MAIN PUBLICATIONS

Monographs:

1. Z. Sokhadze, The Cauchy problem for singular functional differential equations. (Russian) *Kutaisi State University*, 2005.

Textbooks:

1. Z. Sokhadze, Problems of High Mathematics (with G. Oniani, N. Nutsubidze, E. Japaridze, T. Kemoklidze). (Georgian) *Kutaisi*, 2000.

Papers:

1. Z. Sokhadze, Concerning the uniqueness of solution of the Cauchy problem for functional differential equations (with I. Kiguradze). (Russian) *Differentsial'nye Uravneniya* **31** (1995), No. 12, 1977-1988; English transl.: *Differ. Equations* **31** (1995), No. 12, 1947-1958.
2. Z. Sokhadze, Existence and continuability of solutions of the initial value problem for the system of singular functional differential equations (with I. Kiguradze). *Mem. Differential Equations Math. Phys.* **5** (1995), 127-130.
3. Z. Sokhadze, On a theorem of Myshkis-Tsalyuk. *Mem. Differential Equations Math. Phys.* **5** (1995), 131-132.
4. Z. Sokhadze, On the Cauchy problem for singular evolution functional differential equations (with I. Kiguradze). (Russian) *Differentsial'nye Uravneniya* **33** (1997), No.1, 48-59; English transl.: *Differ. Equations* **33** (1997), No.1, 47-58.
5. Z. Sokhadze, On singular functional differential inequalities (with I. Kiguradze). *Georgian Math. J.* **4** (1997), No. 3, 258-278.
6. Z. Sokhadze, On global solvability of the Cauchy problem for singular functional differential equations (with I. Kiguradze). *Georgian Math. J.* **4** (1997), No. 4, 355-372.
7. Z. Sokhadze, On the structure of the set of solutions of the weighted Cauchy problem for evolution singular functional differential equations (with I. Kiguradze). *Fasc. Math.* (1998). No. 28, 71-92.
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11. Z. Sokhadze, A priori estimates of solutions of functional differential inequalities and some of their applications (with I. Kiguradze). *Mem. Differential Equations Math. Phys.* **41** (2007), 43-67.
12. Z. Sokhadze, On some nonlinear boundary value problems for high order functional differential equations (with I. Kiguradze). *Mem. Differential Equations Math. Phys.* **43** (2008), 153-159.
13. Z. Sokhadze, The weighted Cauchy problem for nonlinear singular differential equations with deviating arguments (with B. Půža). *Differ. Uravn.***46** (2010), 29-46.
14. Z. Sokhadze, On perturbed multi-point problems for nonlinear functional systems. *Mem. Differential Equations Math. Phys.* **51** (2010), 163-168.
15. Z. Sokhadze, The weighted Cauchy problem for linear functional differential equations with strong singularities. *Georgian Math. J.* **18** (2011), No. 3, 577-586.
16. Z. Sokhadze, Optimal solvability conditions of the Cauchy-Nicoletti problem for singular functional differential systems (with B. Půža). *Mem. Differential Equations Math. Phys.* **54** (2011), 147-154.
17. Z. Sokhadze, On the Cauchy-Nicoletti weighted problem for higher order nonlinear functional differential equations. *Mem. Differential Equations Math. Phys.* **56** (2012), 143-146.
18. Z. Sokhadze, Kneser type theorems on a structure of sets of solutions of the weighted Cauchy problem for nonlinear singular delayed differential equations. *Georgian Math. J.* **20** (2013), 151-167.
19. Z. Sokhadze, On the weighted initial problem for singular functional differential systems (with B. Půža). *Mem. Differential Equations Math. Phys.* **58** (2013), 153-158.
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21. Z. Sokhadze, Positive solutions of periodic type boundary value problems for first order singular functional differential equations (with I. Kiguradze). *Georgian Math. J.* **21** (2014), 303-311.
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24. Z. Sokhadze, On nonlinear boundary value problems for higher order functional differential equations (with I. Kiguradze). *Georgian Math. J.* **23** (2016), no. 4, 537-550.
25. Z. Sokhadze, On a boundary value problem on an infinite interval for nonlinear functional differential equations (with I. Kiguradze). *Georgian Math. J.* **24** (2017), no. 2, 217-225.
26. Z. Sokhadze, Construction of the transverse-vertical shapes of the orthopedic boot-tree by means of the solution to singular Dirichlet boundary value problem (with M. Shalamberidze, M. Tatvidze). *Bull. Georgian Natl. Acad. Sci. (N.S.)* **12** (2018), no. 1, 27-32. (Scopus)

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32. Z. Sokhadze, Orthopedic boot-tree 3D Design by means of the integral curves of solutions of differential equations (with M. Shalamberidze, M. Tatvidze). *Complexity*, 2020.
33. Z. Sokhadze, Projection of orthopedic supinators considering the loads on locally over-pressure areas (with M. Shalamberidze, M. Tatvidze). *Bull. Georgian Natl. Acad. Sci. (N.S.)* **15** (2021), no. 2, 74-82.
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