LIST OF PUBLICATIONS (selection)
Nicolae Adrian Secelean

Habilitation thesis

"*New results in the theory of countable iterated function systems*", Babes-Bolyai Univesity of Cluj-Napoca, 2015

Ph.D. thesis

"*Applications of measure theory in the study of fractals*", Romanian Academy, Bucharest, 2001

A. Books and book chapters

C1. **Secelean, N.A.**, Wardowski, D. (2021). *A General Approach on Picard Operators*. In: Cho, Y.J., Jleli, M., Mursaleen, M., Samet, B., Vetro, C. (eds) Advances in Metric Fixed Point Theory and Applications. Springer, Singapore. https://doi.org/10.1007/978-981-33-6647-3_20, 2021, Print ISBN: 978-981-33-6646-6; Online ISBN: 978-981-33-6647-3

C2. **N.A. Secelean,** *Countable Iterated Function Systems,* LAP Lambert Academic Publishing, 2013, ISBN-13: 978-3-659-32030-9**;** ISBN-10: 3659320307**,** EAN: 9783659320309

C2 P.T. Crăciunaş, **N.A. Secelean**, S. Crăciunaş – *Analiză Matematică pe dreapta reală*, Editura ULB, Sibiu, 2010, ISBN 978-606-12-0020-7

C3 A. Branga, S. Crăciunaş, **N.A. Secelean** – *Analiză Funcţională şi Teoria Aproximării*, Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2009, ISBN 978-973-133-545-2

C4 **N.A. Secelean,** E. De Amo**:** *Topology: from Fundamentals to Euclidean Spaces*, Editorial Universidad Alméria, Spain, 2008, ISBN 978-84-8240-912-2

C5 L. Ardelean, **N. Secelean:** *Didactica Matematicii – noţiuni generale; comunicare didactică specifică matematicii*, Editura ULB, Sibiu, 2007, ISBN 978-973-739-497-2

C6 L. Ardelean, **N. Secelean:** *Didactica Matematicii – managementul, proiectarea şi evaluarea activităţilor didactice,* Editura ULB, Sibiu, 2007, ISBN 978-973-739-498-9

C7 **N.A. Secelean,** *Numărare, statistică, probabilităţi*, Ed. Credis, 2005, Proiect MEC, ISBN 973-0-04241-1

C8 **N.A. Secelean**: *Măsură şi Fractali,* Editura ULB, Sibiu, 2002, ISBN: 973-651-456-0

C9 P.T. Crăciunaş, **N.A. Secelean**, S. Crăciunaş: *Elemente de Teoria Distribuţiilor,* Ed. Universităţii "Gheorghe Asachi", Iaşi, 2002, ISBN: 973-8292-99-9

C10 S. Crăciunaş, **N.A. Secelean**, P.T. Crăciunaş: *Analiză Funcţională, noţiuni fundamentale*, Editura ULB, Sibiu,2000, ISBN: 973-651-103-0

C11 I. Chiţescu, **N.A. Secelean**: *Elemente de Teoria Măsurii şi Integralei*, Ed. "România de Mâine", Bucureşti, 1999, ISBN: 973-582-140-0

C12 **N.A. Secelean**: *Probleme de Topologie*, Editura ULB, Sibiu, 1995, ISBN: 973-95604-2-9

C13 S. Crăciunaş, **N. Secelean**, P. Crăciunaş: *Elemente de Topologie*, Editura ULB, Sibiu, 1993, ISBN: 973-95604-6-6

B. Articles/studies in extenso, published in journals from the main international scientific flux

B1. Articles in ISI journals

1. Medhi, R., **Secelean, N.** & Viswanathan, P. Exploring Iterative Dynamics, Invariant Measures, and Ergodicity in -Contractive Iterated Function Systems. *Qual. Theory Dyn. Syst.* **24**, 185 (2025). https://doi.org/10.1007/s12346-025-01345-4

2. M. Zhou, G. Li, N. Saleem, O. Popescu, and **N.A. Secelean**, Fixed point results for generalized convex orbital Lipschitz operators, *Demonstratio Mathematica*, vol. 57, no. 1, 2024, pp. 20240082, https://doi.org/10.1515/dema-2024-0082

3. K.K. Pandey, **N.A. Secelean**, and P.V. Viswanathan, On bivariate fractal interpolation for countable data and associated nonlinear fractal operator, *Demonstratio Mathematica*, vol. **57**, no. 1, 2024, pp. 20240014. https://doi.org/10.1515/dema-2024-0014

4. J. Mathew, S. Mathew, **N.A. Secelean**, *On attractors of type 1 iterated function systems*, Journal of Applied Mathematics and Informatics, 2024, vol. **42**, no.**3**, pp. 583-605 https://doi.org/10.14317/jami.2024.583

5. Zhou, M., **Secelean, N.A**., Saleem, N., Abbas, M. Best proximity points for alternative *p*-contractions, Journal of Inequalities and Applications **2024**, 4 (2024)

6. **N.A. Secelean,** D. Wardowski, On a Certain Class of IFSs and Their Attractors, Qualitative Theory of Dynamical Systems (**2022**) 21:162, p.1-15, https://doi.org/10.1007/s12346-022-00688-6

7. **N.A. Secelean,** D. Wardowski, M. Zhou, The Sehgal's Fixed Point Result in the Framework of ρ-space. Mathematics **2022**, 10(3), 459; https://doi.org/10.3390/math10030459

8. I.M. Olaru, **N.A. Secelean,** *A new approach of some contractive mappings on metric spaces*, Mathematics, Vol. **9**, Issue 12, Article number 1433, June 2021, DOI: 10.3390/math9121433

9. N. Niralda, S. Mathew, **N.A. Secelean**, *On boundaries of attractors in dynamical systems, Communications in Nonlinear Science and Numerical Simulation*, Vol. **94**, March 2021, 105572, DOI: 10.1016/j.cnsns.2020.105572

10. M. Zhou, M.K. Jain, M.S. Khan, **N.A. Secelean**, *Semi-compatible mappings and common fixed point theorems of an implicit relation via inverse C−class functions*, AIMS Mathematics, Vol. **6**, Issue 3, 2021: 2636–2652. DOI:10.3934/math.2021160

11. M. Zhou, L. Xiao-lan, **N.A. Secelean,** *Fixed Point Theorems for Generalized Kannan-Type Mappings in a New Type of Fuzzy Metric Space*, Journal of Mathematics, Vol. 2020, Articol number: 1712486, Published May 31 2020, p.1-16, DOI:10.1155/2020/1712486

12. **N.A. Secelean**, D. Wardowski, *Expansive mappings on bounded sets and their application to rational integral equations*, Revista de la Real Academia de Ciencias Exactas Físicas y Naturales Serie A-Matemáticas (2020), Volume: **114**, Issue: 3, Article Number: 134, p.1-9, DOI: 10.1007/s13398-020-00868-6

13. **N.A. Secelean**, *A New Kind of Nonlinear Quasicontractions in Metric Spaces*, Mathematics 2020, Vol. **8**, Issue: 5, Article Number: 661, Published April 2020, DOI: 10.3390/math8050661

14. **N.A. Secelean**, M. Zhou, *Generalized F-Contractions on Product of Metric Spaces*, Mathematics 2019, **7**, 1040; 1-8; doi:10.3390/math7111040

15. M. Zhou, X.L. Liub, **N.A. Secelean**, *On coincidence and common fixed point theorems of eight self-maps satisfying an F_M-contraction condition, Nonlinear Analysis: Modelling and Control **2019**, Vol.* **24***, No. 6,1001–1018*

16. **N.A. Secelean**, S. Mathew, D. Wardowski, *New fixed point results in quasi-metric spaces and applications in fractals theory*, Advances in Difference Equations 2019, 2019**:**177, 1-23, https://doi.org/10.1186/s13662-019-2119-z

17. **N.A. Secelean**, *Suzuki ψ F-contractions and some fixed point results*, Carpathian Journal of Mathematics, Vol. **34** (2018), No.1, 93-102

18. **N.A. Secelean**, D. Wardowski, *New Fixed Point Tools in Non-metrizable Spaces*, Results. Math. Vol. **72** (2017), 919–935, Issue 1-2, DOI: 10.1007/s00025-017-0688-2

19. R. Balu, S. Mathew, **N.A. Secelean**, *Separation properties of (n, m)-IFS attractors*, Communications in Nonlinear Science and Numerical Simulation, Vol. **51** (2017), 160-168, http://doi.org/10.1016/j.cnsns.2017.04.009

20. **N.A. Secelean**, D. Wardowski, *ψ F-Contractions: Not Necessarily Nonexpansive Picard Operators*, Results. Math., Vol. **70** (2016), Issue 3, 415–431 DOI:10.1007/s00025-016-0570-7

21. **N.A. Secelean**, *Weak F-contractions and some fixed point results*, Bulletin of the Iranian Mathematical Society, Vol. **42** (2016), Issue 3, 779-798

22. **N.A. Secelean**, *Generalized F-iterated function systems on product of metric spaces*, Journal of Fixed Point Theory and Applications, **17** (2015) 575–595, DOI: 10.1007/s11784-015-0235-2

22. E.C. Popa, **N.A. Secelean**, *Estimates for the constants of Landau and Lebesgue via some inequalities for the Wallis ratio*, Journal of Computational and Applied Mathematics, Vol. **269** (2014), 68-74, DOI: 10.1016/j.cam.2014.03.020

23. **N.A. Secelean**, *Generalized Iterated Function Systems on the space* $l^{\infty}(X)$, Journal of Mathematical Analysis and Applications, Vol. 410, Issue 2, 15. Feb. 2014, 847-858, DOI:10.1016/j.jmaa.2013.09.007

24. **N.A. Secelean**, *Iterated Function Systems consisting of F-contractions*, Fixed Point Theory and Applications, 2013, **2013**:277, DOI:10.1186/1687-1812-2013-277,

25. M. Olaru, **N.A. Secelean**, *Vector comparison operators in cone metric spaces*, Mathematical Report, Vol. **16** (66), No.3 (2014), 431-442

26. **N.A. Secelean**, *Invariant measure associated with a Generalized Countable Iterated Function System*, Mediterranean Journal of Mathematics, **11** (2014), 361-372, DOI 10.1007/s00009-013-0300-2

27. L. Suciu , W. Majdak , **N.A. Secelean**, *Ergodic properties of operators in some semi-Hilbertian spaces*, Linear and Multilinear Algebra, vol. **61**, issue 2, 2013, p.139-159 DOI: 10.1080/03081087.2012.667094

28. **N.A. Secelean**, *The existence of the attractor of countable iterated function systems*, Mediterranean Journal of Mathematics, No. 1, Vol. **9,** 2012, pp. 61-79 DOI: 10.1007/s00009-011-0116-x,

29. E.C. Popa, **N.A. Secelean**, *On some inequality for the Landau constants*, Taiwanese Journal of Mathematics, Vol.**15**, No.**4**, August 2011, p. 1457-1462,

30. **N.A. Secelean**, *Continuous dependence on a parameter of the countable fractal interpolation Function*, Carpathian Journal of Mathematics, **27**, 2011, No.1, p.131-141

31. **N.A. Secelean**, *Fractal countable interpolation scheme: existence and affine invariance*, Mathematical Reports, Volume: **13,** Issue: **1,** 2011, p. 75-87,

32. A Mihail, **N.A. Secelean**, *On the connectivity of the attractors of recurrent iterated function systems*, Mathematical Reports, vol. **13(63)**, No. **4**, 2011, p. 363-376,

33. **N.A. Secelean**, *Generalized countable iterated function systems*, Filomat, **25:1** (2011), p.21-36, DOI:10.2298/FIL1101021S,

34. **N.A. Secelean**: *Parameterized curve as attractors of some countable iterated function systems*, Archivum Mathematicum, Tomus 40, 2004, p.287-293 http://dml.cz/dmlcz/107911

35. E. de Amo, I. Chiţescu, M. Díaz Carrillo, **N.A. Secelean**: *A new approximation procedure for fractals,* Journal of Computational and Applied Mathematics, vol. **151**, Issue **2**, 2003, p.355-370, DOI:10.1016/S0377-0427(02)00752-5,

B2. Other articles in journals indexed in international data basis

1. **N.A. Secelean**: *Approximation of the attractor of a countable iterated function system*, General Mathematics, nr.**3**, vol.**17**, 2009, p.221-231 (Zbl 1199.28033)

2. M. Bezzarga, E. Moldoveanu, **N. Secelean**: *Dual Resolvent for Semi-dynamical Systems,* Buletin Ştiinţific - University of Piteşti, Ser. Mathematics and Informatics, Nr. **11**, 2005, p.27-44, (Zbl 1249.31009)

3. **N.A. Secelean**: *The fractal interpolation for countable systems of data*, Publications of the Faculty of Electrical Engineering (actually Applicable Analysis and Discrete Mathematics), University of Belgrade, vol.**14**, 2003, p.11-19 (Zbl 1090.28006)

4. **N.A. Secelean**: *Some continuity and approximation properties of a countable iterated function system*, Mathematica Pannonica, vol.**14**, nr.2, 2003, p.237-252 (Zbl 1048.37021)
http://ttk.pte.hu/mii/html/pannonica/index_elemei/vol_14_2_cont.htm

5. **N.A. Secelean**: *A sufficient condition for the existence of invariant set for a system of functions,* Analele Universităţii Bucureşti, vol.**51**, 2002, p. 189-196 (Zbl 1084.47526)

6. **N.A. Secelean**: *The Invariant Measure of a Countable Iterated Function System,* Seminarberichte aus dem Fachbereich Mathematik, Band **73**, 2002, p.3-10

7. **N.A. Secelean**: *The Hausdorff Dimension and the Similarity in Case of Countable Iterated Function System,* Seminarberichte aus dem Fachbereich Mathematik, Band **73**, 2002, p.41-52

8. **N.A. Secelean**: *The code space associated with a Countable Iterated Function System,* General Mathematics, vol. **9**, nr.3-4, 2001, p.61-70 (Zbl 1073.37506)

9. **N.A. Secelean**: *Any compact subset of a metric space is the attractor of a CIFS,* Bull. Math. Soc. Sc. Math. Roumanie, tome **44** (92), nr.3, 2001, p.77-89, (Zbl 1052.37012)

10. **N.A. Secelean**: *Countable Iterated Function Systems,* Far East Journal of Dynamical Systems **3**(2), 2001, p.149-167 (Zbl 1004.28002)
http://www.pphmj.com/article.php?act=art_view&search=secelean

11. **N.A. Secelean**: *Generation of some fractals,* Bull. Math. Soc. Sc. Math. Roumanie, tome **44** (92), nr.1, 2001, p.77-89, (Zbl 1049.28008)

12. **N.A. Secelean**: *Some convergence properties in the Hausdorff-Pompeiu metric,* General Mathematics, vol. **8**, nr.1-2, 2000, p.45-53 (Zbl 1240.54100)
http://depmath.ulbsibiu.ro/genmath/gm/vol8/cuprins8.html

13. **N.A. Secelean**: *Some sets of non-integral dimension,* Mathematical Reports, tom.**49**, nr.3-4, 1997, p.267-276 (Zbl 0885.28004)

14. **N.A. Secelean**: *Some dimension results for Cartesian product sets,* General Mathematics, vol. **2**, nr.3, 1994, p.127-132

B3. Other scientific contributions

- Acu, A. Bucur, **N.A. Secelean**, E. Drăghici, *Proceedings of the 6th annual conference of the Romanian Society of Mathematical Sciences, Sibiu, Romania, May 23-25, 2002. Vol. I.,* Editura ULB, Sibiu, xiv, 2003, 368 p. ISBN: 973-651-634-2 (Zbl 1015.00014);
- D. Acu, A. Bucur, **N.A. Secelean**, E. Drăghici, Proceedings of the 6th annual conference of the Romanian Society of Mathematical Sciences, Sibiu, Romania, May 23--25, 2002. Vol.II. Editura ULB, Sibiu, ii, 2003, 192 p. ISBN: 973-651-649-0 (Zbl 1015.00015);

D. Grants / projects won through competition

- Contract/grant de cercetare științifică cu ULBS nr. 5/2015: *Applications of fixed point results IFS theory*
- Contract/grant de cercetare științifică cu ULBS nr. 3208/2016: *New results in fixed point theory and applications in the study of iterated function systems*
- Contract/grant de cercetare științifică cu ULBS nr. 3073/2017: *Applications of fixed point theory in the study of fractals*
- Contract/grant de cercetare științifică cu ULBS nr. 3441/2018: New applications of fixed point results in fractals theory
- Contract/grant de cercetare științifică cu ULBS nr. 4136/2019 financed from Lucian Blaga University of Sibiu & Hasso Plattner Foundation: *Extensions of the contraction mappings on the generalized metric spaces and applications*
- Contract/grant de cercetare științifică cu ULBS nr. 2836/2020 financed from Lucian Blaga University of Sibiu & Hasso Plattner Foundation: Picard operators on generalized spaces and applications
- Proiect LBUS-HPI-ERG-2020-07: *Dezvoltarea algoritmilor numerici avansați și a protocoalelor de calcul robuste pentru caracterizarea dimensională și structurală a nanostructurilor*
- Contract/grant de cercetare științifică cu ULBS financed by Lucian Blaga University of Sibiu & Hasso Plattner Foundation research grants LBUS-IRG-2021-07 *Teoreme de punct fix pe spații generalizate cu aplicații în generarea unor fractali*