

List of publications

1. Zieliński C.: *Anatomy of Robots: Construction*. (in Polish), Elektronizacja, no. 11, 1983. pg. 16–18.
2. Zieliński C.: *Anatomy of Robots: Control Systems*. (in Polish), Elektronizacja, no. 12, 1983. pg. 13–15.
3. Zieliński C.: *Robots: Their Construction and Possibilities of Applications*. (in Polish), Informatyka, no. 5, 1984. pg. 5–7.
4. Zieliński C.: *Robots: Low-Level Programming Languages*. (in Polish), Informatyka, no. 8, 1984. pg. 6–8.
5. Zieliński C.: *Robots: High-Level Programming Languages*. (in Polish), Informatyka, no. 9, 1984. pg. 8–11.
6. Zieliński C.: *Hierarchy of Robot Programing Languages and the Semantics of Some of their Instructions*. (in Polish), Archiwum Automatyki i Telemekhaniki, Vol.3–4, 1985. pg. 387–405.
7. Zieliński C., Śluzek A.: *Kinematical Aspects of Control of 5-d.o.f. robots*. 1st National Conference on Robotics, (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1985. Vol.2, pg. 121–129.
8. Kruszyński H., Śluzek A., Zieliński C.: *Comparative Analysis of Parameters of Selected Industrial Robots*. 1st National Conference on Robotics, (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1985. Vol.2, pg. 51–64.
9. Zieliński C.: *Semantics of the low level robot language instructions*. Proceedings of the 15th International Symposium on Industrial Robots, Tokyo 1985. pg. 985–993.
10. Śluzek A., Zieliński C.: *New data types for 4/5 degree of freedom robot manipulators*. Proceedings of the 15th International Symposium on Industrial Robots, Tokyo 1985. pg. 1067–1073.
11. Zielińska T., Zieliński C.: *Modern Techniques of Designing and Manufacturing*. (in Polish), Elektronizacja no. 10, 1986. pg. 8–11.
12. Zieliński C.: *Robot Programming Languages*. In: *Robotics*. Published within the series: *Fundamental Problems of Modern Technology*, published by: Polish Academy of Sciences (in Polish), Ed. A. Morecki, PWN 1987. pg. 129–139.
13. Zieliński C.: *TORBOL: An Object-Level Robot Programming Language*. 10th National Conference on Control, (in Polish), Wydawnictwo Politechniki Lubelskiej, Lublin 1988. Vol.3, pg. 61–62.
14. Zieliński C.: *Programming Environment of an Object-Level Robot Programming Language*. 2nd National Conference on Robotics, (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1988. Vol.3, pg. 249–255.
15. Zieliński C.: *Classification and Methods of Defining Robot Programming Languages: Application to the Formulation of an Object-Level Language*. Ph.D. thesis, Faculty of Electronics, Warsaw University of Technology, Warsaw, Poland, 1988. (in Polish).
16. Zieliński C.: *Overview of the Features of Existing Robot Programming Languages*. (in Polish), Archiwum Automatyki i Telemekhaniki. Vol.3, 1989. pg. 339–365.
17. Zieliński C.: *TORBOL: A Programming Language for Robots Executing Transport and Assembly Tasks*. (in Polish), Archiwum Automatyki i Telemekhaniki, Vol.3, 1989. pg. 367–379.

18. Zieliński C.: *Description of Robot Programming Language Instruction Semantics*. (in Polish), *Archiwum Automatyki i Telemekhaniki*, Vol.1–2, 1990. pg. 15–45.
19. Zielińska T., Zieliński C.: *Levels of walking machine programming languages*. Proceedings of the International Conference on Industrial Robots ROBCON'5, Vol.2/3, 9–11 October 1989, Varna, Bulgaria.
20. Zieliński C.: *Incorporation of Sensors in Object–Level Robot Programming Language*. Proceedings of the 8th CISM IFToMM Symposium on Theory and Practice of Robots and Manipulators Ro.Man.Sy'90, 2–6 July 1990, Kraków, Poland. Ed. Morecki A., Bianchi G., Jaworek K. Warsaw University of Technology Publications. pg. 418–425.
21. Zieliński C.: *Petri Net Description of Functioning of a Robot Equipped with Sensors*. 3rd National Conference on Robotics, (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1990. Vol.1, pg. 330–335.
22. Wrzoskiewicz A., Zieliński C.: *Automatic Creation of Symbolic Kinematical Models of Robot Manipulators*. 3rd National Conference on Robotics, (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1990, Vol.1, pg. 306–311.
23. Zieliński C., Śluzek A.: *Kinematical Aspects of Controlling Robots with Axially-Symmetric Tools*. 3rd National Conference on Robotics, (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1990, Vol.1, pg. 342–347.
24. Zieliński C., Grodecki A., Kręglewska U., Śluzek A., Zielińska T.: *Concept of a Robot Controller for Investigative Purposes*. 3rd National Conference on Robotics, (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1990, Vol.1, pg. 336–341.
25. Zieliński C.: *TORBOL: An Object Level Robot Programming Language*. *Mechatronics*, Vol.1, no. 4, Pergamon Press, 1991. pg. 469–485.
26. Zieliński C.: *Description of Semantics of Robot Programming Languages*. *Mechatronics*, Vol.2, no. 2, Pergamon Press, 1992. pg. 171–198.
27. Zieliński C.: *Flexible Controller for Robots Equipped with Sensors*. Proceedings of the 9th CISM–IFToMM Symposium on Theory and Practice of Robots and Manipulators, Ro.Man.Sy'92, 1–4 September 1992, Udine, Italy. Ed. Morecki A., Bianchi G., Jaworek K., *Lecture Notes in Control and Information Sciences* 187, Springer–Verlag, 1993. pg. 205–214.
28. Trabasso L. G., Zieliński C.: *Semi–automatic calibration procedure for the vision–robot interface applied to scale model decoration*. *Robotica* Vol.10, 1992. pg. 303–308.
29. Zieliński C.: *Object Level Robot Programming Languages*. In: *Robotics Research and Applications*. Ed. A. Morecki, W. Muszyński and K. Tchoń, WNT Warszawa 1992. pg. 221–235.
30. Zieliński C.: *Sensor Instructions in Object Level Robot Programming Languages*. *Archiwum Budowy Maszyn*, Vol. 39, Vol.1–2, 1992. pg. 43–54.
31. Zieliński C.: *Controller Structure for Robots with Sensors*. *Mechatronics*, Vol.3, no. 5, Pergamon Press, 1993. pg. 671–686.
32. Zieliński C.: *Robot Object–Oriented Pascal Library: ROOPL*. *Journal of Theoretical and Applied Mechanics*, Vol.31, no. 3, 1993. pg. 525–535.
33. Zielińska T., Zieliński C.: *Utilization of Neural Networks in Robot Control Systems*. 4th National Conference on Robotics, 22–24 September 1993, (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1993. Vol.2, pg. 225–231.
34. Zieliński C.: *Research Oriented Robot Controller*. 4th National Conference on Robotics, 22–24 September 1993, (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1993. Vol.1, pg. 73–80.

35. Zieliński C.: *Sensory Robot Motions*. Archives of Control Sciences, Vol.3 (XXXVIII), no. 1–2, 1994, pg. 5–20.
36. Zieliński C., Zielińska T.: *Sensor-Based Reactive Robot Control*. Proceedings of the 10th CISM–IFTToMM Symposium on Theory and Practice of Robots and Manipulators, Ro.Man.Sy'94, 12–15 September 1994, Gdańsk, Poland. CISM Courses and Lectures, no. 361. Ed. Morecki A., Bianchi G., Jaworek K., Springer–Verlag. pg. 315–322.
37. Zieliński C., Zielińska T.: *Software for Mechatronic Devices*. In: *Mechatronics: the basis for new Industrial Development*. Editors: M. Acar, J. Makra, E. Penney, Computational Mechanics Publications. Southampton, Boston, 1994 Proceedings of the Joint Hungarian–British Mechatronics Conference, 21–23 September 1994, Budapest, Hungary. pg. 755–760.
38. Zieliński C.: *Controller for Robots Equipped with Sensors*. PIAP Bulletin, A collection of papers pertaining to robotics grants funded by the Polish Committee of Scientific Research, 7–8 December 1993, PIAP, Warsaw. (in Polish), pg. 31–40.
39. Zieliński C.: *Reaction Based Robot Control*. Mechatronics, Vol.4, no. 8, 1994. pg. 843–860
40. Zieliński C.: *Distributed Software for Mechatronic Systems*. International Journal of Intelligent Mechatronics: Design and Production, Vol.1, no. 1, 1994. pg. 11–24.
41. Zieliński C.: *Conference Report: Mixed Bag at Mechatronics Conference*. Assembly Automation, Vol.15 no. 1, 1995. pg. 31–33.
42. Zieliński C.: *Sensorimotor robot control*. 7th IFAC/IFORS/IMACS Symposium on Large Scale Systems: Theory and Applications, 10–13 July 1995, London, United Kingdom. Vol.2, pg. 797–802.
43. Zieliński C.: *Control of a Multi-Robot System*. 2nd International Symposium on Methods and Models in Automation and Robotics MMAR'95, 30th August – 2nd September 1995, Międzyzdroje, Poland. Vol.2, pg. 603–608.
44. Zieliński C.: *Robot Programming Methods*. D.Sc. (habilitation) Thesis, Faculty of Electronics and Information Technology, Warsaw University of Technology, Oficyna Wydawnicza Politechniki Warszawskiej, 1995.
45. Zieliński C., Szykiewicz W.: *Control of Two 5 d.o.f. Robots Manipulating a Rigid Object*. IEEE International Symposium on Industrial Electronics ISIE'96, 17–20 June 1996, Warsaw, Poland. Vol.2, pg. 979–984.
46. Zieliński C.: *Utilisation of Reactive Robot Control in Acquiring Moving Objects*. 5th National Conference on Robotics, Świeradów Zdrój, Poland. (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1996, pg. 234–242.
47. Szykiewicz W., Zieliński C.: *A Controller for Two Cooperating Robots Having Five Degrees of Freedom Each*. 5th National Conference on Robotics, Świeradów Zdrój, Poland. (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1996, pg. 140–147.
48. Szykiewicz W., Zieliński C., Kierzenkowski K., Zielińska T., Grodecki A.: *Distributed Multi-Robot Controller MRROC*. 5th National Conference on Robotics, Świeradów Zdrój, Poland. (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1996, pg. 287–295.
49. Zieliński C.: *Reactive Robot Control Applied to Acquiring Moving Objects*. Proceedings of the 3rd International Symposium on Methods and Models in Automation and Robotics MMAR'96, 10–13 September 1996, Międzyzdroje, Poland. Vol.3, pg. 893–898.
50. Zieliński C.: *Object-Oriented Approach to Programming Multi-Robot Systems*. Proceedings of the 11th CISM IFTToMM Symposium on Theory and Practice of Robots and Manipulators Ro.Man.Sy'96, 1–4 July 1996, Udine, Italy. Ed.: Morecki A., Bianchi G., Rzymkowski C., Springer Verlag, Wien, New York, 1997. pg. 373–380.

51. Zieliński C.: *Object-Oriented Robot Programming*. Robotica, Vol.15, 1997. pg. 41–48.
52. Szynekiewicz W., Zieliński C., Kierzenkowski K., Zielińska T., Grodecki A., Gosiewski A.: *Programming Environment for Creating Multi-Robot Controllers for Complex Applications*. Automation'97, 5–7 march 1997, Warsaw, Poland. Vol.1, pg. 127–134.
53. Zieliński C.: *Object-Oriented Programming of Multi-Robot Systems Utilising Sensory Information*. 3rd ECPD International Conference on Advanced Robotics, Intelligent Automation and Active Systems, 15–17 September 1997, Bremen, Germany, pg. 176–181.
54. Zieliński C.: *Object-Oriented Programming of Multi-Robot Systems*. Proceedings of the 4th International Symposium on Methods and Models in Automation and Robotics MMAR'97, 26–29 August 1997, Międzyzdroje, Poland, pg. 1121–1126.
55. Tchoń K., Muszyński R., Zieliński C.: *Kinematic Singularities of the IRp-6 manipulator mounted on a track*. Proceedings of the 4th International Symposium on Methods and Models in Automation and Robotics MMAR'97, 26–29 August 1997, Międzyzdroje, Poland, pg. 913–920.
56. Zieliński C., Szynekiewicz W.: *MRROC and MRROC++ Systems; Part I: Structure*. In: *Construction, Control and Programming of Complex Robotic Systems*. (in Polish), Ed.: Zieliński C., Zielińska T., Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 1997, pg. 25–40.
57. Zieliński C., Szynekiewicz W.: *MRROC and MRROC++ Systems; Part II: Implementation*. In: *Construction, Control and Programming of Complex Robotic Systems*. (in Polish), Ed.: Zieliński C., Zielińska T., Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 1997, pg. 41–54.
58. Zieliński C., Rydzewski A., Szynekiewicz W., Woźniak A.: *Controller of the Serial-parallel Structure Robot*. In: *Construction, Control and Programming of Complex Robotic Systems*. (in Polish), Ed.: Zieliński C., Zielińska T., Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 1997, pg. 55–76.
59. Zieliński C., Rydzewski A., Szynekiewicz W.: *Multi-Robot System Controllers*. Proceedings of the 5th International Symposium on Methods and Models in Automation and Robotics MMAR'98, 25–29 August 1998, Międzyzdroje, Poland, Vol.3, pg. 795–800.
60. Zieliński C.: *Structure and Programming of Multi-Robot System Controllers*. 6th National Conference on Robotics, Świeradów Zdrój, Poland. (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 1998, pg. 225–232.
61. Zieliński C., Szynekiewicz W., Rydzewski A.: *A Method of Designing Multi-Robot Controllers*. *Pomiary – Automatyka – Robotyka PAR*, no. 12 (22), December 1998. pg. 8–14.
62. Zieliński C.: *The MRROC++ System*. First Workshop on Robot Motion and Control, RoMoCo'99, 28–29 June, 1999, Kiekrz, Poland. pg. 147–152.
63. Zieliński C., Szynekiewicz W.: *Controller of the POLYCRANK Robot*. (in Polish), *Pomiary – Automatyka – Kontrola PAK*, no. 8, August 1999. pg. 10-16
64. Mianowski K., Nazarczuk K., Wojtyra M., Szynekiewicz W., Zieliński C., Woźniak A.: *Application of the RNT Robot to Milling and Polishing*. Proceedings of the 13th CISM IFToMM Symposium on Theory and Practice of Robots and Manipulators Ro.Man.Sy'2000, 3–6 July 2000, Zakopane, Poland. pg. 421–429.
65. Zieliński C., Seet G.: *Industry Standard Networks as a Prototyping Tool Validating Mechatronics Systems*. Robotics Research Centre (RRC) Journal, NTU Singapore, January 2000. pg. 39–42.
66. Zieliński C., Seet G.: *Prototyping Tool for Validating Complex Robot Systems*. 6th

- International Conference on Control, Automation, Robotics and Vision, ICARCV'2000, 5–8 December 2000, Singapore. (on CD-ROM)
67. Zieliński C.: *Programming and Control of Multi-Robot Systems*. 6th International Conference on Control, Automation, Robotics and Vision, ICARCV'2000, 5–8 December 2000, Singapore. (on CD-ROM)
 68. Zieliński C.: *Implementation of Control Systems for Autonomous Robots*. 6th International Conference on Control, Automation, Robotics and Vision, ICARCV'2000, 5–8 December 2000, Singapore. (on CD-ROM)
 69. Zieliński C.: Items: *Automaton*, *Digital Automaton*, *Microprogrammed Automaton*, *Cellular Automaton* (Vol.1, pg. 529–531), *Logical Element* (Vol.3, pg. 784), *Logic System* (Vol.3, pg. 785), for the New Encyclopedia of the Scientific Publishing House PWN. 2001/2002 (in Polish).
 70. Zieliński C.: *By How Much Should a General Purpose Programming Language be Extended to Become a Multi-Robot System Programming Language?*. The International Journal of the Robotics Society of Japan: Advanced Robotics, Vol.15 no. 1, 2001. pg. 71–95.
 71. Zieliński C., Szykiewicz W., Mianowski K., Nazarczuk K.: *Mechatronic Design of Open-Structure Multi-Robot Controllers*. Mechatronics, Vol.11 no. 8, Pergamon Press, November 2001. pg. 987–1000.
 72. Zieliński C.: *Implementation of various multi-robot system programming methods*. 7th National Conference on Robotics, Łądek Zdrój, Poland. (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 2001, pg. 311–319.
 73. Antczak K., Zieliński C.: *Utilisation of B-splines in trajectory generation of a milling robot*. 7th National Conference on Robotics, Łądek Zdrój, Poland. (in Polish), Wydawnictwo Politechniki Wrocławskiej, Wrocław 2001, pg. 251–258.
 74. Zieliński C.: *A Quasi-Formal Approach to Structuring Multi-Robot System Controllers*. Second International Workshop on Robot Motion and Control, RoMoCo'01, 18–20 October, 2001, Bukowy Dworek, Poland. pg. 121–128.
 75. Zieliński C.: *A Tool for Quick Verification of Mechatronic Device Control System Concepts*. (in Polish), *Pomiary – Automatyka – Kontrola PAK*. no. 1, January 2002. pg. 22–24.
 76. Zieliński C., Seet G.: *Integrating Sensors with Robots*. Robotics Research Centre (RRC) Journal, NTU Singapore, February 2002. pg. 15–18.
 77. Zieliński C.: *Motion generators in MRROC++ based robot controller*. 14th CISM–IFTToMM Symposium on Robotics, Ro.Man.Sy'02, 1–4 July 2002, Udine, Italy. CISM Courses and Lectures no. 438, Eds.: G. Bianchi, J-P. Guinot and C. Rzymkowski, Springer, Wien, New York, 2002, ISBN 3-211-83691-8. pg. 299–306.
 78. Zieliński C.: *Reaction to Errors in Robot Systems*. Third International Workshop on Robot Motion and Control, RoMoCo'02, 9–11 November, 2002, Bukowy Dworek, Poland. pg. 201–208.
 79. Zieliński C., Mianowski K., Nazarczuk K., Szykiewicz W.: *A Prototype Robot for Polishing and Milling Large Objects*. Industrial Robot. January 2003. Vol.30, no. 1, pg. 67–76.
 80. Zieliński C.: *Fundamentals of Digital Circuit Design*. (in Polish). Warsaw, Wydawnictwo Naukowe PWN, 2003. (450 pages) (extra print 2012, 2013)
 81. Woźniak A., Szykiewicz W., Zieliński C.: *Robot Controller with a Self-Measurement Capability Enabling the Identification of Friction*. Archives of Control Sciences. Vol.13 (XLIX), no. 4., October–December 2003. pg. 391–414.

82. Zieliński C.: *A Unified Formal Description of Behavioural and Deliberative Robotic Multi-Agent Systems*. In: *Robot Control a proceedings volume from the 7th IFAC International Symposium on Robot Control SYROCO 2003*, 1–3 September 2003, Wrocław, Poland. Elsevier IFAC Publications, Vol.2, Eds: I. Duleba, J. Z. Sasiadek, 2004, pg. 405–412 (preprint: 2003, pg. 479–486).
83. Zielińska T., Zieliński C.: *Design of machines: historical facts related to the development of walking machines*. Proceedings of the 11th World Congress in Mechanism and Machine Science, Tianjin, China, 1–4 April 2004. Ed.: Tian Huang. China Machine Press, Vol.2, pg. 924–928
84. Zieliński C.: *Specification of behavioural embodied agents*. Proceedings of the 4th International Workshop on Robot Motion and Control, RoMoCo'04, 17–20 June 2004, Puszczkowo, Poland. Ed.: K. Kozłowski, pg. 79–84.
85. Zieliński C.: *Formalization of programming frameworks for multi-robot systems*, in *Advances in Robotics: Industrial and Medical Robotic Systems*, K. Tchoń (Ed.), (8-th National Conference on Robotics, Polanica Zdrój, 23–25 June 2004), Wydawnictwa Komunikacji i Łączności, Warsaw, 2005. (in Polish) Vol.2, pg. 53–66
86. Winiarski T., Zieliński C.: *Test-bed for the investigation of position–force robot control algorithms*, in *Advances in Robotics: Robot Control with Perception of the Environment*, K. Tchoń (Ed.), (8-th National Conference on Robotics, Polanica Zdrój, 23–25 June 2004), (in Polish) Wydawnictwa Komunikacji i Łączności, Warsaw, 2005. (in Polish) Vol.1, pg. 85–94
87. Czajewski W., Staniak M., Zieliński C.: *Certain aspects of utilizing vision information in service robots*, in *Advances in Robotics: Robot Control with Perception of the Environment*, K. Tchoń (Ed.), (8-th National Conference on Robotics, Polanica Zdrój, 23–25 June 2004), (in Polish) Wydawnictwa Komunikacji i Łączności, Warsaw, 2005. (in Polish) Vol.1, pg. 53–64
88. Zieliński C.: *Formal approach to the design of robot programming frameworks: the behavioural control case*. Bulletin of the Polish Academy of Sciences – Technical Sciences. Vol.53, No.1, 2005. pg. 57–67
89. Zieliński C., Szykiewicz W., Winiarski T.: *Applications of MRROC++ Robot Programming Framework*. Proceedings of the 5th International Workshop on Robot Motion and Control, RoMoCo'05, 23–25 June 2005, Dymaczewo, Poland. pg. 251–257
90. Winiarski T., Zieliński C.: *Implementation of Position–Force Control in MRROC++*. Proceedings of the 5th International Workshop on Robot Motion and Control, RoMoCo'05, 23–25 June 2005, Dymaczewo, Poland. pg. 259–264
91. Zieliński C.: *Systematic Approach to the Design of Robot Programming Frameworks*. Proceedings of the 11th IEEE International Conference on Methods and Models in Automation and Robotics, 29 August – 1 September 2005, Międzyzdroje, Poland. (on CD), Technical University of Szczecin, ISBN-83-60140-85-5, pg. 639–646
92. Zieliński C.: *Transition-Function Based Approach to Structuring Robot Control Software*. In: *Robot Motion and Control: Recent Developments*. Ed. K. Kozłowski, Lecture Notes in Control and Information Sciences, Vol.335, Springer Verlag. 2006. pg 265–286
93. Staniak M., Zieliński C.: *Visual Servos – Part 1*. (in Polish), *Pomiary – Automatyka – Kontrola PAK*, no. 5, May 2006. pg. 9–12.
94. Staniak M., Zieliński C.: *Visual Servos – Part 2*. (in Polish), *Pomiary – Automatyka – Kontrola PAK*, no. 11, November 2006. pg. 30–34
95. Szykiewicz W., Zieliński C., Czajewski W., Winiarski T.: *Control Architecture for Sensor-Based Two-Handed Manipulation*. 16th CISM–IFTOMM Symposium on Robot

- Design, Dynamics and Control, RoManSy'06, June 20-24, 2006, Warsaw, Poland. Ed.: T. Zielińska, C. Zieliński. CISM Courses and Lectures No.487, Springer, Wien, New York. pg. 237–244.
96. Koh N.W., Zieliński C., Ang M.H., Lim S.Y.: *Matrix-based Supervisory Controller of Transition-Function Specified Robot Controllers*. 16th CISM–IFTOMM Symposium on Robot Design, Dynamics and Control, RoManSy'06, June 20-24, 2006, Warsaw, Poland. Ed.: T. Zielińska, C. Zieliński. CISM Courses and Lectures No.487, Springer, Wien, New York. pg. 229–236.
 97. Zieliński C., Szykiewicz W., Winiarski T., Staniak M.: *Rubik's Cube Puzzle as a Benchmark for Service Robots*. 12th IEEE International Conference on Methods and Models in Automation and Robotics, MMAR'2006, Międzyzdroje, Poland, August 28–31, 2006. pg. 579–584.
 98. Zieliński C., Lange J., Zielińska T., Mianowski K.: *Design and Simulation of Motion of a Vehicle Propelled by Six Halfwheels*, in *Advances in Robotics: Control, Perception and Communication*. Ed. K. Tchoń, 9-th National Conference on Robotics, Piechowice, 13–16 September 2006. Wydawnictwa Komunikacji i Łączności, Warsaw, 2006. (in Polish) Vol.1, pg. 255–264.
 99. Winiarski T., Zieliński C.: *Force Control in Dual Arm Systems*, in *Advances in Robotics: Robot Systems and Cooperation*. Ed. K. Tchoń, 9-th National Conference on Robotics, Piechowice, 13–16 September 2006. Wydawnictwa Komunikacji i Łączności, Warsaw, 2006. (in Polish) Vol.2, pg. 267–276
 100. Pawluk M., Zieliński C.: *Unfalsified Adaptive Control of a Robot Arm*, in *Advances in Robotics: Control, Perception and Communication*. Ed. K. Tchoń, 9-th National Conference on Robotics, Piechowice, 13–16 September 2006, Wydawnictwa Komunikacji i Łączności, Warsaw, 2006. (in Polish) Vol.1, pg. 131–140.
 101. Kornuta T., Wojtyra M., Mianowski K., Zieliński C.: *Calibration of a Multi-Robot System*, in *Advances in Robotics: Robot Systems and Cooperation*. Ed. K. Tchoń, 9-th National Conference on Robotics, Piechowice, 13–16 September 2006, Wydawnictwa Komunikacji i Łączności, Warsaw, 2006. (in Polish) Vol.2, pg. 97–106.
 102. Kasprzak W., Zieliński C., Janicki A., Staniak M.: *Application of MRROC++ Framework to Robot Control with Verbal Human-Robot Communication*, in *Advances in Robotics: Control, Perception and Communication*. Ed. K. Tchoń, 9-th National Conference on Robotics, Piechowice, 13–16 September 2006, Wydawnictwa Komunikacji i Łączności, Warsaw, 2006. (in Polish) Vol.1, pg. 297–306.
 103. Zieliński C., Szykiewicz W., Mianowski K., Rydzewski A., Winiarski T.: *Effectors of a Service Robot Capable of Dexterous Two-Handed Manipulation*, in *Advances in Robotics: Robot Systems and Cooperation*. Ed. K. Tchoń, 9-th National Conference on Robotics, Piechowice, 13–16 September 2006, Wydawnictwa Komunikacji i Łączności, Warsaw, 2006. (in Polish) Vol.2, pg. 257–266.
 104. Zieliński C., Szykiewicz W., Winiarski T., Czajewski W., Staniak M.: *Rubik's Cube Puzzle as a Benchmark Task for Service Robots*, in *Advances in Robotics: Robot Systems and Cooperation*. Ed. K. Tchoń, 9-th National Conference on Robotics, Piechowice, 13–16 September 2006 Wydawnictwa Komunikacji i Łączności, Warsaw, 2006. (in Polish) Vol.2, pg. 237–246.
 105. Zieliński C., Szykiewicz W., Trojanek P., Majchrowski M.: *Control of a Team of Heterogeneous Robots: Example of Cooperative Box Pushing*, in *Advances in Robotics: Robot Systems and Cooperation*. Ed. K. Tchoń, 9-th National Conference on Robotics,

- Piechowice, 13–16 September 2006 Wydawnictwa Komunikacji i Łączności, Warsaw, 2006. (in Polish) Vol.2, pg. 299–308.
106. Zieliński C., Malinowski K., Tatjewski P., Ogryczak W., Pacut A., Toczyłowski E., Sacha K., Kasprzak W.: *Research at the Institute of Control and Computation Engineering*, Telecommunication Review + Telecommunication News, Wydawnictwo SIGMA NOT, Warsaw, 10'2006. (in Polish), pg. 289–292.
107. Koh N.W., Zieliński C., Ang M.H., Lim S.Y.: *Job-agents: How to coordinate them?*. Proceedings of the IEEE International Conference on Robotics and Automation, ICRA'07, 10–14 April 2007, Rome, Italy. ISBN: 1-4244-0602-1. pg. 4436–4441.
108. Zieliński C., Szykiewicz W., Winiarski T., Staniak M., Czajewski W., Kornuta T.: *Rubik's Cube as a benchmark validating MRROC++ as an Implementation Tool for Service Robot Control Systems*. Industrial Robot. September 2007. Vol.34, no. 5, pg. 368–375.
109. Zieliński C., Winiarski T., Mianowski K., Rydzewski A., Szykiewicz W.: *End-Effector Sensors' Role in Service Robots*. 6th International Workshop on Robot Motion and Control, RoMoCo'07, June 11–13, 2007, Bukowy Dworek, Poland. Published in: *Robot Motion and Control 2007*, Ed.: Krzysztof Kozłowski, (LNCIS) Lecture Notes in Control and Information Sciences, no 360, Springer Verlag London Limited, ISBN: 978-1-84628-973-6, pg. 401–413.
110. Trojanek P., Zieliński C., Szykiewicz W.: *Definition and Composition of Individual Robot Behaviours in Cooperative Box Pushing*. 13th IEEE IFAC International Conference on Methods and Models in Automation and Robotics MMAR 2007, 27–30 August 2007, Szczecin, Poland. ISBN: 978-83-751803-3-6 (CD). pg. 1137–1141.
111. Zieliński C.: *The Future of Exploitation of Robots*. Przyszłość: Świat-Europa-Polska. Bulletin of the Forecast Committee "Poland 2000 Plus" of the Polish Academy of Sciences. (in Polish) no.2, vol.16, 2007. pg.67–80.
112. Winiarski T., Staniak M., Zieliński C.: *Parallel Visual-Force Control of Robots*. In: *Control and Automatization: Current Problems and Their Solutions*. Ed.: K. Malinowski, L. Rutkowski. (16th National Conference on Control, 11–15 May 2008, Szczyrk, Poland), (in Polish), Akademicka Oficyna Wydawnicza EXIT. pg. 593–602.
113. Zieliński C.: *Robots at Older People Services*. In: *Poland Facing the Aging Process of the Population*. Polish Academy of Sciences, Forecast Committee "Poland 2000 Plus", Warsaw, 2008. (in Polish) pg. 154–169.
114. Winiarski T., Zieliński C.: *Fundamentals of Robot Force Control*. (in Polish), Pomiary, Automatyka, Robotyka – PAR, vol. 12, no. 6, June 2008. pg. 5–10.
115. Trojanek P., Zieliński C.: *A Method of Integrating Robot Programming Frameworks*. 17th CISM-IFTOMM Symposium on Robot Design, Dynamics, and Control, RoManSy'2008, July 5-9, 2008, Waseda University, Tokyo, Japan. Ed.: A. Takanishi, Y. Nakamura, B. Heimann. CISM 2008. pg. 485–492.
116. Staniak M., Winiarski T., Zieliński C.: *Parallel Visual-Force Control*. IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS 2008, September 22–26, 2008, Nice, France. (on CD-ROM)
117. Winiarski T., Zieliński C.: *Control of Manipulator Interaction with the Environment – Part 1*, in: *Problems of Robotics.*, Ed.: K. Tchoń, C. Zieliński, (10-th National Conference on Robotics, Piechowice, 3–6 September 2008), Oficyna Wydawnicza Politechniki Warszawskiej, Scientific Transactions – Electronics, vol.166, Warsaw, 2008. (in Polish) pg. 473–482 (vol.2).
118. Winiarski T., Zieliński C.: *Control of Manipulator Interaction with the Environment*

- *Part 2*, in: *Problems of Robotics.*, Ed.: K. Tchoń, C. Zieliński, 10-th National Conference on Robotics, Piechowice, 3–6 September 2008, Oficyna Wydawnicza Politechniki Warszawskiej, Scientific Transactions – Electronics, vol.166, Warsaw, 2008. (in Polish) pg. 483–492 (vol.2)
119. Kornuta T., Zieliński C.: *Utilisation of Active Vision in the Identification of Objects*, in: *Problems of Robotics.*, Ed.: K. Tchoń, C. Zieliński, 10-th National Conference on Robotics, Piechowice, 3–6 September 2008, Oficyna Wydawnicza Politechniki Warszawskiej, Scientific Transactions – Electronics, vol.166, Warsaw, 2008. (in Polish) pg. 661–670 (vol.2)
120. Zieliński C., Trojanek P.: *Stigmergic Cooperation of Autonomous Robots*. Journal of Mechanism and Machine Theory. Vol. 44, no. 4, April, 2009, pg. 656–670.
121. Koh N.W., Zieliński C., Ang M.H.: *The Matrix-based Framework: Its role as a Job-Agent Supervisory Controller*. Advanced Robotics. vol. 23, no. 12/13, September 2009, pg. 1663–1686.
122. Zieliński C., Winiarski T.: *Specification of multi-robot controllers on an example of a haptic device*. 7th International Workshop on Robot Motion and Control, RoMoCo’09, June 1–3, 2009, Czerniejewo, Poland. In: *Robot Motion & Control 2009*. Editor: K. Kozłowski. Lecture Notes in Control & Information Sciences, vol. 396, Springer, pg. 227–242.
123. Zieliński C.: *Preface to Special Section on Robot Control Theory*. Ed.: C. Zieliński. International Journal of Applied Mathematics and Computer Science. vol. 19, no. 4, 2009. pg. 517–518.
124. Zieliński C., Winiarski T.: *Motion Generation in the MRROC++ robot programming framework*. International Journal of Robotics Research. vol. 29, no. 4, April 2010. pg. 386–413. (OnlineFirst, published on September 28, 2009 as doi:10.1177/0278364909348761)
125. Zieliński C., Winiarski T.: *General specification of multi-robot control system structures*. Bulletin of the Polish Academy of Sciences – Technical Sciences. Vol. 58, no. 1, 2010, pg. 15–28.
126. Zieliński C.: *Robotics: Quo Vadis? Pomiar–Automatyka–Robotyka, PAR, (Measurements–Automation–Robotics)*. no. 5, 2010. (in Polish) pg. 5–15.
127. Staniak M., Zieliński C.: *Structures of visual servos*. Robotics and Autonomous Systems. Vol.58, no. 8, August 2010. pg. 949–954. (doi:10.1016/j.robot.2010.04.004).
128. Zieliński C., Winiarski T., Trojanek P., Kornuta T.: *Multi-agent control system specification of a robot based reconfigurable fixture*, 11-th National Conference on Robotics, Karpacz, 9–12 September 2010, in: *Problems in Robotics*. Red.: Oficyna Wydawnicza Politechniki Warszawskiej, K. Tchoń, C. Zieliński, Scientific Transactions – Electronics, vol.175, part 2, Warsaw, 2010. pg. 691–702.
129. Trojanek P., Zieliński C.: *Specification of Multi-Robot Systems Based on Petri Nets*. In: *Methods of implementation and applications of real-time systems*. Ed.: L. Trybus, S. Samolej. Transport and Communication Publishers, WKŁ. Ed.: L. Trybus, S. Samolej, 17-th Conference on Real Time Systems, Gdańsk, SCR’2010, 27–29 September 2010. pg. 47–58.
130. Zieliński C.: *Robot Embodied Agents – Preface*. In: *Intelligence Surrounding Us. Cooperation of Software Agents, Robots and Intelligent Devices*. Part. IV. (in Polish) Ed.: S. Ambroszkiewicz, A. Borkowski, K. Cetnarowicz, C. Zieliński. Academic Publishing House EXIT, Warsaw 2010. Monographs of the Committee for Control and Robotics of the Polish Academy of Sciences. Vol.15 pg. 261–266.
131. Zieliński C.: *Formal Approach to Robot Programming – Structure of the Control*

- System*. In: *Intelligence Surrounding Us. Cooperation of Software Agents, Robots and Intelligent Devices*. Chpt. 8. (in Polish) Ed.: S. Ambroszkiewicz, A. Borkowski, K. Cetnarowicz, C. Zieliński. Academic Publishing House EXIT, Warsaw 2010. Monographs of the Committee for Control and Robotics of the Polish Academy of Sciences. Vol.15 pg. 267–300.
132. Zieliński C., Trojanek P.: *Robot Cooperation*. In: *Intelligence Surrounding Us. Cooperation of Software Agents, Robots and Intelligent Devices*. Chpt. 9. (in Polish) Ed.: S. Ambroszkiewicz, A. Borkowski, K. Cetnarowicz, C. Zieliński. Academic Publishing House EXIT, Warsaw 2010. Monographs of the Committee for Control and Robotics of the Polish Academy of Sciences. Vol.15 pg. 301–315.
133. Zieliński C., Winiarski T., Szynekiewicz W., Kornuta T., Trojanek P.: *MRROC++ — Robot Programming Framework for the Creation of Multi-Robot Control Systems*. In: *Intelligence Surrounding Us. Cooperation of Software Agents, Robots and Intelligent Devices*. Chpt. 10. (in Polish) Ed.: S. Ambroszkiewicz, A. Borkowski, K. Cetnarowicz, C. Zieliński. Academic Publishing House EXIT, Warsaw 2010. Monographs of the Committee for Control and Robotics of the Polish Academy of Sciences. Vol.15 pg. 317–384.
134. Trojanek P., Zieliński C.: *Specification of Complex Robot Systems*. *Pomiary–Automatyka–Robotyka, PAR*, no. 2, 2011 (Measurements–Automation–Robotics). (also: XV Science and Technology Conference Automation 2011, 6–8 April 2011, Warsaw, Poland.) (in Polish) pp. 677–686.
135. Boryń M., Kornuta T., Zieliński C.: *A Framework for Implementation and Testing of Diverse Visual Servo Algorithms*. *Pomiary–Automatyka–Robotyka, PAR*, no. 2, 2011 (Measurements–Automation–Robotics). (also: XV Science and Technology Conference Automation 2011, 6–8 April 2011, Warsaw, Poland.) (in Polish) pp. 677–686.
136. Kornuta T., Zieliński C.: *Decomposition of the robot-cashier control system*. *Pomiary–Automatyka–Robotyka, PAR*, (Measurements–Automation–Robotics), no. 2, 2011. (in Polish), pg. 41–48.
137. Mianowski K., Banachowicz K., Winiarski T., Zieliński C., Szynekiewicz W., Czajkowski K.: *Multi-fingered gripper for a service robot: hardware design*. *Pomiary–Automatyka–Robotyka, PAR*, (Measurements–Automation–Robotics), no. 5, 2011. (in Polish), pg. 46–52.
138. Winiarski T., Banachowicz K., Zieliński C., Szynekiewicz W., Mianowski K., Czajkowski K.: *Multi-fingered gripper for a service robot: control*. *Pomiary–Automatyka–Robotyka, PAR*, (Measurements–Automation–Robotics), no. 6, 2011. (in Polish), pg. 52–57.
139. Szynekiewicz W., Czajkowski K., Zieliński C., Winiarski T., Mianowski K., Banachowicz K.: *Multi-fingered gripper for a service robot: grasp planning*. *Pomiary–Automatyka–Robotyka, PAR*, (Measurements–Automation–Robotics), no. 7–8, 2011. (in Polish) pg. 75–81
140. Zieliński C., Winiarski T., Szynekiewicz W., Mianowski K., Banachowicz K., Czajkowski K.: *Controller of a manipulator equipped with a multi-fingered gripper*. XVII National Conference on Control, KKA’11, Kielce, Cedzyna, Poland, June 19–22, 2011. (in Polish), Ed. R. Dindorf, pg. 1102–1115.
141. Zieliński C., Winiarski T., Szynekiewicz W., Mianowski K., Banachowicz K., Czajkowski K.: *Controller of a manipulator equipped with a multi-fingered gripper*. In: *Advances in Control and Robotics*. (in Polish) Ed.: K. Malinowski, R. Dindorf. Kielce University of Technology, Kielce 2011. Monographs of the Committee for Control and Robotics of the Polish Academy of Sciences. Vol.16, Part 2, pg. 577–592.

142. Zieliński C., Kornuta T., Trojanek P., Winiarski T., Wałęcki M.: *Specification of a Multi-Agent Robot-Based Reconfigurable Fixture Control System*. 8th International Workshop on Robot Motion and Control 2011, RoMoCo'11, June 15–17, 2011, Bukowy Dworek, Poland. Ed. K. Kozłowski. Lecture Notes in Control and Information Sciences. Vol.422. Springer, 2012. pg. 171–182.
143. Kornuta T., Zieliński C.: *Behavior-based control system of a robot actively recognizing hand postures*. 15th International Conference on Advanced Robotics, ICAR'2011, Tallinn, Estonia, June 20–23, 2011. pg. 265–270. (IEEE Catalog Number: CFP11ROB--CDR)
144. Zieliński C., Kornuta T.: *Generation of Linear Cartesian Trajectories for Robots Using Industrial Motion-Controllers*. 16th International Conference on Methods and Models in Automation and Robotics, MMAR'2011, 22–25 August, 2011, Międzyzdroje, Poland. IEEE Catalog Number: CFP11MMA-CDR, ISBN: 978-1-4577-0913-5, pg.62–67.
145. Zieliński C., Kornuta T., Trojanek P., Winiarski T.: *Method of Designing Autonomous Mobile Robot Control Systems. Part 1: Theoretical Introduction*. *Pomiary–Automatyka–Robotyka, PAR, (Measurements–Automation–Robotics)*, no. 9, 2011. (in Polish) pg. 84–87.
146. Trojanek P., Zieliński C., Kornuta T., Winiarski T.: *Method of Designing Autonomous Mobile Robot Control Systems. Part 2: Example*. *Pomiary–Automatyka–Robotyka, PAR, (Measurements–Automation–Robotics)*, no. 10, 2011. (in Polish) pg. 84–90.
147. Zieliński C., Tchoń K.: *Design, Control and Modelling of Robots. Editorial*. *Journal of Automation, Mobile Robotics and Intelligent Systems*. Vol.5, no. 3. 2011. pg. 5–7.
148. Trojanek P., Zieliński C.: *Decomposition and Specification of Robot Systems*. In: *Design, Analysis and Implementation of Real-time Systems*. Transport and Communication Publishers, WKŁ. Ed.: L. Trybus, S. Samolej, 18-th Conference on Real Time Systems, SCR'2011, 2011. Czarna in Czarna Górną near Ustrzyki Dolne, Poland, 12–15 September (in Polish) pg. 53–64.
149. Kornuta T., Zieliński C.: *Specification of visual servo structures*. *Pomiary–Automatyka–Robotyka, PAR, (Measurements–Automation–Robotics)*, no. 2, 2012. (also: XVI Science and Technology Conference Automation 2012, March 21–23, 2012, Warsaw, Poland.) (in Polish), pg. 370–376. 2012.
150. Zieliński C., Kornuta T.: *Specification of Robotic Systems on an Example of Visual Servoing*. 10-th International IFAC Symposiums on Robot Control, SYROCO, Dubrovnik, Croatia, September 05–07, 2012. IFAC SYROCO 2012 Preprints pg. 45–50. (also: www.IFAC-PapersOnLine.net)
151. Kornuta T., Zieliński C.: *Design of Robot Control Systems, Part I: Methodology*, in: *Advances in Robotics.*, Ed.: K. Tchoń, C. Zieliński, 12-th National Conference on Robotics, Świeradów Zdrój, 12–16 September 2012, Oficyna Wydawnicza Politechniki Warszawskiej, *Scientific Transactions – Electronics*, vol. 182, part 2, Warsaw, 2012. (in Polish) pg. 597–606.
152. Kornuta T., Stefańczyk M., Zieliński C.: *Design of Robot Control Systems, Part II: Active vision*, in: *Advances in Robotics.*, Ed.: K. Tchoń, C. Zieliński, 12-th National Conference on Robotics, Świeradów Zdrój, September 12–16, 2012, Oficyna Wydawnicza Politechniki Warszawskiej, *Scientific Transactions – Electronics*, vol. 182, part 2, Warsaw, 2012. (in Polish) pg. 607–616.
153. Zieliński C., Kornuta T., Stefańczyk M., Szynekiewicz W., Trojanek P., Wałęcki M.: *Industrial Robot Programming Languages*. *Pomiary–Automatyka–Robotyka, PAR, (Measurements–Automation–Robotics)*, no. 11, 2012. pg. 10–19. (in Polish)

154. Trojanek P., Zieliński C.: *Robot Control Systems Design Methodology and Implementation Tools*. 19-th Conference on Real Time Systems, SCR'2012, 2012. Cracow, Poland, 10–12 September. Proceedings of the SCR'2012 Conference in electronic form. (in Polish)
155. Zieliński C., Trojanek P., Kornuta T., Winiarski T., Wałęcki M., Kasprzak W., Szynekiewicz W., Zielińska T.: *Multi-Robot-Based Reconfigurable Fixture: Control System*. *Pomiary–Automatyka–Robotyka, PAR, (Measurements–Automation–Robotics)*, no. 2, 2013. pg. 79–85. (in Polish)
156. Kasprzak W., Szynekiewicz W., Zielińska T., Zieliński C., Trojanek P., Winiarski T., Kornuta T., Wałęcki M.: *Multi-Robot-Based Reconfigurable Fixture: Control Program*. *Pomiary–Automatyka–Robotyka, PAR, (Measurements–Automation–Robotics)*, no. 3, 2013. pg. 96–102. (in Polish)
157. Zieliński C., Kasprzak W., Kornuta T., Szynekiewicz W., Trojanek P., Wałęcki M., Winiarski T., Zielińska T.: *Control and Programming of a Multi-Robot-Based Reconfigurable Fixture*. *Industrial Robot*. Vol.40, no. 4, 2013. pg. 329–336.
158. Trojanek P., Kornuta T., Zieliński C.: *Design of asynchronously stimulated robot behaviours*. 9th International Workshop on Robot Motion and Control, RoMoCo'13. Wąsowo, Poland, 3–5 July 2013. pg. 129–134.
159. Zieliński C., Tchoń K.: *Interaction of Robots with the Environment – Editorial*. *Journal of Automation, Mobile Robotics and Intelligent Systems*, Vol. 7, no. 4, 2013, pg. 3–4, DOI:10.1431/JAMRIS_4-2013
160. Zieliński C., Kornuta T.: *Diagnostic Requirements in Multi-Robot Systems*. in: *Intelligent Systems in Technical and Medical Diagnostics*, Eds.: Józef Korbicz and Marek Kowal, *Advances in Intelligent Systems and Computing*. Vol. 230, Springer 2013. pg. 345–356. (also: 11th International Conference on Diagnostics of Processes and Systems, DPS'2013. Łagów Lubuski, Poland, 8–11 September 2013).
161. Kornuta T., Zieliński C.: *Robot control system design exemplified by multi-camera visual servoing*. *Journal of Intelligent and Robotic Systems*. Vol. 77, no. 3–4, 2015, pg. 499–524 (Published on-line 15 September 2013, DOI: 10.1007/s10846-013-9883-x).
162. Zielińska T., Kasprzak W., Szynekiewicz W., Zieliński C.: *Path Planning for Robotized Mobile Supports*. *Journal of Mechanism and Machine Theory*. Vol. 78, 2014, pg. 51–64. DOI: <http://dx.doi.org/10.1016/j.mechmachtheory.2014.03.004>
163. Zieliński C., Kornuta T.: *Specification of Tasks in Terms of Object-level Relations for a Two-handed Robot*. In: *Recent Advances in Automation, Robotics and Measuring Techniques*, Ed.: Roman Szewczyk, Cezary Zieliński, Małgorzata Kaliczyńska, *Advances in Intelligent Systems and Computing* Vol. 267. pg. 543–552. (XVIII Science and Technology Conference Automation 2014, March 26–28, 2014, Warsaw, Poland.)
164. Kasprzak W., Kornuta T., Zieliński C.: *A Virtual Receptor in a Robot Control Framework*. In: *Recent Advances in Automation, Robotics and Measuring Techniques*, Ed.: Roman Szewczyk, Cezary Zieliński, Małgorzata Kaliczyńska, *Advances in Intelligent Systems and Computing* Vol. 267. pg. 399–408. (XVIII Science and Technology Conference Automation 2014, March 26–28, 2014, Warsaw, Poland.)
165. Kornuta T., Stefańczyk M., Laszkowski M., Figat M., Figat J., Zieliński C.: *Asynchronous data flow handling in component-based robot perception subsystems*. XVIII Science and Technology Conference Automation, March 26–28, 2014, Warsaw, Poland. *Pomiary-Automatyka-Robotyka PAR*, vol. 18 no. 5, 2014, pg.127–133 (in Polish)
166. Janiak M., Zieliński C.: *Mobile Platform Rex — Control System Architecture*. 13th National Conference on Robotics, Kudowa Zdrój, Poland, 2–6 July 2014. In: *Advances*

- in *Robotics*. Scientific Transactions – Electronics, vol.194. (in Polish) Ed.: K. Tchoń, C. Zieliński. Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2014. pg. 45–54.
167. Seredyński D., Winiarski T., Banachowicz K., Zieliński C.: *Three-Fingered Gripper Controller*. 13th National Conference on Robotics, Kudowa Zdrój, Poland, 2–6 July 2014. In: *Advances in Robotics*. Scientific Transactions – Electronics, vol.194. (in Polish) Ed.: K. Tchoń, C. Zieliński. Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2014. pg. 15–24.
168. Wałęcki M., Banachowicz K., Stefańczyk M., Winiarski T., Chojecki R., Zieliński C.: *The Torso of Velma Service Robot*. 13th National Conference on Robotics, Kudowa Zdrój, Poland, 2–6 July 2014. In: *Advances in Robotics*. Scientific Transactions – Electronics, vol.194. (in Polish) Ed.: K. Tchoń, C. Zieliński. Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2014. pg. 5–14.
169. Zieliński C., Kornuta T.: *Ontology for the Purpose of Control of a Service Robot*. 13th National Conference on Robotics, Kudowa Zdrój, Poland, 2–6 July 2014. In: *Advances in Robotics*. Scientific Transactions – Electronics, vol.194. (in Polish) Ed.: K. Tchoń, C. Zieliński. Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2014. pg. 493–502.
170. Zielińska T., Kasprzak W., Zieliński C., Szynekiewicz W.: *Distributing the Supporting Heads for Robotized Machining*. XX CISM-IFToMM Symposium on Theory and Practice of Robots and Manipulators RoManSy’2014. Moscow, Russia, 23–26 June 2014. Ed.: M. Ceccarelli, V. Glazunov. Mechanisms and Machine Science Vol. 22. Springer 2014. pg. 509–517.
171. Zieliński C., Kornuta T., Winiarski T.: *A Systematic Method of Designing Control Systems for Service and Field Robots*. 19-th International Conference on Methods and Models in Automation and Robotics (MMAR), September 2–5, 2014, Międzyzdroje, Poland. pg.1–14.
172. Kornuta T., Winiarski T., Zieliński C.: *Service Robot Ontology: Part I – Robot*. In: *Current Problems in Control and Robotics. Monographs of the Committee for Control and Robotics of the Polish Academy of Sciences, vol. 20*. 2014. Ed.: Krzysztof Malinowski, Jerzy Józefczyk, Jerzy Świątek. pg. 320–331. Also: Polish Control Conference KKA’2014. September, 8–10, 2014, Wrocław, Poland. (in Polish)
173. Kornuta T., Zieliński C., Winiarski T.: *Service Robot Ontology: Part II – Environment*. In: *Current Problems in Control and Robotics. Monographs of the Committee for Control and Robotics of the Polish Academy of Sciences, vol. 20*. 2014. Ed.: Krzysztof Malinowski, Jerzy Józefczyk, Jerzy Świątek. pg. 332–341. Also: Polish Control Conference KKA’2014, September 8–10, 2014, Wrocław, Poland. (in Polish)
174. Zieliński C., Kornuta T.: *An Object-Based Robot Ontology*. In: *Proceedings of the 7th IEEE International Conference Intelligent Systems IS’2014, September 24–26, 2014, Warsaw, Poland, Vol.2: Tools, Architectures, Systems, Applications*. Ed.: D. Filev, J. Jabłkowski, J. Kacprzyk, M. Krawczak, I. Popchev, L. Rutkowski, V. Sgurev, E. Sotirova, P. Szynekarczyk, and S. Zadrozny. Series: Advances in Intelligent Systems and Computing (AISC), Vol. 323, Springer, 2015. pg. 3–14.
175. Fotis Psomopoulos, Emmanouil Tsardoulas, Alexandros Giokas, Cezary Zieliński, Vincent Prunet, Ilias Trochidis, David Daney, Manuel Serrano, Ludovic Courtes, Stratos Arampatzis, Pericles A. Mitkas: *RAPP System Architecture*. Third International Workshop on Assistance and Service Robotics in a Human Environment ASROB-2014. Workshop in conjunction with IEEE/RSJ International Conference on Intelligent Robots and Systems IROS 2014, September 14–18, 2014 Chicago, Illinois, USA.

176. Zieliński C., Kornuta T.: *Programming Frameworks for Creating Robot Controllers*. *Pomiary, Automatyka, Robotyka – PAR*, vol. 19, no. 1, 2015. pg. 5–14. (in Polish). DOI: 10.14313/PAR_215/5
177. Tsardoulis E.G., Zieliński C., Kasprzak W., Reppou S., Symeonidis A.L., Mitkas P.A., Karagiannis G.: *Merging Robotics and AAL ontologies: The RAPP methodology*. In: *Progress in Automation, Robotics and Measuring Techniques. Vol. 2 Robotics*, Eds.: Roman Szewczyk, Cezary Zieliński, Małgorzata Kaliczyńska. pg. 285–298. Series: *Advances in Intelligent Systems and Computing*, Vol. 351. Springer 2015. Also presented at: XIX Science and Technology Conference on Automation – Innovations and Future Perspectives, March 18–20, 2015, Warsaw, Poland.
178. Szlenk M., Zieliński C., Figat M., Kornuta T.: *Reconfigurable Agent Architecture for Robots Utilising Cloud Computing*. In: *Progress in Automation, Robotics and Measuring Techniques. Vol. 2 Robotics*, Eds.: Roman Szewczyk, Cezary Zieliński, Małgorzata Kaliczyńska. pg. 253–264. Series: *Advances in Intelligent Systems and Computing*, Vol. 351. Springer 2015. Also presented at: XIX Science and Technology Conference on Automation – Innovations and Future Perspectives, March 18–20, 2015, Warsaw, Poland.
179. Kornuta T., Winiarski T., Zieliński C.: *Specification of Abstract Robot Skills in Terms of Control System Behaviours*. In: *Progress in Automation, Robotics and Measuring Techniques. Vol. 2 Robotics*, Eds.: Roman Szewczyk, Cezary Zieliński, Małgorzata Kaliczyńska. pg. 139–152. Series: *Advances in Intelligent Systems and Computing*, Vol. 351. Springer 2015. Also presented at: XIX Science and Technology Conference on Automation – Innovations and Future Perspectives, March 18–20, 2015, Warsaw, Poland.
180. Janiak M., Zieliński C.: *Control System Architecture for the Investigation of Motion Control Algorithms on an Example of the Mobile Platform Rex*. *Bulletin of the Polish Academy of Sciences – Technical Sciences*. Vol. 63, no. 3, 2015. pg. 667–678. DOI: 10.1515/bpasts-2015-0078
181. Zieliński C., Tchoń K.: *Robot Perception. Editorial*. *Journal of Automation, Mobile Robotics and Intelligent Systems*. Vol.9, no. 1. 2015. pg. 3–4.
182. Zieliński C., Szykiewicz W., Figat M., Szlenk M., Kornuta T., Kasprzak W., Stefańczyk M., Zielińska T., Figat J.: *Reconfigurable Control Architecture for Exploratory Robots*. 10th International Workshop on Robot Motion and Control, RoMoCo’2015. Poznań, Poland, 6–8 July, 2015. pg. 130–135.
183. Seredyński D., Winiarski T., Banachowicz K., Zieliński C.: *Robot Grasp Planning and Control*. 10th International Workshop on Robot Motion and Control, RoMoCo’2015. Poznań, Poland, 6–8 July, 2015. pg. 40–45.
184. He X., Zieliński C., Davy S., Shi L.: *A Constrained Guess-Check Approach for Resource Allocation in the Robot Control System Design*. 3rd IEEE/IFToMM International Conference on Reconfigurable Mechanisms and Robots ReMAR2015, 20–22 July 2015, Beijing, China. Proceedings published in: *Advances in Reconfigurable Mechanisms and Robots II*, Eds: Ding, Xilun, Kong, Xianwen, Dai, Jian, Springer series *Mechanisms and Machine Science*, Vol. 36. ISBN 978-3-319-23327-7.
185. Figat M., Kornuta T., Szlenk M., Zieliński C.: *Distributed, reconfigurable architecture for robot companions exemplified by a voice-mail application*. 20th International Conference on Methods and Models in Automation and Robotics, MMAR’2015, 24–27 August 2015, Międzyzdroje, Poland.
186. Zieliński C., Figat M.: *Robot System Design Procedure Based on a Formal Specification*. In: *Challenges in Automation, Robotics and Measurement Techniques: Proceeding of Automation–2016, March 2–4, 2016, Warsaw, Poland*, Eds.: Roman Szewczyk,

- Cezary Zieliński, Małgorzata Kaliczyńska. Series: *Advances in Intelligent Systems and Computing*, Vol. 440. Springer 2016. pg. 511–522.
187. Wałęcki M., Zieliński C.: *Prediction-Based Visual Servo Control*. In: *Challenges in Automation, Robotics and Measurement Techniques: Proceeding of Automation–2016, March 2–4, 2016, Warsaw, Poland*, Eds.: Roman Szewczyk, Cezary Zieliński, Małgorzata Kaliczyńska. Series: *Advances in Intelligent Systems and Computing*, Vol. 440. Springer 2016. pg. 693–704.
188. Cezary Zieliński interview by Dobrochna Sajdak-Chudzik: *We teach about control of systems* (in Polish). *Powder and Bulk*. no. 1, 2016. pg. 23–25.
189. Reppou S., Karagiannis G., Tsardoulas E., Kintsakis A., Symeonidis A., Mitkas P., Psomopoulos F., Zieliński C., Prunet V., Iturburu M., Arampatzis S.: *RAPP: A Robotic--Oriented Ecosystem for Delivering Smart User Empowering Applications for Older People*. *International Journal of Social Robotics*. June, 2016, DOI 10.1007/s12369-016-0361-z
190. Tsardoulas E., Kintsakis A., Panayiotou K., Thallas A., Reppou S., Karagiannis G., Iturburu M., Arampatzis S., Zieliński C., Prunet V., Psomopoulos F., Symeonidis A., Mitkas P.: *Towards an integrated robotics architecture for social inclusion — The RAPP paradigm*. *Journal of Cognitive Systems Research*. 2016, doi: <http://dx.doi.org/10.1016/j.cogsys.2016.08.004>
191. Zieliński C., Szynekiewicz W., Kasprzak W., Stefańczyk M., Figat M., Dudek W., Figat J., Szlenk M., Zielińska T.: *Variable Structure Controllers for Social Robots*. 14th National Conference on Robotics, Polanica Zdrój, Poland, 14–18 September 2016. In: *Advances in Robotics*. *Scientific Transactions – Electronics*, vol.195, part 1. (in Polish) Ed.: K. Tchoń, C. Zieliński. Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2016. pg. 5–14.
192. Figat M., Zieliński C.: *Method of Specification of a Companion-Robot*. 14th National Conference on Robotics, Polanica Zdrój, Poland, 14–18 September 2016. In: *Advances in Robotics*. *Scientific Transactions – Electronics*, vol. 195, part 1. (in Polish) Ed.: K. Tchoń, C. Zieliński. Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2016. pg. 39–50.
193. Zieliński C., Stefańczyk M., Kornuta T., Figat M., Dudek W., Szynekiewicz W., Kasprzak W., Figat J., Szlenk M., Winiarski T., Banachowicz K., Zielińska T., Tsardoulas E.G., Symeonidis A.L., Psomopoulos F.E., Kintsakis A.M., Mitkas P.A., Thallas A., Reppou S.E., Karagiannis G.T., Panayiotou K., Prunet V., Serrano M., Merlet J.-P., Arampatzis S., Giokas A., Penteridis L., Trochidis I., Daney D., Iturburu M.: *Variable structure robot control systems: the RAPP approach*. *Robotics and Autonomous Systems*, vol. 94, 2017, pg. 226–244. Elsevier, May 2017, <https://doi.org/10.1016/j.robot.2017.05.002>
194. Zieliński C., Winiarski T., Kornuta T.: *Agent-Based Structures of Robot Systems*. J. Kacprzyk et al. (Eds.), *Trends in Advanced Intelligent Control, Optimization and Automation*, series: *Advances in Intelligent Systems and Computing*, Vol. 577, pg. 493–502, DOI 10.1007/978-3-319-60699-6_48 (presented at: Polish National Control Conference (Krajowa Konferencja Automatyki), 18–21 June 2017, Kraków, Poland.)
195. Figat M., Zieliński C., Hexel R.: *FSM Based Specification of Robot Control System Activities*. 11th International Workshop on Robot Motion and Control, RoMoCo'2017. Wąsowo, Poland, 3–5 July, 2017.
196. Sagar K., de Leonardo L., Molfino R., Zielińska T., Zieliński C., Zlatanov D., Zoppi M.: *The SwarmItFix Pilot*. 27th International Conference on Flexible Automation and Intelligent Manufacturing, FAIM2017, 27–30 June 2017, Modena, Italy. *Procedia Manufacturing*. Vol. 11. Science Direct, Elsevier. pg. 413–422. doi: 10.1016/j.promfg.2017.07.128

197. Zieliński C., Tchoń K.: *Robot modelling, perception, and motion synthesis. Editorial.* Journal of Automation, Mobile Robotics and Intelligent Systems. Vol. 11, no. 2, 2017. pg. 3–4.
198. Zieliński C., Zielińska T.: *Under Digital Care.* Niezbędnik Inteligentna, supplement to Polityka. In: *Posthuman: Medicine, Genetics, Ethics.* (in Polish) no. 2, 2017. pg. 43–45+63.
199. Zieliński C., Figat M., Hexel R.: *Robotic Systems Implementation Based on FSMs.* In: *Challenges in Automation, Robotics and Measurement Techniques: Proceeding of Automation–2018, March 21–23, 2018, Warsaw, Poland,* Eds.: Roman Szewczyk, Cezary Zieliński, Małgorzata Kaliczyńska. Series: Advances in Intelligent Systems and Computing, Vol. 743. Springer 2018. pg. 441–452.
200. Zieliński C.: *Robotic System Architectures Based on Embodied Agents,* in: *Advances in Robotics.,* Ed.: K. Tchoń, C. Zieliński, 15-th National Conference on Robotics, Polanica Zdrój, 5–9 September 2018, Oficyna Wydawnicza Politechniki Warszawskiej, Scientific Transactions – Electronics, vol. 196, Warsaw, 2018. (in Polish) pg. 379–394.
201. Figat M., Zieliński C.: *Embodied Agent Model Based on a Hierarchical Petri Net,* in: *Advances in Robotics.,* Ed.: K. Tchoń, C. Zieliński, 15-th National Conference on Robotics, Polanica Zdrój, 5–9 September 2018, Oficyna Wydawnicza Politechniki Warszawskiej, Scientific Transactions – Electronics, vol. 196, Warsaw, 2018. (in Polish) pg. 395–406.
202. Tchoń K., Zieliński C.: *Preface,* in: *Advances in Robotics.,* Ed.: K. Tchoń, C. Zieliński, 15-th National Conference on Robotics, Polanica Zdrój, 5–9 September 2018, Oficyna Wydawnicza Politechniki Warszawskiej, Scientific Transactions – Electronics, vol. 196, Warsaw, 2018. (in Polish) pg. 1–2.
203. Zieliński C., Figat M., Hexel R.: *Communication Within Multi-FSM Based Robotic Systems.* Journal of Intelligent & Robotic Systems. Vol. 93, no. 3, 2019. pg. 787–805. (<http://dx.doi.org/10.1007/s10846-018-0869-6>)
204. Figat M., Zieliński C.: *Hierarchical Petri Net Representation of Robot Systems.* In: *Automation 2019,* Eds.: Roman Szewczyk, Cezary Zieliński, Małgorzata Kaliczyńska. Series: Advances in Intelligent Systems and Computing, Vol. 920. Springer 2019. pg. 492–501. (March 27–29, 2019, Warsaw, Poland) (https://doi.org/10.1007/978-3-030-13273-6_46)
205. Figat M., Zieliński C.: *Methodology of Designing Multi-agent Robot Control Systems Utilising Hierarchical Petri Nets.* 2019 IEEE International Conference on Robotics and Automation, May 20–24, 2019, Montreal, Canada. pg. 3363–3370
206. Zieliński C.: *General Robotic System Software Design Methodology.* In: *Advances in Mechanism and Machine Science. IFToMM WC 2019.,* Ed.: Uhl T., Mechanisms and Machine Science, vol 73. Springer. pg. 2779–2788. (15th IFToMM World Congress, June 30 – July 4, 2019, Kraków, Poland)
207. Zieliński C.: *Application of embodied agents in the design of robotic systems,* In: *Control, robotics and information processing. (in Polish)* Ed.: P. Kulczycki, J. Korbicz, J. Kacprzyk, Polish Scientific Publishers PWN (accepted) 2019 pg.