

# Sebastian Herbst

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4000363/publications.pdf>

Version: 2024-02-01

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	Corrosion fatigue behavior of electron beam melted iron in simulated body fluid. Npj Materials Degradation, 2022, 6, .	5.8	4
2	Hot forming of shape memory alloys in steel shells: formability, interface, bonding quality. Production Engineering, 2021, 15, 271-283.	2.3	5
3	In Situ X-Ray Diffraction Analysis of Microstructure Evolution during Deep Cryogenic Treatment and Tempering of Tool Steels. Steel Research International, 2021, 92, 2100076.	1.8	5
4	Cold Roll Bonding of Tin-Coated Steel Sheets with Subsequent Heat Treatment. Metals, 2021, 11, 917.	2.3	4
5	Influence of Pre-strain on Very-Low-Cycle Stress-Strain Response and Springback Behavior. Journal of Materials Engineering and Performance, 2021, 30, 33-41.	2.5	3
6	3D orientation data – A comparison of diffraction contrast tomography and serial sectioning electron backscatter diffraction for the nickel-base superalloy IN738LC. Materials Letters, 2020, 262, 127177.	2.6	2
7	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
8	Numerical investigations regarding a novel process chain for the production of a hybrid bearing bushing. Production Engineering, 2020, 14, 569-581.	2.3	5
9	Towards Dry Machining of Titanium-Based Alloys: A New Approach Using an Oxygen-Free Environment. Metals, 2020, 10, 1161.	2.3	18
10	Microstructural Evolution and Mechanical Properties of Hybrid Bevel Gears Manufactured by Tailored Forming. Metals, 2020, 10, 1365.	2.3	5
11	Tailored Forming of Hybrid Bevel Gears with Integrated Heat Treatment. Procedia Manufacturing, 2020, 47, 301-308.	1.9	10
12	Pattern-forming nanoprecipitates in NiTi-related high entropy shape memory alloys. Scripta Materialia, 2020, 186, 132-135.	5.2	6
13	Casting Manufacturing of Cylindrical Preforms Made of Low Alloy Steels. Procedia Manufacturing, 2020, 47, 445-449.	1.9	3
14	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
15	Thinking small: Next-generation sensor networks close the size gap in vertebrate biologging. PLoS Biology, 2020, 18, e3000655.	5.6	50
16	Ion Beam Processing for Sample Preparation of Hybrid Materials with Strongly Differing Mechanical Properties. Metallography, Microstructure, and Analysis, 2020, 9, 54-60.	1.0	2
17	Manufacturing and Virtual Design to Tailor the Properties of Boron-Alloyed Steel Tubes. Lecture Notes in Applied and Computational Mechanics, 2020, , 21-44.	2.2	1
18	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

#	ARTICLE	IF	CITATIONS
19	Joining of blanks by cold pressure welding: Incremental rolling and strategies for surface activation and heat treatment. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2019, 50, 924-939.	0.9	6
20	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
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	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
23	Simulation-Aided Process Chain Design for the Manufacturing of Hybrid Shafts. <i>HTM - Journal of Heat Treatment and Materials</i> , 2019, 74, 115-135.	0.2	6
24	BATS: Adaptive Ultra Low Power Sensor Network for Animal Tracking. <i>Sensors</i> , 2018, 18, 3343.	3.8	33
25	Strategies for the Heat Treatment of Steel-Aluminium Hybrid Components. <i>HTM - Journal of Heat Treatment and Materials</i> , 2018, 73, 268-282.	0.2	11
26	Microstructure and mechanical properties of friction welded steel-aluminum hybrid components after T6 heat treatment. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 696, 33-41.	5.6	36
27	Method for Semi-Automated Measurement and Statistical Evaluation of Iron Aluminum Intermetallic Compound Layer Thickness and Morphology. <i>Metallography, Microstructure, and Analysis</i> , 2017, 6, 367-374.	1.0	10
28	Heat Treatment of Steel-Aluminum Hybrid Components. , 2017, , .		0
29	Determination of heat transfer coefficients for complex spray cooling arrangements. <i>International Journal of Microstructure and Materials Properties</i> , 2016, 11, 229.	0.1	8
30	Process Integrated Heat Treatment of a Microalloyed Medium Carbon Steel: Microstructure and Mechanical Properties. <i>Journal of Materials Engineering and Performance</i> , 2016, 25, 1453-1462.	2.5	5
31	Holistic consideration of grain growth behavior of tempering steel 34CrNiMo6 during heating processes. <i>Journal of Materials Processing Technology</i> , 2016, 229, 61-71.	6.3	10
32	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
33	The Preparation of Metallic Joinings to Optimise their Topography. <i>Praktische Metallographie/Practical Metallography</i> , 2013, 50, 491-500.	0.3	2
34	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