

Zhi-Gang Yang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2003941/publications.pdf>

Version: 2024-02-01

79
papers

1,234
citations

448610

19
h-index

488211

31
g-index

79
all docs

79
docs citations

79
times ranked

1089
citing authors

#	ARTICLE	IF	CITATIONS
1	Temperature dependence of carbon deposits within oxide scale on CrMoV steel in atmospheric and supercritical CO ₂ . <i>Corrosion Science</i> , 2022, 195, 109979.	3.0	2
2	Corrosion Behavior of Multiphase Bainitic Rail Steels. <i>Metals</i> , 2022, 12, 694.	1.0	5
3	Real-Time Quality Monitoring of Laser Cladding Process on Rail Steel by an Infrared Camera. <i>Metals</i> , 2022, 12, 825.	1.0	5
4	Spalling resistance of thermally grown oxide based on NiCoCrAlY(Ti) with different oxide peg sizes. <i>Rare Metals</i> , 2021, 40, 663-670.	3.6	5
5	Effect of thermal cycles on microstructure of reduced activation steel fabricated using laser melting deposition. <i>Journal of Iron and Steel Research International</i> , 2021, 28, 316-326.	1.4	9
6	Characteristics of oxide pegs in Ti- and Y-doped CoNiCrAl alloys at 1150°C. <i>Rare Metals</i> , 2021, 40, 2059-2064.	3.6	9
7	Experimental and theoretical analysis of equilibrium segregation and radiation-induced segregation of Cr at grain boundaries in a reduced activation ferritic/martensitic (RAFM) steel. <i>Journal of Iron and Steel Research International</i> , 2021, 28, 445-452.	1.4	2
8	Multi-Year NDVI Values as Indicator of the Relationship between Spatiotemporal Vegetation Dynamics and Environmental Factors in the Qaidam Basin, China. <i>Remote Sensing</i> , 2021, 13, 1240.	1.8	18
9	On the Decarburization of Surface Pearlite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 3198.	1.1	0
10	Phase-Field Modeling of Hydrogen Diffusion and Trapping in Steels. <i>Acta Metallurgica Sinica (English)</i> 15(7):1070-1077	1.5	7
11	Unraveling the effects of Nb interface segregation on ferrite transformation kinetics in low carbon steels. <i>Acta Materialia</i> , 2021, 215, 117081.	3.8	25
12	Effect of CO ₂ gas pressure on composition, growth rate, and structure of duplex oxide formed on 9Cr steel at 550 °C. <i>Corrosion Science</i> , 2020, 163, 108252.	3.0	13
13	Understanding microstructure-evolution-dependent fracture behaviors in pearlitic steels. <i>Journal of Iron and Steel Research International</i> , 2020, 27, 334-341.	1.4	2
14	Carbon depositions within the oxide scale and its effect on the oxidation behavior of low alloy steel in low (0.1 MPa), sub-(5 MPa) and supercritical (10 MPa) CO ₂ at 550 °C. <i>Corrosion Science</i> , 2020, 177, 108950.	3.0	12
15	First-Principles Calculated Structures and Carbon Binding Energies of Tilt Grain Boundaries in Corundum Structured Metal Oxides. <i>Oxidation of Metals</i> , 2020, 94, 37-49.	1.0	0
16	Chemical boundary engineering: A new route toward lean, ultrastrong yet ductile steels. <i>Science Advances</i> , 2020, 6, eaay1430.	4.7	120
17	Microstructural Instability and Precipitation Behaviors of Intermetallic Phases in a Nb-Containing CoNi-Based Superalloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 2495-2508.	1.1	3
18	Kinetic transitions and Mn partitioning during austenite growth from a mixture of partitioned cementite and ferrite: Role of heating rate. <i>Journal of Materials Science and Technology</i> , 2020, 49, 70-80.	5.6	31

#	ARTICLE	IF	CITATIONS
19	A New Kinetic Mode During the Austenite-to-Ferrite Transformation in Fe-Mn and Fe-Mn-Mo Alloys. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 975-980.	1.5	3
20	Hot roll bonding between commercially pure titanium and high-strength low-alloy steel using Fe interlayer. <i>Journal of Iron and Steel Research International</i> , 2019, 26, 1126-1136.	1.4	21
21	Oxidation behavior and lifetime prediction of three commercial alloys used in power plants at 550°C in CO ₂ environment. <i>Journal of Iron and Steel Research International</i> , 2019, 26, 898-908.	1.4	8
22	Coordination of Pre-oxidation Time and Temperature for a Better Corrosion Resistance to CO ₂ at 550°C. <i>Oxidation of Metals</i> , 2019, 91, 657-675.	1.0	4
23	Comparative cyclic oxidation behaviour and effect of oxides on hardness of wear resistance coating alloys T-401 and T-900. <i>Journal of Iron and Steel Research International</i> , 2019, 26, 1069-1079.	1.4	3
24	Comparison of Microstructural Evolution of Oxides Formed on F91 Martensitic Steel Upon Breakaway Oxidation at 700°C in Air and CO ₂ . <i>Oxidation of Metals</i> , 2019, 91, 463-482.	1.0	1
25	Abnormal Anisotropic Dilatation During Bainitic Transformation of Ausformed Austenite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 540-546.	1.1	10
26	Crystallographic analysis of lath martensite in a 13Cr-5Ni steel by electron backscattering diffraction. <i>Journal of Iron and Steel Research International</i> , 2018, 25, 213-220.	1.4	2
27	Pre-oxidation Effect on Oxidation Behavior of F91 in Carbon Dioxide at 550°C. <i>Oxidation of Metals</i> , 2018, 90, 317-335.	1.0	8
28	Microstructure, precipitation and mechanical properties of a titanium-tungsten alloyed hot rolled high strength steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 718, 56-63.	2.6	7
29	Carbide precipitation and element distribution in high Co-Ni secondary hardening steel. <i>Journal of Iron and Steel Research International</i> , 2018, 25, 340-346.	1.4	15
30	High-Temperature Oxidation Behavior of CrMoV, F91 and Mar-M247 Superalloys Exposed to Laboratory Air at 550°C. <i>Oxidation of Metals</i> , 2018, 90, 401-419.	1.0	5
31	Decelerated Coarsening of (Ti, Mo)C Particles with a Core-Shell Structure in Austenite of a Ti-Mo-Bearing Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 1455-1459.	1.1	16
32	Solubility and Anisotropic Migration Behaviors of Helium in bcc Iron Under Strain. <i>Acta Metallurgica Sinica (English Letters)</i> , 2018, 31, 199-207.	1.5	2
33	Interlayer engineering for titanium clad steel by hot roll bonding. <i>Journal of Iron and Steel Research International</i> , 2018, 25, 739-745.	1.4	21
34	Effects of Ni on austenite stability and fracture toughness in high Co-Ni secondary hardening steel. <i>Journal of Iron and Steel Research International</i> , 2017, 24, 177-183.	1.4	11
35	A Comparison of Fourier Spectral Iterative Perturbation Method and Finite Element Method in Solving Phase-Field Equilibrium Equations. <i>Communications in Computational Physics</i> , 2017, 21, 1325-1349.	0.7	16
36	TEM and HRTEM study of oxide particles in an Al-alloyed high-Cr oxide dispersion strengthened ferritic steel with Hf addition. <i>Journal of Nuclear Materials</i> , 2017, 485, 189-201.	1.3	38

#	ARTICLE	IF	CITATIONS
37	Energy for the interface system of (Nb, Mo)C ₃ -Fe. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	10
38	Diffusion mechanism in molten salt baths during the production of carbide coatings via thermal reactive diffusion. International Journal of Minerals, Metallurgy and Materials, 2017, 24, 1448-1458.	2.4	13
39	Prediction of Ar ₃ during Very Slow Cooling in Low Alloy Steels. ISIJ International, 2016, 56, 678-684.	0.6	2
40	Reversed Austenite Growth Behavior of a 13%Cr-5%Ni Stainless Steel during Intercritical Annealing. ISIJ International, 2016, 56, 148-153.	0.6	32
41	Irradiation Induced Microstructure Evolution in Nanostructured Materials: A Review. Materials, 2016, 9, 105.	1.3	32
42	Effect of Mo Addition on the Transformation Stasis Phenomenon During the Isothermal Formation of Bainitic Ferrite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5670-5674.	1.1	4
43	Microstructural Evolution of a Hypoeutectoid Pearlite Steel under Rolling-sliding Contact Loading. Journal of Iron and Steel Research International, 2016, 23, 1054-1060.	1.4	21
44	Variation in retained austenite content and mechanical properties of 0.2C-7Mn steel after intercritical annealing. International Journal of Minerals, Metallurgy and Materials, 2016, 23, 161-167.	2.4	9
45	Effect of molybdenum addition on the precipitation of carbides in the austenite matrix of titanium micro-alloyed steels. Journal of Materials Science, 2016, 51, 4996-5007.	1.7	78
46	Precipitate Behavior in Fe-20Cr-30Ni-2Nb Austenitic Heat-Resistant Steel. Acta Metallurgica Sinica (English Letters), 2015, 28, 424-429.	1.5	4
47	Carbon Enrichment in Austenite During Bainite Transformation in Fe-3Mn-C Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 1544-1549.	1.1	19
48	Effects of Mo on Carbon Enrichment During Proeutectoid Ferrite Transformation in Hypoeutectoid Fe-C-Mn Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2347-2351.	1.1	13
49	Observation on Formation of Fresh Martensite from the Reversed Austenite During Water-Quenching Process in Fe-0.2C-5Mn Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 3789-3792.	1.1	16
50	Austenite Thermal Stabilization through the Concentration of Manganese and Carbon in the 0.2C-5Mn Steel. ISIJ International, 2014, 54, 2875-2880.	0.6	16
51	Effect of Surface Mechanical Attrition Treatment on Microstructure and Oxidation Behavior in T91 Steel at High Temperature. ISIJ International, 2014, 54, 1935-1942.	0.6	9
52	Effects of Pre-tempering on Intercritical Annealing in Fe-2Mn-0.3C Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5290-5294.	1.1	14
53	Austenite layer and precipitation in high Co-Ni maraging steel. Micron, 2014, 67, 112-116.	1.1	33
54	Antibacterial Property and Precipitation Behavior of Ag-Added 304 Austenitic Stainless Steel. Acta Metallurgica Sinica (English Letters), 2014, 27, 539-545.	1.5	7

#	ARTICLE	IF	CITATIONS
55	Volume Fractions of Proeutectoid Ferrite/Pearlite and Their Dependence on Prior Austenite Grain Size in Hypoeutectoid Fe-Mn-C Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 5456-5467.	1.1	16
56	Growing process and reaction mechanism of electroless Ni-Mo-P film on SiO ₂ substrate. <i>Transactions of Nonferrous Metals Society of China</i> , 2013, 23, 3629-3633.	1.7	13
57	Excess Carbon Enrichment in Austenite During Intercritical Annealing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 4872-4875.	1.1	18
58	Effects of alloying elements on the kinetics of austenitization from pearlite in Fe-C-M alloys. <i>Philosophical Magazine</i> , 2013, 93, 1095-1109.	0.7	32
59	Investigation of Pt-Dy co-doping effects on isothermal oxidation behavior of (Co,Ni)-based alloy. <i>Journal of Rare Earths</i> , 2012, 30, 928-933.	2.5	13
60	An Analytical Model for the Kinetics of Strain-induced Precipitation in Titanium Micro-alloyed Steels. <i>ISIJ International</i> , 2012, 52, 1661-1669.	0.6	20
61	Third generation high strength low alloy steels with improved toughness. <i>Science China Technological Sciences</i> , 2012, 55, 1797-1805.	2.0	28
62	Ausforming effects on anisotropy of mechanical properties in HSLA martensitic steel. <i>Science China Technological Sciences</i> , 2012, 55, 1806-1813.	2.0	3
63	Transformation character of ferrite formation by a ledge mechanism under a mixed-control model. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2012, 19, 428-433.	2.4	1
64	Effect of TaC Particles Dissolution on Grain Coarsening in Reduced Activation Steels. <i>Journal of Iron and Steel Research International</i> , 2011, 18, 47-52.	1.4	38
65	Magnetic and Microwave Absorption Properties of Core/Shell FeCo-Based Nanocomposites Synthesized by a Simple Wet Chemical Method. <i>IEEE Transactions on Magnetics</i> , 2011, 47, 3456-3459.	1.2	6
66	Kinetics of Reverse Transformation from Pearlite to Austenite in an Fe-0.6% C Alloy and the Effects of Alloying Elements. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 1586-1596.	1.1	33
67	Synthesis and evaluation of corrosion resistance of molybdate-based conversion coatings on electroplated zinc. <i>Surface and Coatings Technology</i> , 2010, 205, 2328-2334.	2.2	41
68	Electroless Ni-Mo-P diffusion barriers with Pd-activated self-assembled monolayer on SiO ₂ . <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 166, 67-75.	1.7	31
69	Evolution and coarsening of carbides in 2.25Cr-1Mo steel weld metal during high temperature tempering. <i>Journal of Iron and Steel Research International</i> , 2010, 17, 74-78.	1.4	43
70	Influence of Prior Austenite Deformation and Non-Metallic Inclusions on Ferrite Formation in Low-Carbon Steels. <i>Journal of Iron and Steel Research International</i> , 2010, 17, 36-42.	1.4	9
71	Vertical Short Crack Initiation in Medium Carbon Bainitic Steel Under Mild Tractive Rolling Contact. <i>Journal of Iron and Steel Research International</i> , 2008, 15, 37-41.	1.4	3
72	Creation of Air-Cooled Mn Series Bainitic Steels. <i>Journal of Iron and Steel Research International</i> , 2008, 15, 1-9.	1.4	66

#	ARTICLE	IF	CITATIONS
73	Electroless Plating Ni-based Barrier Layers for 3D Interconnection. , 2006, , .		2
74	Electroless Cu Deposition on a TiN barrier in CuSO ₄ -HF Solution. Journal of the Electrochemical Society, 2005, 152, C466.	1.3	6
75	Ledges in Widmanstatten ferrite observed by scanning tunnelling microscopy. Journal of Materials Science Letters, 1998, 17, 331-333.	0.5	2
76	Title is missing!. Journal of Materials Science, 1998, 33, 487-496.	1.7	1
77	General existence of ledges on $\hat{I}\pm 1$ plates in Cu-Zn-Al alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 1617-1623.	1.1	2
78	Formation of bainite in ferrous and nonferrous alloys through sympathetic nucleation and ledgewise growth mechanism. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 1535-1545.	1.1	16
79	Grain Refinement and Toughening of Low Carbon Low Alloy Martensitic Steel With Yield Strength 900 MPA Grade by Ausforming. , 0, , 195-201.		0