

Curriculum Vitae

Prof. Dr.-Ing.

Dominik T. Matt

- Full Professor of Manufacturing Systems and Technology, Free University of Bozen-Bolzano (FUB)
- Head of the Engineering Research Macroarea „Industrial Engineering & Automation (IEA)“ at the Faculty of Engineering, FUB
- Director of Fraunhofer Italia Research scarl

Short Bio

Dominik Matt is a **Full Professor for Manufacturing Technology and Systems** at the Free University of Bolzano and **Director of Fraunhofer Italia Research in Bolzano**, the first research center of Fraunhofer in Italy.

He received a degree (“Dipl.-Ing.”) in Mechanical Engineering (specialization: Manufacturing Engineering) from the Technical University of Munich (TUM) in 1994 and a Ph.D. in Industrial Engineering (“Dr.-Ing.”) from the Karlsruhe Institute of Technology (KIT) in 1998. During his service at KIT, he led a research project at a high-tech start-up in Cambridge/Boston, USA, where he developed a template model for the fast configuration of supply chain software.

In 1999, he entered the Research and Engineering Center of the BMW Group in Munich, where he worked in leading positions on several R&D and manufacturing system design and optimization projects, in Germany and in the UK. In 1999/2000, while still working at BMW, he took on a position as external lecturer on behalf of the Polytechnic University of Turin (Politecnico di Torino) in the bachelor's degree program "Logistics and Production Engineering" offered at the Free University of Bozen-Bolzano (FUB), for which he also took over the management of the program in 2001. In 2004, he was appointed to the post of an Associate Professor for Manufacturing Technology and Systems (ING-IND/16) in the Department of Production Systems and Business Economics at Politecnico di Torino, Italy.

In 2008, he accepted a call of the Free University of Bozen-Bolzano to a tenured Associate Professorship at the Faculty of Science and Technology. In 2010, he won a national competition for the position of Full Professor at the Faculty of Science and Technology at the FUB where he also heads the engineering research area "Industrial Engineering and Automation (IEA)". Moreover, he is the initiator of the “Smart-Mini-Factory Laboratory” (smartminifactory.it), one of the first Learning Factories working on Industry 4.0 topics in Italy and member of the International Association of Learning Factories (IALF).

Since 2010, Professor Matt is also the Director of Fraunhofer Italia in Bolzano, the first research subsidiary of Fraunhofer in Italy (www.fraunhofer.it), where he coordinates a research staff of about 40 people.

Prof. Matt is member in numerous renowned scientific boards and organizations (e.g. the German National Academy of Science and Engineering, acatech) and is a frequently invited speaker at international conferences.

Facts & Figures

Publications (Status: 11/2024)

Google Scholar

377 documents, 7064 citations, h = 42

Scopus

208 documents, 3748 citations, h = 33

Elsevier BV

Prof. Matt is **listed among the most cited professors and among the 2% top scientists for long career-impact** in their specific fields.

(elsevier.digitalcommonsdata.com, 10/2023).

Funding (2017 to date)

@unibz:

15 research projects **from 2017 to date**, of which **12 (80%)** as **Principal Investigator or Co-Investigator**. Total funding 2017 to date: **2.6 million €**, of which

- **external** funding: 2.1 million € (**81%**)
- **internal** funding (unibz): 0.5 million € (**19%**)

In 2017, Prof. Matt received the “**Best Fund Raising**” award at the “Dies Academicus”. In 12/2021, the **University Council** provided as **reward of excellence** one postdoc position to the group directed by Prof. Matt.

@fraunhofer:

At Fraunhofer Italia, Prof. Matt coordinated from 2017 to date a **third party funded research budget of more than 8 million €**.

Research Interests

The research of Professor Matt focuses primarily on the following areas:

- **Digital Transformation** (specific focus on small and medium sized enterprises)
- **(Lean) Industry 4.0 and Smart Factory** (hybrid assembly systems, human-centered anthropocentric production systems, smart assistance systems for production, interrelationships between Lean Production and Industry 4.0; Industry 4.0 applied to Engineer-to-Order and construction industry)
- **Artificial Intelligence in Manufacturing Systems** (robot imitation learning, decentralized and AI supported control of production, decision support systems)
- **Sustainable and bioinspired Manufacturing** (reconfigurable and intelligent systems for sustainable production processes; re-/configuration of cross-regional circular bio-based value chains, biological transformation)
- **Axiomatic Design** (Manufacturing System Design for Uncertainty and Resilience, Complexity Management)

Summary of research activity (2017 to date)

Digital Transformation

Digital transformation is one of the most significant, impactful and systemic changes in human history. It brings enormous challenges to the economy, businesses, society, and individuals. Many of the new technologies such as mobile internet, 3D printing, Industry 4.0, artificial intelligence, robotics, etc. are disruptive and fundamentally change the way we do business, communicate and live. Europe and especially the peripheral regions with their economic fabric composed mainly of small and medium-sized enterprises are lagging in digital transformation.

Prof. Matt and his research team investigated opportunities and risks of digital transformation in the region from Tyrol to Veneto. The main research questions were: What are the challenges of digital transformation for the economy and society in the region? What are the opportunities and threats? How can companies successfully adopt digital technologies and embrace digital transformation in their business models? How can society as a whole address all the challenges? What steps need to be taken in policy, education, business, science, infrastructure, etc.? What are the critical success factors for the region's digital transformation? Especially based on the multi-stage **Interreg V-A Italy-Austria research project "A21 Digital Tyrol Veneto"** (secondary research, qualitative study with more than 60 in-depth interviews with leading international and local experts, strategic workshops), Prof Matt and his research team developed - together with the University of Verona and the Tyrolean A21 business network - strategies and a roadmap for decision makers for the digital transformation in the region of Tyrol-Veneto (<https://www.a21digital.com/studie/>).

The results of this project were the starting point for insights into Industry 4.0 in family businesses in the interdisciplinary research project **"MASTERMIL - Mastering the digital transformation in the family business: Getting ready for the Millennial generation"**, on which Prof. Matt is working as co-supervisor together with Prof. Alfredo De Massis. The project will provide a toolkit for family businesses for being prepared for the digital transformation.

Industry 4.0 and Smart Factory for SMEs

The future way to respond effectively to the new challenges of market dynamics and increasing international competition is to use the potential offered by digitization and to provide production systems that are highly flexible and rapidly reconfigurable, so as to ensure high production efficiency even in the face of strong variance in demand. To achieve this goal, the Industry 4.0 philosophy places people at the center of the production system and on their ability to react quickly and flexibly to change: digital technologies serve to assist people efficiently.

The overall objective of this research area includes the investigation of methods and technologies for planning, designing and managing cyber-physical production systems for small and medium-sized enterprises. The introduction of Industry 4.0 technologies and systems in SMEs requires intuitive interfaces and simple automation systems and technologies, with a focus on human-machine collaborative workstations. Finally, organizational methods must be developed for the successful introduction of digitization and Industry 4.0 technologies in SMEs. In detail, the following research topics are addressed:

Study of methods, tools and roadmaps for the introduction of Industry 4.0 technologies and concepts in SMEs

The goal is to investigate which of the currently existing or emerging Industry 4.0 technologies are particularly applicable for small and medium-sized enterprises. This topic area was addressed by Prof. Matt and an international research team in the framework of the **H2020-MSCA-RISE project "SME 4.0: Industry 4.0 for SMEs - Smart Manufacturing and Logistics for SMEs in an X-to-order and Mass Customization Environment"**. As a result, more than **80 scientific papers and 3 edited books for SMEs** have been produced by the consortium.

Lean 4.0: Interrelationships between Lean Production and Industry 4.0

Researchers and practitioners around the world have identified a strong link between Lean Production methods and Industry 4.0 technologies and concepts. On Google Scholar, Prof. Matt ranks as the 2nd most cited researcher in the field of Lean Production and was one of the first researchers to demonstrate the close connection between Lean Production and Industry 4.0.

Digitization in manufacturing and smart manufacturing systems

The goal is to study methods for digitization in manufacturing using advanced computing and simulation systems to create a digital twin of cyber-physical manufacturing systems (e.g., in the research project **"Smart Shopfloor - Development of a software prototype for intelligent Shop Floor Management through Industry 4.0 technologies"**). Based on recent advances in artificial intelligence (AI) and machine/deep learning, one aim is also to investigate potential fields of application of AI in manufacturing.

Intelligent Worker Assistance Systems

A human-centered workplace allows workers to optimize effectiveness and efficiency through appropriate assistance systems. This research includes investigation of the most promising concepts of worker assistance systems by testing and implementing them in the Smart Mini Factory lab. A specific aspect that focuses on social sustainability is the inclusion of older people or people with physical disabilities in a manufacturing environment. This research objective was pursued in the project **"ASSIST4WORK - Social sustainability in production through age-appropriate and disability-friendly workplace design using assistance systems"**.

Industry 4.0 applied to the Engineer-to-Order industry and construction

Construction 4.0 refers to the digitization and automation of the construction industry using technologies such as Building Information Modeling (BIM), Additive Manufacturing, Advanced Prefabrication, Industrial Internet of Things, Cloud, Big Data Analytics, Autonomous Robots as well as Virtual, Augmented and Mixed Reality. These new technologies have the potential to increase productivity, quality and safety on construction sites. Prof. Matt started already in 2010 the first research in this area with the project **"build4future"**, which has now found its continuation in the project **"COckPiT - Collaborative Construction Process management - Development of a prototype for the collaborative management of construction-related processes"**.

Engineering Education 4.0

Industry 4.0 is increasing the technical and organizational complexity of industrial processes. This induces an increased demand for skilled personnel at all organizational levels. The resulting increase in the degree of digitization and automation requires a change for engineering education. Prof. Matt has pushed the further development of the Smart Mini Factory lab as a platform for advanced engineering education to students and professionals. These activities were mainly funded through third party funds: (1) **"Interreg V-A Italy-Austria Engineering Education 4.0: Platform for engineering education in I4.0 technologies"**, (2) **"Erasmus+ KA 2-3, ETAT - Education & Training for Automation 4.0 in Thailand"**, (3) **"Erasmus+ KA 2-3, ICARUS - An Innovative Higher Education Institution Training Toolbox to Effectively Address the European Industry 4.0 Skills Gaps and Mismatches"**.

Sustainable and bioinspired Manufacturing

The research activities in this field builds on the experience from many ongoing applied research projects in the field of Industry 4.0 on automation and mechatronics or processes and digitalization in construction. For example, the **EFRE funded research project SMART-Pro**, which is coordinated by Prof. Matt at Fraunhofer Italia, addresses 4 main challenges regarding flexibility and sustainability in production and manufacturing in a holistic way. Challenge 1 relates to the provision of suitable infrastructural and methodological tools of applied research to support companies regarding the potential of Industry 4.0 from a sustainability point of view. Challenge 2 concerns applied research on the topic of configurability and flexible adaptability of products. Challenge 3 concerns the sustainable management (planning and control) of the flexibility offered by a production system with immediate reconfiguration possibilities. Challenge 4 relates to the effective deployment of reconfigurable robotic systems (hardware and software) using machine learning methods. SMART-Pro represents an opportunity to further establish excellent research on sustainable production as a central topic of the future. Particular emphasis is placed on the efficient introduction of automation and digitization solutions in small and medium-sized enterprises.

Axiomatic Design - Manufacturing System Design for Uncertainty and Resilience

Manufacturing systems are large socio-technical systems showing a high degree of complexity in their design. According to complexity theory, production systems are subject to time dependent complexity as their system range moves over time outside the originally defined design range. In his research, Prof. Matt applies and further develops Axiomatic Design (AD) theory as one of the most common design theories in Systems Engineering. While AD has been originally developed at MIT, Prof Matt's research group is one of the most active ones in this field worldwide.

Research Projects @unibz (2017 to date)

Principal Investigator:

- **SME 5.0** - A Strategic Roadmap Towards the Next Level of Intelligent, Sustainable and Human-Centred SMEs. European Research Project HORIZON.1.2 - Marie Skłodowska-Curie Actions (MSCA). Total funding: € 1.168.400; 2023-2026 (budget for unibz: € 317.400);
- **SME 4.0** - Industry 4.0 for SMEs - Smart Manufacturing and Logistics for SMEs in an X-to-order and Mass Customization Environment (SME 4.0). European Research Project H2020-MSCA-RISE-2016. Total budget: 954.000, total funding 783.000; 2017-2020 (**external funding for unibz: € 333.000**); **for this project, Prof. Matt has been recognized with the "Best Fund Raising" award at the "Dies Academicus" 2017 at UniBZ.**
- **A21 Digital Tyrol Veneto** - Development of a strategy for the future and concrete proposals for action on the opportunities and challenges related to Digitization for the Macro-Region of Tyrol, Alto-Adige and Veneto. Interreg V-A Italy-Austria project - Call for proposals 2017. Budget and total funding: 300,938; 2018-2019 (**external funding for unibz: € 155,000**);
- **E-EDU 4.0** - Engineering Education 4.0: Platform for engineering education in I4.0 technologies. Interreg V-A Italy-Austria project - Call for proposals 2017. Budget and total funding: 1,150,000; 2018-2019 (**external funding for unibz: € 180,000**);
- **SMART SHOPFLOOR** - "Development of a software prototype for intelligent Shop Floor Management through Industry 4.0 technologies". Project financed with internal funds of the Free University of Bozen/Bolzano. 2018-2019 (*unibz-internal funding: € 70.000*);
- **ASSIST4WORK** - Social sustainability in production through age-appropriate and disability-friendly workplace design using assistance systems. Project financed with internal funds of the Free University of Bozen/Bolzano. 2018-2019 (*unibz-internal funding: € 98.000*);

Co-Investigator

- **ETAT** - Education & Training for Automation 4.0 in Thailand. Erasmus+ KA 2-3; 2020-2023. (**external funding for unibz: € 63.966**);
- **ICARUS** - An Innovative Higher Education Institution Training Toolbox to Effectively Address the European Industry 4.0 Skills Gap and Mismatches. Erasmus+ KA 2-3; 2019-2022. (**external funding for unibz: € 61.670**);
- **SMF4INFRA** - Smart Mobile Factory for Infrastructure Projects. Joint Projects CH-I; 2022-2024. (**external funding for unibz: € 266.403**);
- **ASSIST4RESILIENCE** - Increasing Resilience in Manufacturing - Development of a Digital Twin Based Worker Assistance. Special Projects; 2022-2023. (**external funding for unibz: € 169.500**);
- **DIGPLABI** - DIGital PLATform for Building and Infrastructure Projects. Contract for research project; 2021-2023. (**external funding for unibz from contract research: € 65.800**);
- **MASTERMIL** - Mastering the digital transformation in the family business: Getting ready for the Millennial generation. ID2020 - Project financed with internal funds of the Free University of Bozen/Bolzano. 2020 -2023. (*unibz-internal funding: € 173.000*);
- **SUSTAINABLE SMES 4.0** - Development of a methodology for the long-term sustainable introduction of Industry 4.0 in SMEs. Province BZ funding (**external funding for unibz: 27.720 €**)

Participation:

- **COCKPiT** - Collaborative Construction Process management - Development of a prototype for the collaborative management of processes related to construction. ERDF 2014-2020 (**external funding for unibz: € 503.000**);
- **CONFUCIUS** - "Study the past if you would define the future": Discovering Patterns in Scheduling and Monitoring Data. ID2020 - Project financed with internal funds of the Free University of Bozen/Bolzano. 2020 -2023. (**external funding for unibz: € 110.000**);
- **EYE TRACK** - Usability of Eye Tracking for Manufacturing in SMEs. Project financed with internal funds of the Free University of Bozen/Bolzano. 2018-2019. (*unibz-internal funding: € 63.000*);

Publications (12 most relevant)

No.	Publication	Quartile (SJR)	SJR ²⁰²³	Citation Count*
01	BRUNETTI, F.; MATT, D.T. ; BONFANTI, A.; DE LONGHI, A.; PEDRINI, G.; ORZES, G.: Digital transformation challenges: strategies emerging from a multi-stakeholder approach. <i>The TQM Journal</i> , 2020, 32 (4), 697-724. DOI: 10.1108/TQM-12-2019-0309	Q1	0.94	208
02	BROZZI, R.; FORTI, D.; RAUCH, E.; MATT, D.T. : The advantages of industry 4.0 applications for sustainability: Results from a sample of manufacturing companies. <i>Sustainability (Special Issue Industry 4.0 for SMEs - Smart Manufacturing and Logistics for SMEs)</i> , 2020, 12(9), 3647. DOI: 10.3390/su12093647	Q1	0.67	135
03	RAUCH, E.; DALLASEGA, P.; MATT, D.T. : Sustainable production in emerging markets through Distributed Manufacturing Systems (DMS). <i>Journal of Cleaner Production</i> , Vol. 135, 2016, pp. 127-138. DOI: 10.1016/j.jclepro.2016.06.106.	Q1	2.06	113
04	RATAJCZAK J., RIEDL M., MATT D.T. (2019). BIM-based and AR application combined with location-based management system for the improvement of the construction performance. <i>BUILDINGS</i> , vol. 9, ISSN: 2075-5309, doi: 10.3390/buildings9050118	Q1	0.58	87
05	MATT, D.T. ; ORZES, G.; RAUCH, E.; DALLASEGA, P.: Urban Production – a Socially Sustainable Factory Concept to overcome Shortcomings of Qualified Workers in Smart SMEs. <i>Computers and Industrial Engineering</i> , 2020, 139, 105384. DOI: 10.1016/j.cie.2018.08.035	Q1	1.70	81
06	RAUCH, E.; DALLASEGA, P.; MATT D.T. : Distributed manufacturing network models of smart and agile mini-factories. <i>International Journal of Agile Systems and Management</i> , Vol. 10, No. 3/4, 2017, pp. 185-205. DOI: 10.1504/IJASM.2017.088534	Q2	0.28	63
07	MATT, D.T. : Adaptation of the value stream mapping approach to the design of lean engineer-to-order production systems: A case study. <i>Journal of Manufacturing Technology Management</i> , 2014, 25(3). DOI: 10.1108/JMTM-05-2012-0054	Q1	1.95	60
08	PASETTI MONIZZA, G.; BENDETTI, C.; MATT, D.T. : Parametric and Generative Design techniques in mass-production environments as effective enablers of Industry 4.0 approaches in the Building Industry. <i>Automation in Construction</i> , 2018, 92, 270-285.	Q1	2.63	61
09	RAUCH, E., UNTERHOFER, M., ROJAS, R.A., GUALTIERI, L., WOSCHANK, M., MATT, D.T. (2020); A maturity level-based assessment tool to enhance the implementation of industry 4.0 in small and medium-sized enterprises, <i>Sustainability (Switzerland)</i> , 12 (9), art. no. 3559	Q1	0.67	61
10	FOLLINI, C., MAGNAGO, V., FREITAG, K., TERZER, M., MARCHER, C., RIEDL, M., GIUSTI, A., MATT, D.T. (2021), Bim-integrated collaborative robotics for application in building construction and maintenance, <i>Robotics</i> , 10 (1), art. no. 2, pp. 1-19.	Q1	0.80	50
11	MATT, D.T. : Template based production system design. <i>Journal of Manufacturing Technology Management</i> , 2008, 19(7). DOI: 10.1108/17410380810898741	Q1	1.95	33
12	MATT, D.T. : Application of Axiomatic Design principles to control complexity dynamics in a mixed-model assembly system: a case analysis. <i>International Journal of Production Research</i> , 2012, 50(7), 1850-1861. DOI: 10.1080/00207543.2011.565086	Q1	2.67	27

Publications (last 26 years: 1998-2024)

PLEASE NOTE:

For the sake of clarity of the submitted documents, a full listing of all publications that Professor Matt has authored in 26 years of scientific activity is omitted. For a complete overview, please consult the following links:

(Status: 11/2024)

Google Scholar

377 documents, 7064 citations, h = 42

Scopus

208 documents, 3748 citations, h = 33

Elsevier BV

Prof. Matt is listed among the most cited professors and among the 2% top scientists for long career-impact in their specific fields.

(elsevier.digitalcommonsdata.com, 10/2023).

Google Scholar:

https://scholar.google.com/citations?user=0_GukYAAAAJ&hl=de&oi=ao

Scopus:

<https://www.scopus.com/authid/detail.uri?authorId=23974953600>

Publons:

<https://publons.com/researcher/2159606/dominik-t-matt/>

ORCID:

<https://orcid.org/0000-0002-2365-7529>

Scopus 20 | Empowering discovery since 2004

Search Lists Sources SciVal ? Create account

This author profile is generated by Scopus. [Learn more](#)

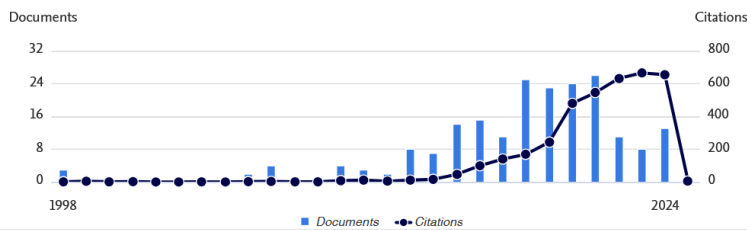
Matt, Dominik T.

Free University of Bozen-Bolzano, Bolzano, Italy © 23974953600 <https://orcid.org/0000-0002-2365-7529> [View more](#)

3,748 Citations by 3,040 documents	208 Documents	33 h-index View h-graph	View more metrics >
---------------------------------------	------------------	--	--

[Set alert](#) [Edit profile](#) [More](#)

Document & citation trends



Most contributed Topics 2019–2023

- Human Robot Interaction; Industrial Robot; Manipulator
11 documents
- Cognitive System; Assistive Technology; Industry 4.0
10 documents
- Cyber Physical Systems; Embedded Systems; Industry 4.0
9 documents

Recent Awards

- 2021: Best Paper Award, 8th International Conference on Augmented Reality, Virtual Reality, and Computer Graphics (Salento AVR 2021) for the paper "Optimizing Collaborative Robotic Workspaces in Industry by applying Mixed Reality"
- 2021: Park Award (ICAD 2021) for the world best paper on Axiomatic Design in the years 2019/2020 entitled "Axiomatic design guidelines for the design of flexible and agile manufacturing and assembly systems for SMEs".
- 2021: Distinguished Educator Award in recognition and appreciation of exceptional achievements, leadership and contributions in Academia and Dedication & Service in the Industrial Engineering (IEOM 2021)
- 2019: Best Application Paper Award, 3rd place, the 28th International Conference on Robotics in Alpe-Adria-Danube Region (RAAD 2019)
- 2018: Outstanding Paper Award 2018, IEEE International Conference on Industrial Engineering and Engineering Management for the paper "Advanced Automation for SMEs in the I4.0 Revolution: Engineering Education and Employees Training in the Smart Mini Factory Laboratory"
- 2018: Best Track paper Award (Sustainability in SC Track) 2018 IEOM International Conference on Industrial Engineering and Operations Management for the paper "Sustainable City Logistics through Shared Resource Concepts"

Memberships

- Full member of the renowned German National Academy of Science and Engineering (www.acatech.de)
- Full member of the Italian Association of Mechanical Technology (AITEM).
- Full member of the Academic Society for Work and Industrial Organization (WGAB).
- Member of the Scientific Committee of the International Biennial Conference of Axiomatic Design (ICAD).
- Member of the Scientific Committee of IRE Bolzano (Institute for Economic Research).

Editorial and Reviewer Activities (last 5 years)

- Reviewer for the following Journals (excerpt):

- International Journal of Production Research (Taylor & Francis)
- Production Planning and Control (Taylor & Francis)
- Computers in Industry (Elsevier)
- Journal of Manufacturing Technology Management (Emerald)
- International Journal of Procurement Management (Inderscience)
- International Journal of Sustainable Engineering (Taylor & Francis)
- Quality and Reliability Engineering International (Wiley)
- Journal of Mechanical Engineering Science (Sage Publishing)
- Zeitschrift für Wirtschaftlichen Fabrikbetrieb (De Gruyter)

- Grant Reviewer for:

- DFG – Deutsche Forschungsgesellschaft (Federal Republic of Germany)
- ÖAW – Österreichische Akademie der Wissenschaften (Austria)
- BMBF – Bundesministerium für Bildung und Forschung (Federal Republic of Germany)
- Norges forskningsråd (Research Council of Norway)
- ASTAR Agency for Science, Technology and Research, Ministry of Education, Singapore
- King Fahd University of Petroleum and Minerals, Saudi Arabia
- Provincia Autonoma di Trento, Comitato ricerca e innovazione

- Recent Editorial Activities:

- Member of the Editorial Board of the Journal of Manufacturing Technology Management
- Fottner, J., Nübel, K., Matt, D.T., eds. (2024), Construction Logistics, Equipment, and Robotics, Lecture Notes in Civil Engineering (LNCE), Springer, pp. 1-222.
- Concli, F., Maccioni, L., Vidoni, R., Matt, D.T., eds. (2024), Latest Advancements in Mechanical Engineering, Lecture Notes in Mechanical Engineering, Springer, pp. 1- 284.
- Borgianni, Y., Matt, D.T., Molinaro, M., Orzes, G., eds. (2023), Towards a Smart, Resilient and Sustainable Industry, Lecture Notes in Networks and Systems, Springer, pp. 1-687.
- Matt DT, Modrák V, Zsifkovits H, eds (2021) "Implementing Industry 4.0 in SMEs – Concepts, Examples and Applications", Palgrave Macmillan
- Matt DT, Modrák V, Zsifkovits H, eds (2021), "Industry 4.0 for SMEs - Challenges, Opportunities and Requirements", Palgrave Macmillan

Keynote Speeches and Invited Talks (last 5 years)

2024

- Digital Connect, 08.10.2024, Four Points Sheraton; evento organizzato da IDM, Keynote Speaker Prof. Matt, Titolo della relazione "AI as an enabler for sustainable value creation in the company" (KI als Enabler für eine nachhaltige Wertschöpfung im Unternehmen), (language: German)
- "Unsere Mission: Das Handwerk" – Landesversammlung des Südtiroler Handwerks ("Our Mission: Craftsmanship" - National Assembly of South Tyrolean Craftsmen), 20.04.2024, NOI TechPark, Bolzano, Italia; Evento organizzato da lvh/apa; Keynote Speaker Prof. Matt, Titolo della relazione "Gamechanger KI: Wie KMU von künstlicher Intelligenz profitieren können; [Gamechanger AI: come le PMI possono beneficiare dell'intelligenza artificiale]", (language: German)

2023

- Internationales Forum Mechatronik 2023 "Intelligent und nachhaltig produzieren", 28. – 29.09.2023, NOI TechPark Bruneck, Bruneck; Keynote Speaker Prof. Matt, "Twin Transformation: digitale Technologien als Enabler für eine nachhaltige Wertschöpfung im Unternehmen; (language: German)
- Fortschritt durch Digitalisierung - Digitalisierung und KI im Unternehmen umsetzen, 11.10.2023, NOI TechPark, Bolzano, Italia; IDM e hds; Keynote Speaker Prof. Matt, "Gamechanger KI: Wie KMU von künstlicher Intelligenz profitieren können; , (language: German)

2022

- Tag der Innovation 2022, 06.10.2022, Bolzano, Italy, Keynote Speech, Title: "KMUs im Spannungsfeld zwischen digitaler Transformation und gesellschaftlichem Wandel", (language: German)
- Meran im Gespräch: Digitaler Wandel für ein resilientes Meran der Zukunft, 20.10.2022, Meran, Italy, Keynote Speech, Title „Society 5.0 wie Gesellschaft, Wirtschaft und Umwelt vom digitalen Wandel profitieren können“, (language: German)

2021

- The 1st online and 14th International Conference on Axiomatic Design (ICAD2021), 23-25.06.2021, Lisbon, Portugal, Keynote Speech, Title: "Biological Transformation for the Design of Resilient and Sustainable Factories of the Future", (language: English)
- The 4th European Conference on Industrial Engineering and Operations Management (IEOM2021), 02-05.08.2021, Roma, Italia, Keynote Speech, Title: "Biological Transformation in Manufacturing and Logistics", (language: English)
- Forum Bau-Bioökonomie, 21.09.2021, Biberach, Germania, Keynote Speech, Title: "Künstliche Intelligenz als Impulsgeber für einen nachhaltigen Bausektor", (language: German)

2020

- International Klimahouse Congress, 23/01/2020, Bolzano, Organizer: Fiera di Bolzano, Keynote Speech, Title: "Künstliche Intelligenz als Impulsgeber für einen nachhaltigen Bausektor - Ziele – Potenziale - Anwendungen"; (language: German)
- LVH/APA Convegno (online) "Wie verändert Digitalisierung die Berufsbildung im Handwerk?", 24.09.2020, Bolzano, Organizer: LVH/APA, Invited Talk, Title: „Handwerk im digitalen Wandel - Herausforderungen und Chancen“, (language: German)

2019

- SWREA general meeting and stakeholder event of the EU Interreg Italy-Austria project A21DIGITAL TYROL VENETO - 20.09.2019, Bolzano, Organizer SWREA, Keynote Speech, Title: "Erfolgreich Brücken in eine digitale Zukunft bauen" (language: German)
- A21 Digital Talent Day 19 - Dolomiten 2030, 27.11.2019, Lienz, Organizer: A21 Digital / Chamber of Commerce of Bolzano / Euregio Tirol-Südtirol-Trentino, Innos, Assimpreditori Bolzano, Keynote Speech, Title: "Digitale Handlungsempfehlungen für Tyrol Veneto", Presentation of the results of the research project Interreg A21 Digital" (language: German)
- A21 Digital Talent Day 2019 - Euregio 2030, 09.12.2019, Bolzano, Organizer: Chamber of Commerce of Bolzano, Keynote Speech, Title of the talk "Welchen IQ hat di KI? Wie intelligente Assistenten unsere Arbeitswelt von morgen verändern werden", (language: German)

Third Mission Activities (last 5 years)

- Contribution by Prof. Dominik T. Matt to the Eisacktaler Wirtschaftsschau, 03.05.2024 "Gamechanger KI: wie unsere Betriebe von künstlicher Intelligenz profitieren können"
- Contribution by Prof. Dominik T. Matt to the strategic retreat of Ivh/apa, 30.08.2024 "Digitale Transformation und KI: Perspektiven und Gestaltungsoptionen für das Handwerk in Südtirol"
- Participation of Prof. Matt as a scientific expert at the round table "Entwicklungspotenziale des Vinschgaus – Was welln mir?", event organized by KIWANIS Club Vinschgau on 02.02.2023 at BASIS Vinschgau
- "Industry 4.0: what's next – a glimpse into the future", Presentation by Prof. Matt at the International Week "Industry 4.0: Technologies and Management", 17.02.2023
- Interview with Prof. Dominik T. Matt in the SWZ Südtiroler Wirtschaftszeitung, 09.06.2023 "KI im Unternehmen: Hallo. Wie kann ich helfen?"
- Interview with Prof. Dominik T. Matt in the SWZ Südtiroler Wirtschaftszeitung, 25.08.2023 "Studie: Werden KIs dümmer?"
- "Twin Transition & Society 5.0: How Society, Economy, and Environment Could Equally Benefit from Digital Transformation", Presentation by Prof. Matt for high school students as part of the "RYLA Junior Programme" of the ROTARY Club in Bressanone (Kloster Neustift), 11.09.2023.
- "Twin Transition & Society 5.0: How Society, Economy, and Environment Could Equally Benefit from Digital Transformation (could)", Presentation by Prof. Matt for teachers of the high school "Max Valier" as part of the "Giornata Pedagogica", 11.09.2023.
- Contribution of Prof. Dominik T. Matt in the SWZ Südtiroler Wirtschaftszeitung, 27.09.2023 "Vom Taschenrechner zu ChatGPT: Die Geschichte von KI"
- Contribution of Prof. Dominik T. Matt in the SWZ Südtiroler Wirtschaftszeitung, 13.10.2023 "KI: Wie lernen eigentlich Maschinen?"
- Interview with Prof. Dominik T. Matt on television, RAI Alto Adige, 14.11.2023; (<http://raisudtirol.rai.it/de/index.php?media=Ptv1699994400>)
- Participation as a scientific expert in the panel discussion "Digitization and Sustainability in Manufacturing" on 19.05.2022 at NOI TechPark
- „Industry 4.0: what's next – a glimpse into the future“, Presentation of Prof. Matt at the International Week "Industry 4.0: Technologies and Management", 14.03.2022
- "Pandemieschub für Industrie 4.0", unibz insight Podcast, 13.10.2021
- „Industry 4.0: what's next – a glimpse into the future“, presentation of Prof. Matt at the International Week "Industry 4.0: Technologies and Management", 08.03.2021
- "Künstliche Intelligenz: der Game Changer, der unsere Welt verändert" (Artificial intelligence: the game changer that is changing our world), presentation of Prof. Matt for high-school students, 09.03.2021
- "Forschungsergebnisse zum Erleben und Anfassen" (Research results to experience and touch), NOI Magazine / Top Stories, 18.11.2021 (<https://noi.bz.it/de/magazine/forschungsergebnisse-zum-erleben-und-anfassen>)
- Coordination and teaching under the initiative for high schools "UniMeetsSchool" in 2019/20, 2020/21 and 2021/22. Worth mentioning: on 26.01.2021, a virtual ceremony was held for the first time with the presentation of certificates of participation for the popular lecture series "UniMeetsSchool" for high school students.
- „Industry 4.0: what's next – a glimpse into the future“, presentation of Prof. Matt at the International Week "Industry 4.0: Technologies and Management", 14.03.2022
- Dominik Matt on the Interreg-project 'A21Digital Tyrol Veneto', NOI Magazine, 26.09.2019
- Participation in public events: long night of research LUNA 2019, 27.09.2019
- Interview with Dominik T. Matt in LUNA 2019, Rai Alto Adige, 29.09.2019
- Visit of high school students in the "Uni-meets-School" course in the Smart Mini Factory Lab, 27.11.2019
- „Digitale Denkanstöße mit Dominik Matt“ (Digital food for thought with Dominik Matt), Talent Day: Prof. Dominik Matt presented the results of the A21DIGITAL TYROL VENETO digitization study in Lienz, 01.12.2019
- Presentation of the laboratory "Smart Mini Factory", Fraunhofer Italia and the NOI Techpark to a delegation from Chiang Mai University and Bangkok Science Park (21.06.2019).
- Presentation of the intermediate results of the research on assistance systems in "Assist4Work" to various stakeholders (Ivh/apa, gwb, Independent L) on 21.06.2019
- Kick-off for collaboration with the Association of Craftsmen (Ivh-apa) as part of the "digitization" training offered by Ivh-apa together with Salisbuo University (12.06.2019)
- Participation in the SEM - Sea E-Mobility meeting at the invitation of the NOI TechPark group (J. Brunner) on 05.06.2019