## Verena Maier-Kiener

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

59	731	18	24
papers	citations	h-index	g-index
63	948	5.1	4.69
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
59	Tuning mechanical properties of ultrafine-grained tungsten by manipulating grain boundary chemistry. <i>Acta Materialia</i> , <b>2022</b> , 117939	8.4	O
58	Hydrogen assisted intergranular cracking of alloy 725: The effect of boron and copper alloying. <i>Corrosion Science</i> , <b>2022</b> , 203, 110331	6.8	3
57	Geometrical model for calculating the effect of surface morphology on total x-ray output of medical x-ray tubes. <i>Medical Physics</i> , <b>2021</b> , 48, 1546-1556	4.4	1
56	How the interface type manipulates the thermomechanical response of nanostructured metals: A case study on nickel. <i>Materialia</i> , <b>2021</b> , 15, 101020	3.2	1
55	High temperature nanoindentation as a tool to investigate plasticity upon phase transformations demonstrated on Cobalt. <i>Materialia</i> , <b>2021</b> , 16, 101084	3.2	1
54	Current trends in nanomechanical testing research. <i>Journal of Materials Research</i> , <b>2021</b> , 36, 2133-2136	2.5	1
53	Strength ranking for interfaces between a TiN hard coating and microstructural constituents of high speed steel determined by micromechanical testing. <i>Materials and Design</i> , <b>2021</b> , 204, 109690	8.1	6
52	Bending Behavior of Zinc-Coated Hot Stamping Steels. <i>Steel Research International</i> , <b>2021</b> , 92, 2100149	1.6	1
51	Extracting information from noisy data: Strain mapping during dynamic in-situ SEM experiments. Journal of Materials Research, <b>2021</b> , 36, 2291-2304	2.5	3
50	Disordered interfaces enable high temperature thermal stability and strength in a nanocrystalline aluminum alloy. <i>Acta Materialia</i> , <b>2021</b> , 215, 116973	8.4	7
49	How grain boundary characteristics influence plasticity close to and above the critical temperature of ultra-fine grained bcc Ta2.5W. <i>Acta Materialia</i> , <b>2021</b> , 216, 117110	8.4	1
48	Ultralow-temperature superplasticity and its novel mechanism in ultrafine-grained Al alloys. <i>Materials Research Letters</i> , <b>2021</b> , 9, 475-482	7.4	2
47	Assessment of grain boundary cohesion of technically pure and boron micro-doped molybdenum via meso-scale three-point-bending experiments. <i>Materials and Design</i> , <b>2021</b> , 207, 109848	8.1	2
46	Grain boundary segregation in Ni-base alloys: a combined atom probe tomography and first principles study. <i>Acta Materialia</i> , <b>2021</b> , 221, 117354	8.4	8
45	Controlling the high temperature deformation behavior and thermal stability of ultra-fine-grained W by re alloying. <i>Journal of Materials Research</i> , <b>2021</b> , 36, 2408-2419	2.5	3
44	Addressing H-Material Interaction in Fast Diffusion Materials-A Feasibility Study on a Complex Phase Steel. <i>Materials</i> , <b>2020</b> , 13,	3.5	5
43	A Modified Electrochemical Nanoindentation Setup for Probing Hydrogen-Material Interaction Demonstrated on a Nickel-Based Alloy. <i>Jom</i> , <b>2020</b> , 72, 2020-2029	2.1	4

## (2018-2020)

42	Microstructural evolution of W-10Re alloys due to thermal cycling at high temperatures and its impact on surface degradation. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2020</b> , 92, 105285	4.1	4
41	Thermally activated deformation mechanisms and solid solution softening in W-Re alloys investigated via high temperature nanoindentation. <i>Materials and Design</i> , <b>2020</b> , 189, 108499	8.1	18
40	Inconel-steel multilayers by liquid dispersed metal powder bed fusion: Microstructure, residual stress and property gradients. <i>Additive Manufacturing</i> , <b>2020</b> , 32, 101027	6.1	6
39	Rate limiting deformation mechanisms of bcc metals in confined volumes. <i>Acta Materialia</i> , <b>2019</b> , 166, 687-701	8.4	22
38	Deformation behavior of aluminum pillars produced by Xe and Ga focused ion beams: Insights from strain rate jump tests. <i>Materials and Design</i> , <b>2019</b> , 181, 107914	8.1	13
37	Influence of annealing on microstructure and mechanical properties of ultrafine-grained Ti45Nb. <i>Materials and Design</i> , <b>2019</b> , 179, 107864	8.1	11
36	Influence of crystal orientation and Berkovich tip rotation on the mechanical characterization of grain boundaries in molybdenum. <i>Materials and Design</i> , <b>2019</b> , 182, 107998	8.1	12
35	Low temperature deformation of MoSi2 and the effect of Ta, Nb and Al as alloying elements. <i>Acta Materialia</i> , <b>2019</b> , 181, 385-398	8.4	11
34	Microstructural Characterization of Molybdenum Grain Boundaries by Micropillar Compression Testing and Atom Probe Tomography. <i>Praktische Metallographie/Practical Metallography</i> , <b>2019</b> , 56, 776-	-786	1
33	Combination of Nanoindentation and Microscopy for the Examination of Aluminum Alloys in Coarse- and Ultrafine-Grained Condition. <i>Praktische Metallographie/Practical Metallography</i> , <b>2019</b> , 56, 432-442	0.3	
32	Beryllium IA Challenge for Preparation and Mechanical Characterization. <i>Praktische Metallographie/Practical Metallography</i> , <b>2019</b> , 56, 624-633	0.3	
31	Mechanical properties of the magnetocaloric intermetallic LaFe11.2Si1.8 alloy at different length scales. <i>Acta Materialia</i> , <b>2019</b> , 165, 40-50	8.4	10
30	Deformation-induced phase transformation in a Co-Cr-W-Mo alloy studied by high-energy X-ray diffraction during in-situ compression tests. <i>Acta Materialia</i> , <b>2019</b> , 164, 272-282	8.4	15
29	Anneal hardening and elevated temperature strain rate sensitivity of nanostructured metals: Their relation to intergranular dislocation accommodation. <i>Acta Materialia</i> , <b>2019</b> , 165, 409-419	8.4	31
28	Strain-Induced Martensitic Transformation in a Co-Cr-W-Mo Alloy Probed by Nanoindentation. <i>Minerals, Metals and Materials Series</i> , <b>2018</b> , 247-250	0.3	
27	Effect of Morphological Differences on the Cold Formability of an Isothermally Heat-Treated Advanced High-Strength Steel. <i>Jom</i> , <b>2018</b> , 70, 1567-1575	2.1	3
26	Interaction of precipitation, recovery and recrystallization in the Mo-Hf-C alloy MHC studied by multipass compression tests. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2018</b> , 73, 199-203	4.1	5
25	Bulk metallic dual phase glasses by severe plastic deformation. <i>Intermetallics</i> , <b>2018</b> , 94, 172-178	3.5	8

24	On the modelling of mixed lubrication of conformal contacts. <i>Tribology International</i> , <b>2018</b> , 125, 220-2	<b>36</b> 4.9	19
23	Essential refinements of spherical nanoindentation protocols for the reliable determination of mechanical flow curves. <i>Materials and Design</i> , <b>2018</b> , 146, 69-80	8.1	23
22	Grain boundary segregation engineering in as-sintered molybdenum for improved ductility. <i>Scripta Materialia</i> , <b>2018</b> , 156, 60-63	5.6	32
21	High Temperature Flow Behavior of Ultra-Strong Nanoporous Au assessed by Spherical Nanoindentation. <i>Nanomaterials</i> , <b>2018</b> , 8,	5.4	4
20	Impact of the Microstructure of Refractory Metals on their Mechanical Properties has Multi-Scale Study. <i>Praktische Metallographie/Practical Metallography</i> , <b>2018</b> , 55, 603-619	0.3	
19	Activation volume and energy of bulk metallic glasses determined by nanoindentation. <i>Materials and Design</i> , <b>2018</b> , 155, 116-124	8.1	14
18	Extraction of Flow Behavior and Hall <b>P</b> etch Parameters Using a Nanoindentation Multiple Sharp Tip Approach . <i>Advanced Engineering Materials</i> , <b>2017</b> , 19, 1600669	3.5	19
17	Influence of modulus-to-hardness ratio and harmonic parameters on continuous stiffness measurement during nanoindentation. <i>Acta Materialia</i> , <b>2017</b> , 134, 167-176	8.4	57
16	Extracting flow curves from nano-sized metal layers in thin film systems. <i>Scripta Materialia</i> , <b>2017</b> , 130, 143-147	5.6	5
15	Phase Decomposition of a Single-Phase AlTiVNb High-Entropy Alloy after Severe Plastic Deformation and Annealing . <i>Advanced Engineering Materials</i> , <b>2017</b> , 19, 1600674	3.5	27
14	Dominating deformation mechanisms in ultrafine-grained chromium across length scales and temperatures. <i>Acta Materialia</i> , <b>2017</b> , 140, 176-187	8.4	21
13	Influence of solid solution strengthening on the local mechanical properties of single crystal and ultrafine-grained binary CuAl X solid solutions. <i>Journal of Materials Research</i> , <b>2017</b> , 32, 4583-4591	2.5	8
12	Advanced Nanoindentation Testing for Studying Strain-Rate Sensitivity and Activation Volume. <i>Jom</i> , <b>2017</b> , 69, 2246-2255	2.1	41
11	Insights into the deformation behavior of the CrMnFeCoNi high-entropy alloy revealed by elevated temperature nanoindentation. <i>Journal of Materials Research</i> , <b>2017</b> , 32, 2658-2667	2.5	32
10	Dynamic nanoindentation testing: is there an influence on a material's hardness?. <i>Materials Research Letters</i> , <b>2017</b> , 5, 486-493	7.4	23
9	Deformation mechanisms during severe plastic deformation of a Cu Ag composite. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 695, 2285-2294	5.7	23
8	Nanoindentation testing as a powerful screening tool for assessing phase stability of nanocrystalline high-entropy alloys. <i>Materials and Design</i> , <b>2017</b> , 115, 479-485	8.1	51
7	Phase Characterization of a Biocompatible Co-Cr-W Alloy Via Correlative Microscopy. <i>Praktische Metallographie/Practical Metallography</i> , <b>2016</b> , 53, 450-461	0.3	2

## LIST OF PUBLICATIONS

6	Deformation in the EMg17Al12 phase at 25278IIC. Acta Materialia, 2016, 113, 221-229	8.4	40
5	Interface dominated mechanical properties of ultra-fine grained and nanoporous Au at elevated temperatures. <i>Acta Materialia</i> , <b>2016</b> , 121, 104-116	8.4	27
4	Interplay between sample size and grain size: Single crystalline vs. ultrafine-grained chromium micropillars. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 674, 626-633	5.3	22
3	Elevated temperature mechanical properties of novel ultra-fine grained CuNb composites.  Materials Science & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 625, 296-302	5.3	20
2	The Phase Transformation of Silicon Assessed by an Unloading Contact Pressure Approach. <i>Jom</i> ,1	2.1	
1	30 Years of Oliver <b>B</b> harr: Then, Now and the Future of Nanoindentation. <i>Jom</i> ,1	2.1	