

## **Listă de lucrări**

Numele și prenumele:  
**BĂDĂRĂU GHEORGHE**

**A. Teza de doctorat.**

Contribuții la studiul recuperatoarelor de căldură cu tuburi termice

**B. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.**

Editors: Agop, M., Ioannou, P.D., Nica, P., Păun, V., The Fractal and Its Implications in the Materials Science, Athens University Press, ISBN 978-960-92410-1-4, cap V – Bădărău, Gh., et.al. Experimental and Theoretic Aspects in the Laser Produced Plasma, pp. 189-213.

**C. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în țară, la edituri recunoscute CNCSIS.**

1. Raileanu, T., Mirea, C., Grancea, V., Badarau, Gh., Cucos, I., 2002, Utilaje si masini pentru pregatirea amestecurilor de formare, Editura "Gh.Asachi" Iasi, ISBN 973-8292-77-8
2. Badarau, Gh., Minea, A.A., Stefan, M., 2003, Proprietatile materialelor metalice, Editura "Gh.Asachi" Iasi, ISBN 973-621-018-9
3. Stefan, M., Mihai, D., Ionita, I., Badarau, Gh., Constantin, B., 2004, Metode numerice si implementarea lor pe calculator. Metode de rezolvare numerica a ecuatiilor neliniare si transcendentale, Editura Tehnopress, Iasi, ISBN 973-702-087-1
4. Stefan, M., Badarau, Gh., Ionita, I., Vizureanu, P., Raileanu, T., Baciu, C., Manole, V., Mihai, D., 2007, Conducerea automata si informatizata in procesarea materialelor metalice, Editura Tehnopress, Iasi, ISBN 978-973-702-438-1
5. Stefan, M., Vizureanu, P., Bejinariu, C., Badarau, Gh., Manole, V., 2008, Studiul proprietăților termice ale materialelor, Editura Tehnopress, Iasi, ISBN 978-973-702-566-0

**D. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.**

1. Simionescu, A., Raileanu, T., Nejneru, C., Hegyi, E., Badarau, Gh, 1995, Utilaje metalurgice specifice-Indrumar de laborator, Universitatea Tehnica "Gh. Asachi" Iasi
2. Dima, A., Raileanu, T., Badarau, Gh., Vizureanu, P., 1997, Echipamente si utilaje specifice (Turnarea metalelor, deformari plastice si tratamente termice), Universitatea Tehnica "Gh. Asachi" Iasi

**E. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe web.**

Proprietățile materialelor metalice – note de curs

Alegerea și utilizarea materialelor metalice –exemplu ptr. temă de casă.

**F. Lucrări științifice publicate în reviste din țară, recunoscute CNCSIS.**

**a) Revistele Academiei**

1. Bejinariu, C., Malureanu, I., florescu, A., Badarau, Gh., 1995, Cercetari experimentale privind alegerea formei semifabricatului in vederea obtinerii piulitelor olandeze prin extrudare indirecta, la rece, din otel, Academia Romana, Filiala Iasi, Tehnologii, sisteme tehnologice si materiale performante in constructia de masini (TSTM-1), vol I, pp.70-74
2. Susan, M., Malureanu, I., Florescu, A., Badarau, Gh., Scanteianu, N., 1995, Instalatie si conditii de realizare a sistemelor ultraacustice inchise la trefilarea sarmelor in camp ultrasonor cu filiera situata in maximul oscilatiei si activata paralel cu directia de tragere, Academia Romana, Filiala Iasi, Tehnologii, sisteme tehnologice si materiale performante in constructia de masini (TSTM-1), vol I, pp.142-146

3. Munteanu, C., Rusu, I., Badarau, Gh., 1995, Caracterizarea magnetica a benzilor metalice feromagnetice amorf din sistemul Fe40Ni40B20 prin histeresis magnetic, Conferinta cu participare internationala "Optimizarea tehnologiilor de prelucrare in constructia de masini", Bacau octombrie, Editura Academiei Romane – Filiala Iasi, vol II, pp. 274-278
4. Munteanu, C., Rusu, I., Badarau, Gh., 1995, Caracterizarea magnetica a benzilor metalice feromagnetice amorf din sistemul Fe40 Ni40, B12Si8 prin metoda magnetometrului, Conferinta cu participare internationala "Optimizarea tehnologiilor de prelucrare in constructia de masini", Bacau octombrie, Editura Academiei Romane – Filiala Iasi, vol II, pp. 279-283
5. Dima, A., Badarau, Gh., Vizureanu, P., Toth, L., Ivanov, P., Stefan, M., Grancea, V., 1996, Some contributions brought by the Romanian science upon the computer assisted designing of technologies and hot working equipment, Romanian Academy, branch office of Iasi, Optimum technologies, technological systems and materials in the machine building field (TSTM-2), pp. 122-117, ISSN 1224-7499
6. Catarschi, V., Dima, A., Comanici, R., Rusu, I., Badarau, Gh., 1996, The determination of the maintaining time at the temperature of the heating furnace as a function of the thermal gradient inside the ingot, Romanian Academy, branch office of Iasi, Optimum technologies, technological systems and materials in the machine building field (TSTM-2), pp. 146-151, ISSN 1224-7499.
7. Rusu, I., Munteanu, C., Badarau, Gh., 1996, The study of the cooling effect by means of dimensional analysis, Romanian Academy, Branch Office of Iasi, Optimum technologies, technological systems and materials in the machine building field (TSTM-2), pp. 177-182, ISSN 1224-7499
8. Susan, M., Malureanu, I., Alexandru, I., Bulancea, V., Rusu, I., Badarau, Gh., 1996, The influence of ultrasonics upon the technological deformability of the wires drawing from RUL IV, Romanian Academy, branch office of Iasi, Optimum technologies, technological systems and materials in the machine building field (TSTM-2), pp. 162-167, ISSN 1224-7499
9. Susan, M., Dima, A., Catarschi, V., Badarau, Gh., Vizureanu, P., 1998, Variatia caracteristicilor magnetice la trefilarea sanelor din oteluri prin activarea filierei cu oscilatii de frecventa ultrasonica, Academia Romana, Filiala Iasi, Simpozionul Materiale-Energie-Mediu, Zilele Academiei Iesene, Iasi, pp.50-55.
10. Badarau, Gh., Dima, A., Simionescu, A., Nanescu, V., 1999, New technology of heat pipe heat recovery systems control, Modelling and optimization in machine building field, (MOCM-4) Romanian Academy, Branch Office of Iasi, pp. 151-155

b) Buletinele universitatilor din Bucuresti, Iasi, Cluj Napoca, Timisoara

1. Raileanu, T., Hopulele, I., Mirea, C., Manole, V., 1994, Considerations concerning the necessity of application of heat treatments in a liquid phase at some cast iron parts, Buletinul I.P.Iasi, tomul XL(XLIV), fasc. 1-4, vol II, Sectia IX Stiinta si ingineria materialelor, pp.562-565
2. Raileanu, T., Mirea, C., Badarau, Gh., Manole, V., Florescu, A., 1994, Researches concerning the heat treatment from the liquid phase at cast iron parts using the electric arc, Buletinul I.P.Iasi, tomul XL(XLIV), fasc. 1-4, vol II, Sectia IX, pp. 566-570
3. Simionescu, A., Nanescu, V., Badarau, Gh., 1994, Materials used at the heat pipe manufacturing, Buletinul I.P.Iasi, Tom XL(XLIV) Fasc. 1-4, vol. II, Sectia IX, Stiinta si ingineria materialelor, pp.747-753.
4. Isachi, P., Ghelbere, S., Badarau, Gh., 1994, Controlled atmospheres produced by the thermal decomposition of methyl alcohol with methane added, Buletinul I.P.Iasi, Tom XL(XLIV) Fasc. 1-4, vol. II, Sectia IX, Stiinta si ingineria materialelor, pp.1033-1039

5. Badarau, Gh., Simionescu, A., 1996, New heat pipe heat recovery system for heat recovery from ventilating and air conditioning installations, Buletinul I.P.Iasi, Tom XLII(XLVI) Fasc. 3-4, vol. II, Sectia IX, Stiinta si ingineria materialelor, pp.151-155
6. Catarschi, V., Malureanu, I., Gheorghiu, D., Badarau, Gh., 1996, The influence of some steel thermophysical characteristics over the ingots heating technologies computer designed for forging, Buletinul I.P.Iasi, Tom XLII(XLVI) Fasc. 3-4, vol. II, Sectia IX, Stiinta si ingineria materialelor, pp.453-457
7. Catarschi, V., Susan, M., Gheorghiu, D., Badarau, Gh., Dragan, T.A., 1996, Contributions considering the computer designed technologies for steel ingots heating, in "INCFOR" programs, Buletinul I.P.Iasi, Tom XLII(XLVI) Fasc. 3-4, vol. II, Sectia IX, Stiinta si ingineria materialelor, pp.507-514
8. Badarau, Gh., Simionescu, A., Nanescu, V., 1998, Contributions concerning the study of the control of the operation of heat pipe heat recovery systems, Buletinul I.P.Iasi, Tom XLIV(XLVIII) Fasc. 1-4, Sectia IX, Stiinta si ingineria materialelor, pp.119-123, ISSN 1453-1690.
9. Dima, A., Toth, L., Badarau, Gh., Minea, A.A., Vizureanu, P., 1998, Experimental; determination of optimum size of the austenitic grain by means of heat treatment cycles in laboratory conditions, Buletinul I.P.Iasi, Tom XLIV(XLVIII) Fasc. 1-4, Sectia IX, Stiinta si ingineria materialelor, pp. 125-133, ISSN 1453-1690..
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14. Rusu, I., Badarau, Gh., Munteanu, C., 2001, Considerations concerning the laser processing of the diffusion microstructure of metallic materials, Buletinul I.P.Iasi, Tom XLVII(LI) Fasc. 3-4, Sectia Stiinta si ingineria materialelor, pp.165-170, ISSN 1453-1690.
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20. Badarau, Gh., 2003, Considerations concerning the possibility of using heat pipes at the temperature control of casting dies, Buletinul I.P.Iasi, Tom XLIX(LIII) Fasc. 1-4, Sectia Stiinta si ingineria materialelor, pp.75-78, ISSN 1453-1690.
21. Badarau, Gh., 2003, Preliminary considerations about the introduction of the equivalent fluid film as a criterion of characterization for gravitational heat pipes, Buletinul I.P.Iasi, Tom XLIX(LIII) Fasc. 1-4, Sectia Stiinta si ingineria materialelor, pp.97-101, ISSN 1453-1690.
22. Bejinariu, C., Malureanu, I., Badarau, Gh., 2003, casting in centrifugal field forces part II, Buletinul I.P.Iasi, Tom XLIX(LIII) Fasc. 1-4, Sectia Stiinta si ingineria materialelor, pp.115-120, ISSN 1453-1690.
23. Ionita, I., Stefan, M., Badarau, Gh., 2005, Metode de punct interior in optimizarea convexa a fortele de prehensiune a unui robot utilizat in procesul de turnare, Buletinul I.P.I. Fasc. 2, Tom LI(LV), pp. 279-282, Sectia Stiinta si Ingineria Materialelor. Iasi, ISSN 1453-1690
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26. Stefan, M., Badarau, Gh., Ionita, I., 2005, Optimizare si metode computationale in stiinta materialelor, Buletinul I.P.I. Fasc. 2, Tom LI(LV), Sectia Stiinta si Ingineria Materialelor. Iasi, pp. 289-292, ISSN 1453-1690
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G. Lucrări științifice publicate în volumele conferințelor.

- a. In volume (proceedings) ale conferintelor internationale (publicate integral)

1. Dima, A., Calancia, O., Badarau, Gh., Ciobanu, M., 1993, The computer assisted determination of technological parameters of heating process of ingots of distinct dimensions, The 7<sup>th</sup> International Metallurgy and Materials Congress, May 4-8, Ankara, Turkey (poster session)
2. Dima, A., Danila, R., Badarau, Gh., Tamasdan, L., 1993, The determination of technological parameters of the heating process of different chemical composition ingots by computer technics, The 7<sup>th</sup> International Metallurgy and Materials Congress, May 4-8, Ankara, Turkey (poster session)
3. Dima, A., Cucos, I., Badarau, Gh., Danila, R., 1993, Comparative study concerning the physico-mechanical features of mouldedAl alloys thermal treated and untreated, The 15<sup>th</sup> International congress of thermal treatments, Dunaujvaros, 19-21 Oct., pp221-225.
4. Dima, A., Badarau, Gh., Chirila, E., Stefan, M., 1995, Constructive-functional dimensioning assisted by computer of the electrical furnace by induction (I), 3<sup>rd</sup> European conference on industrial furnace and boilers, Lisbon, 18-21 April, (poster session)
5. Dima, A., Badarau, Gh., Vizureanu, P., Ivanov, P., 1995, Constructive-functional dimensioning assisted by computer of the electrical furnace by induction (II), 3<sup>rd</sup> European conference on industrial furnace and boilers, Lisbon, 18-21 April, (poster session)
6. Rusu, I., Munteanu, C., Badarau, Gh., 1995, The obtaining and the study of the structure and magnetic properties of the metallic amorphous ferro-magnetic ribbons from Fe80-xSmxB20 system, 4<sup>th</sup> European conference on advanced materials and processes, Venice-Padua, Italy, 25-28 September, (poster session).
7. Munteanu, I., Munteanu, C., Rusu, I., Badarau, Gh., The study of the biocompatibility used for skull and abdominal surgery, 4<sup>th</sup> European conference on advanced materials and processes, Venice-Padua, Italy, 25-28 September, (poster session).
8. Grancea, V., Badarau, Gh., Vizureanu, P., 1995, Intensive preheating of the oxidant like an intensifying method of the burning process, XXVIII.KWT-Kolloquium, Dresden, Germania (sesiunea poster)
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20. Scanteianu, N., Simionescu, A., Badarau, Gh., Vieriu, G.B., 1997, Researches concerning the achievement of an ecological heating system in view of thermo-stabilisation of synthetic fibres in Litzer installation, XXIX Kraftwerkstechnisches Kolloquium, Dresden, Germania (sesiunea poster)
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24. Dima, A., Toth, L., Badarau, Gh., Minea, A.A., Vizureanu, P., 1999, Experimental researches of optimum determination of the heat treatment cycles in laboratory conditions, Conferinta "Echipamente pentru controlul si conducerea sistemelor tehnice", Vinita, Ucraina, tom.3, pp.316-321, ISBN 966-7199-34-7.
25. Dima, A., Vizureanu, P., Badarau, Gh., 1999, New trends in heat treating equipments, Conferinta "Echipamente pentru controlul si conducerea sistemelor tehnice", Vinita, Ucraina, tom.3, pp.322-325, ISBN 966-7199-34-7.
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30. Badarau, Gh., Simionescu, A., Ionita, I., 2003, Recuperatoarele de caldura cu tuburi termice o posibila solutie impusa de necesitatea dezvoltarii durabile in industria metalurgica, Conferinta nationala de tehnologii si materiale avansate TMA 2003, pp. 397-399, Galati.
31. Ionita, I., Stefan, M., Badarau, Gh., Mantu, M., 2003, Tehnologie moderna de obtinere prin turnare a lingotierelor invers conice cu sectiune dreptunghiulara, fara fund, in vederea cresterii semnificative a durabilitatii in exploatare, Conferinta nationala de tehnologii si materiale avansate TMA 2003, pp. 390-396, Galati.
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