Mc Oliveira

List of Publications by Year
in descending order

155	2,576	236925	254184
papers	citations	25 h-index	43 g-index

157	157	157	1764
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comparison between Berkovich, Vickers and conical indentation tests: A three-dimensional numerical simulation study. International Journal of Solids and Structures, 2009, 46, 1095-1104.	2.7	182
2	Study on the influence of work-hardening modeling in springback prediction. International Journal of Plasticity, 2007, 23, 516-543.	8.8	147
3	Influence of process parameters on the deep drawing of stainless steel. Finite Elements in Analysis and Design, 2007, 43, 1062-1067.	3.2	129
4	Algorithms and Strategies for Treatment of Large Deformation Frictional Contact in the Numerical Simulation of Deep Drawing Process. Archives of Computational Methods in Engineering, 2008, 15, 113-162.	10.2	113
5	A new approach for reverse analyses in depth-sensing indentation using numerical simulation. Acta Materialia, 2007, 55, 69-81.	7.9	99
6	Experimental and numerical studies on the warm deep drawing of an Alâ€“Mg alloy. International Journal of Mechanical Sciences, 2015, 93, 59-72.	6.7	78
7	On the determination of the Youngâ€™s modulus of thin films using indentation tests. International Journal of Solids and Structures, 2007, 44, 8313-8334.	2.7	76
8	Modelling of anisotropic work-hardening behaviour of metallic materials subjected to strain-path changes. Computational Materials Science, 2005, 32, 301-315.	3.0	74
9	Experimental study of friction in sheet metal forming. Wear, 2011, 271, 1651-1657.	3.1	70
10	Effect of anisotropy on the deep-drawing of mild steel and dual-phase steel tailor-welded blanks. Journal of Materials Processing Technology, 2007, 184, 288-293.	6.3	62
11	Deep drawing of aluminiumâ€“steel tailor-welded blanks. Materials & Design, 2008, 29, 154-160.	5.1	56
12	Influence of the plastic anisotropy modelling in the reverse deep drawing process simulation. Materials & Design, 2014, 60, 368-379.	5.1	50
13	Piobertâ€“LÃ¼ders plateau and Portevinâ€“Le Chatelier effect in an Alâ€“Mg alloy in simple shear. Mechanics Research Communications, 2013, 48, 1-7.	1.8	49
14	Influence of ductile interlayers on mechanical behaviour of hard coatings under depth-sensing indentation: a numerical study on TiAlN. Journal of Materials Science, 2010, 45, 3812-3823.	3.7	47
15	Applying Nagata patches to smooth discretized surfaces used in 3D frictional contact problems. Computer Methods in Applied Mechanics and Engineering, 2014, 271, 296-320.	6.6	39
16	Influence of boundary conditions on the prediction of springback and wrinkling in sheet metal forming. International Journal of Mechanical Sciences, 2017, 122, 244-254.	6.7	35
17	Surface Smoothing Procedures in Computational Contact Mechanics. Archives of Computational Methods in Engineering, 2017, 24, 37-87.	10.2	33
18	A new strategy for the simultaneous identification of constitutive laws parameters of metal sheets using a single test. Computational Materials Science, 2014, 85, 102-120.	3.0	32

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19	Improvement of a frictional contact algorithm for strongly curved contact problems. International Journal for Numerical Methods in Engineering, 2003, 58, 2083-2101.	2.8	30
20	Modeling of tensionâ€“compression asymmetry and orthotropy on metallic materials: Numerical implementation and validation. International Journal of Mechanical Sciences, 2016, 114, 217-232.	6.7	30
21	Evaluation of strain and stress states in the single point incremental forming process. International Journal of Advanced Manufacturing Technology, 2016, 85, 521-534.	3.0	29
22	Experimental and numerical study of reverse re-drawing of anisotropic sheet metals. Journal of Materials Processing Technology, 2002, 125-126, 764-771.	6.3	28
23	A new staggered algorithm for thermomechanical coupled problems. International Journal of Solids and Structures, 2017, 122-123, 42-58.	2.7	28
24	Inverse Strategies for Identifying the Parameters of Constitutive Laws of Metal Sheets. Advances in Materials Science and Engineering, 2016, 2016, 1-18.	1.8	27
25	Single and ensemble classifiers for defect prediction in sheet metal forming under variability. Neural Computing and Applications, 2020, 32, 12335-12349.	5.6	27
26	Automatic correction of the time step in implicit simulations of the stamping process. Finite Elements in Analysis and Design, 2004, 40, 1995-2010.	3.2	26
27	Mechanical characterization and constitutive parameter identification of anisotropic tubular materials for hydroforming applications. International Journal of Mechanical Sciences, 2015, 104, 91-103.	6.7	26
28	On the determination of the work hardening curve using the bulge test. International Journal of Mechanical Sciences, 2016, 105, 158-181.	6.7	25
29	Numerical Analysis of Residual Stresses in Parts Produced by Selective Laser Melting Process. Procedia Manufacturing, 2020, 47, 1170-1177.	1.9	25
30	Numerical simulation and analysis on the deep drawing of LPG bottles. Journal of Materials Processing Technology, 2008, 200, 416-423.	6.3	24
31	Numerical analysis of different heating systems for warm sheet metal forming. International Journal of Advanced Manufacturing Technology, 2016, 83, 897-909.	3.0	24
32	Blank design for deep drawn parts using parametric NURBS surfaces. Journal of Materials Processing Technology, 2009, 209, 2402-2411.	6.3	23
33	Numerical study of springback using the split-ring test for an AA5754 aluminum alloy. Finite Elements in Analysis and Design, 2010, 46, 751-759.	3.2	23
34	Nagata patch interpolation using surface normal vectors evaluated from the IGES file. Finite Elements in Analysis and Design, 2013, 72, 35-46.	3.2	22
35	Numerical and experimental analysis of wrinkling during the cup drawing of an AA5042 aluminium alloy. International Journal of Material Forming, 2017, 10, 125-138.	2.0	22
36	Numerical Study on the Formability of Metallic Bipolar Plates for Proton Exchange Membrane (PEM) Fuel Cells. Metals, 2019, 9, 810.	2.3	20

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37	Mechanical Behaviour and Springback Study of an Aluminium Alloy in Warm Forming Conditions. ISRN Mechanical Engineering, 2011, 2011, 1-9.	0.9	19
38	A Simple Method for Estimation of Residual Stresses by Depthâ€Sensing Indentation. Strain, 2012, 48, 75-87.	2.4	19
39	Improving Nagata patch interpolation applied for tool surface description in sheet metal forming simulation. CAD Computer Aided Design, 2013, 45, 639-656.	2.7	19
40	Numerical analysis on the elastic deformation of the tools in sheet metal forming processes. International Journal of Solids and Structures, 2016, 100-101, 270-285.	2.7	19
41	Improving Computational Performance through HPC Techniques: case study using DD3IMP in-house code. , 2011, , .		18
42	A deformation based blank design method for formed parts. International Journal of Mechanics and Materials in Design, 2009, 5, 303-314.	3.0	17
43	Numerical study on the influence of initial anisotropy on optimal blank shape. Finite Elements in Analysis and Design, 2009, 45, 71-80.	3.2	17
44	Analysis of friction in the ejection of thermoplastic mouldings. International Journal of Advanced Manufacturing Technology, 2012, 59, 977-986.	3.0	17
45	Influence of the characteristics of the experimental data set used to identify anisotropy parameters. Simulation Modelling Practice and Theory, 2015, 53, 15-44.	3.8	17
46	A contact smoothing method for arbitrary surface meshes using Nagata patches. Computer Methods in Applied Mechanics and Engineering, 2016, 299, 283-315.	6.6	17
47	Identification of material parameters for thin sheets from single biaxial tensile test using a sequential inverse identification strategy. International Journal of Material Forming, 2016, 9, 547-571.	2.0	17
48	Numerical optimization strategies for springback compensation in sheet metal forming. , 2017, , 51-82.		16
49	Detailed experimental and numerical analysis of a cylindrical cup deep drawing: Pros and cons of using solid-shell elements. International Journal of Material Forming, 2018, 11, 357-373.	2.0	16
50	The influence of warm forming in natural aging and springback of Al-Mg-Si alloys. International Journal of Material Forming, 2019, 12, 57-68.	2.0	16
51	A benchmark for validation of numerical results in sheet metal forming. Journal of Materials Processing Technology, 2004, 155-156, 1980-1985.	6.3	15
52	Study on springback in deep drawn tailor welded blanks. International Journal of Material Forming, 2009, 2, 829-832.	2.0	15
53	On the determination of the film hardness in hard film/substrate composites using depth-sensing indentation. Ceramics International, 2013, 39, 6251-6263.	4.8	15
54	Anisotropy and plastic flow in the circular bulge test. International Journal of Mechanical Sciences, 2017, 128-129, 70-93.	6.7	15

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55	Numerical study on the effect of mechanical properties variability in sheet metal forming processes. International Journal of Advanced Manufacturing Technology, 2018, 96, 561-580.	3.0	14
56	Thermo-mechanical finite element analysis of the AA5086 alloy under warm forming conditions. International Journal of Solids and Structures, 2018, 151, 99-117.	2.7	14
57	Experimental and numerical analysis of the heat generated by plastic deformation in quasi-static uniaxial tensile tests. Mechanics of Materials, 2020, 146, 103398.	3.2	14
58	Sensitivity study on some parameters in blank design. Materials & Design, 2009, 30, 1223-1230.	5.1	13
59	A multidisciplinary framework to support the design of injection mold tools. Structural and Multidisciplinary Optimization, 2014, 49, 501-521.	3.5	13
60	On the equivalence between sets of parameters of the yield criterion and the isotropic and kinematic hardening laws. International Journal of Material Forming, 2015, 8, 505-515.	2.0	13
61	Inverse identification of the Swift law parameters using the bulge test. International Journal of Material Forming, 2017, 10, 493-513.	2.0	13
62	Three-Dimensional Computational Analysis of Stress State Transition in Through-Cracked Plates. Mathematics in Computer Science, 2016, 10, 343-352.	0.4	12
63	Numerical modeling of the thermal contact in metal forming processes. International Journal of Advanced Manufacturing Technology, 2016, 87, 1797-1811.	3.0	12
64	Inverse identification of the work hardening law from circular and elliptical bulge tests. Journal of Materials Processing Technology, 2020, 279, 116573.	6.3	12
65	Performance Comparison of Parametric and Non-Parametric Regression Models for Uncertainty Analysis of Sheet Metal Forming Processes. Metals, 2020, 10, 457.	2.3	12
66	Work Hardening Models and the Numerical Simulation of the Deep Drawing Process. Materials Science Forum, 2004, 455-456, 717-722.	0.3	11
67	Constitutive parameter identification of CB2001 yield function and its experimental verification using tube hydroforming tests. International Journal of Mechanical Sciences, 2020, 185, 105868.	6.7	11
68	Comparing faceted and smoothed tool surface descriptions in sheet metal forming simulation. International Journal of Material Forming, 2015, 8, 549-565.	2.0	10
69	Influence of Portevin-Le Chatelier Effect on Shear Strain Path Reversal in an Al-Mg Alloy at Room and High Temperatures. Experimental Mechanics, 2017, 57, 405-415.	2.0	10
70	Normal stress components during shear tests of metal sheets. International Journal of Mechanical Sciences, 2019, 164, 105169.	6.7	10
71	The punch speed influence on warm forming and springback of two Al-Mg-Si alloys. Journal of Manufacturing Processes, 2019, 38, 266-278.	5.9	10
72	Stochastic analysis of a deep drawing process using finite element simulations. International Journal of Material Forming, 2009, 2, 347-350.	2.0	9

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73	On the identification of kinematic hardening with reverse shear test. Engineering With Computers, 2015, 31, 681-690.	6.1	9
74	Benchmark 2 â€“ Springback of a Jaguar Land Rover Aluminium. Journal of Physics: Conference Series, 2016, 734, 022002.	0.4	9
75	Study on the effect of tension-compression asymmetry on the cylindrical cup forming of an AA2090-T3 alloy. International Journal of Solids and Structures, 2018, 151, 135-144.	2.7	9
76	Modelling and Simulation of Sheet Metal Forming Processes. Metals, 2019, 9, 1356.	2.3	9
77	Influence of the contact with friction on the deformation behavior of advanced high strength steels in the Nakajima test. Journal of Strain Analysis for Engineering Design, 2022, 57, 193-207.	1.8	9
78	Towards standard benchmarks and reference data for validation and improvement of numerical simulation in sheet metal forming. Journal of Materials Processing Technology, 2002, 125-126, 798-805.	6.3	8
79	Study on the Influence of the Refinement of a 3-D Finite Element Mesh in Springback Evaluation of Plane-Strain Channel Sections. AIP Conference Proceedings, 2007, , .	0.4	8
80	Influence of draw restraining force on the springback in advanced high strength steels. International Journal of Material Forming, 2008, 1, 177-180.	2.0	7
81	Numerical study of springback using the split-ring test: influence of the clearance between the die and the punch. International Journal of Material Forming, 2018, 11, 325-337.	2.0	7
82	A Modified Hockett-Sherby Law Enabling the Description of the Thermomechanical Behaviour of the AA6061-T6. Procedia Manufacturing, 2020, 47, 896-903.	1.9	7
83	Drawbeads: to Be or Not to Be. AIP Conference Proceedings, 2005, , .	0.4	6
84	Young's modulus of thin films using depth-sensing indentation. Philosophical Magazine Letters, 2010, 90, 9-22.	1.2	6
85	On the characterization of the plastic anisotropy in orthotropic sheet metals with a cruciform biaxial test. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012142.	0.6	6
86	DD3MAT - a code for yield criteria anisotropy parameters identification.. Journal of Physics: Conference Series, 2016, 734, 032053.	0.4	6
87	Springback Evaluation with Several Phenomenological Yield Criteria. Materials Science Forum, 2004, 455-456, 732-736.	0.3	5
88	Application of the Incremental Volumetric Remapping Method in the Simulation of Multi-Step Deep Drawing Processes. AIP Conference Proceedings, 2005, , .	0.4	5
89	Lightweight metal alloy tailor welded blanks. , 2011, , 97-117.		5
90	Cazacu and Barlat Criterion Identification Using the Cylindrical Cup Deep Drawing Test and the Coupled Artificial Neural Networks â€“ Genetic Algorithm Method. Key Engineering Materials, 2012, 504-506, 637-642.	0.4	5

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91	Earing Prediction in Drawing and Ironing Processes Using an Advanced Yield Criterion. Key Engineering Materials, 0, 554-557, 2266-2276.	0.4	5
92	Trimming of 3D solid finite element meshes: sheet metal forming tests and applications. Engineering With Computers, 2015, 31, 237-257.	6.1	5
93	Corrosion Behaviour of Commercial NdFeB Magnets-The Effect of Magnetization. Key Engineering Materials, 2001, 189-191, 340-345.	0.4	4
94	Local Interpolation for Tools Surface Description. , 2010, , .		4
95	Sensitivity Analysis of Process Parameters in the Drawing and Ironing Processes. Key Engineering Materials, 0, 554-557, 2256-2265.	0.4	4
96	Natural aging effect on the forming behavior of a cylindrical cup with an Al-Mg-Si alloy. AIP Conference Proceedings, 2016, , .	0.4	4
97	Analytical sensitivity matrix for the inverse identification of hardening parameters of metal sheets. European Journal of Mechanics, A/Solids, 2019, 75, 205-215.	3.7	4
98	Evaluation of the stress vs strain curve using a high temperature bulge test device. IOP Conference Series: Materials Science and Engineering, 2019, 651, 012048.	0.6	4
99	Effect of yield stress on fatigue crack growth. Frattura Ed Integrita Strutturale, 2019, 13, 9-19.	0.9	4
100	An advanced constitutive model in the sheet metal forming simulation: the Teodosiu microstructural model and the Cazacu Barlat yield criterion. AIP Conference Proceedings, 2004, , .	0.4	3
101	How to Combine the Parameters of the Yield Criteria and the Hardening Law. Key Engineering Materials, 0, 554-557, 1195-1202.	0.4	3
102	On the influence of the yield parameters identification procedure in cylindrical cups earing prediction. , 2013, , .		3
103	Prediction of wrinkling and springback in sheet metal forming. MATEC Web of Conferences, 2016, 80, 03005.	0.2	3
104	The role of tension-compression asymmetry of the plastic flow on ductility and damage accumulation of porous polycrystals. CiÃªncia & Tecnologia Dos Materiais, 2017, 29, e234-e238.	0.5	3
105	Study of the frictional contact conditions in the hole expansion test. Journal of Physics: Conference Series, 2018, 1063, 012139.	0.4	3
106	Comparing metamodeling techniques for variability analysis in sheet metal forming processes. AIP Conference Proceedings, 2019, , .	0.4	3
107	Study on the influence of the yield surface shape in the hole expansion test. IOP Conference Series: Materials Science and Engineering, 2020, 967, 012085.	0.6	3
108	On the effect of the ratio between the yield stresses in shear and in uniaxial tension on forming of isotropic materials. Mechanics Research Communications, 2021, 114, 103693.	1.8	3

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109	Local bifurcation and instability theory applied to formability analysis. International Journal of Material Forming, 2011, 4, 347-356.	2.0	2
110	Finite Element Analysis of the Amontons-Coulombâ€™s Model using Local and Global Friction Tests. AIP Conference Proceedings, 2011, , .	0.4	2
111	Study on the influence of orthotropy and tensionâ€“compression asymmetry of metal sheets in springback and formability predictions. Journal of Physics: Conference Series, 2018, 1063, 012053.	0.4	2
112	Thermomechanical analysis of the draw bead test. Advances in Materials and Processing Technologies, 2019, 5, 401-417.	1.4	2
113	Numerical Study on the Forming Behaviour of Multilayer Sheets. Metals, 2020, 10, 716.	2.3	2
114	EARING EVOLUTION DURING DRAWING AND IRONING PROCESSES. , 0, , .		2
115	FEA OF FRICTIONAL CONTACT PROBLEMS USING NAGATA PATCHES FOR SURFACES DESCRIPTION. , 0, , .		2
116	Reverse Deep Drawing: Experimental and Numerical Simulation Results. Key Engineering Materials, 2002, 230-232, 541-544.	0.4	1
117	Numerical Analysis on the Effects of the Friction Coefficient on the Deep Drawing of a Rail. Materials Science Forum, 2004, 455-456, 737-741.	0.3	1
118	Study on the Influence of the Work Hardening Models Constitutive Parameters Identification in the Springback Prediction. AIP Conference Proceedings, 2005, , .	0.4	1
119	Kinematic Hardening: Characterization, Modeling and Impact on Springback Prediction. AIP Conference Proceedings, 2007, , .	0.4	1
120	Incremental Volumetric Remapping Method: Analysis and Error Evaluation. AIP Conference Proceedings, 2007, , .	0.4	1
121	The Influence of the Substrate on the Mechanical Properties of Si-Doped DLC Thin Films. Materials Science Forum, 2008, 587-588, 839-843.	0.3	1
122	Local Bifurcation and Instability Theory Applied to Formability Analysis. , 2010, , .		1
123	Finite Element Analysis on the Influence of Material Mechanical Properties in Local Contact Conditions. International Journal of Material Forming, 2010, 3, 139-142.	2.0	1
124	A Numerical Study on the Mechanical Behaviour of Hard Coatings with Ductile Interlayers under Depth-Sensing Indentation. Materials Science Forum, 2010, 636-637, 1194-1198.	0.3	1
125	Pre-strain effect on springback of 2D draw bending. International Journal of Materials Engineering Innovation, 2013, 4, 187.	0.5	1
126	Applying Nagata Patches in the Description of Smooth Tool Surfaces Used in Sheet Metal Forming Simulations. Key Engineering Materials, 0, 554-557, 2277-2284.	0.4	1

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127	Inverse analysis methodology on metal sheets for constitutive parameters identification. International Journal of Materials Engineering Innovation, 2013, 4, 101.	0.5	1
128	Sensitivity Analysis for Numerical Sheet Metal Forming Processes. Key Engineering Materials, 2015, 651-653, 1369-1374.	0.4	1
129	Tension-compression asymmetry modelling: strategies for anisotropy parameters identification.. MATEC Web of Conferences, 2016, 80, 05002.	0.2	1
130	A staggered coupling strategy for the finite element analysis of warm deep drawing process. Journal of Physics: Conference Series, 2016, 734, 032033.	0.4	1
131	Remapping algorithms: application to trimming operations in sheet metal forming. Journal of Physics: Conference Series, 2016, 734, 032046.	0.4	1
132	Incremental volumetric and Dual Kriging remapping methods. Finite Elements in Analysis and Design, 2018, 139, 35-48.	3.2	1
133	Temperature analysis during the drawing of an aluminum cylindrical cup. Journal of Physics: Conference Series, 2018, 1063, 012137.	0.4	1
134	The influence of warm forming conditions on the natural aging and springback of a 6016-T4 aluminum alloy. IOP Conference Series: Materials Science and Engineering, 2018, 418, 012020.	0.6	1
135	Influence of the characteristics of the 3D FE mesh on the evolution of variables used to characterize the stress state. AIP Conference Proceedings, 2019, , .	0.4	1
136	Issues on the Correlation between Experimental and Numerical Results in Sheet Metal Forming Benchmarks. Metals, 2020, 10, 1595.	2.3	1
137	Numerical analysis of the bulge test in temperature for the EN AW 6061-T6 sheet. IOP Conference Series: Materials Science and Engineering, 2020, 967, 012024.	0.6	1
138	Optimizing the Description of Forming Tools with BÃ©zier Surfaces in the Numerical Simulation of the Deep Drawing Process. , 2006, , 332-332.		1
139	Numerical Simulation of the Deep Drawing Process: Modelling the Blank Holder. AIP Conference Proceedings, 2004, , .	0.4	0
140	Evolutional Friction Law in the Numerical Simulation of the Deep Drawing of a Rail. Materials Science Forum, 2006, 514-516, 1443-1447.	0.3	0
141	Influence of Anisotropy Properties in Finite Element Optimization of Blank Shape Using NURBS Surfaces. AIP Conference Proceedings, 2007, , .	0.4	0
142	Influence of Drawbeads in Deep-Drawing of Plane-Strain Channel Sections: Experimental and FE Analysis. AIP Conference Proceedings, 2007, , .	0.4	0
143	Finite element analysis of the influence of the restraining force in the draw bend test. International Journal of Material Forming, 2010, 3, 143-146.	2.0	0
144	Numerical Study of Mechanical Behaviour of Heterogeneous Materials. Materials Science Forum, 2012, 730-732, 549-554.	0.3	0

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145	Automatic correction of the time step in implicit simulations of thermomechanical problems. MATEC Web of Conferences, 2016, 80, 07002.	0.2	0
146	On the impact of modelling tension-compression asymmetry on earing and thickness predictions. Advances in Materials and Processing Technologies, 2019, 5, 445-460.	1.4	0
147	The role of viscoelasticity in the mechanical modelling of rubbers. AIP Conference Proceedings, 2019, , .	0.4	0
148	Heat generation when forming AHSS: experimental and numerical analysis of tensile and draw-bead tests. IOP Conference Series: Materials Science and Engineering, 2020, 967, 012086.	0.6	0
149	Study on the influence of the strain rate sensitivity on the springback of the AA5086 alloy under warm forming conditions. IOP Conference Series: Materials Science and Engineering, 2021, 1157, 012043.	0.6	0
150	Influence of the orthotropic behaviour on defects prediction in cup drawing, reverse redrawing and expansion. IOP Conference Series: Materials Science and Engineering, 2021, 1157, 012072.	0.6	0
151	The Effect of Vacancy Defects on the Evaluation of the Mechanical Properties of Single-Wall Carbon Nanotubes: Numerical Simulation Study. Advanced Structured Materials, 2015, , 323-339.	0.5	0
152	Machine Learning for the Prediction of Edge Cracking in Sheet Metal Forming Processes. Management and Industrial Engineering, 2022, , 127-144.	0.4	0
153	Hot tensile and expansion tests of DuctiborÂ®1000 steel. IOP Conference Series: Materials Science and Engineering, 2022, 1238, 012054.	0.6	0
154	Evaluating the influence of the deformation of the forming tools in the thickness distribution along the wall of a cylindrical cup. IOP Conference Series: Materials Science and Engineering, 2022, 1238, 012079.	0.6	0
155	Assessment of Work-Hardening Behavior of Sheet Metal Materials Using Meso- and Macro-Scale Specimens. , 0, , .		0