

Daniel Monceau

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2726892/publications.pdf>

Version: 2024-02-01

180
papers

3,597
citations

117453

34
h-index

197535

49
g-index

181
all docs

181
docs citations

181
times ranked

2138
citing authors

#	ARTICLE	IF	CITATIONS
1	Determination of Parabolic Rate Constants from a Local Analysis of Mass-Gain Curves. Oxidation of Metals, 1998, 50, 477-493.	1.0	172
2	Carburisation of ferritic Fe-Cr alloys by low carbon activity gases. Corrosion Science, 2011, 53, 2767-2777.	3.0	139
3	Iron Oxidation at Low Temperature (260-500°C) in Air and the Effect of Water Vapor. Oxidation of Metals, 2010, 73, 139-162.	1.0	105
4	Title is missing!. Oxidation of Metals, 2002, 58, 275-295.	1.0	104
5	NaCl induced corrosion of Ti-6Al-4V alloy at high temperature. Corrosion Science, 2016, 110, 91-104.	3.0	100
6	High temperature oxidation of IN 718 manufactured by laser beam melting and electron beam melting: Effect of surface topography. Corrosion Science, 2018, 141, 127-145.	3.0	93
7	Title is missing!. Oxidation of Metals, 2002, 58, 249-273.	1.0	75
8	Title is missing!. Oxidation of Metals, 2003, 59, 409-431.	1.0	66
9	Effect of Platinum on the Growth Rate of the Oxide Scale Formed on Cast Nickel Aluminide Intermetallic Alloys. Oxidation of Metals, 2005, 64, 185-205.	1.0	58
10	Effect of Pt and Al content on the long-term, high temperature oxidation behavior and interdiffusion of a Pt-modified aluminide coating deposited on Ni-base superalloys. Surface and Coatings Technology, 2006, 201, 3846-3851.	2.2	58
11	Thermal cycling and reactivity of a MoSi ₂ /ZrO ₂ composite designed for self-healing thermal barrier coatings. Materials and Design, 2016, 94, 444-448.	3.3	58
12	Kinetics of breakaway oxidation of Fe-Cr and Fe-Cr-Ni alloys in dry and wet carbon dioxide. Corrosion Science, 2013, 77, 246-256.	3.0	57
13	Kinetic demixing of ceramics in an electrical field. Solid State Ionics, 1994, 73, 221-225.	1.3	56
14	Effect of interdiffusion on mechanical and thermal expansion properties at high temperature of a MCrAlY coated Ni-based superalloy. Surface and Coatings Technology, 2016, 307, 81-90.	2.2	55
15	Intergranular oxidation of Ni-base alloy 718 with a focus on additive manufacturing. Corrosion Science, 2020, 170, 108684.	3.0	52
16	Investigations on the Diffusion of Oxygen in Nickel at 1000°C by SIMS Analysis. Journal of the Electrochemical Society, 2005, 152, E390.	1.3	51
17	Depletion and Voids Formation in the Substrate During High Temperature Oxidation of Ni-Cr Alloys. Oxidation of Metals, 2013, 79, 93-105.	1.0	49
18	Static and dynamic aspects of coupling between creep behavior and oxidation on MC2 single crystal superalloy at 1150 °C. Acta Materialia, 2005, 53, 4199-4209.	3.8	48

#	ARTICLE	IF	CITATIONS
19	Self-healing thermal barrier coating systems fabricated by spark plasma sintering. <i>Materials and Design</i> , 2018, 143, 204-213.	3.3	47
20	High temperature oxidation and embrittlement at 500–600 °C of Ti-6Al-4V alloy fabricated by Laser and Electron Beam Melting. <i>Corrosion Science</i> , 2020, 175, 108875.	3.0	47
21	Injection of vacancies at metal grain boundaries during the oxidation of nickel. <i>Acta Materialia</i> , 2004, 52, 5375-5380.	3.8	44
22	Substrate Effect on the High-Temperature Oxidation Behavior of a Pt-Modified Aluminide Coating. Part I: Influence of the Initial Chemical Composition of the Coating Surface. <i>Oxidation of Metals</i> , 2006, 66, 155-189.	1.0	44
23	In-situ SEM study of cavity growth during high temperature oxidation of $\hat{\Gamma}^2$ -(Ni,Pd)Al. <i>Scripta Materialia</i> , 2001, 44, 2741-2746.	2.6	41
24	The effect of thermal cycling on the high-temperature creep behaviour of a single crystal nickel-based superalloy. <i>Scripta Materialia</i> , 2007, 56, 277-280.	2.6	41
25	First-principles nickel database: Energetics of impurities and defects. <i>Computational Materials Science</i> , 2015, 101, 77-87.	1.4	40
26	Influence of Microstructure and Surface Roughness on Oxidation Kinetics at 500–600 °C of Ti–6Al–4V Alloy Fabricated by Additive Manufacturing. <i>Oxidation of Metals</i> , 2018, 90, 633-648.	1.0	40
27	STEM-EELS identification of TiOXNY, TiN, Ti2N and O, N dissolution in the Ti2642S alloy oxidized in synthetic air at 650 °C. <i>Corrosion Science</i> , 2019, 153, 191-199.	3.0	40
28	Advanced burner-rig test for oxidation–corrosion resistance evaluation of MCrAlY/superalloys systems. <i>Surface and Coatings Technology</i> , 2006, 201, 3829-3835.	2.2	39
29	Quantification of growth kinetics and adherence of oxide scales formed on Ni-based superalloys at high temperature. <i>Corrosion Science</i> , 2010, 52, 3932-3942.	3.0	39
30	Resistance of 9–20%Cr steels against metal dusting. <i>Steel Research = Archiv für Das Eisenhüttenwesen</i> , 1997, 68, 179-185.	0.2	38
31	Cyclic oxidation of coated and uncoated single-crystal nickel-based superalloy MC2 analyzed by continuous thermogravimetry analysis. <i>Acta Materialia</i> , 2006, 54, 4473-4487.	3.8	38
32	Experimental study and numerical simulation of high temperature (1100–1250 °C) oxidation of prior-oxidized zirconium alloy. <i>Corrosion Science</i> , 2016, 103, 10-19.	3.0	38
33	A comparison of the high-temperature oxidation behaviour of conventional wrought and laser beam melted Inconel 625. <i>Corrosion Science</i> , 2020, 164, 108347.	3.0	38
34	Pt-modified Ni aluminides, MCrAlY-base multilayer coatings and TBC systems fabricated by Spark Plasma Sintering for the protection of Ni-base superalloys. <i>Surface and Coatings Technology</i> , 2009, 204, 771-778.	2.2	37
35	Ni–W diffusion barrier: Its influence on the oxidation behaviour of a $\hat{\Gamma}^2$ -(Ni,Pt)Al coated fourth generation nickel-base superalloy. <i>Surface and Coatings Technology</i> , 2009, 204, 761-765.	2.2	36
36	Effect of Water Vapor on the Spallation of Thermal Barrier Coating Systems During Laboratory Cyclic Oxidation Testing. <i>Oxidation of Metals</i> , 2010, 73, 83-93.	1.0	36

#	ARTICLE	IF	CITATIONS
37	Effect of modification by Pt and manufacturing processes on the microstructure of two NiCoCrAlYTa bond coatings intended for thermal barrier system applications. Surface and Coatings Technology, 2010, 205, 717-727.	2.2	32
38	Beneficial Effect of Pt and of Pre-Oxidation on the Oxidation Behaviour of an NiCoCrAlYTa Bond-Coating for Thermal Barrier Coating Systems. Oxidation of Metals, 2011, 75, 247-279.	1.0	32
39	Modeling the oxidation kinetics of titanium alloys: Review, method and application to Ti-64 and Ti-6242s alloys. Corrosion Science, 2021, 178, 109041.	3.0	32
40	Continuous Thermogravimetry Under Cyclic Conditions. Oxidation of Metals, 2004, 61, 143-163.	1.0	31
41	High temperature corrosion of cast heat resisting steels in CO+CO ₂ gas mixtures. Corrosion Science, 2008, 50, 2398-2406.	3.0	31
42	Breakaway oxidation of austenitic stainless steels induced by alloyed sulphur. Corrosion Science, 2015, 93, 100-108.	3.0	31
43	Transition in high-temperature oxidation kinetics of Pd-modified aluminide coatings: Role of oxygen partial pressure, heating rate, and surface treatment. Journal of Materials Research, 2000, 15, 665-675.	1.2	29
44	Subsurface microstructural changes in a cast heat resisting alloy caused by high temperature corrosion. Corrosion Science, 2010, 52, 255-262.	3.0	28
45	Effect of Nitrogen on the Kinetics of Oxide Scale Growth and of Oxygen Dissolution in the Ti6242S Titanium-Based Alloy. Oxidation of Metals, 2017, 87, 343-353.	1.0	28
46	Kinetic demixing profile calculation in oxide solid solutions under a chemical potential gradient. Solid State Ionics, 1991, 45, 231-237.	1.3	27
47	Tensile properties of a non-line-of-sight processed $\hat{I}^2\hat{I}^3\hat{a}^2$ MCrAlY coating at high temperature. Surface and Coatings Technology, 2017, 326, 28-36.	2.2	27
48	Effects of Bond-Coat Preoxidation and Surface Finish on Isothermal and Cyclic Oxidation, High Temperature Corrosion and Thermal Shock Resistance of TBC Systems. Materials Science Forum, 2001, 369-372, 607-614.	0.3	26
49	Characterization of Sulfur Distribution in Ni-Based Superalloy and Thermal Barrier Coatings After High Temperature Oxidation: A SIMS Analysis. Oxidation of Metals, 2010, 73, 95-113.	1.0	25
50	Thermo $\hat{a}^{\hat{e}}$ mechanical properties of SPS produced self-healing thermal barrier coatings containing pure and alloyed MoSi ₂ particles. Journal of the European Ceramic Society, 2018, 38, 4268-4275.	2.8	25
51	Modelling of the effect of grain boundary diffusion on the oxidation of Ni-Cr alloys at high temperature. Corrosion Science, 2018, 136, 148-160.	3.0	25
52	Oxidation resistant aluminized MCrAlY coating prepared by Spark Plasma Sintering (SPS). Advanced Engineering Materials, 2007, 9, 413-417.	1.6	23
53	Degradation mechanism of Ti-6Al-2Sn-4Zr-2Mo-Si alloy exposed to solid NaCl deposit at high temperature. Corrosion Science, 2020, 172, 108611.	3.0	23
54	Comparison of damaging behavior of oxide scales grown on austenitic stainless steels using tensile test and cyclic thermogravimetry. Corrosion Science, 2016, 103, 145-156.	3.0	22

#	ARTICLE	IF	CITATIONS
55	Low Temperature Oxidation of Pure Iron: Growth Kinetics and Scale Morphologies. Materials Science Forum, 2004, 461-464, 591-598.	0.3	21
56	Influence of embedded MoSi ₂ particles on the high temperature thermal conductivity of SPS produced yttria-stabilised zirconia model thermal barrier coatings. Surface and Coatings Technology, 2016, 308, 31-39.	2.2	21
57	High-temperature cyclic oxidation behaviour of Pt-rich Pt-Al coatings. Part I: Oxidation kinetics of coated AM1 systems after very long-term exposure at 1100°C. Corrosion Science, 2018, 144, 127-135.	3.0	21
58	Sol-gel thermal barrier coatings: Optimization of the manufacturing route and durability under cyclic oxidation. Surface and Coatings Technology, 2010, 205, 1256-1261.	2.2	20
59	Mechanism of breakaway oxidation of Fe-Cr and Fe-Cr-Ni alloys in dry and wet carbon dioxide. Corrosion Science, 2012, 64, 222-222.	3.0	20
60	Atom probe tomographic study of L10 martensite in a Pt-modified NiCoCrAlYTa bond coating. Corrosion Science, 2013, 76, 1-5.	3.0	19
61	First-principles study of sulfur multi-absorption in nickel and its segregation to the Ni(100) and Ni(111) surfaces. Surface Science, 2013, 617, 15-21.	0.8	19
62	Observation and modeling of Pt-Al and Kirkendall void formations during interdiffusion of a Pt coating with a Pt-Ni-Al alloy at high temperature. Surface and Coatings Technology, 2014, 260, 9-16.	2.2	19
63	Effects of tramp elements Cu, P, Pb, Sb and Sn on the kinetics of carburization of case hardening steels. Steel Research = Archiv für Das Eisenhüttenwesen, 1996, 67, 240-246.	0.2	18
64	Relation between microstructure induced by oxidation and room-temperature mechanical properties of the thermally grown oxide scales on austenitic stainless steels. Materials Characterization, 2017, 127, 161-170.	1.9	18
65	High-Temperature Oxidation of a High Silicon SiMo Spheroidal Cast Iron in Air with Pt and Al . Change in H ₂ and O Content. Materials Science Forum, 0, 925, 353-360.	0.3	18
66	High-temperature cyclic oxidation of Pt-rich Pt-Al bond-coatings. Part II: Effect of Pt and Al on TBC system lifetime. Corrosion Science, 2019, 150, 1-8.	3.0	18
67	Cyclic oxidation of alloy 718 produced by additive manufacturing compared to a wrought-718 alloy. Corrosion Science, 2021, 192, 109804.	3.0	18
68	Experimental and Simulation Study of Uphill Diffusion of Al in a Pt-Coated Pt-Ni-Al Model Alloy. Journal of Phase Equilibria and Diffusion, 2009, 30, 602-607.	0.5	17
69	Proto-TGO formation in TBC systems fabricated by spark plasma sintering. Surface and Coatings Technology, 2010, 205, 1245-1249.	2.2	17
70	Modelling of the kinetics of pitting corrosion by metal dusting. Corrosion Science, 2015, 98, 592-604.	3.0	17
71	Growth Kinetics and Characterization of Chromia Scales Formed on Ni-30Cr Alloy in Impure Argon at 700°C. Oxidation of Metals, 2020, 93, 329-353.	1.0	17
72	Micromechanical testing of ultrathin layered material specimens at elevated temperature. Materials at High Temperatures, 2016, 33, 325-337.	0.5	16

#	ARTICLE	IF	CITATIONS
73	Mechanism of metal dusting corrosion by pitting of a chromia-forming alloy at atmospheric pressure and low gas velocity. <i>Corrosion Science</i> , 2016, 107, 204-210.	3.0	16
74	Oxygen Diffusion Modeling in Titanium Alloys: New Elements on the Analysis of Microhardness Profiles. <i>Oxidation of Metals</i> , 2020, 93, 215-227.	1.0	16
75	Contribution to Modeling of Hydrogen Effect on Oxygen Diffusion in Zy-4 Alloy During High Temperature Steam Oxidation. <i>Oxidation of Metals</i> , 2013, 79, 121-133.	1.0	15
76	Evidence of High Temperature Strain Heterogeneities in a Nickel-based Single Crystal Superalloy. <i>Advanced Engineering Materials</i> , 2014, 16, 60-64.	1.6	15
77	Numerical Model for Oxide Scale Growth with Explicit Treatment of Vacancy Fluxes. <i>Materials Science Forum</i> , 2004, 461-464, 481-488.	0.3	14
78	First-principles study of the insertion and diffusion of interstitial atoms (H, C, N and O) in nickel. <i>Journal of Alloys and Compounds</i> , 2020, 822, 153555.	2.8	14
79	Screening for Al ₂ O ₃ failure in MCrAlY APS coatings using short-term oxidation at high temperature. <i>Corrosion Science</i> , 2021, 184, 109334.	3.0	14
80	The role of nitrogen in the oxidation behaviour of a Ti6242S alloy: a nanoscale investigation by atom probe tomography. <i>Acta Materialia</i> , 2021, 216, 117134.	3.8	14
81	Kinetic Demixing of Solute Cations in Alumina Single Crystals during Cooling. <i>Journal of the American Ceramic Society</i> , 1995, 78, 2314-2320.	1.9	13
82	Surface segregation and morphology of Mg-doped γ -alumina powders. <i>Journal of the European Ceramic Society</i> , 1995, 15, 851-858.	2.8	13
83	Effect of Cycle Frequency on High Temperature Oxidation Behavior of Alumina-Forming Coatings Used for Industrial Gas Turbine Blades. <i>Materials Science Forum</i> , 2004, 461-464, 747-754.	0.3	13
84	ALLBATROS advanced long life blade turbine coating systems. <i>Applied Thermal Engineering</i> , 2004, 24, 1745-1753.	3.0	13
85	Internal Oxidation in Dry and Wet Conditions for Oxygen Permeability of Fe-Ni Alloys at 1150 and 1100°C. <i>Oxidation of Metals</i> , 2017, 87, 273-283.	1.0	13
86	Chemical vapor deposition of ruthenium on NiCoCrAlYTa powders followed by thermal oxidation of the sintered coupons. <i>Surface and Coatings Technology</i> , 2003, 163-164, 44-49.	2.2	12
87	Substrate Effect on the High Temperature Oxidation Behavior of a Pt-modified Aluminide Coating. Part II: Long-term Cyclic-oxidation Tests at 1,050°C. <i>Oxidation of Metals</i> , 2007, 68, 223-242.	1.0	12
88	Preliminary Results of the Isothermal Oxidation Study of Pt-Al-NiCoCrAlYTa Multi-Layered Coatings Prepared by Sparks Plasma Sintering (SPS). <i>Materials Science Forum</i> , 0, 595-598, 143-150.	0.3	12
89	Thermal Barrier Systems and Multi-Layered Coatings Fabricated by Spark Plasma Sintering for the Protection of Ni-Base Superalloys. <i>Materials Science Forum</i> , 0, 654-656, 1826-1831.	0.3	12
90	Metal dusting corrosion of austenitic alloys at low and high pressure with the effects of Cr, Al, Nb and Cu. <i>Corrosion Science</i> , 2017, 123, 310-318.	3.0	12

#	ARTICLE	IF	CITATIONS
91	Impact of the clusterization on the solubility of oxygen and vacancy concentration in nickel: A multi-scale approach. <i>Journal of Alloys and Compounds</i> , 2017, 708, 1063-1072.	2.8	12
92	NaCl-Induced High-Temperature Corrosion of $\hat{2}$ 21S Ti Alloy. <i>Oxidation of Metals</i> , 2017, 87, 729-740.	1.0	12
93	High-temperature oxidation kinetics of NiAl single crystal and oxide spallation as a function of crystallographic orientation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 381, 237-248.	2.6	11
94	The Influence of Specimen Thickness on the High Temperature Corrosion Behavior of CMSX-4 during Thermal-Cycling Exposure. <i>Oxidation of Metals</i> , 2007, 68, 165-176.	1.0	11
95	Thermal cycling behavior of EBPVD TBC systems deposited on doped Pt-rich $\hat{3}$ $\hat{2}$ bond coatings made by Spark Plasma Sintering (SPS). <i>Surface and Coatings Technology</i> , 2011, 206, 1558-1565.	2.2	11
96	Thermal cycling behaviour of thermal barrier coating systems based on first- and fourth generation Ni-based superalloys. <i>Materials at High Temperatures</i> , 2012, 29, 136-144.	0.5	11
97	Cyclic Oxidation Behavior of TBC Systems with a Pt-Rich $\hat{3}$ -Ni+ $\hat{3}$ $\hat{2}$ -Ni ₃ Al Bond-Coating Made by SPS. <i>Oxidation of Metals</i> , 2014, 81, 33-45.	1.0	11
98	High Temperature Micromechanical Behavior of a Pt-Modified Nickel Aluminide Bond-Coating and of Its Interdiffusion Zone with the Superalloy Substrate. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 1475-1480.	1.1	11
99	Cation redistribution in oxides under oxygen potential gradients: Influence on the corrosion kinetics. <i>Solid State Ionics</i> , 1992, 53-56, 270-279.	1.3	10
100	Kinetic demixing profile calculation under a temperature gradient in multi-component oxides. <i>Journal of the European Ceramic Society</i> , 1992, 9, 193-204.	2.8	10
101	Evolution of Scale Microstructure as a Function of Scale Oxide Thickness during Oxidation of Nickel at 700 \hat{A} C. <i>Materials Science Forum</i> , 2001, 369-372, 189-196.	0.3	10
102	High temperature oxidation of high purity nickel: oxide scale morphology and growth kinetics. <i>Materials at High Temperatures</i> , 2003, 20, 649-655.	0.5	10
103	Multi-Sample Thermobalance for Rapid Cyclic Oxidation under Controlled Atmosphere. <i>Materials Science Forum</i> , 2004, 461-464, 689-696.	0.3	10
104	First-Principle Calculation of Monovacancy and Divacancy Interactions with Atomic Oxygen in Nickel: Thermal Expansion Effects. <i>Defect and Diffusion Forum</i> , 0, 289-292, 747-753.	0.4	10
105	Carburization of austenitic and ferritic stainless steels in liquid sodium: Comparison between experimental observations and simulations. <i>Corrosion Science</i> , 2019, 159, 108147.	3.0	10
106	Cyclic Oxidation Kinetics Modeling of NiAl Single Crystal. <i>Materials Science Forum</i> , 2004, 461-464, 737-746.	0.3	9
107	Erosion and High Temperature Oxidation Resistance of New Coatings Fabricated by a Sol-Gel Route for a TBC Application. <i>Materials Science Forum</i> , 0, 595-598, 3-10.	0.3	9
108	Kinetics of zircon formation in yttria partially stabilized zirconia as a result of oxidation of embedded molybdenum disilicide. <i>Acta Materialia</i> , 2019, 174, 206-216.	3.8	9

#	ARTICLE	IF	CITATIONS
109	Oxydation et protection des matériaux pour sous-couches (NiAlPd, NiAlPt, NiCoCrAlYTa, CoNiCrAlY) de barrières thermiques. European Physical Journal Special Topics, 2000, 10, Pr4-167-Pr4-171.	0.2	8
110	Development of a NiW & In Situ Diffusion Barrier on a Fourth Generation Nickel-Base Superalloy. Materials Science Forum, 0, 595-598, 23-32.	0.3	8
111	Carburization of Austenitic and Ferritic Steels in Carbon-Saturated Sodium: Preliminary Results on the Diffusion Coefficient of Carbon at 873K. Oxidation of Metals, 2017, 87, 643-653.	1.0	8
112	Outstanding durability of sol-gel thermal barrier coatings reinforced by YSZ-fibers. Journal of the European Ceramic Society, 2018, 38, 4719-4731.	2.8	8
113	Metal dusting of Inconel 625 obtained by laser beam melting: Effect of manufacturing process and hot isostatic pressure treatment. Corrosion Science, 2020, 174, 108820.	3.0	8
114	Kinetic oxidation model including the transient regime for a single crystal nickel-based superalloy over the temperature range 750-1300°C. Corrosion Science, 2022, 206, 110485.	3.0	8
115	The microchemistry and microstructure of magnesium-doped submicron γ -alumina powders after thermal treatment at 1300°C. Journal of the European Ceramic Society, 1993, 12, 337-341.	2.8	7
116	On the Understanding of TGO Growth and Spallation in Nickel Aluminides. Materials Science Forum, 2004, 461-464, 289-296.	0.3	7
117	High-temperature oxidation of nickel-based alloys and estimation of the adhesion strength of resulting oxide layers. Protection of Metals and Physical Chemistry of Surfaces, 2011, 47, 347-353.	0.3	7
118	Chromium and iridium effects on the short-term interdiffusion behaviour between Pt rich β - PtAl_2 bond-coatings and a Ni-Al-Cr alloy. Surface and Coatings Technology, 2017, 309, 258-265.	2.2	7
119	HIGH TEMPERATURE OXIDATION OF Ti-6AL-4V ALLOY FABRICATED BY ADDITIVE MANUFACTURING. INFLUENCE ON MECHANICAL PROPERTIES. MATEC Web of Conferences, 2020, 321, 03006.	0.1	7
120	High-Temperature Oxidation Behavior of Ti6242S Ti-based Alloy. Oxidation of Metals, 2021, 96, 373-384.	1.0	7
121	Metal Dusting of Stainless Steels. Materials Science Forum, 1997, 251-254, 665-670.	0.3	6
122	Characterization of TBC Systems with NiPtAl or NiCoCrAlYTa Bond Coatings after Thermal Cycling at 1100°C: A Comparative Study of Failure Mechanisms. Materials Science Forum, 0, 595-598, 213-221.	0.3	6
123	Shaping of Nanostructured Materials or Coatings through Spark Plasma Sintering. Materials Science Forum, 0, 706-709, 24-30.	0.3	6
124	Relevance of Other Parameters than Carbon Activity in Defining the Severity of a Metal Dusting Environment. Oxidation of Metals, 2017, 87, 655-666.	1.0	6
125	Modelling the high temperature oxidation of titanium alloys: Development of a new numerical tool PyTiOx. Corrosion Science, 2020, 176, 109005.	3.0	6
126	Diffusion and High-Temperature Oxidation of Nickel. Defect and Diffusion Forum, 2001, 194-199, 1675-1682.	0.4	5

#	ARTICLE	IF	CITATIONS
127	Influence of Environment on Creep Properties of MC2 Single Crystal Superalloy at 1150Å°C. Materials Science Forum, 2004, 461-464, 647-654.	0.3	5
128	Cyclic thermogravimetry of TBC systems. Surface and Coatings Technology, 2007, 202, 665-669.	2.2	5
129	Continuous thermogravimetric analysis during the cyclic oxidation of Niâ€“22Alâ€“15Pt+1wt.% Hf at 1200Å°C. Scripta Materialia, 2007, 57, 647-650.	2.6	5
130	Efficient, durable protection of the Ti6242S titanium alloy against high-temperature oxidation through MOCVD processed amorphous alumina coatings. Journal of Materials Science, 2020, 55, 4883-4895.	1.7	5
131	High Temperature Oxidation of Additively Manufactured Structural Alloys. Jom, 2022, 74, 1659-1667.	0.9	5
132	Short-Term High Temperature Oxidation of Lamellar Cast Iron. Materials Science Forum, 2001, 369-372, 181-188.	0.3	4
133	Chemical Evolution in the Substrate due to Oxidation: A Numerical Model with Explicit Treatment of Vacancy Fluxes. Materials Science Forum, 0, 595-598, 463-472.	0.3	4
134	Reactivity and microstructure evolution of a CoNiCrAlY/Talc cermet prepared by Spark Plasma Sintering. Surface and Coatings Technology, 2010, 205, 1183-1188.	2.2	4
135	Characterisation of oxide scale adherence after the high temperature oxidation of nickel-based superalloys. Materials at High Temperatures, 2012, 29, 243-248.	0.5	4
136	Special Issue on Corrosionâ€“Mechanical Loading Interactions. Oxidation of Metals, 2017, 88, 1-2.	1.0	4
137	Oxidation of Thin Nickel-Based Superalloy Specimens: Kinetics Study and Mechanical Integrity. Oxidation of Metals, 2021, 96, 169-182.	1.0	4
138	A Microscopy Study of Spalling and Growth Mechanism of the Oxide Scale Formed on Pd Modified Nickel Aluminum. Materials Science Forum, 2001, 369-372, 499-506.	0.3	3
139	Experimental Study of the Interactions between Oxidation and Structural Defects. Materials Science Forum, 2004, 461-464, 123-130.	0.3	3
140	The nickel, model material for the high temperature oxidation studies: first steps towards predictive modelling. Revue De Metallurgie, 2005, 102, 135-146.	0.3	3
141	Application of image analysis and image simulation for quantitative characterization of scale spallation during cyclic oxidation of a Pt-aluminide coating. Intermetallics, 2006, 14, 423-434.	1.8	3
142	Numerical simulation of cyclic oxidation kinetics with automatic fitting of experimental data. Scripta Materialia, 2007, 56, 233-236.	2.6	3
143	Modeling Two- and Three-Stage Oxygen Tracer Experiments during High-Temperature Oxidation of Metals with a High Oxygen Solubility. Oxidation of Metals, 2018, 89, 517-529.	1.0	3
144	Amorphous Alumina Films Efficiently Protect Ti6242S against Oxidation and Allow Operation above 600 Å°C. Materials Science Forum, 0, 941, 1846-1852.	0.3	3

#	ARTICLE	IF	CITATIONS
145	The nitrogen effect on the oxidation behaviour of Ti6242S titanium-based alloy: contribution of atom probe tomography. MATEC Web of Conferences, 2020, 321, 06005.	0.1	3
146	Oxygen/nitrogen-assisted embrittlement of titanium alloys exposed at elevated temperature. MATEC Web of Conferences, 2020, 321, 06004.	0.1	3
147	Alloy Development for High Temperature Corrosion and Protection. Oxidation of Metals, 2013, 80, 1-1.	1.0	2
148	Influence of Pt Addition and Manufacturing Process on the Failure Mechanisms of NiCoCrAlYTa-Base Thermal Barrier Coating Systems under Thermal Cycling Conditions. Metals, 2018, 8, 771.	1.0	2
149	Investigation of the metal dusting attack on the temperature range 500~700°C using X-ray tomography. Corrosion Science, 2021, 192, 109863.	3.0	2
150	High temperature oxidation and mechanical behavior of Ti221s and Ti6242S Ti-based alloys. MATEC Web of Conferences, 2020, 321, 04011.	0.1	2
151	Fluid dynamic simulation of CrO2(OH)2 volatilization and gas phase evolution during the oxidation of a chromia forming alloy. Corrosion Science, 2022, 203, 110306.	3.0	2
152	Water Vapor Effects in High Temperature Oxidation. Oxidation of Metals, 2013, 79, 443-444.	1.0	1
153	Influence of Environment on Creep Properties of MC2 Single Crystal Superalloy at 1050°C AND 1150°C. , 2013, , 173-180.		1
154	High Temperature Coatings. Oxidation of Metals, 2014, 81, 1-1.	1.0	1
155	Relations Between Oxidation Induced Microstructure and Mechanical Durability of Oxide Scales. Oxidation of Metals, 2017, 88, 29-40.	1.0	1
156	Chemical Interaction of Austenitic and Ferritic Steels with B ₄ C Powder in Liquid Sodium at 600°C. Corrosion, 2019, 75, 1173-1182.	0.5	1
157	Computational Kinetics: Application to Nuclear Materials. , 2020, , 850-880.		1
158	Prototype de thermobalance multi-axes avec cyclage thermique rapide. Mecanique Et Industries, 2007, 8, 65-69.	0.2	0
159	Numerical Modelling of Diffusion Coupled with Cyclic Oxidation. Application to Alumina-Forming Coatings Used for Industrial Gas Turbine Blades. Materials Science Forum, 0, 595-598, 159-168.	0.3	0
160	On the Mutual Interaction between Mechanical Stresses and Internal Corrosion during Isothermal and Cyclic Oxidation of Nickel-Base Superalloys. Materials Science Forum, 0, 595-598, 1023-1031.	0.3	0
161	Hot Corrosion and Degradation in Complex Atmospheres. Oxidation of Metals, 2013, 80, 453-454.	1.0	0
162	Advanced Characterization Techniques in High-Temperature Oxidation and Corrosion Studies. Oxidation of Metals, 2013, 79, 225-226.	1.0	0

#	ARTICLE	IF	CITATIONS
163	High Temperature Corrosion and Protection of Ceramics, Composites and Silicides. Oxidation of Metals, 2013, 80, 205-205.	1.0	0
164	Fundamentals and Numerical Simulations in High Temperature Corrosion and Protection. Oxidation of Metals, 2013, 79, 1-1.	1.0	0
165	Prediction of High Temperature Cyclic Oxidation Kinetics with a Simple Statistical Spalling Model. , 2013, , 165-172.		0
166	Statistical Lifetime Modeling of Fe-Ni-Cr Alloys Subject to High-Temperature Corrosion in Waste-to-Energy Production Units. Corrosion, 2015, 71, 1360-1369.	0.5	0
167	Special Issue on Oxidation in Water Vapor. Oxidation of Metals, 2017, 87, 403-404.	1.0	0
168	Special Issue on the High-Temperature Corrosion in Mixed Oxidant Environments. Oxidation of Metals, 2017, 87, 679-680.	1.0	0
169	Oxidation of New Materials and Composites. Oxidation of Metals, 2017, 88, 235-236.	1.0	0
170	Special Issue on Advances in Relevant Characterization Techniques. Oxidation of Metals, 2017, 88, 421-422.	1.0	0
171	High-Temperature Protective Coatings. Oxidation of Metals, 2017, 88, 71-71.	1.0	0
172	Special Issue on Carburization and Metal Dusting. Oxidation of Metals, 2017, 87, 603-604.	1.0	0
173	Special Issue on "Fundamentals and Numerical Simulations in High-Temperature Corrosion and Protection Focus Issue" Oxidation of Metals, 2017, 87, 271-272.	1.0	0
174	Development of Thermokinetic Tools for Phase Transformation Studies of Zr Alloys for Both In-Service and LOCA Conditions. , 2021, , 833-854.		0
175	Editorial on this Focus Issue on Key Corrosion Topics. Oxidation of Metals, 2021, 96, 1-2.	1.0	0
176	Focus Issue on Unique Materials, Techniques, and Environments. Oxidation of Metals, 2021, 96, 183-184.	1.0	0
177	Kinetic demixing of (Co, Mg)O and ZrO ₂ , Y ₂ O ₃ solid solutions in an electrical field. European Physical Journal Special Topics, 1993, 03, C7-1467-C7-1470.	0.2	0
178	Thermo-Mechanical Characterizations of Coatings for HP Turbines. , 1998, , .		0
179	High temperature behaviour of Titanium alloys in moist air. Annales De Chimie: Science Des Materiaux, 2015, 39, 149-157.	0.2	0
180	Evolution of mechanical properties of Ti6242S alloy after oxidation in air at 560°C: influence of solid salts deposits. MATEC Web of Conferences, 2020, 321, 04029.	0.1	0