Jens SÃ¶lter

List of Publications by Year
in descending order

52 papers	727 citations	623734 14 h-index	552781 26 g-index
53 all docs	53 docs citations	53 times ranked	358 citing authors

#	Article	IF	Citations
1	Partitioning of primary shear zone heat in face milling. CIRP Annals - Manufacturing Technology, 2022, 71, 53-56.	3.6	1
2	Efficient two-scale FE-FFT-based mechanical process simulation of elasto-viscoplastic polycrystals at finite strains. Computer Methods in Applied Mechanics and Engineering, 2021, 374, 113566.	6.6	14
3	Finite element simulation of low frequency vibration-assisted drilling with modification of oscillation modes. Procedia CIRP, 2021, 102, 168-173.	1.9	3
4	Combined laser and deep rolling process as a means to study thermo-mechanical processes. Procedia CIRP, 2021, 102, 369-374.	1.9	1
5	Modelling and Simulation of Mechanical Loads and Residual Stresses in Deep Rolling at Elevated Temperature. Journal of Manufacturing and Materials Processing, 2021, 5, 76.	2.2	1
6	Modification of the Johnsonâ€“Cook Material Model for Improved Simulation of Hard Milling High-Performance Steel Components. Applied Mechanics, 2021, 2, 571-580.	1.5	0
7	Analysis of internal material loads and Process Signature Components in deep rolling. CIRP Journal of Manufacturing Science and Technology, 2021, 35, 400-409.	4.5	11
8	Comparison of Process Signatures for thermally dominated processes. CIRP Journal of Manufacturing Science and Technology, 2021, 35, 217-235.	4.5	4
9	Numerical investigation of the influence of multiple loads on material modifications during hard milling. Procedia CIRP, 2021, 102, 500-505.	1.9	3
10	Wechselverfestigung beim FrÃsen von Stahl/Kinematic hardening in steel 42CrMo4. WT Werkstattstechnik, 2021, 111, 612-616.	0.2	0
11	Influence of the workpiece material on the cutting performance in low frequency vibration assisted drilling. CIRP Journal of Manufacturing Science and Technology, 2020, 31, 140-152.	4.5	11
12	Partition of Primary Shear Plane Heat in Orthogonal Metal Cutting. Journal of Manufacturing and Materials Processing, 2020, 4, 82.	2.2	4
13	A simulation-based analysis of internal material loads and material modifications in multi-step deep rolling. Procedia CIRP, 2020, 87, 515-520.	1.9	5
14	Finite element simulations of the material loads and residual stresses in milling utilizing the CEL method. Procedia CIRP, 2020, 87, 539-544.	1.9	30
15	A Three Dimensional Calculation Approach for the Heat Flux Density Distribution in Face Milling. Procedia CIRP, 2019, 82, 8-13.	1.9	2
16	A Comparative Study of the Influence of the Strain-Hardening in Chip Formation Simulations using Different Software Packages. Procedia CIRP, 2019, 82, 43-46.	1.9	3
17	Heat Partitioning in Dry Milling. , 2019, , 864-868.		0
18	Process Signatures - The Missing Link to Predict Surface Integrity in Machining. Procedia CIRP, 2018, 71, 3-10.	1.9	57

#	Article	IF	Citations
19	Underlying Mechanisms for Developing Process Signatures in Manufacturing. Nanomanufacturing and Metrology, 2018, 1, 193-208.	3.0	39
20	Heat Partitioning in Dry Milling. , 2018, , 1-5.		0
21	An analytical multilayer source stress approach for the modelling of material modifications in machining. CIRP Annals - Manufacturing Technology, 2017, 66, 531-534.	3.6	6
22	Effects of Model Reduction on Simulated Temperature Fields in Milling. Procedia CIRP, 2017, 58, 511-516.	1.9	2
23	Experimental and Numerical Analysis of Residual Stress Change Caused by Thermal Loads During Grinding. Procedia CIRP, 2016, 45, 51-54.	1.9	22
24	A Simulation Based Development of Process Signatures for Manufacturing Processes with Thermal Loads. Procedia CIRP, 2016, 45, 327-330.	1.9	15
25	Development of a hybrid model for the prediction of shape deviations in milling. Materialwissenschaft Und Werkstofftechnik, 2016, 47, 718-725.	0.9	1
26	Analysis of the distortion and compensation potential in grindâ€hardening of linear guides. Materialwissenschaft Und Werkstofftechnik, 2016, 47, 726-734.	0.9	2
27	Development and Validation of a Hybrid Model for the Prediction of Shape Deviations in dry Machining Processes. Procedia CIRP, 2015, 31, 346-351.	1.9	6
28	Enhanced method for the evaluation of the thermal impact of dry machining processes. Production Engineering, 2014, 8, 291-300.	2.3	8
29	Process Signatures â€“ A New Approach to Solve the Inverse Surface Integrity Problem in Machining Processes. Procedia CIRP, 2014, 13, 429-434.	1.9	119
30	A Versatile Method to Determine Thermal Limits in Grinding. Procedia CIRP, 2014, 13, 131-136.	1.9	25
31	Heat Partitioning in Dry Milling. , 2014, , 627-632.		0
32	Prediction of Shape Deviations in Face Milling of Steel. Procedia CIRP, 2013, 8, 15-20.	1.9	28
33	Heat partitioning in dry milling of steel. CIRP Annals - Manufacturing Technology, 2012, 61, 87-90.	3.6	55
34	Relationship between strain distributions and shape deviations of rings caused in clamping. Materialwissenschaft Und Werkstofftechnik, 2012, 43, 23-28.	0.9	3
35	Modellentwicklung zur Minimierung von Geometrieabweichungen. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2012, 107, 224-228.	0.3	3
36	Influence of the turning process on the distortion of disks for gear manufacture. Production Engineering, 2011, 5, 613-620.	2.3	5

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37	Distortion minimization of disks for gear manufacture. International Journal of Machine Tools and Manufacture, 2011, 51, 331-338.	13.4	46
38	INFLUENCE OF CLAMPING STRATEGIES ON ROUNDNESS DEVIATIONS OF TURNED RINGS. Machining Science and Technology, 2011, 15, 338-355.	2.5	4
39	Residual Stresses in High Speed Turning of Thin-Walled Cylindrical Workpieces. International Journal of Automation Technology, 2011, 5, 313-319.	1.0	10
40	Identification of process parameters affecting distortion of disks for gear manufacture Part I: casting, forming and machining. Materialwissenschaft Und Werkstofftechnik, 2009, 40, 354-360.	0.9	16
41	Identification of process parameters affecting distortion of disks for gear manufacture - Part II: heating, carburizing, quenching. Materialwissenschaft Und Werkstofftechnik, 2009, 40, 361-367.	0.9	12
42	Modeling and simulation of ring deformation due to clamping. Materialwissenschaft Und Werkstofftechnik, 2009, 40, 380-384.	0.9	8
43	Improving the shape quality of bearing rings in soft turning by using a Fast Tool Servo. Production Engineering, 2009, 3, 469-474.	2.3	8
44	Prediction of shape deviations in machining. CIRP Annals - Manufacturing Technology, 2009, 58, 507-510.	3.6	51
45	Influence of characteristic material properties on machinability under high speed cutting. International Journal of Machining and Machinability of Materials, 2008, 4, 419.	0.1	4
46	Influence of turning parameters on distortion of bearing rings. Production Engineering, 2007, 1, 135-139.	2.3	19
47	Distortion Engineering â€“ Identification of Causes for Dimensional and Form Deviations of Bearing Rings. CIRP Annals - Manufacturing Technology, 2007, 56, 109-112.	3.6	36
48	Effect of Machining Parameters and Clamping Technique on Residual Stresses and Distortion of Bearing Rings. Materialwissenschaft Und Werkstofftechnik, 2006, 37, 45-51.	0.9	13
49	Einfluss charakteristischer Werkstoffeigenschaften auf die Zerspanbarkeit bei hohen Schnittgeschwindigkeiten. HTM - Journal of Heat Treatment and Materials, 2004, 59, 388-395.	0.2	1
50	Analysis of rear contacted solar cell structures for cost-effective processes and materials. , 2000, , .		5
51	Analysing Internal Material Loads in Manufacturing Processes. Advanced Materials Research, 0, 1018, 83-90.	0.3	3
52	Thermal Modelling of Drilling Steel. Advanced Materials Research, 0, 1140, 205-212.	0.3	2