

Mary Taylor

List of Publications by Year in descending order

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papers

1,029
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567281

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434195

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33
all docs

33
docs citations

33
times ranked

673
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxidation behaviour of a developmental nickel-based alloy and the role of minor elements. Corrosion Science, 2022, 196, 110002.	6.6	5
2	Identifying heating rate dependent oxidation reactions on a nickel-based superalloy using synchrotron diffraction. Acta Materialia, 2019, 181, 570-583.	7.9	19
3	The influence of stress on the oxidation of a Ni-based superalloy. Corrosion Science, 2019, 154, 277-285.	6.6	27
4	Influence of Pre-oxidation on Filamentary Carbon Deposition on 20Cr25Ni Stainless Steel. Oxidation of Metals, 2019, 91, 589-607.	2.1	2
5	The effect of elevated air pressure on the oxidation properties of the nickel-based superalloy, RR1000, at 650°C with different surface modifications. Materials at High Temperatures, 2018, 35, 130-140.	1.0	8
6	The effect of thermal cycling on steam oxidation behaviour of TP347H FG at 650°C. Materials at High Temperatures, 2018, 35, 291-298.	1.0	1
7	Predicting the microstructural evolution in a multi-layered corrosion resistant coating on a Ni-base superalloy. Materials at High Temperatures, 2018, 35, 78-88.	1.0	11
8	Influence of low CO concentration on catalysed carbon deposition on 20Cr25Ni steel in CO2 environments containing ethene. Corrosion Science, 2018, 143, 56-64.	6.6	1
9	Electron microscopy study of the formation mechanism of catalytic nickel-rich particles and the role of carbonyl sulphide in the suppression of carbon deposition on 20Cr-25Ni steel. Materials Characterization, 2018, 144, 505-515.	4.4	2
10	Modelling of the interdiffusion and oxidation of a multilayered chromia forming thermal barrier coating. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 215-219.	1.5	3
11	The Effect of Temperature and Carbonyl Sulphide on Carbon Deposition on 20Cr25Ni Stainless Steel. Oxidation of Metals, 2017, 87, 667-678.	2.1	6
12	An overview of the oxidation of Ni-based superalloys for turbine disc applications: surface condition, applied load and mechanical performance. Materials at High Temperatures, 2016, 33, 465-475.	1.0	41
13	Effect of prior oxidation on high cycle fatigue performance of RR1000 and role of oxidation in fatigue crack initiation. Materials at High Temperatures, 2015, 32, 68-73.	1.0	8
14	Comparison of Chromia Growth Kinetics in a Ni-based Superalloy, with and without Shot-peening. Corrosion Science, 2015, 100, 242-252.	6.6	30
15	Cautionary note on use of focused ion beam sectioning as technique for characterising oxidation damage in Ni based superalloys. Materials at High Temperatures, 2014, 31, 27-33.	1.0	7
16	The Oxidation and Interdiffusion of a Chromia Forming Multilayered TBC System. Oxidation of Metals, 2014, 81, 47-55.	2.1	8
17	Characterisation of subsurface oxidation damage in Ni based superalloy, RR1000. Materials Science and Technology, 2014, 30, 1884-1889.	1.6	27
18	Chromia layer growth on a Ni-based superalloy: Sub-parabolic kinetics and the role of titanium. Corrosion Science, 2013, 75, 58-66.	6.6	146

#	ARTICLE	IF	CITATIONS
19	The oxidation characteristics of the nickel-based superalloy, RR1000, at temperatures of 700â€“900Â°C. <i>Materials at High Temperatures</i> , 2012, 29, 145-150.	1.0	51
20	Oxidation Study of an EB-PVD MCrAlY Thermal Barrier Coating System. <i>Oxidation of Metals</i> , 2011, 76, 259-271.	2.1	43
21	A chromia forming thermal barrier coating system. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2011, 62, 668-673.	1.5	12
22	Effects of breakaway oxidation on local stresses in thermal barrier coatings. <i>Acta Materialia</i> , 2010, 58, 1242-1251.	7.9	129
23	The effect of bond coat oxidation on the microstructure and endurance of a thermal barrier coating system. <i>Materials at High Temperatures</i> , 2009, 26, 317-323.	1.0	10
24	The influence of bondcoat and topcoat mechanical properties on stress development in thermal barrier coating systems. <i>Acta Materialia</i> , 2009, 57, 2349-2361.	7.9	131
25	The effect of bond coat oxidation on the microstructure and endurance of a thermal barrier coating system. <i>Materials at High Temperatures</i> , 2009, 26, 317-323.	1.0	1
26	The influence of bond coat surface roughness on chemical failure and delamination in TBC systems. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2008, 59, 508-513.	1.5	31
27	Oxidation of high-temperature coatings. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2006, 220, 1-10.	1.3	20
28	Formation of diffusion cells in LPPS MCrAlY coatings. <i>Materials at High Temperatures</i> , 2003, 20, 461-465.	1.0	7
29	Diffusion Cells and Chemical Failure of MCrAlY Bond Coats in Thermal-Barrier Coating Systems. <i>Oxidation of Metals</i> , 2001, 55, 17-34.	2.1	160
30	A method for evaluating the creep properties of overlay coatings. <i>Surface and Coatings Technology</i> , 2000, 124, 13-18.	4.8	15
31	Creep relaxation and the spallation of oxide layers. <i>Surface and Coatings Technology</i> , 1997, 94-95, 27-33.	4.8	44
32	Effect of convective heat transfer and phase change on the stability of aluminium smelting cells. <i>AIChE Journal</i> , 1986, 32, 1459-1465.	3.6	17