

Books

1. Ruzic J., Stoimenov N., Advanced copper matrix composites, 2016, (Editor), Academy Publishing House, Sofia, Bulgaria, ISBN 978-954-322-859-1
2. M. Kandeва, D. Karastoyanov, B. Ivanova, E. Asenova., Tribological Interactions of Spheroidal Graphite Cast Iron Microalloyed with Tin., 2016, Academy Publishing House, Sofia, Bulgaria, ISBN 978-954-322-861-4
3. M. Kandeва, A. Vencl, D. Karastoyanov., Advanced Tribological Coatings for Heavy-duty Applications: Case Studies., 2016, Academy Publishing House, Sofia, Bulgaria, ISBN 978-954-322-858-4
4. Penchev T., Karastoyanov D., Gyoshev S. , Altaparmakov I., Innovative Impact Processes: Machines, Theory, Experiments, Modeling, 2016, Academy Publishing House, Sofia, Bulgaria , ISBN 978-954-322-860-7
5. Cantoni V., Karastoyanov D., Mosconi M., Setti A., CVML and SMART LAB at the Exhibition (Pavia. The Battle. The Future – 1525-2015, Nothing was the same again)., Pavia University Press, 2016, Pavia, Italy, (in English and Italian), ISBN: 978-88-6952-035-8 (book), ISBN: 978-88-6952-036-5 (e-book)
6. Karastoyanov, D., Control of robots and other mechatronic systems. Sofia, Academy Publishing House, 2010, (in Bulgarian), ISBN 987-954-322-415-9
7. Karastoyanov D., Control of mechatronic systems. Sofia, Academy Publishing House, 2006, ISBN-10: 954-322-169-3, ISBN-13: 978-954-322-169-1 (in Bulgarian)

8. Zamanov V., Karastoyanov D., Sotirov S., Mechanics and control of robots. Sofia, Litera print, 1993 (in Bulgarian)

Patents

9. Angelov A., Karastoyanov D., Nachev G., Device for determination the position of weldet details in relation to welding gun., Bulgarian patent No 54201 / 18.11.1981

10. Dobrinov A., Dobrino V., Zahariev R., Karastoyanov D., Electromagnetic gripper., Bulgarian patent No 66317/30.04.2013

11. Dobrinov A., Dobrino V., Zahariev R., Karastoyanov D., Manipulator., Bulgarian patent No 66060/30.12.2010

12. Dobrinov A., Dobrino V., Zahariev R., Karastoyanov D., Manipulator., Bulgarian patent No 66064/30.12.2010

13. Gavrilov G., Karastoyanov D., Method of renovating the coating of steel surfaces., Bulgarian patent No № 110745, announced 2.9.2010

14. Karastoyanov D., Brail screen. Bulgarian patent No 66520 / 31.03.2016

15. Karastoyanov D., Simeonov S., Brail Display., Bulgarian Patent No 66527 / 28.04.2016

16. Karastoyanov D., Simeonov S., Dimitrov A., Brail Display., Bulgarian Patent No PБ № 66562 / 31.01.2017

17. Karastoyanov D., Micromanipulator., Bulgarian Patent Application, Reg No 66547 / 31.10.2016

18. Karastoyanov D., I. Yatchev, K. Hinov, Rachev T., Braille Screen., Bulgarian Patent Application, Reg No 111055, October 13, 2011

19. Karastoyanov D. , I. Yatchev, K. Hinov, I. Balabozov., Braille Display., Bulgarian Patent Application, Reg No 111360, December 5, 2012

Publications

20. Kandeва, M., Ivanova, B., Karastoyanov, D., Grozdanova, T., Assenova, E. Abrasive wear of high velocity oxygen fuel (HVOF) superalloy coatings under vibration load (2017) IOP Conference Series: Materials Science and Engineering, 174 (1), art. no. 012010, . DOI: 10.1088/1757-899X/174/1/012010

21. Kandeва, M., Grozdanova, T., Karastoyanov, D., Assenova, E. Wear resistance of WC/Co HVOF-coatings and galvanic Cr coatings modified by diamond nanoparticles (2017) IOP Conference Series: Materials Science and Engineering, 174 (1), art. no. 012060, . DOI: 10.1088/1757-899X/174/1/012060

22. Mara Kandeve, Tinka Grozdanova, Dimitar Karastoyanov, Boriana Ivanova And Aleksandar Venci; Wear Under Vibration Conditions Of Spheroidal Graphite Cast Iron Microalloyed By Sn., International Journal of the Balkan Tribological Association, Vol. 22, No 2A, 1769–1780 (2016),ISSN 1310-4772

23. Emilia Assenova, Mara Kandeve, Dimitar Karastoyanov; Self Organization Effects Of Lubricants And Additives Impact On Tribological Systems Quality. (in print), International Journal of the Balkan Tribological Association, ISSN 1310-4772

24. Karastoyanov D., Yatchev I., Balabozov I., Innovative Graphical Braille Screen for Visually Impaired People., ISSN 1860-949X ISSN 1860-9503 (electronic), Studies in Computational Intelligence, vol. 648, ISBN 978-3-319-32206-3 ISBN 978-3-319-32207-0 (eBook), DOI 10.1007/978-3-319-32207-0, Springer International Publishing, Switzerland, Innovative Approaches and Solutions in Advanced Intelligent Systems, pp 219-240, 2016

25. Kotev V., D. Karastoyanov and P. Genova. Application of the Spatial Mechanisms in Bioreactors: Design Concept., International Journal of Materials Science and Engineering, vol. 3(1), March 2015, pp. 82-85, ISSN 2315-4527, doi: 10.12720/ijmse.3.1.1

26. Karastoyanov D., and V. Kotev. Electromagnetic Microdrives for Braille Screen: Control and Circuit Testing, Intern. Journal of Materials Science and Engineering, vol. 3, (1), March 2015, pp: 1-6, ISSN 2315-4527, doi: 10.12720/ijmse.3.1.1-6.

27. Todor Penchev, Dimitar Karastoyanov, Stanislav Gyoshev., Experimental study of iron metal powder compacting by controlled impact., 17th Intern. Conference on Industrial Design Engineering ICIDE 2015, August 6-7, 2015, Amsterdam, Netherland, published in International Science Index, vol. 17(8) Part 1, 2015, pp 118-121, eISSN: 1307-6892

28. Karastoyanov D., Gyoshev S., Penchev T., Study the influence of the type of cast iron chips on the quality of briquettes obtained with controlled impact., 17th Int. Conf. on Industrial Design Engineering ICIDE, August 6-7, 2015, Amsterdam, Netherland, publ. in International Science Index, vol. 17(8) Part 1, 2015, pp 118-121, eISSN: 1307-6892

29. T. Penchev, S. Gyoshev и D. Karastoyanov., High Speed Briquetting of Metal Chips Using Rocket Engine., International Conference on Circuits, Systems, Communications and Computer, CSCC'15; 15.07.2015 – 21.07.2015, Zakynthos, Greece, pp 172-176, ISSN 1790-5117
30. 137. D. Karastoyanov, D. Ivanova и N. Stoimenov., Technology for Production of High Temperature Materials and Alloys Including nano Elements, International Conference on Circuits, Systems, Communications and Computer, CSCC'15; 15.07.2015 – 21.07.2015, Zakynthos, Greece, pp 177-181, ISSN 1790-5117
31. M. Kandeва, B. Ivanova, D. Karastoyanov, A. Venzl, E. Asenova., Influence of the Metal-Plating Aditive “VALENA” on the Wear of the Spheroidal Graphite Cast Iron Micro Alloyed by Sn., 14th International Conference on Tribology SERBIATRIB'15, May 13-15 2015, Belgrade, Serbia, pp 236-242, ISBN 978-86-7083-857-4
32. D. Karastoyanov, L Doukovaska, S. Gyoshev and I. Kalaykov., Inter Criteria Decision Making Approach for Metal Chips Briquetting., Fifth International Symposium on Business Modeling and Software Design, BMSD'15; 05.07.2015 – 09.07.2015, Milan, Italy, pp 297-301, ISBN 978-989-758-111-3
33. L Doukovaska, D. Karastoyanov, N. Stoimenov and I. Kalaykov., Inter Criteria Decision Making Approach for Iron Powder Briquetting., Fifth International Symposium on Business Modeling and Software Design, BMSD'15; 05.07.2015 – 09.07.2015, Milan, Italy, pp 292-295, ISBN 978-989-758-111-3
34. Atanassova V., L. Doukovska, D. Karastoyanov, F. Čapkovič, InterCriteria Decision Making Approach to EU Member States Competitiveness Analysis: Trend Analysis, Proc. of the 7th IEEE Int. Conf. Intelligent Systems - IS'14, September 24–26 2014, Warsaw, Poland, ISSN 2194-5357, ISBN 978-3-319-11312-8, DOI 10.1007/978-3-319-11313-5, Volume 1: Mathematical Foundations, Theory, Analyses, Springer International Publishing, Switzerland, Advances in Intelligent Systems and Computing vol. 322, pp. 107-115, 2016.,
35. Jakimovska K., Duboka Č. and Karastoyanov D., Application of Fuzzy Topsis and Ahp Method in Evaluating Vehicle Roadworthiness Performance., Proc. of the European Automotive

Congress EAEC-ESFA, November 25-27, 2015, Bucharest, Romania, , ISBN 978-3-319-27275-7 ISBN 978-3-319-27276-4 (eBook), DOI 10.1007/978-3-319-27276-4, Springer International Publishing, Switzerland, pp 69-80, 2016

36. Penchev T., Karastoyanov D., Experimental Study of Upsetting and Die Forging with Controlled Impact., International Conference on Manufacturing Science and Engineering (ICMSE 2014), 17-18 April 2014, Lisbon, Portugal, International Science Index Vol:8 No:4 2014, pp 529-533

37. Karastoyanov D., Penchev T., Mobile Wireless Investigation Platform., International Conference on Manufacturing Science and Engineering (ICMSE 2014), 17-18 April 2014, Lisbon, Portugal., International Science Index Vol:8 No:4 2014, pp 554-559

38. V. Abadjiev, G. Dimchev, E. Abadjieva, D. Karastoyanov., One Application of the International Terminological Standart BDS ISO 10825 for the Damage Identification on the Teeth of Gear Transmissions., 6th Int. Conf. on Mechanics and Material Design M2D'2015, July 26-30 2015, Ponta Delgada, Portugal, (in print), International Journal of Mechanics and Material Design, ISSN 1569-1713

39. Todor Penchev, Stanislav Gyoshev, Dimitar Karastoyanov., Study of parameters of controlled impact by impact deformation of elastic and elastic - plastic materials., Recent Advances in Mechanical Engineering, ISBN: 978-960-474-402-2, pp 113-118,

40. Shahpazov V., L. Doukovska, D. Karastoyanov, Artificial Intelligence Neural Networks Applications in Forecasting Financial Markets and Stock Prices, Proc. of the International Symposium on Business Modeling and Software Design – BMSD'14, 24-26 June 2014, Luxembourg, Grand Duchy of Luxembourg, ISBN 978-989-758-032-1, pp. 282-288, 2014.,

41. Radeva Tatyana R., Ivan S. Yatchev, Dimitar N. Karastoyanov, Nikolay I. Stoimenov, Stanislav D. Gyoshev., Coupled Electromagnetic and Thermal Field Modeling of a Laboratory Busbar System., International Conference on Electrical Engineering and Technology, ICEET 2014, 8-9 September 2014, Geneva, Switzerland, published in: International Science Index Vol: 08 No:09 Part I, eISSN 1307-6892, pp 172-176,

42. Karastoyanov D., Vi. Kotev and T. Penchev. Forging Process Control by Additional Rocket Force, International Journal of Emerging Technology and Advanced Engineering, Vol. 4(8), August 2014, pp. 297-306, ISSN 2250–2459,

43. Karastoyanov D., Vi. Kotev and T. Penchev. Forging by Rocket Driven Hammer: Dynamics and Experiments, Advanced in Engineering Mechanics and Materials, pp: 174-177, ISBN 978-1-61804-241-5.

44. Karastoyanov D., Vi. Kotev and I. Yatchev. Development of a Braille Tactile Device Driven by Linear Magnet Actuators, International Journal of Engineering and Innovative Technology (IJEIT), Vol. 4, (2), August 2014, pp. 35-43, ISSN: 2277-3754,

45. Karastoyanov D., M. Kandevea and K. Kostadinov, Shafts Renovation using Coatings with Nano Elements., International Conferences EUROPMENT 2014, 17-21 July 2014, Santorini, Greece, published in: Advanced in Engineering Mechanics and Materials., ISBN 978-1-61804-241-5, pp 270-274,

46. Karastoyanov D., L. Doukovska, V. Atanassova, Electromagnetic Linear Micro Drives for Braille Screen: Characteristics, Control and Optimization, Proc. of the Third International Conference on Telecommunications and Remote Sensing – ICTRS'14, 26-27 June 2014, Luxembourg, Grand Duchy of Luxembourg, ISBN 978-989-758-033-8, pp. 88-93, 2014.

47. Kandevea M., Vencl A., Assenova E., Karastoyanov D., Grozdanova T., Abrasive Wear of Chemical Nickel Coatings with Boron Nitride Nano-Particles., THE "A" COATINGS - 11th International Conference in Manufacturing Engineering., October 1-3 2014, Thesaloniki, Greece, ISBN 978-960-98780-8-1, pp319-325,

48. M. Kandevea, D. Karastoianov, B. Ivanova, V. Pojidaeva., Influence of Nano-Diamond Particles on the Tribological Characteristics of Nickel Chemical Coatings., Tribology in Industry, Vol. 36, No. 2 (2014) 181

-

187,

49. Kandeve Mara, Boryana Ivanova , Dimitar Karastoyanov, Emilia Assenova., Static and Dynamic Friction of Sphero-graphite Cast Iron with Sn Microalloy., 2nd Austrian Indian Symposium on Materials Science and Tribology, May 26-29, 2014., Vienna, Austria,
50. Andreev Andrey D., Ilona I. Iatcheva, Dimitar N. Karastoyanov, Rumena D. Stancheva., Electromagnetic Flow Meter Efficiency., International Conference on Electrical Engineering and Technology, ICEET 2014, 8-9 September 2014, Geneva, Switzerland, published in: International Science Index Vol: 08 No:09 Part I, eISSN 1307-6892, pp 177-181.,
51. D. Karastoyanov., Energy Efficient Control of Linear Micro Drives for Braille Screen., International Conference on Human and Computer Engineering ICHCE 2013, October 14-15 2013, Osaka, Japan, pISSN 2010-376x, eISSN 2010-3778, pp 860-864
52. M. Kandeve, B. Ivanova, D. Karastoyanov., Composite Coatings to Improve Durability of the Working Body of the Drill., 5th WORLD TRIBOLOGY CONGRESS WTC 2013, September 8-13 2013, Torino, Italy, www.wtc2013.it,
53. M. Kandeve,D. Karastoyanov, B. Ivanova., Friction and Wear of Ni Coatings with Nanosize Particles of SiC., 5th WORLD TRIBOLOGY CONGRESS WTC 2013, September 8-13 2013, Torino, Italy, www.wtc2013.it,
54. D. Karastoyanov, V. Monov., An Intelligent System for Knee and Ankle Rehabilitation., International Conference on Mechanical and Industrial Engineering ICMIE 2013, August 15-16 2013, Venice, Italy, pISSN 2010-376x, eISSN 2010-3778, pp 411-416
55. D. Karastoyanov, V. Monov., An Advanced Technology for Renovation of Extruding Shafts., Intern. Conference on Mechanical and Industrial Engineering ICMIE 2013, August 15-16 2013, Venice, Italy, pISSN 2010-376x, eISSN 2010-3778, pp 407-410
56. T. Penchev, D. Karastojanov, I. Altaparmakov., Experimental Study on “Controlled

Impact”Effect in Plastic Deformation Processes., Advanced Materials Research Vol. 772 (2013) pp 3-8 © (2013) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMR.772.3

57. Balabosov I., Georgiev V., Hinov K., Karastoyanov D., Yatchev I., Influence of Different Geometric Parameters on the Static Force Characteristics of an Electromagnetic Actuator for Braille Screen., International Symposium on Theoretical Electrical Engineering ISTET 2013, June 24-26 2013, Pilsen, Czech Republic, ISBN 978-80-261-0246-5, pp IV-39 – IV 42

58. T. Penchev, D. Karastoyanov and V. Monov., Control System For “Controlled Impact” Laboratory Device., Third IEEE International Conference on Information Science and Technology ICIST 2013, March 23-25, 2013; Yangzhou, Jiangsu, China., 978-1-4673-2764-0/13/ ©2013 IEEE., pp 215-219

59. V. Monov, D. Karastoyanov and T. Penchev., Advanced Control Methods and Technologies for Two Industrial Processes., Third IEEE International Conference on Information Science and Technology ICIST 2013, March 23-25, 2013; Yangzhou, Jiangsu, China., 978-1-4673-2764-0/13/ ©2013 IEEE., pp 187-194

60. D. Karastoyanov, V. Monov and T. Penchev., New Type Electromagnetic Drive For Braille Screen., Third IEEE International Conference on Information Science and Technology ICIST 2013, March 23-25, 2013; Yangzhou, Jiangsu, China., 978-1-4673-2764-0/13/ ©2013 IEEE., pp 178-182

61. Yatchev I., Karastoyanov. D., Optimization of Permanent Magnet Linear Actuator for Braille Screen., International Symposium IGTE 2012, September 16-18 2012, Graz, Austria, pp 59-63

62. Penchev T., Karastoyanov D., New Industrial Engine: Priority And Field Of Application., International Conference ICMAS 2012, November 8-9 2012, Bucharest, Romania, Published In Journal Proceedings In Manufacturing Systems, Vol. 7, Issue 4, 2012, ISSN 2067-9238, PP 241-244

63. T. Penchev, I. Altaparmakov, D. Karastoyanov., Experimental Study on the Possibilities to Decrease the Coefficient of Restitution after Impact., 2012 International Conference on Advanced Design and Manufacturing Engineering (IC ADME), August 16-18 2012, Taiyuan, China., Published in Intern.l Journal "Applied Mechanics and Materials", vol 217-219, 2012, pp 1659-1662, ISBN-13: 978-3-03785-380-1

64. D. Karastoyanov, T. Penchev, M. Kandeve., Tribological Characteristics of Nano Structured Nickel Coatings for Renovating of Extruding Shafts., 2012 Int. Conference on Advanced Design and Manufacturing Engineering (IC ADME 2012), August 16-18 2012, Taiyuan, China., Published in International Journal "Applied Mechanics and Materials", vol 217-219, 2012, ,, 221-225, ISBN-13: 978-3-03785-380-1

65. Dimitar Karastoyanov, Stanislav Simeonov, Todor Penchev., Braille Screen For Visually Impaired., International Conference ICMAS 2012, November 8-9 2012, Bucharest, Romania, Published In Journal Proceedings In Manufacturing Systems, Vol. 7, Issue 2, 2012, ISSN 2067-9238, Pp 111-114

66. M. Kandeve, D. Karastoyanov, A. Andonova., Wear and Tribothermal Effects of nanostructured Nickel Chemical Coatings., Applied Mechanics and Materials, vol. 157-158, 2012, pp 960-963, (selected papers from ICMAM 2011), ISBN-13: 978-3-03785-380-1

67. D. Karastoyanov, S. Simeonov., Assitive Hardware for Visually Impaired., 7th Intern. Conference ICBBM 2010, May 24-28 2010, Liepaya, Latvia, pp 80-83

68. D. Karastoyanov, M. Grouev., Wireless Controlled Luggage Carrier., Problems of Engineering Cybernetics and Robotics, vol. 64, Sofia, 2011, pp 68-77, ISSN 0204-9848

69. M. Kandeve, D. Karastoyanov, A. Andonova., Tribology of Nanostructured Nickel Chemical Coatings., Problems of Engineering Cybernetics and Robotics, vol. 64, Sofia, 2011, pp 52-59, ISSN 0204-9848

70. D. Karastoyanov, T. Penchev, G. Gavrilov., Coating with Nano Components for Renovating

of Extruding Shafts., Problems of Engineering Cybernetics and Robotics, vol. 63, Sofia, 2011, pp 49-57, ISSN 0204-9848

71. T. Penchev, P. Bodurov, D. Karastoyanov., High Speed Rocket Propelled Industrial Hammer., Problems of Engineering Cybernetics and Robotics, vol. 63, Sofia, 2011, pp 35-40, ISSN 0204-9848

72. Yatchev I., Hinov K., Balabosov I., Gueorgiev V., Karastoyanov D., Finite element modeling of electromagnets for Braille screen., 10 Int. Conference on Applied Electromagnetics PES 2011, September 25 – 29, 2011, Nis, Serbia, pp O8.1-O8.4

73. Kotev V., Karastoyanov D., Micromanipulator for Inspection of Shafts Coating with Nano Components., First International Conference on Manipulation, Manufacturing and Measurement on the nanoscale 3M-NANO, August 29 – September 2, 2011, Changchun, China, pp WE19.1-WE19.4

74. P. Georgieva, S. Simeonov, V. Germanov, A. Dimitrov, D. Karastoyanov., Computer System for Navigating a Mobile Robot., IEEE International Symposium on Computer and Informatics (ISCI 2011), 20-22.03.2011, Kuala Lumpur, Malaysia, ISBN: 978-1-61284-690-3, pp 182-187

75. D. Karastoyanov, M. Grouev., Wireless Controlled Luggage Carrier., Problems of Engineering Cybernetics and Robotics, vol. 64, Sofia, 2011, pp 68-77

76. M. Kandeve, D. Karastoyanov, A. Andonova., Tribology of Nanostructured Nickel Chemical Coatings., Problems of Engineering Cybernetics and Robotics, vol. 64, Sofia, 2011, pp 52-59

77. D. Karastoyanov, T. Penchev, G. Gavrillov., Coating with Nano Components for Renovating of Extruding Shafts., Problems of Engineering Cybernetics and Robotics, vol. 63, Sofia, 2011,

pp 49-57

78. T. Penchev, P. Bodurov, D. Karastoyanov., High Speed Rocket Propelled Industrial Hammer., Problems of Engineering Cybernetics and Robotics, vol. 63, Sofia, 2011, pp 35-40
79. M. Kandeve, D. Karastoyanov, A. Andonova., Wear and Tribothermal Effects of nanostructured Nickel Chemical Coatings., published in Applied Mechanics and Materials, vol. 157-158, 2012, pp 960-963, (selected papers from ICMAM 2011), ISBN-13: 978-3-03785-380-1
80. Yatchev I., Hinov K., Balabosov I., Gueorgiev V., Karastoyanov D., Finite element modeling of electromagnets for Braille screen., 10 International Conference on Applied Electromagnetics PES 2011, September 25 – 29, 2011, Nis, Serbia, pp O8.1-O8.4
81. Kotev V., Karastoyanov D., Micromanipulator for Inspection of Shafts Coating with Nano Components., First International Conference on Manipulation, Manufacturing and Measurement on the nanoscale 3M-NANO, August 29 – September 2, 2011, Changchun, China, pp WE19.1-WE19.4
82. P. Georgieva, S. Simeonov, V. Germanov, A. Dimitrov, D. Karastoyanov., Computer System for Navigating a Mobile Robot., IEEE International Symposium on Computer and Informatics (ISCI 2011), 20-22.03.2011, Kuala Lumpur, Malaysia, ISBN: 978-1-61284-690-3, pp 182-187
83. Yatchev I., Karastoyanov. D., Optimization of Permanent Magnet Linear Actuator for Braille Screen., International Symposium IGTE 2012, September 16-18 2012, Graz, Austria (accepted)
84. T. Miteva., D. Karastoyanov., Full surface tracking by mobile robots., International Conference “Bionics and Prosthetics, Biomechanics, Mechatronics and Robotics” (ICBBM 2012), June 4-8 2012, Varna, Bulgaria, pp 74-77, ISBN 978-9934-10-299-8
85. Dimitar KARASTOYANOV, Stanislav SIMEONOV, Todor PENCHEV., BRAYLLE SCREEN

FOR VISUALLY IMPAIRED., International Conference ICMAS 2012, November 8-9 2012, Bucharest, Romania, published in JOURNAL PROCEEDINGS IN MANUFACTURING SYSTEMS, VOL. 7, ISSUE 2, 2012, ISSN 2067-9238, PP 111-114

86. Penchev T., Karastoyanov D., New Industrial Engine: Priority and Field of Application., International Conference ICMAS 2012, November 8-9 2012, Bucharest, Romania, published in JOURNAL PROCEEDINGS IN MANUFACTURING SYSTEMS, VOL. 7, ISSUE 4, 2012, ISSN 2067-9238, PP 241-244

87. T. Penchev, I. Altaparmakov, D. Karastoyanov., Experimental Study on the Possibilities to Decrease the Coefficient of Restitution after Impact., 2012 International Conference on Advanced Design and Manufacturing Engineering (IC ADME 2012), August 16-18 2012, Taiyuan, China., Published in International Journal "Applied Mechanics and Materials", vol 219-219, 2012, pp 1659-1662, ISBN-13: 978-3-03785-380-1

88. D. Karastoyanov, T. Penchev, M. Kandevea., Tribological Characteristics of Nano Structured Nickel Coatings for Renovating of Extruding Shafts., 2012 International Conference on Advanced Design and Manufacturing Engineering (IC ADME 2012), August 16-18 2012, Taiyuan, China., Published in International Journal "Applied Mechanics and Materials", vol 217-219, 2012, pp 221-225, ISBN-13: 978-3-03785-380-1

89. Karastoyanov D., I. Yatchev, K. Hinov, I. Balabozov., Polarity Electromagnet., Bulgarian Patent Application, Reg No 112130, September 30, 2015

90. Abadjiev V., Abadjieva E., Karastoyanov D., Gravity Enriching Body., Bulgarian Patent Application, Reg No 111918, February 3, 2015

91. Karastoyanov D., Stoimenov N., Lifter Bar., Bulgarian Patent Application, Reg No 112174, December 14, 2015

92. Karastoyanov D., Penchev T., Bodurov P., Sirakov P., Burning Body., Bulgarian Patent Application, Reg No 112173, December 14, 2015

93. Karastoyanov D., Penchev T., Bodurov P., Gioshev S., Nail., Bulgarian Patent Application, Reg No 112172, December 14, 2015
94. Karastoyanov D., Penchev T., Bodurov P., Sirakov P., Nail., Bulgarian Patent Application, Reg No 112171, December 14, 2015
95. Karastoyanov D., T. Penchev, P. Bodurov, P. Sirakov., Nail., Bulgarian Patent Application, Reg No 111824, September 18, 2014
96. Karastoyanov D., Method and Testing Stand for Research of surface of renovated shafts., Bulgarian Patent Application, Reg No 111361, December 5, 2012
97. P. Georgieva, S. Simeonov, V. Germanov, A. Dimitrov, D. Karastoyanov., Computer System for Navigating a Mobile Robot., International Symposium ISCI 2011, Mart 18-20, 2011, Kuala Lumpur, Malaysia (accepted)
98. T. Penchev, P. Bodurov, D. Karastoyanov., A FORGING HAMMER PROPELLED BY INDUSTRIAL ROCKET ENGINE., Int. Conference ICMaS 2010, 11-12 November, Bucharest, Romania, (accepted)
99. D. Karastoyanov, T. Penchev, G. Gavrillov., RENOVATING OF SHAFTS FOR FOLIO EXTRUSION., Int. Conference ICMaS 2010, 11-12 November, Bucharest, Romania, (accepted)
100. Zamanov V., Karastoyanov., Wireless controlled investigation mobile robot., JOHN ATANASOFF CELEBRATION DAYS, International Conference AUTOMATICS AND INFORMATICS '09, Symposium ROBOTICS, AUTOMATION AND MECHATRONICS, SOFIA, BULGARIA, 4.10-5.10. 2010, pp. II-9 - II-12

101. Altaparmakov I., Penchev T. Karastoyanov D., Modeling of hit processes with additional external force. ATANASOFF CELEBRATION DAYS, International Conference AUTOMATICS AND INFORMATICS '09, Symposium ROBOTICS, AUTOMATION AND MECHATRONICS, SOFIA, BULGARIA, 4.10-5.10. 2010, pp. II-47 - II-50
102. Karastoyanov D., Tactile matrix Brail screen., JOHN ATANASOFF CELEBRATION DAYS, International Conference AUTOMATICS AND INFORMATICS '09, Symposium ROBOTICS, AUTOMATION AND MECHATRONICS, SOFIA, BULGARIA, 4.10-5.10. 2010, pp. II-63 - II-65
103. Karastoyanov D., Penchev T., Technologies and Technological Lines for shafts renovation., JOHN ATANASOFF CELEBRATION DAYS, International Conference AUTOMATICS AND INFORMATICS '09, Symposium ROBOTICS, AUTOMATION AND MECHATRONICS, SOFIA, BULGARIA, 4.10-5.10. 2010, pp. II-75 - II-78
104. D. Karastoyanov, S. Simeonov., Assitive Hardware for Visually Impaired., 7th Intern. Conference ICBBM 2010, May 24-28, 2010, Liepaya, Latvia, pp 80-83
105. T. Penchev, D. Karastoyanov., Modelling of Grain Deformation in the Process of Cold Plastic Deformation., Problems of Engineering Cybernetics and Robotics, vol. 61, Sofia, 2009, pp 92-99
106. S. Simeonov, D. Karastoyanov., Assistive Computer Interface for Visually Impaired Persons., Problems of Engineering Cybernetics and Robotics, vol. 61, Sofia, 2009, pp 80-91
107. G. Velkovsky, D. Karastoyanov., A System for Determination of the Filtration Coefficient of Soil and Rock Structures., Problems of Engineering Cybernetics and Robotics, vol. 61, Sofia, 2009, pp 21-29
108. L. Kuzev, T. Penchev, D. Karastoyanov., New Shape Milling Bodies for Ball Mills., Problems of Engineering Cybernetics and Robotics, vol. 61, Sofia, 2009, pp 11-20

109. T. Penchev, P. Bodurov, D. Karastoyanov., Rebound Force Calculation in the Case of Hot Forging by Rocket Engine Propped Hammer., JOHN ATANASOFF CELEBRATION DAYS, International Conference AUTOMATICS AND INFORMATICS '09, Symposium ROBOTICS AND AUTOMATION, SOFIA, BULGARIA, 29.09 – 4.10. 2009, pp II – 41 – II – 44

110. T. Penchev, D. Karastoyanov., High Speed Hammer with Rocket Engine. “Combined Hit” Effect., JOHN ATANASOFF CELEBRATION DAYS, International Conference AUTOMATICS AND INFORMATICS '09, Symposium ROBOTICS AND AUTOMATION, SOFIA, BULGARIA, 29.09 – 4.10. 2009, pp II – 37 – II – 40

111. I. Altaparmakov, D. Karastoyanov., MOAST – Mobility Open Architecture Simulation and Tools., JOHN ATANASOFF CELEBRATION DAYS, International Conference AUTOMATICS AND INFORMATICS '09, Symposium ROBOTICS AND AUTOMATION, SOFIA, BULGARIA, 29.09 – 4.10. 2009, pp II – 29 – II – 32

112. D. Karastoyanov, T. Penchev., New Methods for Renovating of Shafts for Folio Extrusion., JOHN ATANASOFF CELEBRATION DAYS, International Conference AUTOMATICS AND INFORMATICS '09, Symposium ROBOTICS AND AUTOMATION, SOFIA, BULGARIA, 29.09 – 4.10. 2009, pp II – 25 – II – 28

113. D. KARASTOYANOV, T. BOYADJIEV, G. BOYADJIEV, V. GEORCHEV., Robotized Medical Center., DECOM-AAS-ETAI International IFAC Conference, Ohrid, Republic of Macedonia, September 26-29, 2009, pp 81-86

114. D. Karastoyanov , T. Boyadjiev, G. Boyadjiev, V. Georchev., HOSPITAL ROBOTIZED ORTHOPEDIC CELL, International Conference “OPTIROB 2009”, Mamaya, Romania, 28-31 may, 2009, pp. 221-228

115. D. Karastoyanov, I. Altaparmakov., System for Simulations of Mobile Robots „USARSim”., John Atanasoff Celebration Days – (International Conference Automatics and Informatics'2008) - Symposium Robotics Systems, October 1-4, 2008, Sofia, Bulgaria, pp VI-49 – VI-52

116. R.Krasteva, D. Karastoyanov, D. Batchvarov, V. Georchev, A. Boneva., Hardware Components for Microrobots Control., John Atanasoff Celebration Days – (International Conference Automatics and Informatics'2008) - Symposium Robotics Systems, October 1-4, 2008, Sofia, Bulgaria, pp VI-17 – VI-20
117. D. Karastoyanov, G. Boyadjiev, T. Boyadjiev, I. Veneva., Interactive Mechatronic System for Knee and Ankle Rehabilitation., John Atanasoff Celebration Days – (International Conference Automatics and Informatics'2008) - Symposium Robotics Systems, October 1-4, 2008, Sofia, Bulgaria, pp VI-5 – VI-8
118. V. Dobrinov, D. Karastoyanov, A. Dobrinov, SMALL OBJECTS MANIPULATION, Problems of Engineering Cybernetics and Robotics, vol. 59, Sofia, 2008, pp 82-86
119. D. Karastoyanov., SUSPICIOUS OBJECTS DETECTING AND HANDLING., 6th International Baltic-Bulgarian Conference ICBBM-2008, June 5-6 2008, Varna, Bulgaria, pp.71-73
120. T. Boiadjiev, V. Vitkov, K. Delchev, R. Kastelov, G. Boiadjiev, D. Karastoyanov., AUTOMATION OF THE DRILLING IN THE ORTHOPEDIC SURGERY., 6th International Baltic-Bulgarian Conference ICBBM-2008, June 5-6 2008, Varna, Bulgaria, pp.31-34
121. V. Ivanova, D. Karastoyanov, V. Dobrinov., Navigation Behavior of Unmanned Miniature Mobile Robots., John Atanasoff Celebration Days – (International Conference Automatics and Informatics'2007), October 3-6, 2007, Sofia, Bulgaria, pp VI-49 – VI-52
122. Dobrinov V., Karastoyanov D, Dobrinov A., Structural stand for knitting needle actuators examination., Problems of Engineering Cybernetics and Robotics, vol. 57, Sofia, 2006, pp 39-43
123. Karastoyanov D., A Mechatronic System for Research of a New Knitting Method., Problems of Engineering Cybernetics and Robotics, vol. 56, Sofia, 2006, pp 41-45

124. Dobrinov, V. Dobrinov, D. Karastoyanov*, I. Beniozev., Novel Type Gripper With Linear Electromagnetic Actuator., International Conference "Bionics and Prosthetics, Biomechanics, Mechatronics and Robotics" (ICBBM 2006), June 5-6 2006, Varna, Bulgaria, pp 66-69
125. Dobrinov, V. Dobrinov, D. Karastoyanov, T. Boyadjiev, V. Ivanova., Steerable-Tip Mechatronic Arthroscope Device With Novel Type Actuators., International Conference "Bionics and Prosthetics, Biomechanics, Mechatronics and Robotics" (ICBBM 2006), June 5-6 2006, Varna, Bulgaria, pp 62-65
126. Z. Zaharieva.,R. Zahariev., D. Karastoyanov., Architecture, functions and wireless mobile terminal in database management system for tracking and management of tools., National Conference "Robotics and Mechatronics'2004", October 6-8 2004, Dryanovo, Bulgaria, pp. 4.1-4.4
127. Zahariev R., Karastoyanov D., A Navigation System and Task Planning in a Mobile Robot for Inspection., Problems of Engineering Cybernetics and Robotics., vol. 54, Sofia, 2004, pp 22-29
128. R. Zahariev, D. Karastoyanov, N. Valchkova., Extending the functionality of the Manufacturing and Test Folder in Database Management System for Tracking and Management of Tools., International Conference "Bionics and Prosthetics, Biomechanics, Mechatronics and Robotics" (ICBBM 2004), June 14-15 2004, Varna, Bulgaria, pp 96-98
129. Dobrinov, D. Karastoyanov, V. Dobrinov., Linear Actuators For The New Generation Knitting Machines., National Conference "Robotics and Mechatronics'2003", October 8-10 2003, Dryanovo, Bulgaria, pp. 3.38 -3.44
130. V. Dobrinov, D. Karastoyanov, V. Ivanova., History Of Knitting., National Conference "Robotics and Mechatronics'2003", October 8-10 2003, Dryanovo, Bulgaria, pp. 3.1 – 3. 9
131. V. Dobrinov, V. Ivanova, D. Karastoyanov., Smart Sensors For Microrobots., National Conference "Robotics and Mechatronics'2003", October 8-10 2003, Dryanovo, Bulgaria, pp. 1.1

– 1.7

132. R. Zahariev, N. Valshkova, D. Karastoyanov., Decision making process in mobile robot for inspection., 7th International Conference PRACTRO 2003, 10-14 June 2003, Varna, Bulgaria, pp 253-261

133. Karastoyanov D., R. Zahariev, E. Petrov., Inspection mobile robot for tight spaces., International Conference on Bionics, Biomechanics and Mechatronics (ICBBM 2002), June 3-5, 2002, Varna, Bulgaria, pp 71-73

134. Petrov E., R. Zahariev, D. Karastoyanov., Technical Means for Low Cost Automation., International Conference on Bionics, Biomechanics and Mechatronics (ICBBM 2002), June 3-5, 2002, Varna, Bulgaria, pp 69-70

135. Dobrinov At., D. Karastoyanov, V. Dobrinov., Resent Research into Knitting Process and New Proposed Way of Knitting, National Conference “Robotics and Mechatronics‘2002”, October 9-11 2002, Dryanovo, Bulgaria, pp. 3.21-3.28

136. Dobrinov At., D. Karastoyanov, V. Dobrinov., Contemporary Technology of Loop-Formation, National Conference “Robotics and Mechatronics‘2002”, October 9-11 2002, Dryanovo, Bulgaria, pp. 3.16-3.20

137. Dobrinov V. S., Dimov H. K., Karastoyanov D. N., New generation knitting machine with individually controlled needles., National Conference “Robotics and Mechatronics‘2001”, October 10-12 2001, Dryanovo, Bulgaria, pp. 4.53-4.58

138. Penev V. G., Georgiev G. L., Karastoyanov D. N., Learning System for Fuzzy Controlled Autonomous Guided Vehicle., Complex Control Systems, No 10, Sofia, 1996, p. 59-64

139. Penev V. G., Koprinkova P. D., Karastoyanov D. N., Comparison Between Fuzzy and

Neuro Controller for Autonomous Guided Vehicle., Complex Control Systems, No 10, Sofia, 1996, p. 20-27

140. Andreeva P. G., Karastoyanov D. N., Parallel Processing in Distributed Information System., International Symposium on Intelligent Robotic Systems ISIRS 95, November 22-24 1995, Bangalore, India, p. 137-142

141. Karastoyanov D. N. and o., Microprocessor control of warehouse trans manipulators., IEEE International Workshop on Intelligent Motion Control, August 20-22, 1990, Istanbul, Turkey, p. 907-910

142. Georgiev G. L., Karastoyanov D. N., Stoenchev S. S., Software methods to define data types in multilevel information and control systems., 7th International Conference SEAR 93, October 1-3, 1993, Varna St Konstantin, Bulgaria, p. 51-54

143. Karastoyanov D. N., Haratchereva G. J., Control of a quadruped walking robot., 6th IFAC Symposium INCOM 89, September 26-29 1989, Madrid, Spain, p. 623-626

144. Karastoyanov D. N., Stoenchev S. S., An information management system for a city power substation., 6th IFAC Symposium INCOM 89, September 26-29 1989, Madrid, Spain, p. 59-63

145. Karastoyanov D. N., State of the art and results in the development of adaptive robots in Bulgaria., 5th IFAC/IFIP/IMACS/IFORS Symposium ROBOTICS AND FMS, April 22-25 1986, Suzdal, USSR, p. 286-289

146. Lakov D. V., Karastoyanov D. N., Nachev G. N., Adaptivity in arc welding robot control., International Symposium on Robot Control SYROCO, November 6-8 1985, Barcelona, Spain, p. 71-73

147. Karastoyanov D. N., Lakov D. V., Nachev G. N., A flexible GMA welder control.,

International Symposium on Robot Control SYROCO, November 6-8 1985, Barcelona, Spain, p. 61-64

148. Karastoyanov D. N., Nachev G. N., Adaptive control of industrial robots for arc welding., IFAC – 9th WORLD CONGRESS, Juli 2-6 1984, Budapest, Hungary, v. 6, p. 50-55

149. Karastoyanov D. N. und a., Flexible Industrierobotersteuerung zur automatisierung von Schweissprozessen., Messen, Steuern, Regeln (MSR), v. 27, H. 2, Berlin, 1984, s. 75-77

150. Karastoyanov D. N., Nachev G. N., Petkov B. I., Erweiterung einer Industrierobotersteuerung mit Moeglichkeiten zur adaptiven Schweissnahtverfolgung., Messen, Steuern, Regeln (MSR), v. 27, H. 2, Berlin, 1984, s. 74-75

151. Manahilov B. E., Avramova M. K., Karastoyanov D. N., A processor-program for a float-point arithmetic procedures realizing in microprocessor system., Second IASTED International Symposium ROBOTICS AND AUTOMATION, June 22-24 1983, Lugano, Switzerland, p. 81-84

152. Avramova M. K., Manahilov B. E., Karastoyanov D. N., Automated development of program modules in robot control operating system., Second IASTED International Symposium ROBOTICS AND AUTOMATION, June 22-24 1983, Lugano, Switzerland, p. 60-63

153. D. N., Nachev G. N., Manahilov B. E., An adaptive seam-tracking subsystem for arc-welding robots., Second IASTED International Symposium ROBOTICS AND AUTOMATION, June 22-24 1983, Lugano, Switzerland, p. 68-71

154. Karastoyanov D. N. und a., Microprozesssoftware fuer eine Industrieroboter steuerung., Messen, Steuerung, Regeln (MSR), v. 24, H. 5, Berlin, 1981, s. 269-270

155. Niagolova L. M., Karastoyanov D. N., Program implementation of an adaptive control loop

in a robotic welding cell., International Symposium ROBCON IV, October 20-23 1987, Sofia, Bulgaria, p .146-