Alexis Deschamps

List of Publications by Year
in descending order

182 papers	12,116 citations	17440 63 h-index	28297 105 g-index
189 all docs	189 docs citations	189 times ranked	4901 citing authors

#	Article	IF	Citations
1	Influence of predeformation and agEing of an Alâ€“Znâ€“Mg alloyâ€"II. Modeling of precipitation kinetics and yield stress. Acta Materialia, 1998, 47, 293-305.	7.9	537
2	Friction stir welding/processing of metals and alloys: A comprehensive review on microstructural evolution. Progress in Materials Science, 2021, 117, 100752.	32.8	436
3	Influence of alloy composition and heat treatment on precipitate composition in Alâ€“Znâ€“Mgâ€“Cu alloys. Acta Materialia, 2010, 58, 248-260.	7.9	345
4	Influence of predeformation on ageing in an Alâ€“Znâ€“Mg alloyâ€"I. Microstructure evolution and mechanical properties. Acta Materialia, 1998, 47, 281-292.	7.9	340
5	Hardening precipitation in a Mgâ€“4Yâ€“3RE alloy. Acta Materialia, 2003, 51, 5335-5348.	7.9	323
6	The influence of Cu/Li ratio on precipitation in Alâ€“Cuâ€“Liâ€“x alloys. Acta Materialia, 2013, 61, 2207-2218.	7.9	316
7	Quantitative investigation of precipitation and mechanical behaviour for AA2024 friction stir welds. Acta Materialia, 2005, 53, 2447-2458.	7.9	312
8	Complex precipitation pathways in multicomponent alloys. Nature Materials, 2006, 5, 482-488.	27.5	272
9	Evolution of precipitate microstructures during the retrogression and re-ageing heat treatment of an Alâ€“Znâ€“Mgâ€“Cu alloy. Acta Materialia, 2010, 58, 4814-4826.	7.9	264
10	On the relationship between microstructure, strength and toughness in AA7050 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 356, 326-336.	5.6	251
11	Characterisation and modelling of precipitate evolution in an Alâ€“Znâ€“Mg alloy during non-isothermal heat treatments. Acta Materialia, 2003, 51, 6077-6094.	7.9	247
12	Microstructure-based modelling of isotropic and kinematic strain hardening in a precipitation-hardened aluminium alloy. Acta Materialia, 2011, 59, 3621-3635.	7.9	216
13	The influence of precipitation on plastic deformation of Alâ€“Cuâ€“Li alloys. Acta Materialia, 2013, 61, 4010-4021.	7.9	216
14	Precipitation behavior and its effect on strengthening of an HSLA-Nb/Ti steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 1635-1647.	2.2	215
15	Dissimilar material joining using laser (aluminum to steel using zinc-based filler wire). Optics and Laser Technology, 2007, 39, 652-661.	4.6	206
16	Characterisation of the composition and volume fraction of Î·â€² and Î· precipitates in an Alâ€“Znâ€“Mg alloy by a combination of atom probe, small-angle X-ray scattering and transmission electron microscopy. Acta Materialia, 2005, 53, 2881-2892.	7.9	205
17	Precipitation Kinetics and Strengthening of a Fe-0.8wt%Cu Alloy.. ISIJ International, 2001, 41, 196-205.	1.4	198
18	Atomic structure of T1 precipitates in Alâ€“Liâ€“Cu alloys revisited with HAADF-STEM imaging and small-angle X-ray scattering. Acta Materialia, 2011, 59, 462-472.	7.9	198

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19	Quantification and modelling of the microstructure/strength relationship by tailoring the morphological parameters of the T1 phase in an Alâ€“Cuâ€“Li alloy. Acta Materialia, 2014, 75, 134-146.	7.9	197
20	Relationship between alloy composition, microstructure and exfoliation corrosion in Alâ€“Znâ€“Mgâ€“Cu alloys. Corrosion Science, 2011, 53, 3139-3149.	6.6	185
21	Microstructural evolution during ageing of Alâ€“Cuâ€“Liâ€“x alloys. Acta Materialia, 2014, 66, 199-208.	7.9	183
22	In situ evaluation of dynamic precipitation during plastic straining of an Alâ€“Znâ€“Mgâ€“Cu alloy. Acta Materialia, 2012, 60, 1905-1916.	7.9	178
23	Influence of quench and heating rates on the ageing response of an Alâ€“Znâ€“Mgâ€“(Zr) alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 251, 200-207.	5.6	162
24	Coupled precipitation and yield strength modelling for non-isothermal treatments of a 6061 aluminium alloy. Acta Materialia, 2014, 62, 129-140.	7.9	155
25	Characterization and modeling of precipitation kinetics in an Alâ€“Znâ€“Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 293, 267-274.	5.6	141
26	Influence of Mg, Ag and Zn minor solute additions on the precipitation kinetics and strengthening of an Al-Cu-Li alloy. Acta Materialia, 2017, 133, 172-185.	7.9	140
27	The effect of minor solute additions on the precipitation path of an Al Cu Li alloy. Acta Materialia, 2016, 115, 104-114.	7.9	135
28	The strength of friction stir welded and friction stir processed aluminium alloys. Scripta Materialia, 2008, 58, 377-382.	5.2	134
29	Strengthening mechanisms of T1 precipitates and their influence on the plasticity of an Alâ€“Cuâ€“Li alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 605, 119-126.	5.6	134
30	The influence of artificial ageing on the corrosion behaviour of a 2050 aluminiumâ€“copperâ€“lithium alloy. Corrosion Science, 2014, 80, 494-502.	6.6	129
31	Grain boundary versus transgranular ductile failure. Journal of the Mechanics and Physics of Solids, 2003, 51, 637-665.	4.8	125
32	Low-temperature solubility of copper in iron: experimental study using thermoelectric power, small angle X-ray scattering and tomographic atom probe. Philosophical Magazine, 2005, 85, 2197-2210.	1.6	120
33	Influence of Mg and Li content on the microstructure evolution of Al Cu Li alloys during long-term ageing. Acta Materialia, 2017, 122, 32-46.	7.9	120
34	A combined approach to microstructure mapping of an Alâ€“Li AA2199 friction stir weld. Acta Materialia, 2011, 59, 3002-3011.	7.9	115
35	Precipitation kinetics in a severely plastically deformed 7075 aluminium alloy. Acta Materialia, 2014, 66, 105-117.	7.9	111
36	Microstructure mapping in friction stir welds of 7449 aluminium alloy using SAXS. Acta Materialia, 2006, 54, 4793-4801.	7.9	104

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37	Modelling the precipitation of NbC on dislocations in Î±-Fe. Acta Materialia, 2007, 55, 1255-1266.	7.9	104
38	The coexistence of two S (Al2CuMg) phases in Alâ€“Cuâ€“Mg alloys. Acta Materialia, 2012, 60, 6940-6951.	7.9	102
39	Quantitative description of the T₁formation kinetics in an Alâ€“Cuâ€“Li alloy using differential scanning calorimetry, small-angle X-ray scattering and transmission electron microscopy. Philosophical Magazine, 2014, 94, 1012-1030.	1.6	102
40	Influence of cooling rate on the precipitation microstructure in a medium strength Alâ€“Znâ€“Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 501, 133-139.	5.6	101
41	Precipitate characterisation in metallic systems by small-angle X-ray or neutron scattering. Comptes Rendus Physique, 2012, 13, 246-256.	0.9	99
42	Comparative study on local and global mechanical properties of 2024 T351, 2024 T6 and 5251 O friction stir welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 415, 162-170.	5.6	97
43	A model for predicting fracture mode and toughness in 7000 series aluminium alloys. Acta Materialia, 2004, 52, 2529-2540.	7.9	95
44	Quantitative measurements of dynamic precipitation during fatigue of an Alâ€“Znâ€“Mgâ€“(Cu) alloy using small-angle X-ray scattering. Acta Materialia, 2014, 74, 96-109.	7.9	94
45	Influence of microstructural parameters on the mechanical properties of oxide dispersion strengthened Fe-14Cr steels. Acta Materialia, 2017, 127, 165-177.	7.9	89
46	On the validity of simple precipitate size measurements by small-angle scattering in metallic systems. Journal of Applied Crystallography, 2011, 44, 343-352.	4.5	85
47	Evolution of the microstructure of a 15-5PH martensitic stainless steel during precipitation hardening heat treatment. Materials and Design, 2016, 107, 416-425.	7.0	85
48	Nature and distribution of quench-induced precipitation in an Al-Zn-Mg-Cu Alloy. Scripta Materialia, 1998, 39, 1517-1522.	5.2	83
49	On the coupling between precipitation and plastic deformation in relation with friction stir welding of AA2024 T3 aluminium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 441, 39-48.	5.6	83
50	In situ small-angle scattering study of the precipitation kinetics in an Alâ€“Zrâ€“Sc alloy. Acta Materialia, 2007, 55, 2775-2783.	7.9	83
51	Low-temperature dynamic precipitation in a supersaturated Al-Zn-Mg alloy and related strain hardening. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 2485-2504.	0.6	80
52	Microstructure distribution in an AA2050 T34 friction stir weld and its evolution during post-welding heat treatment. Acta Materialia, 2015, 101, 90-100.	7.9	78
53	A small-angle neutron scattering study of fine-scale NbC precipitation kinetics in the Î±-Feâ€“Nbâ€“C system. Journal of Applied Crystallography, 2006, 39, 473-482.	4.5	77
54	In situ evaluation of the microstructure evolution during rapid hardening of an Alâ€“2.5Cuâ€“1.5Mg (wt.%) alloy. Acta Materialia, 2011, 59, 2918-2927.	7.9	77

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55	Experimental and modelling assessment of precipitation kinetics in an Alâ€“Liâ€“Mg alloy. Acta Materialia, 2012, 60, 1917-1928.	7.9	76
56	Influence of copper addition on precipitation kinetics and hardening in Alâ€“Znâ€“Mg alloy. Materials Science and Technology, 1999, 15, 993-1000.	1.6	74
57	Precipitation kinetics in metallic alloys: Experiments and modeling. Acta Materialia, 2021, 220, 117338.	7.9	73
58	The influence of plastic instabilities on the mechanical properties of a high-manganese austenitic FeMnC steel. International Journal of Materials Research, 2008, 99, 734-738.	0.3	71
59	The interaction of plasticity and diffusion controlled precipitation reactions. Scripta Materialia, 2003, 49, 927-932.	5.2	70
60	Characterisation of precipitation microstructures in aluminium alloys 7040 and 7050 and their relationship to mechanical behaviour. Materials Science and Technology, 2004, 20, 567-576.	1.6	70
61	In-situ small-angle X-ray scattering study of dynamic precipitation in an Al-Zn-Mg-Cu alloy. Philosophical Magazine, 2003, 83, 677-692.	1.6	69
62	Relating the Early Evolution of Microstructure with the Electrochemical Response and Mechanical Performance of a Cu-Rich and Cu-Lean 7xxx Aluminum Alloy. Journal of the Electrochemical Society, 2012, 159, C492-C502.	2.9	67
63	Atom probe microscopy investigation of Mg site occupancy within Î´â€² precipitates in an Alâ€“Mgâ€“Li alloy. Scripta Materialia, 2012, 66, 903-906.	5.2	65
64	A comparative study of precipitate composition and volume fraction in an Alâ€“Znâ€“Mg alloy using tomographic atom probe and small-angle X-ray scattering. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2001, 81, 2391-2414.	0.6	63
65	3DAP measurements of Al content in different types of precipitates in aluminium alloys. Surface and Interface Analysis, 2007, 39, 206-212.	1.8	61
66	Electrochemical aspects of exfoliation corrosion of aluminium alloys: The effects of heat treatment. Corrosion Science, 2011, 53, 1394-1400.	6.6	59
67	Quantitative Characterization of Precipitate Microstructures in Metallic Alloys Using Small-Angle Scattering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 77-86.	2.2	55
68	Structure and mechanical behavior of ultrafine-grained aluminum-iron alloy stabilized by nanoscaled intermetallic particles. Acta Materialia, 2019, 167, 89-102.	7.9	54
69	Temperature control in laser brazing of a steel/aluminium assembly using thermographic measurements. NDT and E International, 2006, 39, 272-276.	3.7	53
70	A new method for evaluating the size of plate-like precipitates by small-angle scattering. Journal of Applied Crystallography, 2012, 45, 1208-1218.	4.5	52
71	Solute cluster evolution during deformation and high strain hardening capability in naturally aged Alâ€“Znâ€“Mg alloy. Acta Materialia, 2021, 207, 116682.	7.9	52
72	Hydrogen trapping by VC precipitates and structural defects in a high strength Feâ€“Mnâ€“C steel studied by small-angle neutron scattering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 536, 110-116.	5.6	51

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73	Microstructure mapping of a friction stir welded AA2050 Alâ€"Liâ€"Cu in the T8 state. Philosophical Magazine, 2014, 94, 1451-1462.	1.6	51
74	An investigation of the strain dependence of dynamic precipitation in an Al-Zn-Mg-Cu alloy. Scripta Materialia, 2017, 136, 120-123.	5.2	49
75	Microscopic modelling of simultaneous two-phase precipitation: application to carbide precipitation in low-carbon steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 360, 214-219.	5.6	47
76	Clustering kinetics during natural ageing of Al-Cu based alloys with (Mg, Li) additions. Acta Materialia, 2018, 157, 186-195.	7.9	44
77	A combinatorial approach for studying the effect of Mg concentration on precipitation in an Alâ€"Cuâ€"Li alloy. Scripta Materialia, 2016, 110, 44-47.	5.2	41
78	Size distribution and volume fraction of T1 phase precipitates from TEM images: Direct measurements and related correction. Micron, 2015, 78, 19-27.	2.2	40
79	Influence of consolidation methods on the recrystallization kinetics of a Feâ€"14Cr based ODS steel. Journal of Nuclear Materials, 2016, 472, 143-152.	2.7	40
80	TEM study of NbC heterogeneous precipitation in ferrite. Philosophical Magazine, 2006, 86, 4271-4284.	1.6	39
81	On the role of microstructure in governing fracture behavior of an aluminumâ€"copperâ€"lithium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 586, 418-427.	5.6	38
82	Non-isothermal tensile tests during solidification of Alâ€"Mgâ€"Siâ€"Cu alloys: Mechanical properties in relation to the phenomenon of hot tearing. Acta Materialia, 2006, 54, 5209-5220.	7.9	36
83	High-throughput in-situ characterization and modeling of precipitation kinetics in compositionally graded alloys. Acta Materialia, 2015, 101, 1-9.	7.9	36
84	High throughput evaluation of the effect of Mg concentration on natural ageing of Al-Cu-Li-(Mg) alloys. Scripta Materialia, 2018, 150, 156-159.	5.2	36
85	The deformation behaviour of AA6111 as a function of temperature and precipitation state. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 461-465.	5.6	35
86	Recent advances in the metallurgy of aluminum alloys. Part II: Age hardening. Comptes Rendus Physique, 2018, 19, 688-709.	0.9	34
87	Influence of oxide volume fraction on abnormal growth of nanostructured ferritic steels during non-isothermal treatments: An in situ study. Acta Materialia, 2015, 97, 124-130.	7.9	33
88	Comparison of Precipitation Kinetics and Strengthening in an Fe-0.8%Cu Alloy and a 0.8% Cu-containing Low-carbon Steel. ISIJ International, 2003, 43, 1826-1832.	1.4	32
89	Rheological behavior of Al-Mg-Si-Cu alloys in the mushy state obtained by partial remelting and partial solidification at high cooling rate. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1459-1467.	2.2	31
90	Precipitate microstructures and resulting properties of Al-Zn-Mg metal inert gas-weld heat-affected zones. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 1437-1448.	2.2	30

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91	Influence of Natural Ageing and Deformation on Precipitation in an Alâ€“<scp>C</scp>uâ€“<scp>L</scp>i Alloy. Advanced Engineering Materials, 2013, 15, 1082-1085.	3.5	30
92	Direct comparison of Fe-Cr unmixing characterization by atom probe tomography and small angle scattering. Materials Characterization, 2016, 121, 61-67.	4.4	30
93	Study of large strain deformation of dilute solid solutions of Al-Cu using channel-die compression. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 207, 143-152.	5.6	29
94	Combinatorial approaches for the design of metallic alloys. Comptes Rendus Physique, 2018, 19, 737-754.	0.9	29
95	Quantitative characterization of the microstructure of an electron-beam welded medium strength Alâ€“Znâ€“Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 517, 361-368.	5.6	28
96	Cluster hardening in Al-3Mg triggered by small Cu additions. Acta Materialia, 2018, 161, 12-20.	7.9	28
97	Low temperature precipitation kinetics of niobium nitride platelets in Fe. Materials Letters, 2011, 65, 2265-2268.	2.6	27
98	Evolution of Precipitate Microstructure During Creep of an AA7449 T7651 Aluminum Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3934-3940.	2.2	27
99	Study of precipitation kinetics: towards non-isothermal and coupled phenomena. Philosophical Magazine, 2005, 85, 3091-3112.	1.6	26
100	On the corrosion, electrochemistry and microstructure of Al-Cu-Li alloy AA2050 as a function of ageing. Materialia, 2018, 1, 25-36.	2.7	26
101	Influence of second-phase morphology and topology on mechanical and fracture properties of Al-Si alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 234-236, 481-484.	5.6	24
102	Modeling of GP(I) zone formation during quench in an industrial AA7449 75 mm thick plate. Materials and Design, 2016, 112, 46-57.	7.0	24
103	Stability of Î²â€³ nano-phases in Al-Mg-Si(-Cu) alloy under high dose ion irradiation. Acta Materialia, 2017, 128, 64-76.	7.9	24
104	Impact of grain microstructure on the heterogeneity of precipitation strengthening in an Alâ€“Liâ€“Cu alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 627, 51-55.	5.6	23
105	Relationship Between Microstructure, Strength, and Fracture in an Al-Zn-Mg Electron Beam Weld: Part II: Mechanical Characterization and Modeling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 6141-6152.	2.2	22
106	When do oxide precipitates form during consolidation of oxide dispersion strengthened steels?. Journal of Nuclear Materials, 2016, 482, 83-87.	2.7	21
107	Nano-oxide precipitation kinetics during the consolidation process of a ferritic oxide dispersion strengthened steel.. Scripta Materialia, 2020, 188, 10-15.	5.2	21
108	Advances in Microstructural Understanding of Wrought Aluminum Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 4377-4389.	2.2	21

#	Article	IF	Citations
109	Strain hardening rate in relation to microstructure in precipitation hardening materials. European Physical Journal Special Topics, 2000, 10, Pr6-151-Pr6-156.	0.2	19
110	A combined characterization of clusters in naturally aged Alâ€“Cuâ€“(Li, Mg) alloys using small-angle neutron and X-ray scattering and atom probe tomography. Journal of Applied Crystallography, 2017, 50, 1725-1734.	4.5	19
111	Understanding the Compromise between Strength and Exfoliation Corrosion in High Strength 7000 Alloys. Materials Science Forum, 2006, 519-521, 455-460.	0.3	18
112	Two- and three-dimensional characterizations of hot tears in a Alâ€“Mgâ€“Si alloy laser weld. Scripta Materialia, 2008, 59, 324-327.	5.2	18
113	Microstructure modifications induced by a laser surface treatment in an AA7449 aluminium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2736-2747.	5.6	18
114	Multi-scale microstuctural investigation of a new Al-Mn-Ni-Cu-Zr aluminium alloy processed by laser powder bed fusion. Materialia, 2021, 18, 101160.	2.7	18
115	High temperature cleavage fracture in 5383 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 583-586.	5.6	17
116	Influence of the silicon content on the mechanical properties of AA6xxx laser welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 506, 157-164.	5.6	17
117	Microstructural Study of Laser Welds Al6056-AS12 in Relation with Hot Tearing. Materials Science Forum, 2002, 396-402, 1567-1572.	0.3	16
118	Characterization and Modeling of Precipitation Kinetics in a Fe-Si-Ti Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4999-5008.	2.2	16
119	Electron irradiation-enhanced core/shell organization of Al(Cr, Fe, Mn)Si dispersoids in Alâ€“Mgâ€“Si alloys. Philosophical Magazine, 2015, 95, 906-917.	1.6	16
120	Effect of the ageing on precipitation spatial distribution in stationary shoulder friction stir welded AA2050 alloys. Materials Characterization, 2019, 154, 193-199.	4.4	15
121	Ferritic and martensitic ODS steel resistance upset welding of fuel claddings: Weldability assessment and metallurgical effects. Journal of Nuclear Materials, 2019, 518, 326-333.	2.7	14
122	Mesoscopic modelling of precipitation: A tool for extracting physical parameters of phase transformations in metallic alloys. Comptes Rendus Physique, 2010, 11, 236-244.	0.9	13
123	Relationship Between Microstructure, Strength, and Fracture in an Al-Zn-Mg Electron Beam Weld: Part I: Microstructure Characterization. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 6129-6140.	2.2	13
124	Deformation behavior of lean duplex stainless steels with strain induced martensitic transformation: Role of deformation mechanisms, alloy chemistry and predeformation. Materialia, 2019, 5, 100190.	2.7	13
125	Characterization of Joints Between Aluminum and Galvanized Steel Sheets. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2672-2682.	2.2	12
126	Influence of temperature and strain rate on the deformation and damage mechanisms of oxide dispersion strengthened ferritic steels. Materialia, 2018, 4, 585-594.	2.7	12

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127	Microstructural evolution during long time aging of 15â€“5PH stainless steel. Materialia, 2020, 9, 100634.	2.7	12
128	Complex interactions between precipitation, grain growth and recrystallization in a severely deformed Al-Zn-Mg-Cu alloy and consequences on the mechanical behavior. Materialia, 2021, 15, 101028.	2.7	12
129	Anomalous strain hardening behaviour of a supersaturated Al-Zn-Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 234-236, 477-480.	5.6	11
130	Recent Developments in Small-Angle X-Ray Scattering for the Study of Metals and Polymers. Advanced Engineering Materials, 2001, 3, 579.	3.5	11
131	Microstructure of butt laser joints of aluminium alloy 6056 sheets with an AS12 filler. Materials Science and Technology, 2005, 21, 1329-1336.	1.6	11
132	Experimental investigation of microstructure and ageing behaviour of bulk Znâ€“(1â€“18)wt% Alâ€“(0â€“0.06)wt% Mg alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 7901-7911.	5.6	11
133	Precipitation of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.svg"><mml:msup><mml:mi>Î³</mml:mi><mml:mrow><mml:mo>â€³</mml:mo></mml:mrow></mml:msup></mml:math>in Inconel 718 alloy from microstructure to mechanical properties. Materialia, 2021, 20, 101187.	2.7	11
134	Complementarity of Atom Probe, Small Angle Scattering and Differential Scanning Calorimetry for the Study of Precipitation in Aluminium Alloys. Materials Science Forum, 0, 794-796, 926-932.	0.3	10
135	Chemical and structural evolution of nano-oxides from mechanical alloying to consolidated ferritic oxide dispersion strengthened steel. Acta Materialia, 2022, 233, 117992.	7.9	9
136	Mapping the microstructure of a friction-stir welded (FSW) Al-Li-Cu alloy. Journal of Physics: Conference Series, 2010, 247, 012034.	0.4	8
137	The Influence of Mg and Ag on the Precipitation Kinetics and the Formation of the T₁ Phase in Al-Cu-Li Alloys. Materials Science Forum, 0, 794-796, 945-950.	0.3	8
138	Influence of the Martensitic Transformation on the Microscale Plastic Strain Heterogeneities in a Duplex Stainless Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 20-25.	2.2	8
139	High temperature, high strain rate embrittlement of Al-Mg-Mn alloy: evidence of cleavage of an fcc alloy. Materials Science and Technology, 2002, 18, 1085-1091.	1.6	7
140	Low Temperature Solubility Limit of Copper in Iron. Materials Science Forum, 2005, 500-501, 631-638.	0.3	7
141	Architectured duplex stainless steels micro-composite: Elaboration and microstructure characterization. Materials and Design, 2018, 145, 156-167.	7.0	7
142	Mechanical properties of low carbon steel hardened by the Fe₂SiTi phase at high volume fraction. Journal of Physics: Conference Series, 2010, 240, 012095.	0.4	6
143	Lighter structures for transports: The role of innovation in metallurgy. Comptes Rendus Physique, 2017, 18, 445-452.	0.9	6
144	Use of Space-Resolved in-Situ High Energy X-ray Diffraction for the Characterization of the Compositional Dependence of the Austenite-to-Ferrite Transformation Kinetics in Steels. Quantum Beam Science, 2020, 4, 1.	1.2	6

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145	Precipitate Microstructure in the Heat-Affected Zone of Al-Zn-Mg MIG-Welds and Evolution during Post-Welding Heat Treatments. Materials Science Forum, 2002, 396-402, 1561-1566.	0.3	5
146	Precipitation Strengthening in AA7449 Aluminium Alloy: Understanding the Relationship between Microstructure, Yield Strength and Strain Hardening. Materials Science Forum, 2006, 519-521, 991-996.	0.3	5
147	Precipitation Sequences in Two Al-Li-Cu Alloys. Solid State Phenomena, 0, 172-174, 267-272.	0.3	5
148	Macro and micro mechanical in-situ characterization using synchrotron diffraction of architectured micro-composite duplex stainless steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 793, 139852.	5.6	5
149	Asymmetry of strain rate sensitivity between up- and down-changes in 6000 series aluminium alloys of varying Si content. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139517.	5.6	5
150	Effect of Process Parameters on the Ageing of an Al-6% Zn-2.3% Mg Alloy. Materials Science Forum, 1996, 217-222, 1281-1286.	0.3	4
151	Laser brazing of steel-aluminum assembly. , 2004, , .		4
152	Use of Small-Angle X-Ray Scattering for the Characterisation of Precipitates in Aluminium Alloys. Materials Science Forum, 2006, 519-521, 1349-1354.	0.3	4
153	Electrochemical Testing of Exfoliation Corrosion Sensitivity of Aluminum Alloys. ECS Transactions, 2007, 3, 285-293.	0.5	4
154	Understanding the mechanical properties of 2198 Al-Li-Cu alloy in relation with the intra-granular and inter-granular precipitate microstructure. Journal of Physics: Conference Series, 2010, 240, 012096.	0.4	4
155	Characterization of the nature and morphology of coarse precipitation in various oxide dispersion strengthened steels. Materialia, 2021, 17, 101117.	2.7	4
156	Influence of grinding and shot-peening on the near-surface microstructure of a maraging stainless steel. Materialia, 2021, 20, 101220.	2.7	4
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