BRUNO SICILIANO'S CV (WINTER 2025)

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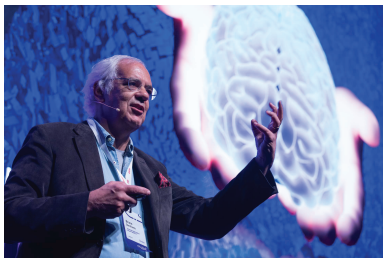

Biosketch

BRUNO SICILIANO is Professor of Control and Robotics, Chair of the Scientific Council of the Interdepartmental Center for Advanced RObotics in Surgery (ICAROS) and Director of PRISMA Lab in the Department of Electrical Engineering and Information Technology at University of Naples Federico II. He is also Honorary Professor of Óbuda University, where he holds the Kálmán Chair. He is a Board Director and Head of the Robotics Department at CREATE Consortium. His research interests include robot manipulation and control, human–robot cooperation, and service robotics. He has co-authored/co-edited 24 books, more than 140 journal papers and more than 310 conference papers/book chapters; his book ***Robotics: Modelling, Planning and Control*** is one of the most widely adopted textbooks world-wide and has been translated into Chinese, Greek and Italian. He has delivered more than 30 keynotes, more than 150 invited lectures and seminars at institutions worldwide, and he has been the recipient of several awards, including the recent **IEEE RAS Pioneer in Robotics and Automation Award** (2024). He is a **Fellow** of **IEEE**, **ASME**, **IFAC**, **AAIA**, **AIIA**, and **NAAI**. He is Co-Editor of the Springer Tracts in Advanced Robotics series, the Springer Proceedings in Advanced Robotics series, and has served on the Editorial Boards of several journals as well as Chair or Co-Chair for numerous international conferences. He co-edited the ***Springer Handbook of Robotics***, which received the **AAP PROSE Award for Excellence in Physical Sciences & Mathematics** and was also the winner in the category **Engineering & Technology** (2009). His group has been granted twenty-five European projects, including a **Synergy Grant** and an **Advanced Grant** from the **European Research Council**. He has served the **IEEE Robotics and Automation Society** as **President**, as Vice-President for Technical Activities and Vice-President for Publications, as a member of the AdCom, and as a Distinguished Lecturer. He has been a **Board Director** of the **European Robotics Association**. Professor Siciliano is currently an **IFAC Pavel J. Nowacki Distinguished Lecturer**, a member of the **International Foundation of Robotics Research Board**, a member of the **Nature Italy Board of Trustees**, and chair of the **Science and Innovation Committee of Enchanted Tools**.

Academic Positions

- **Full Professor** (2013–pres.), University of Naples Federico II, Department of Electrical Engineering and Information Technology
- **Chair of Scientific Council** (2022–pres.), University of Naples Federico II, ICAROS Center
- **Director** (2016–2022), University of Naples Federico II, ICAROS Center
- **Chair of Study Course** (2013–2019), University of Naples Federico II, Automation Engineering
- **Full Professor** (2003–2012), University of Naples Federico II, Department of Computer and Systems Engineering
- **Full Professor** (2000–2003), University of Salerno, Department of Information and Electrical Engineering
- **Associate Professor** (1992–2000), University of Naples Federico II, Department of Computer and Systems Engineering

- **Assistant Professor** (1989–1992), University of Naples, Department of Computer and Systems Engineering
- **Research Scientist** (1986–1989), University of Naples, Department of Computer and Systems Engineering
- **Ph.D. Student** (1983–1986), University of Naples, Department of Computer and Systems Engineering

Other Positions

- **Board Director** (2016–pres.), CREATE Consortium
- **Head of Robotics Department** (2013–pres.), CREATE Consortium

International Recognition and Awards

- **NAAI Fellow**, 2025
- **AIIA Fellow**, 2024
- **IEEE RAS Pioneer in Robotics and Automation Award** for fundamental contributions to robotics research in the areas of manipulation and control, human–robot cooperation, and service robotics, 2024
- **Engelberger Award Education** for contributing to the advancement of the science of robotics in the service of mankind, 2022
- **IFAC Pavel J. Nowacki Distinguished Lecturer**, 2020–2026
- **Rudolf Kálmán Professor Title**, Óbuda University, Budapest, Hungary, 2019
- **Honorary Professor of Óbuda University** for his outstanding achievements in improving and increasing the international quality of education, scientific research and academic activities of Óbuda University, Budapest, Hungary, 2016
- **PROSE Awards for Excellence in Physical Sciences & Mathematics, and for Engineering & Technology**, Springer Handbook of Robotics, American Association of Publishers, Washington, DC, USA, 2009
- **IEEE RAS George Saridis Leadership Award in Robotics and Automation** for his outstanding leadership in the robotics and automation community as a research innovator, an inspired educator, a dedicated contributor of professional service, an ambassador of science and technology, Seattle, WA, USA, 2015
- **IEEE RAS Distinguished Service Award** for outstanding leadership and commitment in promoting robotics and automation and RAS as the number one Society in the field, Anchorage, AK, USA, 2010
- **President of the IEEE Robotics and Automation Society**, 2008–2009; Junior Past-President, 2010–2011; Senior Past-President, 2012–2013
- **Distinguished Lecturer of the IEEE Robotics and Automation Society**, 2004–2007
- **Vice-President for Technical Activities of the IEEE Robotics and Automation Society**, 2000–2003
- **Vice-President for Publications of the IEEE Robotics and Automation Society**, 1999
- **Administrative Committee Member of the IEEE Robotics and Automation Society**, 1996–1999, 2005
- **AAIA Fellow** as top scientist with outstanding achievements in the area of human–robot cooperation, 2023
- **IFAC Fellow** for outstanding contributions to research and education on theory and application of automatic control to robotic systems, and for professional leadership in the field, 2009
- **ASME Fellow**, 2002

- **IEEE Fellow** for contributions to dynamic modeling and control of robotic systems and for leadership in robotics education, 2000
- **Chair of the Science and Innovation Committee of Enchanted Tools**. 2024–pres.
- **Member of Nature Italy Board of Trustees**, 2021–pres.
- **Member of International Foundation of Robotics Research Board**, 2020–pres.
- **Member of the Technical–Scientific Committee of the National Cybersecurity Agency**, 2025–pres.
- **Member of the Advisory Board of Fabbrica Vigevano**, 2025–pres.
- **Member of the Administrative Board of the Fit4MedRob Foundation**, 2023–pres.
- **ERC Synergy Grant** recipient for project on "Multi-sensor Eversion Robot Towards Intelligent Endoscopic Diagnosis and Therapy", 2023
- **ERC Advanced Grant** recipient for project on "Robotic Dynamic Manipulation", 2012
- **H-index of 77** through more than 400 scientific publications (including 3 best paper awards) and more than 45,000 citations
- **Co-author** of the textbook ***Robotics: Modelling, Planning and Control***, 2009; 2nd edition, 2000; 1st edition, 1995; translated in Chinese, Greek and Italian; more than 100 adoptions worldwide
- **Co-author** of the textbook ***Theory of Robot Control***, 1996
- **Co-editor** of the ***Springer Handbook of Robotics***, 2016; 1st edition, 2008
- **Co-editor** of the ***Springer Proceedings in Advanced Robotics*** series, 2016–pres.
- **Co-editor** of the ***Springer Tracts in Advanced Robotics*** series, 2003–pres.
- **Editorial service** for: ***Frontiers in Robotics and AI*** (2015–pres.), ***Journal of Intelligent and Robotic Systems*** (2019–pres.), ***Intelligent Service Robotics*** (2006–pres.), ***Journal of Robotic Systems*** (2001–2005), ***Japanese Society of Mechanical Engineers International Journal*** (1998–2001), ***Robotica*** (1994–pres.), ***ASME Journal of Dynamic Systems, Measurement, and Control*** (1994–1999), ***IEEE Transactions on Robotics and Automation*** (1991–1994)
- **Guest Editor** for the ***International Journal of Robotics Research*** (2004), ***IEEE/ASME Transactions on Mechatronics*** (2002, 2000), ***Journal of Robotic Systems*** (2001), ***Advanced Robotics*** (1996)
- **General or Program (Co-)Chair** for more than 30 international conferences, including the ***IEEE Int. Conf. on Robotics and Automation***, ***Int. Conf. on Advanced Intelligent Mechatronics***, ***IEEE/RSJ Int. Conf. on Intelligent Robots and System***, ***Int. Symp. on Experimental Robotics***, ***IFAC Symp. on Robot Control***, ***IEEE Int. Work. on Control Problems in Robotics and Automation: Future Directions***, and ***IEEE Int. Work. on Safety, Security, and Rescue Robots***
- **Committee member** for more than 350 international conferences
- **Keynote/plenary speaker** at more than 30 international conferences
- **Invited talks** at more than 150 institutions world-wide
- **Invited speaker**, "Robotics & Napoli: The Art of Work & Play", ***TEDx Napoli***, Italy, 2016
- **Reviewer** for the major scientific journals and conferences in the area of robotics and control, as well as for evaluation of institutions and project proposals at both European and international level
- **Letters of Reference** for career promotion or award attribution for more than 300 scholars around the world
- **Ph.D. Committee member** at numerous prestigious institutions including: Australian National University, Danmarks Tekniske Universitet, École Nationale Supérieure d'Arts et Métiers, École Nationale

Supérieure des Mines de Paris, Eidgenössische Technische Hochschule Zürich, Hesam Université, Indian Institute of Technology Kharagpur, Indian Institute of Technology Roorkee. Isfahan University of Technology, Katholieke Universiteit Leuven, King's College London, Linköpings universitet, Lunds Tekniska Högskola, Örebro universitet, Politecnico di Milano, Politecnico di Torino, Royal Military Academy Brussels, Scuola Superiore Sant'Anna Pisa, Tallinn University of Technology, Technische Universität Müchen, Universidad Nacional de Rosario, Universidade de Coimbra, Università di Cassino, Università di Padova, Università di Parma, Università di Roma "Tor Vergata", Universitat Politécnica de Catalunya, Université Blaise Pascal Clermont Ferrand, Université de Rennes 1, Université Montpellier II, Université Paul Sabatier Toulouse, Université Pierre et Marie Curie Paris, Universiteit Twente, Universitetet i Agder, Universitetet i Trondheim, University of Canterbury, University of Bristol, University of the West of England

- **International research cooperation** with more than 80 leading research institutions and more than 35 companies in the field

- **Substantial funding** of 40 Million Euro for his group's research through the ERC-funded Synergy Grant project EndoTheranostics (Multi-sensor Eversion Robot Towards Intelligent Endoscopic Diagnosis and Therapy), 2024–2030, principal investigator and the Advanced Grant project RoDyMan (Robotic Dynamic Manipulation, 2013–2019, principal investigator), the EC-funded projects INVERSE (INteractive robots that intuitiVely lEarn to inVErt tasks by ReaSoning about their Execution, 2024–2027), euROBIN (European ROBotics and AI Network, 2022–2025), HARMONY (Enhancing Healthcare with Assistive Robotic Mobile Manipulation, 2021–2024), AERO-TRAIN (AErial RObotic TRAINing for the next generation of European infrastructure and asset maintenance technologies, 2021–2024), AERIAL-CORE (AERIAL COgnitive integrated multi-task Robotic system with Extended operation range and safety, 2019–2023), DIH^2 (A Network of Robotics DIHs for Agile Production, 2019–2022), RIMA (Robotics for Infrastructure Inspection and MAintenance, 2019–2022), HYFLIERS (HYbrid FLying-rollIng with-snakE-aRm robot for contact inSpection, 2018–2021), REFILLS (Robotics Enabling Fully-Integrated Logistics Lines for Supermarkets, 2017–2020, coordinator), RockEU2 (Robotics Coordination Action for Europe Two, 2016–2018), AEROARMS (AErial RObotic system integrating multiple ARMS and advanced manipulation capabilities for inspection and maintenance, 2015–2019), EuRoC (European Robotic Challenges, 2014–2018, coordinator), SHERPA (Smart collaboration between Humans and ground-aErial Robots for imProving rescuing activities in Alpine environments, 2013–2017), RockEU (Robotics Coordination Action for Europe, 2013–2016), ARCAS (Aerial Robotics Cooperative Assembly System, 2011–2015), SAPHARI (Safe and Autonomous Physical Human-Aware Robot Interaction, 2011–2015), AIRobots (Innovative Aerial Service Robots for Remote Inspections by Contact, 2010–2013), euRobotics (European Robotics Coordination Action, 2010–2013), ECHORD (European Clearing House for Open Robotics Development, 2009–2013, co-coordinator), DEXMART (DEXterous and Autonomous Dual-Arm/Hand Robotic Manipulation with sMART Sensory-Motor Skills: A Bridge from Natural to Artificial Cognition, 2008–2012, coordinator), PHRIENDS (Physical Human-Robot Interaction: DepENDability and Safety, 2006–2009), ETHICBOTS (Emerging Technoethics of Human Interaction with Communication, Bionic, and Robotic Systems, 2005–2007), EURON 2 (European Robotics Research Network, 2004–2008), PHRIDOM (Physical Human-Robot Interaction in anthropic DOMains: safety and dependability, 2005–2006), EURON (European Robotics Research Network, 2000–2004), ERNET (European Robotics Network, 1993–1996). National projects funded by Ministry of University Scientific Research and Technology and additional projects funded by National Research Council, Italian Space Agency and other agencies

- **Promoter and Board Member of Network of Excellence EURON (European Robotics Research Network)**, 2000–2008. This network, gathering more than 200 research groups, has been supported by EC across FP5 and FP6 and has identified the European academic robotics in the rest of the world

- **Elected to Board of Directors of the euRobotics AISBL** (three times since 2013), the entity promoting the creation of a Public Private Partnership in Robotics in Europe

- **Initiator and Coordinator of the 1st Strategic Robotics Challenge program in Europe (EuRoC)** which granted a cumulative sum of 7 M Euro to 15 selected challenger teams through three stages of increasing complexity

Publications

International Books [27]

Monographs

[Bm-7] B. SICILIANO, L. Villani, G. Oriolo, A. De Luca, *Foundations of Robotics*, Springer Advanced Textbooks in Control and Signal Processing Series, London, UK, 2025

[Bm-6] B. SICILIANO, L. Sciavicco, L. Villani, G. Oriolo, *Robotics — Modelling, Planning and Control*, Springer Advanced Textbooks in Control and Signal Processing Series, London, UK, 2009
Italian edition: *Robotica — Modellistica, Pianificazione e Controllo*, McGraw-Hill Libri Italia, Milano, 2008
Greek edition: *Ρομποτικη*, Fountas, Athens, 2014
Chinese edition, Xi'an Jiaotong University Press, Xi'an, China, 2016

[Bm-5] L. Villani, G. Oriolo, B. SICILIANO, *Solution Manual to Accompany Robotics — Modelling, Planning and Control*, Springer, London, UK, 2009
available on the site
http://www.springer.com/engineering/robotics/book/978-1-84628-641-4

[Bm-4] B. SICILIANO, L. Villani, *Robot Force Control*, Kluwer Academic Publishers International Series in Engineering and Computer Science 540, Boston, MA, 1999

[Bm-3] L. Sciavicco, B. SICILIANO, *Modelling and Control of Robot Manipulators*, McGraw-Hill Electrical and Computer Engineering Series, New York NY, 1996
International Student Edition, Singapore, 1996
2nd edition: Springer-Verlag Advanced Textbooks in Control and Signal Processing Series, London, UK, 2000
Italian edition: *Robotica Industriale — Modellistica e Controllo di Robot Manipolatori*, McGraw-Hill Libri Italia, Milano, 1995
2nd Italian edition: McGraw-Hill Libri Italia, Milano, 2000

[Bm-2] B. SICILIANO, L. Villani, *Solutions Manual to Accompany Modelling and Control of Robot Manipulators*, McGraw-Hill, New York, NY, 1996
2nd edition: Springer-Verlag, London, UK, 2000
MATLAB/SIMULINK Toolbox available on the site
http://www.mathworks.com/support/books/book1655.jsp

[Bm-1] C. Canudas de Wit, B. SICILIANO, G. Bastin (Eds.), *Theory of Robot Control*, Springer-Verlag Communications and Control Engineering Series, London, UK, 1996

Edited Volumes

[Be-20] M. Staffa, J.-J. Cabibihan, B. SICILIANO, S.S. Ge, L. Bodenhagen, A. Tapus, S. Rossi, F. Cavallo, L. Fiorini, M. Matarese, H. He, *Social Robotics + AI: 17th International Conference, ICSR+AI 2025, Naples, Italy, September 1012, 2025, Proceedings, Part III*, Springer, Cham, Switzerland, 2025

[Be-19] M. Staffa, J.-J. Cabibihan, B. SICILIANO, S.S. Ge, L. Bodenhagen, A. Tapus, S. Rossi, F. Cavallo, L. Fiorini, M. Matarese, H. He, *Social Robotics + AI: 17th International Conference, ICSR+AI 2025, Naples, Italy, September 1012, 2025, Proceedings, Part II*, Springer, Cham, Switzerland, 2025

[Be-18] M. Staffa, J.-J. Cabibihan, B. SICILIANO, S.S. Ge, L. Bodenhagen, A. Tapus, S. Rossi, F. Cavallo, L. Fiorini, M. Matarese, H. He, *Social Robotics + AI: 17th International Conference, ICSR+AI 2025, Naples, Italy, September 1012, 2025, Proceedings, Part I*, Springer, Cham, Switzerland, 2025

[Be-17] B. SICILIANO, *Robotics Goes MOOC: Impact*, Springer, Cham, Switzerland, 2025

[Be-16] B. SICILIANO, *Robotics Goes MOOC: Interaction*, Springer, Cham, Switzerland, 2025

[Be-15] B. SICILIANO, *Robotics Goes MOOC: Design*, Springer, Cham, Switzerland, 2025

[Be-14] B. SICILIANO, *Robotics Goes MOOC: Knowledge*, Springer, Cham, Switzerland, 2025

[Be-13] L. Villani, C. Natale, M. Beetz, B. SICILIANO, *Robotics for Intralogistics in Supermarkets and Retail Stores*, Springer Tracts in Advanced Robotics, Cham, Switzerland, 2022

[Be-12] B. SICILIANO, F. Ruggiero, *Robot Dynamic Manipulation: Perception of Deformable Objects and Nonprehensile Manipulation Control*, Springer Tracts in Advanced Robotics 144, Cham, Switzerland, 2022

[Be-11] B. SICILIANO, C. Laschi, O. Khatib, *Experimental Robotics XVII*, Springer Proceedings in Advanced Robotics, Cham, Switzerland, 2021

[Be-10] J. Lenarčič, B. SICILIANO, *Advances in Robot Kinematics 2020*, Springer Proceedings in Advanced Robotics, Cham, Switzerland, 2021

[Be-9] A. Ollero, B. SICILIANO, *Aerial Robotic Manipulation*, Springer Tracts in Advanced Robotics 129, Cham, Switzerland, 2019

[Be-8] B. SICILIANO, O. Khatib, *Springer Handbook of Robotics, 2nd Edition*, Springer Handbook Series, Heidelberg, Germany, 2016

[Be-7] B. SICILIANO (Ed.), *Advanced Bimanual Manipulation: Results from the DEXMART Project*, Springer Tracts in Advanced Robotics 80, Heidelberg, Germany, 2012

[Be-6] B. SICILIANO, O. Khatib, *Springer Handbook of Robotics*, Springer Handbook Series, Heidelberg, Germany, 2008

[Be-5] B. SICILIANO, A. De Luca, C. Melchiorri, G. Casalino (Eds.), *Advances in Control of Articulated and Mobile Robots*, Springer Tracts in Advanced Robotics 10, Heidelberg, Germany, 2004

[Be-4] B. SICILIANO, P. Dario (Eds.), *Experimental Robotics VIII*, Springer Tracts in Advanced Robotics 5, Heidelberg, Germany, 2003

[Be-3] B. SICILIANO (Ed.), *2001 IEEE/ASME International Conference on Advanced Intelligent Mechatronics Proceedings*, Omnipress, Madison, WI, 2001

[Be-2] S. Nicosia, B. SICILIANO, A. Bicchi, P. Valigi (Eds.), *RAMSETE — Articulated and Mobile Robotics for Services and Technologies*, Springer-Verlag Lecture Notes on Control and Information Sciences 270, Heidelberg, Germany, 2001

[Be-1] B. SICILIANO, K.P. Valavanis (Eds.), *Control Problems in Robotics and Automation*, Springer-Verlag Lecture Notes on Control and Information Sciences 230, London, UK, 1998

International Journal Papers [144]

Refereed

[Jr-120] S. D'Angelo, S. Marcellini, A. De Crescenzo, M. Marolla, V. Lippiello, B. SICILIANO, "A semi-autonomous aerial platform enhancing non-destructive tests", *Drones*, **9**, 516, MDPI, Basel, Switzerland, 2025

[Jr-119] D. Wu, M. Wang, Y. Zhang, W. Zhang, V. Lippiello, B. SICILIANO, "Distributed neural network controller based on feature enhancement with flexible time prescribed performance for multi-UAV warms", *IEEE Transactions on Aerospace and Electronic Systems*, **61**, 8198–8209, IEEE Press, Piscataway NJ, USA, 2025

[Jr-118] Z. Xie, Y. Wang, X. Luo, P. Arpenti, F. Ruggiero, B. SICILIANO, "Three-dimensional variable center of mass height biped walking using a new model and nonlinear model predictive control", *Mechanism and Machine Theory*, **197**, Elsevier, Amsterdam, The Netherlands, 2024

[Jr-117] M. Selvaggio, R. Moccia, P. Arpenti, R. Caccavale, F. Ruggiero, J. Cacace, F. Ficuciello, A. Finzi, V. Lippiello, L. Villani, B. SICILIANO, "Robotics goes PRISMA", *Robotica*, **42**, Cambridge University Press, Cambridge, UK, 2024

[Jr-116] C. Balsano, P. Burra, C. Duvoux, A. Alisi, F. Piscaglia, P. Invernizzi, M.R. Brunetto, F. Bonino, R. Montalti, S. Campanile, M. Persico, D. Alvaro, S.J. Santini, A. Gerussi, M. Carbone, M. Masarone, A. Eccher, B. SICILIANO, M. Vento, F. Ficuciello, F. Cabitza, S. Penasa, P. Donatelli, "Artificial Intelligence and liver: opportunities and barriers", *Digestive and Liver Disease*, **56**, 1455–1461, Elsevier, Amsterdam, The Netherlands, 2023

[Jr-115] M. Iskandar, C. Ott, A. Albu-Schäffer, B. SICILIANO, A. Dietrich, "Hybrid force–impedance control for fast end-effector motion", *IEEE Robotics and Automation Letters*, **8**, 3931–3938, IEEE Press, Piscataway NJ, USA, 2023

[Jr-114] M. Selvaggio, A. Garg, F. Ruggiero, G. Oriolo, B. SICILIANO, "Non-prehensile object transportation via model predictive non-sliding manipulation control", *IEEE Transactions on Control Systems Technology*, **31**, 2231–2244, IEEE Press, Piscataway NJ, USA, 2023

[Jr-113] A. Mashayekhi, A. Karami, B. SICILIANO, "A new approach for simplifying multi-degree of freedom haptic device dynamics model", *Journal of Intelligent & Robotic Systems*, **108**(4), Springer Nature, Cham, CH, 2023

[Jr-112] M.D. Fiore, G. Meli, A. Ziese, B. SICILIANO, C. Natale, "A general framework for hierarchical redundancy resolution under arbitrary constraints", *IEEE Transactions on Robotics*, **39**, 2468–2487, IEEE Press, Piscataway NJ, USA, 2023

[Jr-111] S. Katyara, F. Ficuciello, D.G. Caldwell, B. SICILIANO, F. Chen, "Leveraging kernelized synergies on shared subspace for precision grasping and dexterous manipulation", *IEEE Transactions on Cognitive and Developmental Systems*, **14**, 2064–2076, IEEE Press, Piscataway NJ, USA, 2022

[Jr-110] Y. Farid, B. SICILIANO, F. Ruggiero, "Review and descriptive investigation of the connection between bipedal locomotion and non-prehensile manipulation", *Annual Reviews in Control*, **53**, 51–69, Elsevier, Amsterdam, The Netherlands, 2022

[Jr-109] A. Sciutti, F. Battaglia, M.R. Fossati, V. Calderai, M.G. Catalano, G. Antonelli, G.M. Di Nunzio, N. Dubbini, L. Giarré, E. Menegatti, F. Negrello, F. Pascucci, M. Pivetti, A.M. Zanchettin, A. Baroncelli, S. Majorana, C. Marchisio, B. SICILIANO, P. Rocco, G. Metta, C. Melchiorri, C. Laschi, E. Guglielmelli, A. De Luca, P. Dario, A. Bicchi, "Making an opportunity out of a crisis: The inclusive approach of the Italian robotics community", *IEEE Robotics and Automation Magazine*, **28**(4), 79–91, IEEE Press, Piscataway NJ, USA, 2021

[Jr-108] C. Pecorella, A. Cirillo, B. SICILIANO, A. Iele, A. Ricciardi, M. Consales, A. Cusano, M. Capece, G. Celentano, R. La Rocca, V. Mirone, F. Ficuciello, "Robot-aided prostate cancer diagnosis with fiber optic sensing: A validation study on phantoms and ex-vivo tissues", *Uro*, **1**, 245–253, MDPI, Basel, CH, 2021

[Jr-107] M. Selvaggio, M. Cognetti, S. Nikolaidis, S. Ivaldi, B. SICILIANO, "Autonomy in physical human–robot interaction: A brief survey", *IEEE Robotics and Automation Letters*, **6**, 7989–7996, IEEE Press, Piscataway NJ, USA, 2021

[Jr-106] A. Iele, A. Ricciardi, C. Pecorella, A. Cirillo, F. Ficuciello, B. SICILIANO, R. La Rocca, V. Mirone, M. Consales, A. Cusano, "Miniaturized optical fiber probe for prostate cancer screening", *Biomedical Optics Express*, **12**, 5691–5703, Optica Publishing Group, Washington, DC, 2021

[Jr-105] A. Botta, J. Cacace, R. De Vivo, B. SICILIANO, G. Ventre, "Networking for cloud robotics: The DewROS platform and its application", *Journal of Sensor and Actuator Networks*, **10**(34), MDPI, Basel, CH, 2021

[Jr-104] M. Tognon, R. Alami, B. SICILIANO, "Physical human–robot interaction with a tethered aerial vehicle: Application to a force-based human guiding problem", *IEEE Transactions on Robotics*, **37**, 723–734, IEEE Press, Piscataway NJ, USA, 2021

[Jr-103] M.H. Hamedani, M. Zekria, F. Sheikholeslama, M. Selvaggio, F. Ficuciello, B. SICILIANO, "Recurrent fuzzy wavelet neural network variable impedance control of robotic manipulators with fuzzy gain dynamic surface in an unknown varied environment", *Fuzzy Sets and Systems*, Elsevier, Amsterdam, The Netherlands, 2020

[Jr-102] V.E. Arriola-Rios, P. Guler, F. Ficuciello, D. Kragic, B. SICILIANO, J.L. Wyatt, "Modeling of deformable objects for robotic manipulation: A tutorial and review", *Frontiers in Robotics and AI*, **7**(82), Frontiers, Lausanne, CH, 2020

[Jr-101] P. Arpenti, R. Caccavale, G. Paduano, G.A. Fontanelli, V. Lippiello, L. Villani, B. SICILIANO, "RGB-D recognition and localization of cases for robotic depalletizing in supermarkets", *IEEE Robotics and Automation Letters*, **5**, 6233–6238, IEEE Press, Piscataway NJ, USA, 2020

[Jr-100] G.A. Fontanelli, G. Paduano, R. Caccavale, P. Arpenti, V. Lippiello, L. Villani, B. SICILIANO, "A reconfigurable gripper for robotic autonomous depalletizing in supermarket logistics", *IEEE Robotics and Automation Letters*, **5**, 4612–4617, IEEE Press, Piscataway NJ, USA, 2020

[Jr-99] G.A. Fontanelli, L.R. Buonocore, F. Ficuciello, L. Villani, B. SICILIANO, "An external force sensing system for minimally invasive robotic surgery", *IEEE/ASME Transactions on Mechatronics*, **25**, 1543–1554, IEEE Press, Piscataway NJ, USA, 2020

[Jr-98] F. Ficuciello, G. Pisani, S. Marcellini, B. SICILIANO, "The PRISMA Hand I: A novel underactuated design and EMG/voice-based multimodal control", *Engineering Applications of Artificial Intelligence*, **93**, Elsevier, Amsterdam, The Netherlands, 2020

[Jr-97] R. Caccavale, P. Arpenti, G. Paduano, A. Fontanellli, V. Lippiello, L. Villani, B. SICILIANO, "A flexible robotic depalletizing system for supermarket logistics", *IEEE Robotics and Automation Letters*, **5**, 4471–4476, IEEE Press, Piscataway NJ, USA, 2020

[Jr-96] R. Caccavale, P. Arpenti, G. Paduano, A. Fontanellli, V. Lippiello, L. Villani, B. SICILIANO, "Modeling, optimization, and experimentation of the ParaGripper for in-hand manipulation without parasitic rotation", *IEEE Robotics and Automation Letters*, **5**, 3011–3018, IEEE Press, Piscataway NJ, USA, 2020

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