

LISTĂ DE LUCRĂRI

Teza de doctorat

Mocanu Marcelina-**Generalizări ale cvasiconformității**, teză susținută în 19 mai 2000, Conducător științific: Prof. univ. dr. Cabiria Andreian Cazacu, Referenți: Acad. Prof. univ. dr. Petru Mocanu, Prof. univ. dr. Mihai Cristea, C.S. I Petru Caraman

Cărți

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2. **Mocanu Marcelina**, Analiză reală, Editura Alma Mater Bacău, 2013, 234 pp., ISBN 978-606-527-250-7
3. **Mocanu Marcelina**, Analiză complexă, Editura Alma Mater Bacău, 2012, 360 pp., ISBN 978-606-527-160-9
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5. **Mocanu Marcelina**, Ecuații diferențiale. Teorie și aplicații, Editura Cermi, Iași, 2006, 250 pp., ISBN 978-973-667-188-3
6. Popa Valeriu, **Mocanu Marcelina**, Spătaru-Burcă Genoveva - Matematici speciale, Editura Plumb, Bacău 2002, 143 pp., ISBN 973-634-005-8

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1. **Mocanu Marcelina**, A global version of Gehring lemma in Orlicz spaces on spaces of homogeneous type, *Mathematical Inequalities and Applications*, vol. 19, no.1, 61-72, 2016, ISSN: 1331-4343 (IF 2014:0,645)
2. **Mocanu Marcelina**, Approximation by Lipschitz functions in abstract Sobolev spaces on metric spaces, *Mathematical Reports*, 15 (65), no. 4, 2013, ISSN 2285-3898 (IF 2013:0,086, IF 2012:0,098)
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5. **Mocanu Marcelina**, A generalization of Orlicz–Sobolev spaces on metric measure spaces via Banach function spaces, Complex Variables and Elliptic Equations, vol. 55, issue 1-3 (2010), January-March 2010, 253-267, ISSN 1747-6933 (IF 2010: 0,409)
6. Popa Valeriu, **Mocanu Marcelina**- Altering distance and common fixed points under implicit relations, Hacettepe Journal of Mathematics and Statistics, 2009, vol. 38, no.3, 1-9, ISSN 1303-5010. (IF 2009: 0,128).
7. Baesu Eveline, Kalyanam Sujatha, **Mocanu Marcelina** - Quantitative evaluation of mechanical properties of cell membranes. An exact solution, Journal of Mechanics of Materials and Structures, vol. 2, no. 6 (2007), 1193-1206, ISSN 1559-3959.

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1. Jeyanthi P., Nalayini P., **Mocanu Marcelina**, $g_{*\lambda,\mu}$ – closed sets in Generalized Topological Spaces, Bol. Soc. Paran. Mat. (3s.) vol 34 (1) (2016), 203–212, ISSN 0037-8712
2. **Mocanu Marcelina**, An extension of Cheeger differential operator from Lipschitz functions to Orlicz-Sobolev functions on metric measure spaces, Scientific Studies and Research. Series Mathematics and Informatics, vol. 25, no. 1, (2015), 23-44, ISSN 2067-3566
3. **Mocanu Marcelina**, Differentiability properties of Orlicz-Sobolev functions on metric measure spaces, ROMAI Journal, vol. 10, no. 2 (2014), 153-168, ISSN 1841-5512, e-ISSN 2065-7714
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5. **Mocanu Marcelina**, Poincaré inequalities based on Banach function spaces on metric measure spaces, Scientific Studies and Research. Series Mathematics and Informatics, vol. 23, no. 1, (2013), 63-76, ISSN 2067-3566.
6. **Mocanu Marcelina**, Calculus with weak upper gradients based on Banach function spaces, Scientific Studies and Research. Series Mathematics and Informatics, vol. 22, no. 1, (2012), 41-64, ISSN 2067-3566.

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8. **Mocanu Marcelina**, Density of Lipschitz functions in Orlicz-Sobolev spaces with zero boundary values on metric measure spaces, *Buletinul Institutului Politehnic din Iași. Secția: Matematică, Mecanică teoretică, Fizică, tom LVII (LXI), Fasc. 1 (2011)*, 169-184, ISSN 1244-7863
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15. **Mocanu Marcelina** –Locally connectedness in generalized closure spaces, *Studii și Cercetări Științifice, Seria Matematică, Univ. Bacău*, nr. 17 (2007) Supplement, 105-116.
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22. **Mocanu Marcelina**- Special forms of continuity in generalized closure spaces, Studii și Cercetări Științifice, Seria: Matematică, Univ. Bacău, nr. 16 (2006), 107-132.

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31. **Mocanu Marcelina**- Harmonic morphisms with integrable dilatation, Mathematical Reports (Romanian Academy), vol. 2 (52), no. 4 (2000), 533-545. (now ISI journal)
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37. **Mocanu Marcelina**- On some differential systems for quasiregular mappings between Riemannian manifolds, Analele Univ. "Dunărea de Jos" din Galați, Fasc. II, Mathematics, Physics, Theoretical Mechanics, Supplement to Tome XVI (XXI) 1998, 131-136.
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41. **Cristian Marcelina**- Asupra unor condiții de punct fix în spații metrice, Studii și Cercetări Științifice. Seria: Matematică, Univ. din Bacău, 1(1991), 47-50 (Romanian)

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1. **Mocanu Marcelina**- Maximal operators and Orlicz-Sobolev functions on metric measure spaces, Proceedings of the Sixth Congress of Romanian Mathematicians (Bucharest 2007), vol.1, 169-178, ISBN 978-973-27-1781-3, Editura Academiei Române, 2009. (proceedings indexed in Zentralblatt Math).
2. **Mocanu Marcelina**- On the Green function for some quasilinear elliptic equations and quasiregular mappings, International Conference Risk in contemporary economy, Proceedings of the mathematical section, "Dunărea de Jos" University of Galați, 1997, 73-82.
3. **Mocanu Marcelina**- Generalizations of Lindelöf's theorem for quasiregular mappings, Scripta scientiarum symposium septimum Tiraspolense Generalis Topologiae et suae applicationum, Chișinău, 249-252, 1996.

Alte lucrări

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Conferințe internaționale

1. **Mocanu Marcelina**- Obstacle problems with nonstandard growth conditions on metric measure spaces, International Conference on Pure and Applied Mathematics, Iași, Romania, November 6-8, 2015
2. **Mocanu Marcelina**- Cheeger differentiable Orlicz-Sobolev functions on metric spaces, The Eighth Congress of Romanian Mathematicians, June 26-July 1, 2015, Iași <http://www.math.uaic.ro/cmr2015/>
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4. **Mocanu Marcelina-** Gehring's Lemma for Orlicz Spaces on Metric Spaces and Regularity Properties of Minimizers of Variational Integrals, International Conference on Applied and Pure Mathematics, Department of Mathematics, "Gh. Asachi" Technical University, Iassy, November 1-3, 2013
5. **Mocanu Marcelina-** Approximation by Lipschitz functions in abstract Sobolev spaces on metric spaces, The 13th Romanian-Finnish Seminar, June 26-30, 2012, Ploiești, Romania
6. **Mocanu Marcelina-** Embeddings of Orlicz-Sobolev spaces on metric measure spaces and Orlicz-Poincaré inequalities, The Seventh Congress of Romanian Mathematicians, June 29-July 5, 2011, Brașov, Romania
7. **Mocanu Marcelina-** Density of Lipschitz functions in Orlicz-Sobolev spaces with zero boundary values on metric measure spaces, International Conference "Applied and fundamental mathematics", November 12-14, 2010, Universitatea Tehnică "Gh. Asachi" Iași, Facultatea de Electronică, Telecomunicații și Tehnologia Informației
8. **Mocanu Marcelina-** Regularity and embedding theorems for Orlicz-Sobolev spaces on metric measure spaces, "Alexandru Myller" Mathematical Seminar Centennial Conference, June 21-26, 2010, University "Al. I. Cuza" Iași, Romania
9. **Mocanu Marcelina-** A generalization of Orlicz-Sobolev capacity in metric measure spaces, International Conference on Mathematics and Informatics ICMI 2, September 8-10, 2009, University of Bacău, Romania
10. **Mocanu Marcelina-** Orlicz-Sobolev Spaces with Zero Boundary Values on Metric Measure Spaces and Poincaré inequality, International Conference on Complex Analysis and Related Topics, The 12-th Romanian-Finnish Seminar, August 17-21, 2009, Turku, Finland
11. **Mocanu Marcelina-** On Poincaré inequalities for Orlicz-Sobolev spaces on metric measure spaces, International Conference Science and Technology in the context of sustainable development, November 6-7, 2008, Petroleum-Gas University, Ploiești, Romania
12. **Mocanu Marcelina-** Regularity properties of Orlicz-Sobolev spaces on metric measure spaces, International Conference on Complex Analysis and related topics, The XI-th Romanian-Finnish Seminar, Alba Iulia, Romania, August 14-19, 2008, "Simion Stoilow" Institute of Mathematics of Romanian Academy

13. **Mocanu Marcelina**-Maximal operators in Orlicz spaces on metric measure spaces, The Sixth Congress of Romanian Mathematicians, Romanian Academy. Section of Mathematical Sciences, Bucharest, June 28-July 4, 2007
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15. **Mocanu Marcelina**- On the differentiability of Sobolev functions on metric measure spaces, International Conference on Complex Analysis and related topics, The X-th Romanian-Finnish Seminar, August 24-29, 2005, Cluj-Napoca, Romania.
16. **Mocanu Marcelina**- Quasiminimizers and quasiconformal maps in metric measure spaces, The Fifth Congress of Romanian Mathematicians, Romanian Academy. Section of Mathematical Sciences and University of Pitești, Pitești, June 22-28, 2003.
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20. **Mocanu Marcelina**- Some sufficient conditions for the convergence of derivatives of weakly quasiregular mappings, International Conference "XII-th Conference on Analytic Functions", University Marie Curie-Sklodowska, Lublin, Poland, August 30-September 4, 1998
21. **Mocanu Marcelina**- On the Green function for some quasilinear elliptic equations and quasiregular mappings, International Colloquium "The risk in contemporary economy", 9-10 mai 1997, University Dunărea de Jos of Galați.

Conferințe naționale

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2. **Mocanu Marcelina**-Three extensions of Orlicz-Sobolev spaces to metric measure spaces and their embeddings, “Gheorghe Vrănceanu” National Conference on Mathematics and Informatics, May 26-28, 2011, “Vasile Alecsandri” University of Bacău
 3. **Mocanu Marcelina**- Minimizing extensions of Lipschitz functions in metric measure spaces, The XII-th National Conference of Romanian Society of Mathematical Sciences, October 17-19, 2008, University of Bacău
 4. Cornel Berceanu, **Mocanu Marcelina**-Arithmetic properties of binomial coefficients, The XII-th National Conference of Romanian Society of Mathematical Sciences, October 17-19, 2008, University of Bacău
 5. **Mocanu Marcelina**- On locally connectedness in generalized closure spaces, National Conference on Mathematics and Informatics CNMI2007, November 16-17, 2007, University of Bacău
 6. **Mocanu Marcelina**- Connectedness in generalized closure spaces, National Conference on Fundamental and Applied Mathematics, Technical University “ Gh. Asachi” Iași, November 9-10 noiembrie, 2007
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Postere la conferințe internaționale

1. **Mocanu Marcelina-** An extension of Gehring's lemma to Orlicz spaces on metric measure spaces, Joint International Meeting of the American Mathematical Society and the Romanian Mathematical Society in partnership with the Simion Stoilow Institute of Mathematics of the Romanian Academy June 27 - 30, 2013, Alba Iulia, Romania
2. **Mocanu Marcelina-** Quasiminimizers and quasiconformal maps in metric measure spaces, “XIX Rolf Nevanlinna Colloquium”, University of Jyväskylä, Finland, June 10-14, 2003
3. **Mocanu Marcelina-** Nonlinear potential theoretic properties of mappings with integrable dilatation, The XVIII th Rolf Nevanlinna Colloquium, University of Helsinki, Finland, August 8-12, 2000.

Prezentări invitate

1. **Mocanu Marcelina-** Applications of Sobolev-type spaces on metric measure spaces, Colloquium del Departamento de Analisis Matematico, Facultad de Ciencias Matematicas, Universidad Complutense de Madrid, Spania, May 31, 2007.
2. **Mocanu Marcelina-** Lipschitz approximation and regularity properties on functions on metric measure spaces, Facultad de Ciencias Matematicas, Colloquium del Departamento de Analisis Matematico, Universidad Complutense de Madrid, January 24, 2013

Proiecte de cercetare / dezvoltare

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19 ianuarie 2016