Takayoshi Nakano

List of Publications by Citations

437 papers	7,023 citations	43 h-index	68 g-index
455 ext. papers	8,561 ext. citations	3.3 avg, IF	6.48 L-index

#	Paper	IF	Citations
437	Unique alignment and texture of biological apatite crystallites in typical calcified tissues analyzed by microbeam X-ray diffractometer system. *Bone*, **2002**, 31, 479-87	4.7	295
436	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. *Scripta Materialia*, **2017**, 132, 34-38	5.6	185
435	Peculiar elastic behavior of Ti□Nb□Ta□Zr single crystals. *Acta Materialia*, **2008**, 56, 2856-2863	8.4	181
434	Novel TiNbTaZrMo high-entropy alloys for metallic biomaterials. *Scripta Materialia*, **2017**, 129, 65-68	5.6	163
433	Effect of scanning strategy on texture formation in Ni-25 at.%Mo alloys fabricated by selective laser melting. *Materials and Design*, **2018**, 140, 307-316	8.1	146
432	Excellent mechanical and corrosion properties of austenitic stainless steel with a unique crystallographic lamellar microstructure via selective laser melting. *Scripta Materialia*, **2019**, 159, 89-93	5.6	145
431	Strengthening mechanisms acting in extruded Mg-based long-period stacking ordered (LPSO)-phase alloys. *Acta Materialia*, **2019**, 163, 226-239	8.4	121
430	Degree of biological apatite c-axis orientation rather than bone mineral density controls mechanical function in bone regenerated using recombinant bone morphogenetic protein-2. *Journal of Bone and Mineral Research*, **2013**, 28, 1170-9	6.3	118
429	Effect of building direction on the microstructure and tensile properties of Ti-48Al-2Cr-2Nb alloy additively manufactured by electron beam melting. *Additive Manufacturing*, **2017**, 13, 61-70	6.1	114
428	The role of ordered domains and slip mode of □2 phase in the plastic behaviour of TiAl crystals containing oriented lamellae. *Acta Metallurgica Et Materialia*, **1993**, 41, 1155-1161		109
427	Low Young□s modulus in Ti□Nb□Ta□Zr□O alloys: Cold working and oxygen effects. *Acta Materialia*, **2011**, 59, 6975-6988	8.4	107
426	Effect of calcium ion concentrations on osteogenic differentiation and hematopoietic stem cell niche-related protein expression in osteoblasts. *Tissue Engineering - Part A*, **2010**, 16, 2467-73	3.9	105
425	Biological apatite (BAp) crystallographic orientation and texture as a new index for assessing the microstructure and function of bone regenerated by tissue engineering. *Bone*, **2012**, 51, 741-7	4.7	90
424	Optimization of Cr content of metastable □-type Ti-Cr alloys with changeable Young's modulus for spinal fixation applications. *Acta Biomaterialia*, **2012**, 8, 2392-400	10.8	90
423	Abnormal arrangement of a collagen/apatite extracellular matrix orthogonal to osteoblast alignment is constructed by a nanoscale periodic surface structure. *Biomaterials*, **2015**, 37, 134-43	15.6	88
422	Development of high Zr-containing Ti-based alloys with low Young's modulus for use in removable implants. *Materials Science and Engineering C*, **2011**, 31, 1436-1444	8.3	88
421	Biocompatible low Young's modulus achieved by strong crystallographic elastic anisotropy in Ti-15Mo-5Zr-3Al alloy single crystal. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 14, 48-54	4.1	84

420	Crystal-orientation-dependent corrosion behaviour of single crystals of a pure Mg and Mg-Al and Mg-Cu solid solutions. *Corrosion Science*, **2016**, 109, 68-85	6.8	82
419	Plastic deformation behavior of 10H-type synchronized LPSO phase in a Mg□Zn□Y system. *Acta Materialia*, **2016**, 109, 90-102	8.4	79
418	Plastic Deformation Behavior of Mg12ZnY LPSO-Phase with 14H-Typed Structure. *Materials Transactions*, **2011**, 52, 1096-1103	1.3	79
417	Low Young□s modulus of Ti□Nb□Ta□Zr alloys caused by softening in shear moduli c? and c44 near lower limit of body-centered cubic phase stability. *Acta Materialia*, **2010**, 58, 6790-6798	8.4	77
416	Bone Loss and Reduced Bone Quality of the Human Femur after Total Hip Arthroplasty under Stress-Shielding Effects by Titanium-Based Implant. *Materials Transactions*, **2012**, 53, 565-570	1.3	76
415	Microstructure of equiatomic and non-equiatomic Ti-Nb-Ta-Zr-Mo high-entropy alloys for metallic biomaterials. *Journal of Alloys and Compounds*, **2018**, 753, 412-421	5.7	70
414	Continuous cyclic stretch induces osteoblast alignment and formation of anisotropic collagen fiber matrix. *Acta Biomaterialia*, **2013**, 9, 7227-35	10.8	69
413	Design and optimization of the oriented groove on the hip implant surface to promote bone microstructure integrity. *Bone*, **2013**, 52, 659-67	4.7	69
412	□Transformation in cold-worked Ti□Nb□Ta□Zr□O alloys with low body-centered cubic phase stability and its correlation with their elastic properties. *Acta Materialia*, **2013**, 61, 139-150	8.4	68
411	Quantitative regulation of bone-mimetic, oriented collagen/apatite matrix structure depends on the degree of osteoblast alignment on oriented collagen substrates. *Journal of Biomedical Materials Research - Part A*, **2015**, 103, 489-99	5.4	67
410	Development of non-equiatomic Ti-Nb-Ta-Zr-Mo high-entropy alloys for metallic biomaterials. *Scripta Materialia*, **2019**, 172, 83-87	5.6	65
409	The alignment of MC3T3-E1 osteoblasts on steps of slip traces introduced by dislocation motion. *Biomaterials*, **2012**, 33, 7327-35	15.6	62
408	Osteocalcin is necessary for the alignment of apatite crystallites, but not glucose metabolism, testosterone synthesis, or muscle mass. *PLoS Genetics*, **2020**, 16, e1008586	6	58
407	Design and fabrication of Ti-Zr-Hf-Cr-Mo and Ti-Zr-Hf-Co-Cr-Mo high-entropy alloys as metallic biomaterials. *Materials Science and Engineering C*, **2020**, 107, 110322	8.3	58
406	Additive manufacturing of dense components in beta-titanium alloys with crystallographic texture from a mixture of pure metallic element powders. *Materials and Design*, **2019**, 173, 107771	8.1	54
405	Microstructure of duplex-phase NbSi2(C40)/MoSi2(C11b) crystals containing a single set of lamellae. *Acta Materialia*, **2002**, 50, 1781-1795	8.4	53
404	Orientation dependence of the deformation kink band formation behavior in Zn single crystal. *International Journal of Plasticity*, **2016**, 77, 174-191	7.6	52
403	Disruption of collagen/apatite alignment impairs bone mechanical function in osteoblastic metastasis induced by prostate cancer. *Bone*, **2017**, 97, 83-93	4.7	51

402	Dual release of growth factor from nanocomposite fibrous scaffold promotes vascularisation and bone regeneration in rat critical sized calvarial defect. *Acta Biomaterialia*, **2018**, 78, 36-47	10.8	51
401	Effect of spatial design and thermal oxidation on apatite formation on Ti-15Zr-4Ta-4Nb alloy. *Acta Biomaterialia*, **2009**, 5, 298-304	10.8	50
400	Non-Basal Slip Systems Operative in Mg12ZnY Long-Period Stacking Ordered (LPSO) Phase with 18R and 14H Structures. *Materials Transactions*, **2013**, 54, 693-697	1.3	48
399	Microstructure and high-temperature strength in duplex silicides. *Intermetallics*, **1998**, 6, 715-722	3.5	48
398	Unique crystallographic texture formation in Inconel 718 by laser powder bed fusion and its effect on mechanical anisotropy. *Acta Materialia*, **2021**, 212, 116876	8.4	47
397	Successful additive manufacturing of MoSi2 including crystallographic texture and shape control. *Journal of Alloys and Compounds*, **2017**, 696, 67-72	5.7	46
396	Plastic Behaviour of TiAl Crystals Containing a Single Set of Lamellae at High Temperatures.. *ISIJ International*, **1992**, 32, 1339-1347	1.7	45
395	Biomechanical evaluation of regenerating long bone by nanoindentation. *Journal of Materials Science: Materials in Medicine*, **2011**, 22, 969-76	4.5	43
394	Effects of a coating resin containing S-PRG filler to prevent demineralization of root surfaces. *Dental Materials Journal*, **2012**, 31, 909-15	2.5	43
393	Synchronous disruption of anisotropic arrangement of the osteocyte network and collagen/apatite in melanoma bone metastasis. *Journal of Structural Biology*, **2017**, 197, 260-270	3.4	41
392	Combination of BMP-2-releasing gelatin/□TCP sponges with autologous bone marrow for bone regeneration of X-ray-irradiated rabbit ulnar defects. *Biomaterials*, **2015**, 56, 18-25	15.6	41
391	Effect of substitutational elements on plastic deformation behaviour of NbSi2-based silicide single crystals with C40 structure. *Acta Materialia*, **2000**, 48, 3465-3475	8.4	41
390	Effect of chemical ordering on the deformation mode of Al-rich Ti-Al single crystals. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1996**, 74, 251-268		40
389	Crystallographic Orientation Control of 316L Austenitic Stainless Steel via Selective Laser Melting. *ISIJ International*, **2020**, 60, 1758-1764	1.7	39
388	Altered material properties are responsible for bone fragility in rats with chronic kidney injury. *Bone*, **2015**, 81, 247-254	4.7	38
387	Dietary L-lysine prevents arterial calcification in adenine-induced uremic rats. *Journal of the American Society of Nephrology: JASN*, **2014**, 25, 1954-65	12.7	38
386	In vitro reproduction of endochondral ossification using a 3D mesenchymal stem cell construct. *Integrative Biology (United Kingdom)*, **2012**, 4, 1207-14	3.7	38
385	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. *BMC Musculoskeletal Disorders*, **2009**, 10, 66	2.8	37

384	Alendronate treatment promotes bone formation with a less anisotropic microstructure during intramembranous ossification in rats. *Journal of Bone and Mineral Metabolism*, **2008**, 26, 24-33	2.9	37
383	Development of TiNbTaZrMo bio-high entropy alloy (BioHEA) super-solid solution by selective laser melting, and its improved mechanical property and biocompatibility. *Scripta Materialia*, **2021**, 194, 113658	5.6	37
382	Elastic-modulus enhancement during room-temperature aging and its suppression in metastable Ti-Nb-Based alloys with low body-centered cubic phase stability. *Acta Materialia*, **2016**, 102, 373-384	8.4	36
381	Crystallographic nature of deformation bands shown in Zn and Mg-based long-period stacking ordered (LPSO) phase. *Philosophical Magazine*, **2015**, 95, 132-157	1.6	36
380	Unloading-Induced Degradation of the Anisotropic Arrangement of Collagen/Apatite in Rat Femurs. *Calcified Tissue International*, **2017**, 100, 87-94	3.9	35
379	Alteration of osteoblast arrangement via direct attack by cancer cells: New insights into bone metastasis. *Scientific Reports*, **2017**, 7, 44824	4.9	34
378	Optimally oriented grooves on dental implants improve bone quality around implants under repetitive mechanical loading. *Acta Biomaterialia*, **2017**, 48, 433-444	10.8	34
377	Comprehensive analyses of how tubule occlusion and advanced glycation end-products diminish strength of aged dentin. *Scientific Reports*, **2016**, 6, 19849	4.9	34
376	Strengthening of Mg-based long-period stacking ordered (LPSO) phase with deformation kink bands. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 763, 138163	5.3	33
375	Areal Distribution of Preferential Alignment of Biological Apatite (BAp) Crystallite on Cross-Section of Center of Femoral Diaphysis in Osteopetrotic (op/op) Mouse. *Materials Transactions*, **2007**, 48, 337-342	1.3	33
374	Evaluation of Bone Quality near Metallic Implants with and without Lotus-Type Pores for Optimal Biomaterial Design. *Materials Transactions*, **2006**, 47, 2233-2239	1.3	32
373	Novel powder/solid composites possessing low Young's modulus and tunable energy absorption capacity, fabricated by electron beam melting, for biomedical applications. *Journal of Alloys and Compounds*, **2015**, 639, 336-340	5.7	31
372	Zirconia-hydroxyapatite composite material with micro porous structure. *Dental Materials*, **2011**, 27, e205-12	5.7	31
371	Unique arrangement of bone matrix orthogonal to osteoblast alignment controlled by Tspan11-mediated focal adhesion assembly. *Biomaterials*, **2019**, 209, 103-110	15.6	30
370	Construction of human induced pluripotent stem cell-derived oriented bone matrix microstructure by using in vitro engineered anisotropic culture model. *Journal of Biomedical Materials Research - Part A*, **2018**, 106, 360-369	5.4	30
369	Electron backscatter diffraction pattern analysis of the deformation band formed in the Mg-based long-period stacking ordered phase. *Scripta Materialia*, **2016**, 117, 32-36	5.6	30
368	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. *Entropy*, **2019**, 21,	2.8	29
367	Influence of unique layered microstructure on fatigue properties of Ti-48Al-2Cr-2Nb alloys fabricated by electron beam melting. *Intermetallics*, **2018**, 95, 1-10	3.5	29

366	Powder-based Additive Manufacturing for Development of Tailor-made Implants for Orthopedic Applications. *KONA Powder and Particle Journal*, **2015**, 32, 75-84	3.4	28
365	Fracture behavior and toughness of NbSi2-based single crystals and MoSi2(C11b)/NbSi2(C40) duplex crystals with a single set of lamellae. *Acta Materialia*, **2011**, 59, 4168-4176	8.4	28
364	Plastic deformation behavior of NbSi2/MoSi2 crystals with oriented lamellae. *Intermetallics*, **2006**, 14, 1345-1350	3.5	28
363	Co-deteriorations of anisotropic extracellular matrix arrangement and intrinsic mechanical property in c-src deficient osteopetrotic mouse femur. *Bone*, **2017**, 103, 216-223	4.7	27
362	In-Situ Observation on the Formation Behavior of the Deformation Kink Bands in Zn Single Crystal and LPSO Phase. *Materials Transactions*, **2015**, 56, 943-951	1.3	27
361	Control of Mechanical Properties of Three-Dimensional Ti-6Al-4V Products Fabricated by Electron Beam Melting with Unidirectional Elongated Pores. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 4293-4301	2.3	26
360	A paradigm shift for bone quality in dentistry: A literature review. *Journal of Prosthodontic Research* , **2017**, 61, 353-362	4.3	26
359	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		26
358	Microstructure and fracture toughness in boron added NbSi2(C40)/MoSi2(C11b) duplex crystals. *Scripta Materialia*, **2016**, 113, 236-240	5.6	25
357	Possibility of Mg- and Ca-based intermetallic compounds as new biodegradable implant materials. *Materials Science and Engineering C*, **2013**, 33, 4101-11	8.3	25
356	Misfit strain affecting the lamellar microstructure in NbSi2/MoSi2 duplex crystals. *Acta Materialia*, **2013**, 61, 3432-3444	8.4	25
355	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	1.7	25
354	Creep-deformation behavior of (Mo0.85Nb0.15)Si2 lamellar-structured C40/C11b two-phase crystals. *Acta Materialia*, **2016**, 107, 196-212	8.4	24
353	Variation in crystallinity of hydroxyapatite and the related calcium phosphates by mechanical grinding and subsequent heat treatment. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2002**, 33, 521-528	2.3	24
352	Texture and Bone Reinforcement **2005**, 1-8		24
351	Anomalous strengthening behavior of Co□Cr□Mo alloy single crystals for biomedical applications. *Scripta Materialia*, **2016**, 123, 149-153	5.6	24
350	Microstructural and Orientation Dependence of the Plastic Deformation Behavior in □-type Ti-15Mo-5Zr-3Al Alloy Single Crystals. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2012**, 43, 1588-1597	2.3	23
349	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	1.3	22

348	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		22
347	Osteoporosis Changes Collagen/Apatite Orientation and Young's Modulus in Vertebral Cortical Bone of Rat. *Calcified Tissue International*, **2019**, 104, 449-460	3.9	22
346	Development of a root canal treatment model in the rat. *Scientific Reports*, **2017**, 7, 3315	4.9	21
345	Isotropic plasticity of β-type Ti-29Nb-13Ta-4.6Zr alloy single crystals for the development of single crystalline β-Ti implants. *Scientific Reports*, **2016**, 6, 29779	4.9	21
344	Improvement of aligned lamellar structure by Cr-addition to NbSi2/MoSi2 duplex-silicide crystals. *Scripta Materialia*, **2010**, 62, 613-616	5.6	21
343	Plastic Behavior and Deformation Structure of Silicide Single Crystals with Transition Metals at High Temperatures. *Materials Research Society Symposia Proceedings*, **1993**, 322, 9		21
342	Evaluation of crystallographic orientation of biological apatite in vertebral cortical bone in ovariectomized cynomolgus monkeys treated with minodronic acid and alendronate. *Journal of Bone and Mineral Metabolism*, **2016**, 34, 234-41	2.9	20
341	Effects of mechanical repetitive load on bone quality around implants in rat maxillae. *PLoS ONE*, **2017**, 12, e0189893	3.7	19
340	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	7.6	19
339	Efficacy of polyphasic calcium phosphates as a direct pulp capping material. *Journal of Dentistry*, **2010**, 38, 828-37	4.8	19
338	Design and development of Ti-Zr-Hf-Nb-Ta-Mo high-entropy alloys for metallic biomaterials. *Materials and Design*, **2021**, 202, 109548	8.1	19
337	Plastic deformation mechanisms of biomedical Co-Cr-Mo alloy single crystals with hexagonal close-packed structure. *Scripta Materialia*, **2018**, 142, 111-115	5.6	18
336	Effects of long-term cigarette smoke exposure on bone metabolism, structure, and quality in a mouse model of emphysema. *PLoS ONE*, **2018**, 13, e0191611	3.7	18
335	Individual mechanical properties of ferrite and martensite in Fe-0.16mass% C-1.0mass% Si-1.5mass% Mn steel. *Journal of Alloys and Compounds*, **2013**, 577, S593-S596	5.7	18
334	New Technique for Evaluation of Preferential Alignment of Biological Apatite (BAp) Crystallites in Bone Using Transmission X-ray Diffractometry. *Materials Transactions*, **2008**, 49, 2129-2135	1.3	18
333	Indentation fracture behavior of (Mo0.85Nb0.15)Si2 crystals with C40 single-phase and MoSi2(C11b)/NbSi2(C40) duplex-phase with oriented lamellae. *Science and Technology of Advanced Materials*, **2004**, 5, 11-17	7.1	18
332	Clinical efficacy and safety of monthly oral ibandronate 100 mg versus monthly intravenous ibandronate 1 mg in Japanese patients with primary osteoporosis. *Osteoporosis International*, **2015**, 26, 2685-93	5.3	17
331	Bioinspired Mineralization Using Chondrocyte Membrane Nanofragments. *ACS Biomaterials Science and Engineering*, **2018**, 4, 617-625	5.5	17

330	Microstructural Changes During Plastic Deformation and Corrosion Properties of Biomedical Co-20Cr-15W-10Ni Alloy Heat-Treated at 873 K. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 2393-2404	2.3	17
329	Regenerative behavior of biomineral/agarose composite gels as bone grafting materials in rat cranial defects. *Journal of Biomedical Materials Research - Part A*, **2010**, 93, 965-75	5.4	17
328	Effects of antiphase domains on dislocation motion in Ti3Al single crystals deformed by prism slip. *Philosophical Magazine*, **2008**, 88, 465-488	1.6	17
327	Surprising increase in yield stress of Mg single crystal using long-period stacking ordered nanoplates. *Acta Materialia*, **2021**, 209, 116797	8.4	17
326	Development of bifunctional oriented bioactive glass/poly(lactic acid) composite scaffolds to control osteoblast alignment and proliferation. *Journal of Biomedical Materials Research - Part A*, **2019**, 107, 1031-1041	5.4	16
325	Development of low-Young□ modulus Ti□Nb-based alloys with Cr addition. *Journal of Materials Science*, **2019**, 54, 8675-8683	4.3	16
324	Novel evaluation method of dentin repair by direct pulp capping using high-resolution micro-computed tomography. *Clinical Oral Investigations*, **2018**, 22, 2879-2887	4.2	16
323	Plastic Anisotropy of Ti3Al Single Crystals. *Materials Research Society Symposia Proceedings*, **1992**, 288, 441		16
322	Beta titanium single crystal with bone-like elastic modulus and large crystallographic elastic anisotropy. *Journal of Alloys and Compounds*, **2019**, 782, 667-671	5.7	16
321	□phase transformation and lattice modulation in biomedical □phase Ti-Nb-Al alloys. *Journal of Alloys and Compounds*, **2018**, 766, 511-516	5.7	16
320	Biocompatible nanostructured solid adhesives for biological soft tissues. *Acta Biomaterialia*, **2017**, 57, 404-413	10.8	15
319	Effects of single or combination therapy of teriparatide and anti-RANKL monoclonal antibody on bone defect regeneration in mice. *Bone*, **2018**, 106, 1-10	4.7	15
318	Structural and Qualitative Bone Remodeling Around Repetitive Loaded Implants in Rabbits. *Clinical Implant Dentistry and Related Research*, **2015**, 17 Suppl 2, e699-710	3.9	15
317	Proliferation and differentiation potential of pluripotent mesenchymal precursor C2C12 cells on resin-based restorative materials. *Dental Materials Journal*, **2010**, 29, 341-6	2.5	15
316	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. *Bone*, **2018**, 108, 25-33	4.7	15
315	Stochastic multi-scale prediction on the apparent elastic moduli of trabecular bone considering uncertainties of biological apatite (BAp) crystallite orientation and image-based modelling. *Computer Methods in Biomechanics and Biomedical Engineering*, **2015**, 18, 162-74	2.1	14
314	Control of hydroxyapatite crystallinity by mechanical grinding method. *Journal of Materials Science: Materials in Medicine*, **2001**, 12, 703-6	4.5	14
313	Degradation behavior of Ca-Mg-Zn intermetallic compounds for use as biodegradable implant materials. *Materials Science and Engineering C*, **2014**, 44, 285-92	8.3	13

312	Formation of c-axis-oriented columnar structures through controlled epitaxial growth of hydroxyapatitePeer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society.View all notes. *Journal of Asian Ceramic Societies*, **2013**, 1, 143-148	2.4	13
311	Promotion of endodontic lesions in rats by a novel extraradicular biofilm model using obturation materials. *Applied and Environmental Microbiology*, **2014**, 80, 3804-10	4.8	13
310	Uncertainty Modeling in the Prediction of Effective Mechanical Properties Using Stochastic Homogenization Method with Application to Porous Trabecular Bone. *Materials Transactions*, **2013**, 54, 1250-1256	1.3	13
309	β-Phase Instability in Binary Ti–xNb Biomaterial Single Crystals. *Materials Transactions*, **2013**, 54, 156-160	1.3	13
308	Alignment of biological apatite crystallites at first molar in human mandible cortical bone. *Cranio - Journal of Craniomandibular Practice*, **2012**, 30, 32-40	1.2	13
307	EFFECTS OF APPLIED STRESS ON PREFERENTIAL ALIGNMENT OF BIOLOGICAL APATITE IN RABBIT FORELIMB BONES. *Phosphorus Research Bulletin*, **2004**, 17, 77-82	0.3	13
306	Effects of Al concentration and resulting long-period superstructures on the plastic properties at room temperature of Al-rich TiAl single crystals. *Philosophical Magazine*, **2005**, 85, 2527-2548	1.6	13
305	Crystallographic orientation control of pure chromium via laser powder bed fusion and improved high temperature oxidation resistance. *Additive Manufacturing*, **2020**, 36, 101624	6.1	13
304	Lattice distortion in selective laser melting (SLM)-manufactured unstable □type Ti-15Mo-5Zr-3Al alloy analyzed by high-precision X-ray diffractometry. *Scripta Materialia*, **2021**, 201, 113953	5.6	13
303	Biomimetic mineralization using matrix vesicle nanofragments. *Journal of Biomedical Materials Research - Part A*, **2019**, 107, 1021-1030	5.4	12
302	Development of Ti□rH□fY□a high-entropy alloys with dual hexagonal-close-packed structure. *Scripta Materialia*, **2020**, 186, 242-246	5.6	12
301	Fundamentals of Metal 3D Printing Technologies. *Materia Japan*, **2017**, 56, 686-690	0.1	12
300	Mesenchymal stromal cells improve the osteogenic capabilities of mineralized agarose gels in a rat full-thickness cranial defect model. *Journal of Tissue Engineering and Regenerative Medicine*, **2013**, 7, 51-60	4.4	12
299	The preparation of PLLA/calcium phosphate hybrid composite and its evaluation of biocompatibility. *Dental Materials Journal*, **2012**, 31, 1087-96	2.5	12
298	The deformation substructure in cyclically deformed TiAl PST crystals. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1996**, 73, 1035-1051		12
297	Synchronous improvement in strength and ductility of biomedical Co□Cr□Mo alloys by unique low-temperature heat treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 739, 53-61	5.3	12
296	Dynamic Collision Behavior Between Osteoblasts and Tumor Cells Regulates the Disordered Arrangement of Collagen Fiber/Apatite Crystals in Metastasized Bone. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	12
295	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. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 766, 138400	5.3	11

294	Quantitative ultrasound (QUS) axial transmission method reflects anisotropy in micro-arrangement of apatite crystallites in human long bones: A study with 3-MHz-frequency ultrasound. *Bone*, **2019**, 127, 82-90	4.7	11
293	Influences of scanning speed and short-time heat treatment on fundamental properties of Ti-6Al-4V alloy produced by EBM method. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 704, 246-251	5.3	11
292	Yield stress anomaly controlled by the phase stability in NbSi2 single crystals. *Scripta Materialia*, **2013**, 68, 313-316	5.6	11
291	Cr segregation at C11b/C40 interface in MoSi2-based alloys: A first-principles study. *Intermetallics*, **2013**, 42, 165-169	3.5	11
290	Numerical Study on the Morphology and Mechanical Role of Healthy and Osteoporotic Vertebral Trabecular Bone. *Journal of Biomechanical Science and Engineering*, **2011**, 6, 270-285	0.8	11
289	Analysis of Biological Apatite Crystal Orientation in Anterior Cortical Bone of Human Mandible Using Microbeam X-ray Diffractometry. *Materials Transactions*, **2012**, 53, 980-984	1.3	11
288	Classification of □1 and □2 lamellar boundaries on the basis of continuity of strains and slip-twinning planes in fatigued TiAl polysynthetically twinned crystals. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **2001**, 81, 1447-1471		11
287	Quantitative Evaluation of Osteocyte Morphology and Bone Anisotropic Extracellular Matrix in Rat Femur. *Calcified Tissue International*, **2021**, 109, 434-444	3.9	11
286	UVA-activated riboflavin promotes collagen crosslinking to prevent root caries. *Scientific Reports*, **2019**, 9, 1252	4.9	11
285	Strain-rate dependence of deformation behavior of LPSO-phases. *Materials Letters*, **2018**, 214, 119-122	3.3	11
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