

PUBLICATIONS LIST

1. Articles

1.1. Articles published in journals indexed in the Web of Science ¹

- [1] D. Dragičević, A. L. Sasu, B. Sasu, A. Șirianțu, Zabczyk type criteria for asymptotic behavior of dynamical systems and applications, *Journal of Dynamics and Differential Equations* 37 (2025), 977–1022.
- [2] D. Dragičević, A. L. Sasu, B. Sasu, On the robustness of polynomial dichotomy of discrete nonautonomous systems, *Carpathian Journal of Mathematics*, 4 (2024).²
- [3] A. L. Sasu, B. Sasu, Input-output criteria for the trichotomic behaviors of discrete dynamical systems, *Journal of Differential Equations* 351 (2023), 277–323.
- [4] D. Dragičević, A. L. Sasu, B. Sasu, On stability of discrete dynamical systems: from global methods to ergodic theory approaches, *Journal of Dynamics and Differential Equations* 34 (2022), 1107–1137.
- [5] D. Dragičević, A. L. Sasu, B. Sasu, L. Singh, Nonuniform input-output criteria for exponential expansiveness of discrete dynamical systems and applications, *Journal of Mathematical Analysis and Applications* 515 (2022), 1–37.
- [6] D. Dragičević, A. L. Sasu, B. Sasu, Input-output criteria for stability and expansiveness of dynamical systems, *Applied Mathematics and Computation* 414 (2022), 1–22.
- [7] D. Dragičević, A. L. Sasu, B. Sasu, On polynomial dichotomies of discrete nonautonomous systems on the half-line, *Carpathian Journal of Mathematics* 38³ (2022), 663–680.
- [8] D. Dragičević, A. L. Sasu, B. Sasu, Admissibility and polynomial dichotomy of discrete nonautonomous systems, *Carpathian Journal of Mathematics*, 38³ (2022), 737–732.

¹According to *2023 Journal Citation Reports (June 2024)*, *Web of Science*.

²Article dedicated to Dr. Dan Tiba on the occasion of his 70th anniversary.

³Special issue dedicated to Professor Emeritus Mihail Megan on the occasion of his 75th anniversary.

- [9] A. L. Sasu, B. Sasu, Strong exponential dichotomy of discrete nonautonomous systems: input-output criteria and strong dichotomy radius, *Journal of Mathematical Analysis and Applications* 504 (2021), Article ID 125373, 1-29.
- [10] A. L. Sasu, B. Sasu, Admissibility criteria for nonuniform dichotomic behavior of nonautonomous systems on the whole line, *Applied Mathematics and Computation* 378 (2020), Article ID 125167.
- [11] D. Dragičević, A. L. Sasu, B. Sasu, On the asymptotic behavior of discrete dynamical systems - An ergodic theory approach, *Journal of Differential Equations* 268 (2020), 4786-4829.
- [12] A. L. Sasu, B. Sasu, Exponential trichotomy and (r, p) -admissibility for discrete dynamical systems, *Discrete and Continuous Dynamical Systems Series B* 22 (2017), 3199-3220.
- [13] A. L. Sasu, B. Sasu, Admissibility and exponential trichotomy of dynamical systems described by skew-product flows, *Journal of Differential Equations* 260 (2016), 1656-1689.
- [14] A. L. Sasu, B. Sasu, Discrete admissibility and exponential trichotomy of dynamical systems, *Discrete and Continuous Dynamical Systems* 34 (2014), 2929-2962.
- [15] A. L. Sasu, B. Sasu, A Zabczyk type method for the study of the exponential trichotomy of discrete dynamical systems, *Applied Mathematics and Computation* 245 (2014), 447-461.
- [16] B. Sasu, A. L. Sasu, On the dichotomic behavior of discrete dynamical systems on the half-line, *Discrete and Continuous Dynamical Systems* 33 (2013), 3057-3084.
- [17] A. L. Sasu, M. G. Babuția, B. Sasu, Admissibility and nonuniform exponential dichotomy on the half-line, *Bulletin des Sciences Mathématiques* 137 (2013), 466-484.
- [18] A. L. Sasu, B. Sasu, On the asymptotic behavior of autonomous systems, *Asymptotic Analysis* 83 (2013), 303-329.
- [19] A. L. Sasu, M. Megan, B. Sasu, On Rolewicz-Zabczyk techniques in the stability theory of dynamical systems, *Fixed Point Theory* 13 (2012), 205-236.
- [20] A. L. Sasu, B. Sasu, Input-output admissibility and exponential trichotomy of difference equations, *Journal of Mathematical Analysis and Applications* 380 (2011), 17-32.
- [21] B. Sasu, A. L. Sasu, Nonlinear criteria for the existence of the exponential trichotomy in infinite dimensional spaces, *Nonlinear Analysis: Theory, Methods & Applications* 74 (2011), 5097-5110.
- [22] A. L. Sasu, B. Sasu, Integral equations and exponential trichotomy of skew-product flows, *Advances in Difference Equations* (2011), Article ID 918274, 1-18.

- [23] A. L. Sasu, On exact controllability of variational discrete systems, *Applied Mathematics Letters* 23 (2010), 101-104.
- [24] A. L. Sasu, Pairs of function spaces and exponential dichotomy on the real line, *Advances in Difference Equations* (2010), Article ID 347670, 1-15.
- [25] A. L. Sasu, B. Sasu, Integral equations in the study of the asymptotic behavior of skew-product flows, *Asymptotic Analysis* 68 (2010), 135-153.
- [26] A. L. Sasu, B. Sasu, Integral equations, dichotomy of evolution families on the half-line and applications, *Integral Equations and Operator Theory* 66 (2010), 113-140.
- [27] A. L. Sasu, B. Sasu, Exponential trichotomy for variational difference equations, *Journal of Difference Equations and Applications* 15 (2009), 693-718.
- [28] A. L. Sasu, Exponential dichotomy and dichotomy radius for difference equations, *Journal of Mathematical Analysis and Applications* 344 (2008), 906-920.
- [29] A. L. Sasu, Integral equations on function spaces and dichotomy on the real line, *Integral Equations and Operator Theory* 58 (2007), 133-152.
- [30] A. L. Sasu, New criteria for exponential stability of variational difference equations, *Applied Mathematics Letters* 19 (2006), 1090-1094.
- [31] A. L. Sasu, Stabilizability and controllability for systems of difference equations, *Journal of Difference Equations and Applications* 12 (2006), 821-826.
- [32] A. L. Sasu, B. Sasu, Exponential dichotomy on the real line and admissibility of function spaces, *Integral Equations and Operator Theory* 54 (2006), 113-130.
- [33] B. Sasu, A. L. Sasu, Exponential trichotomy and p -admissibility for evolution families on the real line, *Mathematische Zeitschrift* 253 (2006), 515-536.
- [34] B. Sasu, A. L. Sasu, Exponential dichotomy and (ℓ^p, ℓ^q) -admissibility on the half-line, *Journal of Mathematical Analysis and Applications* 316 (2006), 397-408.
- [35] B. Sasu, A. L. Sasu, Input-output conditions for the asymptotic behavior of linear skew-product flows and applications, *Communications on Pure and Applied Analysis* 5 (2006), 551-569.
- [36] A. L. Sasu, B. Sasu, A lower bound for the stability radius of time-varying systems, *Proceedings of the American Mathematical Society* 132 (2004), 3653-3659.
- [37] A. L. Sasu, B. Sasu, Exponential stability for linear skew-product flows, *Bulletin des Sciences Mathématiques* 128 (2004), 727-738.
- [38] A. L. Sasu, Integral characterizations for stability of linear skew-product semiflows, *Mathematical Inequalities & Applications* 7 (2004), 535-541.
- [39] B. Sasu, A. L. Sasu, Stability and stabilizability for linear systems of difference equations, *Journal of Difference Equations and Applications* 10 (2004), 1085-1105.

- [40] M. Megan, A. L. Sasu, B. Sasu, Perron conditions for pointwise and global exponential dichotomy of linear skew-product flows, *Integral Equations and Operator Theory* 50 (2004), 489-504.
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- [42] M. Megan, B. Sasu, A. L. Sasu, Exponential expansiveness and complete admissibility for evolution families, *Czechoslovak Mathematical Journal* 54 (2004), 739-749.
- [43] A. L. Sasu, Discrete methods and exponential dichotomy of semigroups, *Acta Mathematica Universitatis Comenianae* 73 (2004), 197-205.
- [44] M. Megan, A. L. Sasu, B. Sasu, Exponential stability and exponential instability for linear skew-product flows, *Mathematica Bohemica* 129 (2004), 225-243.
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- [47] M. Megan, A. L. Sasu, B. Sasu, Perron conditions for uniform exponential expansiveness of linear skew-product flows, *Monatshefte für Mathematik* 138 (2003), 145-157.
- [48] M. Megan, A. L. Sasu, B. Sasu, Banach function spaces and exponential instability of evolution families, *Archivum Mathematicum (Brno)* 39 (2003), 277-286.
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- [56] M. Megan, A. L. Sasu, B. Sasu, Perron conditions and uniform exponential stability of linear skew-product semiflows on locally compact spaces, *Acta Mathematica Universitatis Comenianae* 70 (2001), 229-240.
- [57] M. Megan, B. Sasu, A. L. Sasu, On uniform exponential stability of evolution families, *Rivista di Matematica della Università di Parma* 4 (2001), 27-43.
- [58] M. Megan, A. L. Sasu, B. Sasu, On approximate controllability of systems associated to linear skew product semiflows, *Analele Științifice ale Universității „Al. I. Cuza” din Iași* 47 (2001), 377-388.
- [59] M. Megan, A. L. Sasu, B. Sasu, On uniform exponential stability of periodic evolution operators in Banach spaces, *Acta Mathematica Universitatis Comenianae* 69 (2000), 97-106.
- [60] M. Megan, A. L. Sasu, B. Sasu, Nonuniform asymptotic behaviour of evolution operators in Banach spaces, *Studia Universitatis Babeș-Bolyai Mathematica* 45 (2000), 39-50.

1.2. Articles published in journals indexed in the Web of Science in the publication year ⁴

- [61] A. L. Sasu, B. Sasu, Translation invariant spaces and asymptotic properties of variational equations, *Abstract and Applied Analysis* (2011), Article ID 539026, 1-36.
- [62] A. L. Sasu, B. Sasu, On the unstable initial complement in exponential dichotomy on the half-line, *Analele Științifice ale Universității „Al. I. Cuza” din Iași* 54 (2008), 279-291.
- [63] A. L. Sasu, Exponential dichotomy for evolution families on the real line, *Abstract and Applied Analysis* (2006), Article ID 31641, 1-16.
- [64] A. L. Sasu, B. Sasu, Discrete admissibility, l^p -spaces and exponential dichotomy on the real line, *Dynamics of Continuous Discrete and Impulsive Systems Series A Mathematical Analysis* 13 (2006), 551-561.
- [65] A. L. Sasu, B. Sasu, Exponential dichotomy and admissibility for evolution families on the real line, *Dynamics of Continuous Discrete and Impulsive Systems Series A Mathematical Analysis* 13 (2006), 1-26.

⁴According to the Web of Science.

- [66] M. Megan, A. L. Sasu, B. Sasu, Theorems of Perron type for uniform exponential stability of linear skew-product semiflows, Dynamics of Continuous Discrete and Impulsive Systems Series A Mathematical Analysis 12 (2005), 23-43.

1.3. Articles published in proceedings indexed in the Web of Science⁶

- [67] M. Megan, A. L. Sasu, B. Sasu, Uniform exponential dichotomy and admissibility for linear skew-product semiflows, Recent Advances in Operator Theory, Operator Algebras and Their Applications, Operator Theory Advances and Applications 153 (2005), 185-195.

2. Articles published in other journals indexed in international databases

2.1. Articles published in international journals from abroad

- [68] A. L. Sasu, On exponential expansiveness of linear skew-product flows, Dynamics of Continuous Discrete and Impulsive Systems Series A Mathematical Analysis 16 (2009), 397-412.
- [69] A. L. Sasu, On exponential stability of variational difference equations, Advances in Dynamical Systems and Applications 1 (2006), 91-101.
- [70] A. L. Sasu, Exponential instability and complete admissibility for semigroups in Banach spaces, Rendiconti del Seminario Matematico dell'Universita e del Politecnico di Torino 63 (2005), 141-151.
- [71] M. Megan, B. Sasu, A. L. Sasu, Theorems of Perron type for evolution operators, Rendiconti di Matematica (Roma) 21 (2001), 231-244.

2.2. Articles published in Romanian journals

- [72] M. Megan, A. L. Sasu, B. Sasu, Nonlinear criteria for stability of nonautonomous dynamics - a new Zabczyk-Rolewicz type approach, Annals of the Academy of Romanian Scientists Series Mathematics and Its Applications² 17 (2025), 15-36.
- [73] A. L. Sasu, B. Sasu, On some dichotomy properties of dynamical systems on the whole line, Annals of the Academy of Romanian Scientists Series Mathematics and Its Applications 11 (2019), 175-201.

⁶According to the Web of Science.

²Special issue dedicated to the memory of Professor Haïm Brezis.

- [74] A. L. Sasu, Input-output conditions for uniform dichotomy of difference equations, *Annals of West University of Timișoara - Mathematics and Computer Science* 47 (2009), fasc. 3, 167-175.
- [75] A. L. Sasu, B. Sasu, Input-output conditions for exponential trichotomy of dynamical systems, *Revue d'Analyse Numérique et de Théorie de l'Approximation* 37 (2008), 209-215.
- [76] A. L. Sasu, B. Sasu, Exponential expansiveness of variational dynamical systems, *Annals of West University of Timișoara - Mathematics and Computer Science* 45 (2007), fasc. 2., 155-168.
- [77] A. L. Sasu, (L^p, L^q) -complete admissibility and exponential expansiveness of linear skew-product flows, *Mathematica* 48 (2006), 69-76.
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- [79] A. L. Sasu, Perron conditions with sequence spaces for linear skew-product flows, *Annals of West University of Timișoara - Mathematics and Computer Science* 42 (2004), fasc. 2, 87-96.
- [80] A. L. Sasu, Exponential expansiveness with ℓ^p -spaces for linear skew-product flows, *Annals of West University of Timișoara - Mathematics and Computer Science* 41 (2003), fasc. 2, 97-111.
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3. Articles published in proceedings of conferences

3.1. Articles published in proceedings indexed in the Web of Science

- [84] A. L. Sasu, B. Sasu, Stability and stabilizability of variational discrete systems, pp. 1049-1058, Vol. III, *Proceedings of the 11th International Conference on Computational and Mathematical Methods in Science and Engineering*, Benidorm (Spain), 2011, ISBN 978-84-614-6167-7.

- [85] B. Sasu, A. L. Sasu, Input-output conditions for expansiveness of dynamical systems, Chapter 22, pp. 240-246, Proceedings of The International Conference on Mathematical Problems in Engineering, Aerospace and Sciences: ICNPAA 2008, Genoa (Italy), Cambridge Scientific Publishers 2009, ISBN: 978-1-904-86880-4.

3.2. Articles published in proceedings of national conferences

- [86] M. Megan, B. Sasu, A. L. Sasu, Admissibility and dichotomy on the half-line, Proceedings of the 9th National Conference of The Romanian Mathematical Society, 2005, 211-220.
- [87] M. Megan, A. L. Sasu, B. Sasu, On uniform exponential expansiveness of evolution families, Proceedings of the Conference on Analysis, Functional Equations, Approximation Theory and Convexity, Cluj-Napoca, 2004, 139-147.
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- [92] M. Megan, A. L. Sasu, B. Sasu, On nonuniform exponential stability and Perron condition in Banach spaces, Proceedings of the 3rd National Conference of The Romanian Mathematical Society, Craiova, 1999, 133-141.

4. Published books

4.1. Chapters in books

- [1] B. Sasu, A. L. Sasu, Chapter 19: On stabilizability and detectability of variational control systems, pp. 441-454, Book: Robust Control, Theory and Applications, 2011, INTECH, ISBN: 978-953-307-229-6.

4.2. Books

4.2.1. Mathematical monographs

- [1] A. L. Sasu, Admisibilitate și proprietăți asimptotice ale cocicliilor, Editura Politehnica, 2005.
- [2] M. Megan, A. L. Sasu, B. Sasu, The Asymptotic Behaviour of Evolution Families, Editura Mirton, 2003.

4.2.2. Lecture notes

- [3] A. L. Sasu, B. Sasu, Sisteme liniare cu control, Editura Politehnica, 2003.
- [4] B. Sasu, A. L. Sasu, Sisteme dinamice discrete, Editura Politehnica, 2013.
- [5] M. Megan, A. L. Sasu, B. Sasu, Modelări matematice și comportări asimptotice ale sistemelor cu control, Editura Politehnica, 2008.

4.2.3. Collections for students

- [6] M. Megan, A. L. Sasu, B. Sasu, Calcul diferențial în $\mathbb{R}$ prin exerciții și probleme, Editura Mirton, 2003.
- [7] M. Megan, A. L. Sasu, B. Sasu, Calcul integral în $\mathbb{R}$ prin exerciții și probleme, Editura Mirton, 2003.
- [8] M. Megan, A. L. Sasu, B. Sasu, D. Juratoni, Lecții de analiză matematică. Primitive, Editura Brumar, 2002.

5. Edited special issues and conference proceedings

- [1] Journal of Difference Equations and Applications 30 (10) (2024), *Special issue dedicated to Professor Saber Elaydi on the occasion of his 80th birthday*, Invited Guest Editors J. M. Cushing and A. L. Sasu <https://www.tandfonline.com/toc/gdea20/30/10>
- [2] Carpathian Journal of Mathematics 38 (2002), no. 3 *Special issue dedicated to Professor Emeritus Mihail Megan on the occasion of his 75th anniversary*, Invited Guest Editors A. L. Sasu, B. Sasu <https://semnul.com/carpathian/issue-3-2022/>
- [3] Difference Equations, Discrete Dynamical Systems and Applications, ICDEA 23, Timișoara, Romania, July 24-28, 2017, Springer Proceedings in Mathematics & Statistics, vol. 287 (2019), 382 pp. ISBN 978-3-030-20015-2. Editors: S. Elaydi, C. Pötzsche, A. L. Sasu, <https://link.springer.com/book/10.1007/978-3-030-20016-9>

- [4] Proceedings of the 8th National Conference on Mathematical Analysis and Applications, Timișoara 1-2 Decembrie 2006, Annals of West University of Timișoara - Mathematics and Computer Science 45 (2007), fasc. 1, 277 pages. Editors: D. Gașpar, A. L. Sasu, B. Sasu.
- [5] Proceedings of the 8th National Conference on Mathematical Analysis and Applications, Timișoara 1-2 Decembrie 2006, Annals of West University of Timișoara - Mathematics and Computer Science 45 (2007), fasc. 2, 249 pages. Editors: D. Gașpar, A. L. Sasu, B. Sasu.

Timișoara, March 2025