

LIST OF PUBLISHED PAPERS

I. TEACHING ACTIVITY

I.1. Published books (Ca)

Ca1. Rodinel Ardeleanu, **Leandru-Gheorghe Bujoreanu**, Gabriela Săcărescu, Liviu Săcărescu and Mihaela Simionescu, *Nonmetallic Shape Memory Materials. Structure-Properties-Applications*, (in Romanian), Editura tehnică, științifică și didactică CERMI, Iași, 219 pages, 2007, ISBN 978-973-667-291-0

Ca2. M.Nicu, N.Bâlbă, **L.G.Bujoreanu**, S.Stanciu and F.Apostu, *Materials Science and Engineering. Vol. II Modern Materials*, (in Romanian), 2nd edition; Editura ECOZONE, Iași, 188 pages, 2006, ISBN Vol III: 973-7645-21-9

Ca3. **L.G.Bujoreanu** and C.Munteanu, *Microstructural changes accompanying thermal memory occurrence and stabilization in a Cu-Zn-Al SMA*, Series Advances in Micro- and Nanoengineering, (Editors Irina Kleps, Dan Dascălu and Jose Kenny), Editura Academiei Române, București, pp. 110-120, 2004, ISBN 973-27-1110-8

Ca4. **L.G.Bujoreanu** and C.Baciu, *Materials Study. Tests and Applications*, (in Romanian), Editura tehnică, științifică și didactică CERMI, Iași, 198 pages, 2003, ISBN 973-8188-69-5

Ca5. **L.G.Bujoreanu**, G.Roșescu and I.Avrăm, *Materials Study in Machine Building*, (in Romanian), Editura Științifică "Fundatia Metalurgia Română", București, 321 pages; 1998, ISBN 973-98314-5-1

Ca6. **L.G.Bujoreanu** and S.Stanciu, *Shape Memory Materials. Practical Methods for Analysis*, (in Romanian), Editura "Cermi", Iași, 144 pages, 1998, ISBN 973-9378-28-5

Ca7. G.Calugaru, **L.G.Bujoreanu**, S.Stanciu, I.Hopulele, R.Căliman, O.L.Turcu and I.Apachiței *Shape Memory. Phenomena and Applications in Materials Science*, (in Romanian), Editura „Plumb”, Bacău, 208 pages, 1995, ISBN 973-9150-50-0

Ca8. G.Calugaru, I.Apachiței, R.Căliman, O.L.Turcu and **L.G.Bujoreanu**, *Advanced Materials. Amorphous Metallic Powders*, Editura "Plumb", (in Romanian), Bacău, 218 pages, 1995, ISBN 973-9150-49-7

I.2. Books published on the Web

Ca9. **L.G.Bujoreanu**, *Superalloys. Lecture Notes*, (in Romanian), 118 pages

<http://www.tuiasi.ro/users/112/Note%20de%20curs%20Superaliaje.PDF>

Ca10. **L.G.Bujoreanu**, *Electro and Magnetorheological Materials. Lecture Notes*, (in Romanian), 100 pages

<http://www.tuiasi.ro/users/112/Note%20de%20curs%20Materiale%20ER&MR.PDF>

I.3 Guides for laboratory works

I1 C.Baciu, C.Munteanu, I.Rusu, **L.G.Bujoreanu**, Maria Baciu and I.Apachiței, *Laboratory Handbook. Metals Study*, (in Romanian), Vol. I, Rotaprint, I.P.Iași, 186 pages, 1992

II. SCIENTIFIC CONTRIBUTIONS TO DOMAIN DEVELOPMENT

II.1 Published scientific books (Cb)

Cb1. **L.G.Bujoreanu**, Chapter 9. *Formation of transitory bainite as a precursor of α -phase during tempering of martensitic Cu-Zn-Al SMAs*, in *Shape Memory Alloys: Manufacture, Properties and Applications*, Editor H.R. Chen, Nova Science Publishers 2010, pp. 267-285, ISBN 978-1-60741-789-7

Cb2. R.Chelariu, **L.G.Bujoreanu**, and C.Roman, *Titanium Base Biocompatible Metallic Materials*, (in Romanian), Editura Politehniun, Iași, 215 pages; 2006, ISBN (10) 973-621-153-3; ISBN (13) 978-973-621-153-9

Cb3. **L.G.Bujoreanu**, S.Stanciu, C.Munteanu and M.Susan, *Mechanical and Thermal Memory of Cu-Zn-Al Base Shape Memory Alloys*, (in Romanian), Editura Politehniun, Iași, 183 pages; 2005, ISBN 973-621-111-8

Cb4. **L.G.Bujoreanu** *Intelligent Materials*, (in Romanian), Editura „Junimea”, Iași, 339 pages, 2002, ISBN 973-37-0735-X

Cb5. **L.G.Bujoreanu**, V.Dia, E.Drăgulănescu and G.Roșescu, *Technology and Equipment for Obtaining Some Shape Memory Alloys. Vol. II*, (in Romanian), Editura Științifică "Fundatia Metalurgia Română", București, 166 pages, 1999, ISBN 973-98314-8-6

Cb6. **L.G.Bujoreanu**, V.Dia and S.Mărginean, *Technology and Equipment for Obtaining Some Shape Memory Alloys. Vol.I*, (in Romanian), Editura Științifică "Fundatia Metalurgia Română", București, 207 pages, 1998, ISBN 973-98314-2-7

II.2 Published papers in international journals indexed in ISI Web of Science or IDB (Ri)

Ri 1 Marius-Gabriel Suru, Adrian-Liviu, Paraschiv, Nicoleta Monica Lohan, Bogdan Pricop, Burak Ozkal, **Leandru-Gheorghe Bujoreanu**, *Loading Mode and Environment Effects on Surface Profile Characteristics of Martensite Plates in Cu-Based SMAs*, Journal of Materials Engineering and Performance, 23(7), 2014, pp. 2669-2676, ISSN 1059-9495, **IMPACT FACTOR on 2013: 0,915**

- Ri 2 GURĂU, Gheorghe, GURĂU, Marlen, POTECAȘU, Octavian, ALEXANDRU, Petrică, **Bujoreanu, Leandru**, *Novel high speed high pressure torsion technology for obtaining Fe-Mn-Si-Cr shape memory alloy active elements*, Journal of Materials Engineering and Performance, 23(7), 2014, pp. 2396-2402, ISSN 1059-9495, **IMPACT FACTOR on 2013: 0,915**
- Ri 3 A. Umut Söyler, Burak Özkal and **Leandru G. Bujoreanu**, *Improvement of shape memory characteristics of Fe-14Mn-6Si-9Cr-5Ni powder metallurgy alloy via mechanical alloying*, Journal of Materials Engineering and Performance, 23(7), 2014, pp. 2357-2361, ISSN 1059-9495, **IMPACT FACTOR on 2013: 0,915**
- Ri 4 G. Gurău, C. Gurău, F. M. Braz Fernandes, **L. G. Bujoreanu**, *An Experimental Study on the Response of Equal Channel Angular Pressed Aluminum Subjected to Cold Rolling*, Indian Journal of Engineering and Materials Sciences, Vol 21(3), 2014, pp. 253-258, ISSN 0971-4588, **IMPACT FACTOR on 2013: 0,362**
- Ri 5 M.-G. SURU, C. MOROȘANU, **L.-G. BUJOREANU**, *Variation tendencies of shape memory alloys surface relief as a function of training-cycling parameters*, Journal of Optoelectronics and Advanced Materials, Vol. 16, No. 3-4, 2014, pp. 394-400, ISSN 1842-6573, **IMPACT FACTOR on 2013: 0,516**
- Ri 6 B. PRICOP, B. ÖZKAL, U. SÖYLER, J. VAN HUMBEECK, N. M. LOHAN, M. G. SURU, **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, 2014, p. 247 – 250, ISSN 1842-6573, **IMPACT FACTOR on 2013: 0,402**
- Ri 7 M.-G. Suru, I. Dan, N. M. Lohan, A. L. Paraschiv, B. Pricop, I. P. Spiridon, C. Baci, **L.-G. Bujoreanu**, *Effects of hot working procedure on surface relief characteristic in an Fe–Mn–Si–Cr shape memory alloy*, Materialwissenschaft und Werkstofftechnik, 45(1), 2014, pp. 44–50, ISSN 0933-5137, **IMPACT FACTOR on 2013: 0.505**
- Ri 8 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 α' ferromagnetic martensite*, Optoelectronics and Advanced Materials-Rapid Communications, Vol. 7, No. 11-12, 2013, p. 881 - 886, ISSN 1842-6573, **IMPACT FACTOR: 0, 402**
- Ri 9 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 15(7-8), 2013, pp. 730 – 733, **IMPACT FACTOR: 0.516**
- Ri 10 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 15(7-8), 2013, pp. 781 – 784, **IMPACT FACTOR: 0.516**
- Ri 11 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, No. 1-2, January - February 2013, p. 141 - 144, ISSN 1842-6573, **IMPACT FACTOR: 0, 402**
- Ri 12 Bogdan Pricop, Umut Söyler, Burak Özkal, Nicoleta Monica Lohan, Adrian Liviu Paraschiv, Marius Gabriel Suru and **Leandru-Gheorghe Bujoreanu**, *Influence of mechanical alloying on the behavior of Fe-Mn-Si-Cr-Ni shape memory alloys made by powder metallurgy*, Materials Science Forum Vols. 738-739 (2013) pp 237-241, ISSN 1662-9752
- Ri 13 G. Vitel, M. G. Suru, A. L. Paraschiv, N. M. Lohan, B. Pricop, M. Baci, **L. G. Bujoreanu**, *Structural effects of training cycles in shape memory actuators for temperature control*, Materials and Manufacturing Processes, 28(1), pp. 79-84, 2013, ISSN 1042-6914, DOI:10.1080/10426914.2012.700157, **IMPACT FACTOR: 1,297**
- Ri 14 M.-G. Suru, **L.-G. Bujoreanu**, *Comparative topographic study of surface micro-relief of primary martensite plates in shape memory alloys with different crystalline structures*, Materialwissenschaft und Werkstofftechnik 43(11), pp. 973-978, 2012, ISSN 0933-5137, DOI 10.1002/mawe.201200986, **IMPACT FACTOR: 0,543**
- Ri 15 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, 21(11), pp 2407–2416, 2012, ISSN 1059-9495, DOI: 10.1007/s11665-012-0168-5, **IMPACT FACTOR: 0,855**
- Ri 16 N.M.Lohan, **L.G.Bujoreanu**, C.Baci, *Influence of temperature variation rate on the calorimetric response during heating and on the martensite structure obtained after subsequent cooling of a Cu-Zn-Al shape memory alloy*, Micro & Nano Letters, 7(6), pp. 540–543, 2012, ISSN 1750-0443, **IMPACT FACTOR: 0,944**
- Ri 17 **L.-G. Bujoreanu**, N. M. Lohan, B. Pricop and N. Cimpoeșu, *On role of atomic migration in amnesia occurrence during complex thermal cycling of Cu–Zn–Al shape memory alloy*, Materials Science and Technology, 28(6), pp. 658-667, 2012, ISSN 0267-0836, **IMPACT FACTOR: 0,772**

- Ri 18 G. Vitel, A. L. Paraschiv, M. G. Suru, N. Cimpoesu, **L.-G. Bujoreanu**, *Tempering effects in a normalized hot forged Cu-Zn-Al shape memory alloy*, Optoelectronics and Advanced Materials-Rapid Communications, 6(1-2), pp. 339-342, 2012, ISSN 1842-6573, **IMPACT FACTOR: 0,304**
- Ri 19 Nicoleta Monica Lohan, Bogdan Pricop, **Leandru-Gheorghe Bujoreanu**, Nicanor Cimpoesu, *Heating rate effects on reverse martensitic transformation in a Cu-Zn-Al shape memory alloy*, International Journal of Materials Research, 102(11), pp. 1345-1351, 2011, DOI: 10.3139/146.110595, ISSN 1862-5282, Direct link: <http://www.ijmr.de/directlink.asp?MK110595> , **IMPACT FACTOR on 2011: 0,83**
- Ri 20 G. Vitel, A. L. Paraschiv, M. G. Suru, N. Cimpoesu, **L.-G. Bujoreanu**, *New calorimetric-structural aspects of temperature memory effect in hot rolled Cu-Zn-Al SMAs*, Optoelectronics and Advanced Materials-Rapid Communications, 5(8), pp. 858-862, 2011, ISSN 1842-6573, **IMPACT FACTOR: 0,304**
- Ri 21 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 Communications, 5(5), pp. 569 – 575, 2011, ISSN 1842-6573, **IMPACT FACTOR: 0,304**
- Ri 22 A. Umut Söyler, Burak Özkal, **Leandru G. Bujoreanu**, *Investigation of Mechanical Alloying Process Parameters on Fe-Mn-Si Based System*, Supplemental Proceedings: Volume 1: Materials Processing and Energy Materials **TMS** (The Minerals, Metals & Materials Society) pp. 577-583, 2011
- Ri 23 **L. G. Bujoreanu**, N. M. Lohan, B. Pricop, N. Cimpoesu, *Thermal memory degradation in a Cu-Zn-Al shape memory alloy during thermal cycling with free air cooling*, Journal of Materials Engineering and Performance, 20(3) pp. 468–475, 2011, DOI: 10.1007/s11665-010-9702-5, ISSN 1059-9495, **IMPACT FACTOR: 0,855**
- Ri 24 B. Pricop, U. Söyler, R. I. Comănesci, B. Özkal, **L. G. Bujoreanu**, *Mechanical cycling effects at Fe-Mn-Si-Cr-Ni SMAs obtained by powder metallurgy*, Physics Procedia 10 pp. 125–131, 2010, ISSN 1875-3892
- Ri 25 A. Umut Söyler, Burak Özkal, **Leandru G. Bujoreanu**, *Sintering Densification and Microstructural Characterization of Mechanical Alloyed Fe-Mn-Si based Powder Metal System*, Supplemental Proceedings: Volume 3 General Paper Selection **TMS** (The Minerals, Metals & Materials Society), pp. 785-792, 2010
- Ri 26 C. Lohan, B. Pricop, R. I. Comănesci, N. Cimpoesu, **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, 4(6), pp. 816-820, 2010, ISSN 1842-6573, **IMPACT FACTOR: 0.477**
- Ri 27 **Leandru-Gheorghe Bujoreanu**, Marcus L. Young, Susanne Gollerthan, Christoph Somsen, Gunther Eggeler, *Influence of heat treatment and microstructure on the tensile pseudoelastic response of an Ni-rich NiTi shape memory alloy*, International Journal of Materials Research, 101(5) pp. 623-630, 2010, ISSN 1862-5282, **IMPACT FACTOR:0,86**
- Ri 28 **L. G. Bujoreanu**, S. Stanciu, B. Özkal, R.I.Comănesci, M. Meyer, *Comparative study of the structures of Fe-Mn-Si-Cr-Ni shape memory alloys obtained by classical and by powder metallurgy, respectively*, in ESOMAT 2009 - The 8th European Symposium on Martensitic Transformations, 05003, 2009, edited by P. Šittner, L. Heller and V. Paidar, published by EDP Sciences (www.esomat.org) DOI:10.1051/esomat/200905003
- Ri 29 S. Stanciu, **L. G. Bujoreanu**, R.I.Comănesci, N. Cimpoesu, I. Ioniță, V.V.Moldoveanu, *Particularities of phase transitions in thermomechanically processed Cu-Al-Mn shape memory alloys*, in ESOMAT 2009 - The 8th European Symposium on Martensitic Transformations, 05004, 2009, edited by P. Šittner, L. Heller and V. Paidar, published by EDP Sciences (www.esomat.org) DOI:10.1051/esomat/200905004
- Ri 30 Stanciu, **L.-G. Bujoreanu**, N. Cimpoesu, I. Ioniță, V.V. Moldoveanu, *Shape memory effect and related characteristics of helical springs made from Cu-Al-Ni alloy by investment casting*, Optoelectronics and Advanced Materials-Rapid Communications 3(6) pp. 581-585, 2009, ISSN 1842-6573, **IMPACT FACTOR: 0.451**
- Ri 31 **L. G. Bujoreanu**, S. Stanciu, R. I. Comănesci, M. Meyer, V. Dia, C. Lohan, *Factors influencing the reversion of stress-induced martensite to austenite in a Fe-Mn-Si-Cr-Ni shape memory alloy*, Journal of Materials Engineering and Performance 18(5-6) August, pp. 500-505, 2009, ISSN 1059-9495, **IMPACT FACTOR: 0,592**
- Ri 32 **Leandru G. Bujoreanu**, Sergiu Stanciu, Paul Bârsănescu, and Nicoleta M. Lohan, *Study of the transitory formation of α_1 bainite, as a precursor of α -phase in tempered SMAs*, in Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies IV, edited by Paul Schiopu, Cornel Panait, George Caruntu, Adrian Manea, Proceedings of SPIE, Vol. 7297, (SPIE, Bellingham, WA, 2009), 72970B (d.o.i. 10.1117/12.823620), ISSN 0277-786X
- Ri 33 Sergiu Stanciu, **Leandru G. Bujoreanu**, Iulian Ioniță, Andrei V. Sandu and Alexandru Enache, *A structural-morphological study of a $Cu_{63}Al_{26}Mn_{11}$ shape memory alloy*, in Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies IV, edited by Paul Schiopu, Cornel Panait, George Caruntu, Adrian Manea, Proceedings of SPIE, Vol. 7297, (SPIE, Bellingham, WA, 2009), 72970C, d.o.i. 10.1117/12.823621, ISSN 0277-786X

- Ri 34 T. Sawaguchi, **L.-G. Bujoreanu**, T. Kikuchi, K. Ogawa, M. Koyama, M. Murakami, *Mechanism of reversible transformation-induced plasticity of Fe-Mn-Si shape memory alloys*, Scripta Materialia 59(10), pp. 826-829, 2008, ISSN 1359-6462, **IMPACT FACTOR: 2.887**
- Ri 35 M. Susan, **L.-G. Bujoreanu**, C.L. Dumitrache, L.C.Hanganu, C.Baciu, *A kinematical study of ultrasonic welding based on a system of stationary waves*, Journal of Optoelectronics and Advanced Materials 10(6) June, pp. 1425-1430, 2008, ISSN 1454-4164, **IMPACT FACTOR: 0,577**
- Ri 36 S. Stanciu, **L.-G. Bujoreanu**, B. Özkal, M. L. Öveçoğlu, A. V. Sandu, *Study of precipitate formation in Cu-Al-Ni-Mn-Fe shape memory alloys*, Journal of Optoelectronics and Advanced Materials 10(6) June, pp. 1365-1369, 2008, ISSN 1454-4164, **IMPACT FACTOR: 0,577**
- Ri 37 **L.-G. Bujoreanu**, S. Stanciu, A. Enache, C. Lohan, I. Rusu, *Influence of some extrinsic factors on the two way shape memory effect of electric actuators*, Journal of Optoelectronics and Advanced Materials 10(3) March, pp. 602-606, 2008, ISSN 1454-4164, **IMPACT FACTOR: 0,577**
- Ri 38 **L.G.Bujoreanu**, V. Dia, S. Stanciu, M. Susan, C. Baciu, *Study of tensile constrained recovery behavior of a Fe-Mn-Si shape memory alloy*, European Physical Journal, Special Topics, 158, May, 2008 pp. 15-20, ISSN 1951-6355, **IMPACT FACTOR: 0.689**
- Ri 39 **L.G.Bujoreanu**, *On the influence of austenitization on the morphology of α -phase in tempered Cu-Zn-Al shape memory alloys*, Materials Science and Engineering A, 481-482, 2008, pp. 395-403, 2008, ISSN 0921-5093, **IMPACT FACTOR: 1.806**
- Ri 40 S. Stanciu, and **L. G. Bujoreanu**, *Formation of β_1' stress-induced martensite in the presence of γ phase in a Cu-Al-Ni-Mn-Fe shape memory alloy*, Materials Science and Engineering A, pp. 481-482, 2006, pp. 494-499, 2008 ISSN 0921-5093, **IMPACT FACTOR: 1.806**
- Ri 41 V. Dia, **L.G.Bujoreanu**, S. Stanciu, C. Munteanu, *Study of shape memory effect in lamellar helical springs made from Cu-Zn-Al SMA*, Materials Science and Engineering A 481-482, 2008, pp. 697-701, 2008, ISSN 0921-5093, **IMPACT FACTOR: 1.806**
- Ri 42 T. Sawaguchi, **L.-G. Bujoreanu**, T. Kikuchi, K. Ogawa and F. Yin, *Effects of Nb and C in solution and in NbC form on the transformation-related internal friction of Fe-17Mn (mass%) alloys*, Iron and Steel Institute of Japan International, Vol. 48 (1), pp. 99-106, 2008, ISSN 0915-1559; **IMPACT FACTOR: 0.817**
- Ri 43 M.Susan, **L.G.Bujoreanu**, D.G.Gălușcă, C.Munteanu and M.Mantu, *On the drawing in ultrasonic field of metallic wires with high mechanical resistance*, Journal of Optoelectronics and Advanced Materials 7(2) April, pp. 637-646, 2005, ISSN 1454-4164, **IMPACT FACTOR: 1.138**
- Ri 44 M.Susan, **L.G.Bujoreanu**, D.G.Gălușcă, C.Munteanu and V.Iliescu, *Influence of relative deformation rate on tube processing by ultrasonic vibration drawing*, Revista de Metalurgia de Madrid 40(2), pp. 109-117, 2004, ISSN 0034-8570, **IMPACT FACTOR: 0,798**
- Ri 45 D.Mihai and **L.G.Bujoreanu**, *Mechanical properties degradation in a Cr-Mo low-alloy steel pipe after prolonged use for gas transport in a power plant station*, Revista de Metalurgia de Madrid, 38(6), pp. 464-468, 2002, ISSN 0034-8570, **IMPACT FACTOR: 0,131**
- Ri 46 **L. G. Bujoreanu**, M.L.Craus, V.Dia and V.Plugaru, *Response to applied mechanical load of a multivariant martensitic Cu-Zn-Al-Fe shape memory alloy*, University Politehnica of Bucharest, Scientific Bulletin, Series B: Chemistry and Materials Science, Vol. 64, Nr.3, pp. 59-68, 2002, ISSN 1454-2331, included in ZENTRALBLATT databases
- Ri 47 **L.G.Bujoreanu**, M.L.Craus, S.Stanciu and V.Dia, *Thermally and stress induced changes in three phase structure of Cu-Zn-Al-Fe shape memory alloy*, Materials Science and Technology 16(June), pp. 612-616, 2000, ISSN 0267-0836, **IMPACT FACTOR: 0,562**
- Ri 48 M.Susan and **L.G.Bujoreanu**, *The metal-tool contact friction at the ultrasonic vibration drawing of ball-bearing steel wires*, Revista de Metalurgia de Madrid 35(6), pp. 379-383, 1999, ISSN 0034-8570, **IMPACT FACTOR: 0,186**
- Ri 49 **L.G.Bujoreanu**, M.L.Craus, I.Rusu, S.Stanciu and D.Sutiman, *On the β_2 to α phase transformation in a Cu-Zn-Al – based shape memory alloy*, Journal of Alloys and Compounds 278, pp. 190-193, 1998, ISSN 0925-8388, **IMPACT FACTOR: 0,88**

II.3 Published paper in national journals (Rn)

- Rn 1 Bogdan Pricop, Nicoleta Monica Lohan (Mahu), **Leandru-Gheorghe Bujoreanu**, *Cycling effects on martensite reversion in Cu-based SMAs*, Buletinul Institutului Politehnic Iași, Tomul LVI(LX), Fascicula 4, Secția Știința și Ingineria Materialelor, pp. 135-141, 2010, , ISSN 1453-1690
- Rn 2 Bogdan Pricop, Nicoleta Monica Lohan, **Leandru-Gheorghe Bujoreanu**, *Thermal cycling effects in Cu-Zn-Al shape memory alloys*, Buletinul Institutului Politehnic Iași, Tomul LVI(LX), Fascicula 4, Secția Știința și Ingineria Materialelor, pp. 65-70, 2010, , ISSN 1453-1690
- Rn 3 **Leandru-Gheorghe Bujoreanu**, Sergiu Stanciu, Radu-Ioachim Comănesci, Vasile-Viorel Moldoveanu, Ciprian Lohan, Nicoleta-Monica Lohan, *Pseudoelastic effects of the formation of ϵ tensile-induced martensite in Fe-Mn-Si-Cr-Ni shape memory alloys*, Buletinul Institutului Politehnic Iași, Tomul LV(LIX), Fascicula 1, Secția Știința și Ingineria Materialelor, pp. 105-110, 2009, , ISSN 1453-1690
- Rn 4 Sergiu Stanciu, **Leandru-Gheorghe Bujoreanu**, Nicanor Cimpeșu, Monica Nicoleta Lohan, *Method for in situ observation of stress-induced martensite formation and evolution in shape memory alloys*, Bul. Inst.

- Polit. Iași, t. LIV(LVIII), f. 1, Construcții de Mașini, pp. 357-362, 2008, ISSN 1011-2855
- Rn 5 **Leandru-Gheorghe Bujoreanu**, Sergiu Stanciu, Monica Nicoleta Lohan, Nicanor Cimpoesu, Ciprian Lohan, *The role of ϵ stress-induced martensite in Fe-Mn-Si shape memory behavior*, Bul. Inst. Polit. Iași, t. LIV(LVIII), f. 1, Constr. Mas., pp.351-356, 2008, ISSN 1011-2855
- Rn 6 **Leandru-Gheorghe Bujoreanu**, Sergiu Stanciu, Vasile Dia *Microstructural changes occurring during the conventional processing of Fe-Mn based shape memory alloys*, Bul. Inst. Polit. Iași, t. LIII(LVII), f. 1, St. Ing. Mater., pp. 21-26, 2007, ISSN 1453-1690
- Rn 7 **Leandru-Gheorghe Bujoreanu**, Viorica David, Vasile Dia, Corneliu Munteanu, *Evolution of the hysteretic behaviour of SMA wires during mechanical and thermal cycling*, Bul. Inst. Polit. Iași, t. LII(LVI), f. 6B, Constr. Mas., pp. 207-212, 2006, ISSN 1011-2855
- Rn 8 **Leandru-Gheorghe Bujoreanu**, Romeu Chelariu, Costel Roman, *The effects of Nb additions on the thermomechanical behavior of Ni-Ti shape memory alloy*, Bul. Inst. Polit. Iași, t. LII(LVI), f. 6B, Constr. Mas., pp. 197-206, 2006, ISSN 1011-2855
- Rn 9 **Leandru-Gheorghe Bujoreanu**, Vasile Dia, Viorica David, Corneliu Munteanu and Florin Maxim, *Tempering effects on the microstructure and tensile behaviour of a Cu-Zn-Al shape memory alloy*, Bul. Inst. Polit. Iași, t. LII(LVI), f. 1, St. Ing. Mater., pp. 191-194, 2006, ISSN 1453-1690
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Vn5 **L.Bujoreanu** and S.Stanciu, *Characteristic aspects and development tendencies of shape memory alloys*, (in Romanian), Sesiunea de comunicări tehnico-științifice „Noutăți în domeniul tehnologiilor și utilajelor pentru prelucrarea la cald a metalelor”, Brașov, 29-30 aprilie (1993), vol.IV, Știința materialelor, pp. 107÷112, 1993

II.8. Paper presented in conferences (E)

E1. **L.G. Bujoreanu**, G. Gurău, R.I. Comăneci, B. Özkal, E. Mihalache, *Particular aspects of constrained recovery shape memory effect in a severely plastic deformed Fe-Mn-Si-Cr alloy*, oral presentation at 17th International Metallurgy and Materials Congress IMMC 2014, 11-13 September 2014, Istanbul, Turkey

E2. **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*, invited speaker at Modern Technologies in Industrial Engineering ModTech 2014, 13-15 July 2014, Gliwice, Poland

E3. **M.-G. Suru**, C. Moroșanu, R.-I. Comăneci, E. Mihalache, **L.-G. Bujoreanu**, *Comparative evolution of surface relieves of stress-induced martensite plates in shape memory alloys with different crystalline structures*, poster presentation at International Conference on Martensitic Transformations, ICOMAT 2014, July 6-11, 2014, Bilbao, Spain

E4. **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*, oral presentation at International Conference on Martensitic Transformations, ICOMAT 2014, July 6-11, 2014, Bilbao, Spain

E5. **Leandru-Gheorghe Bujoreanu**, Iuliana Petruța Spiridon, Bogdan Pricop, Burak Ozkal, Umut Soyler, Jan Van Humbeeck, Nicoleta Monica Lohan, Adrian-Liviu Paraschiva, Bogdan Istrate, Marius-Gabriel Suru, *Influence of solution treatment parameters on martensite plate morphology of a hot rolled powder metallurgy Fe-14Mn-6Si-9Cr-5Ni (mass. %) shape memory alloys*, poster presentation at 19th International Vacuum Congress, 9-13 septembrie 2013 Paris

E6. **G. Gurău**, C. Gurău, F. M. Braz Fernandes, **L. G. Bujoreanu**, *An experimental study on the response of equal channel angular pressed aluminum subjected to cold rolling*, oral presentation, Modern Technologies in Industrial Engineering, ModTech 2013, Sinaia, 27-29 Iunie, Romania

E7. **L.G.Bujoreanu**, *Particular aspects concerning the manufacturing and testing of experimental applications of shape memory alloys and the development of new research directions*, oral presentation, Modern Technologies in Industrial Engineering, ModTech 2013, Sinaia, 27-29 Iunie, Romania

E8. **Marius-Gabriel Suru**, Adrian-Liviu Paraschiv, Nicoleta Monica Lohan, Bogdan Pricop, **Leandru-Gheorghe Bujoreanu**, Burak Ozkal, *Loading mode and alloy system effects on surface relief characteristics of martensite plates in Cu-based SMAs*, poster presentation at Shape Memory and Superelastic Technologies, SMST 2013, 20-24.05.2013, Praga, Republica Cehă

E9. **Adrian-Liviu Paraschiv**, **Marius-Gabriel Suru**, Nicoleta Monica Lohan, Bogdan Pricop, **Leandru-Gheorghe Bujoreanu**, Firuța Borza, Nicoleta Lupu, *Factors influencing the structure and properties of polycrystalline magnetic Fe-Ni-Co-Al-Ta-B shape memory alloys*, poster presentation at Shape Memory and Superelastic Technologies, SMST 2013, 20-24.05.2013, Praga, Republica Cehă

E10. **Leandru-Gheorghe Bujoreanu**, Iulia Petruța Spiridon, **Marius-Gabriel Suru**, Gigi Vitel, **Adrian-Liviu Paraschiv**, Bogdan Pricop, Nicoleta Monica Lohan, Bogdan Istrate, **Gheorghe Gurău**, *Atomic migration variation as an effect of thermomechanical cycling in shape memory actuators*, poster presentation at Shape Memory and Superelastic Technologies, SMST 2013, 20-24.05.2013, Praga, Republica Cehă

- E11. M.-G. Suru, I. Dan, N. M. Lohan, A. L. Paraschiv, B. Pricop, I. P. Spiridon, C. Baci, L.-G. Bujoreanu, Hot working effects on surface relief characteristics in a Fe-Mn-Si-Cr shape memory alloy, poster presentation, 8th International Conference in Materials Science and Engineering, BRAMAT 2013, 28.02-2.03.2013 Braşov, Romania
- E12. 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, poster presentation, 8th International Conference in Materials Science and Engineering, BRAMAT 2013, 28.02-2.03.2013 Braşov, Romania
- E13. 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*, poster presentation, 8th International Conference in Materials Science and Engineering, BRAMAT 2013, 28.02-2.03.2013 Braşov, Romania
- E14. Bogdan Pricop, Umut Söyler, Burak Özkal, Nicoleta Monica Lohan, Adrian-Liviu Paraschiv, Marius-Gabriel Suru, Leandru-Gheorghe Bujoreanu, *Influence of mechanical alloying on the behavior of Fe-Mn-Si-Cr-Ni shape memory alloys made by powder metallurgy*, poster presentation at European Symposium on Martensitic Transformations - **ESOMAT 2012**, September 9-16, 2012, Saint-Petersburg, Russia
- E15. Leandru-Gheorghe BUJOREANU, Nicoleta Monica LOHAN, Bogdan PRICOP, Nicanor CIMPOEŞU, *Using differential scanning calorimetry for the study of solid state transitions occurring in shape memory alloys*, oral presentation in the **seminary organized by Netzsch**, 24 mai 2012 „Materials Characterisation by means of thermal analysis techniques”
- E16. 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*, sustained under **poster** form within the symposium A54 - Shape Memory Alloys (SMA) – Materials and Devices, **EUROMAT 2011**, Montpellier 12-15 September 2011
- E17. Vasile Dia, Umut Söyler, Bogdan Pricop, Burak Özkal and **Leandru-Gheorghe Bujoreanu**, *Characterization of mechanically alloyed Fe-Mn-Si-Cr-Ni shape memory alloys. Hot rolling effects*, **oral** presentation within the section METALLIC MATERIALS 5 of 15th International Metallurgy and Materials Congress, **IMMC 2010**, Istanbul 11 - 13 November 2010
- E18. B. Pricop, U. Söyler, R. I. Comănesci, B. Özkal, **L. G. Bujoreanu**, *Mechanical cycling effects at Fe-Mn-Si-Cr-Ni SMAs obtained by powder metallurgy*, sustained under **poster** form within Symposium S Shape memory materials for smart systems III, of European Materials Research **E-MRS Spring Meeting 2010**, Strasbourg, 7-11 June 2010
- E19. S. Stanciu, **L. G. Bujoreanu**, R.I.Comănesci, N. Cimpoeşu, I. Ioniţă, V.V.Moldoveanu, *Particularities of phase transitions in thermomechanically processed Cu-Al-Mn shape memory alloys*, sustained under **poster** form at **ESOMAT 2009** The 8th European Symposium on Martensitic Transformations, Prague 7-11 September 2009
- E20. L. G. Bujoreanu, S. Stanciu, B. Özkal, R. I. Comănesci, M. Meyer, *Comparative study of the structures of Fe-Mn-Si-Cr-Ni shape memory alloys obtained by classical and by powder metallurgy, respectively*, **Oral** presentation at **ESOMAT 2009** The 8th European Symposium on Martensitic Transformations, Prague 7-11 September 2009
- E21. Leandru-Gheorghe BUJOREANU, Sergiu STANCIU, Radu Ioachim COMĂNECI, Ciprian LOHAN, Nicoleta-Monica LOHAN *Particular aspects of the thermomechanical response of Fe-Mn-Si based shape memory alloys*, **plenary** presentation within the Seventh International Congress in Materials Science and Engineering, **ISSIM 2009**, Iaşi, 29-31 May, 2009
- E22.** Sergiu Stanciu, **Leandru G. Bujoreanu**, Nicanor Cimpoeşu and Iulian Ioniţă, *Study of shape memory effect developed by helical springs made from Cu-Al-Ni alloy by lost-wax casting*, sustained under **poster** form at **SMST 2008**, Shape Memory and Superelastic Technologies SMST 2008, 21-25 September, Stresa, Italy
- E23.** **Leandru G. Bujoreanu**, Sergiu Stanciu, Radu I. Comaneci, Markus Meyer, Vasile Dia and Ciprian Lohan, *Factors influencing the reversion of stress-induced martensite to austenite in a Fe-Mn-Si-Cr-Ni shape memory alloy*, sustained under **poster** form at Shape Memory and Superelastic Technologies **SMST 2008**, 21-25 September, Stresa, Italy
- E24.** Sergiu Stanciu, **Leandru G. Bujoreanu**, Iulian Ioniţă, Andrei V. Sandu, Alexandru Enache, *A structural-morphological study of a $Cu_{63}Al_{26}Mn_{11}$ shape memory alloy*, **oral** presentation at Advanced Topics on Optoelectronics Microtechnologies and Nano Technologies, ATOM-N 2008, Constanţa 28-31 August 2008
- E25. **Leandru G. Bujoreanu**, Sergiu Stanciu, Paul Bârsănescu, Nicoleta M. Lohan, *Study of the transitory formation of α_1 bainite, as a precursor of α -phase in tempered SMAs*, **oral** presentation at Advanced Topics on Optoelectronics Microtechnologies and Nano Technologies, ATOM-N 2008, Constanţa 28-31 August 2008
- E26. **L.G.Bujoreanu**, S. Stanciu, *Results obtained at S.I.M. faculty from U.T.Iaşi in the domain of study, research and development of shape memory alloys*, **oral** presentation at the Tenth National Conference of Scientific Research in High school (CNCSIS 10), Brasov, 15-17 May 2008
- E27.** **L. G. Bujoreanu**, V. Dia, S. Stanciu, M. Susan, C. Baci, *Study of the tensile constrained recovery behavior of a Fe-Mn-Si shape memory alloy*, **oral** la presentation within the symposium E: **SHAPE MEMORY**

MATERIALS FOR SMART SYSTEMS, from E-MRS Fall Meeting 2007, September 17-21, Warsaw University of Technology, Poland

E28. M. Susan, **L. G. Bujoreanu**, C. Baci, *Influence of the relative drawing rate at ultrasonic processing of metallic tubes and wires*, sustained on 12-13 September 2007, under the form of **poster** no. 288, within Symposium D33, *Process Modeling of Metallic Alloys*, de la EUROMAT 2007 - European Congress on Advanced Materials and Processes

E29. **L. G. Bujoreanu**, M. Temneanu, R. Ardeleanu, M. Susan, *Factors influencing the bending reproducible behavior of shape memory electrical actuators*, sustained on 10-11 September 2007, under the form of **poster** no. 168, within Symposium B23, *Shape Memory and Amorphous Alloys*, de la EUROMAT 2007 - European Congress on Advanced Materials and Processes

E30. **Leandru-Gheorghe Bujoreanu**, *Study of the transitory formation of α_1 bainite, as a precursor of α -phase in tempered Cu-Zn-Al SMAs*, **oral** presentation in plenary session of the Sixth International Congress in Materials Science and Engineering, Iași, 24-26 May, 2007

E31. **Leandru-Gheorghe Bujoreanu**, *On the influence of austenitization on the morphology of α -phase in tempered Cu-Zn-Al shape memory alloys*, **oral presentation** S-01, on 13th September 2006 between 10:30-10:45, within the section 5, *Microstructural characterization*, of the Seventh European Symposium on martensitic Transformation and Shape Memory Alloys, ESOMAT 2006, 10-15 September 2006, Bochum, Germany

E32. V. Dia, **L. G. Bujoreanu**, S. Stanciu, and C. Munteanu, *Study of shape memory effect in lamellar helical springs made from Cu-Zn-Al SMA*, sustained under the form of **poster** TP 62, within section 8, *Alloy development, processing and applications* of the Seventh European Symposium on martensitic Transformation and Shape Memory Alloys, ESOMAT 2006, 10-15 September 2006, Bochum, Germany

E33. S. Stanciu, and **L. G. Bujoreanu**, *Formation of β_1' stress-induced martensite in the presence of γ phase in a Cu-Al-Ni-Mn-Fe shape memory alloy*, sustained under the form of **poster** WP 17 within section 5, *Microstructural characterization* of the Seventh European Symposium on martensitic Transformation and Shape Memory Alloys, ESOMAT 2006, 10-15 September 2006, Bochum, Germany

E34. A. Airinei, C. Hulubei, R. Ardeleanu, N. Fifere, and **L.G. Bujoreanu**, *Shape change effects in azoaromatic polymer materials*, sustained under the form of **poster** WP 33, within section 6, *Cu-based and less common systems* of the Seventh European Symposium on martensitic Transformation and Shape Memory Alloys, ESOMAT 2006, 10-15 September 2006, Bochum, Germany

E35. **Leandru-Gheorghe Bujoreanu**, Viorica David, Vasile Dia, Corneliu Munteanu, *Evolution of the hysteretic behaviour of SMA wires during mechanical and thermal cycling*, **oral** presentation at the Second International Scientific Conference „Advanced Concepts in Mechanical Engineering” ACME – 2006, 16-17 June 2006, Iași

E36. **Leandru-Gheorghe Bujoreanu**, Romeo Chelariu, Costel Roman, *The effects of Nb additions on the thermomechanical behavior of Ni-Ti shape memory alloy*, **oral** presentation at the Second International Scientific Conference „Advanced Concepts in Mechanical Engineering” ACME – 2006, 16-17 June 2006, Iași

E37. **L.G.Bujoreanu**, *Ten years of research of Shape Memory Alloys at the Faculty of Materials Science and Engineering*, plenary presentation within Fifth International Congress in Materials Science and Engineering, Iași, 26-28 May, 2005

E38. **Leandru-Gheorghe Bujoreanu**, Corneliu Munteanu, Iulian Ioniță and Viorel Kogăniceanu, *On the shape memory behaviour of Cu-based alloys and polyethylene terephthalate (PET)*, **oral** presentation at the Seventh International Conference on the Physics of Advanced Materials, ICPAM-7, 10-12 June 2004, Iași

E39. V. Dia, **L.G. Bujoreanu** and V. Plugaru, *Thermal cycling behaviour of a Cu-Zn-Al-Fe SMA bending actuator*, **oral** presentation at the Thirteenth European Conference of Micromechanics, MME'02, 6-8 October 2002, Sinaia

III. RESEARCH PROJECTS BASED ON CONTRACT/ GRANT

III.1 Research contracts won by national competition (P)

P1. PROJECT MANAGER Exploratory Research Projects – IDEAS

Novel method for improving shape memory properties by controlled atomic migration (in Romanian) contract no. 13/ 2013, Code PN-II-ID-PCE-2012-4-0033 Unique phase on 2013: Emphasizing the reversible formation of stress induced martensite in specimens 0_MA (in Romanian) financed with **185,150 RON**

P2. PROJECT MANAGER Collaborative applied research projects PARTNERSHIPS

Modular system of multifunctional elements with self-adapting displacement (in Romanian) contract no. 144/ 2012, Code PN-II-PT-PCCA-2011-3.1-0174

Unique phase on 2013: Conceiving, designing and producing multifunctional elements. Evaluation of grain refining effect on constrained recovery shape memory effect (in Romanian) financed with **520,088 RON**

Unique phase on 2012: Obtainment the alloys with ultrafine/ nanometric grain size and shape memory effect. Characterization of preliminary specimens (in Romanian) financed with **579,862 RON**

P3. PROJECT MANAGER Exploratory research project, program IDEI
Constrained recovery applications of Fe-(Mn, Ni)-Si-based shape memory alloys, with controlled properties by nanostructural changes at the level of martensite and austenitic matrix, (in Romanian), contract no. 279/ 01.10.2007, code CNCSIS 301

Unique phase on 2010: Obtaining and testing the coupling/ fastening elements, (in Romanian), financed with **180,000 RON**

Unique phase on 2009: Determination of section reduction effects, of secondary heat treatment variant and the study of their effects, (in Romanian), financed with **172,200 RON**

Unique phase on 2008: Determination of chemical composition effects, of primary heat treatment variant and the study of its effects, (in Romanian), financed with **299,588 RON**

Unique phase on 2007: Elaboration of new Fe-Ni and Fe-Mn base alloys, (in Romanian), financed with **75,000 RON**

P4. Member (Sergiu Stanciu – project manager), Exploratory research project, program IDEI,
New beta type shape memory alloys with modified nanostructure by complex alloying and thermomechanical training, used for robotic applications, (in Romanian), contract no. 279/ 01.10.2007, code CNCSIS 616

Unique phase on 2010: *Testing the system under function conditions*, (in Romanian), financed with 195,360 RON

Unique phase on 2009: *Verifying the thermomechanical fatigue behavior of active elements, conceiving, designing and manufacturing of a robotic application*, (in Romanian), financed with 183,800 RON

Unique phase on 2008: *Determining primary heat treatment effects, of plastic deformation and of thermomechanical cycling*, (in Romanian), financed with 300,000 RON

Unique phase on 2007: *Obtaining some cast and primary heat treated specimens of β type SMA*, (in Romanian), financed with 78,000 RON

P5. PROJECT MANAGER Grant CNCSIS type A, *Development of a new computer controlled microactuator from SMA/ elastomer shape memory composites*, (in Romanian)

Additional Contract no. GR 80 / 23.05.2007, Theme no. 8 from Annex Ia, code CNCSIS: 275/2007 Unique phase on 2007: Testing the microactuator under laboratory conditions, (in Romanian), financed with **56,000 RON**

Contract no.: 63GR/ 19.05.2006, Theme no. 3 from Annex Ia, code CNCSIS: 275/2006, Unique phase on 2006: Obtaining of *SMA/ elastomer shape memory composites*, (in Romanian), financed with **82,000 RON**

P6. Member, (Corneliu Munteanu – project leader on behalf of TULasi)

Innovative concept for plasma jet obtention of hard layers with controlled properties, wear and corrosion resistance, (in Romanian), Project CEEX-M1, No.67/ 2006, financed with 1.330.000 RON (175,000 RON **TULasi share**)

P7. Member, (Mihai Susan – project manager),

P8. *Performing technologic system for ultrasonic vibration drawing of stainless steel wires*, (in Romanian), Project CEEX-M1, No.293/ 13.09.2006, financed with 600,000 RON

P9. Member (Romeu Chelariu – project leader on behalf of TULasi) *2D and 3D structures from biocompatible shape memory alloys*, (in Romanian), Project CEEX 25/ 2005, financed with 12,000 RON

P10. PROJECT MANAGER Grant CNCSIS type A, *Study of thermally and mechanically induced transformations down to the level of martensitic nanostructure, in multifunctional shape memory materials. Application of sensor and actuator type*, (in Romanian)

Additional contract 24371/ 24.06.2005, Theme no. 13 from Annex Ia', code CNCSIS 476/2004 Unique phase on 2005: Testing under laboratory conditions of the obtained multifunctional hydraulic and electric elements, (in Romanian), financed with **40,000 RON**

Contract 33371/ 29.06.2004, code CNCSIS 476/2004 Unique phase on 2004: Production and characterization of shape memory elements, shape setting and testing of thermal and mechanical memory, (in Romanian), Theme no. 11 from Annex Ia, financed with **20,000 RON**;

Supplementary phase on 2004, Study of preferred α -phase precipitation within thermally induced multivariant martensitic structure, (in Romanian), Theme 7 from Annex Ia additional, financed with **6,000 RON**

P11. Member (I. Carcea - project leader on behalf of TULasi) *Influence of modifiers upon the structure, the deformability and the shape memory material characteristics in alloys from (Cu,Ni)-(Co,Mn)-(Al,Ga,Sb) system*, (in Romanian)

Program „New Materials, Micro and Nanotechnologies” – MATNANTECH, project no. 3020284, c.f. 159(302) 2003, beneficiary the Faculty of Industrial Chemistry- Bucureşti Polytechnic University, 2003-2005, Subcontract S.C.RANCON S.R.L. Iaşi, financed with 68.400.000 ROL

P12. Member (C. Baciuc - project leader on behalf of TULasi), *Super-alloying technologies of the superficial layer of metals by diffusion processes during electrolytic plasma heating*, (in Romanian)

Project CERES nr. 37/12.11.2002, financed on 2003 with 366.192.000 ROL

financed on 2002 with 18.180.000 ROL

P13. Member (I. Carcea - project leader on behalf of TUIasi), *Obtaining of (magnetic) shape memory alloys from the system (Cu, Ni)-(Co, Mn)-(Al, Ga)*, (in Romanian), Program „ New Materials, Micro and Nanotechnologies” – MATNANTECH 2001, collaboration with the National Institute of Research-Development for Technical Physics Iași

Phase II/2002: *Correlation between physical-mechanical characteristics, thermomechanical treatment parameters and shape memory properties at some compositions of the system (Cu, Ni)-(Co, Mn)-(Al, Ga)*, (in Romanian), financed with 80.000.000 ROL

Phase I/2001: *Determination of the state of art in the development of shape memory alloys of the system (Cu, Ni)-(Co, Mn)-(Al, Ga)*, (in Romanian), financed with 80.000.000 ROL

IV. PhD THESIS

T1 **Leandru-Gheorghe Bujoreanu**, *Technology and Equipment for Obtaining Some Shape Memory Alloys*, The “Gh.Asachi” Technical University from Iași, 188 pages and 7 annex, sustained on May the 5th 1997