

# Bruce A. Pint

## List of Publications by Citations

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336  
papers

10,016  
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52  
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87  
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366  
ext. papers

11,139  
ext. citations

2.6  
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L-index

#	Paper	IF	Citations
336	Experimental observations in support of the dynamic-segregation theory to explain the reactive-element effect. <i>Oxidation of Metals</i> , <b>1996</b> , 45, 1-37	1.6	664
335	Substrate and bond coat compositions: factors affecting alumina scale adhesion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1998</b> , 245, 201-211	5.3	297
334	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
333	Creep-resistant, Al <sub>2</sub> O <sub>3</sub> -forming austenitic stainless steels. <i>Science</i> , <b>2007</b> , 316, 433-6	33.3	260
332	Development and property evaluation of nuclear grade wrought FeCrAl fuel cladding for light water reactors. <i>Journal of Nuclear Materials</i> , <b>2015</b> , 467, 703-716	3.3	227
331	18O/SIMS characterization of the growth mechanism of doped and undoped $\alpha$ -Al <sub>2</sub> O <sub>3</sub> . <i>Oxidation of Metals</i> , <b>1993</b> , 39, 167-195	1.6	200
330	Chromium Volatilization Rates from Cr <sub>2</sub> O <sub>3</sub> Scales into Flowing Gases Containing Water Vapor. <i>Oxidation of Metals</i> , <b>2006</b> , 66, 137-153	1.6	183
329	Optimization of Reactive-Element Additions to Improve Oxidation Performance of Alumina-Forming Alloys. <i>Journal of the American Ceramic Society</i> , <b>2003</b> , 86, 686-95	3.8	182
328	The oxidation mechanism of $\alpha$ -Al <sub>2</sub> O <sub>3</sub> scales. <i>Solid State Ionics</i> , <b>1995</b> , 78, 99-107	3.3	168
327	Influence of Sulfur, Platinum, and Hafnium on the Oxidation Behavior of CVD NiAl Bond Coatings. <i>Oxidation of Metals</i> , <b>2002</b> , 58, 513-544	1.6	158
326	Silicon Carbide Oxidation in Steam up to 2 MPa. <i>Journal of the American Ceramic Society</i> , <b>2014</b> , 97, 2331-2352	3.52	151
325	The effect of various oxide dispersions on the phase composition and morphology of Al <sub>2</sub> O <sub>3</sub> scales grown on $\epsilon$ -NiAl. <i>Oxidation of Metals</i> , <b>1997</b> , 47, 1-20	1.6	136
324	On the formation of interfacial and internal voids in $\alpha$ -Al <sub>2</sub> O <sub>3</sub> scales. <i>Oxidation of Metals</i> , <b>1997</b> , 48, 303-328	1.6	134
323	The reactive element effect in commercial ODS FeCrAl alloys. <i>Materials at High Temperatures</i> , <b>1995</b> , 13, 3-16	1.1	127
322	Oxidation of fuel cladding candidate materials in steam environments at high temperature and pressure. <i>Journal of Nuclear Materials</i> , <b>2012</b> , 427, 396-400	3.3	125
321	Martensitic transformation in CVD NiAl and (Ni,Pt)Al bond coatings. <i>Surface and Coatings Technology</i> , <b>2003</b> , 163-164, 19-24	4.4	120
320	Effect of Cr and Ni Contents on the Oxidation Behavior of Ferritic and Austenitic Model Alloys in Air with Water Vapor. <i>Oxidation of Metals</i> , <b>2004</b> , 61, 463-483	1.6	119

3 <sup>19</sup>	Current Thoughts on Reactive Element Effects in Alumina-Forming Systems: In Memory of John Stringer. <i>Oxidation of Metals</i> , <b>2016</b> , 86, 1-43	1.6	119
3 <sup>18</sup>	Effects of Pt incorporation on the isothermal oxidation behavior of chemical vapor deposition aluminide coatings. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2001</b> , 32, 1727-1741	2.3	111
3 <sup>17</sup>	Effect of composition on the oxidation and hot corrosion resistance of NiAl doped with precious metals. <i>Surface and Coatings Technology</i> , <b>2000</b> , 133-134, 15-22	4.4	104
3 <sup>16</sup>	Effects of minor alloy additions and oxidation temperature on protective alumina scale formation in creep-resistant austenitic stainless steels. <i>Scripta Materialia</i> , <b>2007</b> , 57, 1117-1120	5.6	102
3 <sup>15</sup>	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
3 <sup>14</sup>	The role of chemical composition on the oxidation performance of aluminide coatings. <i>Surface and Coatings Technology</i> , <b>2004</b> , 188-189, 71-78	4.4	98
3 <sup>13</sup>	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
3 <sup>12</sup>	Uniform corrosion of FeCrAl alloys in LWR coolant environments. <i>Journal of Nuclear Materials</i> , <b>2016</b> , 479, 36-47	3.3	97
3 <sup>11</sup>	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
3 <sup>10</sup>	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
3 <sup>09</sup>	Effect of Quaternary Additions on the Oxidation Behavior of Hf-Doped NiAl. <i>Oxidation of Metals</i> , <b>2003</b> , 59, 257-283	1.6	93
3 <sup>08</sup>	Protection of zirconium by alumina- and chromia-forming iron alloys under high-temperature steam exposure. <i>Journal of Nuclear Materials</i> , <b>2013</b> , 438, 64-71	3.3	88
3 <sup>07</sup>	Grain Boundary Segregation of Cation Dopants in $\alpha$ -Al <sub>2</sub> O <sub>3</sub> Scales. <i>Journal of the Electrochemical Society</i> , <b>1998</b> , 145, 1819-1829	3.9	87
3 <sup>06</sup>	The Oxidation Behavior of Oxide-Dispersed $\alpha$ -NiAl: I. Short-Term Performance at 1200°C. <i>Oxidation of Metals</i> , <b>1998</b> , 49, 531-559	1.6	84
3 <sup>05</sup>	Recent progress in the development of electrically insulating coatings for a liquid lithium blanket. <i>Journal of Nuclear Materials</i> , <b>2004</b> , 329-333, 119-124	3.3	83
3 <sup>04</sup>	Comparison of thermal expansion and oxidation behavior of various high-temperature coating materials and superalloys. <i>Materials at High Temperatures</i> , <b>2004</b> , 21, 87-94	1.1	82
3 <sup>03</sup>	Review of advances in development of vanadium alloys and MHD insulator coatings. <i>Journal of Nuclear Materials</i> , <b>2007</b> , 367-370, 780-787	3.3	80
3 <sup>02</sup>	Segregation of Y to Grain Boundaries in the Al <sub>2</sub> O <sub>3</sub> Scale Formed on an ODS Alloy. <i>Journal of the Electrochemical Society</i> , <b>1987</b> , 134, 3207-3208	3.9	79

301	Comparison of the cyclic oxidation behavior of $\text{NiAl}$ , $\text{NiPtAl}$ and $\text{NiPtAl}$ coatings on various superalloys. <i>Surface and Coatings Technology</i> , <b>2007</b> , 202, 730-734	4.4	74
300	Effect of Hf and Y alloy additions on aluminide coating performance. <i>Surface and Coatings Technology</i> , <b>2010</b> , 204, 3287-3293	4.4	73
299	Effects of sulfur impurity on the scale adhesion behavior of a desulfurized Ni-based superalloy aluminized by chemical vapor deposition. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>1998</b> , 29, 833-841	2.3	72
298	Possible Role of the Oxygen Potential Gradient in Enhancing Diffusion of Foreign Ions on $\text{Al}_2\text{O}_3$ Grain Boundaries. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 81, 305-314	3.8	69
297	Recent research and development for the dual-coolant blanket concept in the US. <i>Fusion Engineering and Design</i> , <b>2008</b> , 83, 920-927	1.7	66
296	Limitations on the Use of Ion Implantation for the Study of the Reactive Element Effect in $\text{NiAl}$ . <i>Journal of the Electrochemical Society</i> , <b>1994</b> , 141, 2443-2453	3.9	66
295	Effect of steam on high temperature oxidation behaviour of alumina-forming alloys. <i>Materials at High Temperatures</i> , <b>2015</b> , 32, 28-35	1.1	63
294	Critical questions in materials science and engineering for successful development of fusion power. <i>Journal of Nuclear Materials</i> , <b>2007</b> , 367-370, 1-10	3.3	62
293	Effect of Cycle Frequency on High-Temperature Oxidation Behavior of Alumina-Forming Alloys. <i>Oxidation of Metals</i> , <b>2002</b> , 58, 73-101	1.6	62
292	High-temperature diffusion barriers for protective coatings. <i>Surface and Coatings Technology</i> , <b>2004</b> , 188-189, 153-157	4.4	59
291	Influence of electron beam physical vapor deposited thermal barrier coating microstructure on thermal barrier coating system performance under cyclic oxidation conditions. <i>Surface and Coatings Technology</i> , <b>1999</b> , 120-121, 68-76	4.4	58
290	Development of low-Cr ODS FeCrAl alloys for accident-tolerant fuel cladding. <i>Journal of Nuclear Materials</i> , <b>2018</b> , 501, 59-71	3.3	57
289	Effect of cycle length on the oxidation performance of iron aluminide coatings. <i>Surface and Coatings Technology</i> , <b>2004</b> , 188-189, 35-40	4.4	57
288	The use of two reactive elements to optimize oxidation performance of alumina-forming alloys. <i>Materials at High Temperatures</i> , <b>2003</b> , 20, 375-386	1.1	56
287	The Effect of an Oxide Dispersion on the Critical Al Content in Fe-Al Alloys. <i>Oxidation of Metals</i> , <b>1999</b> , 51, 181-197	1.6	55
286	A platinum-enriched $\text{NiAl}$ two-phase bond coat on Ni-based superalloys. <i>Surface and Coatings Technology</i> , <b>2005</b> , 200, 1259-1263	4.4	54
285	Characterization of alumina interfaces in TBC systems. <i>Journal of Materials Science</i> , <b>2009</b> , 44, 1676-1686	4.3	53
284	Characterization of commercial EB-PVD TBC systems with CVD (Ni,Pt)Al bond coatings. <i>Surface and Coatings Technology</i> , <b>2001</b> , 146-147, 140-146	4.4	52

283	Oxidation of refractory metals in air and low pressure oxygen gas. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2000</b> , 18, 237-243	4.1	51
282	High-Temperature Oxidation Behavior of ODS Fe <sub>3</sub> Al. <i>Oxidation of Metals</i> , <b>2001</b> , 55, 333-357	1.6	48
281	The effect of water vapor on the oxidation behavior of NiPtAl coatings and alloys. <i>Surface and Coatings Technology</i> , <b>2006</b> , 201, 3852-3856	4.4	47
280	Development of ODS FeCrAl for Compatibility in Fusion and Fission Energy Applications. <i>Jom</i> , <b>2014</b> , 66, 2458-2466	2.1	46
279	The formation of Al <sub>2</sub> O <sub>3</sub> scales at 1500°C. <i>Oxidation of Metals</i> , <b>1994</b> , 41, 203-233	1.6	45
278	Effect of Al and Cr Content on Air and Steam Oxidation of FeCrAl Alloys and Commercial APMT Alloy. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 431-441	1.6	44
277	Characterization of the alumina scale formed on a commercial MCrAlYHfSi coating. <i>Surface and Coatings Technology</i> , <b>2010</b> , 205, 1178-1182	4.4	44
276	Optimizing Scale Adhesion on Single Crystal Superalloys. <i>Materials Science Forum</i> , <b>2001</b> , 369-372, 459-466.4		44
275	Cladding burst behavior of Fe-based alloys under LOCA. <i>Journal of Nuclear Materials</i> , <b>2016</b> , 470, 128-138.3		43
274	Investigation of PbLi compatibility issues for the dual coolant blanket concept. <i>Journal of Nuclear Materials</i> , <b>2007</b> , 367-370, 1150-1154	3.3	43
273	The Use of Model Alloys to Develop Corrosion-Resistant Stainless Steels. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 815-822	0.4	43
272	Formation of aluminide coatings on Fe-based alloys by chemical vapor deposition. <i>Surface and Coatings Technology</i> , <b>2008</b> , 202, 3839-3849	4.4	42
271	Liquid metal compatibility issues for test blanket modules. <i>Fusion Engineering and Design</i> , <b>2006</b> , 81, 901-908		42
270	The Oxidation Behavior of Y <sub>2</sub> O <sub>3</sub> -Dispersed NiAl. <i>Oxidation of Metals</i> , <b>2004</b> , 61, 273-292	1.6	42
269	Effect of superalloy substrate and bond coating on TBC lifetime. <i>Surface and Coatings Technology</i> , <b>2010</b> , 205, 1236-1240	4.4	40
268	Effect of pressure on supercritical CO <sub>2</sub> compatibility of structural alloys at 750 °C. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2017</b> , 68, 151-158	1.6	39
267	Effect of water vapor on the 1100°C oxidation behavior of plasma-sprayed TBCs with HVOF NiCoCrAlX bond coatings. <i>Surface and Coatings Technology</i> , <b>2013</b> , 215, 39-45	4.4	39
266	The effect of Pt content on NiPtAl coatings. <i>Surface and Coatings Technology</i> , <b>2008</b> , 203, 413-416	4.4	38

265	A microstructural study of the oxide scale formation on ODS Fe-13Cr steel. <i>Journal of Nuclear Materials</i> , <b>2000</b> , 283-287, 1306-1310	3.3	38
264	Evaluation of iron-aluminide CVD coatings for high temperature corrosion protection. <i>Materials at High Temperatures</i> , <b>2001</b> , 18, 185-192	1.1	37
263	High-Temperature Corrosion in Fossil Fuel Power Generation: Present and Future. <i>Jom</i> , <b>2013</b> , 65, 1024-1032	3.6	36
262	Hot Corrosion of an EB-PVD Thermal-Barrier Coating System at 950°C. <i>Oxidation of Metals</i> , <b>2000</b> , 54, 401-424	1.6	36
261	Oxidation behavior of co-doped NiCrAl alloys in dry and wet air. <i>Surface and Coatings Technology</i> , <b>2013</b> , 237, 8-15	4.4	35
260	Formation and oxidation performance of low-temperature pack aluminide coatings on ferritic-martensitic steels. <i>Surface and Coatings Technology</i> , <b>2009</b> , 204, 766-770	4.4	35
259	Progress in the development of insulator coating for liquid lithium blankets. <i>Fusion Engineering and Design</i> , <b>2010</b> , 85, 1301-1306	1.7	35
258	Analytical Electron-Microscopy Study of the Breakdown of Al <sub>2</sub> O <sub>3</sub> Scales Formed on Oxide Dispersion-Strengthened Alloys. <i>Oxidation of Metals</i> , <b>2001</b> , 56, 119-145	1.6	35
257	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
256	Oxidation behaviour of cast Ni-Cr alloys in steam at 800°C. <i>Materials Science and Technology</i> , <b>2013</b> , 29, 822-827	1.5	33
255	The Oxidation behavior of ODS iron aluminides. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>1996</b> , 47, 663-674	1.6	33
254	Advanced TEM characterization of oxide nanoparticles in ODS Fe-12Cr-5Al alloys. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 9190-9206	4.3	33
253	Initial Assessment of Ni-Base Alloy Performance in 0.1 MPa and Supercritical CO <sub>2</sub> . <i>Jom</i> , <b>2015</b> , 67, 2615-2620	3.2	32
252	Long-term high temperature oxidation behavior of ODS ferritics. <i>Journal of Nuclear Materials</i> , <b>2002</b> , 307-311, 763-768	3.3	32
251	Material Selection for Accident Tolerant Fuel Cladding. <i>Metallurgical and Materials Transactions E</i> , <b>2015</b> , 2, 190-196		31
250	Effect of nitrogen on the formation and oxidation behavior of iron aluminide coatings. <i>Surface and Coatings Technology</i> , <b>2005</b> , 200, 1231-1235	4.4	30
249	Optimizing the Imperfect Oxidation Performance of Iron Aluminides. <i>Materials Science Forum</i> , <b>2001</b> , 369-372, 411-418	0.4	30
248	Growth stress - microstructure relationships for alumina scales. <i>Materials at High Temperatures</i> , <b>2003</b> , 20, 303-309	1.1	30

247	Stainless Steels With Improved Oxidation Resistance for Recuperators. <i>Journal of Engineering for Gas Turbines and Power</i> , <b>2006</b> , 128, 370-376	1.7	29
246	The effect of carbon and reactive element dopants on oxidation lifetime of FeAl. <i>Scripta Materialia</i> , <b>2005</b> , 52, 1199-1204	5.6	29
245	Effect of environment on the scale formed on oxide dispersion strengthened FeCrAl at 1050°C and 1100°C. <i>Materials at High Temperatures</i> , <b>2012</b> , 29, 171-180	1.1	28
244	The Oxidation Behavior of Fe-Al Alloys. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 799-806	0.4	28
243	Performance of chromia- and alumina-forming Fe- and Ni-base alloys exposed to metal dusting environments: The effect of water vapor and temperature. <i>Corrosion Science</i> , <b>2015</b> , 92, 58-68	6.8	27
242	Effect of increased water vapor levels on TBC lifetime with Pt-containing bond coatings. <i>Surface and Coatings Technology</i> , <b>2011</b> , 206, 1566-1570	4.4	27
241	Comparison of the oxidation behavior of $\text{Al}_2\text{O}_3$ and $\text{NiPtAl}$ coatings. <i>Surface and Coatings Technology</i> , <b>2009</b> , 204, 816-819	4.4	27
240	Synthesis and oxidation performance of Al-enriched $\text{Al}_2\text{O}_3$ coatings on Ni-based superalloys via secondary aluminizing. <i>Surface and Coatings Technology</i> , <b>2007</b> , 202, 632-636	4.4	27
239	Interdiffusion behavior of Pt-diffused $\text{Al}_2\text{O}_3$ coatings on Ni-based superalloys. <i>Surface and Coatings Technology</i> , <b>2008</b> , 203, 417-421	4.4	27
238	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
237	Limitations on the Use of Surface Doping for Improving High-Temperature Oxidation Resistance. <i>MRS Bulletin</i> , <b>1994</b> , 19, 26-30	3.2	27
236	Effect of water vapor on thermally grown alumina scales on bond coatings. <i>Surface and Coatings Technology</i> , <b>2013</b> , 215, 30-38	4.4	26
235	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
234	Long-term performance of aluminide coatings on Fe-base alloys. <i>Surface and Coatings Technology</i> , <b>2007</b> , 202, 637-642	4.4	26
233	Transformation of Al <sub>2</sub> O <sub>3</sub> to LiAlO <sub>2</sub> in Pb-7Li at 800°C. <i>Journal of Nuclear Materials</i> , <b>2008</b> , 376, 108-113	3.3	26
232	The Effect of Water Vapor on the Oxidation Behavior of CVD Iron-Aluminide Coatings. <i>Oxidation of Metals</i> , <b>2004</b> , 62, 103-120	1.6	26
231	Temperature limits on the compatibility of insulating ceramics in lithium. <i>Journal of Nuclear Materials</i> , <b>2002</b> , 307-311, 1344-1350	3.3	26
230	Advanced alloys for compact, high-efficiency, high-temperature heat-exchangers. <i>International Journal of Hydrogen Energy</i> , <b>2007</b> , 32, 3622-3630	6.7	25

229	Characterization of the breakaway Al content in alumina-forming alloys. <i>Materials at High Temperatures</i> , <b>2004</b> , 21, 175-185	1.1	25
228	Effects of oxygen and hydrogen at low pressure on the mechanical properties of V-Cr-Ti alloys. <i>Journal of Nuclear Materials</i> , <b>2000</b> , 283-287, 841-845	3.3	25
227	Evaluation of thermal barrier coating systems on novel substrates. <i>Journal of Thermal Spray Technology</i> , <b>2000</b> , 9, 198-203	2.5	25
226	Characterization of thermally cycled alumina scales. <i>Materials at High Temperatures</i> , <b>2000</b> , 17, 165-171	1.1	25
225	Characterization of the alumina scale formed on coated and uncoated doped superalloys. <i>Surface and Coatings Technology</i> , <b>2011</b> , 206, 1522-1528	4.4	24
224	Microstructure and environmental resistance of low Cr ODS FeCrAl. <i>Materials at High Temperatures</i> , <b>2015</b> , 32, 123-132	1.1	22
223	Effect of H <sub>2</sub> O and CO <sub>2</sub> on the Oxidation Behavior and Durability at High Temperature of ODS-FeCrAl. <i>Oxidation of Metals</i> , <b>2013</b> , 79, 627-638	1.6	22
222	Deformation and phase transformations during the cyclic oxidation of NiAl and NiPtAl. <i>Jom</i> , <b>2006</b> , 58, 47-52	2.1	22
221	Creep and corrosion testing of aluminide coatings on ferritic/martensitic substrates. <i>Surface and Coatings Technology</i> , <b>2006</b> , 201, 3880-3884	4.4	22
220	Corrosion behaviour of AlN for self-cooled Li/V blanket application. <i>Fusion Engineering and Design</i> , <b>2003</b> , 69, 397-401	1.7	22
219	Predicting Oxidation-Limited Lifetime of Thin-Walled Components of NiCrW Alloy 230. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 11-38	1.6	21
218	Effects of prior surface damage on high-temperature oxidation of Fe-, Ni-, and Co-based alloys. <i>Wear</i> , <b>2009</b> , 267, 380-386	3.5	21
217	Initial characterization of V-Cr-Ti and MHD coatings exposed to flowing Li. <i>Journal of Nuclear Materials</i> , <b>2009</b> , 386-388, 712-715	3.3	20
216	Study of the Reactive Element Effect in ODS Iron-Base Alumina Formers. <i>Materials Science Forum</i> , <b>1997</b> , 251-254, 397-404	0.4	20
215	On the Loss of Protective Scale Formation in Creep-Resistant, Alumina-Forming Austenitic Stainless Steels at 900°C in Air. <i>Materials Science Forum</i> , <b>2008</b> , 595-598, 725-732	0.4	20
214	Evaluation of iron-aluminide CVD coatings for high temperature corrosion protection		20
213	Critical Exploration of Liquid Metal Plasma-Facing Components in a Fusion Nuclear Science Facility. <i>Fusion Science and Technology</i> , <b>2019</b> , 75, 886-917	1.1	19
212	APS TBC performance on directionally-solidified superalloy substrates with HVOF NiCoCrAlYHfSi bond coatings. <i>Surface and Coatings Technology</i> , <b>2015</b> , 284, 9-13	4.4	19



211	Creep behavior of pack cementation aluminide coatings on Grade 91 ferritic-martensitic alloy. <i>Surface and Coatings Technology</i> , <b>2014</b> , 240, 32-39	4.4	19
210	Impact of superalloy composition, bond coat roughness and water vapor on TBC lifetime with HVOF NiCoCrAlYHfSi bond coatings. <i>Surface and Coatings Technology</i> , <b>2013</b> , 237, 65-70	4.4	19
209	Mechanistic-Based Lifetime Predictions for High-Temperature Alloys and Coatings. <i>Jom</i> , <b>2012</b> , 64, 1454-1460	4.4	19
208	Synthesis and oxidation behavior of platinum-enriched $\text{Al}_2\text{O}_3$ bond coatings on Ni-based superalloys. <i>Surface and Coatings Technology</i> , <b>2006</b> , 201, 3857-3861	4.4	19
207	Effect of environment on the oxidation of ingot-processed iron aluminides. <i>Intermetallics</i> , <b>2001</b> , 9, 735-739	3.3	19
206	Effect of oxy-firing on corrosion rates at 600-650 °C. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2014</b> , 65, 132-140	1.6	18
205	Material compatibility with isothermal PbLi. <i>Materials at High Temperatures</i> , <b>2012</b> , 29, 129-135	1.1	18
204	Ionic segregation on grain boundaries in thermally grown alumina scales. <i>Materials at High Temperatures</i> , <b>2012</b> , 29, 257-263	1.1	18
203	Compatibility of multi-layer, electrically insulating coatings for vanadium-lithium blankets. <i>Journal of Nuclear Materials</i> , <b>2007</b> , 367-370, 1165-1169	3.3	18
202	The Role of Oxygen Uptake and Scale Formation on the Embrittlement of Vanadium Alloys. <i>Oxidation of Metals</i> , <b>2005</b> , 63, 33-55	1.6	18
201	Long-term stability of ceramics in liquid lithium. <i>Journal of Nuclear Materials</i> , <b>2001</b> , 289, 52-56	3.3	18
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199	Effect of pressure and impurities on oxidation in supercritical CO <sub>2</sub> . <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2019</b> , 70, 1400-1409	1.6	17
198	Characterization of chromia scales formed in supercritical carbon dioxide. <i>Materials at High Temperatures</i> , <b>2018</b> , 35, 39-49	1.1	17
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193	Performance of FeCrAl for accident-tolerant fuel cladding in high-temperature steam. <i>Corrosion Reviews</i> , <b>2017</b> , 35, 167-175	3.2	17
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189	Comparison of thermal expansion and oxidation behavior of various high-temperature coating materials and superalloys		16
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180	The effect of cycle frequency, H <sub>2</sub> O and CO <sub>2</sub> on TBC lifetime with NiCoCrAlYHfSi bond coatings. <i>Surface and Coatings Technology</i> , <b>2014</b> , 260, 107-112	4.4	14
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170	The use of two reactive elements to optimize oxidation performance of alumina-forming alloys		13
169	Effect of Thermal Cycling on Compatibility in CO2 for Concentrated Solar Power Applications. <i>Oxidation of Metals</i> , <b>2017</b> , 87, 631-642	1.6	12
168	The Effect of CO2 Pressure on Chromia Scale Microstructure at 750°C. <i>Jom</i> , <b>2018</b> , 70, 1511-1519	2.1	12
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148	Materials Selection for High Temperature (750-1000°C) Metallic Recuperators for Improved Efficiency Microturbines <b>2001</b> ,		10
147	The Effect of Water Vapor on Oxidation Performance of Alloys Used in Recuperators <b>2002</b> , 1045		10
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139	First steps toward predicting corrosion behavior of structural materials in molten salts. <i>Journal of Nuclear Materials</i> , <b>2021</b> , 546, 152755	3.3	9
138	Interfaces in Oxides Formed on NiAlCr Doped with Y, Hf, Ti, and B. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 396-403	0.5	8
137	Performance of vacuum plasma spray and HVOF bond coatings at 900°C and 1100 °C. <i>Surface and Coatings Technology</i> , <b>2018</b> , 337, 136-140	4.4	8
136	Effects of thermal cycling parameters on residual stresses in alumina scales of CoNiCrAlY and NiCoCrAlY bond coats. <i>Surface and Coatings Technology</i> , <b>2014</b> , 258, 608-614	4.4	8
135	High-Temperature Performance of Cast CF8C-Plus Austenitic Stainless Steel. <i>Journal of Engineering for Gas Turbines and Power</i> , <b>2011</b> , 133,	1.7	8
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129	Grain Boundary Chemistry and Transport Through Alumina Scales on NiAl Alloys. <i>Oxidation of Metals</i> , <b>2017</b> , 88, 469-479	1.6	7
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119	The Impact of Impurities on Alloy Behavior in Supercritical CO <sub>2</sub> at 700 °C. <i>Oxidation of Metals</i> , <b>2020</b> , 94, 95-111	1.6	6
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113	The Performance of Pt-Modified Alumina-Forming Coatings and Model Alloys <b>2008</b> ,		6
112	Oxidation of Superalloys in Extreme Environments <b>2010</b> ,		6
111	The Effect of Coating Composition and Geometry on Thermal Barrier Coatings Lifetime. <i>Journal of Engineering for Gas Turbines and Power</i> , <b>2019</b> , 141,	1.7	6
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104	Comparison of Recuperator Alloy Degradation in Laboratory and Engine Testing <b>2006</b> , 217		5

103	Factors Affecting Corrosion Resistance of Recuperator Alloys <b>2003</b> , 755		5
102	Overview of Creep Strength and Oxidation of Heat-Resistant Alloy Sheets and Foils for Compact Heat-Exchangers <b>2005</b> , 1011		5
101	Evaluation and Characterization of Iron- and Nickel-Based Alloys for Microturbine Recuperators <b>2005</b> , 945		5
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99	Methodologies for Evaluation of Corrosion Protection for Ductile Iron Pipe		5
98	Characterization of the breakaway Al content in alumina-forming alloys		5
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93	Inhibited aluminization of an ODS FeCr alloy. <i>Surface and Coatings Technology</i> , <b>2012</b> , 206, 5036-5041	4.4	4
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91	Comparison of Recuperator Alloy Degradation in Laboratory and Engine Testing. <i>Journal of Engineering for Gas Turbines and Power</i> , <b>2008</b> , 130,	1.7	4
90	Oxidation-Sulfidation Behavior of Multiphase Mo-Si-B Alloys. <i>Materials Science Forum</i> , <b>2004</b> , 461-464, 1063-1072	0.4	4
89	An Analysis of the Potential for Deposition, Erosion, or Corrosion in Gas Turbines Fueled by the Products of Biomass Gasification or Combustion <b>2000</b> ,		4
88	The Effect of Various Oxide Dispersions on the Oxidation Resistance of Fe <sub>3</sub> Al. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 364, 1315		4
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86	Report on Exploration of New FeCrAl Heat Variants with Improved Properties		4

85	The effect of Y and Ti on FeCrAl oxidation at 1400 °C. <i>European Physical Journal Special Topics</i> , <b>1993</b> , 03, C9-247-C9-255		4
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82	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
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70	Lifetime Model Development for Supercritical CO2 CSP Systems		3
69	Steam Oxidation Behavior of FeCrAl Cladding. <i>Minerals, Metals and Materials Series</i> , <b>2019</b> , 1451-1460	0.3	3
68	Compatibility of SiC with ODS FeCrAl in flowing Pb-Li at 600-700 °C. <i>Fusion Engineering and Design</i> , <b>2021</b> , 166, 112389	1.7	3



67	Performance of Wrought Superalloys in Extreme Environments. <i>Minerals, Metals and Materials Series</i> , <b>2018</b> , 165-178	0.3	3
66	Accident Tolerant FeCrAl Fuel Cladding: Current Status Towards Commercialization. <i>Minerals, Metals and Materials Series</i> , <b>2018</b> , 165-173	0.3	2
65	Factors Affecting TBC Furnace Cycle Lifetime: Temperature, Environment, Structure and Composition <b>2016</b> , 727-734		2
64	Effect of Environment on the High Temperature Oxidation Behavior of 718 and 718Plus <b>2014</b> , 667-677		2
63	The Effect of Water Vapor and Superalloy Composition on Thermal Barrier Coating Lifetime <b>2012</b> , 723-732		2
62	Evaluation of Commercial and Next Generation Alumina-Forming Austenitic Foil for Advanced Recuperators <b>2013</b> ,		2
61	Design strategies for new oxidation-resistant high temperature alloys <b>2008</b> , 398-432		2
60	An Oxygen Potential Gradient as a Possible Diffusion Driving Force. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 527, 497		2
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58	High Temperature Oxidation Lifetime Modeling of Thin-Walled Components <b>2019</b> ,		2
57	Steam Oxidation Behavior of FeCrAl Cladding. <i>Minerals, Metals and Materials Series</i> , <b>2018</b> , 235-244	0.3	2
56	Steam Oxidation, Burst and Critical Heat Flux Testing of FeCrAl Cladding in the Severe Accident Test Station		2
55	Purification of Chloride Salts for Concentrated Solar Applications		2
54	Effect of Environment on the High Temperature Oxidation Behavior of 718 and 718Plus <b>2014</b> ,		2
53	Computational Methods to Accelerate Development of Corrosion Resistant Coatings for Industrial Gas Turbines. <i>Minerals, Metals and Materials Series</i> , <b>2020</b> , 824-833	0.3	2
52	Effect of Water Vapor on Lifetime of 625 and 120 Foils During Oxidation Between 650 and 800 °C. <i>Oxidation of Metals</i> , <b>2021</b> , 96, 589	1.6	2
51	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
50	Compatibility of FeCrAlMo in Flowing Pb-Li at 600°C to 700°C. <i>Fusion Science and Technology</i> ,1-5	1.1	2

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48	Lifetime modeling for a supercritical CO <sub>2</sub> -molten salt CSP power block <b>2019</b> ,		1
47	Alloy Development for High Temperature Corrosion and Protection. <i>Oxidation of Metals</i> , <b>2013</b> , 80, 1-1	1.6	1
46	Water Vapor Effects in High Temperature Oxidation. <i>Oxidation of Metals</i> , <b>2013</b> , 79, 443-444	1.6	1
45	Effect of Pressure and Thermal Cycling on Compatibility in CO <sub>2</sub> for Concentrated Solar Power Applications <b>2017</b> ,		1
44	High Temperature Coatings. <i>Oxidation of Metals</i> , <b>2014</b> , 81, 1-1	1.6	1
43	Evaluation of NiCrAl Foil for a Concentrated Solar Power Application <b>2013</b> ,		1
42	Evaluation of Commercial Alumina-Forming Austenitic Foil for Advanced Recuperators <b>2011</b> ,		1
41	Effect of environment on the scale formed on oxide dispersion strengthened FeCrAl at 1050°C and 1100°C		1
40	Ionic segregation on grain boundaries in thermally grown alumina scales		1
39	The effect of time and temperature on the segregation of foreign ions to grain boundaries in growing $\gamma$ -Al <sub>2</sub> O <sub>3</sub> scales. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1993</b> , 51, 950-951		1
38	Characterization of the oxidation-sulfidation of a preoxidized ODS FeCrAl alloy. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1993</b> , 51, 1146-1147		1
37	Accident Tolerant FeCrAl Fuel Cladding: Current Status Towards Commercialization. <i>Minerals, Metals and Materials Series</i> , <b>2019</b> , 1381-1389	0.3	1
36	Conceptual Design of HFIR Irradiation Experiment for Material Compatibility Study on Liquid Sn Divertor. <i>Plasma and Fusion Research</i> , <b>2021</b> , 16, 2405040-2405040	0.5	1
35	A Tracer Study on sCO <sub>2</sub> Corrosion with Multiple Oxygen-Bearing Impurities. <i>Oxidation of Metals</i> , <b>2021</b> , 96, 571	1.6	1
34	Pre-Oxidation to Improve Liquid Metal Compatibility. <i>Oxidation of Metals</i> , <b>2021</b> , 96, 231-240	1.6	1
33	Data analytics approach to predict high-temperature cyclic oxidation kinetics of NiCr-based Alloys. <i>Npj Materials Degradation</i> , <b>2021</b> , 5,	5.7	1
32	Evaluating steam oxidation kinetics of environmental barrier coatings. <i>Journal of the American Ceramic Society</i> ,	3.8	1

31	High-Temperature Oxidation and Corrosion of Intermetallics		1
30	Corrosion of 316H stainless steel in flowing FLiNaK salt. <i>Journal of Nuclear Materials</i> , <b>2022</b> , 561, 153551	3,3	o
29	The Role of Oxidation Resistance in High Temperature Alloy Selection for a Future with Green Hydrogen. <i>Jom</i> , 1	2.1	o
28	Principles of Corrosion in Nuclear Systems: Theory and Analytical Methods <b>2020</b> , 1-32		o
27	Lessons Learned in Employing Data Analytics to Predict Oxidation Kinetics and Spallation Behavior of High-Temperature NiCr-Based Alloys. <i>Oxidation of Metals</i> , 1	1.6	o
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16	High Temperature Corrosion and Protection of Ceramics, Composites and Silicides. <i>Oxidation of Metals</i> , <b>2013</b> , 80, 205-205	1.6	
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13	Microstructure and Chemistry of the Oxide Scale and Pt-containing Coatings Deposited on Superalloy N5. <i>Microscopy and Microanalysis</i> , <b>2012</b> , 18, 1676-1677	0.5
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10	Enhancing Oxidation Performance by Control of Interfacial Segregation and Microstructural Design. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 586, 301	
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8	Compatibility of Alumina-Forming Austenitic Steels in Static and Flowing Pb. <i>Jom</i> , <b>2021</b> , 73, 4016	2.1
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6	Characterization of Commercial EB-PVD TBC Systems with CVD (Ni,Pt)Al Bond Coatings	29-44
5	Quantifying adherence of oxide scales on steels exposed to high temperature and pressure steam. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2021</b> , 72, 1315-1327	1.6
4	Editorial on this Focus Issue on Key Corrosion Topics. <i>Oxidation of Metals</i> , <b>2021</b> , 96, 1-2	1.6
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