

List of publications

Ghiocel Moț, Professor Ph. D.

A. PhD Thesis

„Some implications of the general theory of convexity in geometry” (in romanian), „Babeș Bolyai” University of Cluj-Napoca, 1999, Scientific Coordinator: Elena Popoviciu, Professor Ph. D.

B. Patents of invention

C. Books

a) Appeared in recognized CNCS publishing houses

1. **G. Moț**, A. Petrușel, *Superior mathematics for engineers and economists*, Mirton Publishing House, 1999, 276 pag., ISBN: 973-578-897-7 (in romanian).
2. **G. Moț**, A. Petrușel, *Special mathematics for engineers and economists*, Mirton Publishing House, 1999, 277 pag., ISBN: 973-578-953-1 (in romanian).
3. **G. Moț**, L. Popa, *Linear algebra. Collections of problems*, Mirton Publishing House, 1999, 80 pag., ISBN: 973-578-899-3 (in romanian).
4. **G. Moț**, L. Popa, *Differential equations. Collections of problems*, Mirton Publishing House, 1999, 66 pag. ISBN: 973-578-900-2 (in romanian).
5. **G. Moț**, L. Gaga, L. Popa, L. Sida, T. Bulzan, *Exercises and problems of superior mathematics for technical and economic profiles*, Aradeana Life Publishing House, 2003, 630 pag., ISBN: 973-86288-2-2 (in romanian).
6. **G. Moț**, *Types of Convexity in Modern Mathematics. Applications of Allure Theory*, Mirton Publishing House, 1999, 193 pag., ISBN: 973-578-898-5 (in romanian).
7. **G. Moț**, *Convexity and Allure in Elena Popoviciu's sense*, Miracle Printers Publishing House, Vancouver, Washington, USA., 2000, 106 pag., ISBN: 973-578-447-6.
8. A. Petrușel, **G. Moț**, *Multivalued analysis, convexity and mathematical economics*, House of the Book of Science Cluj-Napoca, 2003, 166 pag., ISBN: 973-578-900-3.
9. **G. Moț**, A. Petrușel, G. Petrușel, *Topics in Nonlinear Analysis and Applications to Mathematical Economics*, House of the Book of Science Cluj-Napoca, 2006, 153 pag., ISBN: 973-686-952-0.
10. S. Szentesi, G. Cristescu, **G. Moț**, M. Frățescu, M. Vizental, S. Crișan, D. Dănoiu, *Modeling the economic-ecological balance for investment projects*, „Aurel Vlaicu” University Publishing House, Arad, 2010, ISBN: 978-973-752-388-4 (in romanian).
11. **G. Moț**, *Mathematics for engineers and economists*, „Aurel Vlaicu” University Publishing House, Arad, 2011, 100 pag., ISBN: 978-973-752-351-7 (in romanian).
12. **G. Moț**, L. Popa, *Superior algebra for technical and economic profiles. Theory and applications-2nd Edition*, „Aurel Vlaicu” University Publishing House, Arad, 2013, 132 pag., ISBN: 978-973-752-506-3 (in romanian).
13. **G. Moț**, L. Popa, *Linear algebra. Analytical and differential geometry*, „Aurel Vlaicu” University Publishing House, Arad, 2015, 160 pag., ISBN: 978-973-752-715-8 (in romanian).
14. **G. Moț**, C. L. Mihiț, *Algebra. Seminar and course support*, „Aurel Vlaicu” Univ. Publishing House Arad, 2019, 162 pag., ISBN: 978-973-752-809-4.

b) Coordination of some collective volumes published in recognized CNCS publishing houses

c) Support of courses, seminars, laboratory works, projects in electronic versions

1. **G. Moț**, C. L. Mihiț, *Seminar and course support at Linear algebra, analytical and differential geometry*, 2017 (in romanian).
2. **G. Moț**, C. L. Mihiț, *Seminar and course support at Mathematics I*, 2017 (in romanian).
3. **G. Moț**, C. L. Mihiț, *Seminar and course support at Applied mathematics in economy*, 2018 (in romanian).
4. **G. Moț**, C. L. Mihiț, *Seminar and course support at Mathematical analysis*, 2018 (in romanian).
5. **G. Moț**, C. L. Mihiț, *Seminar and course support at Algebraic foundations of computer science*, 2018 (in romanian).
6. **G. Moț**, C. L. Mihiț, *Seminar and course support at Linear algebra, analytical and differential geometry*, 2018 (in romanian).
7. **G. Moț**, C. L. Mihiț, *Seminar and course support at Differential equations and partial differential equations*, 2019 (in romanian).

D. Articles in extenso, published in journals from the main international scientific flow

I. Scientific articles published in ISI rated journals

1. **G. Moț**, A. Petrușel, *Fixed point theory for a new type of contractive multivalued operators*, Nonlinear Analysis, Theory, Methods and Applications 70 (2009), no. 9, 3371-3377.
2. T. Lazăr, **G. Moț**, G. Petrușel, S. Szentesi, *The Theory of Reich's Fixed Point Theorem for Multivalued Operators*, Fixed Point Theory and Applications, Volume 2010 (2010), Article ID 178421.
3. C. L. Mihiț, **G. Moț**, G. Petrușel, *Ćirić-Type Operators and Common Fixed Point Theorems*, Mathematics 10 (2022), 1947.
4. C. L. Mihiț, **G. Moț**, A. Petrușel, *Fixed Point Theory for Multi-Valued Feng-Liu-Subrahmanyam Contractions*, Axioms 11 (2022), No. 10, 1-9.

II. ISI Proceedings

1. A. Petrușel, **G. Moț**, *Convexity and decomposability in multivalued analysis*, Proc. of the Generalized Convexity / Monotonicity Conference, Samos, Greece, 1999, Lecture Notes in Economics and Mathematical Sciences, Springer-Verlag, 2001, 333-341.

III. Scientific articles published in BDI rated journals

1. P. Enghis, **G. Moț**, *Remarks on spaces with semi-symmetric connections*, The XVIII-th National Conference on Geometry and Topology Oradea-Felix, October 4-7, 1987, Lit. Univ. "Babeș-Bolyai" Cluj-Napoca, 69-72.

2. **G. Moț**, *General convexity structures and multivalued mappings*, Conference on Analysis, Functional Equations, Approximation and Convexity, Held in Honour of Professor Elena Popoviciu on the Occasion of Her 75th Birthday, Cluj-Napoca, Carpatica Publishing House, 1999, 193-196.
3. **G. Moț**, *On the allure of conics and quadrics*, Proc. of the 8-th Symp. of Math. and its Applic. „Politehnica” Univ. of Timișoara, 1999, 242-248.
4. **G. Moț**, *On star-shaped sets in convex metric spaces*, Proc. of „T. Popoviciu” Itinerant Sem., „Babeș Bolyai” Univ. of Cluj-Napoca, Srima Publishing House, 2000, 141-146.
5. **G. Moț**, *The allure of the connection spaces*, Proc. of „T. Popoviciu” Itinerant Sem., „Babeș Bolyai” Univ. of Cluj-Napoca, Srima Publishing House, 2001, 143-148.
6. **G. Moț**, *Fractal type operators*, Sem. De la Meilleure Approx., Convexite et Optimization, Srima Publishing House, 2002, 111-124.
7. **G. Moț**, *Partion and allure*, Proc. of „T. Popoviciu” Itinerant Sem., Univ. „Babeș Bolyai” Cluj-Napoca, Ed. Srima, 2002, 193-196.
8. **G. Moț**, A. Petrușel, *Fixed points and game theory*, Intern. J. Pure Applied Math. 14 (2004), 521-530.
9. **G. Moț**, A. Petrușel, *Selection theorems for multivalued operators*, Annals of the Tiberiu Popoviciu Seminar on Functional Equations, Approximation and Convexity, 3 (2005), 151-156.
10. **G. Moț**, A. Petrușel, *Fractals operators for mixed iterated function system*, Annals of the Tiberiu Popoviciu Seminar of Functional Equations, Approximation and Convexity, 4 (2006), 91-100.
11. **G. Moț**, A. Petrușel, *Local Fixed Point Theorems for Graphic Contractions in Generalized Metric Spaces*, Theory and Applications of Mathematics & Computer Science, 8(1), 2018, 1-5.
12. **G. Moț**, A. Petrușel, *On Iseki’ strict fixed point theorem*, Linear and Nonlinear Anal. 4 (2018), no. 1, 105–115.
13. **G. Moț**, C. L. Mihiț, *On Orthogonal Polynomials*, Theory and Applications of Mathematics & Computer Science, 8(2), (2018), 135-142.

E. Publications in extenso, appeared in the volumes of international specialized conferences

1. **G. Moț**, *Applications of the Convexity spaces*, Proceedings of the Scientific Communications Meeting of “Aurel Vlaicu” University, Third Edition Arad 16th-17th of May 1996 Vol. 14A., 51-56.
2. **G. Moț**, *Generalized convexity in metric spaces*, Lit. Univ. “Aurel Vlaicu” Arad 30-31 October 1997, Vol. I, 83-92.
3. **G. Moț**, *On the allure of conics and quadrics*, Proc. of the 8-th Symp. of Math. and its Applic. „Politehnica” Univ. of Timișoara, 1999, 242-248.
4. **G. Moț**, L. Popa, *On quaternions*, Proceedings of the International Symposium “Research and Education in Innovation Era”, 5th Edition, Section Matematics and Computer Science, "Aurel Vlaicu" University of Arad Publishing House (2014), 70-77.
5. **G. Moț**, A. Petrușel, *On some multi-valued coincidence problems*, Proceedings of the International Symposium „Research and Education in Innovation Era”, 6th Edition, Section Mathematics & Computer Science, "Aurel Vlaicu" University of Arad Publishing House (2016), 1-6.
6. **G. Moț**, A. Petrușel, G. Petrușel, *Fixed Point Problems with Multi-Valued Operators and Applications*, Proceedings of the International Symposium „Research and Education in Innovation Era”, 7th Edition, Section Mathematics & Computer Science, "Aurel Vlaicu" University of Arad Publishing House (2018), 12-17.

F. Other papers and scientific contributions

1. **G. Moț**, *The representation of substances and chemical reactions between them with methods of linear algebra*, Works of the Scientific Session, May 1992, Vol.I. Mathematics-Computer Science, 58-65 (in romanian).
2. **G. Moț**, *The spin and semisimetric spaces*, "Aurel Vlaicu" University of Arad, Faculty of Engineering, Works of the Scientific Session, May 1992, Vol.I. Mathematics-Computer Science, 51-57 (in romanian).
3. P. Enghis, **G. Moț**, *T-birecurrent quarter-symmetrical connections*, The session of scientific communications of "Aurel Vlaicu" University of Arad, May 1994, Lit. Univ. "Aurel Vlaicu" Arad, 131-134 (in romanian).
4. **G. Moț**, A. Petrușel, *A characterization of the ε -chainable generalized metric spaces*, Works of the Scientific Session, Arad, 1994, 135-138.
5. **G. Moț**, *Observations on semi-symmetrical E-connections*, The session of scientific communications of "Aurel Vlaicu" University of Arad, May 1994, Lit. Univ. "Aurel Vlaicu" Arad, 139-144 (in romanian).
6. **G. Moț**, *Convex curves*, Proceedings of the Scientific Communications Meeting of "Aurel Vlaicu" University of Arad, Third Edition, 16th-17th of May 1996, Vol. 14B. Lit. Univ. "Aurel Vlaicu" Arad, 57-60.
7. **G. Moț**, *Generalized convexity in metric spaces*, October 30-31, 1997 Vol. I, Lit. Univ. "Aurel Vlaicu" Arad, 83-92.
8. **G. Moț**, Gh. Ila, *On graphical representations of curves and surfaces using the Matcad program*, Annals of "Aurel Vlaicu" University of Arad, Series Mathematics, Fasc. Mathematics-Computer Science, 2000, 125-132 (in romanian).
9. **G. Moț**, Gh. Ila, *On solving linear systems using the Matcad program*, Annals of "Aurel Vlaicu" University of Arad, Series Mathematics, Fasc. Mathematics-Computer Science, 2000, 133-138 (in romanian).
10. **G. Moț**, L. Popa, *Views upon liniar spaces of cuaternions*, Proceedings of the Scientific Communications Meeting of "Aurel Vlaicu" University, 28th-30th of May 2002, "Aurel Vlaicu" University of Arad Publishing House, 229-236.
11. **G. Moț**, L. Popa, *Applications of linear algebra in modeling of chemical substances and reactions*, Proceedings of the Scientific Communications Meeting of "Aurel Vlaicu" University, 28th-30th of May 2002, "Aurel Vlaicu" University of Arad Publishing House, 237-240 (in romanian).
12. L. Gaga, **G. Moț**, *Critical thinking and its role in mathematics*, International Symposium of ISJ Arad, CCD Arad "Color, Sound and Education" Arad, Vol I, 62-68, 2013, ISBN 978-606-8345-30-7 (in romanian).

Date: 20.06.2025