

# Sebastian Herbst

## List of Publications by Year in descending order

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34  
papers

277  
citations

1163117

8  
h-index

996975

15  
g-index

34  
all docs

34  
docs citations

34  
times ranked

312  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thinking small: Next-generation sensor networks close the size gap in vertebrate biologging. PLoS Biology, 2020, 18, e3000655.	5.6	50
2	Microstructure and mechanical properties of friction welded steel-aluminum hybrid components after T6 heat treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 696, 33-41.	5.6	36
3	BATS: Adaptive Ultra Low Power Sensor Network for Animal Tracking. Sensors, 2018, 18, 3343.	3.8	33
4	Towards Dry Machining of Titanium-Based Alloys: A New Approach Using an Oxygen-Free Environment. Metals, 2020, 10, 1161.	2.3	18
5	Strategies for the Heat Treatment of Steel-Aluminium Hybrid Components. HTM - Journal of Heat Treatment and Materials, 2018, 73, 268-282.	0.2	11
6	Holistic consideration of grain growth behavior of tempering steel 34CrNiMo6 during heating processes. Journal of Materials Processing Technology, 2016, 229, 61-71.	6.3	10
7	Method for Semi-Automated Measurement and Statistical Evaluation of Iron Aluminum Intermetallic Compound Layer Thickness and Morphology. Metallography, Microstructure, and Analysis, 2017, 6, 367-374.	1.0	10
8	Tailored Forming of Hybrid Bevel Gears with Integrated Heat Treatment. Procedia Manufacturing, 2020, 47, 301-308.	1.9	10
9	Determination of heat transfer coefficients for complex spray cooling arrangements. International Journal of Microstructure and Materials Properties, 2016, 11, 229.	0.1	8
10	Joining of blanks by cold pressure welding: Incremental rolling and strategies for surface activation and heat treatment. Materialwissenschaft Und Werkstofftechnik, 2019, 50, 924-939.	0.9	6
11	Pattern-forming nanoprecipitates in NiTi-related high entropy shape memory alloys. Scripta Materialia, 2020, 186, 132-135.	5.2	6
12	The Effect of Increasing Chemical Complexity on the Mechanical and Functional Behavior of NiTi-Related Shape Memory Alloys. Shape Memory and Superelasticity, 2020, 6, 181-190.	2.2	6
13	Simulation-Aided Process Chain Design for the Manufacturing of Hybrid Shafts. HTM - Journal of Heat Treatment and Materials, 2019, 74, 115-135.	0.2	6
14	Process Integrated Heat Treatment of a Microalloyed Medium Carbon Steel: Microstructure and Mechanical Properties. Journal of Materials Engineering and Performance, 2016, 25, 1453-1462.	2.5	5
15	Effects of Cryogenic Treatment on the Microstructure and Mechanical Properties of High-alloyed Tool Steels. HTM - Journal of Heat Treatment and Materials, 2020, 75, 73-93.	0.2	5
16	Numerical investigations regarding a novel process chain for the production of a hybrid bearing bushing. Production Engineering, 2020, 14, 569-581.	2.3	5
17	Microstructural Evolution and Mechanical Properties of Hybrid Bevel Gears Manufactured by Tailored Forming. Metals, 2020, 10, 1365.	2.3	5
18	Simulation assisted process chain design for the manufacturing of bulk hybrid shafts with tailored properties. International Journal of Advanced Manufacturing Technology, 2020, 108, 2409-2417.	3.0	5

#	ARTICLE	IF	CITATIONS
19	Hot forming of shape memory alloys in steel shells: formability, interface, bonding quality. <i>Production Engineering</i> , 2021, 15, 271-283.	2.3	5
20	In Situ X-Ray Diffraction Analysis of Microstructure Evolution during Deep Cryogenic Treatment and Tempering of Tool Steels. <i>Steel Research International</i> , 2021, 92, 2100076.	1.8	5
21	Visualization and Observation of Morphological Peculiarities of Twin Formation in Mg-Based Samples After Electrically Assisted Forming. <i>Metallography, Microstructure, and Analysis</i> , 2019, 8, 806-814.	1.0	4
22	Cold Roll Bonding of Tin-Coated Steel Sheets with Subsequent Heat Treatment. <i>Metals</i> , 2021, 11, 917.	2.3	4
23	Corrosion fatigue behavior of electron beam melted iron in simulated body fluid. <i>Npj Materials Degradation</i> , 2022, 6, .	5.8	4
24	The role of heat-treatments performed before and after a cold roll bonding process of galvanized steel sheets. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	3
25	Casting Manufacturing of Cylindrical Preforms Made of Low Alloy Steels. <i>Procedia Manufacturing</i> , 2020, 47, 445-449.	1.9	3
26	Changes in Mechanical and Microstructural Properties of Magnesium Alloys Resulting from Superimposed High Current Density Pulses. <i>Materials Science Forum</i> , 0, 1016, 385-391.	0.3	3
27	Influence of Pre-strain on Very-Low-Cycle Stress-Strain Response and Springback Behavior. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 33-41.	2.5	3
28	3D orientation data – A comparison of diffraction contrast tomography and serial sectioning electron backscatter diffraction for the nickel-base superalloy IN738LC. <i>Materials Letters</i> , 2020, 262, 127177.	2.6	2
29	Ion Beam Processing for Sample Preparation of Hybrid Materials with Strongly Differing Mechanical Properties. <i>Metallography, Microstructure, and Analysis</i> , 2020, 9, 54-60.	1.0	2
30	The Preparation of Metallic Joinings to Optimise their Topography. <i>Praktische Metallographie/Practical Metallography</i> , 2013, 50, 491-500.	0.3	2
31	Influence of Alternating Short-Cycle Bending on the Mechanical Properties of Copper, $\hat{\pm}$ -Titanium and the Mild Steel DC01. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 7165-7170.	2.5	1
32	Manufacturing and Virtual Design to Tailor the Properties of Boron-Alloyed Steel Tubes. <i>Lecture Notes in Applied and Computational Mechanics</i> , 2020, , 21-44.	2.2	1
33	Suitable Impact Parameters for High-Speed Joining and Influence on the Bonding Zone Microstructure. <i>Journal of Materials Engineering and Performance</i> , 2014, 23, 944-953.	2.5	0
34	Heat Treatment of Steel-Aluminum Hybrid Components. , 2017, , .		0