

## List of published papers

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1 Articles in Web of Science

1.a) Articles published in ISI indexed journals

1. Popescu M. , Popescu P., *Almost Lie Algebroids and Characteristic Classes*, Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 15 (2019), 021, 12 pages, WOS:000464138400001.
2. H. Ramos, P. Popescu, *How many  $k$ -step linear block methods exist and which of them is the most efficient and simplest one?*, Applied Mathematics and Computation, 316C (2018) 296--309, WOS: 000413445600022.
3. Mircea Crasmareanu, Cristian Ida, P. Popescu, *Holomorphic last multipliers on complex manifolds*, Journal of Nonlinear Mathematical Physics, 24, 4 (2017) 596-619, WOS:000392037900013.
4. Ida C., Popescu P., *Contact structures on Lie algebroids*, Publicationes Mathematicae Debrecen, 91, 1-2 (2017) 1--31, WOS:000411150100001.
5. Ida C., Popescu P., *Vertical Liouville foliations on the big-tangent manifold of a Finsler space*, Filomat, 31, 7 (2017) 1985-1994, WOS:000404362000016.
6. Ida C., Popescu P.,  *$d$ -tangential invariants of certain vector bundles over complex foliations*, Journal of Geometry and Physics, 112 (2017) 210--223, WOS:000392037900013.
7. M. Crasmareanu, C. Ida, P. Popescu, *An 1-Differentiable Cohomology Induced by a Vector Field*, Journal of Lie Theory, 26, 4 (2016) 911--926, WOS:000391248300001.
8. Ida C., Popescu P., *On almost complex Lie algebroids*, Mediterr. J. Math. 13 (2016), 803--824, WOS:000373746300020.
9. Popescu P., Popescu M. , *Lagrangians and hamiltonians related to foliations*, Romanian Journal of Physics, 61, 1-2 (2016) 235--244, WOS:000372390500019.
10. Ida C., Popescu P., *Coeffective basic cohomologies of  $K$ -contact and Sasakian manifolds*, Michigan Math. J., 64, 4 (2015) 797--817, WOS:000366880000004.

11. Popescu P., Ida C., *Nonlinear constraints in nonholonomic mechanics*, Journal of Geometric Mechanics, 6, 4 (2014) 527--547, WOS:000347151100005.
12. Popescu P., *Poisson structures on almost complex Lie algebroids*, International Journal of Geometric Methods in Modern Physics, 11, 08 (2014) 1450069, WOS:000341784600005.
13. Ida C., Popescu P., *On some Godbillon–Vey classes of a family of regular foliations*, Topology and its Applications, 172 (2014) 119–128. ISSN: 0166-8641, WOS:000337866300013.
14. Popescu P., *A Lagrangian form of tangent forms*, Journal of Geometry and Physics, 77 (2014) 113-130, WOS:000331689800009.
15. Popescu P., *Higher order transverse bundles and riemannian foliations*, Mediterr. J. Math., 11, 2 (2014), 799–811, WOS:000335233600038.
16. Popescu P. and Popescu M. , *On some classes of foliations*, Balkan Journal of Geometry and Its Applications, 19, 1 (2014) 100-107, WOS:000339159500010.
17. Popescu P. and Popescu M. , *On singular non-holonomic geometry*, Balkan Journal of Geometry and Its Applications, 18, 2 (2013) 58-68, WOS:000320754900006.
18. Popescu P., Popescu M. , *On singular distribution on vector bundles*, Romanian Journal of Physics, 58, 5-6 (2013) 641-649, WOS:000323867600025.
19. Popescu P. and Popescu M. , *Variational problems of some second order Lagrangians given by Pfaff forms*, Balkan Journal of Geometry and Its Applications (BJGA), 17, 2 (2012), 82-91, WOS:000302643700009.
20. Popescu M. , Popescu P., *Totally singular Lagrangians and affine Hamiltonians of higher order*, Balkan Journal of Geometry and Its Applications (BJGA), 16, 2 (2011) 122-132, WOS:000289683600013.
21. Popescu P., Popescu M. , *Foliated vector bundles and Riemannian foliations*, C. R. Acad. Sci. Paris, Ser. I 349 (2011) 445–449, WOS:000290133400019.
22. Popescu M. and Popescu P., *Lagrangians and higher order tangent spaces*, Balkan Journal of Geometry and Its Applications (BJGA), 15, 1 (2010), 142-148, WOS:000276883200012.
23. Udriste C., Popescu M. , Popescu P., *Extended affine classes of Lagrangians and Hamiltonians related to classical field theories*, International Journal of Geometric Methods in Modern Physics, Vol. 6, 7 (2009) 1161-1180, WOS:000272919300009.
24. Popescu P., Popescu M. , *Lagrangians adapted to Submersions and Foliations*, Differential Geometry and its Applications, 27, 2 (2009) 171-178, WOS:000264920900001.

25. Popescu P., Popescu M. , *Affine Hamiltonians in higher order geometry*, International Journal of Theoretical Physics 46, 10 (2007) 2531-2549, WOS:000249918600018.
26. Popescu P., *The Lie pseudoalgebra of an anchored module*, Algebra Colloquium, 13:2, 2006, 267-288, WOS:000236303600006.
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28. Popescu P., *Categories of modules with differentials*, Journal of Algebra, 185, 1996, 50-73, WOS:A1996VL10900004.

1.b) Papers published in ISI Proceeding Volumes

29. Popescu M. , Popescu P., *Aspects of mathematical modeling of professional counseling process*, Ed. Zarifis GK; Martin C; Sava S, BACK TO WORK - THE ROLE OF VALIDATION OF COMPETENCIES IN PROFESSIONAL COUNSELING OF ADULTS, 2012, 77-80, WOS:000314749700016.
30. Popescu M. and Popescu P., *Generalized subbundles of vector bundles*, Proceedings of The International Conference Differential Geometry and Dynamical Systems(DGDS-2011) October 6-9, 2011, Bucharest, ROMANIA, Geometry Balkan Press, BSG Proceedings 19 (2012), 146-151, WOS:000393360600016.
31. Popescu P. and Popescu M., *On Pfaff systems*, Proceedings of The International Conference Differential Geometry and Dynamical Systems (DGDS-2011) October 6-9, 2011, Bucharest, ROMANIA, Geometry Balkan Press, BSG Proceedings 19 (2012), 152-162, WOS:000393360600017.
32. Popescu P., Popescu M. , *Vector and affine bundles related to Riemannian foliations*, Proceedings of The International Conference of Differential Geometry and Dynamical Systems (DGDS-2010), August 25-28, 2010, Bucharest, Romania, BSG Proceedings 18, 2011, 82-86, WOS:000393166700011.
33. Popescu P., Popescu M. , *Principal flat connections of second order on tangent spaces*, Proceedings Conference of Differential Geometry and Dynamical Systems (DGDS-2009) October 8 - 11, University Politehnica of Bucharest, Romania., BSG Proceedings 17 (2010) 178-182, WOS:000391414800021.

34. Popescu M. , Popescu P., *An intrinsic link between scalar and volume-valued Lagrangians*, Proceedings of The International Conference "Differential Geometry and Dynamical Systems" (DGDS-2007), October 5-7, 2007, Bucharest, Romania, Geometry Balkan Press, 2008, BSG Proceedings 15, 168-175, WOS:000261333000020.
35. Popescu M. , Popescu P., N. Dumitru, *Some aspects concerning non-Hamiltonians systems*, Proceedings of The International Conference of Differential Geometry and Dynamical Systems (DGDS-2008), August 29 - September 02, 2007, Mangalia, Romania, 2008, BSG Proceedings 15, 163-167, WOS:000261333000019.
36. Popescu M. , Popescu P., *Lagrangians and Hamiltonians on affine bundles and higher order geometry*, Proc. Vol. VII International Conference GEOMETRY AND TOPOLOGY OF MANIFOLDS, The Mathematical Legacy of Charles Ehresmann on the occasion of the hundredth anniversary of his birthday, Bêdlewo, Poland, May 8-15, 2005, Banach Center Publications, Inst. of Mathematics, Polish Acad. of Sc., Warsawa 2007, 451-469, WOS:000253183000022.
37. Popescu P., Popescu M., *On quasi-connections on fibred manifolds*, New Developements in Differential Geometry, Kluwer Academic Publ., Vol. 350, 1996, 343-352, WOS:A1996BE86Q00027.

## 2) Ph. D Thesis

1. P. Popescu: The Geometry of Vector Bundles, Ph. D Thesis, "A.I.Cuza" University, Iasi, 1995.

## 3) Published Monographs and textbooks

1. M. Popescu, P. Popescu, *Mathematical Analyse. Applications.* (in romanian), Universitaria Publ., Craiova, 2017, 267 pag., ISBN 978-606-14-1143-6
2. P. Popescu, *Studies in the geometry of vector bundles* (in romanian), Reprograph Publ., Craiova, 2009. (200 pag., CNCSIS Publ., ISBN 978-973-671-283-8.
3. P. Popescu, *First and higher order geometry* (in english), Reprograph Publ, Craiova, 2009. (265 pag., CNCSIS Publ.,) ISBN 978-973-671-281-4.
4. M. Popescu, P. Popescu, *Numeric Methods* (in romanian), Reprograph Publ., Craiova, 2009, 180 pag., ISBN 978-973-671-208-1.
5. M. Popescu, P. Popescu, *Linear Algebra and Analitical Geometry* (in romanian), Ed. Universitaria, Craiova, 2002, 260 pagini, ISBN 973-8043-308-8.

6. P. Popescu, M. Popescu, *Differential Geometry* (in romanian), Fund. Scrisul Românesc Publ., Craiova, 1999, 196 pag., ISBN 973-99013-4-5.
7. P. Popescu, M. Popescu, *Linear Algebra and Analytical Geometry. Problems.* (in romanian), Reprograph Publ., Craiova, 2002, 200 pagini, ISBN 973-8419-00-7.
8. M. Popescu, P. Popescu, N. Toporan, *Analytical Geometry* (vol.I) (in romanian), Reprograph Publ., Craiova, 2001, 226 pag., ISBN 973-8092-57-4.
9. P. Popescu, M. Popescu, *Applied Mathematics* (in romanian), Reprograph Publ., Craiova, 2001, 208 pag., ISBN 973-8092-35-3.
10. P. Popescu, M. Popescu, M. Bulat, N. Toporan, L. Zamfir, *Analytical Geometry for baccalaureate* (in romanian), Reprograph Publ., Craiova, 2001, 116 pag., ISBN 973-8092-40-x.
11. M. Popescu, P. Popescu, N. Toporan, *Sets. Relation* (in romanian), Reprograph Publ., Craiova, 2002, 199 pag., ISBN 973-8419-13-1. (pentru Colegiul de institutori)
12. M. Popescu, P. Popescu, N. Toporan, *Funcții. Algebraic Structures* (in romanian), Reprograph Publ., Craiova, 2002, 214 pag., ISBN 973-8419-41-7.
13. M. Popescu, P. Popescu, N. Toporan, *Natural Numbers* (in romanian), Reprograph Publ., Craiova, 2003, 197 pag., ISBN 973-8419-69-7.
14. M. Popescu, P. Popescu, N. Toporan, *Integer, Rational and Real Numbers* (in romanian), Reprograph Publ., Craiova, 2005, 245 pag. ISBN 973-671-82-3.
15. M. Popescu, P. Popescu, N. Toporan, *Didactic of Mathematics* (in romanian), Reprograph Publ., Craiova, 2006, 311 pag., ISBN 973-671-100-5, 978-973-671-100-8.

#### 4) Papers published in refereed journal publications

1. Popescu M., Popescu P. Equivalent definitions for connections in higher order tangent bundles. *Libertas Mathematica* (new series) 37, 2 (2018), 51-57.
2. Popescu, P., Popescu, M., On some variations related to jerk motions. *Balkan J. Geom. Appl.* 21 (2016), no. 1, 67–75.
3. Ida, Cristian; Popescu, P., On the cohomology of some CR-foliations on the tangent bundle of a Finsler space, *Acta Math. Acad. Paedagog. Nyházi.* (N.S.) 31 (2015), no. 1, 47–60.
4. Ida, C., Popescu, P., *Local and global structures on affine holomorphic bundles*, *Bull. Transilv. Univ. Brasov Ser. III*, Vol 5, No.2, 54 (2012) 35-48.

5. Popescu P., Popescu M., Lagrangians and Hamiltonian Structures and Foliations, Physics AUC, 23, Sp. Issue (2011) 203-206.
6. Popescu P. and Popescu M. , *Sub-Lagrangians and sub-Hamiltonians on affine bundles*, Journal of Mathematical Sciences, Vol. 161, No. 2 (2009) 261-282.
7. Popescu P., Popescu M. , *A new setting for higher order Lagrangians in the time dependent case*, J. Adv. Math. Stud. 1, No. 3, 83-92 (2009).
8. Constantin Udriste, Popescu M. , Popescu P., *Generalized Multitime Lagrangians and Hamiltonians*, WSEAS Transactions on Mathematics, Volume 7, 2008, 66-72.
9. Popescu P., Popescu M. , *Higher order geometry on almost Lie structures*, J. Adv. Math. Stud. 1, No. 1-2 (2008) 97-110.
10. Popescu P., Popescu M. , *The derived Lie pseudoalgebra of an anchored module*, Universitatis Iagellonicae Acta Mathematica, fasc.II 1278, 42 (2004) 185-198.
11. Popescu P., Popescu M. , *On Hamiltonian submanifolds (I)*, Balkan Journal of Geometry and its Applications, 7, 2 (2002) 79-86.
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13. Popescu M. , Popescu P., *On Lagrange epimorphisms and Lagrange submersions*, Balkan Journal of Geometry and its Applications, 5, 2 (2000) 97.
14. Popescu M. , Popescu P., *On the structure equations of the induced linear connections*, Balkan Journal of Geometry and its Applications, Vol. 3, Nr.1 (1998) 103.
15. Popescu P., Popescu M. , *Geometrical objects on subbundles (II)*, Balkan Journal of Geometry and its Applications, Vol. 2, No.2 (1997) 105.
16. Popescu P., *On certaines differentials defined by pseudo- differential complexes*, Analele Stiintifice Univ. Ovidius Constanta, III, fasc. 2, 1995, 103-106. (The second International Workshop on Differential Geometry and its Applications, Universitatea Ovidius din Constanta, 25-28 Septembrie 1995.) (ZBL, actually ISI)
17. V. Cruceanu, Popescu M. , Popescu P., *On projectable objects on fibred manifolds*, Archivum Mathematicum, 3, 2001, 185-296. (ZBL, actually Scopus)
18. Popescu M. , Popescu P., *On high order structures on vector bundles*, Algebras, Groups and Geometries, Hadronic Press, 1(16), 1999, 91-103.

19. Popescu P., Popescu M. , *On graded algebra bundles*, Novi Sad Journal of Mathematics, 3(29), 1999, 257-266.
20. Popescu M. , Popescu P., *Projectable nonlinear connections*, Novi Sad Journal of Mathematics, 3(29), 1999, 249-256.
21. Popescu M. , Popescu P., *The structure equations of induced non-linear connectionons*, Analele Universității din Timisoara, Seria matem., Vol. XXXIV, fasc. 2, 1996, 255-260.
22. Popescu M. , Popescu P., *d-linear connections on fibred manifolds*, Analele Universității din Craiova, vol.XXII, 1996, 52-59.
23. Popescu P., *Sur une classe des Groupoides Riemanniens*, Analele Universitatii din Timisoara, Seria matem., Vol. XXXIV, fasc. 1, 1996, 137-150.
24. Popescu P., *Sufficient conditions on some differentiable groupoids to be group actions*, Analele Universitatii din Timisoara, Seria matem., 33, 2 (1995) 277-286.
25. Popescu M. , Popescu P., *The Darboux's property and the  $P(\ )$ -derivability*, Analele Universității din Craiova, seria mat.-inf., vol.XXII, 1995, 51-58.
26. Popescu M. , Popescu P., *On some derivable real functions*, Analele Universității din Oradea, tomul II, fascicola matematică, 1992, 14-117.
27. Popescu M. , Popescu P., *On the  $p$ -derivable functions*, Analele Universității din Oradea, tomul II, fascicola matematică, 1992, 118-124.
28. Popescu P., *Almost Lie Structures, Derivations and Curvature*, Rev.Roumaine Math. Pures Appl., 37, 9 (1992) 779-789.
29. Popescu P., *On the geometry of  $R$ -tangent spaces*, Rev. Roumaine Math. Pures Appl., 37, 8 (1992) 727-733.
30. Popescu M. , Popescu P., *On almost holonomic structures*, Analele Universității din Craiova, seria mat.-inf., vol.XIX, 1991-92, 93-97.
31. Popescu P., *Sur une generalisation de la connexion de Tzitzeica*, Analele Univ. Timisoara, Seria Matematica, 1-2, 1982.

5) Papers published in refereed conference and workshop publications

1. Popescu Marcela, POPESCU PAUL, Nicolae Marian Stefan, Nicolae Ileana-Diana, Marinescu Radu, Nicolae Petre Marian, *A Jerk Model With Friction for the Speed Produced by an Induction*

Motor Drive System, Volum 2018, International Conference on Applied and Theoretical Electricity (ICATE), 2018, 1-6, 978-1-5386-3806-4, DOI: 10.1109/ICATE.2018.8551398

2. Popescu Marcela, POPESCU PAUL, Fast movements and jerk mechanics, Volum 2018 International Conference on Applied and Theoretical Electricity (ICATE), 2018, 1-7, 978-1-5386-3806-4, IEEE, DOI: 10.1109/ICATE.2018.8551398
3. Marinescu, R.-F., Nicolae, P.-M., Popa, L.-D., Popescu, P., Cristina, M.D., Andreea, *Determination of grid voltage distortions influence over the reactive power compensation using dSPACE*, D.L.Proceedings - 2017 International Conference on Modern Power Systems, MPS 2017, 7974414, DOI: 10.1109/MPS.2017.7974414.
4. Popescu P., Popescu M. , On discrete geometry of non-holonomic spaces, Proceedings of The International Conference "Differential Geometry and Dynamical Systems"(DGDS-2014 ), 1-4 September 2014, Mangalia, ROMANIA, BSG PROCEEDINGS 22 (2015) 69-74.
5. Ida C., Popescu P., *On the cohomology of some CR-foliations on the tangent bundle of a Finsler space*, Proceedings of Joint Events of Colloquium on Differential Geometry and its Applications and IX-th International Conference on FERT. August 25 - August 30, 2013, Debrecen, Hungary. Volume Editors: L. Kozma and Z. Kovács, Acta Math. Acad. Paedagog. Nyházi. (N.S.) 31, 1 (2015) 47-60.
6. Popescu P., Ida C., Foliations compatible with Hamiltonians, Proceedings of The International Conference " Differential Geometry and Dynamical Systems"( DGDS-2013 ) 10 - 13 October 2013, Bucharest, ROMANIA, BSG PROCEEDINGS 21 (2015) 147-155.
7. Popescu P. and Popescu M. , On a class of singular vector subbundles, Proceedings of The International Conference Differential Geometry and Dynamical Systems (DGDS-2012) 29 August - 2 September 2012, Mangalia, ROMANIA, Geometry Balkan Press, BSG Proceedings 20 (2013), 79-88.
8. M. Popescu, P. Popescu, Mechanical systems of third order and jerk curves, In Proc. 13th IFToMM World Congress, Guanajuato (Mexico), IMD-123, 2011. <http://www.diciva.ugto.mx/directorio/IFToMM/>
9. Popescu P., Popescu M. , Lifting and descending procedures for Lagrangians of higher order, Annals of the University of Craiova Physics AUC (ISSN – 1223 - 6039), volume 18, 2008, 136-140, Proceedings of the 6th International Spring School and Workshop ” Quantum Field Theory & Hamiltonian Systems”, 06-11 May 2008, Calimanesti-Caciulata, ROMANIA.



10. Popescu M. , Popescu P., Non-Hamiltonian systems, Annals of the University of Craiova Physics AUC (ISSN - 1223 - 6039), vol 16 II (2006) 194-199 (Proceedings of the 5th International Spring School and Workshop ” Quantum Field Theory & Hamiltonian Systems” 20-26 May 2006, Calimanesti-Caciulata, ROMANIA).
11. Popescu M. , Popescu P., From hamiltonians and lagrangians to legendrians, The 5-th Conference of Balkan Society of Geometers, Balkan Press, Editor in chief C.Udriste, Vol. Ed. V.Balan, BSG Proceedings 13 (2006) 115-122
12. Popescu M. , Popescu P., On affine hamiltonians and lagrangians of higher order and their subspaces, The 5-th Conference of Balkan Society of Geometers, Balkan Press, Editor in chief C.Udriste, Vol. Ed. V.Balan, BSG Proceedings 13 (2006) 123-139.
13. Popescu M. , Popescu P., On Finsler bundles and Finsler connections, Proceedings of The Conference of Applied Differential Geometry - General Relativity and The Workshop on Global Analysis, Differential Geometry and Lie Algebras, 2002, Geometry Balkan Press, BSG Proceedings 11 (2004) 111-117.
14. Popescu M. , Popescu P., Higher order geometry and induced objects, Proceedings of The Conference of Applied Differential Geometry - General Relativity and The Workshop on Global Analysis, Differential Geometry and Lie Algebras, 2001, Geometry Balkan Press, BSG Proceedings 10 (2004) 124-137.
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17. Popescu P., Popescu M. , On modules with differential, Proc. Vol. 8th International Conference on Diff. Geom. and Its Appl., Opava, 2001, Univ. Opava, Cehia, 2002.
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19. M Popescu, P Popescu, Geometric objects defined by almost Lie structures, Banach Center Publications 54 (2000), 217-233.
20. P Popescu, M Popescu, *Anchored vector bundles and Lie algebroids*, Banach Center Publications 54 (2000), 51-69.
21. Popescu P., A contravariant approach on (non)commutative geometry, Proceedings of the Workshop on Global Analysis, Differential Geometry, Lie Algebras, december 13-16, 1995, Salonic, Grecia, Balkan Press, 1997, 71-74.
22. Popescu P., On generalized algebroids, New Developements in Differential Geometry, Budapest 1996, Kluwer Academic Publ., 1998, 329-342..

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