Till Clausmeyer

List of Publications by Citations

55 papers	465 citations	12 h-index	20 g-index
58 ext. papers	620 ext. citations	2.1 avg, IF	4.2 L-index

#	Paper	IF	Citations
55	Modeling of ductile fracture from shear to balanced biaxial tension for sheet metals. *International Journal of Solids and Structures*, **2017**, 112, 169-184	3.1	114
54	Experimental characterization and modeling of the hardening behavior of the sheet steel LH800. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2010**, 527, 2515-2526	5.3	32
53	Damage Mechanisms and Mechanical Properties of High-Strength Multiphase Steels. *Materials*, **2018**, 11,	3.5	31
52	Modeling and finite element simulation of loading-path-dependent hardening in sheet metals during forming. *International Journal of Plasticity*, **2014**, 63, 64-93	7.6	23
51	Shifting value stream patterns along the product lifecycle with digital twins. *Procedia CIRP*, **2019**, 86, 3-11	1.8	21
50	Investigation of evolving yield surfaces of dual-phase steels. *Journal of Materials Processing Technology*, **2021**, 287, 116314	5.3	20
49	Evaluation of Void Nucleation and Development during Plastic Deformation of Dual-Phase Steel DP600. *Steel Research International*, **2016**, 87, 1583-1591	1.6	19
48	Phenomenological modeling of anisotropy induced by evolution of the dislocation structure on the macroscopic and microscopic scale. *International Journal of Material Forming*, **2011**, 4, 141-154	2	17
47	Influence of manufacturing processes on material characterization with the grooved in-plane torsion test. *International Journal of Mechanical Sciences*, **2018**, 146-147, 544-555	5.5	15
46	Material characterization for plane and curved sheets using the in-plane torsion test – An overview. *Journal of Materials Processing Technology*, **2018**, 257, 278-287	5.3	14
45	Methods for measuring large shear strains in in-plane torsion tests. *Journal of Materials Processing Technology*, **2021**, 287, 116516	5.3	14
44	Experimental characterization of microstructure development during loading path changes in bcc sheet steels. *Journal of Materials Science*, **2013**, 48, 674-689	4.3	13
43	Analysis of shear cutting of dual phase steel by application of an advanced damage model. *Procedia Structural Integrity*, **2016**, 2, 1700-1707	1	11
42	Investigations of ductile damage during the process chains of toothed functional components manufactured by sheet-bulk metal forming. *Production Engineering*, **2016**, 10, 5-15	1.9	10
41	Adiabatic blanking of advanced high-strength steels. *CIRP Annals - Manufacturing Technology*, **2020**, 69, 269-272	4.9	9
40	Comparison of two models for anisotropic hardening and yield surface evolution in bcc sheet steels. *European Journal of Mechanics, A/Solids*, **2015**, 54, 120-131	3.7	7
39	Enhancement of Lemaitre Model to Predict Cracks at Low and Negative Triaxialities in Sheet Metal Forming. *Key Engineering Materials*, **2015**, 639, 427-434	0.4	7

38	Modelling of the blanking process of high-carbon steel using Lemaitre damage model. *Comptes Rendus - Mecanique*, **2018**, 346, 770-778	2.1	7
37	Investigations of ductile damage in DP600 and DC04 deep drawing steel sheets during punching. *Procedia Structural Integrity*, **2016**, 2, 673-680	1	6
36	Failure assessment in sheet metal forming using a phenomenological damage model and fracture criterion: experiments, parameter identification and validation. *Procedia Engineering*, **2017**, 207, 2066-2071		6
35	Prediction and analysis of damage evolution during caliber rolling and subsequent cold forward extrusion. *Production Engineering*, **2020**, 14, 33-41	1.9	6
34	On mesh dependencies in finite-element-based damage prediction: application to sheet metal bending. *Production Engineering*, **2020**, 14, 123-134	1.9	6
33	High temperature and dynamic testing of AHSS for an analytical description of the adiabatic cutting process. *IOP Conference Series: Materials Science and Engineering*, **2017**, 181, 012026	0.4	5
32	Experimental analysis of anisotropic damage in dual-phase steel by resonance measurement. *International Journal of Damage Mechanics*, **2017**, 26, 1147-1169	3	4
31	Numerical Investigation of Damage in Single-step, Two-step, and Reverse Deep Drawing of Rotationally Symmetric Cups from DP800 Dual Phase Steel. *Procedia Manufacturing*, **2020**, 47, 636-642	1.5	4
30	Damage characterization of high-strength multiphase steels. *IOP Conference Series: Materials Science and Engineering*, **2016**, 159, 012013	0.4	4
29	Material characterization for plane and curved sheets using the in-plane torsion test – an overview. *Procedia Engineering*, **2017**, 207, 1934-1939		4
28	Prediction of Ductile Damage in the Process Chain of Caliber Rolling and Forward Rod Extrusion. *Procedia Manufacturing*, **2020**, 47, 649-655	1.5	3
27	Stress state dependency of unloading behavior in high strength steels. *Procedia Engineering*, **2017**, 207, 179-184		3
26	Experimental setup to characterize flow-induced anisotropy of sheet metals. *IOP Conference Series: Materials Science and Engineering*, **2018**, 418, 012085	0.4	3
25	Influence of cutting tool stiffness on edge formability. *IOP Conference Series: Materials Science and Engineering*, **2018**, 418, 012061	0.4	3
24	Large strain flow curve identification for sheet metals under complex stress states. *Mechanics of Materials*, **2021**, 161, 103997	3.3	3
23	Effect of plastic strain and ductile damage on elastic modulus of multiphase steel and its impact on springback prediction **2019**,		2
22	Influence of Different Yield Loci on Failure Prediction with Damage Models. *Journal of Physics: Conference Series*, **2017**, 896, 012081	0.3	2
21	Microstructural characterization and simulation of damage for geared sheet components. *Journal of Physics: Conference Series*, **2017**, 896, 012076	0.3	2

20	Comparison of two models for anisotropic hardening evolution in metals during complex loading. *International Journal of Material Forming*, **2009**, 2, 395-398	2	2
19	Evaluation of micro-damage by acoustic methods. *Procedia Manufacturing*, **2018**, 15, 527-534	1.5	2
18	Characterization of plasticity and fracture of an QP1180 steel sheet. *Procedia Manufacturing*, **2020**, 50, 529-534	1.5	1
17	Testing of Formed Gear Wheels at Quasi-Static and Elevated Strain Rates. *Procedia Manufacturing*, **2020**, 47, 623-628	1.5	1
16	Micromechanical Modeling of DP600 steel: From Microstructure to The Sheet Metal Forming Process. *Procedia Manufacturing*, **2020**, 47, 1540-1547	1.5	1
15	Numerical investigation of blanking for metal polymer sandwich sheets. *MATEC Web of Conferences* , **2016**, 80, 16002	0.3	1
14	Macroscopic modeling of material interfaces based on atomistic descriptions. *Proceedings in Applied Mathematics and Mechanics*, **2014**, 14, 361-362	0.2	1
13	Characterization of Flow Induced Anisotropy in Sheet Metal at Large Strain. *Experimental Mechanics*,1	2.6	1
12	ADAPT □A Diversely Applicable Parameter Identification Tool: Overview and full-field application examples. *International Journal of Mechanical Sciences*, **2022**, 213, 106840	5.5	1
11	Analytical model of the in-plane torsion test. *Acta Mechanica*, **2022**, 233, 641	2.1	0
10	Estimation and Prevention of Strain Localization in Shear Tests. *Minerals, Metals and Materials Series*, **2021**, 691-707	0.3	0
9	Strain hardening under large deformation for AA5182. *IOP Conference Series: Materials Science and Engineering*, **2020**, 967, 012030	0.4	
8	Determination of average dislocation densities in metals by analysis of digitally processed transmission-electron microscopy images. *Materialwissenschaft Und Werkstofftechnik*, **2013**, 44, 541-546	0.9	
7	Formulation and application of models for anisotropic hardening in sheet metals subject to complex loading-path changes. *Proceedings in Applied Mathematics and Mechanics*, **2009**, 9, 329-330	0.2	
6	Modeling Induced Flow Anisotropy and Phase Transformations in Air Hardening Steels. *Key Engineering Materials*, **2012**, 504-506, 443-448	0.4	
5	Analysis of Path-Dependent Damage and Microstructure Evolution for Numerical Analysis of Sheet-Bulk Metal Forming Processes. *Lecture Notes in Production Engineering*, **2021**, 378-411	0	
4	Analysis of Dislocation Structures in Ferritic and Dual Phase Steels Regarding Continuous and Discontinuous Loading Paths. *Minerals, Metals and Materials Series*, **2017**, 203-210	0.3	
3	Influence of anisotropic damage evolution on cold forging. *Production Engineering*, **2020**, 14, 115-121	1.9	

2	Cyclic Loading Tests Based on the In-Plane Torsion Test for Sheet Metal. *Minerals, Metals and Materials Series*, **2021**, 635-645	0.3
1	Combined Computed Tomography and Numerical Modeling for the Analysis of Bending of Additively Manufactured Cellular Sheets. *Minerals, Metals and Materials Series*, **2021**, 2099-2113	0.3