

Jia Sun

List of Publications by Year in descending order

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papers

770
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430874

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32
docs citations

32
times ranked

333
citing authors

#	ARTICLE	IF	CITATIONS
1	Silicide Coating Fabricated by HAPC/SAPS Combination to Protect Niobium Alloy from Oxidation. ACS Applied Materials & Interfaces, 2016, 8, 15838-15847.	8.0	74
2	Effect of filler on the oxidation protective ability of MoSi ₂ coating for Mo substrate by halide activated pack cementation. Materials and Design, 2016, 92, 602-609.	7.0	68
3	Self-healing YSZ-La-Mo-Si heterogeneous coating fabricated by plasma spraying to protect carbon/carbon composites from oxidation. Composites Part B: Engineering, 2017, 125, 181-194.	12.0	47
4	Thermal shock resistance of thermal barrier coatings for nickel-based superalloy by supersonic plasma spraying. Ceramics International, 2015, 41, 9972-9979.	4.8	37
5	Influence of siliconizing on the oxidation behavior of plasma sprayed MoSi ₂ coating for niobium based alloy. Intermetallics, 2016, 72, 9-16.	3.9	36
6	A MoSi ₂ -based composite coating by supersonic atmospheric plasma spraying to protect Nb alloy against oxidation at 1500°C. Surface and Coatings Technology, 2018, 352, 182-190.	4.8	36
7	Effect of mullite on the microstructure and oxidation behavior of thermal-sprayed MoSi ₂ coating at 1500°C. Ceramics International, 2020, 46, 10058-10066.	4.8	33
8	Ablation behavior of single and alternate multilayered ZrC-SiC coatings under oxyacetylene torch. Journal of the European Ceramic Society, 2022, 42, 830-840.	5.7	33
9	In situ synthesis of SiC nanowire porous layer on carbon/carbon composites. Journal of the American Ceramic Society, 2018, 101, 1371-1380.	3.8	30
10	Oxidation response determined by multiphase-dependent melting degree of plasma sprayed MoSi ₂ on Nb-based alloy. Journal of Alloys and Compounds, 2018, 762, 922-932.	5.5	27
11	Microstructure and oxidation behavior of plasma sprayed WSi ₂ -mullite-MoSi ₂ coating on niobium alloy at 1500°C. Surface and Coatings Technology, 2020, 400, 126210.	4.8	25
12	Effect of thermodynamically metastable components on mechanical and oxidation properties of the thermal-sprayed MoSi ₂ based composite coating. Corrosion Science, 2019, 155, 146-154.	6.6	23
13	Different oxidation protection mechanisms of HAPC silicide coating on niobium alloy over a large temperature range. Journal of Alloys and Compounds, 2019, 790, 1014-1022.	5.5	23
14	Effect of SiO ₂ barrier scale prepared by pre-oxidation on hot corrosion behavior of MoSi ₂ -based coating on Nb alloy. Corrosion Science, 2020, 176, 109051.	6.6	22
15	Multi-layered structural designs of MoSi ₂ /mullite anti-oxidation coating for SiC-coated C/C composites. Surface and Coatings Technology, 2021, 409, 126901.	4.8	22
16	A long-term ultrahigh temperature application of layered silicide coated Nb alloy in air. Applied Surface Science, 2018, 439, 1111-1118.	6.1	21
17	Phase evolution of SiOC-based ceramic nanocomposites derived from a polymethylsiloxane modified by Hf- and Ti-alkoxides. Journal of the American Ceramic Society, 2020, 103, 1436-1445.	3.8	21
18	Self-healing improvement strategy of thermally sprayed MoSi ₂ coating at 1773 K: From calculation to experiment. Corrosion Science, 2021, 189, 109599.	6.6	20

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19	Effect of microwave heating time on bonding strength and corrosion resistance of Ca-P composite layers for carbon/carbon composites. <i>Journal of Alloys and Compounds</i> , 2017, 713, 266-279.	5.5	19
20	Corrosion and thermal cycling behavior of plasma sprayed thermal barrier coatings on die steel. <i>Materials and Design</i> , 2017, 114, 537-545.	7.0	18
21	High-temperature stability and oxidation behavior of SiOC/HfO ₂ ceramic nanocomposite in air. <i>Corrosion Science</i> , 2020, 175, 108866.	6.6	18
22	The oxidation behavior of MoSi ₂ -CrSi ₂ -Si/SiC coating for C/C composites in H ₂ O-O ₂ -Ar atmosphere: Experiment and first-principle investigation. <i>Ceramics International</i> , 2017, 43, 8858-8865.	4.8	17
23	Comparison investigation of hot corrosion exposed to Na ₂ SO ₄ salt and oxidation of MoSi ₂ -based coating on Nb alloy at 1000Å°C. <i>Surface and Coatings Technology</i> , 2020, 385, 125388.	4.8	16
24	Melting index of plasma sprayed molybdenum silicide characterized by constitutions and its effect on oxidation kinetics. <i>Journal of Alloys and Compounds</i> , 2018, 766, 95-103.	5.5	15
25	Ablation behavior under oxyacetylene torch of ZrC coating modified by SiC/TaC nanocomposites. <i>Corrosion Science</i> , 2022, 205, 110423.	6.6	15
26	Oxidation behavior of thermally sprayed Mo-Si based composite: Effect of metastable phase, porosity and residual stress. <i>Journal of Alloys and Compounds</i> , 2019, 776, 712-721.	5.5	14
27	Fracture toughness of thermally sprayed MoSi ₂ composite with different melting indices. <i>Composites Part B: Engineering</i> , 2018, 150, 242-247.	12.0	13
28	Mechanical properties of the supersonic atmospheric plasma sprayed Ca P coating post-processed by a microwave-hydrothermal method. <i>Materials Science and Engineering C</i> , 2019, 95, 49-56.	7.3	9
29	Crack development behavior in thermally sprayed anti-oxidation coating under repeated thermal-oxygen coupling environment. <i>Ceramics International</i> , 2021, 47, 15328-15336.	4.8	9
30	Static water vapor corrosion behavior of MoSi ₂ /Mullite composite coating on Nb based alloy at 1500Å°C. <i>Corrosion Science</i> , 2022, 200, 110234.	6.6	6
31	Hot corrosion of SiO ₂ -Ta ₂ O ₅ binary scale on MoSi ₂ -based ceramics. <i>Corrosion Science</i> , 2021, 185, 109413.	6.6	2
32	A novel MoSi ₂ -rich coating on the SiC-Si coated C/C composites for the preparation and antioxidative properties at 1773ÅK and 1973ÅK. <i>Corrosion Science</i> , 2022, 204, 110392.	6.6	1