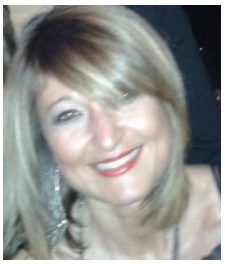
Prof. **Stefania BRUSCHI**

Full professor, M.Sc., Ph.D.



Working address

Department of Industrial Engineering – University of Padova
via Venezia 1
I-35131 Padova (ITALY)
phone +39 049 827 6822
fax +39 049 827 6816
e-mail stefania.bruschi@unipd.it

Educational Qualifications

1998: M.Sc. in Materials Engineering, University of Ferrara (Italy)

2002: PhD in Industrial Manufacturing Engineering with dissertation "A new approach in testing and modelling the material response in hot forging operations", University of Parma (Italy)

Working Experiences

1999-2002: Teaching assistant and supervisor of students of Mechanical Engineering (bachelor and master degrees), University of Padova

2003-2006: Assistant Professor in Manufacturing Engineering, University of Padova

2006-2011: Associate Professor in Manufacturing Engineering, University of Trento

Since October 1st, 2011, Full Professor in Manufacturing Engineering, University of Padova

Since October 1st, 2019, Head of the Department of Industrial Engineering, University of Padova

Since October 1st, 2019, Member of the Academic Senate of the University of Padova

Teaching Experiences

2004- present: Lecturer in "Fundamentals of Manufacturing Technologies" (bachelor degree in Mechanical Engineering), "Lab of Virtual Prototyping of Metal Forming Operations" (master degree in Mechanical Engineering), and "Manufacturing technologies for Aerospace Materials" (master degree in Aerospace Engineering), University of Padova

2008-2011: Lecturer in "Fundamentals of Manufacturing Technology" (bachelor degree in Industrial Engineering), University of Trento

Research areas and activities

Major research interests deal with testing and modelling metal forming and machining processes. The following topics have been addressed:

- New approaches in testing and modelling material response to deformation in cold, hot and warm conditions. Within this topic, innovative testing procedures to qualify material behaviour in bulk and sheet forming operations have been designed and set up, as well as new models (both analytical and neural network-based) have been developed and applied to a wide variety of metallic materials (e.g. steels, superalloys, light alloys,..)
- New approaches in evaluating the fracture occurrence in metal forming operations conducted at both room and elevated temperature. In the case of deforming in cold conditions, a ductile fracture criterion with a linear damage accumulation law was implemented and demonstrated to be effective in the damage and fracture occurrence prediction in cold forging process chains; whereas, in the case of forming at elevated temperatures, the theory of Continuum Damage Mechanics was applied, but properly modified to take into account the microstructural features characterizing the material under deformation.
- New approaches applied to innovative stamping operations, conducted at elevated temperatures, to evaluate: material formability of the new generations of HSS, high resistant aluminium alloys, titanium and magnesium alloys through the approach of forming limit curves and phenomenological fracture criteria; material anisotropy and texture evolution; phase transformation-related parameters as a function of the applied load; friction and heat transfer coefficients at the interface blank-dies.
- New approaches in identifying the material rheological parameters in machining operations thanks to the combined use of analytical and artificial intelligence-based techniques.
- New approaches in evaluating the tool wear and surface integrity of Additive Manufactured Ti6Al4V and CoCrMo alloy fabricated through SLM and EBM and then machined under various lubricating/cooling conditions. In particular, cryogenic cooling making use of liquid and gaseous nitrogen has been investigated and its effects evaluated both at conventional and micro-level.

The research activities have been carried out in the framework of EU-funded projects, Italian Government funded programs and research contracts with Italian and European manufacturing companies.

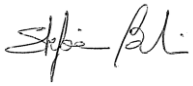
Database	***# Articles (*)***	***# Citations (*)***	***h-index (*)***
SCOPUS	263	4439	32

(*) data collected on March 21^{2t}, 2022.

Memberships

Member of the European Scientific Association for Material Forming (ESAFORM) since 2001.
Member of the Italian Association of Manufacturing Technologies (AITeM) since 1998.
Fellow member of CIRP (The International Academy for Production Engineering) since 2016; Secretary of CIRP STC-F since August 2019.
Member of the Editorial Board of the Journal of Materials Processing Technology.
Track Chair of Manufacturing for NAMRC.

Padova, March 21st, 2022



Papers published in journals with Impact Factor

1. Bariani P.F., Bruschi S., Dal Negro T., A New Constitutive Model for Hot Forging of Steels Taking Into Account the Thermal and Mechanical History, CIRP Annals - – Manufacturing Technology 49/1, 2000.
2. Bariani P.F., Bruschi S., Dal Negro T, 2001, Rheological Behaviour in Multi-step Hot Forging Conditions, International Journal of Forming Processes, 4/1-2: 155-165.
3. Di Lorenzo R., Fratini L., Filice L., Micari F., Bruschi S., Comparison of analytical methods and AI tools for characterisation in hot forming, Journal of Materials Processing Technology, vol. 125-126, 2002, 434-439.
4. Bariani P.F., Bruschi S., Dal Negro T., Integrating physical and numerical simulation techniques to design the hot forging process of stainless steel turbine blades, International Journal of Machine Tools and Manufacture, vol. 44, issue 9, 2004, 945-951.
5. Bariani P.F., Bruschi S., Dal Negro T., Prediction of Nickel-base superalloys rheological behaviour under hot forging conditions using artificial neural networks, Journal of Materials Processing Technology, vol. 152, issue 3, 2004, 395-400.
6. Bariani P.F., Bruschi S., Dal Negro T., Modelling Nimonic 80A rheological behaviour through artificial neural networks, Journal of Engineering Manufacture, vol. 218 Part B, 615-618, 2004.
7. Bruschi S., Poggio S., Quadrini F., Tata E., Workability of Ti6Al4V alloy at high temperature and strain rate, Materials Letters, vol. 58, issue 27-28, 2004, 3622-3629.
8. Bariani P.F., Bruschi S., Dal Negro T., Testing and modelling material response to deformation in bulk metal forming, Key-note paper, STC "F", CIRP Annals – Manufacturing Technology 53/2/2004, 2004, 573-596.
9. Casotto S., Pascon F., Habraken A.-M., Bruschi S., Thermo-mechanical-metallurgical model to predict geometrical distortions of rings during cooling phase after ring rolling operations, Int. Journal of Machine Tools and Manufacture, vol. 45, issue 6, 2005, 657-664.
10. Bruschi S., Casotto S., Dal Negro T., Bariani P.F., Real-time prediction of geometrical distortions of hot-rolled rings during cooling, CIRP Annals – Manufacturing Technology 54/1/2005, 2005, 229-232.
11. Bariani P.F., Bruschi S., Modelling forging and post-forging cooling of C70S6 conrods, Journal of Materials Processing Technology, vol 167, issue 2-3, 529-535.
12. Bariani P.F., Bruschi S., Ghiotti A., Physical simulation of longitudinal welding in port-hole die extrusion, CIRP Annals – Manufacturing Technology, 55/1/2006, 287-290.
13. Turetta A., Bruschi S., Ghiotti A., Investigation of 22MnB5 formability in hot stamping operations, Journal of Materials Processing Technology, vol 177, 2006, issue 1-3, 396-400.
14. Bariani P.F., Bruschi S., Ghiotti A., Lucchetta G., An approach to modelling the forming process of sheet metal-polymer composites, CIRP Annals – Manufacturing Technology, vol. 56, issue 1, 2007, 261-264.
15. Bruschi S., Ghiotti A., Distortions induced in turbine blades by hot forging and cooling, International Journal of Machine Tools and Manufacture, vol. 48, issues 7-8, 2008, 761-767.
16. Bariani P.F., Bruschi S., Ghiotti A., Turetta A., Testing formability in hot stamping of HSS, CIRP Annals – Manufacturing Technology, 57, 2008, 265-268.
17. Zhang Q., Felder E., Bruschi S., Evaluation of friction condition in cold forging by T-shape compression test, Journal of Materials Processing Technology, vol. 209, 2009, 5720-5729.
18. Ghiotti A., Fanini S., Bruschi S., Bariani P.F., Modelling of the Mannesmann effect, CIRP Annals – Manufacturing Technology, vol. 58/1, 2009, 255-258.
19. Ghiotti A., Regazzo P., Bruschi S., Bariani P.F., Reduction of vibrations in blanking by MR dampers, CIRP Annals – Manufacturing Technology, vol. 59/1, 2010, 275-278.

20. Bariani P.F., Bruschi S., Ghiotti A., Critical issues in the simulation of hot forming operations, Production Engineering, vol. 4, 2010, 407-411.
21. Pellegrini D., Ghiotti A., Bruschi S., Effect of warm forming conditions on AZ31B flow behaviour and microstructural characteristics, International Journal of Material Forming, vol. 4/2, 2011, 155-161.
22. Ghiotti A., Bruschi S., Tribological behaviour of DLC coatings for sheet metal forming tools, Wear, vol. 217 (9-10), 2011, 2454-2458.
23. Ghiotti A., Bruschi S., Borsetto F., Tribological characteristics of high strength steel sheets under hot stamping conditions, Journal of Materials Processing Technology, vol. 2011 (11), 2011, 1694-1700.
24. Bariani P.F., Bruschi S., Ghiotti A., Simionato M., Ductile fracture prediction in cold forging process chains, CIRP Annals – Manufacturing Technology, vol. 60/1, 2011, 287-290.
25. Tondini F., Bosetti P., Bruschi S., Heat transfer in hot stamping of high strengh steel sheets, Journal of Engineering Manufacture, 2011, vol. 225, 1813-1824.
26. Bosetti P., Bruschi S., Enhancing position accuracy of CNC machine tools by means of direct measurement of deformation, International Journal of Advanced Manufacturing Technology, 2012, 58 (5-8), 651-662.
27. Setti F., Bini R., Lunardelli M., Bosetti P., Bruschi S., De Cecco M., Shape measurement system for Single Point Incremental Forming (SPIF) manufacts by using trinocular vision and random pattern, Measurement Science and Technology, 2012, 23/11, art. n. 115402.
28. Amiri A., Bruschi s., Sadeghi M.H., Bariani P.F., Investigation on hot deformation behavior of Waspaloy, Materials Science and Engineering A, 2013, 562, 77-82.
29. Ghiotti A., Sgarabotto F., Bruschi S., A novel approach to wear testing in hot stamping of high strength boron steels, 2013, Wear, 302/1-2, 1319-1326.
30. Bariani P.F., Bruschi S., Ghiotti A., Michieletto F., Hot stamping of AA5083 aluminium alloy sheets, CIRP Annals – Manufacturing Technology, 2013, vol. 62/1, 251-254.
31. Ambrogio G., Gagliardi F., Bruschi S., Filice L., On the high-speed single-point incremental forming of titanium alloys, CIRP Annals – Manufacturing Technology, 2013, vol. 62/1, 243-246.
32. Bosetti P., Giorgio Bort M., Bruschi S., Identification of Johnson-Cook and Tresca's parameters for numerical modelling of AISI 304 machining processes, Journal of Manufacturing Science and Engineering, 2013, vol. 135(5), 051021.
33. Tang B.T., Bruschi S., Ghiotti A., Bariani P.F., Numerical modelling of the tailored tempering process applied to 22MnB5 sheets, Finite Elements in Analysis and Design, 2014, vol. 81, 69-81.
34. Ghiotti A., Bruschi S., Sgarabotto F., Bariani P.F., Tribological performances in Zn-based coating in direct hot stamping, Tribology International, 2014, vol.78, 142-151.
35. Bruschi S., Ghiotti A., Hot stamping, Comprehensive Materials Processing, 2014, vol. 3, 27-54.
36. Bruschi S., Altan T., Banabic D., Bariani P.F., Brosius A., Cao J., Ghiotti A., Khrashieh M., Merklein M., Tekkaya A.E., Testing and modelling of material behaviour and formability in sheet metal forming, CIRP Annals – Manufacturing Technology, 2014, vol. 63/2, 727-749.
37. Tang B.T., Wang Q.L., Bruschi S., Ghiotti A., Bariani P.F., Influence of temperature and deformation on phase transformation and Vickers hardness in tailored tempering process: numerical and experimental verifications, Journal of Manufacturing Science and Engineering, 2014, vol. 136, 051018.
38. Ghiotti A., Bruschi S., Sgarabotto F., Novel experimental set-up to investigate the wear of coatings for sheet metal forming tools, International Journal of Forming Processes, 2014, doi 10.1007/s12289-014-1181-z.
39. Bordin A., Bruschi S., Ghiotti A., Bariani P.F., Analysis of tool wear in cryogenic machining of additive manufactured Ti6Al4V alloy, Wear, 2015, vol. 328-329, 89-99.

40. Ghiotti A., Bruschi S., Medea F., (2015) Comparison of tribological and wear performances of AlSi and Zn coatings in hot stamping of boron steel sheets, Wear, vol. 332-333, 810-821.
41. Novella M.F., Ghiotti A., Bruschi S., Bariani P.F., Ductile damage modelling at elevated temperature applied to the cross-wedge rolling of AA6082-T6 bars, Journal of Materials Processing Technology, vol. 222, 259-267.
42. Merklein M, Wieland M, Lechner M, Bruschi S, Ghiotti A (2016) Hot stamping of boron steel sheets with tailored properties: a review. Journal of Materials Processing Technology, 228 pp. 11-24
43. Tang BT, Bruschi S, Ghiotti A, Bariani PF (2016) An improved damage evolution model to predict fracture of steel sheets at elevated temperature. Journal of Materials Processing Technology, 228 pp. 76-87
44. Bruschi S, Buffa G, Ducato A, Fratini L, Ghiotti A (2015) Phase evolution in hot forging of dual phase titanium alloys: experiments and numerical analysis. Journal of Manufacturing Processes, 20 pp. 382-388.
45. Ghiotti A, Bruschi S, Medea F (2015) Comparison of tribological and wear performances of AlSi and Zn coatings in hot stamping of boron steel sheets. Wear, 332-333 pp. 810-821.
46. Merklein M, Wieland M, Lechner M, Bruschi S, Ghiotti A (2016) Hot stamping of boron steel sheets with tailored properties: a review. Journal of Materials Processing Technology, 228 pp. 11-24.
47. Tang BT, Bruschi S, Ghiotti A, Bariani PF (2016) An improved damage evolution model to predict fracture of steel sheets at elevated temperature. Journal of Materials Processing Technology, 228 pp. 76-87
48. Ghiotti A, Bruschi S, Medea F, Hamasalid A (2016) Tribological behaviour of high thermal conductivity steels for hot stamping tools. Tribology International, 97 pp. 412-422.
49. Hassani FZ, Ketabchi M, Ebrahimi GR, Bruschi S (2016) Hot compression deformation characteristics and microstructural evolution of a Co-Cr-Mo-C alloy: Effect of precipitate and martensitic transformation. Materials Science and Engineering A, 657 pp. 383-392.
50. Hassani FZ, Ketabchi M, Bruschi S, Ghiotti A (2016) Effect of carbide precipitation on the microstructural and tribological properties of Co-Cr-Mo-C medical implants after thermal treatment. Journal of Materials Science, 51/9 pp. 4495-4509.
51. Bressan JD, Bruschi S, Ghiotti A (2016) Prediction of limit strains in hot forming of aluminium alloy sheets. International Journal of Mechanical Sciences 115-116, pp. 702-710.
52. Bruschi S, Bertolini R, Bordin A, Medea F, Ghiotti A (2016) Influence of the machining parameters and cooling strategies on the wear behaviour of wrought and additive manufactured Ti6Al4V for biomedical applications. Tribology International, 102, pp. 133-142.
53. Valoppi B, Sanchez A, Zhang Z, Rojas H, Ghiotti A, Bruschi S, Cao J (2016) A hybrid mixed double-sided incremental forming method for forming Ti6Al4V alloy. CIRP Annals – Manufacturing Technology, article in press.
54. Bruschi S, Rysava Z, Tristo G, Umbrello D, De Chiffre L, Bariani PF (2016) Environmentally clean micromilling of electron beam melted Ti6Al4V. Journal of Cleaner Production, 133, pp. 932-941.
55. Sartori S, Moro L, Ghiotti A, Bruschi S (2016) On the tool wear mechanisms in dry and cryogenic turning Additive Manufactured titanium alloys. Tribology International, 105, pp. 264-273.
56. Valoppi B, Ghiotti A, Bruschi S (2017) Elevated temperature behaviour of Ti6Al4V sheets with thermo-electro-chemical modified surfaces for biomedical applications, Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials Design and Applications 231 (6), pp. 523-533.

57. Bertolini R, Bordin A, Bruschi S, Ghiotti A, Pezzato L, Dabalà M (2017) Fretting Corrosion Behavior of Additive Manufactured and Cryogenic-Machined Ti6Al4V for Biomedical Applications. Advanced Engineering Materials 19(6) e201500629.
58. Umbrello D, Bordin A, Imbrogno S, Bruschi S (2017) 3D finite element modelling of surface modification in dry and cryogenic machining of EBM Ti6Al4V alloy. CIRP Journal of Manufacturing Science and Technology 18, pp. 92-100.
59. Bordin A, Sartori S, Ghiotti A, Bruschi S (2017) Experimental investigation on the feasibility of dry and cryogenic machining as sustainable strategies when turning Ti6Al4V produced by Additive Manufacturing. Journal of Cleaner Production 142, pp. 4142-4151.
60. Breda M, Calliari I, Bruschi S, Forzan M, Ghiotti A, Michieletto F, Spezzapria M, Gennari C (2017) Influence of stacking fault energy in electrically assisted uniaxial tension of FCC metals. Materials Science and Technology 33/3, pp. 317-325.
61. Valoppi B, Bruschi S, Ghiotti A, Shivpuri R (2017) Johnson-Cook based criterion incorporating stress triaxiality and deviatoric effect for predicting elevated temperature ductility of titanium alloy sheets. International Journal of Mechanical Sciences 123, pp.94-105.
62. Sartori A, Ghiotti A, Bruschi S (2017) Hybrid lubricating/cooling strategies to reduce the tool wear in finishing turning of difficult-to-cut alloys. Wear 376-377, pp. 107-114.
63. Ghiotti A, Bruschi S, Medea F (2017) Wear onset in hot stamping of aluminium alloy sheets. Wear 376-377, pp. 484-495.
64. Spezzapria M, Settimi AG, Pezzato L, Novella M, Forza M, Dughiero F, Bruschi S, Ghiotti A, Brunelli K, Dabalà M (2017) Effect of prior microstructure and heating rate on the austenitization kinetics of 39NiCrMo3 steel. Steel Research International 88/5, article number 1600267.
65. Sadeghpour S, Abbasi SM, Morakabati M, Bruschi S (2017) Correlation between alpha morphology and tensile properties of a new beta titanium alloy. Materials & Design 121, pp. 24-35.
66. Ghiotti A, Simonetto E, Bruschi S, Bariani PF (2017) Springback measurement in three roll push bending process of hollow structural sections. CIRP Annals – Manufacturing Technology 66/1, pp. 289-292.
67. Mori K, Bariani PF, Behrens BA, Brosius A, Bruschi S, Maeno T, Merklein M, Yanagimoto J (2017) Hot stamping of ultra-high strength steel parts. CIRP Annals – Manufacturing Technology 66/2, pp. 755-777.
68. Bertolini R, Bruschi S, Ghiotti A, Pezzato L, Dabalà M (2017) Influence of the machining cooling strategies on the dental tribocorrosion behaviour of wrought and additive manufactured Ti6Al4V. Biotribology 11, pp. 60-68.
69. Bruschi S, Bertolini R, Ghiotti A (2017) Coupling machining and heat treatment to enhance wear behaviour of an Additive Manufactured Ti6Al4V titanium alloy. Tribology International 116, pp. 58-68.
70. Sartori S, Ghiotti A, Bruschi S (2017) Temperature effects on the Ti6Al4V machinability using cooled gaseous nitrogen in semi-finishing turning. Journal of Manufacturing Processes 30, pp. 187-194.
71. Bruschi S, Bertolini R, Ghiotti A, Savio E, Guo W, Shivpuri R (2018) Machining-induced surface transformations of magnesium alloys to enhance corrosion resistance in human-like environment. CIRP Annals – Manufacturing Technology 67/1, pp. 579-582.
72. Ghiotti A, Bruschi S, Simonetto E, Gennari C, Calliari I, Bariani PF (2018) Electroplastic effect on AA10150 aluminium alloy formability. CIRP Annals – Manufacturing Technology 67/1, pp. 289-292.
73. Bruschi S, Bertolini R, Medeossi F, Ghiotti A, Savio E, Shivpuri R (2018) Case study: the application of machining-conditioning to improve wear resistance of Ti6Al4V surfaces for human hip implants. Wear 394-395, pp. 134-142.

74. Sartori S, Ghiotti A, Bruschi S (2018) Solid-assisted minimum quantity lubrication and cooling strategies to imprve Ti6Al4V machinability in finish turning. Tribology International 118, pp. 287-294.
75. Sartori S, Taccin M, Pavese G, Ghiotti A, Bruschi S (2018) Wear mechanisms of uncoated and coated carbide tools when machining Ti6Al4V using LN2 and cooled N2. International Journal of Advanced Manufacturing 95 (1-4), pp. 1255-1264.
76. Roohi A-H, Moslemi Naeni H, Hoseinpour Gollo M, Soltanpour M, Ghiotti A, Bruschi S (2018) Forming of closed-cell aluminium foams under thermal loadings: experimental investigation. International Journal of Advanced Manufacturing 95 (9-12), pp. 3919-3928.
77. Mu Y, Zhou J, Wang B, Wang Q, Ghiotti A, Bruschi S (2018) Numerical simulation of hot stamping by partition heating based on advanced constitutive modelling of 22MnB5 behaviour. Finite Elements in Analysis and Design 147, pp. 34-44.
78. Sartori S, Pezzato L, Dabalà M, Maurizi Enrici T, Mertens A, Ghiotti A, Bruschi S (2018) Surface integrity analysis of Ti6Al4V after semi-finishing turning under low-temperature cooling strategies. Journal of Materials Engineering and Performance 27(9), pp. 4810-4818.
79. Medeossi F, Sorgato M, Bruschi S, Savio E (2018) Novel method for burrs quantitative evaluation in micro-milling. Precision Engineering 54, pp. 379-387.
80. Simonetto E, Venturato G, Ghiotti A, Bruschi S (2018) Modelling of hot rotary draw bending for thin-walled titanium alloy tubes. International Journal of Mechanical Sciences 148, pp. 698-706.
81. Wang Q, Bruschi S, Ghiotti A, Mu Y (2019) Modelling of fracture occurrence in Ti6Al4V sheets at elevated temperature accounting for anisotropic behaviour. International Journal of Mechanical Sciences 150, pp. 471-483.
82. Hassani FZ, Ketabchi M, Zangeneh S, Bruschi S (2019) Grain refinement of Co-Cr-Mo through plastic deformation followed by reversion of lamellar eutectoid structure. Journal of Materials Engineering and Performance 28(2), pp. 1112-1121.
83. Bruschi S, Pezzato L, Ghiotti A, Dabalà M, Bertolini R (2019) Effectiveness of using low-temperature coolants in machining to enhance durability of AISI 316L stainless steel for reusable biomedical devices. Journal of Manufacturing Processes 39, pp. 295-304.
84. Biasetto L, Bertolini R, Elsayed H, Ghiotti A, Bruschi S (2019) Use of cryogenic machining to improve the adhesion of sphene bioceramic coatings on titanium substrates for dental and orthopedic applications. Ceramics International 45(5), pp. 5941-5951.
85. Ghiotti A, Simonetto E, Bruschi S (2019) Influence of process parameters on tribological behaviour of AA7075 in hot stamping. Wear 426-427, pp. 348-356.
86. Guo W, Pezi Z, Sang X, Poplawski JD, Bruschi S, Qu J, Raabe D, Bei H (2019) Shape-preserving machining produces gradient nanlaminate medium entropy alloys with high strain-rate capability. Acta Materialia 170, pp. 176-186.
87. Bertolini R, Lizzul L, Pezzato L, Ghiotti a, Bruschi S (2019) Improving surface integrity and corrosion resistance of additive manufactured Ti6Al4V alloy by cryogenic machining. International Journal of Advanced Manufacturing Technology 104 (5-8), pp. 2839-2850.
88. Wang Q, Bertolini R, Ghiotti A, Bruschi S (2019) Anisotropic fracture behaviour of AZ31 magnesium alloy sheets as a function of the stress state and temperature. International Journal of Mechanical Sciences 163, art. N. 105146.
89. Peron M, Bertolini R, Ghiotti A, Torgersen A, Bruschi S, Berto F (2020) Enhancement of stress corrosion cracking of AZ31 magnesium alloy in simulated body fluid thanks to cryogenic machining. Journal of the Mechanical Behavior of Biomedical Materials 101, art. N. 103429.
90. Bressan JD, Wang Q, Simonetto E, Ghiotti A, Bruschi S (2020) Formability prediction of Ti6Al4V titanium alloy sheets deformed at room temperature and 600°C. International Journal of Material Forming 176, https://doi.org/10.1007/s12289-020-01546-z.

91. Ghiotti A, Bruschi S, Bertolini R, Perzynski K, Madej L (2020) Forming of bioabsorbable clips using magnesium alloy strips with enhanced characteristics. CIRP Annals – Manufacturing Technology 69(1), pp. 257-260.
92. Tekkaya AE, Bouschard PO, Bruschi S, Tasan CC (2020) Damage in metal forming. CIRP Annals – Manufacturing Technology 69(2), pp. 600-623.
93. Venturato G, Ghiotti A, Bruschi S (2020) Stress-state dependent formability modelling in hot stamping. Production Engineering 14(1), pp. 105-114.
94. Sorgato M, Bertolini R, Bruschi S (2020) On the correlation between surface quality and tool wear in micro-milling of pure copper. Journal of Manufacturing Processes 50, pp. 547-560.
95. Bertolini R, Bedekar V, Ghiotti A, Savio E, Shivpuri R, Bruschi S (2020) Surface integrity and corrosion performances of hardened bearing steel after hard turning. International Journal of Advanced Manufacturing Technology 107(7-8), pp. 1983-1995.
96. Lizzul L, Sorgato M, Bertolini R, Ghiotti A, Bruschi S (2020) Influence of additive manufacturing-induced anisotropy on tool wear in end milling of Ti6Al4V. Tribology International 146, art. N. 106200.
97. Gong L, Bertolini R, Ghiotti A, He N, Bruschi S (2020) Sustainable turning of Inconel 718 nickel alloy using MQL strategy based on graphene nanofluids. International Journal of Advanced Manufacturing Technology 108(9-10), pp. 3159-3174.
98. Sorgato M, Zanini F, Bertolini R, Ghiotti A, Bruschi S (2020) Improvement of micro-hole precision by ultrasound-assisted drilling of laser powder bed fused Ti6Al4V titanium alloy. Precision Engineering 66, pp. 31-41.
99. Sadeghpour S, Javaheri V, Bruschi S, Komi J, Karjalainen P (2020) Strain rate and mechanical stability in determining deformation behaviour of beta Ti alloys. Materials Science and Engineering A 798, art. N. 140274.
100. Simonetto E, Bertolini R, Ghiotti A, Bruschi S (2020) Mechanical and microstructural behaviour of AA7075 aluminium alloy for sub-zero temperature sheet forming process. International Journal of Mechanical Sciences 187, art. N. 105919.
101. Tang B, Wang Q, Guo N, Li X, Wang Q, Bruschi S, Ghiotti A, Luo Z (2020) Modelling anisotropic ductile fracture behaviour of Ti-6Al-4V titanium alloy for sheet forming applications at room temperature. International Journal of Solids and Structures 207, pp. 178-195.
102. Tang B, Wu F, Guo N, Liu J, Ge H, Bruschi S, Li X (2020) Numerical modelling of ductile fracture of hot stamped 22MnB5 boron steel parts in three-point bending. International Journal of Mechanical Sciences 188, art. N. 105591.
103. Lizzul L, Sorgato M, Bertolini R, Ghiotti A, Bruschi S (2021) Anisotropy effect of additively manufactured Ti6Al4V titanium alloy on surface quality after milling. Precision Engineering 67, pp. 301-310.
104. Dobras D, Bruschi S, Simonetto E, Rutkowaska-gorczyca M, Ghiotti A (2021) The effect of direct electric current on the plastic behaviour of AA7075 aluminium alloy in different states of hardening. Materials 14(1), pp. 1-14.
105. Gong L, Bertolini R, Bruschi S, Ghiotti A, He N (2021) Surface integrity evaluation when turning Inconel 718 using sustainable lubricating-cooling approaches. International Journal of Precision Engineering and Manufacturing, https://doi.org/10.1007/s40684-021-00310-1
106. Sorgato M, Bertolini R, Ghiotti A, Bruschi S (2021) Tool wear analysis in high-frequency vibration-assisted drilling of additive manufactured Ti6Al4V alloy. Wear, volume 477, art. n. 203814.
107. Simonetto E, Ghiotti A, Bruschi S (2021) High accuracy direct hot bending of hollow profiles. Manufacturing Letters 27, pp. 63-66.

108. Bertolini R, Ghiotti a, Bruschi S (2021) Graphene nanoplatelets as additives to MQL for improving tool life in machining Inconel 718 alloy. Wear, volume 477, art. n. 203656.

109. Simonetto E, Ghiotti A, Bruschi S (2021) In-process measurement of springback in tube rotary draw bending. International Journal of Advanced Manufacturing Technology 112(9-10), pp. 2485-2496.

110. Ghiotti A, Simonetto E, Bruschi S, Savio E (2021) Enhancing the accuracy of in-process springback measurement of complex tube bending process using cost-effective embedded sensors. Measurement Science and Technology 32(6), art. n. 064002.

111. Simonetto E, Ghiotti A, Bruschi S (2021) Insights on tube rotary draw bending with superimposed localized thermal field. CIRP Journal of Manufacturing Science and Technology 33, pp. 30-41.