Andreas Stark

List of Publications by Year
in descending order

180 papers	3,622 citations	172207 29 h-index	182168 51 g-index
190 all docs	190 docs citations	190 times ranked	2208 citing authors

#	Article	IF	Citations
1	Peritectic titanium alloys for 3D printing. Nature Communications, 2018, 9, 3426.	5.8	172
2	Effect of carbon addition on solidification behavior, phase evolution and creep properties of an intermetallic Î²-stabilized Î³-TiAl based alloy. Intermetallics, 2014, 46, 173-184.	1.8	139
3	Microstructure development and hardness of a powder metallurgical multi phase Î³-TiAl based alloy. Intermetallics, 2012, 22, 231-240.	1.8	134
4	Microstructure and mechanical properties of a forged Î²-solidifying Î³ TiAl alloy in different heat treatment conditions. Intermetallics, 2015, 58, 71-83.	1.8	118
5	Hot-working behavior of an advanced intermetallic multi-phase Î³-TiAl based alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 614, 297-310.	2.6	117
6	Plasticity analysis by synchrotron radiation in a Mg97Y2Zn1 alloy with bimodal grain structure and containing LPSO phase. Acta Materialia, 2015, 94, 78-86.	3.8	93
7	Plastic deformation mechanisms in a crept L12 hardened Co-base superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 571, 13-18.	2.6	84
8	Phase transformation kinetics during continuous heating of a Î²-quenched Tiâ€“10Vâ€“2Feâ€“3Al alloy. Journal of Materials Science, 2015, 50, 1412-1426.	1.7	84
9	Effects of laser processing on the transformation characteristics of NiTi: A contribute to additive manufacturing. Scripta Materialia, 2018, 152, 122-126.	2.6	84
10	Recrystallization and phase transitions in a Î³-TiAl-based alloy as observed by ex situ and in situ high-energy X-ray diffraction. Acta Materialia, 2006, 54, 3721-3735.	3.8	81
11	The effect of tungsten content on the properties of L12-hardened Coâ€“Alâ€“W alloys. Journal of Alloys and Compounds, 2015, 632, 110-115.	2.8	81
12	In Situ Experiments with Synchrotron Highâ€Energy Xâ€Rays and Neutrons. Advanced Engineering Materials, 2011, 13, 658-663.	1.6	80
13	In Situ Observation of Various Phase Transformation Paths in Nbâ€Rich TiAl Alloys during Quenching with Different Rates. Advanced Engineering Materials, 2011, 13, 700-704.	1.6	72
14	Microstructural refinement of boron-containing Î²-solidifying Î³-titanium aluminide alloys through heat treatments in the Î² phase field. Intermetallics, 2013, 32, 12-20.	1.8	70
15	New insights into high-temperature deformation and phase transformation mechanisms of lamellar structures in high Nb-containing TiAl alloys. Acta Materialia, 2020, 186, 575-586.	3.8	65
16	Orthorhombic phase formation in a Nb-rich Î³-TiAl based alloy â€“ An in situ synchrotron radiation investigation. Acta Materialia, 2016, 121, 343-351.	3.8	58
17	Microstructure and mechanical properties of Ti 45Al 5Nb+(0â€“0.5C) sheets. Intermetallics, 2008, 16, 689-697.	1.8	52
18	Microstructure stability of Î³-TiAl produced by selective laser melting. Scripta Materialia, 2017, 130, 110-113.	2.6	49

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19	On the Formation of Ordered Ï‰â€phase in High Nb Containing Î³â€TiAl Based Alloys. Advanced Engineering Materials, 2008, 10, 929-934.	1.6	48
20	Investigation of carbides in Tiâ€“45Alâ€“5Nbâ€“xC alloys (0Ââ‰ÂxÂâ‰Â1) by transmission electron microscopy and high energy-XRD. Intermetallics, 2013, 33, 44-53.	1.8	47
21	Evolution of microstructure and texture in Tiâ€“46Alâ€“9Nb sheet material during tensile flow at elevated temperatures. Intermetallics, 2010, 18, 1046-1055.	1.8	42
22	Austenite decomposition and carbon partitioning during quenching and partitioning heat treatments studied via in-situ X-ray diffraction. Materials and Design, 2019, 178, 107862.	3.3	40
23	Mapping the geometry of Ti-6Al-4V: From martensite decomposition to localized spheroidization during selective laser melting. Scripta Materialia, 2020, 182, 48-52.	2.6	40
24	An in-situ high-energy X-ray diffraction study on the hot-deformation behavior ofÂa Î²-phase containing TiAl alloy. Intermetallics, 2013, 39, 25-33.	1.8	39
25	Microstructural evolution and thermal stability of AlCr(Si)N hard coatings revealed by in-situ high-temperature high-energy grazing incidence transmission X-ray diffraction. Acta Materialia, 2020, 186, 545-554.	3.8	34
26	In situ synchrotron diffraction of the solidification of Mg4Y3Nd. Materials Letters, 2013, 102-103, 62-64.	1.3	33
27	Influence of quasicrystal I-phase on twinning of extruded Mg-Zn-Y alloys under compression. Acta Materialia, 2018, 151, 271-281.	3.8	32
28	In Situ Characterization Techniques Based on Synchrotron Radiation and Neutrons Applied for the Development of an Engineering Intermetallic Titanium Aluminide Alloy. Metals, 2016, 6, 10.	1.0	31
29	Nucleation and thermal stability of carbide precipitates in high Nb containing TiAl alloys. Intermetallics, 2015, 66, 111-119.	1.8	30
30	An in situ investigation of the deformation mechanisms in a Î²-quenched Ti-5Al-5V-5Mo-3Cr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 717, 134-143.	2.6	30
31	Microstructure evolution and enhanced creep property of a high Nb containing TiAl alloy with carbon addition. Journal of Alloys and Compounds, 2019, 807, 151649.	2.8	30
32	Quench rate sensitivity of age-hardenable Al-Zn-Mg-Cu alloys with respect to the Zn/Mg ratio: An in situ SAXS and HEXRD study. Acta Materialia, 2022, 227, 117727.	3.8	30
33	Microstructure and Texture Formation during Hot Rolling of Niobium-Rich Î³ TiAl Alloys with Different Carbon Contents. Advanced Engineering Materials, 2006, 8, 1101-1108.	1.6	29
34	Load partition and microstructural evolution during in situ hot deformation of Tiâ€“6Alâ€“6Vâ€“2Sn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 657, 244-258.	2.6	29
35	Influence of alloy composition and thermal history on carbide precipitation in Î³-based TiAl alloys. Intermetallics, 2017, 89, 32-39.	1.8	29
36	Phase evolution and carbon redistribution during continuous tempering of martensite studied with high resolution techniques. Materials and Design, 2017, 136, 214-222.	3.3	29

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37	Morphology evolution of Ti3AlC carbide precipitates in high Nb containing TiAl alloys. Acta Materialia, 2017, 137, 36-44.	3.8	28
38	Growth and coarsening kinetics of gamma prime precipitates in CMSX-4 under simulated additive manufacturing conditions. Acta Materialia, 2019, 180, 84-96.	3.8	28
39	In situ and atomic-scale investigations of the early stages of Î³ precipitate growth in a supersaturated intermetallic Ti-44Al-7Mo (at.%) solid solution. Acta Materialia, 2019, 164, 110-121.	3.8	28
40	Microstructural influences on strengthening in a naturally aged and overaged Alâ€"Cuâ€"Liâ€"Mg based alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 637, 162-169.	2.6	27
41	The grain boundary pinning effect of the Î¼ phase in an advanced polycrystalline Î³/Î³â€² Co-base superalloy. Journal of Alloys and Compounds, 2018, 753, 333-342.	2.8	27
42	In situ study of phase transformations during laser-beam welding of a TiAl alloy for grain refinement and mechanical property optimization. Intermetallics, 2015, 62, 27-35.	1.8	26
43	CaO dissolution during melting and solidification of a Mgâ€"10 wt.% CaO alloy detected with in situ synchrotron radiation diffraction. Journal of Alloys and Compounds, 2015, 618, 64-66.	2.8	26
44	Directional Atomic Rearrangements During Transformations Between the Î±â€•and Î³â€Phases in Titanium Aluminides. Advanced Engineering Materials, 2008, 10, 389-392.	1.6	25
45	In situ small-angle X-ray scattering study of the perovskite-type carbide precipitation behavior in a carbon-containing intermetallic TiAl alloy using synchrotron radiation. Acta Materialia, 2014, 77, 360-369.	3.8	25
46	Deformation Mechanisms in Metastable Austenitic TRIP/TWIP Steels under Compressive Load Studied by <i>in situ</i> Synchrotron Radiation Diffraction. Advanced Engineering Materials, 2019, 21, 1801101.	1.6	25
47	Stress relaxation through thermal crack formation in CVD TiCN coatings grown on WC-Co with different Co contents. International Journal of Refractory Metals and Hard Materials, 2020, 86, 105102.	1.7	24
48	Hot deformation of Mg-Y-Zn alloy with a low content of the LPSO phase studied by in-situ synchrotron radiation diffraction. Journal of Magnesium and Alloys, 2020, 8, 199-209.	5.5	24
49	Microstructure, phase stability and element partitioning of Î³-Î³â€² Co-9Al-9W-2X alloys in different annealing conditions. Journal of Alloys and Compounds, 2019, 787, 594-605.	2.8	23
50	Synthesis of metal-intermetallic laminate (MIL) composites with modified Al3Ti structure and in situ synchrotron X-ray diffraction analysis of sintering process. Materials and Design, 2018, 151, 8-16.	3.3	22
51	Microstructure evolution induced by the intrinsic heat treatment occurring during wire-arc additive manufacturing of an Al-Mg-Zn-Cu crossover alloy. Materials Letters, 2021, 303, 130500.	1.3	22
52	Influence of small amounts of Si and Cr on the high temperature oxidation behavior of novel cobalt base superalloys. Corrosion Science, 2021, 184, 109388.	3.0	21
53	Morphology and stability of orthorhombic and hexagonal phases in a lamellar Î³-Ti-42Al-8.5Nb alloy-A transmission electron microscopy study. Acta Materialia, 2017, 135, 304-313.	3.8	20
54	High-strength Mg-6Zn-1Y-1Ca (wt%) alloy containing quasicrystalline I-phase processed by a powder metallurgy route. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 715, 92-100.	2.6	20

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55	Deformation-induced phase transformation in a Co-Cr-W-Mo alloy studied by high-energy X-ray diffraction during in-situ compression tests. Acta Materialia, 2019, 164, 272-282.	3.8	20
56	Oxidation behavior of arc evaporated TiSiN coatings investigated by in-situ synchrotron X-ray diffraction and HR-STEM. Surface and Coatings Technology, 2020, 404, 126632.	2.2	20
57	Influence of the Ti/Al/Nb ratio on the structure and properties on intermetallic layers obtained on titanium by non-vacuum electron beam cladding. Materials Characterization, 2020, 163, 110246.	1.9	20
58	In Situ High-Energy X-ray Diffraction during Hot-Forming of a Multiphase TiAl Alloy. Metals, 2015, 5, 2252-2265.	1.0	19
59	Microstructural changes in an extruded Mg Zn Y alloy reinforced by quasicrystalline I-phase by small additions of calcium, manganese and cerium-rich mischmetal. Materials Characterization, 2016, 118, 186-198.	1.9	19
60	Biomimetic hard and tough nanoceramic Tiâ€“Alâ€“N film with self-assembled six-level hierarchy. Nanoscale, 2019, 11, 7986-7995.	2.8	19
61	In Situ Synchrotron Study of B19 Phase Formation in an Intermetallic Î³â€TiAl Alloy. Advanced Engineering Materials, 2012, 14, 445-448.	1.6	18
62	Influence of rare-earth addition on the long-period stacking ordered phase in cast Mgâ€“Yâ€“Zn alloys. Journal of Materials Science, 2014, 49, 2714-2722.	1.7	18
63	Deformation and phase transformation behaviors of a high Nb-containing TiAl alloy compressed at intermediate temperatures. Journal of Materials Science and Technology, 2022, 102, 89-96.	5.6	18
64	In-situ investigation of the oxidation behavior of metastable CVD-Ti1-xAlxN using a novel combination of synchrotron radiation XRD and DSC. Surface and Coatings Technology, 2019, 374, 617-624.	2.2	17
65	The transient liquid phase bonding process of a Î³-TiAl alloy with brazing solders containing Fe or Ni. Intermetallics, 2019, 106, 48-58.	1.8	17
66	HRTEM analysis of the high-temperature phases of the newly developed high-temperature Ni-base superalloy VDM 780 Premium. Journal of Alloys and Compounds, 2020, 814, 152157.	2.8	17
67	Interfaceâ€Mediated Twinningâ€Induced Plasticity in a Fine Hexagonal Microstructure Generated by Additive Manufacturing. Advanced Materials, 2021, 33, e2105096.	11.1	17
68	Study of the Solidification of AS Alloys Combining <i>In Situ</i> Synchrotron Diffraction and Differential Scanning Calorimetry. Materials Science Forum, 0, 765, 286-290.	0.3	16
69	Elastic strain induced abnormal grain growth in graphene nanosheets (GNSs) reinforced copper (Cu) matrix composites. Acta Materialia, 2020, 200, 338-350.	3.8	16
70	New insights into perovskite-Ti3AlC precipitate splitting in a Ti-45Al-5Nb-0.75C alloy by transmission electron microscopy. Intermetallics, 2018, 100, 70-76.	1.8	15
71	Increase in the Mechanical Strength of Mg-8Gd-3Y-1Zn Alloy Containing Long-Period Stacking Ordered Phases Using Equal Channel Angular Pressing Processing. Metals, 2019, 9, 221.	1.0	15
72	Characterization of carbides in Q&P steels using a combination of high-resolution methods. Materials Characterization, 2020, 163, 110242.	1.9	15

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73	Formation of an 18R long-period stacking ordered structure in rapidly solidified Mg88Y8Zn4 alloy. Materials Characterization, 2016, 118, 514-518.	1.9	14
74	Initial plasticity stages in Mg alloys containing Long-Period Stacking Ordered phases using High Resolution Digital Image Correlation (HRDIC) and in-situ synchrotron radiation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 772, 138716.	2.6	14
75	Breaking the continuity of the Al2O3 oxide scale by additions of Cr in Co-Al-W-based superalloys. Corrosion Science, 2021, 189, 109594.	3.0	14
76	Neutron and synchrotron probes in the development of Coâ€“Re-based alloys for next generation gas turbines with an emphasis on the influence of boron additives. Journal of Applied Crystallography, 2014, 47, 1417-1430.	1.9	13
77	Ferrite recrystallization and austenite formation during annealing of cold-rolled advanced high-strength steels: In situ synchrotron X-ray diffraction and modeling. Materials Characterization, 2019, 154, 20-30.	1.9	13
78	Effect of precipitation in the compressive behavior of high strength Mg-Gd-Y-Zn extruded alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 768, 138452.	2.6	13
79	In-Situ Synchrotron X-Ray Diffraction of Ti-6Al-4V During Thermomechanical Treatment in the Beta Field. Metals, 2019, 9, 862.	1.0	13
80	Evidence of an orthorhombic transition phase in a Ti-44Al-3Mo (at.%) alloy using in situ synchrotron diffraction and transmission electron microscopy. Materials Characterization, 2019, 147, 398-405.	1.9	13
81	Microstructural Evolution in Gamma Titanium Aluminides During Severe Hot-Working. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 439-455.	1.1	12
82	Nitrogen transport through thermally grown chromia scales. Corrosion Science, 2018, 145, 180-190.	3.0	12
83	The Effect of Zn Content on the Mechanical Properties of Mg-4Nd-xZn Alloys (x = 0, 3, 5 and 8 wt.%). Materials, 2018, 11, 1103.	1.3	12
84	Identification of Laves phases in a Zr or Hf containing Î³-Î³â€² Co-base superalloy. Journal of Alloys and Compounds, 2019, 805, 880-886.	2.8	12
85	In situ analysis of the effect of high heating rates and initial microstructure on the formation and homogeneity of austenite. Journal of Materials Science, 2019, 54, 9197-9212.	1.7	12
86	Stress-controlled decomposition routes in cubic AlCrN films assessed by in-situ high-temperature high-energy grazing incidence transmission X-ray diffraction. Scientific Reports, 2019, 9, 18027.	1.6	12
87	Deformation kinetics of a TRIP steel determined by in situ high-energy synchrotron X-ray diffraction. Materialia, 2021, 20, 101251.	1.3	12
88	Ti-Al3Ti metal-intermetallic laminate (MIL) composite with a cubic titanium trialuminide stabilized with silver: Selection of fabrication regimes, structure, and properties. Journal of Alloys and Compounds, 2022, 916, 165480.	2.8	12
89	In situ synchrotron radiation diffraction study of the role of Gd, Nd on the elevated temperature compression behavior of ZK40. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 640, 129-136.	2.6	11
90	In situ synchrotron radiation diffraction investigation of the compression behaviour at 350Â°C of ZK40 alloys with addition of CaO and Y. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 664, 2-9.	2.6	11

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91	The Effect of a Grain Boundary Pinning B2 Phase on Polycrystalline Co-Based Superalloys with Reduced Density. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 4070-4078.	1.1	11
92	Ceramic-Reinforced Î³-TiAl-Based Composites: Synthesis, Structure, and Properties. Materials, 2019, 12, 629.	1.3	11
93	â€™Quenching and Partitioningâ€™ - An <i>In Situ</i> Approach to Characterize the Process Kinetics and the Final Microstructure of TRIP-Assisted Steel. Advanced Materials Research, 0, 409, 713-718.	0.3	10
94	Microstructure and Texture Evolution in an Intermetallic Î²â€Stabilized Ti<scp>A</scp>l Alloy During Forging and Subsequent Isothermal Annealing. Advanced Engineering Materials, 2014, 16, 445-451.	1.6	10
95	High strength nanocrystalline Cuâ€“Co alloys with high tensile ductility. Journal of Materials Research, 2019, 34, 58-68.	1.2	10
96	High temperature mechanical behaviour of Mgâ€“6Znâ€“1Y alloy with 1â€¯wt.% calcium addition: Reinforcing effect due to I-(Mg3Zn6Y1) and Mg6Zn3Ca2 phases. Journal of Magnesium and Alloys, 2020, 8, 1047-1060.	5.5	10
97	In situ synchrotron X-ray diffraction study of reaction routes in Ti-Al3Ti-based composites: The effect of transition metals on L12 structure stabilization. Journal of Alloys and Compounds, 2021, 875, 160004.	2.8	10
98	The temperature effect on the plastic deformation of the Mg88Zn7Y5 alloy with LPSO phase studied by in-situ synchrotron radiation diffraction. Intermetallics, 2021, 138, 107321.	1.8	10
99	Precipitation-based grain boundary design alters Inter- to Trans-granular Fracture in AlCrN Thin Films. Acta Materialia, 2022, 237, 118156.	3.8	10
100	Strain energy contributions on the bainitic phase transformation in a CrMoV steel during continuous cooling. Materials and Design, 2018, 155, 475-484.	3.3	9
101	Exploring Structural Changes, Manufacturing, Joining, and Repair of Intermetallic Î³â€TiAlâ€Based Alloys: Recent Progress Enabled by In Situ Synchrotron Xâ€Ray Techniques. Advanced Engineering Materials, 2021, 23, 2000947.	1.6	9
102	Screening for O phase in advanced Î³â€“TiAl alloys. Intermetallics, 2021, 131, 107086.	1.8	9
103	Effect of Si on bainitic transformation kinetics in steels explained by carbon partitioning, carbide formation, dislocation densities, and thermodynamic conditions. Materials Characterization, 2022, 185, 111774.	1.9	9
104	Phase Transformation and Residual Stress in a Laser Beam Spot-Welded TiAl-Based Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5750-5760.	1.1	8
105	Carbon Redistribution Process in Austempered Ductile Iron (ADI) During Heat Treatmentâ€”APT and Synchrotron Diffraction Study. Metals, 2019, 9, 789.	1.0	8
106	Nanostructured Low Carbon Steels Obtained from the Martensitic State via Severe Plastic Deformation, Precipitation, Recovery, and Recrystallization. Advanced Engineering Materials, 2019, 21, 1800202.	1.6	8
107	Temperature dependence of misfit in different Coâ€“Alâ€“W ternary alloys measured by synchrotron X-ray diffraction. Journal of Alloys and Compounds, 2020, 819, 152940.	2.8	8
108	In Situ Highâ€Energy Synchrotron Xâ€Ray Diffraction Reveals the Role of Texture on the Activation of Slip and Twinning during Deformation of Laser Powder Bed Fusion Tiâ€“6Alâ€“4V. Advanced Engineering Materials, 0, , 2001556.	1.6	8

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109	Influence of spinodal decomposition and fccâ†'w phase transformation on global and local mechanical properties of nanolamellar CVD fcc-Ti1-xAlxN coatings. Materialia, 2020, 11, 100696.	1.3	8
110	In Situ High Energy X-Ray Diffraction for Investigating the Phase Transformation in Hot Rolled TRIP-Aided Steels. Advanced Engineering Materials, 2014, 16, 1044-1051.	1.6	7
111	Ordering and disordering of Î²/Î²o-phase in Î³-TiAl based alloys investigated by neutron diffraction. MRS Advances, 2017, 2, 1399-1404.	0.5	7
112	Determination of Temperature-Dependent Elastic Constants of Steel AISI 4140 by Use of In Situ X-ray Dilatometry Experiments. Materials, 2020, 13, 2378.	1.3	7
113	Load partition during hot deformation of AlSi12 and AlSi10Cu6Ni2 alloys: a quantitative evaluation of the stiffness of Si networks. Journal of Materials Science, 2020, 55, 14558-14570.	1.7	7
114	Creep-induced Ï‰o phase precipitation and cavity formation in a cast 45.5Ti-45Al-9Nb-0.5B alloy. Journal of Alloys and Compounds, 2021, 875, 160106.	2.8	7
115	Microstructure and Texture Formation During Near Conventional Forging of an Intermetallic Tiâ€"45Alâ€"5Nb Alloy. Advanced Engineering Materials, 2009, 11, 976-981.	1.6	6
116	Texture Formation during Hot-Deformation of High-Nb Containing Î³-TiAl Based Alloys. Solid State Phenomena, 0, 160, 301-306.	0.3	6
117	In Situ High-Energy XRD Study of the Hot-Deformation Behavior of a Novel Î³-TiAl Alloy. Materials Research Society Symposia Proceedings, 2012, 1516, 71-76.	0.1	6
118	Phase Transformations During Solidification of a Laser-Beam-Welded TiAl Alloyâ€"An In Situ Synchrotron Study. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5761-5770.	1.1	6
119	On the reversibility of the Î±2/Ï‰o phase transformation in a high Nb containing TiAl alloy during high temperature deformation. Journal of Materials Science and Technology, 2021, 93, 96-102.	5.6	6
120	Thermal expansion behaviour of Long-Period Stacking Ordered (LPSO) phase. Revista De Metalurgia, 2015, 51, e043.	0.1	6
121	Microstructural Refinement of Boron Containing Î²-Solidifying Î³-Titanium Aluminide Alloys. Materials Science Forum, 0, 706-709, 1089-1094.	0.3	5
122	Microstructure of Ti-45Al-5Nb and Ti-45Al-10Nb Powders. Key Engineering Materials, 0, 704, 214-222.	0.4	5
123	Phase Formation during Solidification of Mg-Nd-Zn Alloys: An In Situ Synchrotron Radiation Diffraction Study. Materials, 2018, 11, 1637.	1.3	5
124	Thermal Expansion of a Multiphase Intermetallic Ti-Al-Nb-Mo Alloy Studied by High-Energy X-ray Diffraction. Materials, 2021, 14, 727.	1.3	5
125	Competition of mechanisms contributing to the texture formation in metastable austenitic steel under compressive load. Materials Characterization, 2021, 176, 111132.	1.9	5
126	Structure and Properties of Ti-Al-Ta and Ti-Al-Cr Cladding Layers Fabricated on Titanium. Metals, 2021, 11, 1139.	1.0	5

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127	Dynamic Recovery and Recrystallization during Hot-Working in an Advanced TiAl Alloy. Praktische Metallographie/Practical Metallography, 2011, 48, 632-642.	0.1	5
128	In-situ synchrotron X-ray diffraction during quenching and tempering of SAE 52100 steel. Materials Today Communications, 2021, 29, 102930.	0.9	5
129	Phase transformations and phase stability in the Tiâ€“44 at.%Alâ€“(0â€“7Âat.%)Mo system. Intermetallics, 2022, 143, 107484.	1.8	5
130	A Study of Recrystallization and Phase Transitions in Intermetallic Titanium Aluminides by In Situ High-Energy X-Ray Diffraction. Materials Science Forum, 2007, 539-543, 1519-1524.	0.3	4
131	Diffusion brazing of Î³-TiAl-alloys: Investigations of the joint by electron microscopy and high-energy X-ray diffraction. Materials Research Society Symposia Proceedings, 2013, 1516, 215-220.	0.1	4
132	The Transformation Mechanism of Î² Phase to Ï‰-Related Phases in Nb-Rich Î³-TiAl Alloys Studied by <i>In Situ</i> High-Energy X-Ray Diffraction. Materials Science Forum, 0, 772, 85-89.	0.3	4
133	In situ synchrotron radiation measurements of orthorhombic phase formation in an advanced TiAl alloy with modulated microstructure. Materials Research Society Symposia Proceedings, 2015, 1760, 120.	0.1	4
134	Anisotropic Plastic Behavior in an Extruded Long-Period Ordered Structure Mg90Y6.5Ni3.5 (at.%) Alloy. Crystals, 2020, 10, 279.	1.0	4
135	Oxidation resistance of cathodic arc evaporated Cr0.74Ta0.26N coatings. Scripta Materialia, 2022, 211, 114492.	2.6	4
136	Thermal stability of a cathodic arc evaporated Cr0.74Ta0.26N coating. Materialia, 2022, 22, 101434.	1.3	4
137	Formation of lower bainite in a high carbon steel â€“ an in-situ synchrotron XRD study. Journal of Materials Research and Technology, 2022, 18, 5380-5393.	2.6	4
138	TiAlNb-alloy with a modulated B19 containing constituent produced by powder metallurgy. Materials Research Society Symposia Proceedings, 2012, 1516, 35-40.	0.1	3
139	Different Cooling Rates and Their Effect on Morphology and Transformation Kinetics of Martensite. Minerals, Metals and Materials Series, 2018, , 35-40.	0.3	3
140	In-situ analysis of continuous cooling precipitation in Al alloys by wide-angle X-ray scattering. Science and Technology of Advanced Materials, 2020, 21, 205-218.	2.8	3
141	In Situ Synchrotron Radiation Diffraction during Solidification of Mg15Gd: Effect of Cooling Rate. , 2015, , 79-84.		3
142	Analysis of the Microstructure Role in the Yield Asymmetry of Extruded Mg-LPSO Alloys Using In Situ Diffraction Experiments. Jom, 2022, 74, 2609-2621.	0.9	3
143	How Si affects the microstructural evolution and phase transformations of intermetallic Î³-TiAl based alloys. Materialia, 2022, 24, 101475.	1.3	3
144	Phase Transitions and Recrystallization in a Ti-46at%Al-9at%Nb Alloy as Observed by In-Situ High-Energy X-ray Diffraction. Materials Research Society Symposia Proceedings, 2006, 980, 7.	0.1	2

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145	Texture Formation in High Niobium Containing TiAl Alloys. Materials Research Society Symposia Proceedings, 2006, 980, 1.	0.1	2
146	Very Hard Synchrotron X-Ray Radiation as an Advanced Characterization Method Applied to Advanced High-Strength Steels. Advanced Materials Research, 0, 409, 660-665.	0.3	2
147	In-situ High-energy X-ray Diffraction on an Intermetallic Î²-stabilised Î³-TiAl Based Alloy. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2015, 160, 221-225.	0.4	2
148	The Role of Zn on the Elevated Temperature Compression Behavior of Mg5Nd: An In Situ Synchrotron Radiation Diffraction Study. Jom, 2016, 68, 3051-3056.	0.9	2
149	Creep deformation of Co-Re-Ta-C alloys with varying C contentâ€"investigated in-situ by simultaneous synchrotron radiation diffraction. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 719, 124-131.	2.6	2
150	Phase Transformations in the Brazing Joint during Transient Liquid Phase Bonding of a Î³-TiAl Alloy Studied with <i>In Situ</i> High-Energy X-Ray Diffraction. Materials Science Forum, 0, 941, 943-948.	0.3	2
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