

Shenglong

List of Publications by Year in descending order

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times ranked

1018
citing authors

#	ARTICLE	IF	CITATIONS
1	SiO ₂ -Al ₂ O ₃ glass composite coating on Ti-6Al-4V alloy: Oxidation and interfacial reaction behavior. Corrosion Science, 2013, 74, 367-378.	6.6	71
2	High vacuum arc ion plating NiCrAlY coatings: Microstructure and oxidation behavior. Corrosion Science, 2015, 94, 294-304.	6.6	71
3	Comparative study of oxidation and interdiffusion behavior of AIP NiCrAlY and sputtered nanocrystalline coatings on a nickel-based single-crystal superalloy. Corrosion Science, 2015, 98, 530-540.	6.6	70
4	Reactive sputter deposition of alumina films on superalloys and their high-temperature corrosion resistance. Surface and Coatings Technology, 1995, 71, 9-15.	4.8	68
5	The oxidation behavior and mechanical performance of Ti60 alloy with enamel coating. Surface and Coatings Technology, 2005, 190, 195-199.	4.8	67
6	Ta effect on oxidation of a nickel-based single-crystal superalloy and its sputtered nanocrystalline coating at 900-1100 °C. Applied Surface Science, 2015, 345, 194-203.	6.1	64
7	Hot corrosion of arc ion plating NiCrAlY and sputtered nanocrystalline coatings on a nickel-based single-crystal superalloy. Corrosion Science, 2017, 123, 27-39.	6.6	64
8	The mechanism of scale adhesion on sputtered microcrystallized CoCrAl films. Oxidation of Metals, 1996, 45, 39-50.	2.1	63
9	Glass-ceramic coatings on titanium alloys for high temperature oxidation protection: Oxidation kinetics and microstructure. Corrosion Science, 2013, 74, 178-186.	6.6	59
10	Glass coatings on stainless steels for high-temperature oxidation protection: Mechanisms. Corrosion Science, 2014, 82, 316-327.	6.6	57
11	Influences of MCrAlY coatings on oxidation resistance of single crystal superalloy DD98M and their inter-diffusion behaviors. Journal of Alloys and Compounds, 2015, 649, 515-530.	5.5	55
12	Preparation and oxidation behaviour of nanocrystalline Ni+CrAlYSiN composite coating with AlN diffusion barrier on Ni-based superalloy K417. Corrosion Science, 2012, 60, 265-274.	6.6	54
13	Oxidation and hot corrosion behavior of a novel enamel-Al ₂ O ₃ composite coating on K38G superalloy. Surface and Coatings Technology, 2006, 200, 5931-5936.	4.8	53
14	Yttria partially stabilised zirconia as diffusion barrier between NiCrAlY and Ni-base single crystal RenN5 superalloy. Corrosion Science, 2015, 94, 122-128.	6.6	49
15	Influence of columnar microstructure of a sputtered NiAl coating on its oxidation behavior at 1000 °C. Intermetallics, 2002, 10, 467-471.	3.9	46
16	Synergistic corrosion behavior of coated Ti60 alloys with NaCl deposit in moist air at elevated temperature. Corrosion Science, 2008, 50, 15-22.	6.6	46
17	Rehealing ability of oxide scales formed on microcrystalline K38G coatings. Oxidation of Metals, 1995, 43, 317-328.	2.1	45
18	The effect of yttrium addition on oxidation of a sputtered nanocrystalline coating with moderate amount of tantalum in composition. Applied Surface Science, 2016, 366, 245-253.	6.1	44

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19	Benefits of Zr addition to oxidation resistance of a single-phase (Ni,Pt)Al coating at 1373 K. Journal of Materials Science and Technology, 2019, 35, 1334-1344.	10.7	44
20	Diffusion of Ta and its influence on oxidation behavior of nanocrystalline coatings with different Ta, Y and Al contents. Corrosion Science, 2017, 126, 344-355.	6.6	43
21	Amorphous sol-gel SiO ₂ film for protection of Ti6Al4V alloy against high temperature oxidation. Surface and Coatings Technology, 2007, 201, 5967-5972.	4.8	42
22	Hot corrosion behaviour of a Ni+CrAlYSiN composite coating in Na ₂ SO ₄ +25wt.% NaCl melt. Applied Surface Science, 2013, 268, 103-110.	6.1	42
23	Influence of Sputtered Nanocrystalline Coating on Oxidation and Hot Corrosion of a Nickel-based Superalloy M951. Journal of Materials Science and Technology, 2014, 30, 867-877.	10.7	42
24	High temperature corrosion behavior of an AlP NiCoCrAlY coating modified by aluminizing. Surface and Coatings Technology, 2011, 205, 5053-5058.	4.8	39
25	A magnetron sputtered microcrystalline γ -NiAl coating for SC superalloys. Part I. Characterization and comparison of isothermal oxidation behavior at 1100 °C with a NiCrAlY coating. Applied Surface Science, 2015, 324, 1-12.	6.1	38
26	Oxidation behavior of NiCrAlY coatings prepared by arc ion plating using various substrate biases: Effects of chemical composition and thickness of the coatings. Corrosion Science, 2017, 126, 317-323.	6.6	38
27	A magnetron sputtered microcrystalline γ -NiAl coating for SC superalloys. Part II. Effects of a NiCrO diffusion barrier on oxidation behavior at 1100 °C. Applied Surface Science, 2017, 407, 485-494.	6.1	37
28	Effect of sand blasting and glass matrix composite coating on oxidation resistance of a nickel-based superalloy at 1000 °C. Corrosion Science, 2013, 73, 331-341.	6.6	36
29	Crystallization Behavior of SiO ₂ -Al ₂ O ₃ -ZnO-CaO Glass System at 1123-1273 K. Journal of the American Ceramic Society, 2010, 93, 3230-3235.	3.8	34
30	Microstructure and oxidation behavior of a SiC-Al ₂ O ₃ glass composite coating on Ti-47Al-2Cr-2Nb alloy. Corrosion Science, 2014, 87, 179-186.	6.6	34
31	High temperature oxidation of NiCrAlY, nanocrystalline and enamel-metal nano-composite coatings under thermal shock. Corrosion Science, 2015, 100, 556-565.	6.6	31
32	Comparison of the cyclic oxidation behavior of a low expansion Ni+CrAlYSiN nanocomposite and a NiCrAlYSi coating. Corrosion Science, 2014, 80, 393-401.	6.6	30
33	The effect of yttrium addition on the isothermal oxidation behavior of sputtered K38 nanocrystalline coating at 1273 K in air. Surface and Coatings Technology, 2007, 201, 7425-7431.	4.8	27
34	Effect of NiCrAlY platelets inclusion on the mechanical and thermal shock properties of glass matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1360-1366.	5.6	27
35	A duplex nanocrystalline coating for high-temperature applications on single-crystal superalloy. Corrosion Science, 2016, 102, 72-83.	6.6	27
36	Improving oxidation resistance of γ -TiAl based alloy by depositing TiAlSiN coating: Effects of silicon. Corrosion Science, 2021, 179, 109151.	6.6	27

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37	Development of an oxidation resistant glass-ceramic composite coating on Ti-47Al-2Cr-2Nb alloy. <i>Applied Surface Science</i> , 2014, 292, 583-590.	6.1	26
38	High vacuum arc ion plating TiAl coatings for protecting titanium alloy against oxidation at medium high temperatures. <i>Corrosion Science</i> , 2016, 112, 36-43.	6.6	26
39	Effects of surface finish of single crystal superalloy substrate on cyclic thermal oxidation of its nanocrystalline coating. <i>Corrosion Science</i> , 2016, 111, 313-324.	6.6	26
40	The scaling behavior of sputtered Ni3Al coatings with and without Pt modification. <i>Corrosion Science</i> , 2012, 58, 115-120.	6.6	25
41	Preparation and thermal shock behavior at 1000°C of a glass-alumina-NiCrAlY tri-composite coating on K38G superalloy. <i>Surface and Coatings Technology</i> , 2012, 206, 2566-2571.	4.8	25
42	Oxidation behavior of a nanocrystalline coating with low Ta content at high temperature. <i>Corrosion Science</i> , 2021, 180, 109182.	6.6	25
43	Spontaneous reaction formation of Cr23C6 diffusion barrier layer between nanocrystalline MCrAlY coating and Ni-base superalloy at high temperature. <i>Corrosion Science</i> , 2015, 99, 219-226.	6.6	24
44	High vacuum arc ion plating NiCrAlY coatings: Bias effect and approach to preparation of functional gradient coatings. <i>Surface and Coatings Technology</i> , 2015, 281, 44-50.	4.8	24
45	Oxidation behavior of Al/Y co-modified nanocrystalline coatings with different Al content on a nickel-based single-crystal superalloy. <i>Corrosion Science</i> , 2020, 170, 108700.	6.6	23
46	Effect of vitreous enamel coating on the oxidation behavior of Ti6Al4V and TiAl alloys at high temperatures. <i>Journal of Coatings Technology Research</i> , 2008, 5, 93-98.	2.5	22
47	Oxidation and Thermal Shock Behavior of a Glass-Alumina Composite Coating on K38G Superalloy at 1000 °C. <i>Journal of Materials Science and Technology</i> , 2012, 28, 433-438.	10.7	21
48	Strengthening mechanisms and fracture surface characteristics of silicate glass matrix composites with inclusion of alumina particles of different particle sizes. <i>Physica B: Condensed Matter</i> , 2013, 413, 15-20.	2.7	21
49	Comparative study of interfacial reaction between superalloy substrate and glass coating with and without alumina particles incorporation. <i>Applied Surface Science</i> , 2013, 271, 228-233.	6.1	21
50	Effect of sand blasting on oxidation behavior of K38G superalloy at 1000°C. <i>Corrosion Science</i> , 2015, 92, 256-262.	6.6	21
51	Glass-alumina composite coatings for high temperature corrosion protection. Part I: Effect of crystallization and interfacial reaction on the thermo-physical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 3186-3192.	5.6	19
52	Ru-induced microstructural change in ion-plated TiN coating and its tribological properties. <i>Surface and Coatings Technology</i> , 2018, 354, 175-183.	4.8	19
53	Thermophysical Properties of Alumina Particle Reinforced Glass Matrix Composites. <i>International Journal of Applied Ceramic Technology</i> , 2013, 10, 224-233.	2.1	18
54	Microstructure and oxidation behavior of a Ni+CrAlYSiHfN/AlN multilayer coating fabricated by reactive magnetron sputtering. <i>Corrosion Science</i> , 2016, 104, 197-206.	6.6	18

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55	Stoichiometry and tribological behavior of thick Ta(N) coatings produced by direct current magnetron sputtering (DCMS). Applied Surface Science, 2018, 427, 1071-1079.	6.1	18
56	Self-ion bombarded Cr films: Crystallographic orientation and oxidation behaviour. Corrosion Science, 2018, 143, 212-220.	6.6	17
57	Corrosion of enamel with and without CaF ₂ in molten aluminum at 750 °C. Corrosion Science, 2019, 148, 228-236.	6.6	17
58	Cyclic oxidation behavior of glass-ceramic composite coatings on superalloy K38G at 1100 °C. Thin Solid Films, 2011, 519, 4884-4888.	1.8	16
59	Characterization and Oxidation Behavior of a Sputtered Nanocomposite Ni+CrAlYSiHfN Coating. Corrosion, 2015, 71, 523-535.	1.1	16
60	Breakaway oxidation of a low-Al content nanocrystalline coating at 1000 °C. Surface and Coatings Technology, 2019, 358, 958-967.	4.8	16
61	Improved oxidation resistance of β -TiAl intermetallics by sputtered Ni+CrAlYHfSiN composite coating. Corrosion Science, 2021, 187, 109510.	6.6	16
62	Phase Evolution of $\text{SiO}_2 \cdot \text{Al}_2\text{O}_3 \cdot \text{O}_3$ Glass with Added PSZ Particles. Journal of the American Ceramic Society, 2013, 96, 1456-1463.	3.8	15
63	TEM study of the evolution of sputtered Ni+CrAlYSiHfN nanocomposite coating with an AlN diffusion barrier at high temperature. Surface and Coatings Technology, 2016, 286, 262-267.	4.8	15
64	Cyclic oxidation behavior of a multilayer composite coating for single-crystal superalloys. Corrosion Science, 2018, 145, 26-34.	6.6	15
65	Low inter-diffusivity β -base bondcoats for single crystal superalloy Ren ^{AM} N5. I: Primary study of microstructures and oxidation behaviors at 1100 °C. Corrosion Science, 2019, 147, 299-312.	6.6	14
66	Effect of Al and Cr on the oxidation behavior of nanocrystalline coatings at 1050 °C. Corrosion Science, 2022, 200, 110191.	6.6	14
67	Interfacial reactions between a SiO ₂ Al ₂ O ₃ ZnOCaO based glass and alpha alumina. Surface and Coatings Technology, 2013, 232, 6-12.	4.8	13
68	Microstructural stability of AlN diffusion barrier for nanocomposite Ni + CrAlYSiHfN coating on single crystal superalloy at high temperatures. Applied Surface Science, 2015, 359, 420-425.	6.1	13
69	Effect of nitrogen content on the phase transformation of alumina scale on a nanocrystalline NiCrAlYSiHfN/AlN multilayer coating. Corrosion Science, 2020, 165, 108396.	6.6	12
70	High vacuum arc ion plating Cr films: Self-ion bombarding effect and oxidation behavior. Corrosion Science, 2021, 187, 109476.	6.6	12
71	Thermal shock and self-healing behavior of the enamel composite coatings with addition of various nanoparticles at temperatures of 700 and 800 °C. Corrosion Science, 2021, 191, 109747.	6.6	12
72	Electronic Structure of Monomeric Water Adsorption on Ni{111}: Beyond the General Model. Journal of Physical Chemistry C, 2008, 112, 8301-8303.	3.1	11

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73	Microstructure stabilization of a novel glass/YSZ composite coating material by adding alumina particles. <i>Ceramics International</i> , 2015, 41, 9753-9762.	4.8	11
74	Oxidation behavior of glass-based composite thermal barrier coating on K417G superalloy with a NiCoCrAlY bond coat at 1000°C. <i>Surface and Coatings Technology</i> , 2015, 270, 314-323.	4.8	11
75	Isothermal oxidation behavior and microstructure change of a gradient low-expansion coating for superalloys. <i>Corrosion Science</i> , 2019, 147, 182-191.	6.6	11
76	Enamel coating for protection of the 316 stainless steel against tribo-corrosion in molten zinc alloy at 460 °C. <i>Journal of Materials Science and Technology</i> , 2021, 65, 126-136.	10.7	11
77	Effect of YSZ-incorporated glass-based composite coating on oxidation behavior of K438G superalloy at 1000°C. <i>Journal of the European Ceramic Society</i> , 2017, 37, 1013-1022.	5.7	10
78	Oxidation behavior of a glass-based composite coating with a low expansion cermet bond-coat and an AlN diffusion barrier on K417G superalloy. <i>Corrosion Science</i> , 2018, 145, 283-294.	6.6	10
79	Crystallization and wear behavior of SiO ₂ -Al ₂ O ₃ -ZrO ₂ -Ba(Sr, Ca)O glass-ceramics added with Cr ₂ O ₃ by different methods. <i>Ceramics International</i> , 2019, 45, 22617-22624.	4.8	10
80	Oxidation mechanism of a nanocrystalline NiCrAlYSiHfN/AlN multilayer coating. <i>Corrosion Science</i> , 2019, 156, 71-83.	6.6	10
81	Corrosion of SiO ₂ -B ₂ O ₃ -Al ₂ O ₃ -CaF ₂ -R ₂ O (R=Na and K) enamels with different content of ZrO ₂ in H ₂ SO ₄ and NaOH solutions. <i>Ceramics International</i> , 2019, 45, 14958-14967.	4.8	10
82	Oxidation mechanism of Ni+CrAlYNO nanocomposite coating enhanced by a NiCrAlY buffer layer. <i>Corrosion Science</i> , 2021, 180, 109184.	6.6	10
83	Low inter-diffusivity $\hat{\gamma}$ '-base bondcoats for single crystal superalloy Ren ^{AM} N5. $\hat{\gamma}$: Cyclic oxidation behavior at 1100 °C. <i>Corrosion Science</i> , 2019, 159, 108127.	6.6	9
84	Oxidation and corrosion protection of ZG12Cr9Mo1Co1NiVNbNB (CB2) ferritic stainless steel by inorganic composite coatings at 650°C. <i>Corrosion Science</i> , 2020, 177, 109000.	6.6	9
85	Preparation and Oxidation Performance of a NiCoCrAlYSiHf+NiAl Composite Coating Deposited by Arc Ion Plating and Magnetron Sputtering Techniques. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 1019-1029.	2.5	7
86	Temporary enamel coatings for oxidation protection of Ti-6Al-4V at its hot working temperature of 1200°C. <i>Journal of Alloys and Compounds</i> , 2020, 815, 152295.	5.5	7
87	Effects of oxygen incorporation in low expansion Ni+CrAlYN nanocomposite coatings on the oxidation behavior. <i>Corrosion Science</i> , 2020, 167, 108550.	6.6	6
88	Effect of $\hat{\gamma}$ ' Phase Elements on Oxidation Behavior of Nanocrystalline Coatings at 1050 °C. <i>Materials</i> , 2021, 14, 202.	2.9	6
89	Synthesis of advanced aluminide intermetallic coatings by low-energy Al-ion radiation. <i>Scientific Reports</i> , 2016, 6, 26535.	3.3	5
90	Effect of Ti on the microstructure change and oxidation behavior of Ni+CrAlYHfSiN composite coatings. <i>Corrosion Science</i> , 2019, 150, 54-63.	6.6	5

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91	Effect of nitrogen on high temperature oxidation behavior of AlN-doped gradient coating. Corrosion Science, 2022, 199, 110155.	6.6	5
92	Interfacial microstructure evolution of glass-based coating on IC10 superalloy with a Ni ₃ Al bond-coat at 1050°C. Journal of the American Ceramic Society, 2017, 100, 3451-3466.	3.8	3
93	Thermal shock and sulfuric acid corrosion behavior of enamel-nano-Ni composite/enamel-nano-nickel composite coating. International Journal of Applied Glass Science, 2020, 11, 784-795.	2.0	3
94	Corrosion of the WC-12Co and enamel coatings in liquid Zn-55Al alloy at 640 °C. Corrosion Science, 2021, 188, 109559.	6.6	3
95	Improving the oxidation behavior of low expansion Ni + CrAlYNO coating systems by regulating the oxygen content. Corrosion Science, 2021, 189, 109582.	6.6	1
96	Nanocrystalline, Enamel and Composite Coatings for Superalloys. Advances in Chemical and Materials Engineering Book Series, 2018, , 160-186.	0.3	1