2005*.

VI. Alte contribuții științifice

22. (video) D.Cappelleri, P.Cheng, B. Gavrea, and V. Kumar. "Meso-manipulation: System, Modeling, Planning and Control", Video, IEEE International Conference on Robotic and Automation (ICRA), Pasadena, CA, 2008.

Cluj-Napoca

Data _____

Semnătura
