

Abdelkrim Redjaïmia

List of Publications by Year in descending order

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papers

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citations

304743

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72
all docs

72
docs citations

72
times ranked

1244
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization of the intermetallic G-phase in an AISI 329 duplex stainless steel. <i>Journal of Materials Science</i> , 1997, 32, 4533-4540.	3.7	142
2	Phase transformations and mechanical properties in heat treated superaustenitic stainless steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 561, 477-485.	5.6	90
3	Mechanism of porosity formation and influence on mechanical properties in selective laser melting of Ti-6Al-4V parts. <i>Materials and Design</i> , 2018, 156, 480-493.	7.0	90
4	Selecting non-isothermal heat treatment schedules for precipitation hardening systems: An example of coupled process-property optimization. <i>Acta Materialia</i> , 2007, 55, 213-223.	7.9	49
5	Mechanical behaviour of nitrogen-alloyed austenitic stainless steel hardened by warm rolling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 415, 219-224.	5.6	46
6	Effect of microstructure on the thermal conductivity of nanostructured Mg ₂ (Si,Sn) thermoelectric alloys: An experimental and modeling approach. <i>Acta Materialia</i> , 2015, 95, 102-110.	7.9	43
7	Relationship between Microstructure, Mechanical Properties and Damage Mechanisms in High Martensite Fraction Dual Phase Steels. <i>ISIJ International</i> , 2015, 55, 2237-2246.	1.4	41
8	Contribution of electron precession to the identification of the space group from microdiffraction patterns. <i>Ultramicroscopy</i> , 2007, 107, 514-522.	1.9	40
9	DSC study of the kinetic parameters of the metastable phases formation during non-isothermal annealing of an Al-Si-Mg alloy. <i>Journal of Thermal Analysis and Calorimetry</i> , 2011, 104, 627-633.	3.6	39
10	Morphology, crystallography and defects of the intermetallic \hat{A} -phase precipitated in a duplex ($\hat{A} + \hat{A}$) stainless steel. <i>Journal of Materials Science</i> , 2004, 39, 2371-2386.	3.7	38
11	Phase Transformations in the Al-Si Coating during the Austenitization Step. <i>Solid State Phenomena</i> , 0, 172-174, 784-790.	0.3	34
12	Thermodynamic and structural studies on nitrated Fe-1.62%Mn and Fe-0.56%V alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 351, 23-30.	5.6	31
13	Dynamical behaviour and microstructural evolution of a nitrogen-alloyed austenitic stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 480, 89-95.	5.6	30
14	The determination of the activation energy varying with the precipitated fraction of \hat{I}^2 metastable phase in an Al-Si-Mg alloy using non-isothermal dilatometry. <i>Thermochimica Acta</i> , 2014, 577, 5-10.	2.7	30
15	Application of microdiffraction to crystal structure identification. <i>Ultramicroscopy</i> , 1994, 53, 305-317.	1.9	27
16	Title is missing!. <i>Journal of Materials Science</i> , 2002, 37, 4079-4091.	3.7	27
17	LACDIF, a new electron diffraction technique obtained with the LACBED configuration and a Cs corrector: Comparison with electron precession. <i>Ultramicroscopy</i> , 2008, 108, 100-115.	1.9	26
18	Nitride precipitation in compositionally heterogeneous alloys: Nucleation, growth and coarsening during nitriding. <i>Journal of Crystal Growth</i> , 2012, 341, 53-60.	1.5	26

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19	Tempering of a martensitic stainless steel: Investigation by in situ synchrotron X-ray diffraction. <i>Acta Materialia</i> , 2014, 81, 30-40.	7.9	26
20	La ₁₀ W ₂ O ₂₁ : An Anion-Deficient Fluorite-Related Superstructure with Oxide Ion Conduction. <i>Inorganic Chemistry</i> , 2014, 53, 147-159.	4.0	24
21	Carbon and nitrogen effects on microstructure and kinetics associated with bainitic transformation in a low-alloyed steel. <i>Journal of Alloys and Compounds</i> , 2016, 658, 832-838.	5.5	24
22	Deformation mechanisms induced by nanoindentation tests on a metastable austenitic stainless steel: A FIB/SIM investigation. <i>Materials Characterization</i> , 2017, 131, 253-260.	4.4	24
23	Nanoscale Hardening Precipitation in AlMgSi Alloys: A Transmission Electron Microscopy and Small-Angle Neutron Scattering Study. <i>Journal of Applied Crystallography</i> , 1998, 31, 212-222.	4.5	22
24	Synthesis of two-dimensional lead sheets by spark discharge in liquid nitrogen. <i>Particuology</i> , 2018, 40, 152-159.	3.6	22
25	Distribution of Carbon in Martensite During Quenching and Tempering of Dual Phase Steels and Consequences for Damage Properties. <i>ISIJ International</i> , 2013, 53, 1215-1223.	1.4	20
26	Identification and characterization of a novel intermetallic compound in a Fe-22 wt % Cr-5 wt % Ni-3 wt % Mo-0.03 wt % C duplex stainless steel. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1993, 67, 1277-1286.	0.6	19
27	Electron precession microdiffraction as a useful tool for the identification of the space group. <i>Journal of Microscopy</i> , 2007, 227, 157-171.	1.8	19
28	Carbonitriding of low alloy steels: Mechanical and metallurgical responses. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 693, 225-232.	5.6	18
29	Competitive precipitation of amorphous and crystalline silicon nitride in ferrite: Interaction between structure, morphology, and stress relaxation. <i>Acta Materialia</i> , 2015, 93, 218-234.	7.9	17
30	Characterization of Precipitation Sequences in Superaustenitic Stainless Steels. <i>Solid State Phenomena</i> , 0, 172-174, 493-498.	0.3	16
31	Title is missing!. <i>Journal of Materials Science</i> , 2001, 36, 1717-1725.	3.7	15
32	Transformation of the quasicrystalline phase Al-Cr-Fe induced by rapid solidification. <i>Journal of Materials Science</i> , 1995, 30, 2921-2929.	3.7	14
33	Identification and characterization of a novel Mn-N nitride formed in Fe-Mn-N alloy. <i>Journal of Applied Crystallography</i> , 2003, 36, 103-108.	4.5	14
34	Investigation of a Ferrite/Silicon Nitride Composite Concept Aimed at Automotive Applications. <i>Steel Research International</i> , 2012, 83, 590-593.	1.8	14
35	Multiscale analysis of an ODS FeAl40 intermetallic after plasma-assisted nitriding. <i>Journal of Alloys and Compounds</i> , 2016, 683, 418-426.	5.5	12
36	Precipitation of aluminum nitride in a high strength maraging steel with low nitrogen content. <i>Materials Characterization</i> , 2014, 98, 193-201.	4.4	11

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37	Unexpected low-temperature crystallization of amorphous silicon nitride into $\hat{1}\pm$ -Si ₃ N ₄ in a ferritic Fe \hat{e} Si matrix. Scripta Materialia, 2013, 68, 187-190.	5.2	10
38	A proper assessment of TEM diffraction patterns originating from CrN nitrides in a ferritic matrix. Materials Characterization, 2018, 144, 671-677.	4.4	9
39	Crystal structure, morphology and formation mechanism of a novel polymorph of lead dioxide, $\hat{1}^3$ -PbO ₂ . Journal of Applied Crystallography, 2019, 52, 304-311.	4.5	9
40	Pearlite in hypoeutectoid iron \hat{e} nitrogen binary alloys. Journal of Materials Science, 2009, 44, 632-638.	3.7	8
41	Isothermal decomposition of carbon and nitrogen-enriched austenite in 23MnCrMo5 low-alloy steel. Acta Materialia, 2018, 148, 363-373.	7.9	8
42	On the M23C6-Carbide in 2205 Duplex Stainless Steel: An Unexpected (M23C6/Austenite) \hat{e} Eutectoid in the $\hat{1}$ -Ferritic Matrix. Metals, 2021, 11, 1340.	2.3	8
43	Influence of testing mode on the fatigue behavior of $\hat{1}$ austenitic grain at the nanometric length scale for TRIP steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 713, 287-293.	5.6	7
44	Mechanism of Si ₃ N ₄ precipitation in nitrided Fe-Si alloys: A novel example of particle-stimulated-nucleation. Materials Letters, 2017, 189, 25-27.	2.6	6
45	Nitrogen-induced nanotwinning of bainitic ferrite in low-alloy steel. Scripta Materialia, 2018, 155, 63-67.	5.2	6
46	Blue emission and twin structure of p-type copper iodide thin films. Surfaces and Interfaces, 2021, 27, 101500.	3.0	6
47	In situ transmission electron microscopy investigations of the kinetics of $\hat{1}\pm$ -Fe ₁₆ N ₂ precipitation during the ageing of nitrogen \hat{e} ferrite. Scripta Materialia, 2010, 63, 1232-1235.	5.2	5
48	Epitaxial Growth of Sc _{0.09} Al _{0.91} N and Sc _{0.18} Al _{0.82} N Thin Films on Sapphire Substrates by Magnetron Sputtering for Surface Acoustic Waves Applications. Sensors, 2020, 20, 4630.	3.8	5
49	Dynamic Deformation of Metastable Austenitic Stainless Steels at the Nanometric Length Scale. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 6034-6039.	2.2	4
50	Approximant and Frank-Kasper phases. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1993, 67, 569-585.	0.6	3
51	Transmission electron microscopy investigation of acicular ferrite precipitation in $\hat{1}^3$ -Fe ₄ N nitride. Materials Characterization, 2010, 61, 1245-1251.	4.4	3
52	Reversible Phase Transformation in Polycrystalline TRIP Steels Induced by Cyclic Indentation Performed at the Nanometric Length Scale. Steel Research International, 2018, 89, 1800234.	1.8	3
53	High-Temperature Deformation Behavior of 718Plus: Consideration of $\hat{1}^3$ Effects. Materials Performance and Characterization, 2020, 9, 20190031.	0.3	3
54	Behaviour of a maraging steel under quasi-static and dynamic compressive loading. International Journal of Microstructure and Materials Properties, 2010, 5, 65.	0.1	2

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55	Contribution of Local Analysis Techniques for the Characterization of Iron and Alloying Elements in Nitrides: Consequences on the Precipitation Process in Fe-Si and Fe-Cr Nitrided Alloys. <i>Materials</i> , 2018, 11, 1409.	2.9	2
56	Transmission of Plasticity Through Grain Boundaries in a Metastable Austenitic Stainless Steel. <i>Metals</i> , 2019, 9, 234.	2.3	2
57	Orientation Relationships between the γ -ferrite Matrix in a Duplex Stainless Steel and its Decomposition Products: the Austenite and the β and R Frank-Kasper Phases. , 2008, , 479-480.		2
58	A New Example of Non-Crystalline Microstructure in Metallurgy. <i>Journal De Physique</i> , I, 1995, 5, 1-6.	1.2	2
59	Microdiffraction, EDS, and HREM Investigation for Phase Identification With the Electron Microscope. <i>Materials Research Society Symposia Proceedings</i> , 1999, 589, 161.	0.1	1
60	Interface Between Simple Crystal and Icosahedral-Symmetry Related Crystal. <i>European Physical Journal Special Topics</i> , 1996, 06, C2-135-C2-140.	0.2	1
61	A new constitutive model for nitrogen austenitic stainless steel. <i>European Physical Journal Special Topics</i> , 2003, 110, 9-14.	0.2	1
62	Bainite Formation in Carbon and Nitrogen enriched Low Alloyed Steels: Kinetics and Microstructures*. <i>HTM - Journal of Heat Treatment and Materials</i> , 2018, 73, 144-156.	0.2	1
63	Title is missing!. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2003, 34, 410-414.	0.9	0
64	On the behaviour and microstructural evolution of a TiAl alloy under quasistatic and dynamic compression. <i>European Physical Journal Special Topics</i> , 2006, 134, 1125-1130.	0.2	0
65	Characterization of the behavior under impact loading of a maraging steel strengthened by nano-precipitates. <i>European Physical Journal Special Topics</i> , 2006, 134, 839-844.	0.2	0
66	A Study of Dual Phase Steel Damage Evolution with Microstructure. <i>Solid State Phenomena</i> , 0, 172-174, 839-844.	0.3	0
67	Identification by Electron Microdiffraction of Intermetallic Phases in a Duplex Stainless Steel. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , 1990, 48, 494-495.	0.0	0
68	Structural and crystallographic characterization of grain boundaries coarse particles in an Al-Mg-Si alloy, using convergent beam electron diffraction. <i>Applied Physics A: Materials Science and Processing</i> , 2022, 128, .	2.3	0