

Takayoshi Nakano

List of Publications by Year in descending order

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446
papers

10,183
citations

38660

50
h-index

56606

83
g-index

456
all docs

456
docs citations

456
times ranked

6245
citing authors

#	ARTICLE	IF	CITATIONS
1	Unique alignment and texture of biological apatite crystallites in typical calcified tissues analyzed by microbeam x-ray diffractometer system. <i>Bone</i> , 2002, 31, 479-487.	1.4	330
2	Crystallographic texture control of beta-type Ti-15Mo-5Zr-3Al alloy by selective laser melting for the development of novel implants with a biocompatible low Young's modulus. <i>Scripta Materialia</i> , 2017, 132, 34-38.	2.6	302
3	Excellent mechanical and corrosion properties of austenitic stainless steel with a unique crystallographic lamellar microstructure via selective laser melting. <i>Scripta Materialia</i> , 2019, 159, 89-93.	2.6	267
4	Novel TiNbTaZrMo high-entropy alloys for metallic biomaterials. <i>Scripta Materialia</i> , 2017, 129, 65-68.	2.6	262
5	Effect of scanning strategy on texture formation in Ni-25 at.%Mo alloys fabricated by selective laser melting. <i>Materials and Design</i> , 2018, 140, 307-316.	3.3	222
6	Peculiar elastic behavior of Ti-Nb-Ta-Zr single crystals. <i>Acta Materialia</i> , 2008, 56, 2856-2863.	3.8	220
7	Strengthening mechanisms acting in extruded Mg-based long-period stacking ordered (LPSO)-phase alloys. <i>Acta Materialia</i> , 2019, 163, 226-239.	3.8	200
8	Unique crystallographic texture formation in Inconel 718 by laser powder bed fusion and its effect on mechanical anisotropy. <i>Acta Materialia</i> , 2021, 212, 116876.	3.8	174
9	Effect of building direction on the microstructure and tensile properties of Ti-48Al-2Cr-2Nb alloy additively manufactured by electron beam melting. <i>Additive Manufacturing</i> , 2017, 13, 61-70.	1.7	148
10	Degree of biological apatite <i>c</i> -axis orientation rather than bone mineral density controls mechanical function in bone regenerated using recombinant bone morphogenetic protein-2. <i>Journal of Bone and Mineral Research</i> , 2013, 28, 1170-1179.	3.1	144
11	Effect of Calcium Ion Concentrations on Osteogenic Differentiation and Hematopoietic Stem Cell Niche-Related Protein Expression in Osteoblasts. <i>Tissue Engineering - Part A</i> , 2010, 16, 2467-2473.	1.6	127
12	Development of non-equiatomic Ti-Nb-Ta-Zr-Mo high-entropy alloys for metallic biomaterials. <i>Scripta Materialia</i> , 2019, 172, 83-87.	2.6	124
13	Crystal-orientation-dependent corrosion behaviour of single crystals of a pure Mg and Mg-Al and Mg-Cu solid solutions. <i>Corrosion Science</i> , 2016, 109, 68-85.	3.0	123
14	The role of ordered domains and slip mode of ϵ phase in the plastic behaviour of TiAl crystals containing oriented lamellae. <i>Acta Metallurgica Et Materialia</i> , 1993, 41, 1155-1161.	1.9	122
15	Low Young's modulus in Ti-Nb-Ta-Zr-O alloys: Cold working and oxygen effects. <i>Acta Materialia</i> , 2011, 59, 6975-6988.	3.8	122
16	Osteocalcin is necessary for the alignment of apatite crystallites, but not glucose metabolism, testosterone synthesis, or muscle mass. <i>PLoS Genetics</i> , 2020, 16, e1008586.	1.5	119
17	Development of high Zr-containing Ti-based alloys with low Young's modulus for use in removable implants. <i>Materials Science and Engineering C</i> , 2011, 31, 1436-1444.	3.8	113
18	Plastic deformation behavior of 10H-type synchronized LPSO phase in a Mg-Zn-Y system. <i>Acta Materialia</i> , 2016, 109, 90-102.	3.8	112

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19	Microstructure of equiatomic and non-equiatomic Ti-Nb-Ta-Zr-Mo high-entropy alloys for metallic biomaterials. <i>Journal of Alloys and Compounds</i> , 2018, 753, 412-421.	2.8	112
20	Biocompatible low Young's modulus achieved by strong crystallographic elastic anisotropy in Ti-15Mo-5Zr-3Al alloy single crystal. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 14, 48-54.	1.5	110
21	Biological apatite (BAP) crystallographic orientation and texture as a new index for assessing the microstructure and function of bone regenerated by tissue engineering. <i>Bone</i> , 2012, 51, 741-747.	1.4	107
22	Optimization of Cr content of metastable β -type Ti-Cr alloys with changeable Young's modulus for spinal fixation applications. <i>Acta Biomaterialia</i> , 2012, 8, 2392-2400.	4.1	107
23	Design and fabrication of Ti-Zr-Hf-Cr-Mo and Ti-Zr-Hf-Co-Cr-Mo high-entropy alloys as metallic biomaterials. <i>Materials Science and Engineering C</i> , 2020, 107, 110322.	3.8	105
24	Abnormal arrangement of a collagen/apatite extracellular matrix orthogonal to osteoblast alignment is constructed by a nanoscale periodic surface structure. <i>Biomaterials</i> , 2015, 37, 134-143.	5.7	102
25	Plastic Deformation Behavior of Mg ₁₂ ZnY LPSO-Phase with 14H-Typed Structure. <i>Materials Transactions</i> , 2011, 52, 1096-1103.	0.4	98
26	Development of TiNbTaZrMo bio-high entropy alloy (BioHEA) super-solid solution by selective laser melting, and its improved mechanical property and biocompatibility. <i>Scripta Materialia</i> , 2021, 194, 113658.	2.6	95
27	Additive manufacturing of dense components in beta-titanium alloys with crystallographic texture from a mixture of pure metallic element powders. <i>Materials and Design</i> , 2019, 173, 107771.	3.3	93
28	Bone Loss and Reduced Bone Quality of the Human Femur after Total Hip Arthroplasty under Stress-Shielding Effects by Titanium-Based Implant. <i>Materials Transactions</i> , 2012, 53, 565-570.	0.4	91
29	Low Young's modulus of Ti-Nb-Ta-Zr alloys caused by softening in shear moduli c_{44} and c_{42} near lower limit of body-centered cubic phase stability. <i>Acta Materialia</i> , 2010, 58, 6790-6798.	3.8	90
30	Continuous cyclic stretch induces osteoblast alignment and formation of anisotropic collagen fiber matrix. <i>Acta Biomaterialia</i> , 2013, 9, 7227-7235.	4.1	87
31	Dual release of growth factor from nanocomposite fibrous scaffold promotes vascularisation and bone regeneration in rat critical sized calvarial defect. <i>Acta Biomaterialia</i> , 2018, 78, 36-47.	4.1	85
32	Quantitative regulation of bone-mimetic, oriented collagen/apatite matrix structure depends on the degree of osteoblast alignment on oriented collagen substrates. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 489-499.	2.1	82
33	The alignment of MC3T3-E1 osteoblasts on steps of slip traces introduced by dislocation motion. <i>Biomaterials</i> , 2012, 33, 7327-7335.	5.7	81
34	% Transformation in cold-worked Ti-Nb-Ta-Zr-O alloys with low body-centered cubic phase stability and its correlation with their elastic properties. <i>Acta Materialia</i> , 2013, 61, 139-150.	3.8	78
35	Design and optimization of the oriented groove on the hip implant surface to promote bone microstructure integrity. <i>Bone</i> , 2013, 52, 659-667.	1.4	78
36	Orientation dependence of the deformation kink band formation behavior in Zn single crystal. <i>International Journal of Plasticity</i> , 2016, 77, 174-191.	4.1	76

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37	Disruption of collagen/apatite alignment impairs bone mechanical function in osteoblastic metastasis induced by prostate cancer. <i>Bone</i> , 2017, 97, 83-93.	1.4	69
38	Strengthening of Mg-based long-period stacking ordered (LPSO) phase with deformation kink bands. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 763, 138163.	2.6	69
39	Crystallographic Orientation Control of 316L Austenitic Stainless Steel via Selective Laser Melting. <i>ISIJ International</i> , 2020, 60, 1758-1764.	0.6	69
40	Design and development of Tiâ€“Zrâ€“Hfâ€“Nbâ€“Taâ€“Mo high-entropy alloys for metallic biomaterials. <i>Materials and Design</i> , 2021, 202, 109548.	3.3	67
41	Successful additive manufacturing of MoSi ₂ including crystallographic texture and shape control. <i>Journal of Alloys and Compounds</i> , 2017, 696, 67-72.	2.8	66
42	Comprehensive analyses of how tubule occlusion and advanced glycation end-products diminish strength of aged dentin. <i>Scientific Reports</i> , 2016, 6, 19849.	1.6	63
43	Effects of a coating resin containing S-PRG filler to prevent demineralization of root surfaces. <i>Dental Materials Journal</i> , 2012, 31, 909-915.	0.8	62
44	Surprising increase in yield stress of Mg single crystal using long-period stacking ordered nanoplates. <i>Acta Materialia</i> , 2021, 209, 116797.	3.8	61
45	Microstructure of duplex-phase NbSi ₂ (C40)/MoSi ₂ (C11b) crystals containing a single set of lamellae. <i>Acta Materialia</i> , 2002, 50, 1781-1795.	3.8	61
46	Non-Basal Slip Systems Operative in Mg₁₂ZnY Long-Period Stacking Ordered (LPSO) Phase with 18R and 14H Structures. <i>Materials Transactions</i> , 2013, 54, 693-697.	0.4	57
47	Synchronous disruption of anisotropic arrangement of the osteocyte network and collagen/apatite in melanoma bone metastasis. <i>Journal of Structural Biology</i> , 2017, 197, 260-270.	1.3	57
48	Solidification Microstructures of the Ingots Obtained by Arc Melting and Cold Crucible Levitation Melting in TiNbTaZr Medium-Entropy Alloy and TiNbTaZrX (X = V, Mo, W) High-Entropy Alloys. <i>Entropy</i> , 2019, 21, 483.	1.1	57
49	Plastic Behaviour of TiAl Crystals Containing a Single Set of Lamellae at High Temperatures.. <i>ISIJ International</i> , 1992, 32, 1339-1347.	0.6	55
50	Combination of BMP-2-releasing gelatin/Î²-TCP sponges with autologous bone marrow for bone regeneration of X-ray-irradiated rabbit ulnar defects. <i>Biomaterials</i> , 2015, 56, 18-25.	5.7	53
51	Microstructure and high-temperature strength in duplex silicides. <i>Intermetallics</i> , 1998, 6, 715-722.	1.8	52
52	Effect of spatial design and thermal oxidation on apatite formation on Tiâ€“15Zrâ€“4Taâ€“4Nb alloy. <i>Acta Biomaterialia</i> , 2009, 5, 298-304.	4.1	52
53	Biomechanical evaluation of regenerating long bone by nanoindentation. <i>Journal of Materials Science: Materials in Medicine</i> , 2011, 22, 969-976.	1.7	50
54	Elastic-modulus enhancement during room-temperature aging and its suppression in metastable Tiâ€“Nb-Based alloys with low body-centered cubic phase stability. <i>Acta Materialia</i> , 2016, 102, 373-384.	3.8	50

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55	Influence of unique layered microstructure on fatigue properties of Ti-48Al-2Cr-2Nb alloys fabricated by electron beam melting. <i>Intermetallics</i> , 2018, 95, 1-10.	1.8	50
56	Crystallographic nature of deformation bands shown in Zn and Mg-based long-period stacking ordered (LPSO) phase. <i>Philosophical Magazine</i> , 2015, 95, 132-157.	0.7	49
57	Effect of substitutional elements on plastic deformation behaviour of NbSi ₂ -based silicide single crystals with C40 structure. <i>Acta Materialia</i> , 2000, 48, 3465-3475.	3.8	47
58	Dietary L-Lysine Prevents Arterial Calcification in Adenine-Induced Uremic Rats. <i>Journal of the American Society of Nephrology: JASN</i> , 2014, 25, 1954-1965.	3.0	47
59	Effect of chemical ordering on the deformation mode of Al-rich Ti-Al single crystals. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1996, 74, 251-268.	0.8	45
60	Altered material properties are responsible for bone fragility in rats with chronic kidney injury. <i>Bone</i> , 2015, 81, 247-254.	1.4	45
61	Optimally oriented grooves on dental implants improve bone quality around implants under repetitive mechanical loading. <i>Acta Biomaterialia</i> , 2017, 48, 433-444.	4.1	45
62	Unloading-Induced Degradation of the Anisotropic Arrangement of Collagen/Apatite in Rat Femurs. <i>Calcified Tissue International</i> , 2017, 100, 87-94.	1.5	44
63	In vitro reproduction of endochondral ossification using a 3D mesenchymal stem cell construct. <i>Integrative Biology (United Kingdom)</i> , 2012, 4, 1207.	0.6	43
64	Alendronate treatment promotes bone formation with a less anisotropic microstructure during intramembranous ossification in rats. <i>Journal of Bone and Mineral Metabolism</i> , 2008, 26, 24-33.	1.3	42
65	Powder-based Additive Manufacturing for Development of Tailor-made Implants for Orthopedic Applications. <i>KONA Powder and Particle Journal</i> , 2015, 32, 75-84.	0.9	42
66	Osteoporosis Changes Collagen/Apatite Orientation and Young's Modulus in Vertebral Cortical Bone of Rat. <i>Calcified Tissue International</i> , 2019, 104, 449-460.	1.5	41
67	Zirconia-hydroxyapatite composite material with micro porous structure. <i>Dental Materials</i> , 2011, 27, e205-e212.	1.6	40
68	Novel powder/solid composites possessing low Young's modulus and tunable energy absorption capacity, fabricated by electron beam melting, for biomedical applications. <i>Journal of Alloys and Compounds</i> , 2015, 639, 336-340.	2.8	40
69	Development of a root canal treatment model in the rat. <i>Scientific Reports</i> , 2017, 7, 3315.	1.6	40
70	Construction of human induced pluripotent stem cell-derived oriented bone matrix microstructure by using <i>in vitro</i> engineered anisotropic culture model. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 360-369.	2.1	40
71	Single crystalline-like crystallographic texture formation of pure tungsten through laser powder bed fusion. <i>Scripta Materialia</i> , 2022, 206, 114252.	2.6	40
72	The combination therapy with alfacalcidol and risedronate improves the mechanical property in lumbar spine by affecting the material properties in an ovariectomized rat model of osteoporosis. <i>BMC Musculoskeletal Disorders</i> , 2009, 10, 66.	0.8	39

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73	Unique arrangement of bone matrix orthogonal to osteoblast alignment controlled by Tspan11-mediated focal adhesion assembly. <i>Biomaterials</i> , 2019, 209, 103-110.	5.7	39
74	Lattice distortion in selective laser melting (SLM)-manufactured unstable β -type Ti-15Mo-5Zr-3Al alloy analyzed by high-precision X-ray diffractometry. <i>Scripta Materialia</i> , 2021, 201, 113953.	2.6	39
75	In-Situ Observation on the Formation Behavior of the Deformation Kink Bands in Zn Single Crystal and LPSO Phase. <i>Materials Transactions</i> , 2015, 56, 943-951.	0.4	38
76	Alteration of osteoblast arrangement via direct attack by cancer cells: New insights into bone metastasis. <i>Scientific Reports</i> , 2017, 7, 44824.	1.6	38
77	A paradigm shift for bone quality in dentistry: A literature review. <i>Journal of Prosthodontic Research</i> , 2017, 61, 353-362.	1.1	36
78	Crystallographic orientation control of pure chromium via laser powder bed fusion and improved high temperature oxidation resistance. <i>Additive Manufacturing</i> , 2020, 36, 101624.	1.7	36
79	Co-deteriorations of anisotropic extracellular matrix arrangement and intrinsic mechanical property in c-src deficient osteopetrotic mouse femur. <i>Bone</i> , 2017, 103, 216-223.	1.4	35
80	Variation in crystallinity of hydroxyapatite and the related calcium phosphates by mechanical grinding and subsequent heat treatment. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2002, 33, 521-528.	1.1	34
81	Evaluation of Bone Quality near Metallic Implants with and without Lotus-Type Pores for Optimal Biomaterial Design. <i>Materials Transactions</i> , 2006, 47, 2233-2239.	0.4	34
82	Electron backscatter diffraction pattern analysis of the deformation band formed in the Mg-based long-period stacking ordered phase. <i>Scripta Materialia</i> , 2016, 117, 32-36.	2.6	34
83	Areal Distribution of Preferential Alignment of Biological Apatite (BAp) Crystallite on Cross-Section of Center of Femoral Diaphysis in Osteopetrotic (op/op) Mouse. <i>Materials Transactions</i> , 2007, 48, 337-342.	0.4	33
84	Fracture behavior and toughness of NbSi ₂ -based single crystals and MoSi ₂ (C11b)/NbSi ₂ (C40) duplex crystals with a single set of lamellae. <i>Acta Materialia</i> , 2011, 59, 4168-4176.	3.8	33
85	Plastic deformation behavior of NbSi ₂ /MoSi ₂ crystals with oriented lamellae. <i>Intermetallics</i> , 2006, 14, 1345-1350.	1.8	32
86	Control of Anisotropic Crystallographic Texture in Powder Bed Fusion Additive Manufacturing of Metals and Ceramics—A Review. <i>Jom</i> , 2022, 74, 1760-1773.	0.9	32
87	Control of Mechanical Properties of Three-Dimensional Ti-6Al-4V Products Fabricated by Electron Beam Melting with Unidirectional Elongated Pores. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 4293-4301.	1.1	31
88	Novel evaluation method of dentin repair by direct pulp capping using high-resolution micro-computed tomography. <i>Clinical Oral Investigations</i> , 2018, 22, 2879-2887.	1.4	31
89	Anomalous strengthening behavior of Co-Cr-Mo alloy single crystals for biomedical applications. <i>Scripta Materialia</i> , 2016, 123, 149-153.	2.6	30
90	Misfit strain affecting the lamellar microstructure in NbSi ₂ /MoSi ₂ duplex crystals. <i>Acta Materialia</i> , 2013, 61, 3432-3444.	3.8	29

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91	Microstructure and fracture toughness in boron added NbSi ₂ (C40)/MoSi ₂ (C11b) duplex crystals. Scripta Materialia, 2016, 113, 236-240.	2.6	29
92	Effects of mechanical repetitive load on bone quality around implants in rat maxillae. PLoS ONE, 2017, 12, e0189893.	1.1	29
93	Formation of New Bone with Preferentially Oriented Biological Apatite Crystals Using a Novel Cylindrical Implant Containing Anisotropic Open Pores Fabricated by the Electron Beam Melting (EBM) Method. ISIJ International, 2011, 51, 262-268.	0.6	29
94	Two-Dimensional Quantitative Analysis of Preferential Alignment of BAp c-axis for Isolated Human Trabecular Bone Using Microbeam X-ray Diffractometer with a Transmission Optical System. Materials Transactions, 2007, 48, 343-347.	0.4	28
95	Creep-deformation behavior of (Mo _{0.85} Nb _{0.15})Si ₂ lamellar-structured C40/C11b two-phase crystals. Acta Materialia, 2016, 107, 196-212.	3.8	28
96	Development of Ti-Zr-Hf-Y-La high-entropy alloys with dual hexagonal-close-packed structure. Scripta Materialia, 2020, 186, 242-246.	2.6	28
97	Formation and stability of transitional long-period superstructures in Al-rich Ti-Al single crystals. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 763-777.	0.8	27
98	Possibility of Mg- and Ca-based intermetallic compounds as new biodegradable implant materials. Materials Science and Engineering C, 2013, 33, 4101-4111.	3.8	27
99	Stability of crystallographic texture in laser powder bed fusion: Understanding the competition of crystal growth using a single crystalline seed. Additive Manufacturing, 2021, 43, 102004.	1.7	27
100	Bioinspired Mineralization Using Chondrocyte Membrane Nanofragments. ACS Biomaterials Science and Engineering, 2018, 4, 617-625.	2.6	26
101	Effects of long-term cigarette smoke exposure on bone metabolism, structure, and quality in a mouse model of emphysema. PLoS ONE, 2018, 13, e0191611.	1.1	26
102	Beta titanium single crystal with bone-like elastic modulus and large crystallographic elastic anisotropy. Journal of Alloys and Compounds, 2019, 782, 667-671.	2.8	26
103	Texture and Bone Reinforcement. , 2005, , 1-8.		26
104	Cyclic deformation behaviour of Ti-Al alloys containing oriented lamellae. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1995, 71, 127-138.	0.8	25
105	Biocompatible nanostructured solid adhesives for biological soft tissues. Acta Biomaterialia, 2017, 57, 404-413.	4.1	25
106	Experimental clarification of the cyclic deformation mechanisms of β -type Ti-Nb-Ta-Zr-alloy single crystals developed for the single-crystalline implant. International Journal of Plasticity, 2017, 98, 27-44.	4.1	25
107	Quantitative Evaluation of Osteocyte Morphology and Bone Anisotropic Extracellular Matrix in Rat Femur. Calcified Tissue International, 2021, 109, 434-444.	1.5	25
108	Efficacy of polyphasic calcium phosphates as a direct pulp capping material. Journal of Dentistry, 2010, 38, 828-837.	1.7	24

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109	Plastic deformation mechanisms of biomedical Co-Cr-Mo alloy single crystals with hexagonal close-packed structure. <i>Scripta Materialia</i> , 2018, 142, 111-115.	2.6	24
110	Trabecular health of vertebrae based on anisotropy in trabecular architecture and collagen/apatite micro-arrangement after implantation of intervertebral fusion cages in the sheep spine. <i>Bone</i> , 2018, 108, 25-33.	1.4	24
111	Biomimetic mineralization using matrix vesicle nanofragments. <i>Journal of Biomedical Materials Research - Part A</i> , 2019, 107, 1021-1030.	2.1	24
112	Regenerative behavior of biomineral/agarose composite gels as bone grafting materials in rat cranial defects. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 93A, 965-975.	2.1	23
113	Improvement of aligned lamellar structure by Cr-addition to NbSi ₂ /MoSi ₂ duplex-silicide crystals. <i>Scripta Materialia</i> , 2010, 62, 613-616.	2.6	23
114	Microstructural and Orientation Dependence of the Plastic Deformation Behavior in β -type Ti-15Mo-5Zr-3Al Alloy Single Crystals. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 1588-1597.	1.1	23
115	Quantitative estimation of kink-band strengthening in an Mg-Zn-Y single crystal with LPSO nanoplates. <i>Materials Research Letters</i> , 2021, 9, 467-474.	4.1	23
116	Plastic Behavior and Deformation Structure of Silicide Single Crystals with Transition Metals at High Temperatures. <i>Materials Research Society Symposia Proceedings</i> , 1993, 322, 9.	0.1	22
117	Evaluation of crystallographic orientation of biological apatite in vertebral cortical bone in ovariectomized cynomolgus monkeys treated with minodronic acid and alendronate. <i>Journal of Bone and Mineral Metabolism</i> , 2016, 34, 234-241.	1.3	22
118	Development of low-Young's modulus Ti-Nb-based alloys with Cr addition. <i>Journal of Materials Science</i> , 2019, 54, 8675-8683.	1.7	22
119	Control of Crystallographic Texture and Mechanical Properties of Hastelloy-X via Laser Powder Bed Fusion. <i>Crystals</i> , 2021, 11, 1064.	1.0	22
120	Effect of a helium gas atmosphere on the mechanical properties of Ti-6Al-4V alloy built with laser powder bed fusion: A comparative study with argon gas. <i>Additive Manufacturing</i> , 2021, 48, 102444.	1.7	22
121	Indentation fracture behavior of (Mo _{0.85} Nb _{0.15})Si ₂ crystals with C40 single-phase and MoSi ₂ (C11b)/NbSi ₂ (C40) duplex-phase with oriented lamellae. <i>Science and Technology of Advanced Materials</i> , 2004, 5, 11-17.	2.8	21
122	Structural and Qualitative Bone Remodeling Around Repetitive Loaded Implants in Rabbits. <i>Clinical Implant Dentistry and Related Research</i> , 2015, 17, e699-710.	1.6	21
123	Clinical efficacy and safety of monthly oral ibandronate 100Åmg versus monthly intravenous ibandronate 1Åmg in Japanese patients with primary osteoporosis. <i>Osteoporosis International</i> , 2015, 26, 2685-2693.	1.3	21
124	Isotropic plasticity of β -type Ti-29Nb-13Ta-4.6Zr alloy single crystals for the development of single crystalline β -Ti implants. <i>Scientific Reports</i> , 2016, 6, 29779.	1.6	21
125	Overcoming the strength-ductility trade-off by the combination of static recrystallization and low-temperature heat-treatment in Co-Cr-W-Ni alloy for stent application. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 766, 138400.	2.6	21
126	UVA-activated riboflavin promotes collagen crosslinking to prevent root caries. <i>Scientific Reports</i> , 2019, 9, 1252.	1.6	21

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127	Peculiar microstructural evolution and tensile properties of β -containing β -TiAl alloys fabricated by electron beam melting. <i>Additive Manufacturing</i> , 2021, 46, 102091.	1.7	21
128	Equiaxed grain formation by intrinsic heterogeneous nucleation via rapid heating and cooling in additive manufacturing of aluminum-silicon hypoeutectic alloy. <i>Journal of Alloys and Compounds</i> , 2022, 919, 165812.	2.8	21
129	Effects of antiphase domains on dislocation motion in Ti ₃ Al single crystals deformed by prism slip. <i>Philosophical Magazine</i> , 2008, 88, 465-488.	0.7	20
130	Individual mechanical properties of ferrite and martensite in Fe-0.16mass% C-1.0mass% Si-1.5mass% Mn steel. <i>Journal of Alloys and Compounds</i> , 2013, 577, S593-S596.	2.8	20
131	Influences of scanning speed and short-time heat treatment on fundamental properties of Ti-6Al-4V alloy produced by EBM method. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 704, 246-251.	2.6	20
132	Fundamentals of Metal 3D Printing Technologies. <i>Materia Japan</i> , 2017, 56, 686-690.	0.1	20
133	Development of bifunctional oriented bioactive glass/poly(lactic acid) composite scaffolds to control osteoblast alignment and proliferation. <i>Journal of Biomedical Materials Research - Part A</i> , 2019, 107, 1031-1041.	2.1	20
134	Inverse Columnar-Equiaxed Transition (CET) in 304 and 316L Stainless Steels Melt by Electron Beam for Additive Manufacturing (AM). <i>Crystals</i> , 2021, 11, 856.	1.0	20
135	Comparison of microstructure, crystallographic texture, and mechanical properties in Ti-15Mo-5Zr-3Al alloys fabricated via electron and laser beam powder bed fusion technologies. <i>Additive Manufacturing</i> , 2021, 47, 102329.	1.7	20
136	Control of osteoblast arrangement by osteocyte mechanoresponse through prostaglandin E2 signaling under oscillatory fluid flow stimuli. <i>Biomaterials</i> , 2021, 279, 121203.	5.7	20
137	Proliferation and differentiation potential of pluripotent mesenchymal precursor C2C12 cells on resin-based restorative materials. <i>Dental Materials Journal</i> , 2010, 29, 341-346.	0.8	19
138	Control of hydroxyapatite crystallinity by mechanical grinding method. <i>Journal of Materials Science: Materials in Medicine</i> , 2001, 12, 703-706.	1.7	18
139	New Technique for Evaluation of Preferential Alignment of Biological Apatite (BAp) Crystallites in Bone Using Transmission X-ray Diffractometry. <i>Materials Transactions</i> , 2008, 49, 2129-2135.	0.4	18
140	Microstructural Changes During Plastic Deformation and Corrosion Properties of Biomedical Co-20Cr-15W-10Ni Alloy Heat-Treated at 873K. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 2393-2404.	1.1	18
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