

Peng Song

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7390281/publications.pdf>

Version: 2024-02-01

90
papers

1,300
citations

361045

20
h-index

454577

30
g-index

91
all docs

91
docs citations

91
times ranked

643
citing authors

#	ARTICLE	IF	CITATIONS
1	Tribological performance and phase transition of MAX-phase/YSZ abradable seal coating produced by air plasma spraying. <i>Ceramics International</i> , 2022, 48, 4188-4199.	2.3	14
2	Nanoindentation creep behavior of an Fe-Cr-Mo-B-C amorphous coating via atmospheric plasma spraying. <i>Intermetallics</i> , 2022, 141, 107411.	1.8	6
3	Surface texture of substrates prepared by femtosecond laser for improving the thermal cycle life of TBCs. <i>Ceramics International</i> , 2022, 48, 5775-5786.	2.3	7
4	Test atmospheres affecting voids distribution on MCrAlY-bond coats for TBCs at 1050°C. <i>Corrosion Science</i> , 2022, 195, 109967.	3.0	10
5	Oxidation properties and microstructure of a chromium coating on zircaloy-4 fuel cladding material applied by atmospheric plasma spraying. <i>Journal of Nuclear Materials</i> , 2022, 560, 153496.	1.3	17
6	Non-isothermal crystallisation behaviour of a Cr-Fe-Ni-Co-Mo-Si amorphous coating. <i>Materials Today Communications</i> , 2022, 30, 103094.	0.9	2
7	Effect of pre-oxidation treatment on the hot corrosion behavior of pack-cemented aluminide coatings on the K438 alloy in salt mixture. <i>Corrosion Communications</i> , 2022, 5, 1-13.	2.7	1
8	The effect of bulk conversion into surface on physical properties of HfO ₂ : First principle study. <i>Materials Science in Semiconductor Processing</i> , 2022, 146, 106650.	1.9	4
9	Effects of Stepped Heating on the Initial Growth of Oxide Scales on NiCrAlHf Bond Coat Alloy under Air and Water Vapor Atmospheres. <i>Materials</i> , 2022, 15, 2914.	1.3	1
10	Influence of Gradient Index and Pores on the Properties and Internal Stress of Continuous Transition Ceramic-Metal Coating. <i>Coatings</i> , 2022, 12, 569.	1.2	3
11	Effect of Water Vapor on the Microstructure of Al ₂ O ₃ on the Free-Standing MCrAlY Alloy at 1100 °C. <i>Metals</i> , 2022, 12, 865.	1.0	1
12	Interdiffusion Behaviour of Silicon-Modified Aluminide Coating in Atmospheres Containing Water Vapour at 1050°C. <i>Oxidation of Metals</i> , 2022, 98, 179-198.	1.0	3
13	Potential thermal barrier coating materials: RE ₂ FeTaO ₇ (RE = Y, Eu, Gd, Dy) compounds. <i>Journal of Alloys and Compounds</i> , 2021, 855, 157408.	2.8	12
14	First-principle-based structural and thermodynamic parameters of Ni-Al intermetallic compounds under different pressures and temperatures. <i>Modern Physics Letters B</i> , 2021, 35, 2150124.	1.0	3
15	Solid solution mechanism and thermophysical properties of HfO ₂ -SmTaO ₄ ceramics. <i>Materials Today Communications</i> , 2021, 26, 101927.	0.9	0
16	CrO ₂ (OH) ₂ volatilization rate and oxidation behavior prediction of the NiCr coating in air-H ₂ O environment at 650 °C. <i>Corrosion Science</i> , 2021, 182, 109303.	3.0	12
17	Microstructure and oxidation behaviour of MoSi ₂ coating combined MoB diffusion barrier layer on Mo substrate at 1300°C. <i>Ceramics International</i> , 2021, 47, 10137-10146.	2.3	27
18	Influence of Pre-Oxidation on High Temperature Oxidation and Corrosion Behavior of Ni-Based Aluminide Coating in Na ₂ SO ₄ Salt at 1050°C. <i>Frontiers in Materials</i> , 2021, 8, .	1.2	1

#	ARTICLE	IF	CITATIONS
19	A Highly Stable Photodetector Based on a Lead-Free Double Perovskite Operating at Different Temperatures. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 5682-5688.	2.1	20
20	Irradiation with phosphorus ions modifies the structure and tunable band-gap of a hexagonal AlN thin film. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.	1.1	2
21	Effect of water vapor on the oxide growth in FeCrAl-based oxide dispersion-strengthened fuel cladding material at 1100 ^o C and 1200 ^o C. <i>Corrosion Science</i> , 2021, 191, 109775.	3.0	5
22	The growth mechanism of oxide scale with Pt on NiCoCrAlY coating in water vapor at 1050 ^o C. <i>Modern Physics Letters B</i> , 2021, 35, 2150111.	1.0	1
23	Thermal properties of Y _{1-x} Mg _x TaO _{4-x/2} ceramics via anion sublattice adjustment. <i>Rare Metals</i> , 2020, 39, 545-554.	3.6	22
24	Recent progress in thermal/environmental barrier coatings and their corrosion resistance. <i>Rare Metals</i> , 2020, 39, 498-512.	3.6	58
25	Microstructure and interface-adhesion of thermally sprayed continuous gradient elastic modulus FeCrAl-ceramic coatings. <i>Ceramics International</i> , 2020, 46, 5946-5959.	2.3	6
26	Effect of water vapour on morphology of the Si/Ti-rich phase at the interface between oxide layer and aluminide coating. <i>Corrosion Science</i> , 2020, 163, 108240.	3.0	20
27	Fabrication and characterization of 8YSZ ceramic based abrasion-resistant coatings by atmospheric plasma spraying. <i>Ceramics International</i> , 2020, 46, 26530-26538.	2.3	15
28	The thermophysical properties and defect chemistry of HfO ₂ -Sm ₃ TaO ₇ ceramics. <i>Journal of Materials Research</i> , 2020, 35, 2230-2238.	1.2	2
29	Investigation of oxide scale formation and internal oxidation of an Fe-based coating at 500 ^o C and 600 ^o C. <i>Surface and Coatings Technology</i> , 2020, 402, 126309.	2.2	4
30	Thermophysical properties of Yb(Ta Nb _{1-x})O ₄ ceramics with different crystal structures. <i>Ceramics International</i> , 2020, 46, 28451-28458.	2.3	8
31	High temperature mechanical and thermal properties of Ca _x Ba _{1-x} ZrO ₃ solid solutions. <i>Ceramics International</i> , 2020, 46, 17416-17422.	2.3	5
32	Thermophysical and mechanical properties of YTaO ₄ ceramic by niobium substitution tantalum. <i>Materials Letters</i> , 2020, 268, 127586.	1.3	12
33	Effect of the interface morphology and initial nanocrack on the fracture property of a ceramic reinforced plasma-sprayed coating. <i>Ceramics International</i> , 2020, 46, 24930-24939.	2.3	12
34	Effect of Pt doping on oxide scale formation on yttria-dispersion FeCrAl alloy at 1200 ^o C. <i>Corrosion Science</i> , 2020, 168, 108580.	3.0	12
35	Microstructure and thermophysical properties of CeO ₂ -doped SmTaO ₄ ceramics for thermal barrier coatings. <i>Journal of Materials Research</i> , 2020, 35, 242-251.	1.2	4
36	Non-isothermal crystallization kinetics of a Fe-Cr-Mo-B-C amorphous powder. <i>Journal of Alloys and Compounds</i> , 2020, 823, 153783.	2.8	16

#	ARTICLE	IF	CITATIONS
37	Phase transition and interface evolution of Al ₂ O ₃ /ZrO ₂ particles in plasma-sprayed coatings. <i>Ceramics International</i> , 2020, 46, 12275-12281.	2.3	9
38	Effect of platinum and pre-oxidation on the hot corrosion behavior of aluminide coating with NaCl at 1050 Å°C. <i>Materials Research Express</i> , 2020, 7, 116402.	0.8	4
39	Investigation of mechanical and thermal properties of rare earth pyrochlore oxides by first-principles calculations. <i>Journal of the American Ceramic Society</i> , 2019, 102, 2830-2840.	1.9	45
40	Enhanced thermoelectric properties of Pb-doped Cu _{1.8} S polycrystalline materials. <i>Solid State Sciences</i> , 2019, 95, 105953.	1.5	10
41	Influence of zirconia alloying on the thermophysical and mechanical properties of YTaO ₄ ceramics. <i>Ceramics International</i> , 2019, 45, 24894-24899.	2.3	13
42	Effect of in-situ oxidation on the nanomechanical evolution of Fe-base coating with ceramic particles produced by internal rotating plasma spraying. <i>Ceramics International</i> , 2019, 45, 19856-19863.	2.3	8
43	Cyclic oxidation behaviour of Pt-doped aluminide coating on DZ125 containing Hf. <i>Materials Research Express</i> , 2019, 6, 126536.	0.8	3
44	Plastic metallic-barrier layer for crack propagation within plasma-sprayed Cu/ceramic coatings. <i>Surface and Coatings Technology</i> , 2019, 360, 259-268.	2.2	24
45	Improvement in the mechanical properties of plasma spray ceramic-Cu/Ti ₃ AlC ₂ gradient coatings by heat treatment. <i>Ceramics International</i> , 2019, 45, 22452-22463.	2.3	14
46	Diffusion characteristics and structural stability of Pt modified \hat{I}^2 -NiAl/ \hat{I}^3 Å ² -Ni ₃ Al within NiCoCrAl alloy at high temperature. <i>Applied Surface Science</i> , 2019, 476, 1096-1107.	3.1	18
47	Effect of partial crystallization of an amorphous layer on the mechanical properties of ceramic/metal-glass coating by thermal spraying. <i>Ceramics International</i> , 2019, 45, 18803-18813.	2.3	8
48	Microstructure and wear performance of arc-sprayed Al/316L stainless-steel composite coating. <i>Surface and Coatings Technology</i> , 2019, 374, 189-200.	2.2	26
49	Analysis of structure and microhardness of Al ₂ O ₃ -40Å wt.% TiO ₂ /NiCoCrAl gradient coating with in-situ needle-like phase reinforcement after high-temperature treatment. <i>Ceramics International</i> , 2019, 45, 14546-14554.	2.3	12
50	Thermo-mechanical properties of fluorite Yb ₃ TaO ₇ and Yb ₃ NbO ₇ ceramics with glass-like thermal conductivity. <i>Journal of Alloys and Compounds</i> , 2019, 788, 1231-1239.	2.8	34
51	Effect of water vapor on the failure behavior of thermal barrier coating with Hf-doped NiCoCrAlY bond coating. <i>Journal of Materials Research</i> , 2019, 34, 2653-2663.	1.2	10
52	Influence of the combined-effect of NaCl and Na ₂ SO ₄ on the hot corrosion behaviour of aluminide coating on Ni-based alloys. <i>Journal of Alloys and Compounds</i> , 2019, 790, 228-239.	2.8	33
53	Alumina growth behaviour on the surface-modified NiCoCrAl alloy by Pt and Hf at high temperature. <i>Applied Surface Science</i> , 2019, 479, 1178-1191.	3.1	38
54	Microstructure and fracture toughness of in-situ nanocomposite coating by thermal spraying of Ti ₃ AlC ₂ /Cu powder. <i>Ceramics International</i> , 2019, 45, 13119-13126.	2.3	27

#	ARTICLE	IF	CITATIONS
55	Effect of external pressure on γ -NiAl phase transformation of Co-base alloy at 1323 K. Materials Research Express, 2019, 6, 1265b2.	0.8	4
56	Fracture behaviour of ceramic-metallic glass gradient transition coating. Ceramics International, 2019, 45, 5566-5576.	2.3	35
57	Thermophysical properties of rare earth barium aluminates. Journal of the American Ceramic Society, 2018, 101, 2718-2723.	1.9	12
58	Influence of water vapour on the HfO ₂ distribution within the oxide layer on CoNiCrAlHf alloys. Journal of Alloys and Compounds, 2018, 739, 690-699.	2.8	19
59	Influence of heat treatment on alternant-layer structure and mechanical properties of Al ₂ O ₃ -TiO ₂ -MgO coatings. Ceramics International, 2018, 44, 13727-13735.	2.3	15
60	Influence of ZrO ₂ alloying effect on the thermophysical properties of fluorite-type Eu ₃ TaO ₇ ceramics. Scripta Materialia, 2018, 152, 117-121.	2.6	47
61	Evolution of in-situ pores and high-temperature thermal-barrier performance of Al-Si coating on NiCoCrAl alloy. Surface and Coatings Technology, 2018, 344, 489-498.	2.2	8
62	Heat-induced interface-coupling behaviour of thermally sprayed Cu/ceramic coatings. Ceramics International, 2018, 44, 11918-11922.	2.3	15
63	Effect of water vapor on evolution of a thick Pt-layer modified oxide on the NiCoCrAl alloy at high temperature. Materials Research Express, 2018, 5, 036514.	0.8	5
64	Destructive Effect of Water Vapour on an In Situ Diffusion Barrier Layer within an Aluminide Coating on IN738 Alloy. Coatings, 2018, 8, 332.	1.2	6
65	Enhanced interface adhesion by in-situ oxidation within metal-ceramic coatings. Ceramics International, 2018, 44, 23273-23278.	2.3	19
66	Potential thermal barrier coating materials: RE ₃ NbO ₇ (RE=La, Nd, Sm, Eu, Gd, Dy) ceramics. Journal of the American Ceramic Society, 2018, 101, 4503-4508.	1.9	66
67	Synthesis, crystal structure and thermophysical properties of (La _{1-x} Eu _x) ₃ TaO ₇ ceramics. Ceramics International, 2018, 44, 16273-16281.	2.3	19
68	Effect of Titanium Addition on Alumina Growth Mechanism on Yttria-Containing FeCrAl-Base Alloy. Oxidation of Metals, 2018, 90, 671-690.	1.0	35
69	Effect of YSZ-dopant on microstructure and hardness property of the Al ₂ O ₃ -40%TiO ₂ plasma sprayed coating. Materials Research Express, 2018, 5, 086504.	0.8	5
70	Fabrication and characterization of Ni-decorated h-BN powders with ChCl-EG ionic liquid as addition by electroless deposition. Royal Society Open Science, 2018, 5, 180146.	1.1	5
71	Evolution of cracks within an Al ₂ O ₃ -40%wt%TiO ₂ /NiCoCrAl gradient coating. Ceramics International, 2018, 44, 20798-20807.	2.3	30
72	Synthesis and thermophysical properties of ferroelastic SmNb _{1-x} Ta _x O ₄ ceramics. Ceramics International, 2018, 44, 13999-14006.	2.3	17

#	ARTICLE	IF	CITATIONS
73	Effects of the metal-ceramic transition region on the mechanical properties and crack propagation behavior of an Al ₂ O ₃ -40 wt% TiO ₂ coating. Surface and Coatings Technology, 2017, 321, 200-212.	2.2	30
74	Alternant phase distribution and wear mechanical properties of an Al ₂ O ₃ -40 wt%TiO ₂ composite coating. Ceramics International, 2017, 43, 7295-7304.	2.3	35
75	Influence of microstructure on hardness of plasma sprayed Al ₂ O ₃ -TiO ₂ -MgO coatings with interface diffusion by heat treatment. Materials Research Express, 2017, 4, 126402.	0.8	12
76	Oxidation behaviour of the nickel-based superalloy DZ125 hot-dipped with Al coatings doped by Si. Corrosion Science, 2016, 112, 170-179.	3.0	37
77	Effect of the Porosity on Thermal Stress within TBCs Using Finite Element Method. Materials Science Forum, 2016, 849, 689-694.	0.3	1
78	Alumina Growth and Interface Strengthening Mechanisms of Pt on the Surface of Bond Coats in EB-PVD TBC System Based on First-Principles. Materials Science Forum, 2016, 850, 253-258.	0.3	1
79	Effect of O ₂ on reduction of NO ₂ with CH ₄ over gallium-modified ZnAl ₂ O ₄ spinel-oxide catalyst by first principle analysis. Applied Surface Science, 2015, 349, 138-146.	3.1	9
80	First-principles calculations of NO and NO ₂ adsorption on a spinel ZnGaAlO ₄ (100) surface. Physica Scripta, 2014, 89, 075401.	1.2	7
81	Effect of oxygen content in NiCoCrAlY bondcoat on the lifetimes of EB-PVD and APS thermal barrier coatings. Surface and Coatings Technology, 2013, 221, 207-213.	2.2	63
82	Effect of Polishing Treatment on Rumpling of Oxide Scales on NiPtAl Coatings with Different Pt-Content. Advanced Materials Research, 2013, 662, 383-386.	0.3	1
83	Effect of atmosphere composition on the oxidation behavior of MCrAlY coatings. Materials and Corrosion - Werkstoffe Und Korrosion, 2011, 62, 699-705.	0.8	21
84	Effect of exposure conditions on the oxidation of MCrAlY-bondcoats and lifetime of thermal barrier coatings. Surface and Coatings Technology, 2009, 204, 820-823.	2.2	31
85	Effect of Pt Content on TGO Growth in EB-PVD TBC Systems with NiPtAl Bondcoats. Advanced Materials Research, 0, 690-693, 2051-2054.	0.3	0
86	Effect of Atmosphere Composition on Lifetime and Oxidation Behavior of EB-PVD TBC with NiPtAl Bondcoats. Advanced Materials Research, 0, 652-654, 1822-1825.	0.3	0
87	Effect of Thermal Cycling on Lifetime and Failure Mechanism of EB-PVD TBC with NiCoCrAlYzr Bondcoats. Advanced Materials Research, 0, 652-654, 1826-1829.	0.3	3
88	Influence of Impact Damage on the Thermal Stress Distribution within the EB-PVD Thermal Barrier Coatings. Materials Science Forum, 0, 849, 683-688.	0.3	1
89	Difference oxidation behaviors of Ni ₈ Al and Ni ₂₅ Cr coatings in air with water vapor at 650°C. Modern Physics Letters B, 0, , 2150274.	1.0	0
90	Beneficial effects of flame pre-oxidation on the oxidation behavior of NiCoCrAlHf alloy at 1050°C. Journal of Materials Research, 0, , .	1.2	0