

## Lista lucrărilor științifice publicate

1. B. Pricop, U. Söyler, R.I. Comăneci, B. Özkal, L.G. Bujoreanu, *Mechanical cycling effects at Fe-Mn-Si-Cr-Ni SMAs obtained by powder metallurgy*, **Physics Procedia**, Volume 10, pp. 125–131, 2010.
2. B. Pricop, N.M. Lohan (Mahu), L.G. Bujoreanu, *Thermal cycling effects in Cu-Zn-Al shape memory alloys*, **Buletinul Institutului Politehnic din Iași**, Tomul LVI (LX), Fasc. 4, Secția Știința și Ingineria Materialelor, pag. 65-70, 2010.
3. B. Pricop, N.M. Lohan (Mahu), L.G. Bujoreanu, *Cycling effects on martensite reversion in Cu-based SMAs*, **Buletinul Institutului Politehnic din Iași**, Tomul LVI (LX), Fasc. 3, Secția Știința și Ingineria Materialelor, pag. 135-141, 2010.
4. C. Lohan, B. Pricop, R.I. Comăneci, N. Cimpoeșu, L.G. Bujoreanu, *Variation tendencies of tensile constrained recovery behaviour and associated structural changes during thermal cycling of a Fe-Mn-Si-Cr-Ni shape memory alloy*, **Optoelectronics And Advanced Materials-Rapid Communications**, Vol. 4, Nr. 6, pp. 816 – 820, 2010.
5. V. Dia, U. Söyler, B. Pricop, B. Özkal, L.G. Bujoreanu, *Characterization of Mechanically Alloyed Fe-Mn-Si-Cr-Ni Shape Memory Alloys. Hot rolling effects*, **International Metallurgy and Material Congress**, Istanbul, pp. 1071-1075, 2010.
6. B. Pricop, U. Söyler, N.M. Lohan, B. Özkal, D. Chicet, A. David, L.G. Bujoreanu, *Mechanical alloying effects on the thermal behaviour of a Fe-Mn-Si-Cr-Ni shape memory alloy under powder form*, **Optoelectronics and Advanced Materials – Rapid Communication**, Vol. 5, Nr. 5-6, pp. 555 – 561, 2011.
7. B. Pricop, N.M. Lohan (Mahu), L.G. Bujoreanu, *Obtainment Of Fe-Mn-Si-Cr-Ni Smas By Powder Metallurgy*, **Buletinul Institutului Politehnic din Iași**, Tomul LVII (LXI), Fasc. 1, Secția Știința și Ingineria Materialelor, pag. 71-77, 2011.
8. N.M. Lohan, B. Pricop, L.G. Bujoreanu, N. Cimpoeșu, *Heating rate effects on reverse martensitic transformation in a Cu-Zn-Al shape memory alloy*, **International Journal of Materials Research**, Vol. 102, Nr. 11, pp. 1345-1351, 2011.
9. L.G. Bujoreanu, N.M. Lohan, B. Pricop, N. Cimpoeșu, *Thermal memory degradation in a Cu-Zn-Al shape memory alloy during thermal cycling with free air cooling*, **Journal of Materials Engineering and Performance**, Vol. 20, Nr.3, pp. 468-475, 2011.

10. B. Pricop, U. Söyler, N.M. Lohan, B. Özkal, L.G. Bujoreanu, D. Chicet, C. Munteanu, *Thermal behavior of mechanically alloyed powders used for producing an Fe-Mn-Si-Cr-Ni shape memory alloy*, **Journal of Materials Engineering and Performance**, Vol. 21, Nr. 11, pp. 2407-2416, 2012.
11. L.G. Bujoreanu, N.M. Lohan, B. Pricop, N. Cimpoesu, *On role of atomic migration in amnesia occurrence during complex thermal cycling of Cu-Zn-Al shape memory alloy*, **Materials Science and Technology**, Vol. 28, Nr. 6, pp. 658-667, 2012.
12. G. Vitel, M.G. Suru, A.L. Paraschiv, N.M. Lohan, B. Pricop, M. Baciuc, L.G. Bujoreanu, *Structural Effects of Training Cycles in Shape Memory Actuators for Temperature Control*, **Materials and Manufacturing Processes**, Vol. 28, Nr. 1, pp. 79-84, 2012.
13. A.L. Paraschiv, F. Borza, M.G. Suru, B. Pricop, I.P. Spiridon, E. Mihalache, L-G Bujoreanu, *Chemical composition and processing effects on the pseudoelastic response of alpha' ferromagnetic martensite*, **Optoelectronics And Advanced Materials-Rapid Communications**, Vol. 7, Nr. 11-12, pp. 881-886, 2013.
14. I.P. Spiridon, B. Pricop, M.G. Suru, A.L. Paraschiv, N.M. Lohan, L-G. Bujoreanu, *The influence of heat treatment atmosphere and maintaining period on the homogeneity degree of a Fe-Mn-Si-Cr-Ni shape memory alloy obtained through powder metallurgy*, **Journal Of Optoelectronics And Advanced Materials**, Vol. 15, Nr. 7-8, pp. 730-733, 2013.
15. A-L. Paraschiv, F. Borza, N. Lupu, M.-G. Suru, N.M. Lohan, B. Pricop, I.P. Spiridon, L.-G. Bujoreanu, *On some structural characteristics of Fe-base shape memory alloys*, **Journal Of Optoelectronics And Advanced Materials**, Vol. 15, Nr. 7-8, pp. 781-784, 2013.
16. M.G. Suru, A.L. Paraschiv, B. Pricop, L.G. Bujoreanu, *A statistical evaluation of thermomechanical loading effects on martensite plate morphology in CuZnAl SMAs*, **Optoelectronics And Advanced Materials-Rapid Communications**, Vol. 7, Nr. 1-2, pp. 141-144, 2013.
17. B. Pricop, U. Söyler, B. Özkal, N.M. Lohan, A.L. Paraschiv, M.G. Suru, L.G. Bujoreanu, *Influence of mechanical alloying on the behavior of Fe-Mn-Si-Cr-Ni shape memory alloys made by powder metallurgy*, **Materials Science Forum**, Vol. 738-739, pp. 237-241, 2013.
18. M.-G. Suru, I. Dan, N. M. Lohan, A. L. Paraschiv, B. Pricop, I. P. Spiridon, C. Baciuc, L.-G. Bujoreanu, *Effects of hot working procedure on surface relief characteristic in an*

- Fe-Mn-Si-Cr shape memory alloy*, **Mat.-wiss. u. Werkstofftech**, Vol. 45, Nr. 1, pp. 44-50, 2014.
19. M.-G. Suru, A. L. Paraschiv, N. M. Lohan, B. Pricop, B. Özkal, L.-G. Bujoreanu, *Loading mode and environment effects on surface profile characteristics of martensite plates in Cu-based SMAs*, **JMEPEG**, Vol. 23, Nr. 7, pp. 2669-2676, 2014.
  20. N.-M. Lohan, Marius-Gabriel SURU, B. Pricop and L.-G. Bujoreanu, *Cooling rate effects on the structure and transformation behavior of Cu-Zn-Al shape memory alloys*, **International Journal of Minerals, Metallurgy and Materials**, Vol. 21, no. 11, pp. 1109-1114, 2014.
  21. B. Pricop, B. Özkal, U. Söyler, J. Van Humbeeck, N.M. Lohan, M.-G. Suru and L.-G. Bujoreanu, *Influence of mechanically alloyed fraction and hot rolling temperature in the last pass on the structure of Fe-14Mn-6Si-9Cr-5Ni (mass. %) shape memory alloys processed by powder metallurgy*, **Optoelectronics And Advanced Materials-Rapid Communications**, Vol. 8, No: 3-4, Pp: 247-250, 2014.
  22. Marius-Gabriel SURU, N.M. Lohan, B. Pricop, I.P. Spiridon, E. Mihalache, R.I. Comaneci and L-G. Bujoreanu, *Structural effects of high-temperature plastic deformation process on martensite plate morphology in a Fe-Mn-Si-Cr SMA*, **Int. J. Materials and Product Technology**, Vol. 50, No. 3/4, pp. 276-288, 2015

### **Prezentări orale**

1. Marius-G. SURU, Nicoleta-M. LOHAN, Adrian L. PARASCHIV, Bogdan PRICOP, Iuliana-P. SPIRIDON, Radu I. COMĂNECI, Leandru-G. BUJOREANU, *Structural Effects Of High-Temperature Plastic Deformation Process On Martensite Plate Morphology in a Fe-Mn-Si-Cr SMA*, ModTech International Conference - Modern Technologies in Industrial Engineering, Iunie 27-29, Sinaia, Romania
2. B. Pricop, U. Söyler, B. Özkal, M.G. Suru, N.M. Lohan, R.I. Comăneci, N. Cimpoeșu, V. Mușat, G. Gurău, B. Istrate, E. Mihalache, L.G. Bujoreanu, *A study of martensite formation in powder metallurgy Fe-Mn-Si-Cr-Ni shape memory alloys*, International Conference on Martensitic Transformations 2014 July 6-11, 2014, Bilbao, Spain
3. L.G. Bujoreanu, R.I. Comăneci, G. Gurău, N.M. Lohan, M. G. Suru, B. Pricop, V. Goanță, V. Mușat, B. Istrate, E. Mihalache, *Thermomechanical training effects of multifunctional modules, processed by high-speed high pressure torsion, when*

*subjected to compression loading-unloading cycles*, ModTech International Conference - Modern Technologies in Industrial Engineering, Iulie 13-16, Gliwice, Poland

4. E. Mihalache, B. Pricop, N.-M. Lohan, M.-G. Suru, B. Ozkal, L.-G. Bujoreanu, *Dynamic-Mechanical Analysis of Mechanically Alloyed Fe-Mn-Si-Cr-Ni Shape Memory Alloy*, International Conference on High-Temperature Shape Memory Alloys - HTSMAs, 5-8 Mai, 2015, Wildbad Kreuth, Germania.

## **Lucrări prezentate sub formă de poster**

1. **Pricop Bogdan**, Söyler U., Comăneci R.I., Özkal B., Bujoreanu L.G., *Mechanical cycling effects at Fe-Mn-Si-Cr-Ni SMAs obtained by powder metallurgy*, **European Materials Research Society – Spring Meeting**, Strasbourg, 2010.
2. **Pricop Bogdan**, Söyler U., Lohan N.M., Özkal B., Bujoreanu L.G., Chicet D., Munteanu C., *Thermal behaviour of mechanically alloyed powders used for producing an Fe-Mn-Si-Cr-Ni shape memory alloy, via sintering, hot-rolling and thermomechanical training*, **European Congress and Exhibition on Advanced Materials and Processes -EUROMAT**, 2011.
3. **Pricop Bogdan**, Söyler U., Özkal B., Lohan N.M., Paraschiv A.L., Suru M.G., Bujoreanu L.G., *Influence of mechanical alloying on the behavior of Fe-Mn-Si-Cr-Ni shape memory alloys made by powder metallurgy*, **European Symposium on Martensitic Transformations**, Saint-Petersburg, Russia, 2012.
4. Spiridon I.P., **Pricop Bogdan**, Suru M.G., Paraschiv A.L., Lohan N.M., Bujoreanu L-G., *The influence of heat treatment atmosphere and maintaining period on the homogeneity degree of a Fe-Mn-Si-Cr-Ni shape memory alloy obtained through powder metallurgy*, **International Conference on Materials Science & Engineering – BRAMAT**, Braşov, 2013.
5. Suru M.G., Lohan N.M., Paraschiv A.L., Pricop B., Spiridon I.P., Baciuc C., Bujoreanu L-G., *Hot working effects on surface relief characteristics in a Fe-Mn-Si-Cr SMA*, **International Conference on Materials Science & Engineering – BRAMAT**, Braşov, 2013.
6. Paraschiv A.L., Suru M.G., Lohan N.M., Pricop B., Spiridon I.P., Bujoreanu L-G., *On some structural characteristics of Fe-base shape memory alloys*, **International Conference on Materials Science & Engineering – BRAMAT**, Braşov, 2013.

7. Paraschiv A.L., Borza F., Lupu N., Suru M.G., Lohan N.M., Pricop B., Özkal B., Bujoreanu L-G., *Factors Influencing The Structures And Properties Of Polycrystalline Magnetic Fe-Ni-Co-Al-Ta-B Shape Memory Alloys*, **The International Conference on Shape Memory and Superelastic Technologies (SMST)**, Prague, Czech Republic, 2013.
8. Bujoreanu L-G., Spiridon I.P., Suru M.G., Vitel G., Paraschiv A.L., Pricop B., Lohan N.M., Istrate B., Gurau G., *Atomic Migration Intensification As An Effect Of Thermomechanical Cycling In Shape Memory Actuators*, **The International Conference on Shape Memory and Superelastic Technologies (SMST)**, Prague, Czech Republic, 2013.
9. Suru M.G., Paraschiv A.L., Lohan N.M., Pricop B., Özkal B., Bujoreanu L-G., *Loading Mode And Environment Effects On Surface Relief Characteristics Of Martensite Plates In Cu-Based Smas*, **The International Conference on Shape Memory and Superelastic Technologies (SMST)**, Prague, Czech Republic, 2013.
10. Bujoreanu L-G., Spiridon I.P., Pricop B., Özkal B., Söyler U., Van Humbeeck J., Lohan N.M., Paraschiv A.L., Istrate B., Suru M.G., *Influence Of Solution Treatment Parameters On Martensite Plate Morphology Of A Hot Rolled Powder Metallurgy Fe-14Mn-6Si-9Cr-5Ni (mass. %) Shape Memory Alloys*, **19th International Vacuum Congress (IVC-19), International Conference on Nanoscience and Technology (ICN+T 2013)**, Paris 9-13 September 2013.
11. Pricop B., Lohan N. M., Borza F., Lupu N., Suru M.-G., Mihalache E., Comănesci R.I., Bujoreanu L.-G., *Structural changes associated with the pseudoelastic response of Fe-based shape memory alloys*, **The VI<sup>th</sup> edition of the International Conference UgalMat 2014**, Galați 29-30 Mai 2014.
12. Mihalache E., Lohan N. M., Pricop B., Bujoreanu L.-G., Suru M.-G., *Comparative characteristics of martensite and bainite in Cu-based SMAs*, **The VI<sup>th</sup> edition of the International Conference UgalMat 2014**, Galați 29-30 Mai 2014.
13. M.-G. Suru, C. Moroșanu, R.-I. Comănesci, E. Mihalache, B. Pricop, C. Baciuc, L.-G. Bujoreanu, *Comparative evolution of surface relieves of stress-induced martensite plates in shape memory alloys with different crystalline structures*, **International Conference on Martensitic Transformations (ICOMAT)** July 6-11, 2014, Bilbao, Spain
14. Monica-Nicoleta LOHAN, Elena MIHALACHE, Bogdan PRICOP, Marius-Gabriel SURU, Leandru-Gheorghe BUJOREANU, *A study of R-phase transition and*

- temperature memory effect in a commercial Nitinol wire*, **9th International Conference On Materials Science & Engineering**, Bramat, 4-7 Martie, 2015, Brasov.
15. E. Mihalache, F. Borza, N. Lupu, N. M. Lohan, B. Pricop, M.-G. Suru, L.-G. Bujoreanu, *Thermomechanical processing effects on the martensitic transformation in Fe-based SMAs*, **9th International Conference On Materials Science & Engineering**, Bramat, 4-7 Martie, 2015, Brasov.
16. N. Cimpoeșu, E. Mihalache, B. Pricop, N.-M. Lohan, M.G. Suru, R.I. Comăneci, B. Özkal, L.G. Bujoreanu, *Structural-Morphological Fluctuations Induced by Thermomechanical Processing in a FeMnSi-based Shape Memory Alloy*, **International Conference on High-Temperature Shape Memory Alloys - HTSMAs**, 5-8 Mai, 2015, Wildbad Kreuth, Germania.
17. Marius-Gabriel SURU, Nicoleta-Monica LOHAN, Elena MIHALACHE, Bogdan PRICOP, Radu-Ioachim COMĂNECI, Leandru-Gheorghe BUJOREANU, *AFM Evaluation of Pre-Straining Degree Effects on the Dimensions of Stress Induced Martensite Plates in Fe-Mn-Si Based SMAs*, **International Conference on High-Temperature Shape Memory Alloys - HTSMAs**, 5-8 Mai, 2015, Wildbad Kreuth, Germania.