

Xiao Huang

List of Publications by Year in descending order

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citations

117625

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125
docs citations

125
times ranked

21408
citing authors

#	ARTICLE	IF	CITATIONS
1	Sub- and Supercritical Water Gasification of Rice Husk: Parametric Optimization Using the I-Optimality Criterion. ACS Omega, 2021, 6, 12480-12499.	3.5	11
2	Coordinated Heat and Feed Printing Strategy for Wire and Arc Additive Manufacturing of Metal-Cored Wires. Journal of Materials Engineering and Performance, 2021, 30, 8841.	2.5	0
3	Fracture performance and crack growth prediction of SPS TBCs in isothermal experiments by crack numbering density. Ceramics International, 2020, 46, 2682-2692.	4.8	8
4	Oxidation behaviour of alloy S16 in superheated steam and supercritical water. Materials at High Temperatures, 2020, 37, 1-10.	1.0	3
5	Sintering resistance of suspension plasma sprayed 7YSZ TBC under isothermal and cyclic oxidation. Journal of the European Ceramic Society, 2020, 40, 2030-2041.	5.7	18
6	Microstructure and Oxidation Behavior of Narrow Gap Brazing and Wide Gap Brazing Joints With Boron/Silicon-Free Nickel Base Braze Alloys. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	1.1	0
7	Characterization of alloy 3033 after exposure to superheated steam at 800 $\hat{\text{A}}$ $^{\circ}\text{C}$. Materials at High Temperatures, 2019, 36, 117-124.	1.0	0
8	Performance of Aluminide and Cr-Modified Aluminide Pack Cementation-Coated Stainless Steel 304 in Supercritical Water at 700 $\hat{\text{A}}$ $^{\circ}\text{C}$. Journal of Nuclear Engineering and Radiation Science, 2019, 5, .	0.4	3
9	Al depletion and elemental redistribution in PtAl coated CMSX-4 and IN738LC after high-temperature exposure. Materials at High Temperatures, 2019, 36, 499-510.	1.0	6
10	Correlation between crystal structure and mechanical performance of Cr-implanted 300M high-strength steel using X-ray diffraction method. Journal of Iron and Steel Research International, 2019, 26, 1106-1116.	2.8	5
11	Laser $\hat{\text{A}}$ Based Additive Manufacturing Technologies for Aerospace Applications. Advanced Engineering Materials, 2019, 21, 1900617.	3.5	87
12	Effect of wire and arc additive manufacturing (WAAM) process parameters on bead geometry and microstructure. Additive Manufacturing, 2019, 26, 138-146.	3.0	147
13	Evaluation of oxidation behavior of two potential coating alloys T14 and T19 for superheated steam and supercritical water power plant application. Surface and Coatings Technology, 2019, 370, 69-81.	4.8	3
14	Phase Transformation and Lattice Parameter Changes of Non-trivalent Rare Earth-Doped YSZ as a Function of Temperature. Journal of Materials Engineering and Performance, 2018, 27, 2263-2270.	2.5	14
15	Characterization of Alloy 214 After Exposure to Superheated Steam at 800 $\hat{\text{A}}$ $^{\circ}\text{C}$. Journal of Nuclear Engineering and Radiation Science, 2018, 4, .	0.4	0
16	Corrosion Behaviour of Bare and NiCrAlY Coated Alloy 214 in Supercritical Water at 700 $\hat{\text{A}}$ $^{\circ}\text{C}$. Journal of Nuclear Engineering and Radiation Science, 2018, 4, .	0.4	5
17	Microstructure Study of NiCrAlY and FeCrAlY Exposed to Superheated Steam at 800 $\hat{\text{A}}$ $^{\circ}\text{C}$. Journal of Nuclear Engineering and Radiation Science, 2018, 4, .	0.4	1
18	Oxidation Behaviour of Alloys 800H, 3033 and 304 in High-Temperature Supercritical Water. Oxidation of Metals, 2018, 89, 151-163.	2.1	17

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19	Assessing the Feasibility of Micro-Plasma Technology for Additive Manufacturing. , 2018, , .		0
20	Isothermal Oxidation of RenÃ© N5 at 1150Å°C. , 2018, , .		3
21	Application and anti-bacterial performance evaluation of liquid glass coating. International Journal of Materials and Product Technology, 2018, 56, 326.	0.2	0
22	Nanoâ€Hydroxyapatite and TiO₂ Bioactivated Polymer for Implant Applications. Advanced Engineering Materials, 2017, 19, 1600727.	3.5	4
23	Effect of Steam Pressure on the Oxidation Behaviour of Alloy 625. Minerals, Metals and Materials Series, 2017, , 329-341.	0.4	1
24	Corrosion Behaviour of Alloy 800H in Low Density Superheated Steam. ISIJ International, 2016, 56, 1067-1075.	1.4	10
25	Performance of Chemical Vapor Deposition and Plasma Spray-Coated Stainless Steel 310 in Supercritical Water. Journal of Nuclear Engineering and Radiation Science, 2016, 2, .	0.4	6
26	Isothermal and Cyclic Oxidation Performance of Vertically Cracked and Columnar Thermal Barrier Coating Structures Produced Using Axial Suspension Plasma Spraying Process. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	6
27	High temperature performance of mullite whisker-reinforced ZTA. Journal of Composite Materials, 2016, 50, 3719-3729.	2.4	8
28	Solid Particle Erosion Behaviors of Carbon-Fiber Epoxy Composite and Pure Titanium. Journal of Materials Engineering and Performance, 2016, 25, 290-296.	2.5	20
29	Mechanical Properties of Plasmaâ€Sprayed Mulliteâ€Reinforced Titaniaâ€Bioglass Composite. International Journal of Applied Ceramic Technology, 2016, 13, 1074-1083.	2.1	1
30	Recent Trends in Newly Developed Plasma-Sprayed and Sintered Coatings for Implant Applications. Journal of Thermal Spray Technology, 2016, 25, 1088-1110.	3.1	6
31	Supercritical Oxidation of Boiler Tube Materials. Journal of Nuclear Engineering and Radiation Science, 2016, 2, .	0.4	1
32	Developing Corrosion Prevention Coating Solutions for the Canadian SCWR Concept. Jom, 2016, 68, 480-484.	1.9	8
33	Isothermal and Cyclic Oxidation Performance of Vertically Cracked and Columnar TBC Structures Produced Using ÅSPS Process. , 2015, , .		0
34	Stabilization of 4H hexagonal phase in gold nanoribbons. Nature Communications, 2015, 6, 7684.	12.8	215
35	Surface modification-induced phase transformation of hexagonal close-packed gold square sheets. Nature Communications, 2015, 6, 6571.	12.8	195
36	Corrosion Behaviour 310 Stainless Steel in Superheated Steam. Oxidation of Metals, 2015, 84, 621-631.	2.1	11

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37	Isothermal Oxidation Behavior of VC and Columnar Structured Thermal Barrier Coatings Deposited by Suspension Plasma Spray Technology. <i>Journal of Thermal Spray Technology</i> , 2015, 24, 1060-1070.	3.1	13
38	Mechanical properties, sliding wear and solid particle erosion behaviors of plasma enhanced magnetron sputtering CrSiCN coating systems. <i>Wear</i> , 2015, 324-325, 27-35.	3.1	49
39	Thin metal nanostructures: synthesis, properties and applications. <i>Chemical Science</i> , 2015, 6, 95-111.	7.4	198
40	Wide Gap Brazing of IN 738 With Boron Free Ni-Co-Zr-Hf-Cr-Ti-Al Braze Alloy. , 2014, , .		0
41	Mullite Whisker Reinforced Zirconia Toughened Alumina for High Temperature Applications. , 2014, , .		0
42	A Study of Pack Aluminizing Process for NiCrAlY Coatings Using Response Surface Methodology. <i>Journal of Materials Engineering and Performance</i> , 2014, 23, 83-91.	2.5	9
43	25th Anniversary Article: Hybrid Nanostructures Based on Two-Dimensional Nanomaterials. <i>Advanced Materials</i> , 2014, 26, 2185-2204.	21.0	579
44	Characterization of Ni-20Cr-5Al model alloy in supercritical water. <i>Journal of Nuclear Materials</i> , 2014, 445, 298-307.	2.7	20
45	Growth of noble metal nanoparticles on single-layer TiS ₂ and TaS ₂ nanosheets for hydrogen evolution reaction. <i>Energy and Environmental Science</i> , 2014, 7, 797-803.	30.8	323
46	Effects of substrate material and TBC structure on the cyclic oxidation resistance of TBC systems. <i>Surface and Coatings Technology</i> , 2014, 258, 49-61.	4.8	11
47	Microstructure Characterization and Wear Test of Plasma Sprayed and Sintered CP-Ti Coatings. <i>Advanced Engineering Materials</i> , 2014, 16, 45-51.	3.5	0
48	Coating Two-Dimensional Nanomaterials with Metal-Organic Frameworks. <i>ACS Nano</i> , 2014, 8, 8695-8701.	14.6	168
49	Gasification of Bio-Waste and Biomass Products Through Exposure to High Density and Low Density Supercritical Water. , 2014, , .		0
50	Development and Oxidation Test of Metal Mesh Reinforced Ceramic Composite Material. , 2014, , .		0
51	Microstructure, bioactivity and wear resistance of sintered composite Co-Cr-Mo/Bioglass® for medical implant applications. <i>International Journal of Surface Science and Engineering</i> , 2014, 8, 264.	0.4	4
52	Ni ₃ S ₂ nanorods/Ni foam composite electrode with low overpotential for electrocatalytic oxygen evolution. <i>Energy and Environmental Science</i> , 2013, 6, 2921.	30.8	939
53	Development of the Process Index for NiCrAlY Coatings with the Mettech Axial III,¢ System. <i>Journal of Materials Engineering and Performance</i> , 2013, 22, 713-722.	2.5	6
54	Metal dichalcogenide nanosheets: preparation, properties and applications. <i>Chemical Society Reviews</i> , 2013, 42, 1934.	38.1	1,809

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55	Solution-phase epitaxial growth of noble metal nanostructures on dispersible single-layer molybdenum disulfide nanosheets. <i>Nature Communications</i> , 2013, 4, 1444.	12.8	756
56	Electrochemical Behaviours of Titanium Nitride (TiN) and Chromium Nitride (CrN) Based PVD Coating Systems. , 2013, , .		4
57	Tribological Behaviors of Titanium Nitride- and Chromium-Nitride-Based Physical Vapor Deposition Coating Systems. <i>Journal of Engineering for Gas Turbines and Power</i> , 2012, 134, .	1.1	7
58	Life Prediction and Metallographical Examination of SAGBO Cracking in RB211 High Pressure Turbine Blades. , 2012, , .		1
59	Tribological Behaviours of Titanium Nitride and Chromium Nitride Based PVD Coating Systems. , 2012, , .		1
60	Metal Frame Reinforced Ceramic Matrix Composite for High Temperature Applications. , 2012, , .		0
61	Reducing Thermal Conductivity of Ceramic Materials Through Alloying. , 2012, , .		0
62	Calorimetric analysis of dysprosia and dysprosia-doped zirconia ceramics. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012, 110, 1061-1067.	3.6	1
63	Graphene-Based Electrodes. <i>Advanced Materials</i> , 2012, 24, 5979-6004.	21.0	829
64	Wide Gap Braze Repair of Gas Turbine Blades and Vanes—A Review. <i>Journal of Engineering for Gas Turbines and Power</i> , 2012, 134, .	1.1	51
65	Erosion Resistance of Titania Co-Doped Yttria Stabilized Zirconia. , 2012, , .		0
66	Layered Nanomaterials: Fabrication of Single- and Multilayer MoS ₂ Film-Based Field-Effect Transistors for Sensing NO at Room Temperature (Small 1/2012). <i>Small</i> , 2012, 8, 2-2.	10.0	4
67	Graphene-based composites. <i>Chemical Society Reviews</i> , 2012, 41, 666-686.	38.1	3,513
68	Gold Coating of Silver Nanoprisms. <i>Advanced Functional Materials</i> , 2012, 22, 849-854.	14.9	116
69	Graphene Oxide-Templated Synthesis of Ultrathin or Tadpole-Shaped Au Nanowires with Alternating <i>hcp</i> and <i>fcc</i> Domains. <i>Advanced Materials</i> , 2012, 24, 979-983.	21.0	135
70	Assembly of Graphene Oxide and Au _{0.7} Ag _{0.3} Alloy Nanoparticles on SiO ₂ : A New Raman Substrate with Ultrahigh Signal-to-Background Ratio. <i>Journal of Physical Chemistry C</i> , 2011, 115, 24080-24084.	3.1	36
71	Synthesis of hexagonal close-packed gold nanostructures. <i>Nature Communications</i> , 2011, 2, 292.	12.8	553
72	Metal-layer-assisted coalescence of Au nanoparticles and its effect on diameter control in vapor-liquid-solid growth of oxide nanowires. <i>Physical Review B</i> , 2011, 83, .	3.2	31

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73	Transient Oxide Formation on APS NiCrAlY After Oxidation Heat Treatment. Journal of Thermal Spray Technology, 2011, 20, 621-629.	3.1	16
74	Graphene-Based Materials: Synthesis, Characterization, Properties, and Applications. Small, 2011, 7, 1876-1902.	10.0	2,239
75	Synthesis of Gold Square-like Plates from Ultrathin Gold Square Sheets: The Evolution of Structure Phase and Shape. Angewandte Chemie - International Edition, 2011, 50, 12245-12248.	13.8	121
76	Investigation of Stress Assisted Grain Boundary Oxidation Cracking in MAR-M002 High Pressure Turbine Blades. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	4
77	Fatigue Properties of Narrow and Wide Gap Braze Repaired Joints. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	6
78	Fatigue Properties of Narrow and Wide Gap Braze Repaired Joints. , 2010, , .		1
79	Investigation of Stress Assisted Grain Boundary Oxidation (SAGBO) Cracking in Mar-M002 High Pressure Turbine Blades. , 2010, , .		1
80	Microstructure and tribological properties of CrN and CrSiCN coatings. Surface and Coatings Technology, 2010, 205, 182-188.	4.8	58
81	Characterization of transient oxide formation on CoNiCrAlY after heat treatment in vacuum and air. Surface and Coatings Technology, 2010, 205, 647-657.	4.8	40
82	Microstructure and Corrosion Behavior of CrN and CrSiCN Coatings. Journal of Materials Engineering and Performance, 2010, 19, 721-727.	2.5	25
83	On the thermodynamics and microstructure of variably cooled and co-doped Y2O3-ZrO2 for application to thermal barrier coatings. Surface and Coatings Technology, 2010, 205, 1843-1849.	4.8	5
84	Reduced Graphene Oxide-Templated Photochemical Synthesis and in situ Assembly of Au Nanodots to Orderly Patterned Au Nanodot Chains. Small, 2010, 6, 513-516.	10.0	202
85	TGO Evolution and Coating Property Changes for EB-PVD TBC Coatings Under Cyclic Oxidation Condition. , 2010, , .		1
86	A BRIEF REVIEW ON GRAPHENE-NANOPARTICLE COMPOSITES. Cosmos, 2010, 06, 159-166.	0.4	24
87	Effect of Tungsten Addition on the Nucleation of Borides in Wide Gap Brazed Joint. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	12
88	Photochemically Controlled Synthesis of Anisotropic Au Nanostructures: Platelet-like Au Nanorods and Six-Star Au Nanoparticles. ACS Nano, 2010, 4, 6196-6202.	14.6	82
89	Electrochemical Deposition of Semiconductor Oxides on Reduced Graphene Oxide-Based Flexible, Transparent, and Conductive Electrodes. Journal of Physical Chemistry C, 2010, 114, 11816-11821.	3.1	159
90	Superalloys. , 2010, , .		117

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91	Effect of Co-Doping on Microstructure, Thermal and Mechanical Properties of Ternary Zirconia-Based Thermal Barrier Coating Materials. , 2009, , .		0
92	Wide Gap Braze Repair Using Vertically Laminated Repair Scheme. Journal of Engineering for Gas Turbines and Power, 2009, 131, .	1.1	12
93	Characterization of porous bi-modal Ni structures. Journal of Porous Materials, 2009, 16, 165-173.	2.6	14
94	Effect of Microstructure on the Solid Particle Erosion Properties of Ni Plating. Journal of Materials Engineering and Performance, 2009, 18, 305-311.	2.5	5
95	Experimental study of phase transformation and specific heat of ternary zirconia-based oxides using differential scanning calorimetry. Journal of Alloys and Compounds, 2009, 488, 469-478.	5.5	6
96	High Temperature Radiation Heat Transfer Performance of Thermal Barrier Coatings With Multiple Layered Structures. Journal of Engineering for Gas Turbines and Power, 2009, 131, .	1.1	8
97	Effect of Tungsten Addition on the Nucleation of Borides in Wide Gap Brazed Joint. , 2009, , .		1
98	Design and fabrication of hybrid bi-modal wick structure for heat pipe application. Journal of Porous Materials, 2008, 15, 635-642.	2.6	54
99	Microstructure and phase transformation of zirconia-based ternary oxides for thermal barrier coating applications. Journal of Materials Science, 2008, 43, 2631-2641.	3.7	36
100	Experimental study of the thermal conductivity of metal oxides co-doped yttria stabilized zirconia. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 149, 63-72.	3.5	27
101	Development of Composite Wicks for Heat Pipe Performance Enhancement. Heat Transfer Engineering, 2008, 29, 873-884.	1.9	49
102	Wide Gap Braze Repair Using Vertically Laminated Repair Scheme. , 2008, , .		1
103	Brazing and Wide Gap Repair of X-40 Using Ni-Base Alloys. Journal of Engineering for Gas Turbines and Power, 2008, 130, .	1.1	10
104	High Temperature Radiation Heat Transfer Performance of Thermal Barrier Coatings With Multiple Layered Structures. , 2008, , .		0
105	Novel Porous Hydroxyapatite Prepared by Combining H ₂ O ₂ Foaming with PU Sponge and Modified with PLGA and Bioactive Glass. Journal of Biomaterials Applications, 2007, 21, 351-374.	2.4	57
106	Design and computational analysis of highly reflective multiple layered thermal barrier coating structure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 460-461, 101-110.	5.6	10
107	Effect of Ruthenium, Rhenium and Yttria Additions on the Microstructure of Wide Gap Brazing of IN738. , 2007, , .		5
108	Design and modeling of multiple layered TBC system with high reflectance. Journal of Materials Science, 2006, 41, 6245-6255.	3.7	18

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109	Influence of wick characteristics on heat pipe performance. International Journal of Energy Research, 2006, 30, 489-499.	4.5	39
110	Examination of a Grit-Blasting Process for Thermal Spraying Using Statistical Methods. Journal of Thermal Spray Technology, 2005, 14, 471-479.	3.1	34
111	Study on Composition-Induced Microstructural Variation in the Interface Between Co-Based Hardfacing Alloys and IN738 Ni-Based Superalloy. Journal of Materials Engineering and Performance, 2004, 13, 158-166.	2.5	10
112	Effect of Grain Size on the Weldability of Cast Alloy 718. Materials and Manufacturing Processes, 2004, 19, 285-311.	4.7	18
113	Latest Advancements in Thermal Barrier Coatings. Canadian Aeronautics and Space Journal, 2004, 50, 107-114.	0.1	2
114	The effect of grain boundary segregation of boron in cast alloy 718 on HAZ microfissuring – A SIMS analysis. Acta Materialia, 1997, 45, 3095-3107.	7.9	91
115	Effect of homogenization heat treatment on the microstructure and heat-affected zone microfissuring in welded cast alloy 718. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 785-790.	2.2	70
116	EFFECT OF WATER OR STEAM PRESSURE ON THE OXIDATION BEHAVIOUR OF ALLOY 625 AND A286 AT 625 °C. CNL Nuclear Review, 0, , 1-11.	0.6	4
117	Catalytic supercritical water gasification of biomass waste using iron-doped alkaline earth catalysts. Biomass Conversion and Biorefinery, 0, , .	4.6	1