

# CITATION REPORT

List of articles citing

## Volatility of Common Protective Oxides in High-Temperature Water Vapor: Current Understanding and Unanswered Questions

DOI: [10.4028/www.scientific.net/msf.461-464.765](https://doi.org/10.4028/www.scientific.net/msf.461-464.765)  
Materials Science Forum, 2004, 461-464, 765-774.

**Source:** <https://exaly.com/paper-pdf/36517249/citation-report.pdf>

**Version:** 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
164	Development of novel diffusion coatings for 9% Cr ferritic-martensitic steels. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2005</b> , 56, 874-881	1.6	25
163	Effect of Steam Velocity on the Hydrothermal Oxidation/Volatilization of Silicon Nitride. <i>Journal of the American Ceramic Society</i> , <b>2006</b> , 89, 1380-1387	3.8	18
162	Oxidation resistance: One barrier to moving beyond Ni-base superalloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 415, 255-263	5.3	96
161	The effect of water vapor on the oxidation behavior of NiAl coatings and alloys. <b>2006</b> , 201, 3852-3856		47
160	Creep and corrosion testing of aluminide coatings on ferritic-martensitic substrates. <b>2006</b> , 201, 3880-3884		22
159	Effect of manganese addition on reactive evaporation of chromium in Ni-Cr alloys. <i>Journal of Materials Engineering and Performance</i> , <b>2006</b> , 15, 394-398	1.6	17
158	Comparison of Oxidation Behavior and Electrical Properties of Doped NiO- and Cr <sub>2</sub> O <sub>3</sub> -Forming Alloys for Solid-Oxide, Fuel-Cell Metallic Interconnects. <i>Oxidation of Metals</i> , <b>2006</b> , 65, 237-261	1.6	27
157	The effect of manganese additions on the reactive evaporation of chromium in Ni-Cr alloys. <b>2006</b> , 54, 1821-1825		105
156	Technologien für den Klimaschutz und ihre Anforderungen an Werkstoffe. <b>2006</b> , 78, 1809-1817		3
155	Chromium Vaporization from High-Temperature Alloys. <b>2007</b> , 154, A295		182
154	Interdiffusional degradation of oxidation-resistant aluminide coatings on Fe-base alloys. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2007</b> , 58, 751-761	1.6	26
153	Long-term performance of aluminide coatings on Fe-base alloys. <b>2007</b> , 202, 637-642		26
152	Alumina-Forming Austenitic Stainless Steels Strengthened by Laves Phase and MC Carbide Precipitates. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2007</b> , 38, 2737-2746	2.3	101
151	The oxidation behaviour of metals and alloys at high temperatures in atmospheres containing water vapour: A review. <b>2008</b> , 53, 775-837		406
150	Calculation of Reactive-evaporation Rates of Chromia. <i>Oxidation of Metals</i> , <b>2008</b> , 69, 163-180	1.6	54
149	The development of alumina-forming austenitic stainless steels for high-temperature structural use. <i>Jom</i> , <b>2008</b> , 60, 12-18	2.1	97
148	Formation of aluminide coatings on Fe-based alloys by chemical vapor deposition. <b>2008</b> , 202, 3839-3849		42

147	The Effect of Yttrium on Oxygen Grain-Boundary Transport in Polycrystalline Alumina Measured Using Ni Marker Particles. <i>Journal of the American Ceramic Society</i> , <b>2008</b> , 91, 2002-2008	3.8	21
146	Design strategies for new oxidation-resistant high temperature alloys. <b>2008</b> , 398-432		2
145	Evaluation of Mn substitution for Ni in alumina-forming austenitic stainless steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 524, 176-185	5.3	38
144	Characterization of alumina interfaces in TBC systems. <i>Journal of Materials Science</i> , <b>2009</b> , 44, 1676-1686	4.3	53
143	Investigation of the Evolution of the Oxide Scale Formed on 310 Stainless Steel Oxidized at 600 °C in Oxygen with 40% Water Vapour Using FIB and TEM. <i>Oxidation of Metals</i> , <b>2009</b> , 71, 77-105	1.6	15
142	Effect of Alloying Additions on Phase Equilibria and Creep Resistance of Alumina-Forming Austenitic Stainless Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2009</b> , 40, 1868-1880	2.3	71
141	Corrosion mechanisms of candidate structural materials for supercritical water-cooled reactor. <b>2009</b> , 3, 233-240		11
140	Formation and oxidation performance of low-temperature pack aluminide coatings on ferritic-martensitic steels. <b>2009</b> , 204, 766-770		35
139	Progress in corrosion resistant materials for supercritical water reactors. <i>Corrosion Science</i> , <b>2009</b> , 51, 2508-2523	6.8	150
138	Corrosion of alumina-forming austenitic steel Fe-0Ni-4Cr-0.6Nb-0.1Ti in supercritical water. <i>Journal of Nuclear Materials</i> , <b>2010</b> , 399, 231-235	3.3	37
137	Formation of Aluminide Coatings on Ferritic-Martensitic Steels by a Low-Temperature Pack Cementation Process. <b>2010</b> , 204, 2737-2744		30
136	Effect of Hf and Y alloy additions on aluminide coating performance. <b>2010</b> , 204, 3287-3293		73
135	Rare earth application for heat-resisting alloys. <b>2010</b> , 28, 12-21		12
134	Corrosion behaviour of Fe-Al(Mn) alloys in steam. <b>2010</b> , 18, 1375-1378		6
133	Oxidation in Steam and Steam/Hydrogen Environments. <b>2010</b> , 407-456		31
132	High Temperature Corrosion of Alumina-forming Iron, Nickel and Cobalt-base Alloys. <b>2010</b> , 606-645		15
131	Comparison of the dry and wet oxidation at 900°C of Fe <sub>2</sub> Al <sub>5</sub> and Ni <sub>2</sub> Al <sub>3</sub> coatings. <i>Corrosion Science</i> , <b>2011</b> , 53, 597-603	6.8	30
130	The Pack-Cementation Process of Iron-Aluminide Coating on China Low Activation Martensitic and 316L Austenitic Stainless Steel. <b>2011</b> , 60, 1065-1068		6

129	Effect of increased water vapor levels on TBC lifetime with Pt-containing bond coatings. <b>2011</b> , 206, 1566-1570	27
128	Overview of Strategies for High-Temperature Creep and Oxidation Resistance of Alumina-Forming Austenitic Stainless Steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2011</b> , 42, 922-931	2.3 96
127	Performance of Al-rich oxidation resistant coatings for Fe-base alloys. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2011</b> , 62, 549-560	1.6 34
126	Interface reactivity study between La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3</sub> [(LSCF) cathode material and metallic interconnect for fuel cell. <b>2011</b> , 196, 2037-2045	36
125	Minimum Al Content for Forming Alumina Scale on Creep Resistant Ferritic Steels at 650 °C. <b>2011</b> , 284-286, 1080-1084	
124	Evaluation of Alumina-Forming Austenitic Foil for Advanced Recuperators. <b>2011</b> , 133,	11
123	High-Temperature Performance of Cast CF8C-Plus Austenitic Stainless Steel. <b>2011</b> , 133,	8
122	Small-angle neutron scattering study of the wet and dry high-temperature oxidation of alumina- and chromia-forming stainless steels. <i>Corrosion Science</i> , <b>2012</b> , 58, 121-132	6.8 10
121	High-Temperature Oxidation Resistance of Austenitic Stainless Steel Cr <sub>18</sub> Ni <sub>11</sub> Cu <sub>3</sub> Al <sub>3</sub> MnNb. <i>Journal of Iron and Steel Research International</i> , <b>2012</b> , 19, 74-78	1.2 20
120	Effects of silicon additions on the oxide scale formation of an alumina-forming austenitic alloy. <i>Corrosion Science</i> , <b>2012</b> , 65, 317-321	6.8 30
119	High temperature corrosion of superheater steels by KCl and K <sub>2</sub> CO <sub>3</sub> under dry and wet conditions. <b>2012</b> , 104, 253-264	54
118	The Effect of Water Vapor and Superalloy Composition on Thermal Barrier Coating Lifetime. <b>2012</b> , 723-732	2
117	Mechanistic-Based Lifetime Predictions for High-Temperature Alloys and Coatings. <i>Jom</i> , <b>2012</b> , 64, 1454-1460	19
116	Interdiffusion behavior of Al-rich oxidation resistant coatings on ferritic/austenitic alloys. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2012</b> , 63, 909-920	1.6 5
115	Comparison of Short-Term Oxidation Behavior of Model and Commercial Chromia-Forming Ferritic Stainless Steels in Dry and Wet Air. <i>Oxidation of Metals</i> , <b>2012</b> , 78, 1-16	1.6 10
114	Long-Term Performance of High-Temperature Foil Alloys in Water Vapor Containing Environment. Part I: Oxidation Behavior. <i>Oxidation of Metals</i> , <b>2013</b> , 79, 567-578	1.6 23
113	Long-Term Performance of High-Temperature Foil Alloys in Water Vapor Containing Environment. Part II: Chromia Vaporization Behavior. <i>Oxidation of Metals</i> , <b>2013</b> , 79, 579-588	1.6 6
112	Performance of advanced turbocharger alloys and coatings at 850/950°C in air with water vapor. <b>2013</b> , 215, 90-95	9

111	Hot corrosion behaviour and its mechanism of a new alumina-forming austenitic stainless steel in molten sodium sulphate. <i>Corrosion Science</i> , <b>2013</b> , 77, 202-209	6.8	30
110	High temperature oxidation of fuel cladding candidate materials in steam/hydrogen environments. <i>Journal of Nuclear Materials</i> , <b>2013</b> , 440, 420-427	3.3	269
109	Impact of superalloy composition, bond coat roughness and water vapor on TBC lifetime with HVOF NiCoCrAlYHfSi bond coatings. <b>2013</b> , 237, 65-70		19
108	Effect of water vapor on thermally grown alumina scales on bond coatings. <b>2013</b> , 215, 30-38		26
107	Comparison of potassium chloride and potassium carbonate with respect to their tendency to cause high temperature corrosion of stainless 304L steel. <b>2013</b> , 105, 98-105		53
106	Effect of water vapour content on thermal barrier coating lifetime. <b>2013</b> , 29, 828-834		5
105	Oxidation behaviour of cast Ni-Cr alloys in steam at 800°C. <b>2013</b> , 29, 822-827		33
104	Oxidation and Corrosion of Ceramics. <b>2013</b> , 1-93		0
103	The Effect of Grain Boundary Character Distribution on Oxidation Resistance of ZG30Cr20Ni10 Heat Resistant Steel. <b>2013</b> , 553-560		
102	Advanced Steels for Accident Tolerant Fuel Cladding in Commercial Nuclear Reactors. <b>2014</b> , 109-126		2
101	Oxidation and Corrosion of Ceramics. <b>2014</b> , 1-93		
100	High Temperature Oxidation Studies of Al Coating Deposited by Magnetron Sputtering. <b>2014</b> , 665, 63-67		
99	Cyclic oxidation of AISI 316L stainless steel – Influence of water vapour between 800 and 1000°C. <i>Corrosion Engineering Science and Technology</i> , <b>2014</b> , 49, 169-179	1.7	1
98	Creep behavior of pack cementation aluminide coatings on Grade 91 ferritic/bainitic alloy. <b>2014</b> , 240, 32-39		19
97	Effect of Mo dispersion size and water vapor on oxidation of two-phase directionally solidified NiAl/Mo in-situ composites. <b>2014</b> , 80, 33-36		4
96	The effect of cycle frequency, H <sub>2</sub> O and CO <sub>2</sub> on TBC lifetime with NiCoCrAlYHfSi bond coatings. <b>2014</b> , 260, 107-112		14
95	Water Vapour Effect on the Oxidation Mechanism of a Cobalt-Based Alloy at High Temperatures (800-1100 °C). <i>Oxidation of Metals</i> , <b>2014</b> , 82, 415-436	1.6	2
94	Oxidation behavior of silicon carbide at 1200 °C in both air and water vapor-rich environments. <i>Corrosion Science</i> , <b>2014</b> , 88, 416-422	6.8	51

93	Silicon Carbide Oxidation in Steam up to 21MPa. <i>Journal of the American Ceramic Society</i> , <b>2014</b> , 97, 2331-2352	3.5	151
92	Co-optimization of wrought alumina-forming austenitic stainless steel composition ranges for high-temperature creep and oxidation/corrosion resistance. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 590, 101-115	5.3	86
91	Advanced Steels for Accident Tolerant Fuel Cladding in Current Light Water Reactors. <b>2014</b> , 433-442		1
90	High-Temperature Materials Chemistry and Thermodynamics. <b>2014</b> , 17-38		2
89	Effect of Environment on the High Temperature Oxidation Behavior of 718 and 718Plus. <b>2014</b> , 667-677		2
88	Advanced Steels for Accident Tolerant Fuel Cladding in Current Light Water Reactors. <b>2015</b> , 431-442		1
87	Effect of steam on high temperature oxidation behaviour of alumina-forming alloys. <b>2015</b> , 32, 28-35		63
86	Alloy Selection for Accident Tolerant Fuel Cladding in Commercial Light Water Reactors. <b>2015</b> , 2, 197-207		8
85	Environmental/thermal barrier coating systems deposited on Nb/Nb5Si3 based alloy. <b>2015</b> , 32, 50-56		8
84	A high-throughput investigation of Fe-Cr-Al as a novel high-temperature coating for nuclear cladding materials. <b>2015</b> , 26, 274003		22
83	Improvement of Oxidation Resistance of Remelted Zone in an Al <sub>2</sub> O <sub>3</sub> -Forming Austenitic Stainless Steel by Annealing. <i>Oxidation of Metals</i> , <b>2015</b> , 83, 273-290	1.6	3
82	Field and Laboratory Evaluations of Commercial and Next-Generation Alumina-Forming Austenitic Foil for Advanced Recuperators. <b>2016</b> , 138,		4
81	Oxidation of Ni-Cr alloy at intermediate oxygen pressures. I. Diffusion mechanisms through the oxide layer. <i>Corrosion Science</i> , <b>2016</b> , 111, 474-485	6.8	39
80	Stability of Chromia (Cr <sub>2</sub> O <sub>3</sub> )-Based Scales Formed During Corrosion of Austenitic Fe-Cr-Ni Alloys in Flowing Oxygenated Supercritical Water. <i>Corrosion</i> , <b>2016</b> , 72, 1170-1180	1.8	12
79	Lifetime of environmental/thermal barrier coatings deposited on a niobium silicide composite with boron containing M7Si6-based bond coat. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2016</b> , 67, 1252-1260	1.6	8
78	Challenges in Developing Oxidation-Resistant Chromium-Based Alloys for Applications Above 900°C. <i>Jom</i> , <b>2016</b> , 68, 2793-2802	2.1	16
77	Behavior of an improved Zr fuel cladding with oxidation resistant coating under loss-of-coolant accident conditions. <i>Journal of Nuclear Materials</i> , <b>2016</b> , 482, 75-82	3.3	81
76	Development of Cast Alumina-Forming Austenitic Stainless Steels. <i>Jom</i> , <b>2016</b> , 68, 2803-2810	2.1	14

75	Oxidation behavior of sintered tubular silicon carbide in pure steam □Weight-loss correlation developments. <b>2016</b> , 42, 4679-4689		7
74	The Effect of Environment on Thermal Barrier Coating Lifetime. <b>2016</b> , 138,		9
73	KCl-induced high temperature corrosion of selected commercial alloys. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2016</b> , 67, 26-38	1.6	17
72	Creep and Oxidation Behavior of Modified CF8C-Plus with W, Cu, Ni, and Cr. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 1641-1653	2.3	4
71	Ash-related issues during biomass combustion: Alkali-induced slagging, silicate melt-induced slagging (ash fusion), agglomeration, corrosion, ash utilization, and related countermeasures. <b>2016</b> , 52, 1-61		514
70	Improved Oxidation Resistance of a New Aluminum-Containing Austenitic Stainless Steel at 800 °C in Air. <i>Oxidation of Metals</i> , <b>2017</b> , 88, 301-314	1.6	6
69	Phase Investigations Under Steam Oxidation Process at 800 °C for 1000 h of Advanced Steels and Ni-Based Alloys. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 139-158	1.6	23
68	Environmental resistance of a Ti2AlC-type MAX phase in a high pressure burner rig. <i>Journal of the European Ceramic Society</i> , <b>2017</b> , 37, 23-34	6	25
67	Kinetics of volatilization of high temperature corrosion products and its application to chlorine corrosion. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2017</b> , 68, 186-196	1.6	10
66	The corrosion and stress corrosion cracking behavior of a novel alumina-forming austenitic stainless steel in supercritical water. <i>Journal of Nuclear Materials</i> , <b>2017</b> , 484, 339-346	3.3	14
65	Steam oxidation resistance and performance of newly developed coatings for Haynes□ 282□ Ni-based alloy. <i>Corrosion Science</i> , <b>2018</b> , 138, 326-339	6.8	4
64	Neural network modelling studies of steam oxidised kinetic behaviour of advanced steels and Ni-based alloys at 800 °C for 3000 h. <i>Corrosion Science</i> , <b>2018</b> , 133, 94-111	6.8	8
63	Oxidation of Al2O3 Scale-Forming MAX Phases in Turbine Environments. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2018</b> , 49, 782-792	2.3	33
62	High performance of Al-Si-CVD-FBR coating on P92 steel against steam oxidation at 650 °C: Part 1. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2018</b> , 69, 307-318	1.6	1
61	Suppression of Cr evaporation by Co electroplating and underlying Cr retention mechanisms for the 22 wt.% Cr containing ferritic stainless steel. <i>Corrosion Science</i> , <b>2018</b> , 130, 45-55	6.8	20
60	Oxygenated Treatment on Saturated Vapour Oxidation Behaviors of GH2984 Alloys for 700 °C Ultra-supercritical Boilers. <i>Rare Metal Materials and Engineering</i> , <b>2018</b> , 47, 3672-3677		1
59	Corrosion by Hydrogen and Water Vapor. <b>2018</b> , 284-295		
58	Effects of Nb/Ti/V/Ta on phase precipitation and oxidation resistance at 1073 K in alumina-forming austenitic stainless steels. <i>Materials Characterization</i> , <b>2018</b> , 144, 86-98	3.9	22



57	Performance of Aluminide and Cr-Modified Aluminide Pack Cementation-Coated Stainless Steel 304 in Supercritical Water at 700 °C. <i>Journal of Nuclear Engineering and Radiation Science</i> , <b>2019</b> , 5,	1.1	3
56	Surface adsorption and diffusion of N on FeAl (111) using first principles calculations. <i>Journal of Iron and Steel Research International</i> , <b>2019</b> , 26, 882-887	1.2	
55	Investigation of surface interactions between volatile chromium species and ceramics. <i>Surface and Interface Analysis</i> , <b>2019</b> , 51, 506-515	1.5	0
54	Effect of Oxidation Process on Surface Scale of 20Cr2Ni3 Piercing Plug Steel. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2019</b> , 490, 022068	0.4	
53	KCl-induced corrosion of Ni-based alloys containing 35±5 wt% Cr. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2019</b> , 70, 1486-1506	1.6	4
52	Volatilization kinetics of chromium oxide, manganese oxide, and manganese chromium spinel at high temperatures in environments containing water vapor. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2019</b> , 70, 1426-1438	1.6	9
51	Corrosion Evaluation and Material Selection for Supercritical Water Reactor Used for Heavy Oil Upgradation. <i>Oxidation of Metals</i> , <b>2019</b> , 91, 525-559	1.6	4
50	High-temperature oxidation behavior of HiPIMS as-deposited CrAlTi and annealed Cr2AlC coatings on Zr-based alloy. <i>Journal of Nuclear Materials</i> , <b>2020</b> , 528, 151855	3.3	16
49	Low Cycle Fatigue of Single Crystal (gamma prime)-containing Co-based Superalloys at (750, °C). <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2020</b> , 51, 200-213	2.3	4
48	High temperature oxidation behaviors of SiON coated AISI 441 in Ar + O2, Ar+H2O, and Ar + CO2 atmospheres. <i>Corrosion Science</i> , <b>2020</b> , 166, 108429	6.8	4
47	Steam Oxidation in Accident Conditions. <b>2020</b> , 452-473		0
46	The Influence of Aluminum Content on Oxidation Resistance of New-Generation ODS Alloy at 1200 °C. <i>Metals</i> , <b>2020</b> , 10, 1478	2.3	7
45	The influence of the chemical composition of the Fe-Cr-Al system coatings on the oxide films phase composition. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2020</b> , 862, 022059	0.4	2
44	The effect of aluminum content in the Fe-Cr-Al system alloys on the oxide films phase composition. <i>Materials Today: Proceedings</i> , <b>2020</b> , 30, 554-558	1.4	1
43	Oxidation Processes and Involved Chemical Reactions of Corrosion-Resistant Alloys in Supercritical Water. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 10278-10288	3.9	6
42	A Systematic Investigation of Precipitates in Matrix and at Grain Boundaries in an Alumina-Forming Austenitic Steel During Creep Testing at 700 °C. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2020</b> , 51, 4186-4194	2.3	8
41	Surface degradation of three Cr-containing cobalt-based alloys exposed to pure water vapour at 900°C. <i>Corrosion Engineering Science and Technology</i> , <b>2020</b> , 55, 441-452	1.7	1
40	Advances in numerical modeling of environmental barrier coating systems for gas turbines. <i>Journal of the European Ceramic Society</i> , <b>2020</b> , 40, 3363-3379	6	16



39	Effect of Aluminum on Microstructure and High-Temperature Oxidation Resistance of Austenitic Heat-Resistant Steel. <i>Metals</i> , <b>2020</b> , 10, 176	2.3	3
38	Early Corrosion Characterization of 316 Stainless Steel (Passivated in Supercritical Water with Na <sub>3</sub> PO <sub>4</sub> ) in Subcritical Water Containing Oxygen and NaCl. <i>Journal of Materials Engineering and Performance</i> , <b>2020</b> , 29, 1919-1928	1.6	4
37	Environment Effects on Chromia (Cr <sub>2</sub> O <sub>3</sub> ) Scale Stability Formed on Type 310S Stainless Steel During Wet Oxidation. <i>Corrosion</i> , <b>2020</b> , 76, 678-689	1.8	1
36	Durability of YSZ coated Ti <sub>2</sub> AlC in 1300°C high velocity burner rig tests. <i>Journal of the American Ceramic Society</i> , <b>2020</b> , 103, 7014-7030	3.8	4
35	Steam oxidation of chromium corrosion barrier coatings for sic-based accident tolerant fuel cladding. <i>Journal of Nuclear Materials</i> , <b>2021</b> , 543, 152561	3.3	2
34	Laves phases: a review of their functional and structural applications and an improved fundamental understanding of stability and properties. <i>Journal of Materials Science</i> , <b>2021</b> , 56, 5321-5427	4.3	44
33	Invited Review Paper in Commemoration of Over 50 Years of Oxidation of Metals: Addressing the Role of Water Vapor on Long-Term Stainless Steel Oxidation Behavior. <i>Oxidation of Metals</i> , <b>2021</b> , 95, 335-357	1.6	5
32	Steam oxidation of ytterbium disilicate environmental barrier coatings with and without a silicon bond coat. <i>Journal of the American Ceramic Society</i> , <b>2021</b> , 104, 2285-2300	3.8	4
31	Discontinuities in Oxidation Kinetics: A New Model and its Application to Cr <sub>5</sub> Si-Base Alloys. <i>Oxidation of Metals</i> , <b>2021</b> , 95, 445	1.6	1
30	Analysis of the Corrosion Behavior of Vapor-Deposited CrN-Coated Zirconium under Normal Operation and Accident Scenarios. <b>2021</b> , 855-877		
29	Impact of Water Vapor on the High Temperature Oxidation of Wrought and Selective Laser Melted (SLM) AISI 316L. <i>Oxidation of Metals</i> , <b>2021</b> , 96, 347-359	1.6	1
28	Evaluation of the Heat Resistance of the Fe-Cr-Al System Coatings. <i>Defect and Diffusion Forum</i> , 410, 525-530		1
27	Low cycle fatigue of a single crystal CoNi-base superalloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 827, 142007	5.3	0
26	Reason for negative effect of Nb addition on oxidation resistance of alumina-forming austenitic stainless steel at 1323 K. <i>Corrosion Science</i> , <b>2021</b> , 191, 109754	6.8	2
25	A low-temperature preparation strategy of SiC/ZrB <sub>2</sub> -CrSi <sub>2</sub> -Si/SiC multilayer oxidation-resistant coating for C/C composites: Process, kinetics and mechanism research. <i>Applied Surface Science</i> , <b>2021</b> , 562, 149993	6.7	3
24	Oxidation of Superalloys in Extreme Environments. 859-875		4
23	Effect of Microstructure and Environment on the High-Temperature Oxidation Behavior of Alloy 718Plus. 977-991		2
22	Effect of tungsten on the oxidation of alumina-forming austenitic stainless steel. <i>Applied Microscopy</i> , <b>2019</b> , 49, 13	1.1	2

21	Relative Ti <sub>2</sub> AlC Scale Volatility under 1300 °C Combustion Conditions. <i>Coatings</i> , <b>2020</b> , 10, 142	2.9	3
20	Development of novel diffusion coatings for 9–12% Cr ferritic-martensitic steels (SUNASPO). <b>2008</b> , 176-192		1
19	The Effect of Grain Boundary Character Distribution on Oxidation Resistance of ZG30Cr20Ni10 Heat Resistant Steel. <b>2013</b> , 553-560		
18	PHASE COMPOSITION OF OXIDE FILMS FORMED ON THE SURFACE OF THE FE-CR-AL SYSTEM COATINGS. <i>Izvestia Volgograd State Technical University</i> , <b>2020</b> , 14-18	0	
17	Study on the antioxidation properties and mechanisms of SiC/Si <sub>3</sub> N <sub>4</sub> /B <sub>2</sub> O <sub>3</sub> /Si <sub>2</sub> N <sub>2</sub> /SiC multilayer coating related to strain compatibility and stress distribution via XRD and Raman spectra. <i>Composites Part B: Engineering</i> , <b>2021</b> , 228, 109452	10	1
16	The growth mechanism of oxide scale with Pt on NiCoCrAlY coating in water vapor at 1050°C. <i>Modern Physics Letters B</i> , <b>2021</b> , 35, 2150111	1.6	0
15	Accelerated oxidation during 1350°C cycling of ytterbium silicate environmental barrier coatings. <i>Journal of the American Ceramic Society</i> ,	3.8	0
14	High-temperature oxidation and quenching of chromium-coated zirconium alloy ATF cladding tubes with and w/o pre-damage. <i>Journal of Nuclear Materials</i> , <b>2022</b> , 559, 153470	3.3	0
13	Creep Behavior and Phase Equilibria in Model Precipitate Strengthened Alumina-Forming Austenitic Alloys. <i>Jom</i> , <b>2022</b> , 74, 1453-1468	2.1	1
12	Corrosion Control Methods in Supercritical Water Oxidation Processes. <b>2022</b> , 191-239		
11	Corrosion Mechanisms of Alloys in Supercritical Water. <b>2022</b> , 127-153		
10	High-temperature oxidation behavior and mechanism of the Si-based thermal protective coating for SiCf/SiC composites under static oxidation and H <sub>2</sub> O/O <sub>2</sub> /Na <sub>2</sub> SO <sub>4</sub> corrosion oxidation. <i>Composites Part B: Engineering</i> , <b>2022</b> , 238, 109906	10	0
9	Role of Cr Content in Microstructure, Creep, and Oxidation Resistance of Alumina-Forming Austenitic Alloys at 850–900 °C. <i>Metals</i> , <b>2022</b> , 12, 717	2.3	
8	Carburization Susceptibility of Chromia-Forming Alloys in High-Temperature CO <sub>2</sub> . <i>SSRN Electronic Journal</i> ,	1	
7	Insights into the superior stress corrosion cracking resistance of FeCrAl alloy in high temperature hydrogenated water: The critical role of grain boundary oxidation. <b>2022</b> , 208, 110668		0
6	Dispersed phases in powder metallurgically-produced alloys: contributions to high-temperature oxidation behavior. 1-28		0
5	Alumina-forming austenitic stainless steel for high durability and chromium-evaporation minimized balance of plant components in solid oxide fuel cells. <b>2022</b> ,		0
4	Discontinuous oxidation in wet air of T91 with a novel Al <sub>2</sub> O <sub>3</sub> -forming NiCrAl nanocomposite coating in as-deposited and pre-oxidized states. <b>2022</b> , 128937		0

- 3 Oxidation resistance and mechanical properties of Al<sub>2</sub>O<sub>3</sub>-forming and SiO<sub>2</sub>-forming austenitic stainless steels between 1023[K and 1173[K. **2023**, 211, 110914 ○
- 2 Effect of pressure on high-temperature oxidation of Ni alloys in supercritical CO<sub>2</sub> containing impurities. **2023**, 215, 111055 ○
- 1 Reactive evaporation and condensation of chromium: A review. **2023**, 572, 233065 ○