

# СПИСЪК на ПУБЛИКАЦИИТЕ

на  
Цветомир Йотов Цачев

## I. Научни публикации в периодични списания

1. Tsachev, Ts., An  $l_2$  constrained best approximation problem, Доклади на БАН, 42 (1989), No 6, 37–40. **Импакт фактор за 1989 г.: 0.126**
2. Tsachev, Ts., An optimal control problem for the heat equation, Mathematica Balkanica (new series), 3 (1989), No 3&4, 296–310.
3. Tsachev, Ts., An  $l_2$  constrained best approximation problem, Numer. Funct. Anal. and Optimiz., 10 (1989), No 7&8, 807–826. **Импакт фактор за 1989 г.: 0.431**
4. Ribarska, N.K., Ts.Y. Tsachev and M.I. Krastanov, On the general mountain pass principle of Ghoussoub-Preiss, Mathematica Balkanica (new series), 5 (1991), No 4, 350–358.
5. Tsachev, Ts., Optimal control of linear parabolic equation: the constrained right-hand side as control function, Numer. Funct. Anal. and Optimiz., 13 (1992), No 3&4, 369–380. **Импакт фактор за 1992 г.: 0.228**
6. Tsachev, Ts., and I.V. Iordanov, The bang-bang principle for a parabolic optimal control problem with Hölderian cost functional, Доклади на БАН, 45 (1992), No 10, 25–27. **Импакт фактор за 1992 г.: 0.076**
7. Tsachev, Ts., and V. Angelov, Fixed points of nonself mappings and applications, Nonlinear Analysis: Theory, Methods and Applications, 21 (1993), No 1, 9–16. **Импакт фактор за 1993 г.: 0.347**
8. Ribarska, N.K., Ts.Y. Tsachev and M.I. Krastanov, Deformation lemma on  $C^1$  - Finsler manifolds and applications, Доклади на БАН, 47 (1994), No 1, 13–16. **Импакт фактор за 1994 г.: 0.089**
9. Ribarska, N.K., Ts.Y. Tsachev and M.I. Krastanov, Deformation lemma, Ljusternik-Schnirellmann theory and mountain pass theorem on  $C^1$ - Finsler manifolds, Serdica Math. J., 21 (1995), 239–266.
10. Ribarska, N.K., Ts.Y. Tsachev and M.I. Krastanov, Speculating about mountains, Serdica Math. J., 22 (1996), 341–358.
11. Angelov, V., and Ts. Tsachev, A coincidence theorem for densifying mappings and applications, Demonstratio Mathematica, 31 (1998), No 2, 365–376.
12. Ribarska, N.K., Ts.Y. Tsachev and M.I. Krastanov, A saddle point theorem without a finite dimensional closed loop, Доклади на БАН, 51 (1998), No 11&12, 13–16.
13. Ribarska, N.K., Ts.Y. Tsachev and M.I. Krastanov, The intrinsic mountain pass principle, Topological Methods in Nonlin. Anal., 12 (1998), No 2, 309–322.
14. Ribarska, N.K., Ts.Y. Tsachev and M.I. Krastanov, The intrinsic mountain pass principle, C.R. Acad. Sci. Paris, Ser 1 Math., 329 (1999), No 5, 399–404.

## **Импакт фактор за 1999 г.: 0.291**

15. Iordanov, I.V., and Ts. Tsachev, The bang-bang principle for a parabolic optimal control problem with Hölderian cost functional, *Mathematica Balkanica* (new series), 13 (1999), No 1&2, 149–168.

16. Ribarska, N.K., Ts.Y. Tsachev and M.I. Krastanov, A note on “On a critical point theory for multivalued functionals and applications to partial differential inclusions”, *Nonlinear Analysis*, 43 (2001), No 2, Ser. A: Theory, Methods, 153–158. **Импакт фактор за 2001 г.: 0.460**

17. Feichtinger, G., Ts. Tsachev and V. Veliov, Maximum principle for age and duration structured systems: a tool for optimal prevention and treatment of HIV, *Mathematical Population Studies*, 11 (2004), No 1, 3–28.

18. Krastanov, M.I., N.K. Ribarska and Ts. Y. Tsachev, On the Existence of Solutions to Differential Inclusions with Nonconvex Right-Hand Side, *SIAM Journal on Optimization*, 18 (2007), No 3, 733–751. **Импакт фактор за 2007 г.: 1.554**

19. Tagarev, T., Ts. Tsachev and N. Zhivkov, Formalizing the Optimization Problem in Long-Term Capability Planning, *Information and Security : An International Journal*, 23 (2008), No 1, 99–114.

20. Belyakov A., Ts. Tsachev and V.M. Veliov, Optimal control of heterogeneous systems with endogenous domain of heterogeneity, *Applied Mathematics & Optimization*, 64 (2011), No 2, 287–311, DOI: 10.1007/s00245-011-9140-2. **Импакт фактор за 2011 г.: 0.952**

21. Krastanov, M.I., N.K. Ribarska and Ts. Y. Tsachev, A Pontryagin maximum principle for infinite-dimensional problems, *SIAM Journal on Control and Optimization*, 49 (2011), No 5, 2155–2182, DOI: 10.1137/100799009. **Импакт фактор за 2011 г.: 1.518**

22. Prskawetz, A., Ts. Tsachev and V. Veliov, Optimal education in an age-structured model under changing labor demand and supply, *Macroeconomic Dynamics*, 16 (2012), 159–183, DOI:10.1017/S1365100510000465. **Импакт фактор за 2012 г.: 0.42**

23. Brečhet, Th., Ts. Tsachev and V.M. Veliov, Markets for Emission Permits with Free Endowment: a Vintage Capital Analysis, *Optimal Control, Applications and Methods*, 33 (2012), 214–231, DOI: 10.1002/oca.988. **Импакт фактор за 2012 г.: 1.062**

24. Skritek, B., Ts. Tsachev, V.M. Veliov, Optimality conditions and the Hamiltonian for a distributed optimal control problem on controlled domain, приета за печат в *Applied Mathematics & Optimization*, DOI: 10.1007/s00245-014-9237-5. **Импакт фактор за 2012 г.: 0.859**

## **II. Научни публикации в сборници от конференции**

1. Tsachev, Ts., Finite dimensional approximation for a class of optimal control problems for systems governed by partial differential equations, *Proceedings of the International Conference on Constructive Theory of Functions*, Varna, May 24-31, 1987, 460–465.

2. Tsachev, Ts., Optimal control problem for the heat equation, Доклади на Осемнадесетата пролетна конференция на СМБ, Албена, 6-10 април 1989 г., 526–530.

3. Ribarska, N.K., Ts.Y. Tsachev and M.I. Krastanov, Mountain pass lemma for locally Lipschitz functions on smooth Finsler manifolds, Доклади на Двадесетата пролетна конференция на СМБ, Варна, 2-5 април 1991 г., 138–141.

4. Tsachev, Ts., Dynamic Evacuation Models, in Scientific Support for the Decision Making in the Security Sector, Ognyan Kounchev, Rene Willems, Velizar Shalamanov and Tsvetomir Tsachev (Eds.), *NATO Science for Peace and Security Series, D: Information and Communication Security, vol.12*, IOS Press Amsterdam 2007, 324–338, Proceedings of NATO ARW, October 21-25, 2006, Velingrad, Bulgaria.

5. Bréchet, Th., Ts. Tsachev and V.M. Veliov, Prices versus Quantities in a Vintage Capital Model, in Dynamic Systems, Economic Growth, and the Environment, J. Crespo Cuaresma, T.K. Palokangas, A. Tarasyev (Eds.), *Dynamic Modeling and Econometrics in Economics and Finance, Vol. 12*, Springer 2010, 141–159, Proceedings of ECG-2008, November 7-8, 2008, IIASA, Laxenburg, Austria.

6. Skritek, B., Ts. Tsachev, V.M. Veliov, Pontryagin's type optimality conditions for a distributed control problem arising in endogenous growth theory, приета за печат в Proceedings of the 9-th International Conference on "Large-Scale Scientific Computations", 3-7 юни 2013 г., гр. Созопол.

### III. Обзорна статия

1. Tsachev, Ts., Optimal control of heterogeneous systems, Доклади на Четиридесет и първата пролетна конференция на СМБ, Боровец, 9-12 април 2012 г., 70–82.

### IV. Редакторство на сборници от научни конгреси и конференции

1. Proceedings of NATO Advanced Research Workshop: "Scientific Support for the Decision Making in the Security Sector"(Editors: Ognyan Kounchev, Rene Willems, Velizar Shalamanov and Tsvetomir Tsachev), Velingrad, Bulgaria, October 21-25, 2006, Published by IOS Press Amsterdam, NATO Science for Peace Security Series, D: Information and Communication Security, vol.12, 2007.

#### Общо публикации:

- 31 статии в периодични списания и сборници от конференции;
- редакторство на един сборник от статии от научно мероприятие.

**от тях след придобиване на научното звание ст. н. с. II ст. (доцент):**

- 12 статии в периодични списания и сборници от конференции;
- редакторство на един сборник от статии от научно мероприятие.

Сумарен импакт фактор:

8.413

от него след придобиване на научното звание ст. н. с. II ст. (доцент):

6.365