Willem J Quadakkers

List of Publications by Year
in descending order

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210 papers	9,563 citations	30070 54 h-index	53230 85 g-index
217 all docs	217 docs citations	217 times ranked	3037 citing authors

#	Article	IF	Citations
1	Metallic interconnectors for solid oxide fuel cellsâ€...â€“â€...a review. Materials at High Temperatures, 2003, 20, 115-127.	1.0	287
2	Enhanced oxidation of the 9%Cr steel P91 in water vapour containing environments. Corrosion Science, 2006, 48, 3428-3454.	6.6	270
3	Reduction of chromium vaporization from SOFC interconnectors by highly effective coatings. Journal of Power Sources, 2007, 164, 578-589.	7.8	249
4	Differences in growth mechanisms of oxide scales formed on ODS and conventional wrought alloys. Oxidation of Metals, 1989, 32, 67-88.	2.1	240
5	Development of high strength ferritic steel for interconnect application in SOFCs. Journal of Power Sources, 2008, 178, 163-173.	7.8	201
6	The Effect of Water Vapor on Selective Oxidation of Feâ€“Cr Alloys. Oxidation of Metals, 2008, 69, 143-162.	2.1	190
7	Growth and adherence of chromia based surface scales on Ni-base alloys in high- and low-pO2 gases. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 477, 259-270.	5.6	170
8	Effect of Alloy Composition and Exposure Conditions on the Selective Oxidation Behavior of Ferritic Feâ€“Cr and Feâ€“Crâ€“X Alloys. Oxidation of Metals, 2010, 74, 319-340.	2.1	165
9	Current Thoughts on Reactive Element Effects in Alumina-Forming Systems: In Memory of John Stringer. Oxidation of Metals, 2016, 86, 1-43.	2.1	164
10	Composition and growth mechanisms of alumina scales on FeCrAl-based alloys determined by SNMS. Applied Surface Science, 1991, 52, 271-287.	6.1	159
11	Anomalous temperature dependence of oxidation kinetics during steam oxidation of ferritic steels in the temperature range 550â€“650 Â°C. Corrosion Science, 2004, 46, 2301-2317.	6.6	150
12	Failure mechanisms of thermal barrier coatings on MCrAlY-type bondcoats associated with the formation of the thermally grown oxide. Journal of Materials Science, 2009, 44, 1687-1703.	3.7	147
13	Effect of surface condition on the oxidation behaviour of MCrAlY coatings. Surface and Coatings Technology, 2006, 201, 3824-3828.	4.8	143
14	Enhanced internal oxidation as trigger for breakaway oxidation of Feâ€“Cr alloys in gases containing water vapor. Scripta Materialia, 2007, 57, 845-848.	5.2	143
15	Parameters affecting TGO growth and adherence on MCrAlY-bond coats for TBC's. Surface and Coatings Technology, 2006, 201, 3906-3910.	4.8	131
16	Growth Rates of Alumina Scales on Feâ€“Crâ€“Al Alloys. Oxidation of Metals, 2004, 61, 17-37.	2.1	123
17	Role of Water Vapor in Chromia-Scale Growth at Low Oxygen Partial Pressure. Oxidation of Metals, 2003, 59, 285-301.	2.1	122
18	Modelling of phase equilibria in MCrAlY coating systems. Surface and Coatings Technology, 2004, 187, 272-283.	4.8	112

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19	Growth mechanisms of oxide scales on ODS alloys in the temperature range 1000-1100Â°C. Materials and Corrosion - Werkstoffe Und Korrosion, 1990, 41, 659-668.	1.5	107
20	Sub-Scale Depletion and Enrichment Processes During High Temperature Oxidation of the Nickel Base Alloy 625 in the Temperature Range 900â€“1000ÂÂ°C. Oxidation of Metals, 2011, 75, 143-166.	2.1	105
21	Correlation between the Microstructure, Growth Mechanism, and Growth Kinetics of Alumina Scales on a FeCrAlY Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 2974-2983.	2.2	103
22	The prediction of breakaway oxidation for alumina forming ODS alloys using oxidation diagrams. Materials and Corrosion - Werkstoffe Und Korrosion, 1994, 45, 232-241.	1.5	102
23	Oxidation induced lifetime limits of thin walled, iron based, alumina forming, oxide dispersion strengthened alloy components. Materials Science and Technology, 1994, 10, 126-131.	1.6	96
24	The effect of niobium ion implantation on the oxidation behavior of a?-TiAl-based intermetallic. Oxidation of Metals, 1996, 46, 19-35.	2.1	96
25	Oxidation limited life times of chromia forming ferritic steels. Materials and Corrosion - Werkstoffe Und Korrosion, 2004, 55, 825-830.	1.5	96
26	Effect of processing parameters on MCrAlY bondcoat roughness and lifetime of APSâ€“TBC systems. Surface and Coatings Technology, 2014, 260, 82-89.	4.8	91
27	Studies concerning the effect of nitrogen on the oxidation behavior of TiAl-based intermetallics at 900ï¿½C. Oxidation of Metals, 1995, 44, 477-499.	2.1	90
28	Temperature dependence of oxide scale formation on high-Cr ferritic steels in Arâ€“H2â€“H2O. Corrosion Science, 2011, 53, 2131-2141.	6.6	90
29	Effect of?-alumina formation on the growth kinetics of alumina-forming superalloys. Oxidation of Metals, 1996, 46, 465-480.	2.1	86
30	The effect of microstructure on the oxidation behaviour of TiAl-based intermetallics. Corrosion Science, 1993, 34, 615-630.	6.6	84
31	Oxidation-Resistant Aluminide Coatings on Î³-TiAl. Oxidation of Metals, 2003, 59, 233-255.	2.1	84
32	Oxidation characteristics of a platinized MCrAlY bond coat for TBC systems during cyclic oxidation at 1000 Â°C. Surface and Coatings Technology, 2005, 199, 77-82.	4.8	83
33	Effect of Laves phase strengthening on the mechanical properties of high Cr ferritic steels for solid oxide fuel cell interconnect application. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5888-5899.	5.6	82
34	Scale formation mechanisms of martensitic steels in high CO₂/H₂O-containing gases simulating oxyfuel environments. Materials at High Temperatures, 2009, 26, 63-72.	1.0	80
35	Effect of water vapor on high-temperature oxidation of FeCr alloys. Jom, 2009, 61, 44-50.	1.9	79
36	Y-rich oxide distribution in plasma sprayed MCrAlY-coatings studied by SEM with a cathodoluminescence detector and Raman spectroscopy. Surface and Coatings Technology, 2009, 204, 531-538.	4.8	79

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37	Behaviour of various glassâ€“ceramic sealants with ferritic steels under simulated SOFC stack conditions. Journal of Power Sources, 2005, 150, 86-100.	7.8	78
38	Growth Mechanisms and Electrical Conductivity of Oxide Scales on Ferritic Steels Proposed as Interconnect Materials for SOFC's. Fuel Cells, 2006, 6, 93-99.	2.4	76
39	Protective and non-protective scale formation of NiCr alloys in water vapour containing high- and low-pO2 gases. Corrosion Science, 2008, 50, 1753-1760.	6.6	75
40	Title is missing!. Oxidation of Metals, 2000, 54, 211-235.	2.1	72
41	Corrosion of High Temperature Alloys in the Primary Circuit Helium of High Temperature Gas Cooled Reactors. Part II: Experimental Results. Materials and Corrosion - Werkstoffe Und Korrosion, 1985, 36, 335-347.	1.5	71
42	The oxidation behaviour of niobium containing ?-TiAl based intermetallics in air and argon/oxygen. Mikrochimica Acta, 1995, 119, 23-39.	5.0	67
43	Implications of steam oxidation for the service life of high-strength martensitic steel components in high-temperature plant. International Journal of Pressure Vessels and Piping, 2007, 84, 82-87.	2.6	67
44	The Effect of Water-Vapor Content and Gas Flow Rate on the Oxidation Mechanism of a 10%Cr-Ferritic Steel in Ar-H2O Mixtures. Oxidation of Metals, 2005, 63, 401-422.	2.1	65
45	Development of high chromium ferritic steels strengthened by intermetallic phases. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 594, 372-380.	5.6	64
46	Corrosion of high temprature alloys in the primary circuit helium of high temperature gas cooled reactors. - Part I: Theoretical background. Materials and Corrosion - Werkstoffe Und Korrosion, 1985, 36, 141-150.	1.5	63
47	Effect of oxygen content in NiCoCrAlY bondcoat on the lifetimes of EB-PVD and APS thermal barrier coatings. Surface and Coatings Technology, 2013, 221, 207-213.	4.8	63
48	Non-steady state carburisation of martensitic 9â€“12%Cr steels in CO2 rich gases at 550Â°C. Corrosion Science, 2014, 88, 161-169.	6.6	61
49	Temperature dependence of phase relationships in different types of MCrAlY-coatings. Surface and Coatings Technology, 2007, 202, 603-607.	4.8	60
50	Composition, structure and protective properties of alumina scales on iron-based oxide dispersion strengthened alloys. Materials at High Temperatures, 1992, 10, 23-32.	1.0	59
51	Isothermal and cyclic oxidation behavior of free standing MCrAlY coatings manufactured by high-velocity atmospheric plasma spraying. Surface and Coatings Technology, 2017, 313, 191-201.	4.8	58
52	Development of oxidation resistant coatings for Î³-TiAl based alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 328, 297-301.	5.6	56
53	Mechanisms of steam oxidation in high strength martensitic steels. International Journal of Pressure Vessels and Piping, 2007, 84, 75-81.	2.6	56
54	Oxidation kinetics of Yâ€doped FeCrAlâ€alloys in low and high pO₂ gases. Materials and Corrosion - Werkstoffe Und Korrosion, 2010, 61, 838-844.	1.5	55

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55	Effect of water vapour on growth and adherence of chromia scales formed on Cr in high and low pO₂-environments at 1000 and 1050Â°C. Materials at High Temperatures, 2005, 22, 213-221.	1.0	55
56	Solid Oxide Fuel Cell Development at Forschungszentrum Juelich. Fuel Cells, 2007, 7, 204-210.	2.4	52
57	Overview on Recent Developments of Bondcoats for Plasma-Sprayed Thermal Barrier Coatings. Journal of Thermal Spray Technology, 2017, 26, 1743-1757.	3.1	52
58	Thermodynamic and Kinetic Aspects of the Corrosion of High-Temperature Alloys in High-Temperature Gas-Cooled Reactor Helium. Nuclear Technology, 1984, 66, 383-391.	1.2	51
59	Modeling carbide dissolution in alloy 602 CA during high temperature oxidation. Corrosion Science, 2015, 96, 32-41.	6.6	51
60	A mathematical model describing carburization in multielement alloy systems. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1989, 20, 1021-1028.	1.4	49
61	The effect of water vapor on the oxidation behavior of 9%Cr steels in simulated combustion gases. Fresenius' Journal of Analytical Chemistry, 1998, 361, 540-544.	1.5	49
62	Oxidation Induced Lifetime Limits of Chromia Forming Ferritic Interconnector Steels. Journal of Fuel Cell Science and Technology, 2004, 1, 30-34.	0.8	49
63	Evaluation of the suitability of various glass sealant?alloy combinations under SOFC stack conditions. Journal of Materials Science, 2005, 40, 1583-1592.	3.7	48
64	The oxidation behaviour of the 9 % Cr steel P92in CO2- and H2O-rich gases relevant to oxyfuel environments. International Journal of Materials Research, 2010, 101, 287-299.	0.3	47
65	The effect of implanted yttrium on the growth and adherence of alumina scales on Fe-20Cr-5Al. Applied Surface Science, 1991, 47, 261-272.	6.1	46
66	Effect of nickel base superalloy composition on oxidation resistance in <scp>SO</scp>₂ containing, high p<scp>O</scp>₂ environments. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 178-187.	1.5	46
67	A new computational approach for modelling the microstructural evolution and residual lifetime assessment of MCrAlY coatings. Materials at High Temperatures, 2015, 32, 57-67.	1.0	46
68	Oxidation behaviour and microstructural stability of alloy 625 during long-term exposure in steam. Journal of Materials Science, 2014, 49, 6127-6142.	3.7	45
69	Microstructural stability and oxidation behavior of Sanicro 25 during longâ€term steam exposure in the temperature range 600â€“750â€‰Â°C. Materials and Corrosion - Werkstoffe Und Korrosion, 2015, 66, 315-327.	1.5	45
70	Surface analytical investigations on the oxidation behaviour of TiAl-base intermetallics. Fresenius' Journal of Analytical Chemistry, 1993, 346, 75-78.	1.5	43
71	Mechanisms of Oxide Scale Formation on Ferritic Interconnect Steel in Simulated Low and High pO2 Service Environments of Solid Oxide Fuel Cells. Oxidation of Metals, 2014, 82, 123-143.	2.1	43
72	Cracking in and around the thermally grown oxide in thermal barrier coatings: A comparison of isothermal and cyclic oxidation. Journal of Materials Science, 2006, 41, 1047-1058.	3.7	41

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73	Parameters affecting TGO growth rate and the lifetime of TBC systems with MCrAlYâ€bondcoats. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 501-507.	1.5	41
74	Effect of <scp>SO</scp>₂ on oxidation of metallic materials in <scp>CO</scp>₂/<scp>H</scp>₂<scp>O</scp>â€rich gases relevant to oxyfuel environments. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 121-131.	1.5	41
75	Modelling compositional changes in nickel base alloy 602 CA during high temperature oxidation. Materials at High Temperatures, 2015, 32, 102-112.	1.0	41
76	Distribution and transport of yttrium in alumina scales on iron-base ODS alloys. Solid State Ionics, 1993, 59, 235-242.	2.7	40
77	Overview of the Development of Solid Oxide Fuel Cells at Forschungszentrum Juelich. International Journal of Applied Ceramic Technology, 2006, 3, 470-476.	2.1	40
78	Quantitative analysis of oxide films on ODS-alloys using MCs+-SIMS and e-beam SNMS. Fresenius' Journal of Analytical Chemistry, 1993, 346, 186-191.	1.5	39
79	Parameters affecting transient oxide formation on FeCrAl based foil and fibre materials. Materials at High Temperatures, 2003, 20, 287-293.	1.0	39
80	Modification of alumina scale formation on FeCrAlY alloys by minor additions of group IVa elements. Journal of Materials Science, 2008, 43, 4550-4560.	3.7	38
81	Oxidation in Steam and Steam/Hydrogen Environments. , 2010, , 407-456.		37
82	Potential suitability of ferritic and austenitic steels as interconnect materials for solid oxide fuel cells operating at 600Â°C. Journal of Power Sources, 2010, 195, 7600-7608.	7.8	36
83	Batch to batch variations in the oxidation behaviour of alumina forming Fe-based alloys. Materials and Corrosion - Werkstoffe Und Korrosion, 2000, 51, 350-357.	1.5	35
84	Effect of manufacturing related parameters on oxidation properties of MCrAlYâ€bondcoats. Materials and Corrosion - Werkstoffe Und Korrosion, 2008, 59, 463-470.	1.5	35
85	Effect of Titanium Addition on Alumina Growth Mechanism on Yttria-Containing FeCrAl-Base Alloy. Oxidation of Metals, 2018, 90, 671-690.	2.1	35
86	Long-term operation of solid oxide fuel cells and preliminary findings on accelerated testing. International Journal of Hydrogen Energy, 2020, 45, 8955-8964.	7.1	35
87	The influence of cooling rate during alloy casting on the oxidation behaviour of TiAl-based intermetallics. Journal of Materials Science, 1993, 28, 5869-5874.	3.7	34
88	Metallic materials in solid oxide fuel cells. Materials Research, 2004, 7, 203-208.	1.3	34
89	Analysis and modelling of transport processes in alumina scales on high temperature alloys. Fresenius' Journal of Analytical Chemistry, 1993, 346, 318-322.	1.5	33
90	Predicting Oxidation-Limited Lifetime of Thin-Walled Components of NiCrW Alloy 230. Oxidation of Metals, 2017, 87, 11-38.	2.1	33

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91	A Finite Difference Model Describing Carburization in High-Temperature Alloys. Corrosion, 1986, 42, 390-397.	1.1	32
92	Analysis of composition and growth mechanisms of oxide scales on high temperature alloys by SNMS, SIMS, and RBS. Mikrochimica Acta, 1992, 107, 197-206.	5.0	31
93	Determination of lattice and grain boundary diffusion coefficients in protective alumina scales on high temperature alloys using SEM, TEM and SIMS. Fresenius' Journal of Analytical Chemistry, 1995, 353, 267-270.	1.5	31
94	A novel method to evaluate the suitability of glass sealant?alloy combinations under SOFC stack conditions. Journal of Power Sources, 2005, 141, 102-107.	7.8	31
95	Effect of exposure conditions on the oxidation of MCrAlY-bondcoats and lifetime of thermal barrier coatings. Surface and Coatings Technology, 2009, 204, 820-823.	4.8	31
96	A Simple Expression for Predicting the Oxidation Limited Life of Thin Components Manufactured from FCC High Temperature Alloys. Oxidation of Metals, 2012, 77, 253-264.	2.1	29
97	Long-term behaviour of solid oxide fuel cell interconnect materials in contact with Ni-mesh during exposure in simulated anode gas at 700 and 800ÂÂ°C. Journal of Power Sources, 2014, 271, 213-222.	7.8	29
98	Impact of processing conditions and feedstock characteristics on thermally sprayed MCrAlY bondcoat properties. Surface and Coatings Technology, 2017, 318, 114-121.	4.8	29
99	Development of NiCrAlY Alloys for Corrosion-Resistant Coatings and Thermal Barrier Coatings of Gas Turbine Components. Journal of Pressure Vessel Technology, Transactions of the ASME, 1999, 121, 384-387.	0.6	28
100	Analysis of corrosion layers on protective coatings and high temperature materials in simulated service environments of modern power plants using SNMS, SIMS, SEM, TEM, RBS and X-ray diffraction studies. Analytical and Bioanalytical Chemistry, 2002, 374, 581-587.	3.7	28
101	Effects of minor additions and impurities on oxidation behaviour of FeCrAl alloys. Development of novel surface coatings compositions. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 848-853.	1.5	28
102	Development of storage materials for high-temperature rechargeable oxide batteries. Journal of Energy Storage, 2015, 1, 54-64.	8.1	28
103	Effect of specimen thickness on the growth rate of chromia scales on Ni-base alloys in high- and low-pO2 gases. Journal of Alloys and Compounds, 2009, 467, 450-458.	5.5	27
104	Boron Depletion in a Nickel Base Superalloy Induced by High Temperature Oxidation. Oxidation of Metals, 2015, 83, 393-413.	2.1	27
105	Oxidation of Metallic Materials in Simulated CO₂/H₂O-Rich Service Environments Relevant to an Oxyfuel Plant. Materials Science Forum, 0, 696, 194-199.	0.3	26
106	Slow Transition from Protective to Breakaway Oxidation of Haynes 214 Foil at High Temperature. Oxidation of Metals, 2013, 79, 405-427.	2.1	26
107	The influence of implanted chromium and yttrium on the oxidation behaviour of TiAl-based intermetallics. Journal of Materials Science, 1995, 30, 5793-5798.	3.7	25
108	Power-To-Storage - The Use of an Anode-Supported Solid Oxide Fuel Cell as a High-Temperature Battery. ECS Transactions, 2013, 57, 255-267.	0.5	25

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109	Effect of Specimen Thickness on the Oxidation Rate of High Chromium Ferritic Steels: The Significance of Intrinsic Alloy Creep Strength. Oxidation of Metals, 2013, 79, 15-28.	2.1	25
110	Evidence for Cr-carbide formation at the scale/metal interface during oxidation of FeCrAl alloys. Materials Letters, 2006, 60, 1654-1658.	2.6	24
111	Anode Side Diffusion Barrier Coating for Solid Oxide Fuel Cells Interconnects. Journal of Fuel Cell Science and Technology, 2010, 7, .	0.8	24
112	Overview on the JÃ¼lich SOFC Development Status. ECS Transactions, 2013, 57, 23-33.	0.5	24
113	Future Directions in the Field of High-Temperature Corrosion Research. Oxidation of Metals, 2017, 87, 681-704.	2.1	24
114	Effect of test atmosphere composition on high-temperature oxidation behaviour of CoNiCrAlY coatings produced from conventional and ODS powders. Materials at High Temperatures, 2018, 35, 97-107.	1.0	24
115	Modeling Interdiffusion Processes in CMSX-10/Ni Diffusion Couple. Journal of Phase Equilibria and Diffusion, 2016, 37, 201-211.	1.4	23
116	Corrosion behaviour of high temperature alloys in impure helium environments. Journal of Nuclear Materials, 1986, 140, 94-105.	2.7	22
117	Effect of selective oxidation of chromium on creep strength of Alloy 617. Materials Science and Technology, 1992, 8, 78-82.	1.6	22
118	Fundamental considerations for the development of oxidation-resistant alloys and coatings based on Î³-TiAl. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 2247-2251.	2.2	22
119	Chromium vaporization from alumina-forming and aluminized alloys. Solid State Ionics, 2008, 179, 2406-2415.	2.7	22
120	Oxidation Limited Lifetime of Niâ€Base Metal Foams in the Temperature Range 700â€“900â€‰Â°C. Advanced Engineering Materials, 2010, 12, 873-883.	3.5	22
121	High Temperature Corrosion Issues for Metallic Materials in Solid Oxide Fuel Cells. , 2010, , 482-517.		22
122	Steam Oxidation of 9% to 12%Cr Steels: Critical Evaluation and Implications for Practical Application. Corrosion, 2014, 70, 112-129.	1.1	22
123	Effect of gas flow rate on oxidation behaviour of alloy 625 in wet air in the temperature range 900â€“1000â€‰Â°C. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 159-170.	1.5	22
124	Use of acoustic emission technique to study the spalling behaviour of oxide scales on Ni-10Cr-8Al containing sulphur and/or yttrium impurity. Materials and Corrosion - Werkstoffe Und Korrosion, 1989, 40, 552-558.	1.5	21
125	Blistering of MCrAlY-coatings in H2/H2O-atmospheres. Corrosion Science, 2009, 51, 446-450.	6.6	21
126	Effect of atmosphere composition on the oxidation behavior of MCrAlY coatings. Materials and Corrosion - Werkstoffe Und Korrosion, 2011, 62, 699-705.	1.5	21

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127	Effects of water vapour on the high temperature nitridation of chromium. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 260-266.	1.5	21
128	Effect of Sulphur on the Oxidation Behaviour of Possible Construction Materials for Heat Exchangers in Oxyfuel Plants in the Temperature Range 550â€“700ÂÂ°C. Oxidation of Metals, 2018, 89, 651-681.	2.1	21
129	Metastable alumina formation during oxidation of FeCrAl and its suppression by surface treatments. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 843-847.	1.5	20
130	Postâ€test Characterization of Metallic Materials and Adjacent Components in an SOFC Stack After 34,000â€‰h Operation at 700â€‰Â°C. Fuel Cells, 2019, 19, 84-95.	2.4	20
131	Modeling in High Temperature Corrosion: A Review and Outlook. Oxidation of Metals, 2021, 96, 385-436.	2.1	20
132	Review of high temperature corrosion of metals and alloys in sulphidizing/oxidizing environments I. COrrosion of metals. High Temperature Technology, 1986, 4, 83-96.	0.3	19
133	Effect of Zr Additions on the Oxidation Kinetics of FeCrAlY Alloys in Low and High pO2 Gases. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1173-1183.	2.2	19
134	Subsurface Depletion and Enrichment Processes During Oxidation of a High Chromium, Laves-Phase Strengthened Ferritic Steel. Electrochemical and Solid-State Letters, 2011, 14, P17.	2.2	19
135	Scale Formation of Alloy 602 CA During Isothermal Oxidation at 800â€“1100ÂÂ°C in Different Types of Water Vapor Containing Atmospheres. Oxidation of Metals, 2015, 84, 661-694.	2.1	19
136	Temperature Dependence of Laves Phase Composition in Nb, W and Si-Alloyed High Chromium Ferritic Steels for SOFC Interconnect Applications. Journal of Phase Equilibria and Diffusion, 2015, 36, 471-484.	1.4	19
137	TEM and SNMS studies on the oxidation behaviour of NiCrAlY-based coatings. Fresenius' Journal of Analytical Chemistry, 1997, 358, 122-126.	1.5	17
138	Carburization of Cr-based ODS alloys in SOFC relevant environments. Materials and Corrosion - Werkstoffe Und Korrosion, 1998, 49, 252-257.	1.5	17
139	Steam oxidation of ferritic steels â€“ laboratory test kinetic data. Materials at High Temperatures, 2005, 22, 47-60.	1.0	17
140	Behavior of Interconnect Steels in Carbon Containing Simulated Anode Gas of Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2012, 159, F725-F732.	2.9	17
141	Influence of vacuum heat treatment parameters on the surface composition of MCrAlY coatings. Surface and Coatings Technology, 2013, 215, 24-29.	4.8	17
142	High-temperature behavior of oxide dispersion strengthening CoNiCrAlY. Materials at High Temperatures, 2018, 35, 108-119.	1.0	17
143	Effect of oxygen partial pressure on the oxidation behaviour of an yttria dispersion strengthened NiCr-base alloy. Journal of Materials Science, 2008, 43, 5591-5598.	3.7	16
144	Temperature and gas composition dependence of internal oxidation kinetics of an Feï£¿10%Cr alloy in water vapour containing environments. Materials and Corrosion - Werkstoffe Und Korrosion, 2011, 62, 504-513.	1.5	16

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145	Influence of sulphur impurity on oxidation behaviour of Niâ€“10Crâ€“9Al in air at 1000Â°C. Materials Science and Technology, 1988, 4, 1119-1125.	1.6	15
146	Steam oxidation and its potential effects on creep strength of power station materials. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 890-896.	1.5	15
147	Oxide scale formation and subsurface phase transformations during longâ€term steam exposure of the cobalt base alloy 25. Materials and Corrosion - Werkstoffe Und Korrosion, 2012, 63, 878-888.	1.5	15
148	Effect of alloy composition on the oxidationâ€induced boron depletion in cast Niâ€base superalloy components. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 171-185.	1.5	15
149	Effect of Nb Addition on Oxidation Mechanisms of High Cr Ferritic Steel in Arâ€“H2â€“H2O. Oxidation of Metals, 2019, 92, 471-491.	2.1	15
150	Points to be considered in thermogravimetry. Materials and Corrosion - Werkstoffe Und Korrosion, 1993, 44, 345-350.	1.5	14
151	Effect ofin-situgas changes on thermally grown chromia scales formed on Niâ€“25Cr alloy at 1000Â°C in atmospheres with and without water vapour. Materials at High Temperatures, 2015, 32, 238-247.	1.0	14
152	Correlative Atom Probe Tomography and Transmission Electron Microscopy Analysis of Grain Boundaries in Thermally Grown Alumina Scale. Microscopy and Microanalysis, 2019, 25, 11-20.	0.4	14
153	Oxidation induced lifetime limits of thin walled, iron based, alumina forming, oxide dispersion strengthened alloy components. Materials Science and Technology, 1994, 10, 126-131.	1.6	14
154	High-Temperature Oxidation of FeCrAl Alloys: The Effect of Mg Incorporation into the Alumina Scale. International Journal of Materials Research, 2003, 94, 180-187.	0.8	14
155	On the mechanism of the oxidation of NiCrAl-base alloys in air and air containing sulphur dioxide. Oxidation of Metals, 1993, 40, 275-294.	2.1	13
156	Lifetime extension of FeCrAlRE alloys in air: Potential roles of an enhanced Al-reservoir and surface pre-treatment. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 854-866.	1.5	13
157	SIMS investigations on the growth mechanisms of protective chromia and alumina surface scales. Mikrochimica Acta, 1990, 101, 109-119.	5.0	12
158	Oxidation behavior of mechanically alloyed chromium based alloys. Fresenius' Journal of Analytical Chemistry, 1997, 358, 230-232.	1.5	12
159	Magnetic moment investigation by frequency mixing techniques. Review of Scientific Instruments, 2009, 80, 115106.	1.3	12
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