

Xing-Wang Cheng

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2744700/publications.pdf>

Version: 2024-02-01

107
papers

2,397
citations

218677

26
h-index

254184

43
g-index

108
all docs

108
docs citations

108
times ranked

1725
citing authors

#	ARTICLE	IF	CITATIONS
1	Phase Diagram of Sub-THz Electric-Field-Induced Polarization Oscillation. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, 2100416.	2.4	6
2	Designing TiVNbTaSi refractory high-entropy alloys with ambient tensile ductility. <i>Scripta Materialia</i> , 2022, 206, 114230.	5.2	51
3	Towards high performance in Ti-based composite through manipulating nickel coatings on graphene reinforcement. <i>Journal of Alloys and Compounds</i> , 2022, 893, 162240.	5.5	11
4	A TiB whisker-reinforced titanium matrix composite with controllable orientation: A novel method and superior strengthening effect. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 830, 142309.	5.6	20
5	Evolution of microstructures and mechanical properties with tempering temperature of a pearlitic quenched and tempered steel. <i>Journal of Iron and Steel Research International</i> , 2022, 29, 1393-1403.	2.8	8
6	Microstructures and mechanical properties of FeCoNi(MoW) high-entropy alloys. <i>Materials Letters</i> , 2022, 308, 131250.	2.6	6
7	Achieving well-balanced strength and ductility in GNFs/Ti composite via laminated architecture design. <i>Carbon</i> , 2022, 189, 173-185.	10.3	15
8	A rapid route to improve the mechanical properties of the aged high Co-Ni steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 834, 142612.	5.6	5
9	Effects of Si additions on microstructures and mechanical properties of VNbTiTaSi refractory high-entropy alloys. <i>Journal of Alloys and Compounds</i> , 2022, 900, 163517.	5.5	19
10	Study on hot deformation behavior of as-cast 22%W high-density steel. <i>Journal of Materials Research and Technology</i> , 2022, 17, 2355-2368.	5.8	9
11	The investigation on Johnson-Cook model and dynamic mechanical behaviors of ultra-high strength steel M54. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 835, 142693.	5.6	18
12	The effect of TiC on microstructure and mechanical properties of Ti-5553 beta phase titanium alloy. <i>Materials and Design</i> , 2022, 214, 110395.	7.0	12
13	Phase-field simulations of vortex chirality manipulation in ferroelectric thin films. <i>Npj Quantum Materials</i> , 2022, 7, .	5.2	22
14	Achieving an excellent combination of strength and plasticity in a low carbon steel through dynamic plastic deformation and subsequent annealing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 842, 143051.	5.6	3
15	Ultrafast Ferroelectric Domain Switching Induced by Nano-Second Strain-Pulse. <i>Advanced Theory and Simulations</i> , 2022, 5, .	2.8	10
16	Machine learning correlated with phenomenological mode unlocks the vast compositional space of eutectics of multi-principal element alloys. <i>Materials and Design</i> , 2022, 219, 110795.	7.0	8
17	High-temperature damage-tolerance of a hot-rolled brick-and-mortar Ti2Ni/TiNi composite. <i>Materials Letters</i> , 2022, 323, 132555.	2.6	1
18	Deformation and fracture mechanism of Ti-6Al-4V target at high and hyper velocity impact. <i>International Journal of Impact Engineering</i> , 2022, 169, 104312.	5.0	5

#	ARTICLE	IF	CITATIONS
19	Achieving high performance in (NiTi ₂ +TiC)/Ti composites with network architecture via reaction interface design. <i>Journal of Alloys and Compounds</i> , 2022, 925, 166230.	5.5	4
20	Corrosion behaviour of NiCrFeAl-hBN seal coatings in oxidation environments at a high temperature. <i>Rare Metals</i> , 2021, 40, 212-218.	7.1	4
21	Designing V NbMoTa refractory high-entropy alloys with improved properties for high-temperature applications. <i>Scripta Materialia</i> , 2021, 191, 131-136.	5.2	70
22	Another eutectic point of Co-Cr-Fe-Ni-M (Hf, Ta, Nb) high-entropy system determined using a simple mixture method correlated with mixing enthalpy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 802, 140634.	5.6	17
23	Tensile properties of tungsten/glass composites at elevated temperatures. <i>Materials Chemistry and Physics</i> , 2021, 259, 124012.	4.0	0
24	Mechanical (compressive) form of driving force triggers the phase transformation from β^2 to β & β^2 phases in metastable β^2 phase-field Ti-5553 alloy. <i>Journal of Materials Science and Technology</i> , 2021, 78, 238-246.	10.7	15
25	Good strength-plasticity compatibility in graphene nanoplatelets/Ti composites by strengthening the interface bonding via in-situ formed TiB whisker. <i>Ceramics International</i> , 2021, 47, 4338-4343.	4.8	26
26	Interface evolution and mechanical properties of nickel coated graphene nanoflakes/pure titanium matrix composites. <i>Journal of Alloys and Compounds</i> , 2021, 853, 157157.	5.5	14
27	Effects of vanadium concentration on mechanical properties of V NbMoTa refractory high-entropy alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 808, 140848.	5.6	30
28	Excellent combination of compressive strength and ductility of (CoCrFeNi) _{0.26} (Cr _{0.07} Fe _{0.16} Ni _{0.31} Hf _{0.4}) high-entropy alloys. <i>Materials and Design</i> , 2021, 202, 109569.	7.0	20
29	Microstructure and mechanical properties of a Cr-Ni-W-Mo steel processed by thermo-mechanical controlled processing. <i>Journal of Iron and Steel Research International</i> , 2021, 28, 713-721.	2.8	2
30	Achieving high performance in graphite nano-flakes reinforced titanium matrix composites through a novel reaction interface design. <i>Carbon</i> , 2021, 175, 334-351.	10.3	29
31	Simultaneously improved strength and toughness of hot-rolled brick-and-mortar TiNi/Ti ₂ Ni intermetallic composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 815, 141302.	5.6	5
32	Towards high performance GNFs/Ti composite through simultaneously manipulating laminated microstructure and interface reaction. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 814, 141230.	5.6	9
33	Direct achievement of ultra-high strength and good ductility for high Co-Ni secondary hardening steel by combining spark plasma sintering and deformation. <i>Materials Letters</i> , 2021, 290, 129465.	2.6	10
34	Novel high-entropy alloys with high-density μ -D019 and abnormal phase transformation. <i>Scripta Materialia</i> , 2021, 199, 113893.	5.2	14
35	Microstructure and mechanical properties of a novel high-density steel having high tungsten content. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 824, 141797.	5.6	7
36	Processing, microstructure and mechanical properties of Ni _{1.5} CoFeCu _{0.8} Al _{0.2} V _{0.5} high entropy alloy matrix composites reinforced by in-situ synthesized vanadium carbides. <i>Materials Chemistry and Physics</i> , 2021, 271, 124934.	4.0	2

#	ARTICLE	IF	CITATIONS
37	Graphene nanoplatelets (GNPs)-templated synthesis of oriented TiB and the inspiration for tailoring three-dimensional (3D) interface structure in GNPs/Ti matrix composites. <i>Materials Characterization</i> , 2021, 181, 111447.	4.4	11
38	Effect of particle size on dynamic mechanical behaviors of W particles/Zr-based bulk metallic glass composites. <i>Journal of Alloys and Compounds</i> , 2021, 885, 160545.	5.5	6
39	Lamellar Pearlite as an Initial Microstructure for Austenite Reversion Treatment. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 1330-1339.	2.5	5
40	An Evaluation of the Microstructure and Microhardness in an Al–Zn–Mg Alloy Processed by ECAP and Post-ECAP Heat Treatments. <i>Advanced Engineering Materials</i> , 2020, 22, 1901040.	3.5	3
41	Microstructure, mechanical and physical properties of FeCoNiAlMnW high-entropy films deposited by magnetron sputtering. <i>Applied Surface Science</i> , 2020, 507, 145131.	6.1	21
42	Mechanical properties and pre-oxidation behavior of spark plasma sintered B4C ceramics using (Ti3SiC2+CeO2/La2O3) as sintering aid. <i>Ceramics International</i> , 2020, 46, 22189-22196.	4.8	12
43	Synthesis, characterization and electromagnetic absorbing performance of multi-step petaloid morphology VO2(M). <i>Ceramics International</i> , 2020, 46, 25493-25502.	4.8	21
44	Structural designation and mechanical properties of TiNi/Ti2Ni laminated composites. <i>Journal of Physics: Conference Series</i> , 2020, 1507, 062010.	0.4	1
45	Controlling I^2Sn grain orientations in electronic interconnects with single-crystal Cobalt substrates. <i>Acta Materialia</i> , 2020, 194, 422-436.	7.9	9
46	The effect of Ti–Mo–Nb on the microstructures and tensile properties of a Fe–Mn–Al–C austenitic steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 780, 139220.	5.6	27
47	Microstructures and mechanical properties of CoCrFeNiHfx high-entropy alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 792, 139820.	5.6	21
48	Two-dimensional lamellar stacked (NH4)0.8V3O7·3.5H2O: A promising material with high dielectric properties and microwave absorption performance. <i>Applied Surface Science</i> , 2020, 509, 145079.	6.1	8
49	A review of multi-physical fields induced phenomena and effects in spark plasma sintering: Fundamentals and applications. <i>Materials and Design</i> , 2020, 191, 108662.	7.0	286
50	The role of interfacial reaction on the dynamic mechanical response in graphene nano-flake/Ti composites. <i>Carbon</i> , 2019, 152, 986-990.	10.3	34
51	Bimodal grain structure effect on the static and dynamic mechanical properties of transparent polycrystalline magnesium aluminate (spinel). <i>Ceramics International</i> , 2019, 45, 20362-20367.	4.8	7
52	Strain induced additional growth and high integrity of TiB-whiskers in titanium matrix composite: intrinsic mechanisms and superior strengthening effects. <i>Materials Research Express</i> , 2019, 6, 126519.	1.6	8
53	Static recrystallization of transparent polycrystalline yttrium aluminum garnet (YAG). <i>Scripta Materialia</i> , 2019, 173, 37-40.	5.2	4
54	Effect of prestrain on tensile property of TiNi/Mg composite. <i>Materials Science and Technology</i> , 2019, 35, 2243-2251.	1.6	3

#	ARTICLE	IF	CITATIONS
55	Effects of Ti foil thickness on microstructures and mechanical properties of in situ synthesized micro-laminated TiC/Ti composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 767, 138296.	5.6	11
56	Effect of tungsten content on dynamic compressive properties of borosilicate glass/tungsten composites at elevated temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 744, 604-609.	5.6	2
57	Microstructures and mechanical properties of HfNbTaTiZrW and HfNbTaTiZrMoW refractory high-entropy alloys. <i>Journal of Alloys and Compounds</i> , 2019, 803, 778-785.	5.5	69
58	Static and dynamic mechanical properties of Yttrium Aluminum Garnet (YAG). <i>Ceramics International</i> , 2019, 45, 12256-12263.	4.8	18
59	Preparation and microwave absorption properties of microsheets VO ₂ (M). <i>Journal of Alloys and Compounds</i> , 2019, 791, 307-315.	5.5	27
60	Design of novel low-density refractory high entropy alloys for high-temperature applications. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 755, 318-322.	5.6	73
61	Strain rate dependence of compressive behavior in an Al-Zn-Mg alloy processed by ECAP. <i>Journal of Alloys and Compounds</i> , 2019, 791, 1079-1087.	5.5	25
62	Crystallization evolution and ferroelectric behavior of Bi _{3.25} La _{0.75} Ti ₃ O ₁₂ -based thin films prepared by rf-magnetron sputtering. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 8974-8979.	2.2	2
63	Influence of tantalum on mechanical, ferroelectric and dielectric properties of Bi-excess Bi _{3.25} La _{0.75} Ti ₃ O ₁₂ thin film. <i>Applied Surface Science</i> , 2019, 463, 1141-1147.	6.1	17
64	Broadband microwave absorption of Fe ₃ O ₄ BaTiO ₃ composites enhanced by interfacial polarization and impedance matching. <i>Composites Part B: Engineering</i> , 2019, 163, 598-605.	12.0	96
65	Omega phase formation and deformation mechanism in heat treated Ti-5553 alloy under high strain rate compression. <i>Materials Letters</i> , 2019, 236, 163-166.	2.6	11
66	Preparation and Dynamic Mechanical Properties at Elevated Temperatures of a Tungsten/Glass Composite. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 1040-1046.	2.5	4
67	A rapid route for synthesizing Ti-(AlxTi _y /UFG Al) core-multishell structured particles reinforced Al matrix composite with promising mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 721, 61-64.	5.6	7
68	Electromagnetic Wave Absorption Performance on Fe ₃ O ₄ Polycrystalline Synthesized by the Synergy Reduction of Ethylene Glycol and Diethylene Glycol. <i>Journal of Physical Chemistry C</i> , 2018, 122, 3628-3637.	3.1	19
69	Characterization of highly (117)-oriented Bi _{3.25} La _{0.75} Ti ₃ O ₁₂ thin films prepared by rf-magnetron sputtering technique. <i>Solid State Communications</i> , 2018, 278, 31-35.	1.9	6
70	Effect of heat treatments on the microstructures and tensile properties of an ultrafine-grained Al-Zn-Mg alloy processed by ECAP. <i>Journal of Alloys and Compounds</i> , 2018, 749, 567-574.	5.5	28
71	The response of yttrium aluminum garnet (YAG) grains and grain boundaries to nanoindentation. <i>Journal of Materials Science</i> , 2018, 53, 16198-16206.	3.7	4
72	Interstitial strengthening of refractory ZrTiHfNb _{0.5} Ta _{0.5} O _x (x=0.05, 0.1, 0.2) high-entropy alloys. <i>Materials Letters</i> , 2018, 228, 145-147.	2.6	30

#	ARTICLE	IF	CITATIONS
73	Microstructural and mechanical properties of in-situ micro-laminated TiC/Ti composite synthesised. Materials Letters, 2018, 228, 1-4.	2.6	21
74	Mechanical properties of an Al-Zn-Mg alloy processed by ECAP and heat treatments. Journal of Alloys and Compounds, 2018, 769, 631-639.	5.5	38
75	Synthesis and Electromagnetic and Microwave Absorption Properties of Monodisperse Fe ₃ O ₄ /±-Fe ₂ O ₃ Composites. ACS Applied Nano Materials, 2018, 1, 3935-3944.	5.0	50
76	The Microstructure and Mechanical Properties of Refractory High-Entropy Alloys with High Plasticity. Materials, 2018, 11, 208.	2.9	38
77	Failure Mode of Ductile Hole Formation in Thick Ti-6Al-4V Targets Having Equiaxed and Lamellar Microstructures. , 2018, , 493-504.		0
78	Spark plasma sintering of B4C-TiB ₂ -SiC composite ceramics using B4C, Ti ₃ SiC ₂ and Si as starting materials. Ceramics International, 2018, 44, 21626-21632.	4.8	39
79	Enhanced mechanical properties due to nanocrystallization by isothermal annealing in Al ₈₅ Ni ₉ Er ₆ glassy alloy. Journal of Alloys and Compounds, 2017, 695, 3048-3053.	5.5	8
80	Novel synthesizing and characterization of copper matrix composites reinforced with carbon nanotubes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 696, 80-89.	5.6	86
81	The influence of defect structures on the mechanical properties of Ti-6Al-4V alloys deformed by high-pressure torsion at ambient temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 1-13.	5.6	38
82	Effects of annealing time on the microstructures and tensile properties of formed laminated composites in Ti-Ni system. Journal of Alloys and Compounds, 2017, 699, 695-705.	5.5	19
83	The effects of thickness of original Ti foils on the microstructures and mechanical properties of Ti ₂ Ni/TiNi laminated composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 292-302.	5.6	24
84	Influence of increasing Al concentration on phase, microstructure and mechanical behaviors of Ni _{1.5} CoFeCu _{1-x} Al _x V _{0.5} high entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 708, 523-536.	5.6	18
85	Investigation on the microstructure, room and high temperature mechanical behaviors and strengthening mechanisms of the (TiB+TiC)/TC4 composites. Journal of Alloys and Compounds, 2017, 726, 240-253.	5.5	88
86	Synthesis and thermochromic property studies on W doped VO ₂ films fabricated by sol-gel method. Scientific Reports, 2017, 7, 6132.	3.3	45
87	Dielectric and ferroelectric properties of Ta-modified Bi _{3.25} La _{0.75} Ti ₃ O ₁₂ ceramics. Ceramics International, 2017, 43, 13193-13198.	4.8	14
88	Factors affecting the mechanical properties of ultra-high-strength bainitic steel containing W and 0.33 mass% C. Journal of Iron and Steel Research International, 2016, 23, 289-296.	2.8	5
89	Enhancement of La addition on glass forming ability and thermal stability of Al ₈₅ Ni ₇ Er _{8-x} La _x (x =) Tj ETQq1 1 0.784314 rgBT /Cv	3.1	4
90	Microstructures and mechanical properties of bulk nanocrystalline silver fabricated by spark plasma sintering. Journal of Materials Research, 2016, 31, 2223-2232.	2.6	3

#	ARTICLE	IF	CITATIONS
91	High-entropy alloy particle reinforced Al-based amorphous alloy composite with ultrahigh strength prepared by spark plasma sintering. <i>Materials and Design</i> , 2016, 109, 219-226.	7.0	85
92	Electrochemical performance of aluminum niobium oxide as anode for lithium-ion batteries. <i>Rare Metals</i> , 2016, 35, 256-261.	7.1	11
93	Hydrothermal synthesis and photocatalytic properties of pyrochlore Sm ₂ Zr ₂ O ₇ nanoparticles. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2016, 321, 48-54.	3.9	29
94	Ballistic performance and damage characteristics of chemical vapor infiltration quasi 3D-Cf/SiC composites. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2016, 31, 118-122.	1.0	3
95	Fabrication, characterization and tensile property of a novel Ti ₂ Ni/TiNi micro-laminated composite. <i>Materials and Design</i> , 2016, 92, 486-493.	7.0	56
96	Effect of Ni/Cr ratio on phase, microstructure and mechanical properties of Ni _x CoCuFeCr _{2-x} (x=1.0). <i>Tj ETQq0 0.0 rgBT /Overlock 10</i>	9.5	92
97	Penetration performance of W/Cu double-layer shaped charge liners. <i>Rare Metals</i> , 2016, 35, 184-191.	7.1	10
98	Preparation and properties of W-Cu-Zn alloy with low W-W contiguity. <i>Rare Metals</i> , 2016, 35, 242-248.	7.1	3
99	Strength-improved Al 65 Cu 16.5 Ti 18.5 amorphous/crystalline alloy synthesized by spark plasma sintering. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 642, 377-380.	5.6	9
100	Failure mechanisms in ballistic performance of Ti-6Al-4V targets having equiaxed and lamellar microstructures. <i>International Journal of Impact Engineering</i> , 2015, 85, 161-169.	5.0	46
101	Al-based bulk metallic glass with large plasticity and ultrahigh strength. <i>Journal of Alloys and Compounds</i> , 2015, 648, 276-279.	5.5	21
102	Adiabatic shear banding of hot-rolling Ti-6Al-4V alloy subjected to dynamic shearing and uniaxial dynamic compression. <i>Rare Metals</i> , 2015, 34, 632-637.	7.1	8
103	Effect of microstructures on ballistic impact property of Ti-6Al-4V targets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 608, 53-62.	5.6	42
104	Effects of short time electric pulse heat treatment on microstructures and mechanical properties of hot-rolled Ti-6Al-4V alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 618, 104-111.	5.6	18
105	Effect of the metallic glass volume fraction on the mechanical properties of Zr-based metallic glass reinforced with porous W composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 561, 152-158.	5.6	7
106	Effect of Temperature on the Dynamic Mechanical Behaviors of Zr-Based Metallic Glass Reinforced Porous Tungsten Matrix Composite. <i>Advanced Engineering Materials</i> , 2012, 14, 439-444.	3.5	7
107	Synthesis and magnetic properties of Al doped Zn _{0.995} Mn _{0.005} O powers. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	9