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Stefano Guarino

Date of birth: 25/05/1973 | **Nationality:** Italian | **Email address:** stefano.guarino@unicusano.it

WORK EXPERIENCE

01/11/2001 – 31/10/2003 Rome, Italy

UNIVERSITY RESEARCH ASSISTANT UNIVERSITY OF ROME TOR VERGATA

Research activities in manufacturing processes aimed at improving efficiency, quality, sustainability, and innovation within following manufacturing fields:

- **Advanced Materials:** new materials with enhanced properties for manufacturing, such as lightweight alloys, composites, smart materials, and metal foams. This includes research on material behavior under different manufacturing conditions.
- **Laser Material Processing:** investigation on how different types of lasers (such as CO2, fiber, or solid-state lasers) interact with various materials (metals, plastics, ceramics, etc.) to cut, weld, drill, engrave
- **Process Optimization:** Research focuses on enhancing the efficiency, precision, and quality of laser-based manufacturing processes. This includes optimizing parameters like laser power, pulse duration, beam quality, and scanning speed for better results.

01/01/2004 – 31/12/2004 Naples, Italy

UNIVERSITY RESEARCH ASSISTANT UNIVERSITY OF NAPLES FEDERICO II

Failure, performance and processing prediction for enhanced design with non-crimp-fabric composites:

- Material Characterization;
- Failure Modes;
- Modeling Techniques.

01/09/2005 – 11/05/2014 Rome, Italy

UNIVERSITY ASSISTANT PROFESSOR UNIVERSITY OF ROME TOR VERGATA

1. **Teaching:** Design and deliver of courses related to manufacturing;
2. **Research:** Scholarly research in manufacturing-related fields, such as advanced manufacturing technologies, industrial automation, new materials;
3. **Advising and Mentoring:** advisor of undergraduate and graduate students on academic and career-related matters;
4. **Professional Development:** conferences, workshops, or seminars on the latest advancements in manufacturing technology;
5. **Service and Collaboration:** Participation to departmental and university committees, contributing to the development of the department's goals;
6. **Industry Collaboration:** partnerships and collaborations with industry stakeholders, participation to consultancy projects, providing expertise to industries to bridge the gap between academia and real-world manufacturing challenges;
7. **Grant Writing:** Application for research grants to secure funding for research projects, equipment, or student scholarships within the field of manufacturing.

2011 – 2014 Naples, Italy

MEMBER OF THE SCIENTIFIC COUNCIL CIRTIBS - INTER-UNIVERSITY CENTER ON INNOVATIVE TECHNOLOGIES

2011 – 2016 Rome, Italy

MEMBER OF THE TEACHING BOARD OF THE DOCTORATE IN INDUSTRIAL ENGINEERING UNIVERSITY OF ROME TOR VERGATA

2013 – 2022 Naples, Italy

MEMBER OF THE BOARD OF DIRECTORS ITALIAN ASSOCIATION MANUFACTURING TECHNOLOGIES

2013 – 2021 Rome, Italy

TECHNICAL-SCIENTIFIC EXPERT FOR THE EVALUATION OF RESEARCH PROJECTS REGIONE LAZIO (ITALY)

Evaluation of research projects POR FESR call 2014-2020, assessing proposals, providing expertise, and making informed recommendations.

1. **Reviewing Research Proposals:** Evaluate research project proposals submitted for funding or grants, assessing their scientific merit, feasibility, methodology, and potential impact.
2. **Expertise in Materials and manufacturing Field:** knowledge and expertise in this particular technical-scientific area to assess the quality, innovation, and relevance of proposed research.
3. **Critical Analysis:** Conduct a thorough analysis of the research objectives, hypotheses, methodology, and expected outcomes to ensure they align with the current state of knowledge and address significant scientific questions.
4. **Evaluation Criteria:** Use predefined evaluation criteria or guidelines to objectively assess the scientific rigor, originality, significance, and ethical considerations of the proposed research.
5. **Communication:** Clearly articulate your assessments and recommendations in written reports or evaluations, providing specific feedback to funding agencies, academic institutions, or editorial boards.
6. **Ethical Considerations:** Ensure compliance with ethical standards and guidelines while evaluating research proposals, especially concerning human subjects, animal welfare, and environmental impact.

12/05/2014 – 29/12/2021 Rome, Italy

ASSOCIATE PROFESSOR UNIVERSITY NICCOLÒ CUSANO

Associate professor in manufacturing processes: undergraduate and graduate-level courses, research, publishing papers, supervising student projects, and collaborating with industry and other academic professionals to advance the field of manufacturing processes.
Expertise spans various areas related to:

1. **Material Processing**: Understanding different materials (metals, polymers, composites) and their behavior during manufacturing processes like casting, forming, machining, welding, and additive manufacturing (3D printing).
2. **Advanced Manufacturing Technologies**: Expertise in emerging technologies such as laser manufacturing, CNC machining, surface finishing, functional coatings, metal fomas, additive manufacturing, life cycle assesment, robotics, automation, and the integration of Industry 4.0 principles in manufacturing.
3. **Process Optimization**: Implementing techniques to enhance efficiency, reduce waste, and improve quality in manufacturing processes, including lean manufacturing, Six Sigma, and statistical process control.
4. **Product Design for Manufacturability**: Collaborating with product designers to ensure products are optimized for efficient and cost-effective manufacturing.
5. **Sustainability in Manufacturing**: Researching and implementing eco-friendly practices, such as recycling, waste reduction, and energy-efficient manufacturing processes.
6. **Quality Control and Assurance**: Developing methodologies to ensure the consistent quality of manufactured products through inspections, testing, and continuous improvement strategies.
7. **Industry Collaboration**: Engaging with industry partners for research collaborations, consulting, or providing expertise to solve real-world manufacturing challenges.
8. **Professional Development**: Continuous learning and staying updated with advancements in manufacturing technologies, processes, and industry trends.

2014 – 2022 Rome, Italy

COORDINATOR OF THE BACHELOR DEGREE IN INDUSTRIAL ENGINEERING UNIVERSITY 'NICCOLÒ CUSANO'

Overseeing various aspects of the program to ensure its smooth functioning and success:

1. Curriculum development: Designing, updating, and reviewing the program's curriculum to ensure it meets academic standards and industry requirements.
2. Student guidance: Advising and guiding students throughout their academic journey, including course selection, research direction, and career planning.
3. Faculty support: Collaborating with faculty members to coordinate teaching assignments, ensure quality instruction, and support their professional development.
4. Program administration: Handling administrative tasks such as admissions, enrollment management, scheduling, and managing program resources.
5. Quality assurance: Monitoring and assessing the program's effectiveness, implementing improvements, and ensuring compliance with accreditation standards.

6. Networking and partnerships: Building relationships with other educational institutions, industry partners, and professional organizations to enhance the program's reputation and opportunities for students.
7. Research and innovation: Encouraging research initiatives, fostering innovation, and integrating new trends or technologies into the curriculum.
8. Communication: Serving as a liaison between students, faculty, administration, and external stakeholders to facilitate effective communication and collaboration.

2014 – 2016 Rome, Italy

PRESIDENT OF THE UNIVERSITY QUALITY ASSURANCE PRESIDIUM UNIVERSITY NICCOLÒ CUSANO

Responsible for overseeing and managing quality assurance processes within University Institution. The role involves ensuring that the academic programs, services, and operations of the university meet established standards and regulations.
Key responsibilities of include:

1. Policy Development
2. Compliance Monitoring
3. Assessment and Evaluation
4. Data Analysis
5. Reporting and Documentation
6. Training and Support
7. Continuous Improvement
8. Accreditation Preparation
9. Risk Management
10. Stakeholder Engagement

2016 – 2022 Bari, Italy

TECHNICAL-SCIENTIFIC EXPERT FOR THE EVALUATION OF RESEARCH PROJECTS REGIONE PUGLIA (ITALY)

Evaluation of research projects POR FESR call 2014-2020, assessing proposals, providing expertise, and making informed recommendations.

1. Reviewing Research Proposals
2. Assessment of the quality, innovation, and relevance of proposed research
3. Critical Analysis
4. Evaluation Criteria
5. Communication
6. Ethical Considerations

2016 – 2022 Torino, Italy

TECHNICAL-SCIENTIFIC EXPERT FOR THE EVALUATION OF RESEARCH PROJECTS REGINE PIEMONTE

Evaluation of research projects MANUNET call 2014-2020, assessing proposals, providing expertise, and making informed recommendations.

1. Reviewing Research Proposals
2. Assessment of the quality, innovation, and relevance of proposed research
3. Critical Analysis
4. Evaluation Criteria
5. Communication
6. Ethical Considerations

2017 – CURRENT Rome, Italy

MEMBER OF THE TEACHING BOARD OF THE DOCTORATE IN INDUSTRIAL AND CIVIL ENGINEERING UNIVERSITY NICCOLÒ CUSANO

2018 – 2021 Naples, Italy

TECHNICAL-SCIENTIFIC EXPERT FOR THE EVALUATION OF RESEARCH PROJECTS REGIONE CAMPANIA

Evaluation of research projects RIS3 call 2018, assessing proposals, providing expertise, and making informed recommendations.

1. Reviewing Research Proposals

2. Assessment of the quality, innovation, and relevance of proposed research
3. Critical Analysis
4. Evaluation Criteria
5. Communication
6. Ethical Considerations

2020 – 2021 Rome, Italy

COORDINATOR OF THE MASTER DEGREE IN MANAGEMENT ENGINEERING UNIVERSITY NICCOLÒ CUSANO

01/01/2019 – 31/12/2021 Torino, Italy

MEMBER OF UNIVERSITY QUALITY ASSURANCE EVALUATION UNIT POLITECNICO DI TORINO

Responsible for monitoring and evaluating the quality and effectiveness of academic processes, research, teaching and services offered within the university institution.
The main functions include:
Internal evaluation: Examines and evaluates the quality of the university's academic activities, research, teaching and services, often using established performance indicators and standards.
Reports and analyses: Produces periodic or annual reports that summarize the results of internal evaluations and provide detailed analyzes on the overall situation of the university institution.Improvement
Research: Identifies areas of strength and weakness within the university and provides recommendations to improve existing processes or implement new strategies.
Quality Assurance: Collaborates with other institutional bodies to ensure high quality standards in teaching, research and services offered.
Respond to external requirements: Prepares reports and responds to the requirements of external or government accreditation agencies, demonstrating compliance with established standards.
Stakeholder Engagement: Involves faculty, staff, students and other stakeholders in the evaluation process, gathering feedback and opinions to improve the quality of the institution.

30/12/2021 – CURRENT Rome, Italy

FULL PROFESSOR UNIVERSITY NICCOLÒ CUSANO

Full professor in manufacturing processes. The role encompasses various responsibilities, including:

1. **Teaching:** Designing and conducting courses, creating syllabi, delivering lectures, mentoring students, grading assignments, and supervising student research projects.
2. **Research:** Conducting original research in manufacturing field, publishing scholarly articles in peer-reviewed journals, presenting findings at conferences, securing grants and funding for research projects, and collaborating with other researchers.
3. **Mentoring and Advising:** Guiding graduate students, mentoring junior faculty, offering advice to students on academic and career matters, and providing support and direction to individuals under your purview.
4. **Service:** Serving on committees within the department, university, participating in academic governance, and contributing to the administration and management of the academic institution.
5. **Networking:** Establishing and maintaining professional relationships with colleagues, researchers, and experts, both nationally and internationally, to foster collaborations and exchange ideas.

01/03/2023 – CURRENT Rome, Italy

PRESIDENT OF THE UNIVERSITY QUALITY ASSURANCE PRESIDIUM UNIVERSITY NICCOLÒ CUSANO

Responsible for overseeing and managing quality assurance processes within University Institution. The role involves ensuring that the academic programs, services, and operations of the university meet established standards and regulations.
Key responsibilities of include:

1. Policy Development
2. Compliance Monitoring
3. Assessment and Evaluation
4. Data Analysis
5. Reporting and Documentation
6. Training and Support
7. Continuous Improvement
8. Accreditation Preparation

9. Risk Management
10. Stakeholder Engagement

01/07/2023 – CURRENT Rome, Italy
VICE-RECTOR FOR INTERNATIONALISATION UNIVERSITY NICCOLÒ CUSANO

Responsible for overseeing and coordinating various initiatives and programs aimed at fostering internationalization.
The responsibilities encompass:

1. Strategic Planning
2. International Partnerships cultivating and managing
3. Global Mobility Programs
4. International Student and Staff Support
5. Promotion and Recruitment
6. Curriculum Internationalization
7. Compliance and Regulations
8. Representation and Networking

09/2022 – 06/2023 Prague, Czechia
TECHNICAL-SCIENTIFIC EXPERT FOR THE EVALUATION OF RESEARCH PROJECTS MINISTRY OF EDUCATION, YOUTH AND SPORTS OF THE CZECH REPUBLIC

Evaluation of research projects 'Excellent research call in the Johannes Amos Comenius Programme (P JAC)', assessing proposals, providing expertise, and making informed recommendations.

1. Reviewing Research Proposals
2. Assessment of the quality, innovation, and relevance of proposed research
3. Critical Analysis
4. Evaluation Criteria
5. Communication
6. Ethical Considerations

07/11/2023 – CURRENT Rome, Italy
TECHNICAL-SCIENTIFIC EXPERT FOR THE EVALUATION OF RESEARCH PROJECTS MIMIT - ITALIAN MINISTRY OF INDUSTRY AND ECONOMIC DEVELOPMENT

Evaluation of research projects 'Industrial Research and Experimental Development Programs (P.R.I.S.S.)', assessing proposals, providing expertise, and making informed recommendations.

1. Reviewing Research Proposals
2. Assessment of the quality, innovation, and relevance of proposed research
3. Critical Analysis
4. Evaluation Criteria
5. Communication
6. Ethical Considerations

EDUCATION AND TRAINING

01/10/1993 – 12/05/2000 Rome, Italy
MECHANICAL ENGINEERING MASTER DEGREE University of Rome Tor Vergata

Website www.uniroma2.it

01/11/2000 – 30/04/2004 Rome, Italy
PH.D IN ENERGY-ENVIRONMENT ENGINEERING University of Rome Tor Vergata

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B1	B1	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access | Google Suite (Doc, Slides, Form, Sheet, Drive) | Autocad and Solidworks | FEM calculation model and stress analysis: ANSYS (Workbench/ Fluent) | Highly proficient in Minitab for statistical analysis | Good knowledge of OriginLab Software | Research and analytical skills | Social Media | Video Conferencing (Zoom, Teams, Skype, Webex) - Advanced | Google Drive | Data analysis (hypothesis testing, ANOVA, multivariate analysis) | Computer-Aided Manufacturing (CAM)

ADDITIONAL INFORMATION

HONOURS AND AWARDS

01/01/2008
Best Paper Prize 2005-2007 – Elsevier Journal 'Engineering Application of Artificial Intelligence' Best Paper Prize Elsevier Journal 'Engineering Application of Artificial Intelligence' 2005- 2007
M. Barletta, A. Gisario, S. Guarino, 'Modelling of electrostatic fluidized bed (EFB) coating process using artificial neural networks' Engineering Applications of Artificial Intelligence, Volume 20, Issue 6, September 2007, Pages 721-733;

PUBBLICATIONS

ARTICLES

1. S. GUARINO, R. POLINI, F. QUADRINI, H SEIN, W. AHMED Cutting force and wear evaluation in peripheral milling by dental tools. THIN SOLID FILMS 469–470 (2004) 161– 166 ISSN: 0040-6090

2. BARLETTA M., GUARINO S., TAGLIAFERRI V. Metal cleaning made easy: A fluidized bed system is a cost-effective option for degreasing processes. METAL FINISHING; vol. 102, Issue 12 (2004), pp. 23-28 ISSN: 0026-0576

3. BARLETTA M., GISARIO A, GUARINO S, RUBINO G. (2006). Development of smooth finishes in electrostatic fluidized bed (EFB) coating process of high-performance thermoplastic powders (PPA 571 H). PROGRESS IN ORGANIC COATINGS. vol. 57 Issue 4, pp. 337-347 ISSN: 0300-9440

4. POLINI R, BARLETTA M., GUARINO S, UCCIARDELLO N. (2006). HF-CVD of diamond coatings on cemented tungsten carbides: progress in substrate preparation. JOURNAL OF MACHINE ENGINEERING. vol. 6 Issue 4, pp. 58-76 ISSN: 1895-7595.

5. BARLETTA M., GISARIO A, GUARINO S. TAGLIAFERRI V. (2006). Fluidized bed degreasing (FBD) of metal components. JOURNAL OF MACHINE ENGINEERING. vol. 6 Issue 4, pp. 77-97 ISSN: 1895-7595.

6. BARLETTA M., GUARINO S, RUBINO G, TAGLIAFERRI V. (2007). Progress in Fluidized Bed assisted Abrasive Jet Machining (FB-AJM): Internal Polishing of Aluminium Tube. INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE. vol. 47 Issue 3-4, pp. 483-495 ISSN: 0890-6955.

7. BARLETTA M., GISARIO A, GUARINO S. (2007) Modelling of electrostatic fluidized bed (EFB) coating process using artificial neural networks. ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE. vol. 20 (6), pp. 721-733 ISSN: 0952-1976.

8. BARLETTA M., GUARINO S, MONTANARI R, TAGLIAFERRI V. (2007). Metal foams for structural applications: design and manufacturing. INTERNATIONAL JOURNAL OF COMPUTER INTEGRATED MANUFACTURING. Volume 20 Issue 5, 2007, 497 ISSN: 0951-192X.

9. BARLETTA M., BOLELLI G, GUARINO S, LUSVARGHI L. Development of matte finishes in electrostatic (EFB) and conventional hot dipping (CHDFB) fluidized bed coating process. PROGRESS IN ORGANIC COATINGS. Vol. 59 (2007) 53-67 ISSN: 0300-9440.

10. GUARINO S., UCCIARDELLO N., TAGLIAFERRI V. "An application of neural network solutions to the modelling of high power diode laser assisted forming process of AA 6082 thin sheets" KEY ENGINEERING MATERIALS. Vol. 344 (2007) 325-332 ISSN 1013-9826.

11. BARLETTA M., CECCARELLI D, GUARINO S, TAGLIAFERRI V. Fluidized Bed assisted Abrasive Jet Machining (FB-AJM): Precision internal finishing of Inconel 718 components. JOURNAL OF MANUFACTURING SCIENCE AND ENGINEERING. ISSN: 1087-1357. Vol. 129 (2007) 1045-1059 ISSN: 1087-1357.

12. BARLETTA M., GISARIO A., GUARINO S., TAGLIAFERRI V., Fluidized bed coating of metal substrates by using high performance thermoplastic powders: statistical approach and neural network modelling, ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE. Volume 21(2008), Issue 8, 1130-1143, ISSN: 0952-1976.

13. BARLETTA M., GISARIO A., GUARINO S, Modelling of fluidized bed degreasing (FBP) process by ANNS, INTERNATIONAL JOURNAL OF SURFACE SCIENCE AND ENGINEERING. Vol. 2 No 3/4 (2008), pp. 294 – 309, ISSN 1749-7868

14. MASSIMILIANO BARLETTA, GIANLUCA RUBINO, STEFANO GUARINO, GIOVANNI BOLELLI, LUCA LUSVARGHI, ANNAMARIA GISARIO, Fast Regime - Fluidized Bed Machining (FR-FBM) of Atmospheric Plasma Spraying (APS) TiO2 coatings. SURFACE AND COATINGS TECHNOLOGY, Volume 203, Issues 5-7, 2008, Pages 855-861 ISSN 0257-8972

15. BARLETTA M, GISARIO A, GUARINO S., RUBINO G. (2009). Production of open cell aluminium foams by using the dissolution and sintering process (DSP). JOURNAL OF MANUFACTURING SCIENCE AND ENGINEERING. Volume 131, Issue 4, 2009, pp. ISSN: 1087-1357.

16. BARLETTA M., GISARIO A, GUARINO S, (2009). Hybrid forming process of AA 6108 T4 thin sheets: process modelling by neural network solutions. JOURNAL OF ENGINEERING MANUFACTURE. ISSN 0954-4054. Volume 223, Number 5, 2009, pp. 535-545

17. BARLETTA, GUARINO (2010), High speed finishing of a CuZn15 brass alloy by Abrasive Recirculating Fluidized Bed (ARFB), Powder Technology, Volume 203, Issue 3, 25 November 2010, Pages 591-602

18. GISARIO, M. BARLETTA, C. CONTI, S. GUARINO (2011), Springback control in sheet metal bending by laser-assisted bending: Experimental analysis, empirical and neural network modelling, Optics and Lasers in Engineering, Volume 49, Issue 12, December 2011, Pages 1372-1383

19. GUARINO S, BARLETTA M, PEZZOLA S, VESCO S (2012). Manufacturing of steel foams by Slip Reaction Foam Sintering (SRFS) . MATERIALS & DESIGN, vol. 40, p. 268-275, ISSN: 0264-1275

20. BARLETTA, M., GUARINO, S., VESCO, S., GISARIO, A., TAGLIAFERRI, V. Abrasive Fluidized Bed (AFB) finishing of thermally sprayed cobalt-chromium coatings. (2013) Manufacturing Letters 1 (1) PP. 1 - 4

21. A ANTENUCCI, S GUARINO, V TAGLIAFERRI, N UCCIARDELLO. Electro-Deposition of Cu on Open Cell Aluminum Foams.Materials Sciences & Applications 4 (11) 2013

22. BARLETTA, M., GUARINO, S., RUBINO, G., TROVALUSCI, F., TAGLIAFERRI, V. Environmentally friendly wooden-based coatings for thermal insulation: Design, manufacturing and performances, Progress in Organic Coatings 77 (2014) 701–711 ISSN: 0300-9440

23. ANTENUCCI, S. GUARINO, V. TAGLIAFERRI, N. UCCIARDELLO, Improvement of the mechanical and thermal characteristics of open cell aluminium foams by the electrodeposition of Cu, Materials and Design 59 (2014) 124–129, ISSN: 0264-1275

24. GUARINO S, ANTENUCCI A, TAGLIAFERRI V, UCCIARDELLO N (2015). Electro-deposition of graphene on aluminium open cell metal foams. MATERIALS & DESIGN, ISSN: 0264-1275, doi: 10.1016/j.matdes.2015.01.004

25. GUARINO S, RUBINO G, TAGLIAFERRI V, UCCIARDELLO N (2015). Thermal behavior of open cell aluminium foams in forced air: experimental analysis. MEASUREMENT, ISSN: 0263-2241, doi: 10.1016/j.measurement.2014.09.069

26. GIANNINI O, GUARINO S., Fuzzy model for Laser Assisted Bending Process 2nd International Conference on Mechanical Design and Engineering (ICMDE 2016), TORINO (ITALY)

27. Guarino S, Barbieri M, Pasqualino P, Bella G (2017). Fabrication and Characterization of an Innovative Heat Exchanger with Open Cell Aluminium Foams. In: 2017 2nd International Conference on Advances on Clean Energy Research (ICACER 2017), Berlin, Germany April 7-9, 2017. vol. 118, p. 227-232, doi: 10.1016/j.egypro.2017.07.015

28. Guarino S, Ponticelli GS (2017). High Power Diode Laser (HPDL) for Fatigue Life Improvement of Steel: Numerical Modelling. METALS, vol. 7(10), p. 447-458, ISSN: 2075-4701, doi: 10.3390/met7100447

29. Guarino S, Barletta M, Afilal A (2017). High Power Diode Laser (HPDL) surface hardening of low carbon steel: Fatigue life improvement analysis. JOURNAL OF MANUFACTURING PROCESSES, ISSN: 1526-6125, doi: 10.1016/j.jmapro.2017.06.015

30. Guarino S, Lione R, Gazzani F, Pavoni C, Tagliaferri V, Cozza P (2017). In vitro and in vivo evaluation of diamond-coated strips. ANGLE ORTHODONTIST, vol. Volume 87 , p. 455-459, ISSN: 0003-3219, doi: 10.2319/071516-552.1

31. Guarino S, Di Ilio G, Venettacci S (2017). Influence of thermal contact resistance of

aluminum foams in forced convection: Experimental analysis. MATERIALS, vol. 10, 907, ISSN: 1996-1944, doi: 10.3390/ma10080907

32. Guarino S, Ucciardello N, Venettacci S, Genna S (2017). Life cycle assessment of a new graphene-based electrodeposition process on copper components. JOURNAL OF CLEANER PRODUCTION, vol. 165, p. 520-529, ISSN: 0959-6526, doi: 10.1016/j.jclepro.2017.07.168

33. Ponticelli GS, Guarino S, Giannini O (2018). A fuzzy logic-based model in laser-assisted bending springback control. THE INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol. 95, p. 3887-3898, ISSN: 1433-3015, doi: 10.1007/s00170-017-1482-8

34. Guarino S, Ponticelli G S, Giannini O, Genna S, Trovalusci F (2018). Laser milling of yttria-stabilized zirconia by using a Q-switched Yb:YAG fiber laser: experimental analysis. THE INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol. 94, p. 1373-1385, ISSN: 1433-3015, doi: 10.1007/s00170-017-1020-8

35. GS Ponticelli, S Guarino, V Tagliaferri, O Giannini (2018), An optimized fuzzy-genetic algorithm for metal foam manufacturing process control, The International Journal of Advanced Manufacturing Technology, 1-12, https://doi.org/10.1007/s00170-018-2942-5

36. Tagliaferri V.,Trovalusci, F., Guarino S., venettacci S. (2019), Environmental and Economic Analysis of FDM, SLS and MJF Additive Manufacturing Technologies", 10.3390/ma12244161

37. Stefano Guarino, Gennaro Salvatore Ponticelli, Flaviana Tagliaferri, Simone Venettacci (2019), Life cycle analysis of an innovativefluidized bed degreasing process", Journal of Cleaner Production, 10.1016/j.jclepro.2019.118947

38. Guarino, S., Ponticelli, G.S., Venettacci, S. (2020), Environmental assessment of Selective Laser Melting compared with Laser Cutting of 316L stainless steel: A case study for flat washers' production, CIRP Journal of Manufacturing Science and Technology 31, pp. 525-538, 10.1016/j.cirpj.2020.08.004,

39. Guarino, S., Ponticelli, G.S., Tagliaferri, F., Venettacci, S. (2020), Life cycle analysis of an innovative fluidized bed degreasing process, Journal of Cleaner Production 245,118947, 10.1016/j.jclepro.2019.118947

40. Ponticelli, G.S., Guarino, S., Giannini, (2020), O. An optimal genetic algorithm for fatigue life control of medium carbon steel in laser hardening process", Applied Sciences (Switzerland) 10(4),1401, 10.3390/app10041401

41. Genna, S., Giannini, O., Guarino, S., Ponticelli, G.S., Tagliaferri F., (2020), Laser texturing of AISI 304 stainless steel: experimental analysis and genetic algorithm optimization to control the surface wettability", International Journal of Advanced Manufacturing Technology 110(11-12), pp. 3005-3022, 10.1007/s00170-020-06073-4

42. Ponticelli, G.S., Giannini, O., Guarino, S., Horn, M. (2020), An optimal fuzzy decision-making approach for laser powder bed fusion of AlSi10Mg alloy", Journal of Manufacturing Processes 58, pp. 712-723, 10.1016/j.jmapro.2020.08.054

43. Salvatori, S., Ponticelli, G.S., Pettinato, S., Genna, S., Guarino, S. (2020), High-pressure sensors based on laser-manufactured sintered silicon carbide", Applied Sciences (Switzerland) 10(20),7095, pp. 1-12, 10.3390/app10207095

44. Venettacci, S., Ponticelli, G.S., Guarino, S., (2021) Fluidised bed finishing process for aeronautical applications: Environmental and technical-economic assessment, Journal of Cleaner Production 299,126900,

45. Ponticelli, G.S., Tagliaferri, F., Genna, S., Venettacci S., Giannini, O., Guarino, S., (2021) Soft computing techniques for laser-induced surface wettability control, Materials 14(9),2379

46. Ponticelli, G.S., Tagliaferri, F., Venettacci S., Horn M., Giannini, O., Guarino, S. (2021) Re-engineering of an impeller for submersible electric pump to be produced by selective laser melting, Applied Sciences (Switzerland) 11(16),7375.

47. Guarino, S., Marchese, E., Ponticelli, G.S., Scerrati A., Tagliaferri, V., Trovalusci, F., (2021) Additive manufacturing for neurosurgery: Digital light processing of individualized patient-specific cerebral aneurysms, Materials 14(20),6057

48. Venettacci, S., Cozzolino, R., Ponticelli, G.S., Guarino, S., (2022) Environmental and economic life cycle assessment of thermal energy storage based on organic phase change material embedded in open-cell copper foams, Sustainable Production and Consumption 29, pp. 387-405

49. Corona D, Giannini O, Guarino S, Ponticelli GS, Zarcone M (2022). Experimental investigation on the electrical, thermal, and mechanical properties of laser powder bed fused copper alloys. JOURNAL OF MANUFACTURING PROCESSES, ISSN: 1526-6125, doi: 10.1016/j.jmapro.2022.02.023 -

50. Ponticelli GS, Di Salvo L, Giuliani M, Panciroli R, Guarino S (2022). Induced back stress hardening and strengthening effect by repetitive progressive tensile loading of laser-powder bed fused 316L stainless steel. INTERNATIONAL JOURNAL, ADVANCED MANUFACTURING TECHNOLOGY, ISSN: 0268-3768, doi: 10.1007/s00170-022-09690-3

51. Ponticelli GS, Panciroli R, Venettacci S, Tagliaferri F, Guarino S (2022). Experimental investigation on the fatigue behavior of laser powder bed fused 316L stainless steel. CIRP - JOURNAL OF MANUFACTURING SCIENCE AND TECHNOLOGY, ISSN: 1755-5817, doi: 10.1016/j.cirpj.2022.07.007

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