

# Daniel Monceau

## List of Publications by Year in Descending Order

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

176  
papers

2,740  
citations

30  
h-index

43  
g-index

181  
ext. papers

3,132  
ext. citations

3.3  
avg, IF

5.4  
L-index

#	Paper	IF	Citations
176	High Temperature Oxidation of Additively Manufactured Structural Alloys. <i>Jom</i> , <b>2022</b> , 74, 1659-1667	2.1	1
175	Fluid Dynamic Simulation of CrO <sub>2</sub> (OH) <sub>2</sub> volatilization and gas phase evolution during the oxidation of a chromia forming alloy. <i>Corrosion Science</i> , <b>2022</b> , 110306	6.8	0
174	Screening for Al <sub>2</sub> O <sub>3</sub> failure in MCrAlY APS coatings using short-term oxidation at high temperature. <i>Corrosion Science</i> , <b>2021</b> , 184, 109334	6.8	6
173	Oxidation of Thin Nickel-Based Superalloy Specimens: Kinetics Study and Mechanical Integrity. <i>Oxidation of Metals</i> , <b>2021</b> , 96, 169-182	1.6	2
172	Development of Thermokinetic Tools for Phase Transformation Studies of Zr Alloys for Both In-Service and LOCA Conditions <b>2021</b> , 833-854		
171	Modeling the oxidation kinetics of titanium alloys: Review, method and application to Ti-64 and Ti-6242s alloys. <i>Corrosion Science</i> , <b>2021</b> , 178, 109041	6.8	9
170	Editorial on this Focus Issue on Key Corrosion Topics. <i>Oxidation of Metals</i> , <b>2021</b> , 96, 1-2	1.6	
169	Focus Issue on Unique Materials, Techniques, and Environments. <i>Oxidation of Metals</i> , <b>2021</b> , 96, 183-184	1.6	
168	High-Temperature Oxidation Behavior of Ti6242S Ti-based Alloy. <i>Oxidation of Metals</i> , <b>2021</b> , 96, 373-384	1.6	1
167	The role of nitrogen in the oxidation behaviour of a Ti6242S alloy: a nanoscale investigation by atom probe tomography. <i>Acta Materialia</i> , <b>2021</b> , 216, 117134	8.4	2
166	Cyclic oxidation of alloy 718 produced by additive manufacturing compared to a wrought-718 alloy. <i>Corrosion Science</i> , <b>2021</b> , 192, 109804	6.8	4
165	Investigation of the metal dusting attack on the temperature range 500-700 °C using X-ray tomography. <i>Corrosion Science</i> , <b>2021</b> , 192, 109863	6.8	1
164	Metal dusting of Inconel 625 obtained by laser beam melting: Effect of manufacturing process and hot isostatic pressure treatment. <i>Corrosion Science</i> , <b>2020</b> , 174, 108820	6.8	3
163	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> , <b>2020</b> , 51, 1475-1480	2.3	6
162	Growth Kinetics and Characterization of Chromia Scales Formed on Ni <sub>3</sub> BOCr Alloy in Impure Argon at 700 °C. <i>Oxidation of Metals</i> , <b>2020</b> , 93, 329-353	1.6	8
161	Degradation mechanism of Ti-6Al-2Sn-4Zr-2Mo-Si alloy exposed to solid NaCl deposit at high temperature. <i>Corrosion Science</i> , <b>2020</b> , 172, 108611	6.8	6
160	Oxygen/nitrogen-assisted embrittlement of titanium alloys exposed at elevated temperature. <i>MATEC Web of Conferences</i> , <b>2020</b> , 321, 06004	0.3	2

159	Evolution of mechanical properties of Ti6242S alloy after oxidation in air at 560°C: influence of solid salts deposits. <i>MATEC Web of Conferences</i> , <b>2020</b> , 321, 04029	0.3	
158	Computational Kinetics: Application to Nuclear Materials <b>2020</b> , 850-880		1
157	Modelling the high temperature oxidation of titanium alloys: Development of a new numerical tool PyTiOx. <i>Corrosion Science</i> , <b>2020</b> , 176, 109005	6.8	2
156	High temperature oxidation and mechanical behavior of Zr1s and Ti6242S Ti-based alloys. <i>MATEC Web of Conferences</i> , <b>2020</b> , 321, 04011	0.3	1
155	The nitrogen effect on the oxidation behaviour of Ti6242S titanium-based alloy: contribution of atom probe tomography. <i>MATEC Web of Conferences</i> , <b>2020</b> , 321, 06005	0.3	1
154	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> , <b>2020</b> , 822, 153555	5.7	6
153	Oxygen Diffusion Modeling in Titanium Alloys: New Elements on the Analysis of Microhardness Profiles. <i>Oxidation of Metals</i> , <b>2020</b> , 93, 215-227	1.6	10
152	Efficient, durable protection of the Ti6242S titanium alloy against high-temperature oxidation through MOCVD processed amorphous alumina coatings. <i>Journal of Materials Science</i> , <b>2020</b> , 55, 4883-4895	4.3	2
151	A comparison of the high-temperature oxidation behaviour of conventional wrought and laser beam melted Inconel 625. <i>Corrosion Science</i> , <b>2020</b> , 164, 108347	6.8	23
150	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> , <b>2020</b> , 175, 108875	6.8	16
149	HIGH TEMPERATURE OXIDATION OF TI-6AL-4V ALLOY FABRICATED BY ADDITIVE MANUFACTURING. INFLUENCE ON MECHANICAL PROPERTIES. <i>MATEC Web of Conferences</i> , <b>2020</b> , 321, 03006	0.3	4
148	Intergranular oxidation of Ni-base alloy 718 with a focus on additive manufacturing. <i>Corrosion Science</i> , <b>2020</b> , 170, 108684	6.8	21
147	Carburization of austenitic and ferritic stainless steels in liquid sodium: Comparison between experimental observations and simulations. <i>Corrosion Science</i> , <b>2019</b> , 159, 108147	6.8	6
146	Kinetics of zircon formation in yttria partially stabilized zirconia as a result of oxidation of embedded molybdenum disilicide. <i>Acta Materialia</i> , <b>2019</b> , 174, 206-216	8.4	4
145	STEM-EELS identification of TiOXNY, TiN, Ti2N and O, N dissolution in the Ti6242S alloy oxidized in synthetic air at 650 °C. <i>Corrosion Science</i> , <b>2019</b> , 153, 191-199	6.8	20
144	Chemical Interaction of Austenitic and Ferritic Steels with B4C Powder in Liquid Sodium at 600°C. <i>Corrosion</i> , <b>2019</b> , 75, 1173-1182	1.8	1
143	High-temperature cyclic oxidation of Pt-rich Hf-bond-coatings. Part II: Effect of Pt and Al on TBC system lifetime. <i>Corrosion Science</i> , <b>2019</b> , 150, 1-8	6.8	10
142	Self-healing thermal barrier coating systems fabricated by spark plasma sintering. <i>Materials and Design</i> , <b>2018</b> , 143, 204-213	8.1	34

141	Thermo-mechanical properties of SPS produced self-healing thermal barrier coatings containing pure and alloyed MoSi <sub>2</sub> particles. <i>Journal of the European Ceramic Society</i> , <b>2018</b> , 38, 4268-4275	6	17
140	Modelling of the effect of grain boundary diffusion on the oxidation of Ni-Cr alloys at high temperature. <i>Corrosion Science</i> , <b>2018</b> , 136, 148-160	6.8	16
139	Outstanding durability of sol-gel thermal barrier coatings reinforced by YSZ-fibers. <i>Journal of the European Ceramic Society</i> , <b>2018</b> , 38, 4719-4731	6	5
138	Influence of Microstructure and Surface Roughness on Oxidation Kinetics at 500-800 °C of Ti-6Al-4V Alloy Fabricated by Additive Manufacturing. <i>Oxidation of Metals</i> , <b>2018</b> , 90, 633-648	1.6	26
137	High temperature oxidation of IN 718 manufactured by laser beam melting and electron beam melting: Effect of surface topography. <i>Corrosion Science</i> , <b>2018</b> , 141, 127-145	6.8	57
136	High-Temperature Oxidation of a High Silicon SiMo Spheroidal Cast Iron in Air with In Situ Change in H <sub>2</sub> O Content. <i>Materials Science Forum</i> , <b>2018</b> , 925, 353-360	0.4	12
135	Modeling Two- and Three-Stage Oxygen Tracer Experiments during High-Temperature Oxidation of Metals with a High Oxygen Solubility. <i>Oxidation of Metals</i> , <b>2018</b> , 89, 517-529	1.6	3
134	Influence of Pt Addition and Manufacturing Process on the Failure Mechanisms of NiCoCrAlYTa-Base Thermal Barrier Coating Systems under Thermal Cycling Conditions. <i>Metals</i> , <b>2018</b> , 8, 771	2.3	2
133	Amorphous Alumina Films Efficiently Protect Ti6242S against Oxidation and Allow Operation above 600 °C. <i>Materials Science Forum</i> , <b>2018</b> , 941, 1846-1852	0.4	2
132	High-temperature cyclic oxidation behaviour of Pt-rich coatings. Part I: Oxidation kinetics of coated AM1 systems after very long-term exposure at 1100 °C. <i>Corrosion Science</i> , <b>2018</b> , 144, 127-135	6.8	10
131	Special Issue on Oxidation in Water Vapor. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 403-404	1.6	
130	Internal Oxidation in Dry and Wet Conditions for Oxygen Permeability of Fe-Ni Alloys at 1150 and 1100 °C. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 273-283	1.6	11
129	Relation between microstructure induced by oxidation and room-temperature mechanical properties of the thermally grown oxide scales on austenitic stainless steels. <i>Materials Characterization</i> , <b>2017</b> , 127, 161-170	3.9	15
128	Relevance of Other Parameters than Carbon Activity in Defining the Severity of a Metal Dusting Environment. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 655-666	1.6	3
127	Effect of Nitrogen on the Kinetics of Oxide Scale Growth and of Oxygen Dissolution in the Ti6242S Titanium-Based Alloy. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 343-353	1.6	20
126	Special Issue on the High-Temperature Corrosion in Mixed Oxidant Environments. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 679-680	1.6	
125	Oxidation of New Materials and Composites. <i>Oxidation of Metals</i> , <b>2017</b> , 88, 235-236	1.6	
124	Special Issue on Advances in Relevant Characterization Techniques. <i>Oxidation of Metals</i> , <b>2017</b> , 88, 421-4226		

123	Carburization of Austenitic and Ferritic Steels in Carbon-Saturated Sodium: Preliminary Results on the Diffusion Coefficient of Carbon at 873 K. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 643-653	1.6	7
122	High-Temperature Protective Coatings. <i>Oxidation of Metals</i> , <b>2017</b> , 88, 71-71	1.6	
121	Special Issue on Carburization and Metal Dusting. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 603-604	1.6	
120	Relations Between Oxidation Induced Microstructure and Mechanical Durability of Oxide Scales. <i>Oxidation of Metals</i> , <b>2017</b> , 88, 29-40	1.6	1
119	Metal dusting corrosion of austenitic alloys at low and high pressure with the effects of Cr, Al, Nb and Cu. <i>Corrosion Science</i> , <b>2017</b> , 123, 310-318	6.8	7
118	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> , <b>2017</b> , 708, 1063-1072	5.7	11
117	Tensile properties of a non-line-of-sight processed $\text{TiAl}$ MCrAlY coating at high temperature. <i>Surface and Coatings Technology</i> , <b>2017</b> , 326, 28-36	4.4	18
116	Special Issue on Corrosion-Mechanical Loading Interactions. <i>Oxidation of Metals</i> , <b>2017</b> , 88, 1-2	1.6	4
115	Special Issue on Fundamentals and Numerical Simulations in High-Temperature Corrosion and Protection Focus Issue $\square$ <i>Oxidation of Metals</i> , <b>2017</b> , 87, 271-272	1.6	
114	NaCl-Induced High-Temperature Corrosion of $\text{Ti-6Al-4V}$ Ti Alloy. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 729-740	1.6	7
113	Chromium and iridium effects on the short-term interdiffusion behaviour between Pt rich $\text{Pt-Co}$ bond-coatings and a Ni-Al-Cr alloy. <i>Surface and Coatings Technology</i> , <b>2017</b> , 309, 258-265	4.4	5
112	Effect of interdiffusion on mechanical and thermal expansion properties at high temperature of a MCrAlY coated Ni-based superalloy. <i>Surface and Coatings Technology</i> , <b>2016</b> , 307, 81-90	4.4	40
111	Micromechanical testing of ultrathin layered material specimens at elevated temperature. <i>Materials at High Temperatures</i> , <b>2016</b> , 33, 325-337	1.1	13
110	Thermal cycling and reactivity of a $\text{MoSi}_2/\text{ZrO}_2$ composite designed for self-healing thermal barrier coatings. <i>Materials and Design</i> , <b>2016</b> , 94, 444-448	8.1	49
109	Experimental study and numerical simulation of high temperature (1100-1250 °C) oxidation of prior-oxidized zirconium alloy. <i>Corrosion Science</i> , <b>2016</b> , 103, 10-19	6.8	30
108	Mechanism of metal dusting corrosion by pitting of a chromia-forming alloy at atmospheric pressure and low gas velocity. <i>Corrosion Science</i> , <b>2016</b> , 107, 204-210	6.8	12
107	Comparison of damaging behavior of oxide scales grown on austenitic stainless steels using tensile test and cyclic thermogravimetry. <i>Corrosion Science</i> , <b>2016</b> , 103, 145-156	6.8	19
106	NaCl induced corrosion of Ti-6Al-4V alloy at high temperature. <i>Corrosion Science</i> , <b>2016</b> , 110, 91-104	6.8	62

105	Influence of embedded MoSi <sub>2</sub> particles on the high temperature thermal conductivity of SPS produced yttria-stabilised zirconia model thermal barrier coatings. <i>Surface and Coatings Technology</i> , <b>2016</b> , 308, 31-39	4.4	15
104	Modelling of the kinetics of pitting corrosion by metal dusting. <i>Corrosion Science</i> , <b>2015</b> , 98, 592-604	6.8	12
103	Statistical Lifetime Modeling of Fe-Ni-Cr Alloys Subject to High-Temperature Corrosion in Waste-to-Energy Production Units. <i>Corrosion</i> , <b>2015</b> , 71, 1360-1369	1.8	
102	First-principles nickel database: Energetics of impurities and defects. <i>Computational Materials Science</i> , <b>2015</b> , 101, 77-87	3.2	33
101	Breakaway oxidation of austenitic stainless steels induced by alloyed sulphur. <i>Corrosion Science</i> , <b>2015</b> , 93, 100-108	6.8	22
100	Evidence of High-Temperature Strain Heterogeneities in a Nickel-Based Single-Crystal Superalloy. <i>Advanced Engineering Materials</i> , <b>2014</b> , 16, 60-64	3.5	11
99	Observation and modeling of $\delta$ -NiPtAl and Kirkendall void formations during interdiffusion of a Pt coating with a $\delta$ (Ni-13Al) alloy at high temperature. <i>Surface and Coatings Technology</i> , <b>2014</b> , 260, 9-16	4.4	13
98	Cyclic Oxidation Behavior of TBC Systems with a Pt-Rich $\delta$ Ni- $\delta$ Ni <sub>3</sub> Al Bond-Coating Made by SPS. <i>Oxidation of Metals</i> , <b>2014</b> , 81, 33-45	1.6	10
97	High Temperature Coatings. <i>Oxidation of Metals</i> , <b>2014</b> , 81, 1-1	1.6	1
96	Hot Corrosion and Degradation in Complex Atmospheres. <i>Oxidation of Metals</i> , <b>2013</b> , 80, 453-454	1.6	
95	Alloy Development for High Temperature Corrosion and Protection. <i>Oxidation of Metals</i> , <b>2013</b> , 80, 1-1	1.6	1
94	Water Vapor Effects in High Temperature Oxidation. <i>Oxidation of Metals</i> , <b>2013</b> , 79, 443-444	1.6	1
93	Advanced Characterization Techniques in High-Temperature Oxidation and Corrosion Studies. <i>Oxidation of Metals</i> , <b>2013</b> , 79, 225-226	1.6	
92	High Temperature Corrosion and Protection of Ceramics, Composites and Silicides. <i>Oxidation of Metals</i> , <b>2013</b> , 80, 205-205	1.6	
91	Atom probe tomographic study of L10 martensite in a Pt-modified NiCoCrAlYTa bond coating. <i>Corrosion Science</i> , <b>2013</b> , 76, 1-5	6.8	18
90	Fundamentals and Numerical Simulations in High Temperature Corrosion and Protection. <i>Oxidation of Metals</i> , <b>2013</b> , 79, 1-1	1.6	
89	Depletion and Voids Formation in the Substrate During High Temperature Oxidation of NiCr Alloys. <i>Oxidation of Metals</i> , <b>2013</b> , 79, 93-105	1.6	36
88	Contribution to Modeling of Hydrogen Effect on Oxygen Diffusion in Zy-4 Alloy During High Temperature Steam Oxidation. <i>Oxidation of Metals</i> , <b>2013</b> , 79, 121-133	1.6	15

87	Kinetics of breakaway oxidation of FeCr and FeCrNi alloys in dry and wet carbon dioxide. <i>Corrosion Science</i> , <b>2013</b> , 77, 246-256	6.8	45
86	Influence of Environment on Creep Properties of MC2 Single Crystal Superalloy at 1050°C AND 1150°C <b>2013</b> , 173-180		1
85	First-principles study of sulfur multi-absorption in nickel and its segregation to the Ni(100) and Ni(111) surfaces. <i>Surface Science</i> , <b>2013</b> , 617, 15-21	1.8	17
84	Prediction of High Temperature Cyclic Oxidation Kinetics with a Simple Statistical Spalling Model <b>2013</b> , 165-172		
83	Mechanism of breakaway oxidation of FeCr and FeCrNi alloys in dry and wet carbon dioxide. <i>Corrosion Science</i> , <b>2012</b> , 64, 222-222	6.8	16
82	Thermal cycling behaviour of thermal barrier coating systems based on first- and fourth generation Ni-based superalloys. <i>Materials at High Temperatures</i> , <b>2012</b> , 29, 136-144	1.1	8
81	Characterisation of oxide scale adherence after the high temperature oxidation of nickel-based superalloys. <i>Materials at High Temperatures</i> , <b>2012</b> , 29, 243-248	1.1	4
80	Shaping of Nanostructured Materials or Coatings through Spark Plasma Sintering. <i>Materials Science Forum</i> , <b>2012</b> , 706-709, 24-30	0.4	4
79	Carburisation of ferritic FeCr alloys by low carbon activity gases. <i>Corrosion Science</i> , <b>2011</b> , 53, 2767-2777	6.8	111
78	Thermal cycling behavior of EBPVD TBC systems deposited on doped Pt-rich $\gamma$ bond coatings made by Spark Plasma Sintering (SPS). <i>Surface and Coatings Technology</i> , <b>2011</b> , 206, 1558-1565	4.4	11
77	High-temperature oxidation of nickel-based alloys and estimation of the adhesion strength of resulting oxide layers. <i>Protection of Metals and Physical Chemistry of Surfaces</i> , <b>2011</b> , 47, 347-353	0.9	6
76	Beneficial Effect of Pt and of Pre-Oxidation on the Oxidation Behaviour of an NiCoCrAlYTaN Bond-Coating for Thermal Barrier Coating Systems. <i>Oxidation of Metals</i> , <b>2011</b> , 75, 247-279	1.6	25
75	Thermal Barrier Systems and Multi-Layered Coatings Fabricated by Spark Plasma Sintering for the Protection of Ni-Base Superalloys. <i>Materials Science Forum</i> , <b>2010</b> , 654-656, 1826-1831	0.4	10
74	Subsurface microstructural changes in a cast heat resisting alloy caused by high temperature corrosion. <i>Corrosion Science</i> , <b>2010</b> , 52, 255-262	6.8	24
73	Quantification of growth kinetics and adherence of oxide scales formed on Ni-based superalloys at high temperature. <i>Corrosion Science</i> , <b>2010</b> , 52, 3932-3942	6.8	35
72	Effect of modification by Pt and manufacturing processes on the microstructure of two NiCoCrAlYTaN bond coatings intended for thermal barrier system applications. <i>Surface and Coatings Technology</i> , <b>2010</b> , 205, 717-727	4.4	28
71	Characterization of Sulfur Distribution in Ni-Based Superalloy and Thermal Barrier Coatings After High Temperature Oxidation: A SIMS Analysis. <i>Oxidation of Metals</i> , <b>2010</b> , 73, 95-113	1.6	23
70	Effect of Water Vapor on the Spallation of Thermal Barrier Coating Systems During Laboratory Cyclic Oxidation Testing. <i>Oxidation of Metals</i> , <b>2010</b> , 73, 83-93	1.6	31

69	Iron Oxidation at Low Temperature (260-300 °C) in Air and the Effect of Water Vapor. <i>Oxidation of Metals</i> , <b>2010</b> , 73, 139-162	1.6	78
68	Reactivity and microstructure evolution of a CoNiCrAlY/Talc cermet prepared by Spark Plasma Sintering. <i>Surface and Coatings Technology</i> , <b>2010</b> , 205, 1183-1188	4.4	3
67	Proto-TGO formation in TBC systems fabricated by spark plasma sintering. <i>Surface and Coatings Technology</i> , <b>2010</b> , 205, 1245-1249	4.4	13
66	Sol-gel thermal barrier coatings: Optimization of the manufacturing route and durability under cyclic oxidation. <i>Surface and Coatings Technology</i> , <b>2010</b> , 205, 1256-1261	4.4	19
65	First-Principle Calculation of Monovacancy and Divacancy Interactions with Atomic Oxygen in Nickel: Thermal Expansion Effects. <i>Defect and Diffusion Forum</i> , <b>2009</b> , 289-292, 747-753	0.7	10
64	Experimental and Simulation Study of Uphill Diffusion of Al in a Pt-Coated Ni-Al Model Alloy. <i>Journal of Phase Equilibria and Diffusion</i> , <b>2009</b> , 30, 602-607	1	14
63	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> , <b>2009</b> , 204, 771-778	4.4	35
62	NiW diffusion barrier: Its influence on the oxidation behaviour of a (Ni,Pt)Al coated fourth generation nickel-base superalloy. <i>Surface and Coatings Technology</i> , <b>2009</b> , 204, 761-765	4.4	29
61	Development of a NiW In Situ Diffusion Barrier on a Fourth Generation Nickel-Base Superalloy. <i>Materials Science Forum</i> , <b>2008</b> , 595-598, 23-32	0.4	5
60	High temperature corrosion of cast heat resisting steels in CO + CO <sub>2</sub> gas mixtures. <i>Corrosion Science</i> , <b>2008</b> , 50, 2398-2406	6.8	27
59	Erosion and High Temperature Oxidation Resistance of New Coatings Fabricated by a Sol-Gel Route for a TBC Application. <i>Materials Science Forum</i> , <b>2008</b> , 595-598, 3-10	0.4	8
58	Numerical Modelling of Diffusion Coupled with Cyclic Oxidation. Application to Alumina-Forming Coatings Used for Industrial Gas Turbine Blades. <i>Materials Science Forum</i> , <b>2008</b> , 595-598, 159-168	0.4	
57	Characterization of TBC Systems with NiPtAl or NiCoCrAlYTa Bond Coatings after Thermal Cycling at 1100°C: A Comparative Study of Failure Mechanisms. <i>Materials Science Forum</i> , <b>2008</b> , 595-598, 213-221	0.4	6
56	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> , <b>2008</b> , 595-598, 143-150	0.4	12
55	Chemical Evolution in the Substrate due to Oxidation: A Numerical Model with Explicit Treatment of Vacancy Fluxes. <i>Materials Science Forum</i> , <b>2008</b> , 595-598, 463-472	0.4	3
54	On the Mutual Interaction between Mechanical Stresses and Internal Corrosion during Isothermal and Cyclic Oxidation of Nickel-Base Superalloys. <i>Materials Science Forum</i> , <b>2008</b> , 595-598, 1023-1031	0.4	
53	Oxidation resistant aluminized MCrAlY coating prepared by Spark Plasma Sintering (SPS). <i>Advanced Engineering Materials</i> , <b>2007</b> , 9, 413-417	3.5	22
52	Cyclic thermogravimetry of TBC systems. <i>Surface and Coatings Technology</i> , <b>2007</b> , 202, 665-669	4.4	5



51	Numerical simulation of cyclic oxidation kinetics with automatic fitting of experimental data. <i>Scripta Materialia</i> , <b>2007</b> , 56, 233-236	5.6	1
50	The effect of thermal cycling on the high-temperature creep behaviour of a single crystal nickel-based superalloy. <i>Scripta Materialia</i> , <b>2007</b> , 56, 277-280	5.6	36
49	Continuous thermogravimetric analysis during the cyclic oxidation of Ni <sub>2</sub> Al <sub>0.5</sub> Pt + 1 wt.% Hf at 1200 °C. <i>Scripta Materialia</i> , <b>2007</b> , 57, 647-650	5.6	3
48	The Influence of Specimen Thickness on the High Temperature Corrosion Behavior of CMSX-4 during Thermal-Cycling Exposure. <i>Oxidation of Metals</i> , <b>2007</b> , 68, 165-176	1.6	8
47	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> , <b>2007</b> , 68, 223-242	1.6	11
46	Prototype de thermobalance multitéles avec cyclage thermique rapide. <i>Mecanique Et Industries</i> , <b>2007</b> , 8, 65-69		
45	Application of image analysis and image simulation for quantitative characterization of scale spallation during cyclic oxidation of a Pt-aluminide coating. <i>Intermetallics</i> , <b>2006</b> , 14, 423-434	3.5	3
44	Cyclic oxidation of coated and uncoated single-crystal nickel-based superalloy MC2 analyzed by continuous thermogravimetry analysis. <i>Acta Materialia</i> , <b>2006</b> , 54, 4473-4487	8.4	33
43	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. <i>Surface and Coatings Technology</i> , <b>2006</b> , 201, 3846-3851	4.4	47
42	Advanced burner-rig test for oxidation/corrosion resistance evaluation of MCrAlY/superalloys systems. <i>Surface and Coatings Technology</i> , <b>2006</b> , 201, 3829-3835	4.4	33
41	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> , <b>2006</b> , 66, 155-189	1.6	40
40	The nickel, model material for the high temperature oxidation studies: first steps towards predictive modelling. <i>Revue De Metallurgie</i> , <b>2005</b> , 102, 135-146		3
39	Static and dynamic aspects of coupling between creep behavior and oxidation on MC2 single crystal superalloy at 1150 °C. <i>Acta Materialia</i> , <b>2005</b> , 53, 4199-4209	8.4	38
38	Effect of Platinum on the Growth Rate of the Oxide Scale Formed on Cast Nickel Aluminide Intermetallic Alloys. <i>Oxidation of Metals</i> , <b>2005</b> , 64, 185-205	1.6	56
37	Investigations on the Diffusion of Oxygen in Nickel at 1000°C by SIMS Analysis. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, E390	3.9	42
36	Numerical Model for Oxide Scale Growth with Explicit Treatment of Vacancy Fluxes. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 481-488	0.4	12
35	Low Temperature Oxidation of Pure Iron: Growth Kinetics and Scale Morphologies. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 591-598	0.4	19
34	Effect of Cycle Frequency on High Temperature Oxidation Behavior of Alumina-Forming Coatings Used for Industrial Gas Turbine Blades. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 747-754	0.4	13

33	Cyclic Oxidation Kinetics Modeling of NiAl Single Crystal. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 737-746.	4	9
32	Influence of Environment on Creep Properties of MC2 Single Crystal Superalloy at 1150°C. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 647-654	0.4	4
31	Experimental Study of the Interactions between Oxidation and Structural Defects. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 123-130	0.4	3
30	Multi-Sample Thermobalance for Rapid Cyclic Oxidation under Controlled Atmosphere. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 689-696	0.4	10
29	On the Understanding of TGO Growth and Spallation in Nickel Aluminides. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 289-296	0.4	7
28	Continuous Thermogravimetry Under Cyclic Conditions. <i>Oxidation of Metals</i> , <b>2004</b> , 61, 143-163	1.6	28
27	High-temperature oxidation kinetics of NiAl single crystal and oxide spallation as a function of crystallographic orientation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 381, 237-248	5.3	9
26	Injection of vacancies at metal grain boundaries during the oxidation of nickel. <i>Acta Materialia</i> , <b>2004</b> , 52, 5375-5380	8.4	39
25	ALLBATROS advanced long life blade turbine coating systems. <i>Applied Thermal Engineering</i> , <b>2004</b> , 24, 1745-1753	5.8	11
24	High temperature oxidation of high purity nickel: oxide scale morphology and growth kinetics. <i>Materials at High Temperatures</i> , <b>2003</b> , 20, 649-655	1.1	8
23	Application of a Simple Statistical Spalling Model for the Analysis of High-Temperature, Cyclic-Oxidation Kinetics Data. <i>Oxidation of Metals</i> , <b>2003</b> , 59, 409-431	1.6	50
22	Chemical vapor deposition of ruthenium on NiCoCrAlYTa powders followed by thermal oxidation of the sintered coupons. <i>Surface and Coatings Technology</i> , <b>2003</b> , 163-164, 44-49	4.4	10
21	Correlations Between Growth Kinetics and Microstructure for Scales Formed by High-Temperature Oxidation of Pure Nickel. II. Growth Kinetics. <i>Oxidation of Metals</i> , <b>2002</b> , 58, 275-295	1.6	86
20	Correlations Between Growth Kinetics and Microstructure for Scales Formed by High-Temperature Oxidation of Pure Nickel. I. Morphologies and Microstructures. <i>Oxidation of Metals</i> , <b>2002</b> , 58, 249-273	1.6	68
19	In-situ SEM study of cavity growth during high temperature oxidation of $\text{E}(\text{Ni,Pd})\text{Al}$ . <i>Scripta Materialia</i> , <b>2001</b> , 44, 2741-2746	5.6	36
18	A Microscopy Study of Spalling and Growth Mechanism of the Oxide Scale Formed on Pd Modified Nickel Aluminum. <i>Materials Science Forum</i> , <b>2001</b> , 369-372, 499-506	0.4	3
17	Short-Term High Temperature Oxidation of Lamellar Cast Iron. <i>Materials Science Forum</i> , <b>2001</b> , 369-372, 181-188	0.4	3
16	Evolution of Scale Microstructure as a Function of Scale Oxide Thickness during Oxidation of Nickel at 700°C. <i>Materials Science Forum</i> , <b>2001</b> , 369-372, 189-196	0.4	10

15	Effects of Bond-Coat Preoxidation and Surface Finish on Isothermal and Cyclic Oxidation, High Temperature Corrosion and Thermal Shock Resistance of TBC Systems. <i>Materials Science Forum</i> , <b>2001</b> , 369-372, 607-614	0.4	23
14	Diffusion and High-Temperature Oxidation of Nickel. <i>Defect and Diffusion Forum</i> , <b>2001</b> , 194-199, 1675-1682		5
13	Oxydation et protection des matériaux pour sous-couches (NiAlPd, NiAlPt, NiCoCrAlYT <sub>a</sub> , CoNiCrAlY) de barrières thermiques. <i>European Physical Journal Special Topics</i> , <b>2000</b> , 10, Pr4-167-Pr4-171		6
12	Transition in high-temperature oxidation kinetics of Pd-modified aluminide coatings: Role of oxygen partial pressure, heating rate, and surface treatment. <i>Journal of Materials Research</i> , <b>2000</b> , 15, 665-675	2.5	27
11	Determination of Parabolic Rate Constants from a Local Analysis of Mass-Gain Curves. <i>Oxidation of Metals</i> , <b>1998</b> , 50, 477-493	1.6	143
10	Metal Dusting of Stainless Steels. <i>Materials Science Forum</i> , <b>1997</b> , 251-254, 665-670	0.4	6
9	Resistance of 90%Cr-steels against metal dusting. <i>Steel Research = Archiv Für Das Eisenhüttenwesen</i> , <b>1997</b> , 68, 179-185		33
8	Effects of tramp elements Cu, P, Pb, Sb and Sn on the kinetics of carburization of case hardening steels. <i>Steel Research = Archiv Für Das Eisenhüttenwesen</i> , <b>1996</b> , 67, 240-246		13
7	Kinetic Demixing of Solute Cations in Alumina Single Crystals during Cooling. <i>Journal of the American Ceramic Society</i> , <b>1995</b> , 78, 2314-2320	3.8	12
6	Surface segregation and morphology of Mg-doped alumina powders. <i>Journal of the European Ceramic Society</i> , <b>1995</b> , 15, 851-858	6	13
5	Kinetic demixing of ceramics in an electrical field. <i>Solid State Ionics</i> , <b>1994</b> , 73, 221-225	3.3	47
4	The microchemistry and microstructure of magnesium-doped submicron alumina powders after thermal treatment at 1300°C. <i>Journal of the European Ceramic Society</i> , <b>1993</b> , 12, 337-341	6	6
3	Cation redistribution in oxides under oxygen potential gradients: Influence on the corrosion kinetics. <i>Solid State Ionics</i> , <b>1992</b> , 53-56, 270-279	3.3	8
2	Kinetic demixing profile calculation under a temperature gradient in multi-component oxides. <i>Journal of the European Ceramic Society</i> , <b>1992</b> , 9, 193-204	6	9
1	Kinetic demixing profile calculation in oxide solid solutions under a chemical potential gradient. <i>Solid State Ionics</i> , <b>1991</b> , 45, 231-237	3.3	23