

# Klaudia Horváth

## List of Publications by Year in descending order

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38  
papers

478  
citations

623188

14  
h-index

713013

21  
g-index

38  
all docs

38  
docs citations

38  
times ranked

404  
citing authors

#	ARTICLE	IF	CITATIONS
1	Combination of in-situ diffraction experiments and acoustic emission testing to understand the compression behavior of Mg-Y-Zn alloys containing LPSO phase under different loading conditions. <i>International Journal of Plasticity</i> , 2018, 106, 107-128.	4.1	76
2	Increasing strength of a biomedical Ti-Nb-Ta-Zr alloy by alloying with Fe, Si and O. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 71, 329-336.	1.5	75
3	Influence of quasicrystal I-phase on twinning of extruded Mg-Zn-Y alloys under compression. <i>Acta Materialia</i> , 2018, 151, 271-281.	3.8	32
4	Hot deformation of Mg-Y-Zn alloy with a low content of the LPSO phase studied by in-situ synchrotron radiation diffraction. <i>Journal of Magnesium and Alloys</i> , 2020, 8, 199-209.	5.5	24
5	Comparison of the effects of isothermal equal channel angular pressing and multi-directional forging on mechanical properties of AM60 magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 776, 139002.	2.6	20
6	Mobility of pinned twin boundaries during mechanical loading of extruded binary Mg-1Zn alloy. <i>Materials Characterization</i> , 2018, 139, 81-88.	1.9	18
7	A new insight into LPSO transformation during multi-axial forging in Mg-Gd-Y-Zn-Zr alloy. <i>Materials Letters</i> , 2020, 269, 127625.	1.3	16
8	The slip activity during the transition from elastic to plastic tensile deformation of the Mg-Al-Mn sheet. <i>Journal of Magnesium and Alloys</i> , 2021, 9, 1057-1067.	5.5	16
9	Superior low-temperature superplasticity in fine-grained ZK60 Mg alloy sheet produced by a combination of repeated upsetting process and sheet extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 819, 141444.	2.6	16
10	Unraveling the effect of deformation-induced phase transformation on microstructure and micro-texture evolution of a multi-axially forged Mg-Gd-Y-Zn-Zr alloy containing the LPSO phase. <i>Journal of Materials Research and Technology</i> , 2021, 15, 2088-2101.	2.6	16
11	Characterization of Microstructure and Mechanical Properties of Mg-Y-Zn Alloys with Respect to Different Content of LPSO Phase. <i>Advanced Engineering Materials</i> , 2018, 20, 1700396.	1.6	15
12	Comprehensive Evaluation of the Properties of Ultrafine to Nanocrystalline Grade 2 Titanium Wires. <i>Materials</i> , 2018, 11, 2522.	1.3	15
13	Mechanism of LDH Direct Growth on Aluminum Alloy Surface: A Kinetic and Morphological Approach. <i>Journal of Physical Chemistry C</i> , 2021, 125, 11687-11701.	1.5	15
14	Investigation of shear and tensile mechanical properties of ZK60 Mg alloy sheet processed by rolling and sheet extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 828, 142098.	2.6	14
15	Deformation behavior and acoustic emission response on uniaxial compression of extruded rectangular profile of Mg Zn Zr alloy. <i>Journal of Alloys and Compounds</i> , 2016, 680, 623-632.	2.8	13
16	Evolution of twinning in extruded AZ31 alloy with bimodal grain structure. <i>Materials Characterization</i> , 2017, 126, 116-124.	1.9	12
17	Compressive yield stress improvement using thermomechanical treatment of extruded Mg-Zn-Ca alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 730, 401-409.	2.6	11
18	The temperature effect on the plastic deformation of the Mg <sub>88</sub> Zn <sub>7</sub> Y <sub>5</sub> alloy with LPSO phase studied by in-situ synchrotron radiation diffraction. <i>Intermetallics</i> , 2021, 138, 107321.	1.8	10

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19	Influence of Volume Fraction of Long-Period Stacking Ordered Structure Phase on the Deformation Processes during Cyclic Deformation of Mg-Y-Zn Alloys. <i>Crystals</i> , 2021, 11, 11.	1.0	9
20	Investigation of the Microstructure Evolution and Deformation Mechanisms of a Mg-Zn-Zr-RE Twin-Roll-Cast Magnesium Sheet by In-Situ Experimental Techniques. <i>Materials</i> , 2018, 11, 200.	1.3	8
21	Characterization of the Microstructure, Local Macro-Texture and Residual Stress Field of Commercially Pure Titanium Grade 2 Prepared by CONFORM ECAP. <i>Metals</i> , 2018, 8, 1000.	1.0	7
22	Grain Size-Related Strengthening and Softening of a Precompressed and Heat-Treated Mg <sup>97</sup> Zn <sup>0.56</sup> Y <sup>1.5</sup> Ca Alloy. <i>Materials</i> , 2020, 13, 351.	1.3	7
23	Intermetallic Phases Identification and Diffusion Simulation in Twin-Roll Cast Al-Fe Clad Sheet. <i>Materials</i> , 2021, 14, 7771.	1.3	6
24	Effect of Extrusion Ratio on Microstructure and Resulting Mechanical Properties of Mg Alloys with LPSO Phase. <i>Minerals, Metals and Materials Series</i> , 2017, , 29-34.	0.3	5
25	The influence of surface on direction of diffusion in Al-Fe clad material. <i>Materials Characterization</i> , 2022, 190, 112005.	1.9	5
26	Characterization of the Acoustic Emission Response and Mechanical Properties of Mg Alloy with LPSO Phase. <i>Materials Science Forum</i> , 2016, 879, 762-766.	0.3	4
27	Characterization of Active Deformation Mechanisms in Mg Alloys with LPSO Phase. <i>Acta Physica Polonica A</i> , 2018, 134, 815-819.	0.2	3
28	Thermal stability of the microstructure of rapidly solidified ribbon-consolidated Mg <sup>97.94</sup> Zn <sup>0.56</sup> Y <sup>1.5</sup> alloy. <i>Materials Characterization</i> , 2022, 183, 111618.	1.9	3
29	In Situ Synchrotron Diffraction Analysis of Zn Additions on the Compression Properties of NK30. <i>Materials</i> , 2019, 12, 3935.	1.3	2
30	Effect of Thermomechanical Treatment on Subsequent Deformation Behavior in a Binary Z1 Magnesium Alloy Studied by the Acoustic Emission Technique. <i>Advanced Engineering Materials</i> , 2019, 21, 1800915.	1.6	2
31	Influence of Thermomechanical Treatment on Tension <sup>–</sup> Compression Yield Asymmetry of Extruded Mg <sup>97</sup> Zn <sup>0.56</sup> Ca Alloy. <i>Minerals, Metals and Materials Series</i> , 2019, , 77-81.	0.3	1
32	Twinning <sup>–</sup> Detwinning in Pre-Compressed and Thermally Treated ZX10 and ZN10 Alloys. <i>Materials</i> , 2020, 13, 5605.	1.3	1
33	Mechanisms of Plastic Deformation in Ti-Nb-Zr-Ta Based Biomedical Alloys with Fe and Si Content. <i>Acta Physica Polonica A</i> , 2015, 128, 574-578.	0.2	1
34	In Situ Investigation of Deformation Mechanisms in Mg <sup>97</sup> Zn <sup>0.56</sup> Y Magnesium Alloy with LPSO Phase by Diffraction Methods and Acoustic Emission. <i>Minerals, Metals and Materials Series</i> , 2017, , 625-629.	0.3	0
35	Acoustic Emission Study of High Temperature Deformation of Mg <sup>97</sup> Zn <sup>0.56</sup> Y Alloys with LPSO Phase. <i>Minerals, Metals and Materials Series</i> , 2018, , 203-208.	0.3	0
36	Thermo-Mechanical Treatment of Extruded Mg <sup>97</sup> Zn Alloy: Cluster Analysis of AE Signals. <i>Minerals, Metals and Materials Series</i> , 2018, , 217-221.	0.3	0

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37	Mechanical Properties of Thermo-Mechanically Treated Extruded Mg-Zn-Based Alloys. Minerals, Metals and Materials Series, 2018, , 259-265.	0.3	0
38	Intermetallic Phase Growth in Al-steel Clad Strip during In-situ Heating in TEM. Microscopy and Microanalysis, 2021, 27, 91-92.	0.2	0