

## Lista publicațiilor (Vlad Timofte)

### Monografii

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- [M1] *Shape Memory Alloys: Manufacture, Properties and Applications*. Chapter 17: Analysis of a thermomechanical model of shape memory alloys, Nova Science Publishers, New York, 2010, 487–536, ISBN: 978-1-60741-789-7  
[https://www.novapublishers.com/catalog/product\\_info.php?products\\_id=10269](https://www.novapublishers.com/catalog/product_info.php?products_id=10269)
- [M2] (republicat din [M1]) *Encyclopedia of Materials Science Research, Vol. 2*. Analysis of a thermomechanical model of shape memory alloys, Nova Science Publishers, New York, 2012, 487–536, ISBN: 978-1-61209-954-5  
[https://www.novapublishers.com/catalog/product\\_info.php?products\\_id=22462](https://www.novapublishers.com/catalog/product_info.php?products_id=22462)

### Articole publicate

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#### Articole cotate ISI

- [1]<sup>1</sup> On the positivity of symmetric polynomial functions. Part I: General results, *J. Math. Anal. Appl.* **284** (2003), 174–190.
- [2] On the positivity of symmetric polynomial functions. Part II: Lattice general results and positivity criteria for degrees 4 and 5, *J. Math. Anal. Appl.* **304** (2005), 652–667.
- [3] On the positivity of symmetric polynomial functions. Part III: Extremal polynomials of degree 4, *J. Math. Anal. Appl.* **307** (2005), 565–578.
- [4] A criterion for bases of the ring of symmetric functions, *Ann. Comb.* **9** (2005), 497–501.
- [5] Special uniform approximations of continuous vector-valued functions. Part I: Special approximations in  $C_X(T)$ , *J. Approx. Theory* **119** (2002), 291–299.
- [6] Special uniform approximations of continuous vector-valued functions. Part II: Special approximations in  $C_X(T) \otimes C_Y(S)$ , *J. Approx. Theory* **123** (2003), 270–275.
- [7] Stone-Weierstrass theorems revisited, *J. Approx. Theory* **136** (2005), 45–59.
- [8] On Leibniz series defined by convex functions, *J. Math. Anal. Appl.* **300** (2004), 160–171.
- [9] Integral estimates for convergent positive series, *J. Math. Anal. Appl.* **303** (2005), 90–102.
- [10] Uniqueness theorem for a thermomechanical model of shape memory alloys, *Math. Mech. Solids* **6** (2001), 447–466 (cu Aida Timofte).
- [11] Existence theorem for a thermomechanical model of shape memory alloys, *Math. Mech. Solids* **6** (2001), 541–545 (cu Aida Timofte).
- [12] Existence, uniqueness and regularity of solutions for a thermomechanical model of shape memory alloys, *Math. Mech. Solids* **11** (2006), 563–574 (cu Tudor Ratiu și Aida Timofte).
- [13] A note on: “Monotone strain-stress models for shape memory alloys hysteresis loop and pseudoelastic behavior” [*Z. Angew. Math. Phys. (ZAMP)* **56** (2005), 304–356], *Z. Angew. Math. Phys. (ZAMP)* **59** (2008), 181–185 (cu Aida Timofte).
- [14] Representation of a class of locally convex  $(M)$ -lattices, *Indag. Math.* **18** (2007), 455–469.
- [15] An isomorphic characterization of  $L^1$ -spaces, *Indag. Math.* **18** (2007), 629–640.

#### Articole non-ISI

- [16] New tests for positive iteration series, *Real Anal. Exchange* **30** (2004/05), 799–811.
- [17] Differential estimate for  $n$ -ary forms on closed orthants, *JIPAM. J. Inequal. Pure Appl. Math.* **5** (2004), Article 112, 6 pp. (electronic).
- [18] Qualitative results concerning the behavior of shape memory alloys, *Rev. Roum. Math. Pures Appl.* **47** (2002), 121–133 (cu Aida Timofte).
- [19] Representation of abstract  $(M)$ -spaces with a strong positive cone, *Rev. Roum. Math. Pures Appl.* **45** (2000), 907–911.
- [20] Isometric embeddings of metric spaces into Hilbert spaces, *Math. Rep. (Bucur.)* **2(52)** (2000), 103–109.

#### Preprinturi (trimise la diverse reviste)

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- [P1] On the positivity of symmetric polynomial functions. Part IV: Existence of efficient algorithms.
- [P2] Generalized Dini theorems for nets of functions on arbitrary sets.

#### În pregătire (diverse stadii)

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- [R1] Inverse remainder polynomials.
- [R2] Differential calculus and implicit functions in topological vector spaces.
- [R3] On complete root classification by approximate roots.
- [R4] The Half-Degree and Degree Principles for symmetric functions.

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<sup>1</sup>Pentru o lucrare de Master bazată pe [1] (Universitatea Konstanz, Germania), a se vedea:  
<http://www.math.uni-konstanz.de/~grimm/deutsch.diplom.pdf>