

Mathias GÅrken

List of Publications by Year in descending order

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289
papers

12,446
citations

22153

59
h-index

34986

98
g-index

302
all docs

302
docs citations

302
times ranked

7792
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanostructuring of Nb-Si-Cr Alloys by Electron Beam Melting to Improve the Mechanical Properties and the Oxidation Behavior. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2022, 53, 240-249.	2.2	1
2	Fatigue Life Optimized Layer Architecture of Ultrafine-Grained Al-Ti Laminates Under Bending Stresses. Advanced Engineering Materials, 2022, 24, .	3.5	2
3	Microcantilever Fracture Tests of \pm Cr Containing NiAl Bond Coats. Advanced Engineering Materials, 2022, 24, .	3.5	2
4	Resistance-curve envelopes for dental lithium disilicate glass-ceramics. Journal of the European Ceramic Society, 2022, 42, 2516-2522.	5.7	6
5	Quantification of the temperature-dependent evolution of defect structures in a CoNi-base superalloy. Acta Materialia, 2022, 227, 117702.	7.9	14
6	Creep properties and deformation mechanisms of single-crystalline γ -strengthened superalloys in dependence of the Co/Ni ratio. Philosophical Magazine, 2022, 102, 718-744.	1.6	3
7	Influence of Nb, Ta and Zr on the Interdiffusion Coefficients and Solid Solution Strengthening of β -TiAl Single Phase Alloys. Metals, 2022, 12, 752.	2.3	1
8	On the influence of Al-concentration on the fracture toughness of NiAl: Microcantilever fracture tests and atomistic simulations. Acta Materialia, 2022, 234, 117996.	7.9	4
9	The grain boundary hardness in austenitic stainless steels studied by nanoindentations. International Journal of Materials Research, 2022, 95, 492-498.	0.3	0
10	Understanding raft formation and precipitate shearing during double minimum creep in a γ -strengthened single crystalline Co-base superalloy. Philosophical Magazine, 2021, 101, 326-353.	1.6	6
11	The temperature dependent lattice misfit of rhenium and ruthenium containing nickel-base superalloys - Experiment and modelling. Materials and Design, 2021, 198, 109362.	7.0	31
12	Breakdown of the superplastic deformation behavior of heterogeneous nanomaterials at small length scales. Materials Research Letters, 2021, 9, 41-49.	8.7	4
13	Applicability of focused Ion beam (FIB) milling with gallium, neon, and xenon to the fracture toughness characterization of gold thin films. Journal of Materials Research, 2021, 36, 2505-2514.	2.6	13
14	Microcantilever Fracture Tests on Eutectic NiAl-Cr(Mo) In Situ Composites. Advanced Engineering Materials, 2021, 23, 2001464.	3.5	9
15	Hierarchical and heterogeneous multiphase metallic nanomaterials and laminates. MRS Bulletin, 2021, 46, 236-243.	3.5	18
16	Ultrafine-Grained Laminated Metal Composites: A New Material Class for Tailoring Cyclically Stressed Components. Advanced Engineering Materials, 2021, 23, 2100070.	3.5	3
17	About the Role of Interfaces on the Fatigue Crack Propagation in Laminated Metallic Composites. Materials, 2021, 14, 2564.	2.9	6
18	Partitioning Behavior of Nb, Ta, and Zr in Fully Lamellar β Titanium Aluminides and Its Effect on the Lattice Misfit and Creep Behavior. Advanced Engineering Materials, 2021, 23, 2100156.	3.5	17

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19	Influence of small amounts of Si and Cr on the high temperature oxidation behavior of novel cobalt base superalloys. <i>Corrosion Science</i> , 2021, 184, 109388.	6.6	21
20	Temperature-Dependent Dynamic Strain Aging in Selective Laser Melted 316L. <i>Advanced Engineering Materials</i> , 2021, 23, 2001501.	3.5	4
21	Design of a Co-Al-W-Ta Alloy Series with Varying γ' Volume Fraction and Their Thermophysical Properties. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 3931-3944.	2.2	11
22	Correlation Between Local Chemical Composition and Formation of Different Types of Ordered Phases in the Polycrystalline Nickel-Base Superalloy A718Plus. <i>Advanced Engineering Materials</i> , 2021, 23, 2100558.	3.5	6
23	A scale-bridging study of the influence of TCP phases on the mechanical properties of an additive manufactured Ni-base superalloy combining microcompression testing, X-ray nanotomography and TEM. <i>Microscopy and Microanalysis</i> , 2021, 27, 938-942.	0.4	0
24	Yielding behavior of a single-crystalline γ' -strengthened Co-Ti-Cr superalloy. <i>Scripta Materialia</i> , 2021, 200, 113928.	5.2	16
25	Grain boundary mediated plasticity: A blessing for the ductility of metallic thin films?. <i>Acta Materialia</i> , 2021, 215, 117079.	7.9	18
26	Understanding creep of a single-crystalline Co-Al-W-Ta superalloy by studying the deformation mechanism, segregation tendency and stacking fault energy. <i>Acta Materialia</i> , 2021, 214, 117019.	7.9	23
27	Breaking the continuity of the Al ₂ O ₃ oxide scale by additions of Cr in Co-Al-W-based superalloys. <i>Corrosion Science</i> , 2021, 189, 109594.	6.6	14
28	Rotating Scan Strategy Induced Anisotropic Microstructural and Mechanical Behavior of Selective Laser Melted Materials and Their Reduction by Heat Treatments. <i>Advanced Engineering Materials</i> , 2021, 23, 2100622.	3.5	9
29	Understanding the High Creep Resistance of MRI 230D Magnesium Alloy through Nanoindentation and Atom Probe Tomography. <i>Metals</i> , 2021, 11, 1727.	2.3	1
30	Solid Solution Strengthening of Mo, Re, Ta and W in Ni during High-Temperature Creep. <i>Metals</i> , 2021, 11, 1909.	2.3	3
31	Hetero-deformation induced (HDI) hardening does not increase linearly with strain gradient. <i>Scripta Materialia</i> , 2020, 174, 19-23.	5.2	111
32	Deformation mechanisms and strain rate sensitivity of bimodal and ultrafine-grained copper. <i>Acta Materialia</i> , 2020, 186, 363-373.	7.9	30
33	The influence of near service environmental conditions on the corrosion and LCF behaviour of a beta-stabilized γ' -TiAl alloy. <i>Corrosion Science</i> , 2020, 175, 108885.	6.6	4
34	Nanoscaled eutectic NiAl-(Cr,Mo) composites with exceptional mechanical properties processed by electron beam melting. <i>Scientific Reports</i> , 2020, 10, 15153.	3.3	10
35	The Importance of Diffusivity and Partitioning Behavior of Solid Solution Strengthening Elements for the High Temperature Creep Strength of Ni-Base Superalloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 6195-6206.	2.2	23
36	Optimization of the heat treatment of additively manufactured Ni-base superalloy IN718. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2020, 27, 640-648.	4.9	27

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37	Combining Experiments and Atom Probe Tomography-Informed Simulations on γ' Precipitation Strengthening in the Polycrystalline Ni-Based Superalloy A718Plus. <i>Advanced Engineering Materials</i> , 2020, 22, 2000149.	3.5	16
38	Revealing the local fatigue behavior of bimodal copper laminates by micropillar fatigue tests. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 788, 139502.	5.6	7
39	On the Precipitation-Strengthening Contribution of the Ta-Containing $\text{Co}_3(\text{Al,W})$ -Phase to the Creep Properties of γ' Cobalt-Base Superalloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 1567-1574.	2.2	20
40	Enhancing the High-Temperature Strength of a Co-Base Superalloy by Optimizing the γ' Microstructure. <i>Metals</i> , 2020, 10, 321.	2.3	15
41	The Role of Interfaces on the Deformation Mechanisms in Bimodal Al Laminates Produced by Accumulative Roll Bonding. <i>Advanced Engineering Materials</i> , 2020, 22, 2000145.	3.5	15
42	Local Mechanical Properties at the Dendrite Scale of Ni-Based Superalloys Studied by Advanced High Temperature Indentation Creep and Micropillar Compression Tests. <i>Minerals, Metals and Materials Series</i> , 2020, , 273-281.	0.4	0
43	High Lightweight Potential of Ultrafine-Grained Aluminum/Steel Laminated Metal Composites Produced by Accumulative Roll Bonding. <i>Advanced Engineering Materials</i> , 2019, 21, 1800286.	3.5	21
44	New flat-punch indentation creep testing approach for characterizing the local creep properties at high temperatures. <i>Materials and Design</i> , 2019, 183, 108090.	7.0	13
45	Influence of Different Annealing Atmospheres on the Mechanical Properties of Freestanding MCrAlY Bond Coats Investigated by Micro-Tensile Creep Tests. <i>Metals</i> , 2019, 9, 692.	2.3	3
46	Low temperature deformation of MoSi ₂ and the effect of Ta, Nb and Al as alloying elements. <i>Acta Materialia</i> , 2019, 181, 385-398.	7.9	16
47	Determination of the true projected contact area by in situ indentation testing. <i>Journal of Materials Research</i> , 2019, 34, 2859-2868.	2.6	7
48	Microstructural dependence of the fracture toughness of metallic thin films: A bulge test and atomistic simulation study on single-crystalline and polycrystalline silver films. <i>Journal of Materials Research</i> , 2019, 34, 3483-3494.	2.6	5
49	Microtensile creep testing of freestanding MCrAlY bond coats. <i>Journal of Materials Research</i> , 2019, 34, 2643-2652.	2.6	3
50	Impact of Mn on the precipitate structure and creep resistance of Ca containing magnesium alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 761, 137964.	5.6	8
51	In-situ observation of dislocation dynamics near heterostructured interfaces. <i>Materials Research Letters</i> , 2019, 7, 376-382.	8.7	100
52	Fracture resistance of yttria stabilized zirconia manufactured from stabilizer-coated nanopowder by micro cantilever bending tests. <i>Journal of the European Ceramic Society</i> , 2019, 39, 3830-3836.	5.7	6
53	Influence of Co to Ni ratio in γ' -strengthened model alloys on oxidation resistance and the efficacy of the halogen effect at 900°C. <i>Corrosion Science</i> , 2019, 156, 84-95.	6.6	35
54	In situ X-ray tomography investigation of the crack formation in an intermetallic beta-stabilized TiAl-alloy during a stepwise tensile loading. <i>International Journal of Fatigue</i> , 2019, 124, 138-148.	5.7	15

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55	A review of experimental approaches to fracture toughness evaluation at the micro-scale. <i>Materials and Design</i> , 2019, 173, 107762.	7.0	167
56	Superior Mechanical Properties of Aluminum-Titanium Laminates in Terms of Local Hardness and Strength. <i>Advanced Engineering Materials</i> , 2019, 21, 1800546.	3.5	8
57	Tension/Compression asymmetry of a creep deformed single crystal Co-base superalloy. <i>Acta Materialia</i> , 2019, 166, 597-610.	7.9	48
58	The influence of niobium, tantalum and zirconium on the microstructure and creep strength of fully lamellar β titanium aluminides. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 744, 46-53.	5.6	30
59	Optimisation of interface formation by shear inclination: Example of aluminium-copper hybrid produced by ECAP with back-pressure. <i>Materials and Design</i> , 2018, 146, 142-151.	7.0	11
60	The grain boundary pinning effect of the β phase in an advanced polycrystalline Co-base superalloy. <i>Journal of Alloys and Compounds</i> , 2018, 753, 333-342.	5.5	27
61	On the grain boundary strengthening effect of boron in Cobalt-base superalloys. <i>Acta Materialia</i> , 2018, 145, 247-254.	7.9	73
62	Interface affected zone for optimal strength and ductility in heterogeneous laminate. <i>Materials Today</i> , 2018, 21, 713-719.	14.2	357
63	Dynamic mechanical characterization of poly(glycerol sebacate)/poly(butylene succinate-butylene) Tj ETQq1 1 0.784314 rgBT /Overlo 2018, 221, 115-118.	2.6	11
64	Double minimum creep in the rafting regime of a single-crystal Co-base superalloy. <i>Scripta Materialia</i> , 2018, 142, 129-132.	5.2	51
65	Scaling of the fracture toughness of freestanding metallic thin films with the yield strength. <i>Materials Research Letters</i> , 2018, 6, 607-612.	8.7	15
66	Influence of stacking fault energy and dislocation character on slip transfer at coherent twin boundaries studied by micropillar compression. <i>Acta Materialia</i> , 2018, 154, 261-272.	7.9	44
67	Thermophysical and Mechanical Properties of Advanced Single Crystalline Co-base Superalloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 4099-4109.	2.2	58
68	High-temperature corrosion of Inconel Alloy 718, Haynes Alloy 282 Alloy and CoWAlloy1&2 in supercritical ammonia/ammonium chloride solution. <i>Journal of Crystal Growth</i> , 2018, 498, 289-300.	1.5	11
69	Enhanced monotonic and cyclic mechanical properties of ultrafine-grained laminated metal composites with strong and stiff interlayers. <i>International Journal of Fatigue</i> , 2018, 116, 379-387.	5.7	8
70	The Effect of a Grain Boundary Pinning B2 Phase on Polycrystalline Co-Based Superalloys with Reduced Density. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 4070-4078.	2.2	11
71	Superplastic deformation behavior of Zn-22% Al alloy investigated by nanoindentation at elevated temperatures. <i>Materials and Design</i> , 2018, 153, 71-79.	7.0	15
72	Microstructure and compression strength of Co-based superalloys hardened by β and carbide precipitation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 734, 437-444.	5.6	18

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73	Characterization of γ' and γ'' phases in 2nd and 4th generation single crystal nickel-base superalloys. <i>Metals and Materials International</i> , 2017, 23, 126-131.	3.4	18
74	Crack nucleation and elastic / plastic deformation of TiAl alloys investigated by in-situ loaded atomic force microscopy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 689, 11-16.	5.6	19
75	A novel type of Co-Ti-Cr-base γ' superalloys with low mass density. <i>Acta Materialia</i> , 2017, 135, 244-251.	7.9	101
76	High-performance direct conversion X-ray detectors based on sintered hybrid lead triiodide perovskite wafers. <i>Nature Photonics</i> , 2017, 11, 436-440.	31.4	442
77	On the temperature dependent strengthening of nickel by transition metal solutes. <i>Acta Materialia</i> , 2017, 137, 54-63.	7.9	21
78	Determination of the strain-rate sensitivity of ultrafine-grained materials by spherical nanoindentation. <i>Journal of Materials Research</i> , 2017, 32, 1466-1473.	2.6	22
79	Understanding the extremely low fracture toughness of freestanding gold thin films by in-situ bulge testing in an AFM. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 691, 218-225.	5.6	37
80	Influencing hardness and wear during the dynamic tempered microinjection molding process by considering isothermal holding time. <i>Polymer Engineering and Science</i> , 2017, 57, 121-128.	3.1	0
81	Micromechanical characterization of laser consolidated nanoparticle ITO layers. <i>Thin Solid Films</i> , 2017, 642, 214-218.	1.8	2
82	Optimized layer architecture for an extended fatigue life of ultrafine-grained AA1050/AA5005 laminated metal composites. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 194, 012036.	0.6	11
83	High temperature properties and fatigue strength of novel wrought γ' Co-base superalloys. <i>Journal of Materials Research</i> , 2017, 32, 4475-4482.	2.6	37
84	Ex and in situ investigations on the role of persistent slip bands and grain boundaries in fatigue crack initiation. <i>Journal of Materials Research</i> , 2017, 32, 4276-4286.	2.6	13
85	Size-dependent fracture toughness of tungsten. <i>Acta Materialia</i> , 2017, 138, 198-211.	7.9	62
86	Layer architecture and fatigue life of ultrafine-grained laminated metal composites consisting of different aluminum alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 702, 406-413.	5.6	16
87	Influence of rhenium on γ'' -strengthened cobalt-base superalloys. <i>Journal of Materials Research</i> , 2017, 32, 2551-2559.	2.6	23
88	Plane-strain bulge testing of thin films under compressive residual stresses. <i>Surface and Coatings Technology</i> , 2017, 327, 167-173.	4.8	7
89	Isolating the effect of residual stresses on coating wear by a mechanical stress relaxation technique. <i>Thin Solid Films</i> , 2017, 638, 159-166.	1.8	20
90	Morphology evolution of Ti ₃ AlC carbide precipitates in high Nb containing TiAl alloys. <i>Acta Materialia</i> , 2017, 137, 36-44.	7.9	28

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91	Segregation assisted microtwinning during creep of a polycrystalline L12-hardened Co-base superalloy. <i>Acta Materialia</i> , 2017, 123, 295-304.	7.9	83
92	Investigation of the deformation behavior of aluminum micropillars produced by focused ion beam machining using Ga and Xe ions. <i>Scripta Materialia</i> , 2017, 127, 191-194.	5.2	52
93	Microstructure and Mechanical Properties of Accumulative Roll-Bonded AA1050A/AA5005 Laminated Metal Composites. <i>Metals</i> , 2016, 6, 56.	2.3	32
94	Elemental partitioning, lattice misfit and creep behaviour of Cr containing γ/β strengthened Co base superalloys. <i>Materials Science and Technology</i> , 2016, 32, 220-225.	1.6	71
95	Local mechanical properties of the $(\text{Ti}_2\text{O}+\text{Ti}\%_0)$ composite in multiphase titanium aluminides studied with nanoindentation at room and high temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 665, 135-140.	5.6	13
96	On the transition from plastic deformation to crack initiation in the high- and very high-cycle fatigue regimes in plain carbon steels. <i>International Journal of Fatigue</i> , 2016, 93, 281-291.	5.7	23
97	An improved method for point deflection measurements on rectangular membranes. <i>Materials and Design</i> , 2016, 109, 485-491.	7.0	11
98	Effect of elastic anisotropy on strain relief and residual stress determination in cubic systems by FIB-DIC experiments. <i>Materials and Design</i> , 2016, 112, 505-511.	7.0	11
99	Enhanced fatigue lives in AA1050A/AA5005 laminated metal composites produced by accumulative roll bonding. <i>Acta Materialia</i> , 2016, 120, 150-158.	7.9	55
100	Improved creep strength of nickel-base superalloys by optimized γ/β partitioning behavior of solid solution strengthening elements. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 676, 411-420.	5.6	52
101	Fracture toughness evaluation of NiAl single crystals by microcantilevers—a new continuous J-integral method. <i>Journal of Materials Research</i> , 2016, 31, 3786-3794.	2.6	47
102	A flexible method for the preparation of thin film samples for in situ TEM characterization combining shadow-FIB milling and electron-beam-assisted etching. <i>Ultramicroscopy</i> , 2016, 171, 82-88.	1.9	13
103	Superior creep strength of a nickel-based superalloy produced by selective laser melting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 674, 299-307.	5.6	170
104	Mechanical properties of copper/bronze laminates: Role of interfaces. <i>Acta Materialia</i> , 2016, 116, 43-52.	7.9	507
105	Tailored heat treated accumulative roll bonded aluminum blanks: failure under bending stresses. <i>Production Engineering</i> , 2016, 10, 399-407.	2.3	1
106	Instantaneous healing of micro-fractures during coseismic slip: Evidence from microstructure and Ti in quartz geochemistry within an exhumed pseudotachylite-bearing fault in tonalite. <i>Lithos</i> , 2016, 254-255, 84-93.	1.4	10
107	Reliability model of LED package regarding the fatigue behavior of gold wires. , 2016, , .		8
108	Diffusion of solutes in fcc Cobalt investigated by diffusion couples and first principles kinetic Monte Carlo. <i>Acta Materialia</i> , 2016, 106, 304-312.	7.9	131

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109	Global and local strain rate sensitivity of bimodal Al-laminates produced by accumulative roll bonding. <i>Acta Materialia</i> , 2016, 103, 643-650.	7.9	35
110	Microstructure, Lattice Misfit, and High-Temperature Strength of $\hat{\gamma}$ -Strengthened Co-Al-W-Ge Model Superalloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 2141-2149.	2.2	21
111	Mechanical characterization of metallic thin films by bulge and scratch testing. <i>Surface and Coatings Technology</i> , 2016, 289, 69-74.	4.8	26
112	Intermediate Co/Ni-base model superalloys – Thermophysical properties, creep and oxidation. <i>Scripta Materialia</i> , 2016, 112, 83-86.	5.2	74
113	Time-dependent deformation behavior of freestanding and SiN _x -supported gold thin films investigated by bulge tests. <i>Journal of Materials Research</i> , 2015, 30, 2161-2169.	2.6	13
114	DFG Research Training Group 1229 – Stable and Metastable Multi-Phase Systems for Elevated Service Temperatures – Advanced Engineering Materials, 2015, 17, 1096-1098.	3.5	0
115	The Thermal Stability of Intermetallic Compounds in an As-Cast SX Co-Base Superalloy. <i>Advanced Engineering Materials</i> , 2015, 17, 741-747.	3.5	26
116	Formation of Cuboidal Co ₃ AlC Precipitates in Carbon-Containing Co-Al-W-Based Superalloys. <i>Advanced Engineering Materials</i> , 2015, 17, 1113-1118.	3.5	10
117	Ultrafine-Grained Austenitic Stainless Steels X4CrNi18-12 and X8CrMnNi19-6-3 Produced by Accumulative Roll Bonding. <i>Metals</i> , 2015, 5, 730-742.	2.3	6
118	Microstructure-dependent deformation behaviour of bcc-metals – indentation size effect and strain rate sensitivity. <i>Philosophical Magazine</i> , 2015, 95, 1766-1779.	1.6	64
119	Evolution of microstructure and mechanical properties of coated Co-base superalloys during heat treatment and thermal exposure. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 628, 374-381.	5.6	12
120	The effect of tungsten content on the properties of L12-hardened Co-Al-W alloys. <i>Journal of Alloys and Compounds</i> , 2015, 632, 110-115.	5.5	81
121	Secondary Al-Si-Mg High-pressure Die Casting Alloys with Enhanced Ductility. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 1035-1045.	2.2	39
122	Microsegregation and precipitates of an as-cast Co-based superalloy – microstructural characterization and phase stability modelling. <i>Journal of Materials Science</i> , 2015, 50, 6329-6338.	3.7	46
123	Isothermal aging of a $\hat{\gamma}$ -strengthened Co-Al-W alloy coated with vacuum plasma-sprayed MCrAlY bond coats. <i>Surface and Coatings Technology</i> , 2015, 276, 360-367.	4.8	8
124	Silicon nitride and intrinsic amorphous silicon double antireflection coatings for thin-film solar cells on foreign substrates. <i>Thin Solid Films</i> , 2015, 583, 25-33.	1.8	10
125	Nanoindentation studies of the mechanical properties of the $\hat{\gamma}$ phase in a creep deformed Re containing nickel-based superalloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 634, 202-208.	5.6	72
126	Mechanical properties of ultrafine-grained AlZnMg(Cu)-alloys AA7020 and AA7075 processed by accumulative roll bonding. <i>Journal of Materials Science</i> , 2015, 50, 4422-4429.	3.7	23

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127	Novel wrought γ/γ' cobalt base superalloys with high strength and improved oxidation resistance. <i>Scripta Materialia</i> , 2015, 109, 104-107.	5.2	130
128	Influence of Iridium on the Properties of γ' -Strengthened Co-Base Superalloys. <i>Advanced Engineering Materials</i> , 2015, 17, 748-754.	3.5	18
129	Fatigue behavior of calcium containing AZ91 magnesium alloys*. <i>Materialprüfung/Materials Testing</i> , 2015, 57, 126-130.	2.2	0
130	Fatigue crack initiation in nickel-based superalloys studied by microstructure-based FE modeling and scanning electron microscopy. <i>MATEC Web of Conferences</i> , 2014, 14, 16001.	0.2	1
131	The Strengthening Effect of Phase Boundaries in a Severely Plastically Deformed Ti-Al Composite Wire. <i>Metals</i> , 2014, 4, 37-54.	2.3	4
132	Bulge fatigue testing of freestanding and supported gold films. <i>Journal of Materials Research</i> , 2014, 29, 267-276.	2.6	26
133	Microstructure and mechanical properties of Cr-Ta-Si Laves phase-based alloys at elevated temperatures. <i>Philosophical Magazine</i> , 2014, 94, 3914-3944.	1.6	14
134	Microcantilever bending experiments in NiAl – Evaluation, size effects, and crack tip plasticity. <i>Journal of Materials Research</i> , 2014, 29, 2129-2140.	2.6	67
135	Influence of cross-rolling on the mechanical properties of an accumulative roll bonded aluminum alloy AA6014. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 597, 122-127.	5.6	32
136	Mechanical properties and lattice misfit of γ/γ' strengthened Co-base superalloys in the Co-W-Al-Ti quaternary system. <i>Intermetallics</i> , 2014, 55, 28-39.	3.9	141
137	Elemental partitioning and mechanical properties of Ti- and Ta-containing Co-Al-W-base superalloys studied by atom probe tomography and nanoindentation. <i>Acta Materialia</i> , 2014, 78, 78-85.	7.9	168
138	Crack initiation mechanisms in AA6082 fatigued in the VHCF-regime. <i>International Journal of Fatigue</i> , 2014, 60, 23-27.	5.7	14
139	Characterization of Oxidation Protection Coatings for High Temperature Applications by Means of Nanoindentation and Scanning Electron Microscopy Methods. <i>Praktische Metallographie/Practical Metallography</i> , 2014, 51, 568-582.	0.3	1
140	Influence of specimen geometry on temperature increase during ultrasonic fatigue testing. <i>Ultrasonics</i> , 2013, 53, 1412-1416.	3.9	3
141	Highly resolved analysis of the chemistry and mechanical properties of an a-C:H coating system by nanoindentation and auger electron spectroscopy. <i>Thin Solid Films</i> , 2013, 528, 263-268.	1.8	5
142	Influence of upscaling accumulative roll bonding on the homogeneity and mechanical properties of AA1050A. <i>Journal of Materials Science</i> , 2013, 48, 8377-8385.	3.7	22
143	Surface strain evolution of ultrafine-grained aluminum alloy laminates under tension – Microscale plastic instabilities and the Portevin-Le Chatelier effect. <i>Scripta Materialia</i> , 2013, 68, 809-812.	5.2	9
144	Plastic deformation mechanisms in a crept L12 hardened Co-base superalloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 571, 13-18.	5.6	84

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