Akihiko Chiba

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1546362/publications.pdf

Version: 2024-02-01

364 9,722 52 papers citations h-index

376 376 376 5084 all docs docs citations times ranked citing authors

77

g-index

#	Article	IF	Citations
1	Microstructures and mechanical properties of Co–29Cr–6Mo alloy fabricated by selective laser melting process for dental applications. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 21, 67-76.	3.1	381
2	Pin-on-disk wear behavior in a like-on-like configuration in a biological environment of high carbon cast and low carbon forged Co–29Cr–6Mo alloys. Acta Materialia, 2007, 55, 1309-1318.	7.9	204
3	Novel Co-rich high performance twinning-induced plasticity (TWIP) and transformation-induced plasticity (TRIP) high-entropy alloys. Scripta Materialia, 2019, 165, 39-43.	5.2	200
4	Build direction dependence of microstructure and high-temperature tensile property of Co–Cr–Mo alloy fabricated by electron beam melting. Acta Materialia, 2014, 64, 154-168.	7.9	163
5	Relationship between the microstructure and mechanical properties of an equiatomic AlCoCrFeNi high-entropy alloy fabricated by selective electron beam melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 656, 39-46.	5.6	144
6	Strain-induced martensitic transformation near twin boundaries in a biomedical Co–Cr–Mo alloy with negative stacking fault energy. Acta Materialia, 2013, 61, 1648-1661.	7.9	140
7	Novel Co-rich high entropy alloys with superior tensile properties. Materials Research Letters, 2019, 7, 82-88.	8.7	139
8	Development of strong and ductile metastable face-centered cubic single-phase high-entropy alloys. Acta Materialia, 2019, 181, 318-330.	7.9	134
9	First demonstration of promising selective electron beam melting method for utilizing high-entropy alloys as engineering materials. Materials Letters, 2015, 159, 12-15.	2.6	133
10	Room-temperature ductility of Ti–6Al–4V alloy with α′ martensite microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1512-1520.	5.6	132
11	CoCrFeNiTi-based high-entropy alloy with superior tensile strength and corrosion resistance achieved by a combination of additive manufacturing using selective electron beam melting and solution treatment. Materials Letters, 2017, 189, 148-151.	2.6	130
12	Microstructure and corrosion behaviour in biological environments of the new forged low-Ni Co?Cr?Mo alloys. Biomaterials, 2005, 26, 4912-4923.	11.4	122
13	Phase and grain size inhomogeneity and their influences on creep behavior of Co–Cr–Mo alloy additive manufactured by electron beam melting. Acta Materialia, 2015, 86, 305-318.	7.9	121
14	Ultrafine Grain Refinement of Biomedical Co-29Cr-6Mo Alloy during Conventional Hot-Compression Deformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 1980-1994.	2.2	111
15	Effects of chromium and nitrogen content on the microstructures and mechanical properties of as-cast Co–Cr–Mo alloys for dental applications. Acta Biomaterialia, 2012, 8, 2856-2862.	8.3	95
16	In-situ fabrication and characterization of ultrafine structured Cu–TiC composites with high strength and high conductivity by mechanical milling. Journal of Alloys and Compounds, 2016, 657, 122-132.	5.5	95
17	Significant Improvement in Mechanical Properties of Biomedical Co-Cr-Mo Alloys with Combination of N Addition and Cr-Enrichment. Materials Transactions, 2008, 49, 260-264.	1.2	94
18	Isothermal Phase Transformation in Biomedical Co-29Cr-6Mo Alloy without Addition of Carbon or Nitrogen. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2613-2625.	2.2	91

#	Article	IF	CITATIONS
19	Effects of post-processing on cyclic fatigue response of a titanium alloy additively manufactured by electron beam melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 680, 239-248.	5.6	91
20	Nanoarchitectured Co–Cr–Mo orthopedic implant alloys: Nitrogen-enhanced nanostructural evolution and its effect on phase stability. Acta Biomaterialia, 2013, 9, 6259-6267.	8.3	86
21	Thermomechanical characterization of β-stabilized Ti–45Al–7Nb–0.4W–0.15B alloy. Intermetallics, 2011 19, 1184-1190.	' 3.9	85
22	Synergistic alloying effect on microstructural evolution and mechanical properties of Cu precipitation-strengthened ferritic alloys. Acta Materialia, 2013, 61, 7726-7740.	7.9	85
23	Hot forging characteristic of Ti–5Al–5V–5Mo–3Cr alloy with single metastable β microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 611, 337-344.	5.6	85
24	Impact of solute elements on detwinning in magnesium and its alloys. International Journal of Plasticity, 2017, 91, 134-159.	8.8	81
25	Simple method to construct process maps for additive manufacturing using a support vector machine. Additive Manufacturing, 2019, 27, 353-362.	3.0	81
26	Enhanced damping capacity of magnesium alloys by tensile twin boundaries. Scripta Materialia, 2015, 101, 8-11.	5.2	80
27	Suzuki segregation in Co–Ni-based superalloy at 973 K: An experimental and computational study by phase-field simulation. Acta Materialia, 2012, 60, 2901-2915.	7.9	79
28	Refinement of lamellar structures in Ti-Al alloy. Acta Materialia, 2017, 125, 81-97.	7.9	78
29	Frequent Occurrence of Discontinuous Dynamic Recrystallization in Ti-6Al-4V Alloy with α′ Martensite Starting Microstructure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3245-3260.	2.2	76
30	Effect of Carbon Addition on Microstructure and Mechanical Properties of a Wrought Co–Cr–Mo Implant Alloy. Materials Transactions, 2006, 47, 287-290.	1.2	75
31	Construction of processing map for biomedical Co–28Cr–6Mo–0.16N alloy by studying its hot deformation behavior using compression tests. Materials Science & Department of the Structural Materials: Properties, Microstructure and Processing, 2009, 513-514, 286-293.	5.6	74
32	Ti–6Al–4V alloy with an ultrafine-grained microstructure exhibiting low-temperature–high-strain-rate superplasticity. Materials Letters, 2013, 98, 209-212.	2.6	74
33	Evolution of cold-rolled microstructures of biomedical Co-Cr-Mo alloys with and without N doping. Materials Science & Doping Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 614-621.	5.6	73
34	Effects of nitrogen addition on microstructure and mechanical behavior of biomedical Co–Cr–Mo alloys. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 29, 417-426.	3.1	73
35	Development of new Co–Cr–W-based biomedical alloys: Effects of microalloying and thermomechanical processing on microstructures and mechanical properties. Materials & Design, 2014, 55, 987-998.	5.1	72
36	Mechanical properties of as-forged Ni-free Co–29Cr–6Mo alloys with ultrafine-grained microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5961-5966.	5.6	71

#	Article	IF	Citations
37	Effects of sigma phase and carbide on the wear behavior of CoCrMo alloys in Hanks' solution. Wear, 2014, 310, 51-62.	3.1	69
38	Mechanical and corrosion properties of AlCoCrFeNi high-entropy alloy fabricated with selective electron beam melting. Additive Manufacturing, 2018, 23, 264-271.	3.0	69
39	Molten pool behavior and effect of fluid flow on solidification conditions in selective electron beam melting (SEBM) of a biomedical Co-Cr-Mo alloy. Additive Manufacturing, 2019, 26, 202-214.	3.0	69
40	Grain refinement of biomedical Co–27Cr–5Mo–0.16N alloy by reverse transformation. Materials Letters, 2010, 64, 49-52.	2.6	68
41	Mechanical Properties of Forged Low Ni and C-Containing Co-Cr-Mo Biomedical Implant Alloy. Materials Science Forum, 2005, 475-479, 2317-2322.	0.3	62
42	Cu–Ti–C alloy with high strength and high electrical conductivity prepared by two-step ball-milling processes. Materials & Design, 2014, 61, 70-74.	5.1	61
43	Grain refinement and weak-textured structures based on the dynamic recrystallization of Mg–9.80Gd–3.78Y–1.12Sm–0.48Zr alloy. Journal of Magnesium and Alloys, 2021, 9, 456-466.	11.9	61
44	Electron beam additive manufacturing of Inconel 718 alloy rods: Impact of build direction on microstructure and high-temperature tensile properties. Additive Manufacturing, 2018, 23, 457-470.	3.0	60
45	Regulating twin boundary mobility by annealing in magnesium and its alloys. International Journal of Plasticity, 2017, 99, 1-18.	8.8	59
46	Enhanced Mechanical Properties of As-Forged Co-Cr-Mo-N Alloys with Ultrafine-Grained Structures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 5243-5257.	2.2	58
47	Quantitative Analysis of Work Hardening and Dynamic Softening Behavior of low carbon alloy Steel Based on the Flow Stress. Materials & Design, 2013, 45, 384-392.	5.1	58
48	Hot deformation characteristics and dynamic recrystallization mechanisms of a Co–Ni-based superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139638.	5.6	58
49	Local strain evolution due to athermal $\hat{1}^3\hat{a}^{\dagger}\hat{1}^0\mu$ martensitic transformation in biomedical Co Cr Mo alloys. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 32, 52-61.	3.1	57
50	Behavior modeling and microstructural evolutions of Ti–6Al–4V alloy under hot forming conditions. International Journal of Mechanical Sciences, 2016, 108-109, 1-13.	6.7	57
51	Effect of Heat Treatment on Microstructure and Mechanical Properties of Ni- and C-Free Co–Cr–Mo Alloys for Medical Applications. Materials Transactions, 2005, 46, 1790-1793.	1.2	56
52	Corrosion mechanism of an equimolar AlCoCrFeNi high-entropy alloy additively manufactured by electron beam melting. Npj Materials Degradation, 2020, 4, .	5.8	55
53	Mechanical and corrosion properties of CoCrFeNiTi-based high-entropy alloy additive manufactured using selective laser melting. Additive Manufacturing, 2019, 25, 412-420.	3.0	54
54	Regulating the coarsening of the $\hat{I}^3\hat{a}$ phase in superalloys. NPG Asia Materials, 2015, 7, e212-e212.	7.9	52

#	Article	IF	CITATIONS
55	Stacking-fault strengthening of biomedical Co–Cr–Mo alloy via multipass thermomechanical processing. Scientific Reports, 2017, 7, 10808.	3.3	49
56	Origin of Significant Grain Refinement in Co-Cr-Mo Alloys Without Severe Plastic Deformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4875-4887.	2.2	48
57	Influence of two-step ball-milling condition on electrical and mechanical properties of TiC-dispersion-strengthened Cu alloys. Materials & Design, 2014, 64, 441-449.	5.1	48
58	Corrosion behaviour of CoCrMo alloys in 2 wt% sulphuric acid solution. Electrochimica Acta, 2014, 125, 543-555.	5.2	46
59	Friction Coefficient in Hot Compression of Cylindrical Sample. Materials Transactions, 2010, 51, 1210-1215.	1.2	44
60	Deformation Behavior and Dynamic Recrystallization of Biomedical Co-Cr-W-Ni (L-605) Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2819-2830.	2.2	44
61	Role of slip and {10-12} twin on the crystal plasticity in Mg-RE alloy during deformation process at room temperature. Journal of Materials Science and Technology, 2021, 80, 279-296.	10.7	42
62	Preparation of weak-textured commercially pure titanium by electron beam melting. Additive Manufacturing, 2015, 8, 105-109.	3.0	41
63	Dynamic recrystallization of a biomedical Co–Cr–W-based alloy under hot deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 592, 173-181.	5.6	40
64	Effects of partially substituting cobalt for nickel on the corrosion resistance of a Ni–16Cr–15Mo alloy to aqueous hydrofluoric acid. Corrosion Science, 2014, 78, 101-110.	6.6	40
65	Effects of alloyed Si on the oxidation behaviour of Co–29Cr–6Mo alloy for solid-oxide fuel cell interconnects. Corrosion Science, 2015, 95, 88-99.	6.6	40
66	Influence of cobalt addition on microstructure and hot workability of IN713C superalloy. Materials and Design, 2017, 122, 340-346.	7.0	40
67	Fatigue improvement of electron beam melting-fabricated biomedical Co–Cr–Mo alloy by accessible heat treatment. Materials Research Letters, 2018, 6, 93-99.	8.7	40
68	Study of microstructure evolution and properties of Cu-Fe microcomposites produced by a pre-alloyed powder method. Materials and Design, 2017, 126, 64-72.	7.0	39
69	Effect of Al content and cold rolling on the microstructure and mechanical properties of Al5Cr12Fe35Mn28Ni20 high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 380-390.	5.6	39
70	Flow behavior and microstructure in Ti–6Al–4V alloy with an ultrafine-grained α-single phase microstructure during low-temperature-high-strain-rate superplasticity. Materials & Design, 2015, 66, 611-617.	5.1	38
71	On microstructural homogenization and mechanical properties optimization of biomedical Co-Cr-Mo alloy additively manufactured by using electron beam melting. Additive Manufacturing, 2019, 28, 215-227.	3.0	38
72	Microstructure and mechanical properties of biomedical Co–29Cr–8Mo alloy wire fabricated by a modified melt-spinning process. Acta Materialia, 2007, 55, 2119-2128.	7.9	37

#	Article	IF	CITATIONS
73	Interfacial reactions of solid Co and solid Fe with liquid Al. Corrosion Science, 2012, 60, 32-37.	6.6	37
74	Role of nitrogen addition in stabilizing the γ phase of Biomedical Co–29Cr–6Mo alloy. Materials Chemistry and Physics, 2012, 133, 29-32.	4.0	37
75	Abnormal grain growth in commercially pure titanium during additive manufacturing with electron beam melting. Materialia, 2019, 6, 100281.	2.7	37
76	Effects of carbon concentration on microstructure and mechanical properties of as-cast nickel-free Co–28Cr–9W-based dental alloys. Materials Science and Engineering C, 2014, 40, 127-134.	7.3	36
77	Analysis of the Fracture Mechanism of Ti-6Al-4V Alloy Rods That Failed Clinically After Spinal Instrumentation Surgery. Spine, 2015, 40, E767-E773.	2.0	36
78	High temperature oxidation behaviour of $\hat{1}^3\hat{\epsilon}^2$ -strengthened Co-based superalloys with different Ni addition. Corrosion Science, 2019, 157, 109-115.	6.6	36
79	Microstructures and Mechanical Properties of Biomedical Co-29Cr-6Mo-0.14N Alloys Processed by Hot Rolling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3108-3119.	2.2	35
80	Role of strain-induced martensitic transformation on extrusion and intrusion formation during fatigue deformation of biomedical Co–Cr–Mo–N alloys. Acta Materialia, 2014, 81, 377-385.	7.9	35
81	Suzuki Segregation and Dislocation Locking in Supersaturated Co-Ni-Based Alloy. Materials Transactions, 2001, 42, 2112-2116.	1.2	34
82	Interfacial reactions between molten Al and a Co–Cr–Mo alloy with and without oxidation treatment. Corrosion Science, 2011, 53, 4324-4326.	6.6	34
83	Effects of cold working on corrosion resistance of Co-modified Ni–16Cr–15Mo alloy in hydrofluoric acid solution. Corrosion Science, 2014, 89, 258-267.	6.6	34
84	Dynamic recrystallization in biomedical Co-29Cr-6Mo-0.16N alloy with low stacking fault energy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 668, 86-96.	5.6	34
85	Cellular lattices of biomedical Co-Cr-Mo-alloy fabricated by electron beam melting with the aid of shape optimization. Additive Manufacturing, 2016, 12, 305-313.	3.0	34
86	Microstructure evolution and mechanical property of a precipitation-strengthened refractory high-entropy alloy HfNbTaTiZr. Materials Letters, 2019, 254, 46-49.	2.6	34
87	Mechanical behaviors of Ti–V–(Al, Sn) alloys with α′ martensite microstructure. Journal of Alloys and Compounds, 2011, 509, 2684-2692.	5.5	33
88	Characterisation of oxide films formed on Co–29Cr–6Mo alloy used in die-casting moulds for aluminium. Corrosion Science, 2013, 73, 72-79.	6.6	33
89	Deformation mode in biomedical Co–27% Cr–5% Mo alloy consisting of a single hexagonal close-packed structure. Scripta Materialia, 2010, 63, 1092-1095.	5.2	32
90	Osseointegration Enhancement by Zr doping of Co-Cr-Mo Implants Fabricated by Electron Beam Melting. Additive Manufacturing, 2015, 6, 6-15.	3.0	32

#	Article	IF	CITATIONS
91	Assessment of precipitation behavior in dental castings of a Co–Cr–Mo alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 50, 268-276.	3.1	32
92	Heterogeneous microstructures and corrosion resistance of biomedical Co-Cr-Mo alloy fabricated by electron beam melting (EBM). Additive Manufacturing, 2018, 24, 103-114.	3.0	32
93	Microstructural evolution and deformation mode under high-temperature-tensile-deformation of the Ti-6Al-4V alloy with the metastable $\hat{1}\pm\hat{a}\in^2$ martensite starting microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 661, 68-78.	5.6	31
94	Forging property, processing map, and mesoscale microstructural evolution modeling of a Ti-17 alloy with a lamellar $(\hat{l}\pm+\hat{l}^2)$ starting microstructure. Science and Technology of Advanced Materials, 2017, 18, 893-904.	6.1	31
95	Phase decomposition in biomedical Co–29Cr–6Mo–0.2N alloy during isothermal heat treatment at 1073K. Journal of Alloys and Compounds, 2014, 590, 411-416.	5.5	30
96	Microscopic mechanism of plastic deformation in a polycrystalline Co–Cr–Mo alloy with a single hcp phase. Acta Materialia, 2014, 64, 1-11.	7.9	30
97	Elucidating the effect of preheating temperature on melt pool morphology variation in Inconel 718 laser powder bed fusion via simulation and experiment. Additive Manufacturing, 2021, 37, 101642.	3.0	30
98	High-temperature ultra-strength of dual-phase Re0.5MoNbW(TaC)0.5 high-entropy alloy matrix composite. Journal of Materials Science and Technology, 2021, 84, 1-9.	10.7	30
99	Synergetic strengthening in HfMoNbTaTi refractory high-entropy alloy via disordered nanoscale phase and semicoherent refractory particle. Materials and Design, 2021, 212, 110248.	7.0	30
100	Effect of Sigma Phase in Co-29Cr-6Mo Alloy on Corrosion Behavior in Saline Solution. Materials Transactions, 2006, 47, 1961-1964.	1.2	29
101	Enhancement of athermal α″ martensitic transformation in Ti–10V–2Fe–3Al alloy due to high-speed hot deformation. Scripta Materialia, 2012, 67, 21-24.	5.2	29
102	Effects of microstructures on the sliding behavior of hot-pressed CoCrMo alloys. Wear, 2014, 319, 200-210.	3.1	29
103	Influence of carbon addition on mechanical properties and microstructures of Ni-free Co–Cr–W alloys subjected to thermomechanical processing. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 37, 274-285.	3.1	29
104	Influence of Mo concentration on corrosion resistance to HF acid solution of Ni–Co–Cr–Mo alloys with and without Cu. Corrosion Science, 2015, 99, 185-193.	6.6	29
105	Developing high strength and ductility in biomedical Co–Cr cast alloys by simultaneous doping with nitrogen and carbon. Acta Biomaterialia, 2016, 31, 435-447.	8.3	29
106	Controlling factors determining flowability of powders for additive manufacturing: A combined experimental and simulation study. Powder Technology, 2021, 393, 482-493.	4.2	29
107	Effect of process parameters on melt pool geometry and microstructure development for electron beam melting of IN718: A systematic single bead analysis study. Additive Manufacturing, 2019, 26, 215-226.	3.0	28
108	Influence of minor Ag addition on the microstructure and properties of powder metallurgy Cu-10Âwt% Fe alloy. Journal of Alloys and Compounds, 2022, 904, 163983.	5.5	28

#	Article	IF	Citations
109	Corrosion resistance of Cu- and Fe-modified Ni–30Co–16Cr–15Mo alloy in aqueous hydrofluoric acid. Corrosion Science, 2014, 89, 81-92.	6.6	27
110	Regulating the passive film of NiCoCrMo alloy in hydrofluoric acid solution by small addition of Cu. Corrosion Science, 2015, 98, 119-127.	6.6	27
111	Effect of multipass thermomechanical processing on the corrosion behaviour of biomedical Co–Cr–Mo alloys. Corrosion Science, 2019, 148, 178-187.	6.6	27
112	Thermal properties of powder beds in energy absorption and heat transfer during additive manufacturing with electron beam. Powder Technology, 2021, 381, 44-54.	4.2	27
113	Interfacial reaction between Co–Cr–Mo alloy and liquid Al. Corrosion Science, 2013, 75, 262-268.	6.6	26
114	Surface characterisation of Ni-free Co–Cr–W-based dental alloys exposed to high temperatures and the effects of adding silicon. Corrosion Science, 2015, 94, 411-419.	6.6	26
115	Anisotropy of Young's modulus and tensile properties in cold rolled α′ martensite Ti–V–Sn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 486, 503-510.	5.6	25
116	Grain refinement due to complex twin formation in rapid hot forging of magnesium alloy. Scripta Materialia, 2013, 68, 171-174.	5.2	25
117	Refinement of solidification microstructures by carbon addition in biomedical Co–28Cr–9W–1Si alloys. Materials Letters, 2014, 116, 82-85.	2.6	25
118	Submicron lamellar porous structure formed by selective dissolution of Ti-Al alloy. Materials and Design, 2016, 98, 1-11.	7.0	25
119	Tuning strain-induced γ-to-ε martensitic transformation of biomedical Co–Cr–Mo alloys by introducing parent phase lattice defects. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 90, 523-529.	3.1	25
120	Microstructure refinement for superior ductility of Al–Si alloy by electron beam melting. Additive Manufacturing, 2020, 32, 100982.	3.0	25
121	Smoke Suppression in Electron Beam Melting of Inconel 718 Alloy Powder Based on Insulator–Metal Transition of Surface Oxide Film by Mechanical Stimulation. Materials, 2021, 14, 4662.	2.9	25
122	Tribological properties of carbon/carbon composites with various pyrolytic carbon microstructures. Wear, 2013, 304, 103-108.	3.1	24
123	Collective behavior of strain-induced martensitic transformation (SIMT) in biomedical Co–Cr–Mo–N alloy polycrystal: An ex-situ electron backscattering diffraction study. Materials Science & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 611, 263-273.	5.6	24
124	Influences of alloyed Si on the corrosion resistance of Coâ€"Crâ€"Mo alloy to molten Al by iso-thermal oxidation in air. Corrosion Science, 2015, 100, 428-434.	6.6	24
125	Precipitation behavior of a novel cobalt-based superalloy subjected to prior plastic deformations. Materials and Design, 2016, 112, 1-10.	7.0	24
126	Microstructural control of alloy 718 fabricated by electron beam melting with expanded processing window by adaptive offset method. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 764, 138058.	5.6	24

#	Article	IF	Citations
127	Role of operating and environmental conditions in determining molten pool dynamics during electron beam melting and selective laser melting. Additive Manufacturing, 2020, 36, 101559.	3.0	24
128	Dry Friction and Wear Behavior of Forged Co–29Cr–6Mo Alloy without Ni and C Additions for Implant Applications. Materials Transactions, 2005, 46, 1578-1587.	1.2	23
129	Thermomechanical characterization of P/M Ti–Fe–Mo–Y alloy with a fine lamellar microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2345-2352.	5.6	23
130	Influence of carbon and nitrogen addition on microstructure and hot deformation behavior of biomedical Co–Cr–Mo alloy. Materials Chemistry and Physics, 2012, 135, 849-854.	4.0	23
131	Experimental and theoretical research on interfacial reaction of solid Co with liquid Al. Corrosion Science, 2013, 73, 54-61.	6.6	23
132	Modeling Grain Boundary Motion and Dynamic Recrystallization in Pure Metals. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 5861-5875.	2.2	23
133	Strengthening of biomedical Ni-free Co–Cr–Mo alloy by multipass "low-strain-per-pass― thermomechanical processing. Acta Biomaterialia, 2015, 28, 215-224.	8.3	23
134	Effect of carbon on the microstructure, mechanical properties and metal ion release of Ni-free Co–Cr–Mo alloys containing nitrogen. Materials Science and Engineering C, 2015, 55, 145-154.	7.3	23
135	Cold-rolling behavior of biomedical Ni-free Co–Cr–Mo alloys: Role of strain-induced ε martensite and its intersecting phenomena. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 55, 201-214.	3.1	23
136	Damping capacity of pre-compressed magnesium alloys after annealing. Materials Science & Damp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 708, 104-109.	5.6	23
137	Comprehensive study on mechanisms for grain morphology evolution and texture development in powder bed fusion with electron beam of Co–Cr–Mo alloy. Materialia, 2019, 6, 100346.	2.7	23
138	The damage process in a biomedical Co–29Cr–6Mo–0.14N alloy analyzed by X-ray tomography and electron backscattered diffraction. Scripta Materialia, 2011, 64, 367-370.	5.2	22
139	CoCrMo cellular structures made by Electron Beam Melting studied by local tomography and finite element modelling. Materials Characterization, 2016, 116, 48-54.	4.4	22
140	Development of low-Young's modulus Ti–Nb-based alloys with Cr addition. Journal of Materials Science, 2019, 54, 8675-8683.	3.7	22
141	Strength and superconductivity of Nb3Al prepared by spark plasma sintering. Journal of Alloys and Compounds, 2002, 336, 232-236.	5.5	21
142	Phase transformation and age-hardening of hexagonal α′ martensite in Ti–12mass%V–2mass%Al alloys studied by transmission electron microscopy. Journal of Alloys and Compounds, 2010, 506, 607-614.	5.5	21
143	Effects of carbon addition on wear mechanisms of CoCrMo metal-on-metal hip joint bearings. Materials Science and Engineering C, 2017, 76, 997-1004.	7.3	21
144	Discontinuous yielding and microstructural evolution of Ti-40Âat.% Al alloy compressed in single \hat{l}_{\pm} -hcp phase region. Journal of Alloys and Compounds, 2017, 693, 1261-1276.	5.5	21

#	Article	IF	CITATIONS
145	Electron beam melting of boron-modified Ti–6Al–2Sn–4Zr–2Mo–0.1Si alloy with superior tensile strength and oxidation resistance at elevated temperatures. Materialia, 2018, 4, 367-372.	2.7	21
146	A Constitutive Model and Processing Maps Describing the Highâ€Temperature Deformation Behavior of Tiâ€17 Alloy in the ⟨i⟩β⟨ i⟩â€Phase Field. Advanced Engineering Materials, 2019, 21, 1800775.	3.5	21
147	Deformation behavior of Mg–5Y–2Nd–0.5Zr alloys with different Sm additions. Journal of Alloys and Compounds, 2021, 856, 158201.	5.5	21
148	Effect of nitriding treatment on corrosion behaviour of Co–Cr–Mo alloy in liquid Al. Corrosion Science, 2014, 78, 244-250.	6.6	20
149	Ex-situ observation on the dissolution behaviour of Ni–16Cr–15Mo and Ni–30Co–16Cr–15Mo alloys in hydrofluoric acid. Corrosion Science, 2015, 90, 133-139.	6.6	20
150	Strain-controlled iso-thermal fatigue behavior of Co–29Cr–6Mo used for tooling materials in Al die casting. Materials Science & Drocessing, Microstructure and Processing, 2017, 703, 27-36.	5.6	20
151	Fundamentals of Metal 3D Printing Technologies. Materia Japan, 2017, 56, 686-690.	0.1	20
152	Constructing Processing Maps for Hot Working of Co-Ni-Cr-Mo Superalloy. Materials Transactions, 2009, 50, 2277-2284.	1.2	19
153	Enhancement of corrosion resistance of Fe–Cr–Mo alloy to molten Al by thermal oxidation in air. Corrosion Science, 2013, 77, 97-102.	6.6	19
154	Detwining in Mg alloy with a high density of twin boundaries. Science and Technology of Advanced Materials, 2014, 15, 035003.	6.1	19
155	Effects of Al, Ti, and Zr doping on oxide film formation in Co–29Cr–6Mo alloy used as mould material for Al die-casting. Corrosion Science, 2014, 84, 147-158.	6.6	19
156	Characterization of powder bed generation in electron beam additive manufacturing by discrete element method (DEM). Materials Today: Proceedings, 2017, 4, 11437-11440.	1.8	19
157	High-temperature deformation behavior and microstructural characterization of high-Mn bearing titanium-based alloy. Materials Characterization, 2018, 139, 176-185.	4.4	19
158	Mechanical Properties of Biomedical Co-33Cr-5Mo-0.3N Alloy at Elevated Temperatures. Materials Transactions, 2008, 49, 1963-1969.	1.2	18
159	Formation of Ultrafineâ€Grained Microstructure of Ti–6Al–4V Alloy by Hot Deformation of α′ Martensite Starting Microstructure. Advanced Engineering Materials, 2011, 13, 470-474.	3.5	18
160	Microstructure evolution of SUS303 free-cutting steel during hot compression process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 583, 161-168.	5.6	18
161	Effects of nitrogen on microstructural evolution of biomedical Co–Cr–W alloys during hot deformation and subsequent cooling. Materials & Design, 2014, 57, 421-425.	5.1	18
162	Effect of cold rolling on phase decomposition in biomedical Co–29Cr–6Mo–0.2N alloy during isothermal heat treatment at 1073 K. Journal of Alloys and Compounds, 2014, 612, 273-279.	5.5	18

#	Article	IF	CITATIONS
163	Control of \hat{I}^3 lamella precipitation in Tiâ \in "39 at.% Al single crystals by nanogroove-induced dislocation bands. Acta Materialia, 2015, 96, 352-365.	7.9	18
164	Effect of Building Position on Phase Distribution in Co-Cr-Mo Alloy Additive Manufactured by Electron-Beam Melting. Materials Transactions, 2016, 57, 2041-2047.	1.2	18
165	Manufacturing of high-strength Ni-free Co–Cr–Mo alloy rods via cold swaging. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 60, 38-47.	3.1	18
166	The influence of temperature during water-quench rapid heat treatment on the microstructure, mechanical properties and biocompatibility of Ti 6Al 4V ELI alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 96, 144-151.	3.1	18
167	Impacts of pre-strain on twin boundary mobility of magnesium. Journal of Alloys and Compounds, 2020, 816, 152496.	5.5	18
168	Effects of Zirconium Addition on Microstructures and Mechanical Properties of Co-29Cr-6Mo Alloy. Materials Transactions, 2007, 48, 1084-1088.	1.2	17
169	Effect of Fe Addition on Microstructures and Mechanical Properties of Ni- and C-Free Co-Cr-Mo Alloys. Materials Transactions, 2007, 48, 2207-2211.	1.2	17
170	Grain growth and static recrystallization kinetics in Co–20Cr–15W–10Ni (L-605) cobalt-base superalloy. Philosophical Magazine, 2014, 94, 1992-2008.	1.6	17
171	Superthermostability of nanoscale TIC-reinforced copper alloys manufactured by a two-step ball-milling process. Philosophical Magazine, 2015, 95, 4035-4053.	1.6	17
172	Investigation on hot deformation behavior of nanoscale TiC-strengthened Cu alloys fabricated by mechanical milling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 668, 1-12.	5.6	17
173	Continuous Measurements of Recrystallization and Grain Growth in Cobalt Super Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 2363-2374.	2.2	17
174	Osseointegration of 3D printed microalloyed CoCr implants—Addition of 0.04% Zr to CoCr does not alter bone material properties. Journal of Biomedical Materials Research - Part A, 2018, 106, 1655-1663.	4.0	17
175	Significant lattice-distortion effect on compressive deformation in Mo-added CoCrFeNi-based high-entropy alloys. Materials Science & Structural Materials: Properties, Microstructure and Processing, 2022, 830, 142295.	5.6	17
176	Correlation between Ductility and Ordering Energy of Ni ₃ Al. Materials Transactions, JIM, 1990, 31, 824-827.	0.9	16
177	Successful Treatment of Multiple Small-Bowel Perforations Caused by Cytomegalovirus in a Patient with Malignant Lymphoma: Report of a Case. Surgery Today, 2006, 36, 930-933.	1.5	16
178	Microstructure and Tensile Properties of Hot-Pressed Co-Cr-Mo Alloy Compacts for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 532-537.	0.4	16
179	Effects of plasma rotating electrode process parameters on the particle size distribution and microstructure of Ti-6Al-4ÂV alloy powder. Powder Technology, 2020, 376, 363-372.	4.2	16
180	Isothermal \hat{l}^3 $\hat{a}\dagger'\hat{l}\mu$ phase transformation behavior in a Co-Cr-Mo alloy depending on thermal history during electron beam powder-bed additive manufacturing. Journal of Materials Science and Technology, 2020, 50, 162-170.	10.7	16

#	Article	IF	CITATIONS
181	Thermomechanical response of particulate-reinforced powder metallurgy titanium matrix composites—A study using processing map. Materials Science & Dipineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 4733-4741.	5.6	15
182	Asymmetric slip trace formation in tension/compression cyclic deformation of biomedical Co–Cr–Mo–N alloy with negative stacking fault energy. Scripta Materialia, 2014, 74, 52-55.	5.2	15
183	Modeling dynamic recrystallization of L-605 cobalt superalloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 653, 84-92.	5.6	15
184	Effect of Nb Content on Microstructures and Mechanical Properties of Ti-xNb-2Fe Alloys. Journal of Materials Engineering and Performance, 2019, 28, 5501-5508.	2.5	15
185	Centrifugal granulation behavior in metallic powder fabrication by plasma rotating electrode process. Scientific Reports, 2020, 10, 18446.	3.3	15
186	Quasi-in-situ study on {10-12} twinning-detwinning behavior of rolled Mg-Li alloy in two-step compression (RD)-compression (ND) process. Journal of Magnesium and Alloys, 2022, 10, 2775-2787.	11.9	15
187	Effects of 5th Element Addition to Co-29Cr-6Mo Alloy Containing Impurity Ni on Metal Ion Release. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2005, 69, 886-891.	0.4	14
188	Microstructure and Mechanical Properties of & Deformed under the & Deformed under the & Deformed under the wamp; alpha; & Deformed under the w	1.2	14
189	Determination of the Mechanical Properties of Extruded Pure Magnesium During Tension–Tension Low-Cycle Fatigue Using Ultrasonic Testing. Materials Transactions, 2010, 51, 2025-2032.	1.2	14
190	Uneven damage on head and liner contact surfaces of a retrieved Co–Cr-based metal-on-metal hip joint bearing: An important reason for the high failure rate. Materials Science and Engineering C, 2016, 62, 532-543.	7.3	14
191	Significance of powder feedstock characteristics in defect suppression of additively manufactured Inconel 718. Additive Manufacturing, 2020, 34, 101277.	3.0	14
192	Critical factor triggering grain boundary cracking in non-weldable superalloy Alloy713ELC fabricated with selective electron beam melting. Acta Materialia, 2021, 208, 116695.	7.9	14
193	Synthesis and characterization of nanoparticles of Alnico alloys. Acta Materialia, 2003, 51, 5593-5600.	7.9	13
194	Nitriding of Co–Cr–Mo alloy in nitrogen. Materials Chemistry and Physics, 2014, 145, 350-356.	4.0	13
195	Quantitative in vivo biocompatibility of new ultralowâ€nickel cobalt–chromium–molybdenum alloys. Journal of Orthopaedic Research, 2016, 34, 1505-1513.	2.3	13
196	Dynamic recrystallization behavior of biomedical Co-29Cr-6Mo-0.16N alloy. Materials Characterization, 2016, 118, 50-56.	4.4	13
197	Ultrasound Diagnosis and Treatment of Breast Lumps after Breast Augmentation with Autologous Fat Grafting. Plastic and Reconstructive Surgery - Global Open, 2017, 5, e1603.	0.6	13
198	Influence of Cu addition on corrosion behavior and tensile performance of Ni-30Co-16Cr-15Mo-6Fe alloy. Materials Characterization, 2020, 161, 110140.	4.4	13

#	Article	IF	CITATIONS
199	Mechanical Analysis of Notch-Free Pre-Bent Rods for Spinal Deformity Surgery. Spine, 2020, 45, E312-E318.	2.0	13
200	Development of Novel Methods for Compensation of Stress-strain Curves. ISIJ International, 2011, 51, 782-787.	1.4	13
201	Microstructure and Mechanical Properties of Co-29Cr-6Mo Alloy Aged at 1023 K. Materials Transactions, 2007, 48, 1517-1522.	1.2	12
202	Determination of the Cyclic-Tension Fatigue of Extruded Pure Magnesium Using Multiple Ultrasonic Waves. Materials Transactions, 2010, 51, 1255-1263.	1.2	12
203	Influence of Cold-Working and Subsequent Heat-Treatment on Young's Modulus and Strength of Co-Ni-Cr-Mo Alloy. Materials Transactions, 2010, 51, 434-441.	1.2	12
204	Mechanisms of Cr segregation to C11b/C40 lamellar interface in (Mo,Nb)Si2 duplex silicide: A phase-field study to bridge experimental and first-principles investigations. Intermetallics, 2014, 54, 232-241.	3.9	12
205	Significant impact of yttrium microaddition on high temperature tensile properties of Inconel 713C superalloy. Materials Letters, 2018, 227, 40-43.	2.6	12
206	Nitinol powders generate from Plasma Rotation Electrode Process provide clean powder for biomedical devices used with suitable size, spheroid surface and pure composition. Scientific Reports, 2018, 8, 13776.	3.3	12
207	The influence of Mo on Suzuki-segregation-related microstructure evolution and mechanical properties of Coâ^Ni-based superalloy. Journal of Alloys and Compounds, 2018, 768, 136-142.	5.5	12
208	Effects of process parameters and cooling gas on powder formation during the plasma rotating electrode process. Powder Technology, 2021, 393, 301-311.	4.2	12
209	A method to manipulate non-steady-state columnar-to-equiaxed transition in powder bed fusion additive manufacturing using an electron beam. Acta Materialia, 2022, 227, 117717.	7.9	12
210	Fabrication and Mechanical Properties of Porous Co– Cr– Mo Alloy Compacts without Ni Addition. Materials Transactions, 2006, 47, 283-286.	1.2	11
211	Dynamic Recrystallization Behavior of Biomedical CCM Alloy with Additions of C and N. Materials Transactions, 2010, 51, 1633-1639.	1.2	11
212	Thermo-mechanical fatigue test of a wrought Co-based alloy as potential tooling material for die casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 615, 164-168.	5.6	11
213	Analysis of Run-in-Stage Wear Behavior and Contact Mechanics of Metal-on-Metal Hip Joint Bearings with Different Radial Clearances. Materials Transactions, 2015, 56, 826-834.	1.2	11
214	Serial Injections of Cryopreserved Fat at $\hat{a}^{196}\hat{a}^{0}$ C for Tissue Rejuvenation, Scar Treatment, and Volume Augmentation. Plastic and Reconstructive Surgery - Global Open, 2018, 6, e1742.	0.6	11
215	Strain-Induced Martensitic Transformation and Texture Evolution in Cold-Rolled Co–Cr Alloys. Quantum Beam Science, 2018, 2, 11.	1.2	11
216	Effect of niobium addition on tensile properties and oxidation resistance of a titanium-based alloy. Corrosion Science, 2021, 180, 109198.	6.6	11

#	Article	IF	CITATIONS
217	Calculation-driven design of off-equiatomic high-entropy alloys with enhanced solid-solution strengthening. Materials Science & Description A: Structural Materials: Properties, Microstructure and Processing, 2021, 817, 141359.	5.6	11
218	Process optimization and mechanical property investigation of non-weldable superalloy Alloy713ELC manufactured with selective electron beam melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 787, 139485.	5.6	11
219	Microstructure and mechanical properties of Ti–Nb–Fe–Zr alloys with high strength and low elastic modulus. Transactions of Nonferrous Metals Society of China, 2022, 32, 503-512.	4.2	11
220	Friction-Wear Properties of Nitrogen-Ion-Implanted Nickel-Free Co–Cr–Mo Alloy. Materials Transactions, 2005, 46, 1593-1596.	1.2	10
221	Microstructures of Zr-Added Co-Cr-Mo Alloy Compacts Fabricated with a Metal Injection Molding Process and Their Metal Release in 1 mass% Lactic Acid. Materials Transactions, 2010, 51, 1281-1287.	1.2	10
222	Nitrogen-induced dynamic strain aging in a biomedical-grade Co–Cr–Mo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 552, 69-75.	5.6	10
223	Effects of surface friction treatment on the in vitro release of constituent metals from the biomedical Co–29Cr–6Mo–0.16N alloy. Materials Science and Engineering C, 2016, 64, 260-268.	7.3	10
224	Development of microstructure and mechanical properties during annealing of a cold-swaged Coâ€"Crâ€"Mo alloy rod. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 64, 187-198.	3.1	10
225	Effect of nitrogen on the microstructure and mechanical properties of Co–33Cr–9W alloys prepared by dental casting. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 77, 693-700.	3.1	10
226	Impact of minor alloying with C and Si on the precipitation behavior and mechanical properties of N-doped Co–Cr alloy dental castings. Materials Science and Engineering C, 2018, 92, 112-120.	7.3	10
227	Pattern formation mechanism of directionally-solidified MoSi2/Mo5Si3 eutectic by phase-field simulation. Intermetallics, 2020, 116, 106590.	3.9	10
228	Mechanical Property of Single Phase Co-Ni-Cr-Mo Based Superalloy Produced by Cold Working and Recrystallization Heat Treatment. Materials Science Forum, 2004, 449-452, 573-576.	0.3	9
229	Surface Characterization and Anodic Polarization of Nitrogen-Ion-Implanted Nickel-Free Co–Cr–Mo Alloy. Materials Transactions, 2005, 46, 1627-1632.	1.2	9
230	Phase Stability and Mechanical Properties of Ti-Cr Based Alloys with Low Young's Modulus. Materials Science Forum, 0, 654-656, 2114-2117.	0.3	9
231	Construction of Processing Map for Biomedical Co-29Cr-6Mo-0.23C-0.14N Alloy by Using Compression Tests. Materials Transactions, 2011, 52, 780-786.	1.2	9
232	Mechanical Properties of Ti-Cr-Sn-Zr Alloys with Low Young's Modulus. Materials Science Forum, 0, 706-709, 553-556.	0.3	9
233	Quantitative evaluation in hot workability of SUS303 free-cutting steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 563, 117-124.	5.6	9
234	Effect of Phase Transformation on Tensile Behavior of Co–Cr–Mo Alloy Fabricated by Electron-beam Melting. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2014, 61, 234-242.	0.2	9

#	Article	IF	Citations
235	Nano-lamellar/nano-tubular hierarchical porous structure produced by selective dissolution and anodization of lamellar Ti-40at.% Al alloy. Materials Letters, 2015, 145, 15-18.	2.6	9
236	Characterisation of nanoscale carbide precipitation in as-cast Co–Cr–W-based dental alloys. Journal of Materials Chemistry B, 2016, 4, 1778-1786.	5.8	9
237	Preventing high-temperature oxidation of Co–Cr-based dental alloys by boron doping. Journal of Materials Chemistry B, 2016, 4, 309-317.	5.8	9
238	Low Young's Modulus Ti–Nb–O with High Strength and Good Plasticity. Materials Transactions, 2018, 59, 858-860.	1.2	9
239	Influence of interatomic interactions on the mechanical properties of face-centered cubic multicomponent Co–Ni–Cr–Mo alloys. Materialia, 2020, 12, 100742.	2.7	9
240	Preparation of high-strength Coâ^'Crâ^'Mo alloy rods via hot-caliber rolling. Materialia, 2020, 12, 100729.	2.7	9
241	Non-equilibrium solidification behavior associated with powder characteristics during electron beam additive manufacturing. Materials and Design, 2022, 221, 110915.	7.0	9
242	Mechanical Properties of Ti-Cr-Sn-Zr Alloys. Materials Science Forum, 2010, 638-642, 635-640.	0.3	8
243	Nanoplastic deformation on Ti–39 at.% Al single crystals for manipulation of every single γ lamella. Acta Materialia, 2014, 76, 331-341.	7.9	8
244	The hot forging behaviour and its effects on the oxidation behaviour of W–Cr alloy. Corrosion Science, 2014, 83, 367-374.	6.6	8
245	Prototyping of Co–Cr–Mo Alloy Flat Spiral Spring by Electron Beam Melting. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2014, 61, 243-249.	0.2	8
246	Mechanisms of lamellar structure formation and Cr interfacial segregation in C11b-MoSi2/C40-NbSi2 dual phase silicide verified by a phase-field simulation incorporating elastic inhomogeneity. Computational Materials Science, 2015, 108, 358-366.	3.0	8
247	Cold-Workability and Microstructure Change with \hat{I}^2 -Phase Stability in High-Strength Ti-Mn Binary Alloys. Jom, 2019, 71, 3590-3599.	1.9	8
248	Quantifying the dislocation structures of additively manufactured Ti–6Al–4V alloys using X-ray diffraction line profile analysis. Additive Manufacturing, 2021, 37, 101678.	3.0	8
249	Spreading behavior of Ti 48Al 2Cr 2Nb powders in powder bed fusion additive manufacturing process: Experimental and discrete element method study. Additive Manufacturing, 2022, 49, 102489.	3.0	8
250	Detection, classification and prediction of internal defects from surface morphology data of metal parts fabricated by powder bed fusion type additive manufacturing using an electron beam. Additive Manufacturing, 2022, 54, 102736.	3.0	8
251	Deformation and Fracture Behavior of TiAl in Compression Tests at Room Temperature. Materials Transactions, JIM, 1992, 33, 802-810.	0.9	7
252	生体甓Co基å•̂金ã®é«~機能化. Materia Japan, 2007, 46, 194-197.	0.1	7

#	Article	IF	Citations
253	Microstructure and Mechanical Properties of α′ Martensite Type Ti Alloy Deformation-Processed under the α′ Processing. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 989-996.	0.4	7
254	Effect of Nitrogen Content on Microstructure of Hot-Pressed Co-Cr-Mo Alloy Compacts for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2008, 72, 875-880.	0.4	7
255	Reduction of Artifact of Metallic Implant in Magnetic Resonance Imaging by Coating of Diamagnetic Material. IEEE Transactions on Magnetics, 2009, 45, 4837-4840.	2.1	7
256	Enhanced Grain Refinement Through Deformation Induced α Precipitation in Hot Working of α + β Tita Alloy. Advanced Engineering Materials, 2012, 14, 785-789.	nium 3.5	7
257	Effect of Cobalt Addition on the Deformation and Recrystallization Textures of Polycrystalline IN713C Nickel Based Superalloy. Advanced Materials Research, 0, 922, 711-715.	0.3	7
258	Texture evolution and mechanical anisotropy of biomedical hot-rolled Co–Cr–Mo alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 51, 205-214.	3.1	7
259	Effects of carbon content and size on Ti-C reaction behavior and resultant properties of Cu-Ti-C alloy system. Materials Characterization, 2018, 141, 186-192.	4.4	7
260	Precipitation during \hat{l}^3 - $\hat{l}\mu$ Phase Transformation in Biomedical Co-Cr-Mo Alloys Fabricated by Electron Beam Melting. Metals, 2020, 10, 71.	2.3	7
261	Study on Hot Deformation Behavior of Beta Ti-17Mo Alloy for Biomedical Applications. Jom, 2022, 74, 494-505.	1.9	7
262	Robust mechanical properties and corrosion resistance of new low-cost hot-forged and aged <mml:math altimg="si0019.svg" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">β</mml:mi></mml:math> -type Tiâ€"14Mnâ€"(x)Zr alloys. Journal of Alloys and Compounds, 2022, 904, 164098.	5 . 5	7
263	Density, surface tension, and viscosity of Co-Cr-Mo melts measured using electrostatic levitation technique. Thermochimica Acta, 2022, 710, 179183.	2.7	7
264	Ductility of Undoped Ni ₃ Al. Materials Transactions, JIM, 1992, 33, 503-508.	0.9	6
265	Microstructure and Mechanical Properties of Hot-Pressed Co-Cr-Mo Alloy Compacts. Advanced Materials Research, 2007, 26-28, 769-772.	0.3	6
266	Nucleation of recrystallization in fine-grained materials: an extension of the Bailey–Hirsch criterion. Philosophical Magazine Letters, 2013, 93, 631-639.	1.2	6
267	Super-elastic Behavior of a Ti-Cr-Sn-Zr Alloy. Materials Today: Proceedings, 2015, 2, S829-S832.	1.8	6
268	Manipulating local heat accumulation towards controlled quality and microstructure of a Co-Cr-Mo alloy in powder bed fusion with electron beam. Materials Letters, 2019, 254, 269-272.	2.6	6
269	Corrosion-resistant carbide-reinforced martensitic steel by Cu modification. Npj Materials Degradation, 2019, 3, .	5. 8	6
270	Low Young's Modulus and High Strength Obtained in Ti-Nb-Zr-Cr Alloys by Optimizing Zr Content. Journal of Materials Engineering and Performance, 2020, 29, 2871-2878.	2.5	6

#	Article	IF	CITATIONS
271	Roles of Mo and Cu on Electrochemical Behaviors of Ni-Base Alloys in Hydrofluoric Acid Solution. Journal of the Electrochemical Society, 2020, 167, 101502.	2.9	6
272	Vickers Hardness Properties of Austenitic Stainless Steels from Cryogenic Temperatures to Room Temperatures TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 1997, 32, 507-514.	0.1	6
273	Microstructure, mechanical properties, and cytotoxicity of low Young's modulus Ti–Nb–Fe–Sn alloys. Journal of Materials Science, 2022, 57, 5634-5644.	3.7	6
274	Effect of Heat Treatment on Microstructure and Mechanical Properties of Ni- and C-Free Co-Cr-Mo Alloys for Medical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 260-264.	0.4	5
275	Effect of Dissolved Oxygen Content on Pin-on-Disc Wear Behavior of Biomedical Co-Cr-Mo Alloys in a Like-on-Like Configuration in Distilled Water. Materials Transactions, 2007, 48, 1511-1516.	1.2	5
276	Influence of Cold-Working and Subsequent Heat-Treatment on Young's Modulus and Strength of Co-Ni-Cr-Mo Alloy. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2009, 73, 74-80.	0.4	5
277	Residual Stress Behavior of Rolled Aluminum Alloy A2024T3 in a Thin Plate During Cyclic-Tension Fatigue Studied Using Ultrasonic Horizontally Polarized Shear Waves. Materials Transactions, 2010, 51, 962-968.	1.2	5
278	Cyclic-Tension Fatigue Behavior in a Rolled AZ31B Magnesium Alloy Studied Using Ultrasonic Shear Waves. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2151-2161.	2.2	5
279	Phase-Field Simulation of <i>D</i> O ₃ -Type Antiphase Boundary Migration in Fe ₃ Al with Vacancy and Solute Segregation. Solid State Phenomena, 0, 172-174, 1313-1319.	0.3	5
280	Our Experience with 131 Cases of Simultaneous Breast Implant Exhange with Fat (SIEF). Plastic and Reconstructive Surgery - Global Open, 2016, 4, e691.	0.6	5
281	Porous surface structures in biomedical Co-Cr-Mo alloy prepared by local dealloying in a metallic melt. Materials Letters, 2018, 219, 256-259.	2.6	5
282	Low Springback and Low Young's Modulus in Ti–29Nb–13Ta–4.6Zr Alloy Modified by Mo Addition. Materials Transactions, 2019, 60, 1755-1762.	1.2	5
283	Effects of Fe on Microstructures and Mechanical Properties of Ti–15Nb–25Zr–(0, 2, 4, 8)Fe Alloys Prepared by Spark Plasma Sintering. Materials Transactions, 2019, 60, 1763-1768.	1.2	5
284	Effects of Si concentrations on microstructure and mechanical properties of as-cast Co–Cr–Mo alloys. IOP Conference Series: Materials Science and Engineering, 2019, 635, 012006.	0.6	5
285	Favorable modulation of osteoblast cellular activity on Zrâ€modified Co–Cr–Mo alloy: The significant impact of zirconium on cell–substrate interactions. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 1518-1526.	3.4	5
286	Manufacturing of a nanosized TiB strengthened Ti-based alloy via electron beam powder bed fusion. Additive Manufacturing, 2020, 36, 101472.	3.0	5
287	A study on wettability and formation of intermetallic phase between Co–Cr–Mo alloy and Sn-Solder used as a potential under bump metallization for flip-chip packages. Intermetallics, 2020, 125, 106875.	3.9	5
288	Surface evolution and corrosion behaviour of Cu-doped carbide-reinforced martensitic steels in a sulfuric acid solution. Npj Materials Degradation, $2021, 5, \ldots$	5.8	5

#	Article	IF	Citations
289	Characterization of oxide films on wrought Co–Cr–Mo–xSi alloys exposed to high-temperature oxidation. Corrosion Science, 2021, 191, 109753.	6.6	5
290	Removal of Arsenic from Geothermal Water by using High Intensity Field and High Gradient Magnetic Separation. IEEJ Transactions on Power and Energy, 2005, 125, 701-708.	0.2	5
291	A novel strategy to strengthen the hexagonal close-packed (HCP) alloys. Journal of Alloys and Compounds, 2022, 893, 162346.	5. 5	5
292	Thermophysical properties of liquid Co–Cr–Mo alloys measured by electromagnetic levitation in a static magnetic field. Thermochimica Acta, 2022, 708, 179119.	2.7	5
293	Demonstrating a duplex TRIP/TWIP titanium alloy via the introduction of metastable retained \hat{l}^2 -phase. Materials Research Letters, 2022, 10, 754-761.	8.7	5
294	Fabrication of Porous Co-Cr-Mo Compacts Prepared by Spark Plasma Sintering for Biomedical Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 281-286.	0.4	4
295	Cytocompatibility for Co-Cr-Mo Alloy with a Small Amount of Zirconium or Carbon. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2007, 71, 578-585.	0.4	4
296	Reduction of artifact of metallic implant in magnetic resonance imaging by combining paramagnetic and diamagnetic materials. Journal of Applied Physics, 2010, 107, 09B323.	2.5	4
297	Phase-Field Study on the Segregation Mechanism of Additive Elements in NbSi2/MoSi2 Duplex Silicide. Materials Research Society Symposia Proceedings, 2013, 1516, 145-150.	0.1	4
298	Phase-Field Simulation of Lamellar Structure Formation in MoSi2/NbSi2 Duplex Silicide. Materials Research Society Symposia Proceedings, 2013, 1516, 309-315.	0.1	4
299	Aging Effect on Microstructure of Cold Groove-Rolled & amp; alpha; & amp; prime; -Type Ti& amp; ndash; 12 mass%V& amp; ndash; 2 mass%Al Alloys Studied by Transmission Electron Microscopy. Materials Transactions, 2014, 55, 763-767.	1.2	4
300	Line-Profile Analysis Combined with Texture Analysis for Characterizing Dislocation Distribution in Texture Components of Cold-Rolled Copper Sheets. High Temperature Materials and Processes, 2016, 35, 705-713.	1.4	4
301	Effect of Building Position on Phase Distribution in Co-Cr-Mo Alloy Additive Manufactured by EBM. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2016, 63, 10-16.	0.2	4
302	Microstructure refining of Co-29Cr-6Mo-0.16N alloy in rapid hot-forging process. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 729, 48-52.	5.6	4
303	Fabricating 9–12 Cr ferritic/martensitic steels using selective electron beam melting. Materials Letters, 2020, 271, 127747.	2.6	4
304	Effects of the aluminum concentration on twin boundary motion in pre-strained magnesium alloys. Journal of Materials Science and Technology, 2021, 73, 116-127.	10.7	4
305	Quantitative and Qualitative Relationship between Microstructural Factors and Fatigue Lives under Load- and Strain-Controlled Conditions of Ti–5Al–2Sn–2Zr–4Cr–4Mo (Ti-17) Fabricated Using a 1500-ton Forging Simulator. Materials Transactions, 2019, 60, 1740-1748.	1.2	4
306	Evidence for chromium, cobalt and molybdenum volatilisations during high temperature oxidation of Co-27Cr-6Mo Alloy. Corrosion Science, 2022, 202, 110285.	6.6	4

#	Article	IF	CITATIONS
307	Effect of Ultrafine (AlN/Al) and Y ₂ O ₃ Powder Addition on Sintering Characteristics and Thermal Diffusivity of AlN. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1996, 60, 128-134.	0.4	3
308	Effect of Grain Size on Mechanical Properties of Single Phase Co-Ni-Cr-Mo Based Superalloy. Materials Science Forum, 2005, 475-479, 631-634.	0.3	3
309	Fabrication of Gas Atomized Co-Cr-Mo Alloy Powder and Microstructure of the Hot-Pressed Compacts. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 275-280.	0.4	3
310	Mechanical Properties of Zr Added CoCrMo Alloy Sintered Compact Produced by MIM Proces. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2010, 57, 118-125.	0.2	3
311	Effect of Addition of a Small Amount of Zr on the Sintering behavior of Water Atomized 316L Stainless Steel Powder. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2010, 57, 126-133.	0.2	3
312	Microstructure and Mechanical Properties of α' Martensite Type Ti-V-Al Alloy after Cold- or Hot Working Process. Key Engineering Materials, 0, 436, 171-177.	0.4	3
313	Interface Migration with Segregation in MoSi ₂ -Based Lamellar Alloy Simulated by Phase-Field Method. Advanced Materials Research, 0, 922, 832-837.	0.3	3
314	Enhanced oxidation resistance of a titanium–based alloy by the addition of boron and the application of electron beam melting. Additive Manufacturing, 2020, 31, 100971.	3.0	3
315	The microstructure and mechanical properties of selective electron beam melting manufactured 9–12Cr ferritic/martensitic steel using N- and Ar-atomized powder. Additive Manufacturing, 2021, 45, 102075.	3.0	3
316	Macro-mesoscale microstructural evolution modeling under hot forging of a Ti-17 alloy with a lamellar ($\hat{l}\pm+\hat{l}^2$) starting microstructure. MATEC Web of Conferences, 2020, 321, 13005.	0.2	3
317	Compensation for Friction and Temperature Increase Due to Adiabatic Heating duringHot Compression Testing and Construction of ^ ^ldquo;Processing Map^ ^rdquo; of BiomedicalCo-29Cr-6Mo-0.16N Alloy. Journal of the Japan Society for Technology of Plasticity, 2010, 51, 221-226.	0.3	3
318	Additive Manufacturing Using Electron Beam Melting (EBM) Technique and EBM Metallurgy. Journal of Smart Processing, 2014, 3, 152-157.	0.1	3
319	Current status of Metal Additive Manufacturing and Microstructure Control of Metal Parts in Powder Bed Fusionï¼^PBF). Journal of Smart Processing, 2018, 7, 216-222.	0.1	3
320	Spinodal Decomposition in Plastically Deformed Fe–Cr–Co Magnet Alloy. ISIJ International, 2022, 62, 1268-1274.	1.4	3
321	A survey on basic influencing factors of solidified grain morphology during electron beam melting. Materials and Design, 2022, 221, 110927.	7. O	3
322	Electrical Resistivity of the Ni-base Alloys Containing Fe. Materials Transactions, JIM, 1990, 31, 93-97.	0.9	2
323	Effect of Nitrogen on Mechanical Properties of Porous Titanium Compacts Prepared by Powder Sintering. Materials Science Forum, 2005, 475-479, 2313-2316.	0.3	2
324	Effect of Sigma Phase in Co-29Cr-6Mo Alloy on Corrosion and Mechanical Properties. Advanced Materials Research, 2007, 26-28, 777-780.	0.3	2

#	Article	IF	CITATIONS
325	Grain Refining Technique and Mechanical Properties of the Biomedical Co-Cr-Mo Alloy. Materials Science Forum, 2010, 654-656, 2184-2187.	0.3	2
326	Phase Stability and Mechanical Properties of Ti-Cr-Sn-Zr Alloys Containing a Large Amount of Zr. Materials Science Forum, 0, 879, 1344-1349.	0.3	2
327	Introducing dislocations locally in Al-supersaturated $\hat{l}\pm2$ -Ti3Al single crystal via nanoscale wedge indentation. Intermetallics, 2019, 113, 106557.	3.9	2
328	Dynamic recrystallization of Sn coatings on carbon-fiber-reinforced plastics during cold spray additive manufacturing. Additive Manufacturing, 2022, 56, 102949.	3.0	2
329	Disintegration and Powder Formation of Nb75M25 (M = Al, Si, Ga, Ge, and Sn) Due to Hydrogenation in an Arc-melting Chamber. Journal of Materials Research, 1998, 13, 2526-2532.	2.6	1
330	Dry Friction and Wear Behavior of Forged Co-29Cr-6Mo Alloy without Ni and C Additions for Implant Applications. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 265-274.	0.4	1
331	Effects of a Co-29Cr-6Mo Alloy on Cultured Cells. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 142-145.	0.4	1
332	"Materials Technology for Improving QOL― Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 259.	0.4	1
333	Effect of Nitrogen on Microstructure of Porous CoCrMo Alloy Compacts for Biomedical Applications. Materials Science Forum, 2007, 561-565, 1501-1504.	0.3	1
334	Effect of Iron Addition on Co-29Cr-6Mo Alloys for Biomedical Applications. Materials Science Forum, 2007, 561-565, 1497-1500.	0.3	1
335	Dynamic Recrystallization Behavior of Biomedical CCM Alloys in Hot Compression Process. Materials Science Forum, 2010, 654-656, 1275-1278.	0.3	1
336	Dynamic Strain Aging in Biomedical Co–Cr–Mo-Based Alloys with Nitrogen Doping. Key Engineering Materials, 2012, 508, 141-145.	0.4	1
337	Dynamic Recrystallization of Biomedical Co-Cr-W-Ni (L-605) Alloy. Materials Science Forum, 0, 706-709, 472-477.	0.3	1
338	Effects of Carbon Addition on Mechanical Properties and Microstructures of Ni-Free Co–Cr–W-Based Dental Alloys. , 2015, , 225-236.		1
339	Recent Trends of Additive Manufacturing Using Electron Beam Melting. Journal of the Japan Society for Precision Engineering, 2016, 82, 624-628.	0.1	1
340	Effect of Zr-Addition to Ti-14Mn Alloy. Materials Science Forum, 0, 890, 352-355.	0.3	1
341	Characterization of intermetallic phase in as-cast Si-doped Co–Cr–Mo alloys. IOP Conference Series: Materials Science and Engineering, 2019, 635, 012007.	0.6	1
342	XPS Analysis of Oxide Formed on the Surface of Co-28Cr-6Mo-1Si Alloy Oxidized at 550°C. Key Engineering Materials, 2020, 845, 95-100.	0.4	1

#	Article	IF	CITATIONS
343	Non-Equilibrium Solidification Behavior With Solute Trapping Associated With Powder Characteristics During Electron Beam Additive Manufacturing. SSRN Electronic Journal, 0, , .	0.4	1
344	Mechanical Properties of Meta-Stable Ti-Cr-Sn-Zr Alloys. , 2013, , 1537-1542.		1
345	Crystallographic Orientation and Mechanical Properties of ^ ^alpha; ^ ^prime; Martensite Ti-V AlloySystems Produced by Cross Rolling. Journal of the Japan Society for Technology of Plasticity, 2009, 50, 249-255.	0.3	1
346	High-Temperature Deformation Mechanism of B2-Type NiAl Intermetallic Compound Deduced from Stress Relaxation Behavior. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2000, 64, 948-954.	0.4	1
347	Superior hardness–corrosion-resistance combination in a Co-, Cu-modified Ni–Cr–Mo alloy via multiple nanoscale segregation mechanisms. Scripta Materialia, 2022, 209, 114389.	5.2	1
348	Ball-milling treatment of gas-atomized Ti 48Al 2Cr 2Nb powder and its effect on preventing smoking during electron beam powder bed fusion building process. Additive Manufacturing, 2022, 51, 102634.	3.0	1
349	Analysis of hierarchical microstructural evolution in electron beam powder bed fusion Ti–6Al–4V alloys via time-of-flight neutron diffraction. Additive Manufacturing Letters, 2022, 3, 100053.	2.1	1
350	The significance of thermomechanical processing on the cellular response of biomedical Co–Cr–Mo alloys. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 133, 105360.	3.1	1
351	Deformation and Fracture Behavior of a TiAl Intermetallic Compound in Compression Tests at Room Temperature. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1991, 55, 1045-1053.	0.4	О
352	Precipitation Behavior and Mechanical Properties of a Supersaturated Co-Based Superalloy. Materials Science Forum, 2003, 439, 320-325.	0.3	О
353	New Type of Ultra-Fine Grained Microstructure in Ti-6Al-4V Alloy for Enhancing Superplasticity. Materials Science Forum, 0, 735, 322-326.	0.3	O
354	Phase-Field Study of Ordered Domain Growth and Segregation in Intermetallics. Materia Japan, 2012, 51, 53-61.	0.1	О
355	Nitrogen-Enhanced Nanostructural Evolution and its Effect on Phase Stability in Biomedical Co-Cr-Mo Alloys. Advanced Materials Research, 0, 922, 826-831.	0.3	O
356	Spinodal Decomposition in Plastically Deformed Fe-Cr-Co Magnet Alloy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2021, 107, 146-153.	0.4	О
357	Effect of Ir Addition on the High-Temperature Creep Strength of B2-Type NiAl Intermetallic Compounds. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2000, 64, 1048-1055.	0.4	O
358	Development of a Practical Magnetic Separation System. TEION KOGAKU (Journal of Cryogenics and) Tj ETQq0 0) 0 pgBT /C	Overlock 10 Tf
359	New Type of Deformation Processing of Conventional Ti Alloys. Journal of the Japan Society for Technology of Plasticity, 2012, 53, 900-905.	0.3	0
360	Effect of Ultrafine AlN/Al and Eu ₂ O ₃ Powder Addition on Sintering Characteristics and Thermal Diffusivity of AlN. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1997, 61, 99-104.	0.4	0

#	Article	IF	CITATIONS
361	Guide to Development of Innovative Joining Technology. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2017, 86, 570-578.	0.1	O
362	Manufacture and Material Characteristics of Titanium Alloy Thrusters for Attitude Control Using Electron Beam Additive Manufacturing. Journal of the Japan Society for Precision Engineering, 2020, 86, 925-929.	0.1	0
363	Novel Constitutive Equation for Predicting Dynamic Recrystallization During Hot Working Considering the Efficiency of Power Dissipation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 0, , 1.	2.2	O
364	Microstructure evolution during T6 heat treatment in an additive manufactured AlSi10Mg alloy using powder bed fusion-electron beam. Keikinzoku/Journal of Japan Institute of Light Metals, 2022, 72, 321-326.	0.4	0