Andreas Stark

List of Publications by Year
in descending order

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180 papers	3,622 citations	172457 29 h-index	182427 51 g-index
190 all docs	190 docs citations	190 times ranked	2208 citing authors

#	Article	IF	Citations
1	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.	10.7	18
2	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.	4.4	9
3	Oxidation resistance of cathodic arc evaporated Cr0.74Ta0.26N coatings. Scripta Materialia, 2022, 211, 114492.	5.2	4
4	Phase transformations and phase stability in the Tiâ€“44 at.%Alâ€“(0â€“7Âat.%)Mo system. Intermetallics, 2022, 143, 107484.	3.9	5
5	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.	7.9	30
6	Thermal stability of a cathodic arc evaporated Cr0.74Ta0.26N coating. Materialia, 2022, 22, 101434.	2.7	4
7	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.	5.8	4
8	In- and ex-situ study of the deformation behavior of the Î²o(Ï‰o) phase in a Ti4Al3Nb alloy during high-temperature compression. Journal of Alloys and Compounds, 2022, , 165626.	5.5	1
9	Analysis of the Microstructure Role in the Yield Asymmetry of Extruded Mg-LPSO Alloys Using In Situ Diffraction Experiments. Jom, 2022, 74, 2609-2621.	1.9	3
10	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.	5.5	12
11	Temperature Dependence of Hallâ€“Petch Parameters Using In Situ Diffraction Experiments in AZ31 Alloy. Jom, 2022, 74, 2622-2634.	1.9	1
12	Near-Surface and Bulk Dissolution Behavior of Î³â€² Precipitates in Nickel-Based VDMÂ® Alloy 780 Studied with In-Situ Lab-Source and Synchrotron X-ray Diffraction. Metals, 2022, 12, 1067.	2.3	2
13	How Si affects the microstructural evolution and phase transformations of intermetallic Î³-TiAl based alloys. Materialia, 2022, 24, 101475.	2.7	3
14	Precipitation-based grain boundary design alters Inter- to Trans-granular Fracture in AlCrN Thin Films. Acta Materialia, 2022, 237, 118156.	7.9	10
15	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.	3.5	9
16	In-Situ Investigation of the Oxidation Behaviour of Chemical Vapour Deposited Zr(C,N) Hard Coatings Using Synchrotron X-ray Diffraction. Coatings, 2021, 11, 264.	2.6	2
17	TEM and Synchrotron X-ray Study of the Evolution of Phases Formed During Bonding of IN718/Al/IN718 Couples by TLPB. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 1382-1394.	2.2	0
18	Thermal Expansion of a Multiphase Intermetallic Ti-Al-Nb-Mo Alloy Studied by High-Energy X-ray Diffraction. Materials, 2021, 14, 727.	2.9	5

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19	Screening for O phase in advanced Î³â€“TiAl alloys. Intermetallics, 2021, 131, 107086.	3.9	9
20	Load Partitioning Between Mg17Al12 Precipitates and Mg Phase in the AZ91 Alloy Using In-Situ Synchrotron Radiation Diffraction Experiments. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 2732-2745.	2.2	1
21	Influence of small amounts of Si and Cr on the high temperature oxidation behavior of novel cobalt base superalloys. Corrosion Science, 2021, 184, 109388.	6.6	21
22	Competition of mechanisms contributing to the texture formation in metastable austenitic steel under compressive load. Materials Characterization, 2021, 176, 111132.	4.4	5
23	An In Situ Synchrotron Dilatometry and Atomistic Study of Martensite and Carbide Formation during Partitioning and Tempering. Materials, 2021, 14, 3849.	2.9	0
24	Structure and Properties of Ti-Al-Ta and Ti-Al-Cr Cladding Layers Fabricated on Titanium. Metals, 2021, 11, 1139.	2.3	5
25	Breaking the continuity of the Al2O3 oxide scale by additions of Cr in Co-Al-W-based superalloys. Corrosion Science, 2021, 189, 109594.	6.6	14
26	Creep-induced Ï‰ phase precipitation and cavity formation in a cast 45.5Ti-45Al-9Nb-0.5B alloy. Journal of Alloys and Compounds, 2021, 875, 160106.	5.5	7
27	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.	5.5	10
28	In situ high-energy X-ray diffraction of precipitation and dissolution reactions during heating of Al alloys. Journal of Materials Science, 2021, 56, 19697-19708.	3.7	2
29	In situ synchrotron X-ray diffraction study of continuous cooling transformations of TIMETAL 54M. Journal of Alloys and Compounds, 2021, 881, 160602.	5.5	1
30	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.	3.9	10
31	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.	2.6	22
32	On the reversibility of the Î±2/Ï‰ phase transformation in a high Nb containing TiAl alloy during high temperature deformation. Journal of Materials Science and Technology, 2021, 93, 96-102.	10.7	6
33	Interfaceâ€Mediated Twinningâ€Induced Plasticity in a Fine Hexagonal Microstructure Generated by Additive Manufacturing. Advanced Materials, 2021, 33, e2105096.	21.0	17
34	Deformation kinetics of a TRIP steel determined by in situ high-energy synchrotron X-ray diffraction. Materialia, 2021, 20, 101251.	2.7	12
35	In-situ synchrotron X-ray diffraction during quenching and tempering of SAE 52100 steel. Materials Today Communications, 2021, 29, 102930.	1.9	5
36	Stainless steel reveals an anomaly in thermal expansion behavior of severely deformed materials. Physical Review Materials, 2021, 5, .	2.4	0

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37	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.	5.5	17
38	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.	3.8	24
39	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.	5.6	14
40	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.	5.5	8
41	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.	4.8	20
42	Elastic strain induced abnormal grain growth in graphene nanosheets (GNSs) reinforced copper (Cu) matrix composites. Acta Materialia, 2020, 200, 338-350.	7.9	16
43	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.	11.9	10
44	Anisotropic Plastic Behavior in an Extruded Long-Period Ordered Structure Mg90Y6.5Ni3.5 (at.%) Alloy. Crystals, 2020, 10, 279.	2.2	4
45	Determination of Temperature-Dependent Elastic Constants of Steel AISI 4140 by Use of In Situ X-ray Dilatometry Experiments. Materials, 2020, 13, 2378.	2.9	7
46	Mapping the geometry of Ti-6Al-4V: From martensite decomposition to localized spheroidization during selective laser melting. Scripta Materialia, 2020, 182, 48-52.	5.2	40
47	Characterization of carbides in Q&P steels using a combination of high-resolution methods. Materials Characterization, 2020, 163, 110242.	4.4	15
48	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.	4.4	20
49	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.	3.7	7
50	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.	7.9	65
51	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.	7.9	34
52	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.	11.9	24
53	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.	6.1	3
54	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.	2.7	8

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55	Phase separation and up-hill diffusion in the ordered Î±2 compound of a Î³- Ti-Al-Nb alloy. MATEC Web of Conferences, 2020, 321, 12041.	0.2	0
56	Microstructure evolution and enhanced creep property of a high Nb containing TiAl alloy with carbon addition. Journal of Alloys and Compounds, 2019, 807, 151649.	5.5	30
57	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.	5.5	12
58	Carbon Redistribution Process in Austempered Ductile Iron (ADI) During Heat Treatmentâ€"APT and Synchrotron Diffraction Study. Metals, 2019, 9, 789.	2.3	8
59	Austenite decomposition and carbon partitioning during quenching and partitioning heat treatments studied via in-situ X-ray diffraction. Materials and Design, 2019, 178, 107862.	7.0	40
60	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.	4.4	13
61	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.	5.6	13
62	Growth and coarsening kinetics of gamma prime precipitates in CMSX-4 under simulated additive manufacturing conditions. Acta Materialia, 2019, 180, 84-96.	7.9	28
63	In-Situ Synchrotron X-Ray Diffraction of Ti-6Al-4V During Thermomechanical Treatment in the Beta Field. Metals, 2019, 9, 862.	2.3	13
64	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.	5.5	23
65	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.	4.8	17
66	Ceramic-Reinforced Î³-TiAl-Based Composites: Synthesis, Structure, and Properties. Materials, 2019, 12, 629.	2.9	11
67	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.	3.7	12
68	Biomimetic hard and tough nanoceramic Tiâ€"Alâ€"N film with self-assembled six-level hierarchy. Nanoscale, 2019, 11, 7986-7995.	5.6	19
69	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.	2.3	15
70	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.	3.3	12
71	In Situ Synchrotron Diffraction Analysis of Zn Additions on the Compression Properties of NK30. Materials, 2019, 12, 3935.	2.9	2
72	The transient liquid phase bonding process of a Î³-TiAl alloy with brazing solders containing Fe or Ni. Intermetallics, 2019, 106, 48-58.	3.9	17

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73	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.	4.4	13
74	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.	7.9	28
75	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.	7.9	20
76	Deformation Mechanisms in Metastable Austenitic TRIP/TWIP Steels under Compressive Load Studied by in situ Synchrotron Radiation Diffraction. Advanced Engineering Materials, 2019, 21, 1801101.	3.5	25
77	High strength nanocrystalline Cuâ€“Co alloys with high tensile ductility. Journal of Materials Research, 2019, 34, 58-68.	2.6	10
78	Nanostructured Low Carbon Steels Obtained from the Martensitic State via Severe Plastic Deformation, Precipitation, Recovery, and Recrystallization. Advanced Engineering Materials, 2019, 21, 1800202.	3.5	8
79	Thermo-mechanical Processing of EZK Alloys in a Synchrotron Radiation Beam. Minerals, Metals and Materials Series, 2019, , 297-303.	0.4	0
80	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.	5.5	27
81	Different Cooling Rates and Their Effect on Morphology and Transformation Kinetics of Martensite. Minerals, Metals and Materials Series, 2018, , 35-40.	0.4	3
82	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.	7.0	22
83	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.	5.6	30
84	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.	5.6	2
85	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.	5.6	20
86	Effects of laser processing on the transformation characteristics of NiTi: A contribute to additive manufacturing. Scripta Materialia, 2018, 152, 122-126.	5.2	84
87	Influence of quasicrystal I-phase on twinning of extruded Mg-Zn-Y alloys under compression. Acta Materialia, 2018, 151, 271-281.	7.9	32
88	Elemental Segregation and O-Phase Formation in a Gamma-TiAl Alloy. Materials Science Forum, 2018, 941, 741-746.	0.3	2
89	Nitrogen transport through thermally grown chromia scales. Corrosion Science, 2018, 145, 180-190.	6.6	12
90	Phase Formation during Solidification of Mg-Nd-Zn Alloys: An In Situ Synchrotron Radiation Diffraction Study. Materials, 2018, 11, 1637.	2.9	5

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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.	2.2	11
92	New insights into perovskite-Ti3AlC precipitate splitting in a Ti-45Al-5Nb-0.75C alloy by transmission electron microscopy. Intermetallics, 2018, 100, 70-76.	3.9	15
93	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.	2.9	12
94	Peritectic titanium alloys for 3D printing. Nature Communications, 2018, 9, 3426.	12.8	172
95	Strain energy contributions on the bainitic phase transformation in a CrMoV steel during continuous cooling. Materials and Design, 2018, 155, 475-484.	7.0	9
96	Investigation of single phase <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">u</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>ZnS</mml:mi><mml:msub><mml:mi mathvariant="normal">n</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">b</mml:mi><mml:mrow	2.4	2
97	Ordering and disordering of Î²/Î²0-phase in Î³-TiAl based alloys investigated by neutron diffraction. MRS Advances, 2017, 2, 1399-1404.	0.9	7
98	Microstructure of gas atomised Î³-TiAl based alloy powders. MRS Advances, 2017, 2, 1347-1352.	0.9	1
99	Influence of alloy composition and thermal history on carbide precipitation in Î³-based TiAl alloys. Intermetallics, 2017, 89, 32-39.	3.9	29
100	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.	7.9	20
101	Microstructure stability of Î³-TiAl produced by selective laser melting. Scripta Materialia, 2017, 130, 110-113.	5.2	49
102	Phase evolution and carbon redistribution during continuous tempering of martensite studied with high resolution techniques. Materials and Design, 2017, 136, 214-222.	7.0	29
103	Morphology evolution of Ti3AlC carbide precipitates in high Nb containing TiAl alloys. Acta Materialia, 2017, 137, 36-44.	7.9	28
104	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.	2.3	31
105	Hexagonal To Orthorhombic Symmetry Reduction In a Lamellar Ti-42Al-8.5Nb Alloy. Microscopy and Microanalysis, 2016, 22, 1948-1949.	0.4	0
106	The Role of Zn on the Elevated Temperature Compression Behavior of Mg5Nd: An In Situ Synchrotron Radiation Diffraction Study. Jom, 2016, 68, 3051-3056.	1.9	2
107	In situ analysis of the forging process of a novel Î³â€TiAl alloy using synchrotron radiation. Materialwissenschaft Und Werkstofftechnik, 2016, 47, 1109-1120.	0.9	0
108	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.	5.6	11

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109	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.	4.4	19
110	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.	2.2	6
111	Formation of an 18R long-period stacking ordered structure in rapidly solidified Mg88Y8Zn4 alloy. Materials Characterization, 2016, 118, 514-518.	4.4	14
112	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.	2.2	8
113	Orthorhombic phase formation in a Nb-rich Î³-TiAl based alloy â€“ An in situ synchrotron radiation investigation. Acta Materialia, 2016, 121, 343-351.	7.9	58
114	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.	5.6	29
115	In Situ High-Energy X-ray Diffraction during Hot-Forming of a Multiphase TiAl Alloy. Metals, 2015, 5, 2252-2265.	2.3	19
116	Plasticity analysis by synchrotron radiation in a Mg97Y2Zn1 alloy with bimodal grain structure and containing LPSO phase. Acta Materialia, 2015, 94, 78-86.	7.9	93
117	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
118	Phase transformation kinetics during continuous heating of a Î²-quenched Tiâ€“10Vâ€“2Feâ€“3Al alloy. Journal of Materials Science, 2015, 50, 1412-1426.	3.7	84
119	The effect of tungsten content on the properties of L12-hardened Coâ€“Alâ€“W alloys. Journal of Alloys and Compounds, 2015, 632, 110-115.	5.5	81
120	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.	5.6	27
121	Nucleation and thermal stability of carbide precipitates in high Nb containing TiAl alloys. Intermetallics, 2015, 66, 111-119.	3.9	30
122	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.	3.9	26
123	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.	1.0	2
124	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.	5.6	11
125	Microstructure and mechanical properties of a forged Î²-solidifying Î³ TiAl alloy in different heat treatment conditions. Intermetallics, 2015, 58, 71-83.	3.9	118
126	Microstructural Evolution in Gamma Titanium Aluminides During Severe Hot-Working. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 439-455.	2.2	12

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127	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.	5.5	26
128	In Situ Synchrotron Radiation Diffraction during Solidification of Mg15Gd: Effect of Cooling Rate. , 2015, , 79-84.		3
129	Investigation of Compression Behavior of Mg-4Zn-2(Nd,Gd)-0.5Zr at 350Â°C by In Situ Synchrotron Radiation Diffraction. , 2015, , 103-107.		1
130	In Situ Investigation of Microstructure Evolution during Solidification of Mg10CaxGd (x=5, 10, 20) Alloys. Acta Physica Polonica A, 2015, 128, 606-611.	0.5	2
131	Thermal expansion behaviour of Long-Period Stacking Ordered (LPSO) phase. Revista De Metalurgia, 2015, 51, e043.	0.5	6
132	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.	7.9	25
133	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.	3.5	7
134	Effects of Carbon Content, Annealing Condition and Internal Defects on the nucleation, growth and coarsening of P-type Carbides in High Niobium Containing TiAl Alloys. Materials Research Society Symposia Proceedings, 2014, 1760, 61.	0.1	0
135	Perovskite Ti3AlC Carbide Splitting in High Nb Containing TiAl Alloys. Materials Research Society Symposia Proceedings, 2014, 1760, 31.	0.1	1
136	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.	3.7	18
137	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.	5.6	117
138	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.	3.5	10
139	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.	3.9	139
140	In Situ Synchrotron Radiation Diffraction during Solidification of Mg4Y and Mg4YxGd Alloys (x = 1, 4) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		0
141	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.	4.5	13
142	In Situ Synchrotron Radiation Diffraction during Melting and Solidification of Mg-Al Alloys Containing CaO. , 2014, , 191-195.		1
143	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.	3.9	39
144	Microstructural refinement of boron-containing Î²-solidifying Î³-titanium aluminide alloys through heat treatments in the Î² phase field. Intermetallics, 2013, 32, 12-20.	3.9	70

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145	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.	5.6	84
146	In situ synchrotron diffraction of the solidification of Mg4Y3Nd. Materials Letters, 2013, 102-103, 62-64.	2.6	33
147	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.	3.9	47
148	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
149	In situ synchrotron diffraction of the solidification of Mg-RE alloys. , 2013, , 253-257.		0
150	TiAlNb-alloy with a modulated B19 containing constituent produced by powder metallurgy. Materials Research Society Symposia Proceedings, 2012, 1516, 35-40.	0.1	3
151	Microstructure development and hardness of a powder metallurgical multi phase Î³-TiAl based alloy. Intermetallics, 2012, 22, 231-240.	3.9	134
152	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
153	In Situ Synchrotron Study of B19 Phase Formation in an Intermetallic Î³â€TiAl Alloy. Advanced Engineering Materials, 2012, 14, 445-448.	3.5	18
154	Monitoring of Heat Treatment Processes by High Energy Synchrotron Radiation. Acta Physica Polonica A, 2012, 121, 39-43.	0.5	2
155	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.	3.5	72
156	In Situ Experiments with Synchrotron Highâ€Energy Xâ€Rays and Neutrons. Advanced Engineering Materials, 2011, 13, 658-663.	3.5	80
157	In Situ Studies of Light Metals with Synchrotron Radiation and Neutrons. Materials Science Forum, 2011, 690, 192-197.	0.3	0
158	Texture Formation of Î±₂-Ti₃Al during Hot Forming of Î³-TiAl Based Alloys. Materials Research Society Symposia Proceedings, 2011, 1295, 189.	0.1	0
159	Influence of Quenching Rates on the Transformation of Ternary Phases in Nb-rich Î³-TiAl Alloys. Materials Research Society Symposia Proceedings, 2011, 1295, 107.	0.1	1
160	Dynamic Recovery and Recrystallization during Hot-Working in an Advanced TiAl Alloy. Praktische Metallographie/Practical Metallography, 2011, 48, 632-642.	0.3	5
161	Evolution of microstructure and texture in Tiâ€“46Alâ€“9Nb sheet material during tensile flow at elevated temperatures. Intermetallics, 2010, 18, 1046-1055.	3.9	42
162	Microstructure and Texture Formation During Near Conventional Forging of an Intermetallic Tiâ€“45Alâ€“5Nb Alloy. Advanced Engineering Materials, 2009, 11, 976-981.	3.5	6

#	Article	IF	Citations
163	Directional Atomic Rearrangements During Transformations Between the Î±â€•and Î³â€Phases in Titanium Aluminides. Advanced Engineering Materials, 2008, 10, 389-392.	3.5	25
164	On the Formation of Ordered Ï‰â€phase in High Nb Containing Î³â€TiAl Based Alloys. Advanced Engineering Materials, 2008, 10, 929-934.	3.5	48
165	Microstructure and mechanical properties of Ti 45Al 5Nb+(0â€“0.5C) sheets. Intermetallics, 2008, 16, 689-697.	3.9	52
166	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
167	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.	7.9	81
168	Microstructure and Texture Formation during Hot Rolling of Niobium-Rich Î³ TiAl Alloys with Different Carbon Contents. Advanced Engineering Materials, 2006, 8, 1101-1108.	3.5	29
169	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
170	Texture Formation in High Niobium Containing TiAl Alloys. Materials Research Society Symposia Proceedings, 2006, 980, 1.	0.1	2
171	Texture Formation during Hot-Deformation of High-Nb Containing Î³-TiAl Based Alloys. Solid State Phenomena, 0, 160, 301-306.	0.3	6
172	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
173	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
174	Microstructural Refinement of Boron Containing Î²-Solidifying Î³-Titanium Aluminide Alloys. Materials Science Forum, 0, 706-709, 1089-1094.	0.3	5
175	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
176	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
177	Microstructure of Ti-45Al-5Nb and Ti-45Al-10Nb Powders. Key Engineering Materials, 0, 704, 214-222.	0.4	5
178	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
179	Stability of Ordered B2-Î²_O and Disordered BCC-Î² Phases in Tial - A First Principles Study. Materials Science Forum, 0, 1016, 1159-1165.	0.3	0
180	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.	3.5	8