Citation Report
List of articles citing

Design and mechanical properties of new ? type titanium alloys for implant materials

DOI: 10.1016/s0921-5093(97)00808-3
Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 243, 244-249.

#	Paper	IF	Citations
984	Microstructure and mechanical behaviour of the isothermally forged Tiâ€Alâ€Nb alloy. **2000**, 214, 23-31		1
983	????????CP???????????. **2002**, 41, 553-560		5
982	First Principles Estimation of Bulk Modulus and Theoretical Strength of Titanium Alloys. **2002**, 43, 3028-3031		9
981	Phase Decomposition in a Ti-13Nb-13Zr Alloy during Aging at 600°C. **2002**, 43, 2956-2963		18
980	Development of Low Rigidity β-type Titanium Alloy for Biomedical Applications. **2002**, 43, 2970-2977		264
979	??????????????. **2002**, 52, 330-334		6
978	Nitrogen ion implantation and in vitro corrosion behavior of as-cast Tiâ€Alâ€Nb alloy. **2002**, 44, 2439-2457		50
977	Wear Characteristics of Surface Oxidation Treated New Biomedical β-type Titanium Alloy in Simulated Body Environment. **2002**, 88, 567-574		20
976	Fretting Fatigue Characteristics of New Biomedical β-type Titanium Alloy in Air and Simulated Body Environment. **2002**, 88, 553-560		17
975	Recent metallic materials for biomedical applications. **2002**, 33, 477-486		994
974	Aging behavior of the Ti-29Nb-13Ta-4.6Zr new beta alloy for medical implants. **2002**, 33, 487-493		66
973	Mechanical properties of porous titanium compacts prepared by powder sintering. **2003**, 49, 1197-1202		440
972	Recent research and development in titanium alloys for biomedical applications and healthcare goods. **2003**, 4, 445-454		644
971	Bioactive calcium phosphate invert glass-ceramic coating on beta-type Ti-29Nb-13Ta-4.6Zr alloy. **2003**, 24, 283-90		64
970	Fatigue performance and cyto-toxicity of low rigidity titanium alloy, Ti-29Nb-13Ta-4.6Zr. **2003**, 24, 2673-83		434
969	Joining of Calcium Phosphate Invert Glass-Ceramics on a Type Titanium Alloy. **2003**, 86, 1031-1033		14
968	Failure Processes in Biometallic Materials. **2003**, 131-167		15

967	Microstructures and Mechanical Properties of Porosity-Graded Pure Titanium Compacts. **2003**, 44, 657-660	26
966	Hard TissueâBiomaterial Interactions. **2003**, 7-46	2
965	Recent Applications, Research and Development in Titanium and Its Alloys. **2004**, 90, 462-471	10
964	Development of a beta-type Ti-12Mo-5Ta alloy for biomedical applications: cytocompatibility and metallurgical aspects. **2004**, 15, 885-91	47
963	High-strength metastable beta-titanium alloys for biomedical applications. **2004**, 56, 49-51	57
962	In vitro biocompatibility of a new titanium-29niobium-13tantalum-4.6zirconium alloy with osteoblast-like MG63 cells. **2004**, 75, 1701-7	21
961	First-principles calculations for development of low elastic modulus Ti alloys. **2004**, 70,	262
960	Influence of hafnium content on mechanical behaviors of Tiâ20Nbâ□Hf alloys. **2004**, 58, 3182-3186	22
959	CALCIUM PHOSPHATE GLASS-CERAMIC COATING ON A TITANIUM ALLOY. **2004**, 17, 29-36	4
958	Effects of Sn and Zr Additions on Phase Constitution and Aging Behavior of Ti-50 mass%Ta Alloys Quenched from β Single Phase Region. **2004**, 45, 1106-1112	41
957	Shape Memory Properties of Biomedical Ti-Mo-Ag and Ti-Mo-Sn Alloys. **2004**, 45, 1096-1100	129
956	Beta Ti Alloys with Low Young's Modulus. **2004**, 45, 2776-2779	220
955	Shape Memory and Mechanical Properties of Biomedical Ti-Sc-Mo Alloys. **2004**, 45, 1101-1105	55
954	Tensile Deformation Behavior of Ti-Nb-Ta-Zr Biomedical Alloys. **2004**, 45, 1113-1119	77
953	??????????????????. **2005**, 55, 561-565	40
952	Beta TiNbSn Alloys with Low Young’s Modulus and High Strength. **2005**, 46, 1070-1078	249
951	Anisotropy and Temperature Dependence of Young’s Modulus in Textured TiNbAl Biomedical Shape Memory Alloy. **2005**, 46, 1597-1603	71
950	Characterization of Surface Oxide Film Formed on Ti–8Fe–8Ta–4Zr. **2005**, 46, 3015-3019	4

949	Mechanical Properties of Biocompatible Beta-Type Titanium Alloy Coated with Calcium Phosphate Invert Glass-Ceramic Layer. **2005**, 46, 1564-1569	17
948	A novel combinatorial approach to the development of beta titanium alloys for orthopaedic implants. **2005**, 25, 282-289	95
947	Relationships between tensile deformation behavior and microstructure in Ti–Nb–Ta–Zr system alloys. **2005**, 25, 363-369	114
946	Mechanical properties and cyto-toxicity of new beta type titanium alloy with low melting points for dental applications. **2005**, 25, 417-425	44
945	Bimodal structured Ti-base alloy with large elasticity and low Young's modulus. **2005**, 25, 290-295	26
944	Mechanical properties of porous Ti–15Mo–5Zr–3Al compacts prepared by powder sintering. **2005**, 25, 330-335	49
943	Effect of Ta content on mechanical properties of Ti–30Nb–XTa–5Zr. **2005**, 25, 370-376	52
942	Inhomogeneous microstructure in highly alloyed cast TiAl-based alloys, caused by microsegregation. **2005**, 52, 1021-1025	60
941	Mechanical properties and microstructures of new Ti–Fe–Ta and Ti–Fe–Ta–Zr system alloys. **2005**, 25, 312-320	53
940	Determination of single-crystal elasticity constants in a cubic phase within a multiphase alloy: X-ray diffraction measurements and inverse-scale transition modelling. **2005**, 38, 30-37	24
939	Microstructural Evolution of Ti-13Nb-13Zr Alloy during Sintering. **2005**, 498-499, 40-48	8
938	Effect of Zr Addition on Phase Constitution and Heat Treatment Behavior of Ti-25mass%Nb Alloys. **2005**, 475-479, 2337-2342	
937	Mechanical Properties of Ti-Nb Biomedical Shape Memory Alloys Containing 13- and 14-Group Elements. **2005**, 475-479, 2329-2332	13
936	Preparation of Nb-40Ti Powders by High-Energy Milling. **2005**, 498-499, 146-151	
935	High Temperature Deformation Behavior of a Beta Titanium Alloy for Biomedical Application. **2005**, 475-479, 2299-2302	2
934	Mechanical compatibility of titanium implants in hard tissues. **2005**, 1284, 239-247	65
933	Synthesis, structure and electrochemical behavior of a beta Ti-12Mo-5Ta alloy as new biomaterial. **2005**, 59, 2936-2941	59
932	Recent advances in the design of titanium alloys for orthopedic applications. **2005**, 2, 741-8	81

931	Deformation-induced nanostructuring in a TiâNbâTaâh âalloy. **2006**, 89, 031906	44
930	Gum Metal and Related Alloys. **2006**, 1-4	1
929	X-ray Diffraction Analysis of Ti-18 mol%Nb Based Shape Memory Alloys Containing 3d Transition Metal Elements. **2006**, 47, 1209-1213	15
928	Effects of Sn Content and Aging Conditions on Superelasticity in Biomedical Ti–Mo–Sn Alloys. **2006**, 47, 513-517	23
927	Microstructural Modification in a Beta Titanium Alloy for Implant Applications. **2006**, 47, 90-95	10
926	Self-organization of anodic nanotubes on two size scales. **2006**, 2, 888-91	90
925	Texture and shape memory behavior of Tiâ22Nbâ8Ta alloy. **2006**, 54, 423-433	221
924	Corrosion characterization of titanium alloys by electrochemical techniques. **2006**, 51, 1815-1819	473
923	Nanotube oxide coating on Tiâ29Nbâ13Taâ4.6Zr alloy prepared by self-organizing anodization. **2006**, 52, 94-101	88
922	Composition dependence of youngâ modulus in Ti-V, Ti-Nb, and Ti-V-Sn alloys. **2006**, 37, 3239-3249	59
921	Phase stability and its effect on the deformation behavior of TiâNbâTaâh/Cr âalloys. **2006**, 54, 1943-1948	80
920	General approach to phase stability and elastic properties of âtype Ti-alloys using electronic parameters. **2006**, 55, 477-480	455
919	Recent Development of New Alloys for Biomedical Use. **2006**, 512, 243-248	28
918	Ceramic Bonding to Biocompatible Titanium Alloys Obtained by Powder Metallurgy. **2006**, 530-531, 605-611	
917	Biomimetic Coatings on Ti-Based Alloys Obtained by Powder Metallurgy for Biomedical Applications. **2006**, 530-531, 599-604	
916	THE SOLIDIFICATION MICROSTRUCTURE OF BIOMEDICAL TITANIUM ALLOYS UNDER THE CENTRIFUGAL FORCE. **2006**, 20, 4685-4690	
915	Mechanical Properties of Porous Titanium Compacts Reinforced by UHMWPE. **2007**, 539-543, 1033-1037	6
914	Phase Constitution and Heat Treatment Behavior of Zr-Nb Alloys. **2007**, 561-565, 1435-1440	3

913	Approaches to the Design and Processing of Novel Titanium Alloys. **2007**, 29-30, 127-130	
912	Biodegradable Fiber Reinforced Ti Composite Fabricated by Spark Plasma Sintering Method. **2007**, 539-543, 3201-3206	7
911	Corrosion Characteristics of TiN and ZrN Coated Ti-Nb Alloy by RF-Sputtering. **2007**, 539-543, 1270-1275	6
910	Mechanical Behaviors of Ti-29Nb-13Ta-4.6Zr-XO for Biomedical Applications Subjected to Cold Working and Various Heat Treatments. **2007**, 561-565, 1471-1476	
909	Mechanical Properties and Biocompatibility of Porous Titanium Prepared by Powder Sintering. **2007**, 539-543, 635-640	4
908	Bioactive Ceramic Surface Modification of β-Type Ti-Nb-Ta-Zr System Alloy by Alkali Solution Treatment. **2007**, 48, 293-300	19
907	Effects of Alloying Elements on Hard Ceramic Layer Formation on Surfaces of Biomedical Ti-29Nb-13Ta-4.6Zr and Ti-6Al-4V ELI during Gas Nitriding. **2007**, 71, 415-422	5
906	Calcium-Phosphate Formation on Titanium Modified with Newly Developed Calcium-Hydroxide-Slurry Treatment. **2007**, 48, 105-110	10
905	Mechanical Properties and Phase Stability of Ti-Nb-Ta-Zr-O Alloys. **2007**, 48, 1124-1130	25
904	New TiZrCuPd Quaternary Bulk Glassy Alloys with Potential of Biomedical Applications. **2007**, 48, 2445-2448	45
903	TiO2 nanotubes: Self-organized electrochemical formation, properties and applications. **2007**, 11, 3-18	1053
902	Aging response of the Tiâ35Nbâ7Zrâ5Ta and Tiâ35Nbâ7Ta alloys. *Journal of Alloys and Compounds*, **2007**, 433, 207-210	5.7 79
901	Influence of Nb and Mo contents on phase stability and elastic property of Ê-type Ti-X alloys. **2007**, 17, 1417-1421	17
900	Titanium and Titanium Alloy Applications in Medicine. **2007**, 533-576	11
899	Synthetic relationship between titanium and alloying elements in designing Ni-free Ti-based bulk metallic glass alloys. **2007**, 91, 053106	10
898	AC Impedance Behaviors of Ti-Zr Binary Alloys for Biomaterials. **2007**, 26-28, 817-820	3
897	??????????????????. **2007**, 58, 495-499	4
896	The development of Ti alloys for dental implant with high corrosion resistance and mechanical strength. **2007**, 26, 260-7	42

895	CaTiO(3) coating on titanium for biomaterial application--optimum thickness and tissue response. **2007**, 82, 304-15		55
894	Theory-guided bottom-up design of β-titanium alloys as biomaterials based on first principles calculations: Theory and experiments. **2007**, 55, 4475-4487		188
893	Low stiffness porous Ti structures for load-bearing implants. **2007**, 3, 997-1006		328
892	A new Ti-based bulk glassy alloy with potential for biomedical application. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 459, 233-237	5.3	155
891	α′-Martensite Ti–V–Sn alloys with low Young's modulus and high strength. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 448, 39-48	5.3	54
890	Mechanical characteristics and microstructure of drawn wire of Ti–29Nb–13Ta–4.6Zr for biomedical applications. **2007**, 27, 154-161		54
889	Surface elastic properties of Ti alloys modified for medical implants: a force spectroscopy study. **2007**, 3, 113-9		23
888	Effect of Fe and Zr additions on α phase formation in β-type Ti–Mo alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 497, 74-78	5.3	53
887	Fabrication of porous titanium scaffold materials by a fugitive filler method. **2008**, 19, 3489-95		26
886	Evolution of Microstructure and Texture during Recrystallization of the Cold-Swaged Ti-Nb-Ta-Zr-O Alloy. **2008**, 39, 672-678		38
885	Study of New Multifunctional Shape Memory and Low Elastic Modulus Ni-Free Ti Alloys. **2008**, 39, 742-751		22
884	Surface hardening of biomedical Ti–29Nb–13Ta–4.6Zr and Ti–6Al–4V ELI by gas nitriding. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 486, 193-201	5.3	49
883	Nanoscale mechanism and intrinsic structure related deformation of Ti-alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 493, 71-78	5.3	19
882	Microstructure and mechanical properties of cold-rolled TiNbTaZr biomedical β-titanium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2008**, 490, 421-426	5.3	86
881	Mechanical biocompatibilities of titanium alloys for biomedical applications. **2008**, 1, 30-42		829
880	Microstructure, mechanical properties and cytocompatibility of stable beta Ti-Mo-Ta sintered alloys. **2008**, 1, 345-51		38
879	Interfacial defects in Ti–Nb shape memory alloys. **2008**, 56, 3088-3097		77
878	Histomorphologic evaluation of Ti–13Nb–13Zr alloys processed via powder metallurgy. A study in rabbits. **2008**, 28, 223-227		14

877	Anisotropy of Young's modulus and tensile properties in cold rolled □ martensite Ti□V□Sn alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2008**, 486, 503-510	5.3	22
876	Elastic modulus of biomedical titanium alloys by nano-indentation and ultrasonic techniques□A comparative study. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 489, 419-425	5.3	100
875	In vitro apatite formation on chemically treated (P/M) Ti-13Nb-13Zr. **2008**, 24, 50-6		39
874	Corrosion behaviour of Ti-15Mo alloy for dental implant applications. **2008**, 36, 500-7		89
873	The microstructure and properties of Ti□Mo□Nb alloys for biomedical application. *Journal of Alloys and Compounds*, **2008**, 453, 320-324	5.7	85
872	Quantum parameters for guiding the design of Ti alloys with shape memory and/or low elastic modulus. **2008**, 88, 2529-2548		17
871	IMPROVEMENT IN MECHANICAL PERFORMANCE OF LOW-MODULUS □Ti-Nb-Ta-Zr SYSTEM ALLOYS BY MICROSTRUCTURAL CONTROL VIA THERMOMECHANICAL PROCESSING. **2008**, 22, 2787-2795		3
870	Titanium and Its Alloys. **2008**, 2876-2892		
869	Ultrafine-grained titanium of high interstitial contents with a good combination of strength and ductility. **2008**, 92, 011924		22
868	Effect of Silane Coupling Treatment on Mechanical Properties of Porous Pure Titanium Filled with PMMA for Biomedical Applications. **2008**, 72, 839-845		8
867	Microstructure and Mechanical Properties of □ Martensite Type Ti Alloy Deformation-Processed under the □ Processing. **2008**, 72, 989-996		7
866	Mechanical Properties of Implant Rods made of Low-Modulus □Type Titanium Alloy, Ti-29Nb-13Ta-4.6Zr, for Spinal Fixture. **2008**, 72, 674-678		11
865	Effect of Oxygen Content on Microstructure and Mechanical Properties of Ti-29Nb-13Ta-4.6Zr Alloy for Biomedical Applications. **2008**, 72, 960-964		8
864	Characteristics of Biomedical Beta-Type Titanium Alloy Subjected to Coating. **2008**, 49, 365-371		7
863	Effect of Nb Content on Plastic Deformation Behavior and Deformation Textures of Ti-Nb-Zr-Ta-O Alloy. **2008**, 72, 970-974		5
862	Biologically and Mechanically Biocompatible Titanium Alloys. **2008**, 49, 2170-2178		128
861	Wear and Mechanical Properties, and Cell Viability of Gas-Nitrided Beta-Type Ti-Nb-Ta-Zr System Alloy for Biomedical Applications. **2008**, 49, 166-174		16
860	Titanium Alloys with High Biological and Mechanical Biocompatibility. **2008**, 55, 303-311		2

859	In Vitro Cytotoxicity of Binary Ti Alloys for Bone Implants. **2009**, 618-619, 295-298		2
858	Prolonged antibiotic delivery from anodized nanotubular titanium using a co-precipitation drug loading method. **2009**, 91, 587-95		80
857	Comparative corrosion study of Ti-Ta alloys for dental applications. **2009**, 5, 3625-39		166
856	Design and Characterization of New Ti-Nb-Hf Alloys. **2009**, 18, 490-495		21
855	Microstructure and Mechanical Properties of TiNbZr Alloy during Cold Drawing. **2009**, 38, 579-582		8
854	Characterization of Microstructure and Mechanical Properties of TiNbZr Alloy during Heat Treatment. **2009**, 38, 1136-1140		4
853	Electrochemical synthesis of silica-doped high aspect-ratio titania nanotubes as nanobioceramics for implant applications. **2009**, 54, 3255-3269		32
852	Nanotube morphology changes for Tiâ□r alloys as Zr content increases. **2009**, 517, 5033-5037		60
851	Powder sintering of porous Tiâ□5Mo alloy from TiH2 and Mo powders. *Journal of Alloys and Compounds*, **2009**, 485, 215-218	5.7	46
850	Self-Organized Oxide Nanotube Layers on Titanium and Other Transition Metals. **2009**, 435-466		4
849	MODIFICATION OF PHASE STABILITY AND MECHANICAL PROPERTIES BY THE ADDITION OF O AND Fe INTO □Ti ALLOYS. **2009**, 23, 1559-1565		21
848	Multiple deformation mechanisms of Tiâ□2.4Nbâ□.73Taâ□.0Zrâ□.34O alloy. **2009**, 94, 061901		41
847	Nanostructure and corrosion behaviors of nanotube formed Ti-Zr alloy. **2009**, 19, 1005-1008		48
846	Effect of Oxygen Content on Microstructure and Mechanical Properties of Biomedical Ti-29Nb-13Ta-4.6Zr Alloy under Solutionized and Aged Conditions. **2009**, 50, 2716-2720		57
845	Anomalous Thermal Expansion of Cold-Rolled Ti-Nb-Ta-Zr Alloy. **2009**, 50, 423-426		27
844	Microstructure and Mechanical Properties of α′ Martensite Type Ti Alloys Deformed under the α′ Processing. **2009**, 50, 2744-2750		12
843	Nanocrystalline body-centred cubic beta-titanium alloy processed by high-pressure torsion. **2009**, 100, 1662-1667		16
842	Stress-induced martensitic transformation in a Ti45Zr38Al17cast rod. **2009**, 144, 012090		1

841	Ion release from SrO-CaO-TiO2-P2O5 glasses in Tris buffer solution. **2009**, 117, 935-938		21
840	The effect of Zr content on the microstructure, mechanical properties and cell attachment of Ti-35Nb-xZr alloys. **2010**, 5, 045006		21
839	Fabrication and Mechanical Properties of Porous Ti/HA Composites for Bone Fixation Devices. **2010**, 51, 1449-1454		21
838	Titanium Alloys for Spinal Fixation Devices. **2010**, 49, 437-440		5
837	Effect of Youngâ modulus in metallic implants on atrophy and bone remodeling. **2010**, 90-99		4
836	Development of biomedical porous titanium filled with medical polymer by in-situ polymerization of monomer solution infiltrated into pores. **2010**, 3, 41-50		14
835	Mechanical properties of low modulus beta titanium alloys designed from the electronic approach. **2010**, 3, 565-73		158
834	Influence of a short thermal treatment on the superelastic properties of a titanium-based alloy. **2010**, 63, 1053-1056		91
833	Effects of Ta content on the phase stability and elastic properties of Tiâ Ta alloys from first-principles calculations. **2010**, 12, 2120-2124		20
832	The pack-boronizing of pure vanadium under a controlled atmosphere. **2010**, 256, 7612-7618		18
831	Orthopaedic applications of metallic biomaterials. **2010**, 329-354		2
830	Mechanical Properties of Ti-Cr-Sn-Zr Alloys. **2010**, 638-642, 635-640		7
829	Anomalous Characteristics of Ti-Nb-Ta-Zr Alloy for Biomedical Applications. **2010**, 638-642, 16-21		3
828	Bending Fatigue and Spring Back Properties of Implant Rods Made of Type Titanium Alloy for Spinal Fixture. **2010**, 89-91, 400-404		5
827	Formability of Tiâ29Nbâ13Taâ4.6Zr Biomaterial at High Temperatures. *Key Engineering Materials*, **2010**, 443, 620-625	0.4	1
826	Coatings for metallic biomaterials. **2010**, 260-282		6
825	New-generation metallic biomaterials. **2010**, 355-378		6
824	Phase Stability and Mechanical Properties of Ti-Cr Based Alloys with Low Youngâ Modulus. **2010**, 654-656, 2114-2117		9

823	Fatigue failure of metallic biomaterials. **2010**, 122-156		1
822	Cytotoxicity of titanium and titanium alloying elements. **2010**, 89, 493-7		170
821	Effect of martensitic □phase on mechanical properties of Ti100â□Cox alloys with x=5, 7 and 9. **2010**, 18, 725-729		3
820	Effect of the addition of Ta on microstructure and properties of Tiâ□Nb alloys. *Journal of Alloys and Compounds*, **2010**, 504, 330-340	5.7	35
819	Phase stability and hardness of some ternary Tiâ□r based shape memory alloys. **2011**, 1-11		3
818	Design and Research on Mechanical Properities of New Type Low Modulus Biomedical Metastable □Titanium Alloy. **2011**, 311-313, 1667-1672		
817	Microstructure of cast □TiAl based alloy solidified from □phase region. **2011**, 21, 215-222		23
816	Numerical evaluation of reduction of stress shielding in laser coated hip prostheses. **2011**, 14, 331-334		11
815	Effect of additives on sintering response of titanium by powder injection moulding. **2011**, 54, 420-426		16
814	Properties of titanium-hydroxyapatite composite materials fabricated via mechanical alloying and spark plasma sintering process. **2011**, 61, 192-198		6
813	Improvement in Fatigue Strength of Biomedical β-Type Ti–Nb–Ta–Zr Alloy while Maintaining Low Young’s Modulus through Optimizing ω-Phase Precipitation. **2011**,		1
812	Hydroxyapatite production on ultrafine-grained pure titanium by micro-arc oxidation and hydrothermal treatment. **2011**, 205, S537-S542		47
811	Age-hardening behavior, microstructural evolution and grain growth kinetics of isothermal □phase of Tiâ□Nbâ□Taâ□râ□e alloy for biomedical applications. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 529, 326-334	5.3	27
810	Processing considerations for cast Tiâ□5Nbâ□Moâ□Zrâ□Sn biomedical alloys. **2011**, 31, 1520-1525		13
809	The role of heat treatment on microstructure and mechanical properties of Ti-13Zr-13Nb alloy for biomedical load bearing applications. **2011**, 4, 1132-44		64
808	Mechanical and biodegradable properties of porous titanium filled with poly-L-lactic acid by modified in situ polymerization technique. **2011**, 4, 1206-18		16
807	Relationship between various deformation-induced products and mechanical properties in metastable Ti-30Zr-Mo alloys for biomedical applications. **2011**, 4, 2009-16		32
806	Self-adjustment of Young's modulus in biomedical titanium alloys during orthopaedic operation. **2011**, 65, 688-690		105

805	Effects of Sn and Zr on the Microstructure and Mechanical Properties of Ti-Ta-Based Shape Memory Alloys. **2011**, 20, 762-766		26
804	Microstructures and mechanical properties of metastable Ti-30Zr-(Cr, Mo) alloys with changeable Young's modulus for spinal fixation applications. **2011**, 7, 3230-6		105
803	The influence of heat treatment and role of boron on sliding wear behaviour of β-type Ti-35Nb-7.2Zr-5.7Ta alloy in dry condition and in simulated body fluids. **2011**, 4, 284-97		18
802	Nanostructured surface changes of Tiâ35Taâ□Zr alloys with changes in anodization factors. **2011**, 519, 4663-4667		8
801	Surface characteristics of hydroxyapatite/titanium composite layer on the Ti-35Ta-xZr surface by RF and DC sputtering. **2011**, 519, 7045-7049		22
800	Titanium and cobaltâ□hromium alloys for hips and knees. **2011**, 34-55		2
799	Research Development of Biomedical Titanium Alloy. **2011**, 55-57, 2009-2012		1
798	Peritectic Reaction of High Nb and W Pentatomic TiAl-Based Alloy. **2011**, 335-336, 831-835		
797	Determining Ti-17 □Phase Single-Crystal Elasticity Constants through X-Ray Diffraction and Inverse Scale Transition Model. **2011**, 681, 97-102		14
796	Titanium-Based Biomaterials for Preventing Stress Shielding between Implant Devices and Bone. **2011**, 2011, 836587		336
795	Beta Titanium Alloys with Very High Ductility Induced by Complex Deformation Mechanisms: a New Material Perspective for Coronary Stent Applications. **2011**, 172-174, 129-134		3
794	Effect of Heat Treatment and Boron Addition on Corrosion Behavior of Ti-35Nb-7.2Zr-5.7Ta (wt%) □Titanium Alloy in Simulated Body Fluid. **2011**, 67, 085001-1-085001-9		2
793	Microstructure and Mechanical Properties of a Biomedical □Type Titanium Alloy Subjected to Severe Plastic Deformation after Aging Treatment. *Key Engineering Materials*, **2012**, 508, 152-160	0.4	6
792	Influence of Sn Content on Microstructure and Mechanical Properties of Ti-35wt%Nb Alloy. **2012**, 509, 96-102		
791	Titanium as a Reconstruction and Implant Material in Dentistry: Advantages and Pitfalls. *Materials*, **2012**, 5, 1528-1545	3.5	127
790	Mechanical Properties of Ti-Cr-Sn-Zr Alloys with Low Youngâ□ Modulus. **2012**, 706-709, 553-556		8
789	Youngâ□ Modulus Changeable Titanium Alloys for Orthopaedic Applications. **2012**, 706-709, 557-560		1
788	Processing and Characterization of □Ti Alloys by Means of Powder Metallurgy Processing and Blender Elemental. **2012**, 727-728, 61-66		4

787	Research and development of metals for medical devices based on clinical needs. **2012**, 13, 064102		72
786	Shape memory, superelastic and low Youngâ modulus alloys. **2012**, 462-490		7
785	Fatigue Strength of Ti-35Nb-7Zr-5Ta. **2012**, 727-728, 73-79		
784	High Performance Beta Titanium Alloys as a New Material Perspective for Cardiovascular Applications. **2012**, 706-709, 578-583		3
783	Unusual Effect of Oxygen on the Mechanical Behavior of a Type Titanium Alloy Developed for Biomedical Applications. **2012**, 706-709, 135-142		4
782	Fabrication of biomedical Tiâ5Nbâ7Zrâ5Ta alloys by mechanical alloying and spark plasma sintering. **2012**, 55, 65-70		37
781	Young's Modulus Changeable Type Binary Ti-Cr Alloys for Spinal Fixation Applications. *Key Engineering Materials*, **2012**, 508, 117-123	0.4	2
780	Theory-Guided Materials Design of Multi-Phase Ti-Nb Alloys with Bone-Matching Elastic Properties. *Materials*, **2012**, 5, 1853-1872	3.5	62
779	Design of low elastic modulus TiâNbâZr alloys for implant materials. **2012**, 27, 55-57		7
778	Metallic Biomaterials, Current Situation and Future Perspective^|^#x301C;Trend in Development of Metallic Materials for Orthopedic Applications^|^#x301C;. **2012**, 51, 309-312		1
777	Biomechanical Evaluation of Amorphous Calcium Phosphate Coated TNTZ Implants Prepared Using a Radiofrequency Magnetron Sputtering System. **2012**, 53, 1343-1348		6
776	Effect of Al Addition on Superelastic Properties of Aged Ti–Nb–Zr–Al Quaternary Alloys. **2012**, 53, 1981-1985		16
775	Microstructural evaluation of boron free and boron containing heat-treated Ti-35Nb-7.2Zr-5.7Ta alloy. **2012**, 18, 295-303		3
774	Development of New Titanium-Molybdenum Alloys with Changeable Young's Modulus for Spinal Fixture Devices. **2012**, 6, 695-700		
773	Ultrafine-grained textured surface layer on Zrâ1%Nb alloy produced by ultrasonic impact peening for enhanced corrosion resistance. **2012**, 210, 54-61		70
772	Effect of milling time on microstructure of Ti35Nb2.5Sn/10HA biocomposite fabricated by powder metallurgy and sintering. **2012**, 22, 608-612		8
771	A new concept of hip joint stem and its fabrication using metastable TiNbSn alloy. *Journal of Alloys and Compounds*, **2012**, 536, S582-S585	5.7	18
770	Characterization of a new beta titanium alloy, Tiâ12Moâ3Nb, for biomedical applications. *Journal of Alloys and Compounds*, **2012**, 536, S208-S210	5.7	60

769	Precision machining of medical devices. **2012**, 59-113		7
768	Superelastic and shape memory properties of TixNb3Zr2Ta alloys. **2012**, 12, 151-9		20
767	Formation of alloys in the TiâNb system by hydride cycle method and synthesis of their hydrides in self-propagating high-temperature synthesis. **2012**, 37, 14234-14239		23
766	Characterization of thin anodic oxides of TiâNb alloys by electrochemical impedance spectroscopy. **2012**, 82, 324-332		54
765	Laser deposition and deformation behavior of Ti-Nb-Zr-Ta alloys for orthopedic implants. **2012**, 16, 21-8		13
764	Investigation of In Vitro Bone Cell Adhesion and Proliferation on Ti Using Direct Current Stimulation. **2012**, 32, 2163-2168		22
763	Introduction to Metallic Biomaterials. **2012**, 1-11		
762	New Kind of Titanium Alloys for Biomedical Application. **2012**, 253-272		1
761	Laser-assisted development of new Ti-Mo-Zr alloys for biomedical applications. **2012**,		1
760	Influence of noble metals alloying additions on the corrosion behaviour of titanium in a fluoride-containing environment. **2012**, 23, 1129-37		22
759	Microstructural and Orientation Dependence of the Plastic Deformation Behavior in T̈ype Ti-15Mo-5Zr-3Al Alloy Single Crystals. **2012**, 43, 1588-1597		23
758	Beta type Ti-Mo alloys with changeable Young's modulus for spinal fixation applications. **2012**, 8, 1990-7		133
757	Optimization of Cr content of metastable T̈ype Ti-Cr alloys with changeable Young's modulus for spinal fixation applications. **2012**, 8, 2392-400		90
756	The influence of chemical composition and thermo-mechanical treatment on TiâNbâTaâZr alloys. **2012**, 35, 731-740		26
755	On the design of new T̈metastable titanium alloys with improved work hardening rate thanks to simultaneous TRIP and TWIP effects. **2012**, 66, 749-752		232
754	A study of low Young?s modulus TiâNbâZr alloys using d electrons alloy theory. **2012**, 67, 57-60		66
753	Effect of Zr on super-elasticity and mechanical properties of Tiâ24at% Nbâ(0, 2, 4)at% Zr alloy subjected to aging treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 536, 197-206	5.3	64
752	Effects of alloying elements on the Snoek-type relaxation in TiâNbâXâO alloys (X=Al, Sn, Cr, and Mn). *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 541, 28-32	5.3	13

751	Effects of cold deformation on microstructure, texture evolution and mechanical properties of Ti□Nb□Ta□Zr□He alloy for biomedical applications. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 547, 64-71	5.3	59
750	Improvement in fatigue strength while keeping low Young's modulus of a □type titanium alloy through yttrium oxide dispersion. **2012**, 32, 542-549		25
749	Laser-assisted synthesis of Ti□Mo alloys for biomedical applications. **2012**, 32, 1190-1195		47
748	Development of thermo-mechanical processing for fabricating highly durable □type Ti-Nb-Ta-Zr rod for use in spinal fixation devices. **2012**, 9, 207-16		39
747	Influence of in situ TiB reinforcements and role of heat treatment on mechanical properties and biocompatibility of □Ti-alloys. **2012**, 10, 1-12		19
746	Improvement in Fatigue Strength of Biomedical □type Ti□Nb□Ta□Zr Alloy While Maintaining Low Young□s Modulus Through Optimizing □Phase Precipitation. **2012**, 43, 294-302		73
745	Improvement of the corrosion resistance and structural and mechanical properties of a titanium base alloy by thermo-mechanical processing. **2013**, 64, 500-508		9
744	Biomedical Ti-Mo alloys with surface machined and modified by laser beam: biomechanical, histological, and histometric analysis in rabbits. **2013**, 15, 427-37		19
743	Porous low modulus Ti40Nb compacts with electrodeposited hydroxyapatite coating for biomedical applications. **2013**, 33, 2280-7		25
742	Microstructure and mechanical behavior of metal injection molded Ti-Nb binary alloys as biomedical material. **2013**, 28, 171-82		82
741	Effects of the microstructural characteristics of a metastable □Ti alloy on its corrosion fatigue properties. **2013**, 54, 32-37		7
740	Influence of Zr content on microstructure and mechanical properties of implant Ti□5Nb□4Sn□8Mo□xZr alloys. **2013**, 23, 1299-1303		21
739	□Type Ti□Nb□Zr alloys with ultra-low Young's modulus and high strength. **2013**, 23, 562-565		32
738	Investigation of early stage deformation mechanisms in a metastable □titanium alloy showing combined twinning-induced plasticity and transformation-induced plasticity effects. **2013**, 61, 6406-6417		272
737	Application of plasma electrolytic oxidation to bioactive surface formation on titanium and its alloys. **2013**, 3, 19725		81
736	Deformation Induced Changeable Young's Modulus in Ternary Ti-Cr-O Alloys for Spinal Fixation Applications. **2013**, 1635-1641		
735	A study of calcium carbonate/multiwalled-carbon nanotubes/chitosan composite coatings on Ti□6Al□4V alloy for orthopedic implants. **2013**, 285, 309-316		43
734	Debinding behaviour of a water soluble PEG/PMMA binder for Ti metal injection´moulding. **2013**, 139, 557-565		33

733	Characterization and Development of Biosystems and Biomaterials. **2013**,		5
732	Surface treatment, corrosion behavior, and apatite-forming ability of Ti-45Nb implant alloy. **2013**, 101, 269-78		52
731	Microstructure and beta grain growth behavior of Ti□Mo alloys solution treated. **2013**, 84, 105-111		35
730	Mechanical properties and microstructures of □Ti-25Nb-11Sn ternary alloy for biomedical applications. **2013**, 33, 1629-35		52
729	Heterogeneous grain refinement of biomedical Ti□29Nb□13Ta□4.6Zr alloy through high-pressure torsion. **2013**, 20, 1067-1067		8
728	Optimal Design of Titanium Alloys for Prosthetic Applications Using a Multiobjective Evolutionary Algorithm. **2013**, 28, 741-745		22
727	Influence of cold rolling and ageing treatment on microstructure and mechanical properties of Ti-30Nb-5Ta-6Zr alloy. **2013**, 27, 33-42		19
726	Heat treatment and mechanical properties of powder metallurgy processed Ti□35.5Nb□5.7Ta beta-titanium alloy. **2013**, 84, 225-231		11
725	Enhancement of adhesive strength of hydroxyapatite films on Ti-29Nb-13Ta-4.6Zr by surface morphology control. **2013**, 18, 232-9		14
724	Influence of surface modification on the apatite formation and corrosion behavior of Ti and Ti-15Mo alloy for biomedical applications. **2013**, 138, 114-123		24
723	Deformation-induced □phase in modified Ti-29Nb-13Ta-4.6Zr alloy by Cr addition. **2013**, 9, 8027-35		45
722	Effects of Sn content on the microstructure, mechanical properties and biocompatibility of Ti□Nb□5n/hydroxyapatite biocomposites synthesized by powder metallurgy. **2013**, 49, 511-519		29
721	Electrochemical properties, chemical composition and thickness of passive film formed on novel Ti□20Nb□10Zr□5Ta alloy. **2013**, 99, 176-189		78
720	Thermal stability and high-temperature shape memory effect of Ti□Ta□2r alloy. **2013**, 68, 1008-1011		41
719	On the mechanical properties of TiNb based alloys. *Journal of Alloys and Compounds*, **2013**, 571, 25-30	5.7	47
718	Biocompatibility of Ti-alloys for long-term implantation. **2013**, 20, 407-15		492
717	Ultrafine-grained Ti-based composites with high strength and low modulus fabricated by spark plasma sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 560, 857-861	5.3	50
716	Designing biocompatible Ti-based metallic glasses for implant applications. **2013**, 33, 875-83		142

715	Artificial Neural Network Model: Prediction of Mechanical Properties in Beta-Titanium Biomaterial. **2013**, 367, 40-44		3
714	Sintering and Mechanical Properties of Injection Molded Low Cost Ti Alloys. **2013**, 747, 583-586		2
713	Experimental Study on Heat Yreatment Processing of a New Low Cost Titanium Alloy Used in Aviation Field. **2013**, 747-748, 919-925		1
712	Research and Development of Low-Cost Titanium Alloys for Biomedical Applications. *Key Engineering Materials*, **2013**, 551, 133-139	0.4	7
711	Production of Porous Type Ti-40Nb Alloy for Biomedical Applications: Comparison of Selective Laser Melting and Hot Pressing. *Materials*, **2013**, 6, 5700-5712	3.5	63
710	Comparison of Mechanical Properties of a Biomedical Titanium Alloy Added with Pure Rare Earth and Rare Earth Oxides. **2013**, 750, 147-151		
709	Advances in Development of Titanium Alloys for Spinal Fixation Applications-Titanium Alloys with High Fatigue Strength and Low Springback for Spinal Fixation Applications-. *Key Engineering Materials*, **2013**, 575-576, 446-452	0.4	1
708	Development of Changeable Young's Modulus with Good Mechanical Properties in Type Ti-Cr-O Alloys. *Key Engineering Materials*, **2013**, 575-576, 453-460	0.4	
707	Improvement of adhesive strength of segmented polyurethane on Ti-29Nb-13Ta-4.6Zr alloy through HâDâtreatment for biomedical applications. **2013**, 101, 776-83		7
706	Additive manufacturing technology (direct metal laser sintering) as a novel approach to fabricate functionally graded titanium implants: preliminary investigation of fabrication parameters. **2013**, 28, 1490-5		44
705	Methods of Porous Biomedical Material Fabrication. **2013**, 750-752, 1468-1471		
704	Improvement of Tensile and Fatigue Properties of β-Titanium Alloy while Maintaining Low Young’s Modulus through Grain Refinement and Oxygen Addition. **2013**, 54, 2000-2006		14
703	Effects of Alloying Elements on the HAp Formability on Ti Alloys after Alkali Treatment. **2013**, 54, 1295-1301		3
702	Enthalpies of Solution in Ti–X (X = Mo, Nb, V and W) Alloys from First-Principles Calculations. **2013**, 54, 484-492		29
701	^|^beta;-Phase Instability and Effects on the Physical Properties in Binary Ti-Nb Biomaterial Single Crystals. **2013**, 77, 281-286		1
700	Development of Titanium Alloys with High Mechanical Biocompatibility with Focusing on Controlling Elastic Modulus. **2013**, 52, 219-228		8
699	Development of High Modulus Ti–Fe–Cu Alloys for Biomedical Applications. **2013**, 54, 574-581		12
698	β-Phase Instability in Binary Ti–xNb Biomaterial Single Crystals. **2013**, 54, 156-160		13

697	Effect of Oxide Particles Formed through Addition of Rare-Earth Metal on Mechanical Properties of Biomedical β-Type Titanium Alloy. **2013**, 54, 1361-1367		6
696	Fatigue and Fretting Fatigue of Biomaterial, TI-29NB-13TA-4.6ZR, in Air and Simulated Body Environment. **2013**, 223-230		1
695	Mechanical Properties of Low-Cost Beta-Type Ti-Mn Alloys Fabricated by Metal Injection Molding. **2013**, 1115-1122		
694	Mechanical Properties of Meta-Stable Ti-Cr-Sn-Zr Alloys. **2013**, 1537-1542		
693	Combinatorial laser-assisted development of novel Ti-Ta alloys for biomedical applications. **2013**,		4
692	Recrystallization temperature influence upon texture evolution of a SPD processed Ti-Nb-Ta-Zr-O alloy. **2014**, 63, 012151		1
691	Surface characteristics of Zincâ□TiO2 coatings prepared via micro-arc oxidation. **2014**, 21, 585-593		14
690	Biomedical Polymer Surface Modification of Beta-Type Titanium Alloy for Implants through Anodic Oxide Nanostructures. **2014**, 783-786, 1261-1264		2
689	In-vitro biomechanical evaluation of stress shielding and initial stability of a low-modulus hip stem made of □type Ti-33.6Nb-4Sn alloy. **2014**, 36, 1665-71		24
688	Chemical nanoroughening of Ti40Nb surfaces and its effect on human mesenchymal stromal cell response. **2014**, 102, 31-41		31
687	Control of nanotube shape and morphology on Tiâ□Nb(Ta)â□Zr alloys by varying anodizing potential. **2014**, 572, 105-112		18
686	Effect of Phase Stability on Some Physical and Mechanical Properties in □Ti Single Crystal for Biomedical Applications. **2014**, 783-786, 1372-1376		1
685	Informatics based design of prosthetic Ti alloys. **2014**, 29, B69-B75		6
684	Mechanical and Biological Biocompatibilityof Novel □Type Ti-Mn Alloys for Biomedical Applications. **2014**, 783-786, 1232-1237		3
683	Biofunctional Surface Layer and its Bonding Strength in Low Modulus □Type Titanium Alloy for Biomedical Applications. **2014**, 783-786, 78-84		
682	Microstructural characterisation of Tiâ□Nbâ□(Feâ□Cr) alloys obtained by powder metallurgy. **2014**, 57, 316-319		2
681	New Developments of Ti-Based Alloys for Biomedical Applications. *Materials*, **2014**, 7, 1709-1800	3.5	553
680	Color tone and interfacial microstructure of white oxide layer on commercially pure Ti and Tiâ□Nbâ□Taâ□Zr alloys. **2014**, 53, 11RD02		12

679	Nanostructure and Fatigue Behavior of Type Titanium Alloy Subjected to High-Pressure Torsion after Aging Treatment. **2014**, 891-892, 9-14		
678	Influence of Heat Treatment on Fatigue Resistance of Sintered Ti 35Nb 7Zr 5Ta Alloy. **2014**, 936, 1290-1297		
677	Effect of Zr Addition on Martensitic Transformation in TiMoSn Alloy. **2014**, 922, 137-142		5
676	Surface modification of pure titanium by hydroxyapatite-containing composite coatings. **2014**, 169, 1056-1063		3
675	Mechanical properties enhancement in Tiâ29Nbâ13Taâ4.6Zr alloy via heat treatment with no detrimental effect on its biocompatibility. **2014**, 54, 786-791		25
674	Adhesive strength of medical polymer on anodic oxide nanostructures fabricated on biomedical type titanium alloy. **2014**, 36, 244-51		15
673	Interaction of bone-dental implant with new ultra low modulus alloy using a numerical approach. **2014**, 38, 151-60		55
672	Isothermal Section of the Ti-Ta-Sn Ternary System at 1173 K. **2014**, 35, 262-268		1
671	Phase transformations in ball-milled Tiâ40Nb and Tiâ45Nb powders upon quenching from the phase region. **2014**, 253, 166-171		27
670	Effects of micro- and nano-scale wave-like structures on fatigue strength of a beta-type titanium alloy developed as a biomaterial. **2014**, 29, 393-402		18
669	In vitro bio-functional performances of the novel superelastic beta-type Ti-23Nb-0.7Ta-2Zr-0.5N alloy. **2014**, 35, 411-9		25
668	Fabrication of a high-performance hip prosthetic stem using Ti-33.6Nb-4Sn. **2014**, 30, 140-9		26
667	Characterization of hot deformation behavior of a biomedical titanium alloy TLM. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 598, 236-243	5.3	21
666	Potentiality of the "Gum Metal" titanium-based alloy for biomedical applications. **2014**, 44, 362-70		48
665	Effect of the composition of Ti alloy on the photocatalytic activities of Ti-based oxide nanotube arrays prepared by anodic oxidation. **2014**, 319, 181-188		12
664	Effects of Sn addition on the microstructure, mechanical properties and corrosion behavior of TiNbâSn alloys. **2014**, 96, 273-281		75
663	Novel lubricated surface of titanium alloy based on porous structure and hydrophilic polymer brushes. **2014**, 317, 875-883		13
662	Structure Stability and Elastic Properties of Type Ti-X (X=Nb, Mo) Alloys from First-Principles Calculations. **2014**, 43, 553-558		5

661	Recent Development of Effect Mechanism of Alloying Elements in Titanium Alloy Design. **2014**, 43, 775-779	21
660	Metastable beta Ti-Nb-Mo alloys with improved corrosion resistance in saline solution. **2014**, 137, 280-289	67
659	Determination of the Youngâs modulus of porous Ætype Tiâ40Nb by finite element analysis. **2014**, 64, 1-8	18
658	Designation and development of biomedical Ti alloys with finer biomechanical compatibility in long-term surgical implants. **2014**, 8, 219-229	15
657	The bioactivity of enhanced Ti-32Nb-5Zr alloy with anodic oxidation and cyclic calcification. **2014**, 15, 1595-1600	6
656	Enhancement of mechanical properties of biocompatible Tiâ45Nb alloy by hydrostatic extrusion. **2014**, 49, 6930-6936	24
655	Anodic oxidation of the Tiâ13Nbâ13Zr alloy. **2014**, 18, 3073-3080	7
654	Ultrafine-grained TiâNbâTaâZr alloy produced by ECAP at room temperature. **2014**, 49, 6656-6666	20
653	Deformation-induced changeable Young's modulus with high strength in Ætype Ti-Cr-O alloys for spinal fixture. **2014**, 30, 205-13	41
652	High-efficiency combinatorial approach as an effective tool for accelerating metallic biomaterials research and discovery. **2014**, 39, 273-80	19
651	Microstructure and mechanical properties of spark plasma sintered Ti-Mo alloys for dental applications. **2014**, 21, 479-486	13
650	Influence of single and double aging treatment on microstructures and mechanical properties of cold rolled Tiâ30Nbâ5Taâ6Zr alloy. **2014**, 30, 189-195	1
649	Effects of surface nanocrystallization on corrosion resistance of Ætype titanium alloy. **2014**, 24, 2529-2535	36
648	Unsteady flow softening behaviour of near beta Ti alloy TLM during hot deformation. **2014**, 30, 665-669	4
647	Elastic softening of Ætype Ti-Nb alloys by indium (In) additions. **2014**, 39, 162-74	54
646	Changeable Youngâs modulus with large elongation-to-failure in Ætype titanium alloys for spinal fixation applications. **2014**, 82, 29-32	53
645	A Ætype TiNbZr alloy with low modulus and high strength for biomedical applications. **2014**, 24, 157-162	34
644	Bending springback behavior related to deformation-induced phase transformations in Ti-12Cr and Ti-29Nb-13Ta-4.6Zr alloys for spinal fixation applications. **2014**, 34, 66-74	11

643	Developments of titanium alloys with high mechanical biocompatibility for biomedical applications. **2014**, 64, 374-381		1
642	Mechanical Properties, Microstructures, and Biocompatibility of Low-Cost Type Ti-Mn Alloys for Biomedical Applications. **2014**, 21-30		3
641	Endurance of Low-Modulus Type Titanium Alloys for Spinal Fixation. **2014**, 205-212		
640	Microstructural evolution and mechanical behavior of metastable Type Tiâ30Nbâ1Moâ2Sn alloy with low modulus and high strength. **2015**, 25, 414-418		5
639	Design and fabrication of a metastable type titanium alloy with ultralow elastic modulus and high strength. **2015**, 5, 14688		69
638	Effect of Zr Addition on Mechanical and Shape Memory Properties of Ti-5Mo-3Sn Alloys. **2015**, 80, 37-44		2
637	Alloy Design Based on Molecular Orbital Method. **2015**, 54, 207-217		
636	Frictional and Wear Behavior of Commercially Pure Ti, Ti-6Al-7Nb, and SUS316L Stainless Steel in Artificial Saliva at 310 K. **2015**, 56, 1648-1657		5
635	Evaluation of Adhesion of Hydroxyapatite Films Fabricated on Biomedical β-Type Titanium Alloy after Immersion in Ringer’s Solution. **2015**, 56, 1703-1710		1
634	The Role of Stress Induced Martensite in Ductile Metastable Beta Ti-alloys Showing Combined TRIP/TWIP Effects. **2015**, 2, S505-S510		11
633	Wear response of metastable type Tiâ25Nbâ2Moâ4Sn alloy for biomedical applications. **2015**, 34, 564-568		10
632	Nanostructured Ti-Zr-Pd-Si-(Nb) bulk metallic composites: Novel biocompatible materials with superior mechanical strength and elastic recovery. **2015**, 103, 1569-79		6
631	Mechanical Characterization of Tiâ12moâ3nb Alloy for Biomedical Application Hot Swaged and Aged. **2015**, 18, 8-12		16
630	Development of Type Ti23Mo-45S5 Bioglass Nanocomposites for Dental Applications. *Materials*, **2015**, 8, 8032-8046	3.5	10
629	Porous Titanium for Dental Implant Applications. *Metals*, **2015**, 5, 1902-1920	2.3	53
628	Development of Single Crystalline Bone Plate with Low Youngâ Modulus Using Beta-type Ti-15Mo-5Zr-3Al Alloy. **2015**, 101, 501-505		3
627	A METALLURGICAL OVERVIEW OF TI âBASED ALLOY IN BIOMEDICAL APPLICATIONS. **2015**, 76,		1
626	Structural Stabilities of Ti Alloys Studied Using a New Mo Equivalent Derived from [ ] Phase-Boundary Slopes. **2015**, 46, 3440-3447		54

625	Fatigue characteristics of a biomedical β-type titanium alloy with titanium boride. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 640, 154-164	5.3	16
624	Phase Stability and Stress-Induced Transformations in Beta Titanium Alloys. **2015**, 67, 1273-1280		77
623	Enhancing Functionalities of Metallic Materials by Controlling Phase Stability for Use in Orthopedic Implants. **2015**, 79-91		4
622	Application of the Bonsâ€Azuma method and determination of grain growth mechanism in rolled Tiâ€r alloys. **2015**, 95, 564-573		8
621	Biocompatibility evaluation of novel β-type titanium alloy (Tiâ€35Nbâ€7Zrâ€Ta)98Si2 in vitro. **2015**, 5, 101794-101801		7
620	First principles theoretical investigations of low Young's modulus beta Ti-Nb and Ti-Nb-Zr alloys compositions for biomedical applications. **2015**, 50, 52-8		74
619	Machining medical grade titanium alloys using nonabrasive nanolayered cutting tools. **2015**, 225-248		
618	Tribocorrosion properties of different type titanium alloys in simulated body fluid. **2015**, 332-333, 679-686		55
617	Microstructural and Mechanical Characterization of Ti-12Mo-6Zr Biomaterials Fabricated by Spark Plasma Sintering. **2015**, 46, 1385-1393		5
616	In-situ formed graded microporous structure in titanium alloys and its effect on the mechanical properties. *Materials and Design*, **2015**, 83, 295-300	8.1	10
615	Deformation-induced martensitic transformation in a new metastable β-titanium alloy. *Journal of Alloys and Compounds*, **2015**, 650, 22-29	5.7	53
614	Effect of heterogeneous precipitation caused by segregation of substitutional and interstitial elements on mechanical properties of a β-type Ti alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 643, 109-118	5.3	7
613	Fatigue behavior of bulk β-type titanium alloy Tiâ€15Moâ€5Zrâ€3Al annealed in high temperature nitrogen gas. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 627, 351-359	5.3	15
612	β-Type titanium alloys for spinal fixation surgery with high Young's modulus variability and good mechanical properties. **2015**, 24, 361-9		37
611	Advances in Metallic Biomaterials. **2015**,		13
610	Titanium Alloys for Biomedical Applications. **2015**, 179-213		36
609	A silver nanoparticle loaded TiO2 nanoporous layer for visible light induced antimicrobial applications. **2015**, 106, 290-7		12
608	Titanium-35niobium alloy as a potential material for biomedical implants: In vitro study. **2015**, 56, 538-44		35

607	Additive Manufacturing Technology for Orthopedic Implants. **2015**, 3-26		3
606	The formation mechanisms of surface nanocrystallites in type biomedical TiNbZrFe alloy by surface mechanical attrition treatment. **2015**, 347, 553-560		19
605	Tribocorrosion Mechanisms of Ti6Al4V in Artificial Saliva by Zero-Resistance Ammetry (ZRA) Technique. **2015**, 1, 1		9
604	Development of Ti-Nb-Zr alloys with high elastic admissible strain for temporary orthopedic devices. **2015**, 20, 176-187		118
603	Calcium phosphate coating of biomedical titanium alloys using metalâorganic chemical vapour deposition. **2015**, 30, B8-B12		7
602	Biomedical TiNbZrTaSi alloys designed by d-electron alloy design theory. *Materials and Design*, **2015**, 85, 7-13	8.1	51
601	Surface medication of Tiâ15Mo alloy by thermal oxidation: Evaluation of surface characteristics and corrosion resistance in Ringer's solution. **2015**, 356, 1117-1126		24
600	Assessment of osteoinduction using a porous hydroxyapatite coating prepared by micro-arc oxidation on a new titanium alloy. **2015**, 24, 51-6		20
599	Cluster-plus-glue-atom model and universal composition formulas [cluster](glue atom)x for BCC solid solution alloys. *Journal of Alloys and Compounds*, **2015**, 652, 63-69	5.7	31
598	Mechanical properties and cytocompatibility of oxygen-modified type Ti-Cr alloys for spinal fixation devices. **2015**, 12, 352-361		37
597	Aluminum-free low-modulus Ti-C composites that exhibit reduced image artifacts during MRI. **2015**, 12, 322-331		6
596	A diffusion mobility database for magnesium alloy development. **2015**, 48, 123-130		30
595	Factors influencing the elastic moduli, reversible strains and hysteresis loops in martensitic Ti-Nb alloys. **2015**, 48, 511-20		41
594	Fabrication of graded porous titaniumâmagnesium composite for load-bearing biomedical applications. **2015**, 67, 354-359		45
593	Enhanced Adhesion Properties, Structure and Sintering Mechanism of Hydroxyapatite Coatings Obtained by Plasma Jet Deposition. **2015**, 35, 1-19		4
592	Interface Oral Health Science 2014. **2015**,		1
591	Electrochemical behavior of near-beta titanium biomedical alloys in phosphate buffer saline solution. **2015**, 48, 55-62		19
590	A new titanium alloy with a combination of high strength, high strain hardening and improved ductility. **2015**, 94, 17-20		164

589	Superplastic Grade Titanium Alloy: Comparative Evaluation of Mechanical Properties, Microstructure, and Fracture Behavior. **2016**, 2016, 1-7		7
588	Mechanical and Corrosion Behavior of New Generation Ti-45Nb Porous Alloys Implant Devices. **2016**, 4, 33		16
587	New Cu-Free Ti-Based Composites with Residual Amorphous Matrix. *Materials*, **2016**, 9,	3.5	0
586	Apatite Formation and Biocompatibility of a Low Young's Modulus Ti-Nb-Sn Alloy Treated with Anodic Oxidation and Hot Water. **2016**, 11, e0150081		14
585	Micro Arc Oxidation of Ti-15Zr-7.5Mo Alloy. **2016**, 57, 2015-2019		5
584	Alloying Effects of Transition Metals on Beta Phase Stability of Ti Alloys from First-Principles Calculations. **2016**, 1919-1923		1
583	Osteoanabolic Implant Materials for Orthopedic Treatment. **2016**, 5, 1740-52		20
582	Titanium and Titanium Alloy Applications in Medicine. **2016**, 475-517		9
581	Wear Behaviors of Combinations Comprised of Titanium Alloys in Air and Ringerâ Solution. **2016**, 1707-1710		
580	Influence of oxygen on omega phase stability in the Ti-29Nb-13Ta-4.6Zr alloy. **2016**, 123, 144-148		43
579	Development of New Trip/Twip Titanium Alloys Combining High Strength, High Strain Hardening and Improved Ductility. **2016**, 865-868		
578	Development of Biomedical Titanium Alloys with a Focus on Controlling Youngâ Modulus. **2016**, 1655-1663		
577	Modification of the Ti40Cu36Zr10Pd14 BMG Crystallization Mechanism with Heating Rates 10-140 K/min. **2016**, 25, 5289-5301		3
576	Alloy Design Based on Molecular Orbital Method. **2016**, 57, 213-226		26
575	Reprint of âHydroxyapatite deposition on micropore-formed Ti-Ta-Nb alloys by plasma electrolytic oxidation for dental applicationsâ**2016**, 307, 1152-1157		3
574	Glass forming range of the Ti-Fe-Si amorphous alloys: An effective materials-design approach coupling CALPHAD and topological instability criterion. **2016**, 120, 205106		8
573	Proliferation and osteogenic differentiation of rat BMSCs on a novel Ti/SiC metal matrix nanocomposite modified by friction stir processing. **2016**, 6, 38875		40
572	Investigations into Ti-(Nb,Ta)-Fe alloys for biomedical applications. **2016**, 32, 336-347		48

571	Hydroxyapatite deposition on micropore-formed Ti-Ta-Nb alloys by plasma electrolytic oxidation for dental applications. **2016**, 294, 15-20		14
570	A first-principles study of the diffusion coefficients of alloying elements in dilute Ti alloys. **2016**, 18, 16870-81		28
569	Oxidation treatments of beta-type Ti-40Nb for biomedical use. **2016**, 302, 88-99		22
568	Grain Boundary Character Distribution of TLM Titanium Alloy During Deformation. **2016**, 25, 2236-2244		3
567	Enhancing the durability of spinal implant fixture applications made of Ti-6Al-4V ELI by means of cavitation peening. **2016**, 92, 360-367		6
566	First-principles study of phase equilibrium in TiâV, TiâNb, and TiâTa alloys. **2016**, 54, 125-133		26
565	Effect of Mn-Content on the Deformation Behavior of Binary Ti-Mn Alloys. *Key Engineering Materials*, **2016**, 705, 214-218	0.4	5
564	Improvement of microstructure, mechanical and corrosion properties of biomedical Ti-Mn alloys by Mo addition. *Materials and Design*, **2016**, 110, 414-424	8.1	37
563	Variations of nanotubes on the TiâNbâHf alloys with applied voltages. **2016**, 620, 119-125		7
562	Electrochemical Behaviors of Biomedical Nanograined Type Titanium Alloys. **2016**, 879, 2549-2554		
561	Isotropic plasticity of type Ti-29Nb-13Ta-4.6Zr alloy single crystals for the development of single crystalline Ti implants. **2016**, 6, 29779		21
560	Preparation and In Vivo Study of Porous TitaniumâPolyglycolide Composite. **2016**, 57, 2002-2007		2
559	On the effect of hydrogen on the elastic moduli and acoustic loss behaviour of Ti-6Al-4V. **2016**, 96, 2311-2327		2
558	A Type Titanium Alloy With Significantly Changeable YoungâS Modulus and Good Mechanical Properties Used for Spinal Fixation Applications. **2016**, 1685-1689		
557	Microstructure and mechanical properties of ZrBe alloys processed by hot rolling. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 667, 286-292	5.3	8
556	Tribocorrosion studies of metallic biomaterials: The effect of plasma nitriding and DLC surface modifications. **2016**, 63, 100-114		50
555	Fabrication of a hydroxyapatite-containing coating on TiâTa alloy by electrical discharge coating and hydrothermal treatment. **2016**, 302, 238-243		37
554	First principles studies on structural, elastic and electronic properties of new Ti Mo Nb Zr alloys for biomedical applications. *Materials and Design*, **2016**, 108, 60-67	8.1	33

553	Study of low-modulus biomedical β-Ti-Nb-Zr alloys based on single-crystal elastic constants modeling. **2016**, 62, 310-318	30
552	Low Young's modulus Ti-based porous bulk glassy alloy without cytotoxic elements. **2016**, 36, 323-31	23
551	Properties of the Ti40Zr10Cu36Pd14 BMG Modified by Sn and Nb Additions. **2016**, 25, 800-808	4
550	Mechanical and Surface Functionalities of Nanostructured β-Type Titanium Alloys Through Severe Plastic Deformation. **2016**, 1761-1766	1
549	Mechanical Properties of a Rod for Spinal Deformity Correction Produced from Meta-Stable Beta Ti-Cr-Sn-Zr Alloys. **2016**, 1791-1796	
548	Laser Cladding of Composite Bioceramic Coatings on Titanium Alloy. **2016**, 25, 656-667	12
547	Influence of Nb on the β→α″ martensitic phase transformation and properties of the newly designed Ti-Fe-Nb alloys. **2016**, 60, 503-510	117
546	Newly developed Ti-Nb-Zr-Ta-Si-Fe biomedical beta titanium alloys with increased strength and enhanced biocompatibility. **2016**, 60, 230-238	100
545	A new titanium based alloy Ti-27Nb-13Zr produced by powder metallurgy with biomimetic coating for use as a biomaterial. **2016**, 63, 671-7	42
544	Surface modification and machining of TiNi/TiNb-based alloys by electrical discharge machining. **2016**, 86, 1475-1485	19
543	Electrochemical behavior of a novel nano-composite coat on Ti alloy in phosphate buffer solution for biomedical applications. **2016**, 6, 20276-20285	37
542	Surface properties of Ti-35Nb-7Zr-5Ta: Effects of long-term immersion in artificial saliva and fluoride solution. **2016**, 116, 102-11	12
541	Biomedical titanium alloys with Young's moduli close to that of cortical bone. **2016**, 3, 173-85	159
540	High-Temperature Deformation Characteristics of a β-Type Ti-29Nb-13Ta-4.6Zr Alloy. **2016**, 25, 1554-1561	7
539	Formation of biomimetic hydroxyapatite coatings on the surface of titanium and Ti-containing alloys. **2016**, 193-229	4
538	Topological design and additive manufacturing of porous metals for bone scaffolds and orthopaedic implants: A review. **2016**, 83, 127-41	1008
537	Mechanical and electrochemical characterisation of new Ti-Mo-Nb-Zr alloys for biomedical applications. **2016**, 60, 68-77	58
536	A β-titanium alloy with extra high strain-hardening rate: Design and mechanical properties. **2016**, 114, 60-64	124

535	Electrochemical corrosion behavior and elasticity properties of Ti-6Al-xFe alloys for biomedical applications. **2016**, 62, 36-44		45
534	Ultrafine-grained porous titanium and porous titanium/magnesium composites fabricated by space holder-enabled severe plastic deformation. **2016**, 59, 754-765		12
533	Imprecise knowledge based design and development of titanium alloys for prosthetic applications. **2016**, 53, 350-365		20
532	A novel method for production of foamy core@compact shell Ti6Al4V bone-like composite. *Journal of Alloys and Compounds*, **2016**, 656, 416-422	5.7	11
531	Carbide evolution and its potential reduction methods in Ti-22Nb based alloys prepared by metal injection moulding. **2017**, 193, 295-298		18
530	Biodegradable Metals as Bioactive Materials. **2017**, 77-98		2
529	Synthesis and characterization of Ti-27.5Nb alloy made by CLAD additive manufacturing process for biomedical applications. **2017**, 75, 341-348		28
528	Surface characteristics of Ti-5Al-2.5Sn in electrical discharge machining using negative polarity of electrode. **2017**, 92, 1-13		118
527	Compositional screening of Zr-Nb-Mo alloys with CALPHAD-type model for promising bio-medical implants. **2017**, 56, 196-206		3
526	In situ scanning and transmission electron microscopy investigation on plastic deformation in a metastable titanium alloy. **2017**, 133, 21-29		52
525	Corrosion behavior of thermo-mechanically processed biomedical Ti-29Nb-13Ta-4.6Zr. *Journal of Alloys and Compounds*, **2017**, 725, 23-31	5.7	17
524	Experimental investigation of phase equilibria in the Ti-Fe-Cr ternary system. **2017**, 58, 58-69		17
523	Materials for 3D printing in medicine: Metals, polymers, ceramics, hydrogels. **2017**, 43-71		17
522	Nanostructured type titanium alloy fabricated by ultrasonic nanocrystal surface modification. **2017**, 39, 698-706		35
521	In situ synchrotron X-ray diffraction study of deformation behaviour of a metastable type Ti-33Nb-4Sn alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 692, 81-89	5.3	20
520	Tethering of 3-aminopropyltriethoxy silane films on medical grade V titanium alloy surface through self-assembled monolayers (SAMs) for biomedical applications. **2017**, 412, 648-656		7
519	Local atomic structure near an Nb atom in aged i alloys. **2017**, 131, 534-542		22
518	First-principles calculations and thermodynamic modeling of the Sn-Ta system. **2017**, 57, 46-54		3

517	Microhardness and microstructure evolution of ultra-fine grained Ti-15Mo and TIMETAL LCB alloys prepared by high pressure torsion. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 682, 220-228	5.3	20
516	The evolution of microstructure and microhardness in a biomedical Tiâ5Nbâ7Zrâ5Ta alloy. **2017**, 52, 3062-3073		16
515	Change in the deformation mode resulting from beta-omega compositional partitioning in a Ti Mo alloy: Room versus elevated temperature. **2017**, 130, 69-73		42
514	Influence of testing orientation on mechanical properties of Ti45Nb deformed by high pressure torsion. *Materials and Design*, **2017**, 114, 40-46	8.1	17
513	Biomaterials for hip implants â important considerations relating to the choice of materials. **2017**, 13,		5
512	Effect of Fe content, sintering temperature and powder processing on the microstructure, fracture and mechanical behaviours of Ti-Mo-Zr-Fe alloys. *Journal of Alloys and Compounds*, **2017**, 729, 1215-1225	5.7	14
511	New beta-type Ti-Fe-Sn-Nb alloys with superior mechanical strength. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 705, 348-351	5.3	28
510	Advanced mechanical properties of powder metallurgy commercially pure titanium with a high oxygen concentration. **2017**, 32, 3769-3776		35
509	Microstructure and Texture Evolutions of Biomedical Ti-13Nb-13Zr Alloy Processed by Hydrostatic Extrusion. **2017**, 48, 5747-5755		12
508	Metastable Zr-Nb alloys for spinal fixation rods with tunable Young's modulus and low magnetic resonance susceptibility. **2017**, 62, 372-384		24
507	Unusual dynamic precipitation softening induced by dislocation glide in biomedical beta-titanium alloys. **2017**, 7, 8056		7
506	Surface modification of phase Ti implant by hydroaxyapatite mixed electric discharge machining to enhance the corrosion resistance and in-vitro bioactivity. **2017**, 326, 134-145		74
505	Electrochemical corrosion and bioactivity of Ti-Nb-Sn-hydroxyapatite composites fabricated by pulse current activated sintering. **2017**, 75, 222-227		10
504	Phase stability dependence of deformation mode correlated mechanical properties and elastic properties in Ti-Nb gum metal. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 702, 173-183	5.3	14
503	Production and characterization of TiO2 nanotubes on Ti-Nb-Mo-Sn system for biomedical applications. **2017**, 326, 126-133		5
502	Enhance stability and in vitro cell response to a bioinspired coating on zr alloy with increasing chitosan content. **2017**, 14, 459-467		10
501	Plastic deformation behaviour of single-crystalline martensite of Ti-Nb shape memory alloy. **2017**, 7, 15715		27
500	About thermostability of biocompatible TiâZrâTaâSi amorphous alloys. **2017**, 127, 107-113		4

499	New Ti-Ta-Zr-Nb alloys with ultrahigh strength for potential orthopedic implant applications. **2017**, 75, 119-127		53
498	Microstructures and mechanical properties of Mn modified, Ti-Nb-based alloys. *Journal of Alloys and Compounds*, **2017**, 723, 1091-1097	5.7	10
497	Experimental clarification of the cyclic deformation mechanisms of □-type Ti–Nb–Ta–Zr-alloy single crystals developed for the single-crystalline implant. **2017**, 98, 27-44		19
496	Time-resolved X-ray diffraction of Ti in dynamic-DAC. **2017**,		
495	Shape Memory Effect in New Ti-Nb-Ta Alloy. **2017**, 889, 165-170		6
494	Abnormal Deformation Behavior of Oxygen-Modified □-Type Ti-29Nb-13Ta-4.6Zr Alloys for Biomedical Applications. **2017**, 48, 139-149		20
493	Mechanical and microstructural characteristics of commercial purity titanium implants fabricated by electron-beam additive manufacturing. **2017**, 187, 64-67		20
492	Cellular responses of osteoblast-like cells to 17 elemental metals. **2017**, 105, 148-158		42
491	Ab-initio and experimental study of phase stability of Ti-Nb alloys. *Journal of Alloys and Compounds*, **2017**, 696, 481-489	5.7	30
490	The phase, morphology and surface characterization of Ti–Mo alloy films prepared by magnetron sputtering. **2017**, 7, 52595-52603		7
489	Phase stability and elastic properties of Ti–Nb–X (X= Zr, Sn) alloys: anab initiodensity functional study. **2017**, 25, 085013		10
488	Microstructure and properties of hydrogenated TB8 alloy. **2017**, 36, 242-246		
487	Structure and Mechanical Properties of As-Cast Ti-5Sn-xMo Alloys. *Materials*, **2017**, 10,	3.5	6
486	Design of the Next Generation Metallic Biomaterials. **2017**, 56, 584-588		2
485	Microstructure and Mechanical Properties of Ti-12Mo-8Nb Alloy Hot Swaged and Treated for Orthopedic Applications. **2017**, 20, 526-531		7
484	Effects of Mo Addition on the Mechanical Properties and Microstructures of Ti-Mn Alloys Fabricated by Metal Injection Molding for Biomedical Applications. **2017**, 58, 271-279		13
483	Synthesis and Characterization of Ti-6Al-6Mo Prepared by Arc Melting Process. **2017**, 202, 012034		
482	Design of a New Multi-element Beta Titanium Alloy Based on d-Electron Method. **2018**, 377-386		2

481	On the compressive deformation behavior of new beta titanium alloys designed by d-electron method. *Journal of Alloys and Compounds*, **2018**, 746, 206-217	5.7	30
480	Effect of HF/HNO3-treatment on the porous structure and cell penetrability of titanium (Ti) scaffold. *Materials and Design*, **2018**, 145, 65-73	8.1	13
479	Influence of the Mn content on the TiNbxMn alloys with a novel fcc structure. *Journal of Alloys and Compounds*, **2018**, 746, 601-610	5.7	6
478	First-principles predictions of structural, mechanical and electronic properties of □iNb under high pressure. **2018**, 116, 141-150		3
477	The effect of two-step surface modification for Ti-Ta-Mo-Zr alloys on bone regeneration: An evaluation using calvarial defect on rat model. **2018**, 442, 630-639		6
476	Deformation mechanisms in a metastable beta titanium twinning induced plasticity alloy with high yield strength and high strain hardening rate. **2018**, 152, 301-314		116
475	Effect of calcium pyrophosphate on microstructural evolution and in vitro biocompatibility of Ti-35Nb-7Zr composite by spark plasma sintering. **2018**, 90, 8-15		4
474	Surface Nanostructuring of Ti6Al4 V Surfaces for Parylene-C Coatings with Ultradurable Adhesion. **2018**, 1, 1586-1594		9
473	An investigation of the mechanical and microstructural evolution of a TiNbZr alloy with varied ageing time. **2018**, 8, 5737		20
472	Advanced Mechanical Properties of a Powder Metallurgy Ti-Al-N Alloy Doped with Ultrahigh Nitrogen Concentration. **2018**, 70, 626-631		7
471	Development of a novel TiNbTa material potentially suitable for bone replacement implants. *Materials and Design*, **2018**, 145, 88-96	8.1	11
470	Production, microstructure and mechanical properties of cold-rolled Ti-Nb-Mo-Zr alloys for orthopedic applications. *Journal of Alloys and Compounds*, **2018**, 743, 141-145	5.7	24
469	An in situ investigation of the deformation mechanisms in a □quenched Ti-5Al-5V-5Mo-3Cr alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2018**, 717, 134-143	5.3	26
468	Measurement of phase equilibria in Ti-Co-Pt ternary system. **2018**, 60, 191-199		4
467	Effects of shot-peening and atmospheric-pressure plasma on aesthetic improvement of Ti□Nbâ□aâ□r alloy for dental applications. **2018**, 57, 01AG05		4
466	Interdiffusion and atomic mobility in bcc Tiâ□ich Tiâ□bâ□r system. **2018**, 60, 98-105		24
465	Development of a novel fcc structure for an amorphous-nanocrystalline Ti-33Nb-4Mn (at.%) ternary alloy. **2018**, 135, 46-56		14
464	Additive Manufacturing of Titanium Alloys by Electron Beam Melting: A Review. *Advanced Engineering Materials*, **2018**, 20, 1700842	3.5	200

463	Physico-mechanical properties of Ti-Zr coatings fabricated via ion-assisted arc-plasma deposition. **2018**, 149, 129-133		14
462	Deformation mechanism and mechanical properties of a thermomechanically processed Ti-28Nb-35.4Zr alloy. **2018**, 78, 224-234		51
461	Microstructure and mechanical properties of CP-Ti fabricated via powder metallurgy with non-uniformly dispersed impurity solutes. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 716, 1-10	5.3	26
460	First principles studies on the elastic, thermodynamic properties and electronic structure of Ti15â□MoxSn compounds. **2018**, 18, 280-288		5
459	A metastable type Zr-4Mo-4Sn alloy with low cost, low Young's modulus and low magnetic susceptibility for biomedical applications. *Journal of Alloys and Compounds*, **2018**, 754, 232-237	5.7	15
458	Microstructures and mechanical properties of as-cast titaniumâ□irconiumâ□holybdenum ternary alloys. **2018**, 49, 30-38		1
457	Observations on {332} twinning-induced softening in Ti-Nb Gum metal. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 724, 189-198	5.3	11
456	Artificial neural network based optimization of prerequisite properties for the design of biocompatible titanium alloys. **2018**, 149, 259-266		13
455	Open porous dealloying-based biomaterials as a novel biomaterial platform. **2018**, 88, 95-103		47
454	Low-1 level mechanical vibration improves bone microstructure, tissue mechanical properties and porous titanium implant osseointegration by promoting anabolic response in type 1 diabetic rabbits. **2018**, 106, 11-21		15
453	Effect of alloying elements on microstructural evolution in oxygen content controlled Ti-29Nb-13Ta-4.6Zr (wt%) alloys for biomedical applications during aging. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 709, 312-321	5.3	19
452	High throughput analysis of solute effects on the mechanical behavior and slip activity of beta titanium alloys. *Materials and Design*, **2018**, 137, 371-383	8.1	24
451	Metal release and cell biological compatibility of beta-type Ti-40Nb containing indium. **2018**, 106, 1686-1697		10
450	Surface modification of metallic biomaterials for enhanced functionality: a review. **2018**, 33, 93-105		47
449	Effect of Fluoride Concentration and pH on Corrosion Behavior of Tiâ□5Mo in Artificial Saliva. **2018**, 4, 1		4
448	Effect of oxygen addition on microstructures and mechanical properties of Ti-7.5Mo alloy. *Journal of Alloys and Compounds*, **2018**, 737, 221-229	5.7	36
447	Studying the effect of composition on the in vitro wear behavior and elastic modulus of titanium-niobium-based alloys for biomedical implants. *Biomedical Physics and Engineering Express*, **2018**, 4, 027003	1.5	6
446	Microstructural tailoring and mechanical properties of a multi-alloyed near titanium alloy Ti-5321 with various heat treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 711, 553-561	5.3	50

445	Fabrication of Porous Titanium-Polyglycolide-Calcium Carbonate Composite as Bone Replacement Material. **2018**, 75, 69-74		
444	High-Temperature Oxidation Behavior and Its Oxide Layer Structure Formed on Ti-Nb Alloys. **2018**, 82, 232-239		1
443	Gum Metal and Related Alloys. **2018**,		2
442	Microstructure, Texture and Mechanical Properties after Cold Working and Annealing in a Biomedical Ti-Nb-Ta Alloy. **2018**, 941, 2465-2470		5
441	Effects of Mo Addition on Deformation Behavior of Metastable Beta-Type Ti-Mn Single Crystals. **2018**, 941, 1360-1365		2
440	Evolution of Secondary Phase during Aging Treatment in Novel near Ti-6Mo-5V-3Al-2Fe Alloy. *Materials*, **2018**, 11,	3.5	9
439	Corrosion Behaviour in Human Stimulation Media of a High Entropy Titan-Based Alloy. **2018**, 374, 012004		4
438	Microstructure and lattice defects in ultrafine grained biomedical and metastable Ti alloys. **2018**, 455-475		4
437	New TiZrNbTaFe high entropy alloy used for medical applications. **2018**, 400, 022049		33
436	The effect of Zr and Sn additions on the microstructure of Ti-Nb-Fe gum metals with high elastic admissible strain. *Materials and Design*, **2018**, 160, 1186-1195	8.1	19
435	Design of strain-transformable titanium alloys. **2018**, 19, 710-720		22
434	The room temperature tensile deformation behavior of thermomechanically processed metastable Ti-Nb-Ta-Zr bio-alloy: the role of deformation-induced martensite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 738, 15-23	5.3	13
433	Development of <001>-fiber texture in cold-groove-rolled Ti-Mo-Al-Zr biomedical alloy. **2018**, 1, 52-61		7
432	Origin of low Young modulus of multicomponent, biomedical Ti alloys - Seeking optimal elastic properties through a first principles investigation. **2018**, 88, 352-361		8
431	Ti-Nb-Zr system and its surface biofunctionalization for biomedical applications. **2018**, 175-200		1
430	Mechanical properties and deformation mechanisms of Ti-3Al-5Mo-4.5 V alloy with varied phase stability. *Journal of Materials Science and Technology*, **2018**, 34, 2507-2514	9.1	20
429	Zirconium Alloys for Orthopaedic and Dental Applications. *Advanced Engineering Materials*, **2018**, 20, 1800207	3.5	35
428	The molecular orbital approach and its application to biomedical titanium alloy design. **2018**, 39-64		3

427	Biocompatible beta-Ti alloys with enhanced strength due to increased oxygen content. **2018**, 371-392		2
426	Development of a high strength and high ductility near Ti alloy with twinning induced plasticity effect. **2018**, 156, 47-50		58
425	Synthesis of biphasic calcium phosphate (BCP) coatings on type titanium alloys reinforced with rutile-TiO2 compounds: adhesion resistance and in-vitro corrosion. **2018**, 87, 713-724		16
424	A Review of Metastable Beta Titanium Alloys. *Metals*, **2018**, 8, 506	2.3	206
423	Microstructural and mechanical properties of novel type TiâNbâNi alloys containing a second phase. **2018**, 109, 708-715		7
422	Mechanical Properties of a Newly Additive Manufactured Implant Material Based on Ti-42Nb. *Materials*, **2018**, 11,	3.5	47
421	Fabrication of Titanium-Niobium-Zirconium-Tantalium Alloy (TNZT) Bioimplant Components with Controllable Porosity by Spark Plasma Sintering. *Materials*, **2018**, 11,	3.5	10
420	High-strength stabilized Ti-Nb-Fe-Cr alloys with large plasticity. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 732, 368-377	5.3	62
419	Recent Progress in Research and Development of Metallic Structural Biomaterials with Mainly Focusing on Mechanical Biocompatibility. **2018**, 59, 1-13		16
418	Corrosion and wear properties of biomedical Ti-Zr-based alloys. **2018**, 69, 1703-1712		4
417	A unique hybrid-structured surface produced by rapid electrochemical anodization enhances bio-corrosion resistance and bone cell responses of type Ti-24Nb-4Zr-8Sn alloy. **2018**, 8, 6623		10
416	Preparation and bioactive surface modification of the microwave sintered porous Ti-15Mo alloys for biomedical application. **2018**, 61, 545-556		10
415	Deformation mechanisms in surface nano-crystallization of low elastic modulus Ti6Al4V/Zn composite during severe plastic deformation. **2018**, 157, 142-147		23
414	Microstructural evolution and mechanical properties of a friction-stir processed Ti-hydroxyapatite (HA) nanocomposite. **2018**, 88, 127-139		13
413	The Molecular Orbital Approach to Titanium Alloy Design. *Key Engineering Materials*, **2018**, 770, 217-223	0.4	0
412	Structural design and mechanical response of gradient porous Ti-6Al-4V fabricated by electron beam additive manufacturing. *Materials and Design*, **2018**, 158, 256-265	8.1	21
411	Titanium Alloys. **2019**, 213-224		7
410	Extraordinary strength-ductility synergy in a heterogeneous-structured Ti alloy through microstructural optimization. *Materials Research Letters*, **2019**, 7, 467-473	7.4	24

409	In vitro corrosion behavior of Ti-Mo-W alloys in artificial saliva. **2019**, 572, 012028		
408	Titanium-Tissue Interface Reaction and Its Control With Surface Treatment. **2019**, 7, 170		79
407	Modelling martensitic transformation in titanium alloys: The influence of temperature and deformation. **2019**, 7, 100382		21
406	Progress in Development of Beta Titanium Alloys for Biomedical Applications. **2019**, 512-512		2
405	Beta-type Ti-Nb-Zr-Cr alloys with large plasticity and significant strain hardening. *Materials and Design*, **2019**, 181, 108064	8.1	30
404	The effect of nano-size second phases on the tribological performance of TNTZ alloy. **2019**, 6, 095031		
403	Low-Youngâ-Modulus Materials for Biomedical Applications. **2019**, 435-457		
402	The plasma electrolytic oxidation (PEO) coatings to enhance in-vitro corrosion resistance of Tiâ29Nbâ13Taâ4.6Zr alloys: The combined effect of duty cycle and the deposition frequency. **2019**, 374, 345-354		24
401	Ti-Based Biomedical Alloys. **2019**, 61-76		1
400	Effect of twinned-structure on deformation behavior and correlated mechanical properties in a metastable Ti alloy. *Journal of Alloys and Compounds*, **2019**, 811, 152054	5.7	4
399	Influence of Cold Plastic Deformation on the Structure and Physicomechanical Properties of the Biocompatible Low-Modulus Zr51Ti31Nb18 Alloy. **2019**, 120, 790-795		
398	Electrochemical and bioactive characteristics of the porous surface formed on Ti-xNb alloys via plasma electrolytic oxidation. **2019**, 378, 125027		25
397	Measurement of Diffusion Coefficients in the bcc Phase of the Ti-Sn and Zr-Sn Binary Systems. **2019**, 50, 1409-1420		10
396	Spark plasma sintering of low modulus titanium-niobium-tantalum-zirconium (TNTZ) alloy for biomedical applications. *Materials and Design*, **2019**, 183, 108163	8.1	21
395	Gradient Microstructures and Mechanical Properties of Ti-6Al-4V/Zn Composite Prepared by Friction Stir Processing. *Materials*, **2019**, 12,	3.5	4
394	Experimental investigation of phase relationship in Tiâe-Hf ternary system. **2019**, 67, 101669		1
393	Improved Osseointegration of a TiNbSn Alloy with a Low Young's Modulus Treated with Anodic Oxidation. **2019**, 9, 13985		12
392	Comparison of the Microstructure and Biocorrosion Properties of Additively Manufactured and Conventionally Fabricated near Ti-25Nb-3Zr-3Mo-2Sn Alloy. **2019**, 5, 5844-5856		9

391	TiâZr Alloy by Magnesiothermic Reduction and Acid Leaching: Influence of Process Conditions. **2019**, 28, 187-190		1
390	Making metals linear super-elastic with ultralow modulus and nearly zero hysteresis. **2019**, 6, 515-523		13
389	Novel Ti35Zr28Nb alloy scaffolds manufactured using selective laser melting for bone implant applications. **2019**, 87, 273-284		52
388	Mechanical behaviour of Ti-Nb-Hf alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 740-741, 398-409	5.3	6
387	Titanium Alloys. **2019**, 77-94		2
386	Feasibility of Producing a TiâZr Alloy via Combustion in the TiO2âZrO2âMg System. **2019**, 55, 185-190		2
385	Fatigue failure of metallic biomaterials. **2019**, 153-188		1
384	Casting. **2019**, 311-330		2
383	Coatings for metallic biomaterials. **2019**, 369-382		0
382	Orthopedic applications of metallic biomaterials. **2019**, 431-473		1
381	New-generation metallic biomaterials. **2019**, 495-521		4
380	The wear induced crystallographic texture transition in Ti-29Nb-14Ta-4.5Zr alloy. **2019**, 491, 360-373		9
379	Formation of a hydroxyapatite layer on TiâNbâTaâZr and enhancement of four-point bending fatigue characteristics by fine particle peening. **2019**, 2, 227-234		4
378	Flowing and dynamic recrystallization behavior of new biomedical metastable titanium alloy. **2019**, 6, 0865d2		4
377	Role of aging induced precipitation on the mechanical and tribocorrosive performance of a Ti-Nb-Ta-O orthopedic alloy. **2019**, 103, 109755		11
376	Selective Laser Melting of Ti42Nb Composite Powder and the Effect of Laser Re-Melting. *Key Engineering Materials*, **2019**, 801, 270-275	0.4	7
375	Enhancement of impact toughness of type TiâMo alloy by {332} twinning. **2019**, 54, 11279-11291		10
374	Dynamic compression-induced twins and martensite and their combined effects on the adiabatic shear behavior in a Ti-8.5Cr-1.5Sn alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 759, 203-209	5.3	11

373	Ni-free, built-in nanotubular drug eluting stents: Experimental and theoretical insights. **2019**, 103, 109750		5
372	Effects of selected metallic and interstitial elements on the microstructure and mechanical properties of beta titanium alloys for orthopedic applications. **2019**, 6, 100323		17
371	Fibre Laser Treatment of Beta TNZT Titanium Alloys for Load-Bearing Implant Applications: Effects of Surface Physical and Chemical Features on Mesenchymal Stem Cell Response and Staphylococcus aureus Bacterial Attachment. **2019**, 9, 186		9
370	Novel ultrafine-grained □type Ti-28Nb-2Zr-8Sn alloy for biomedical applications. **2019**, 107, 1628-1639		1
369	A novel approach to achieving a low Youngâ□ modulus in titanium-based metallic glasses. **2019**, 8, 22-28		10
368	A Review on Biomedical Titanium Alloys: Recent Progress and Prospect. *Advanced Engineering Materials*, **2019**, 21, 1801215	3.5	371
367	Surface Modification Methods for Titanium and Its Alloys and Their Corrosion Behavior in Biological Environment: A Review. **2019**, 5, 1		32
366	Effect of milling time and presence of Sn on the microstructure and porosity of sintered Ti-10Ta-8Mo and Ti-10Ta-8Mo-3Sn alloys. *Journal of Alloys and Compounds*, **2019**, 791, 232-247	5.7	10
365	Design and development of metallic biomaterials with biological and mechanical biocompatibility. **2019**, 107, 944-954		37
364	Measurement of the Interdiffusion Coefficients in Mo-Ti and Mo-Ti-Zr Beta Phase Alloys from 1273 to 1473 K. **2019**, 40, 206-218		2
363	Fundamental Theory of Biodegradable Metalsâ□Definition, Criteria, and Design. **2019**, 29, 1805402		111
362	Biomechanical performance using finite element analysis of different screw materials in the parallel screw fixation of Salterâ□Harris Type 4 fractures. **2019**, 41, 1		4
361	DC plasma electrolytic oxidation treatment of gum metal for dental implants. **2019**, 302, 10-20		14
360	Biocorrosion and Mechanical Properties of ZXM100 and ZXM120 Magnesium Alloys. **2019**, 13, 905-914		6
359	Effects of Nb on Superelasticity and Low Modulus Properties of Metastable □Type Ti-Nb-Ta-Zr Biomedical Alloys. **2019**, 28, 1410-1418		13
358	Effects of Mo content on the microstructural and mechanical properties of as-cast Ti-Mo alloys. **2019**, 655, 012015		6
357	Mechanical Properties of Additively Manufactured Porous Titanium with Sub-Millimetre Structural Units. **2019**, 60, 1792-1798		4
356	Phase Composition, Microstructure, Corrosion Resistance and Mechanical Properties of Molten Salt Electrochemically Synthesised Tiâ□Nbâ□Sn Biomedical Alloys. **2019**, 60, 422-428		7

355	Development of the Snoek Anelastic Relaxation Correlated with Oxygen in Ti Alloys. **2019**, 298, 59-63		2
354	Microstructure, chemical and biological performance of boron-modified TiCaPCON films. **2019**, 465, 486-497		5
353	A semi-empirical approach to the prediction of deformation behaviors of Ti alloys. **2019**, 158, 62-65		18
352	Diffusivities and atomic mobilities in bcc Ti-Zr-Nb alloys. **2019**, 64, 160-174		10
351	Tribocorrosion of Porous Titanium Used in Biomedical Applications. **2019**, 5, 1		12
350	Study of the influence of Zr on the mechanical properties and functional response of Ti-Nb-Ta-Zr-O alloy for orthopedic applications. *Materials and Design*, **2019**, 164, 107555	8.1	31
349	Microstructure evolution, mechanical properties, and enhanced bioactivity of Ti-13Nb-13Zr based calcium pyrophosphate composites for biomedical applications. **2019**, 98, 279-287		14
348	A comparative study on the hot deformation behavior of Ti 5Al 5Mo 5V 3Cr and newly developed Ti 4Al 7Mo 3V 3Cr alloys. **2019**, 161, 410-418		27
347	Development of type Ti-x at. % Mo alloys by mechanical alloying and powder metallurgy: Phase evolution and mechanical properties (10 â x â 35). *Journal of Alloys and Compounds*, **2019**, 776, 370-378	5.7	16
346	Nanodiamonds for improving lubrication of titanium surfaces in simulated body fluid. **2019**, 143, 890-896		13
345	Microstructure, Phase Transformation, Mechanical Behavior, Bio-corrosion and Antibacterial Properties of Ti-Nb-xSn (x = 0, 0.25, 0.5 and 1.5) SMAs. **2019**, 28, 382-393		7
344	Tailoring elastic admissible strain of TiZr alloy by cold rolling deformation. *Journal of Alloys and Compounds*, **2019**, 781, 504-507	5.7	6
343	Comparative study on Ti-Nb binary alloys fabricated through spark plasma sintering and conventional P/M routes for biomedical application. **2019**, 94, 619-627		25
342	Formation of Titanium-Tantalum Alloy Using Selective Laser Melting. **2019**, 37-47		1
341	Effect of alloying elements on the microstructure, coefficient of friction, in-vitro corrosion and antibacterial nature of selected Ti-Nb alloys. **2019**, 469, 617-623		19
340	Selective Laser Melting of Novel Titanium-Tantalum Alloy as Orthopaedic Biomaterial. **2019**,		2
339	Corrosion phenomena of PEO-treated films formed in solution containing Mn, Mg, and Si ions. **2019**, 477, 50-59		14
338	HHC-36 antimicrobial peptide loading on silk fibroin (SF)/hydroxyapatite (HA) nanofibrous-coated titanium for the enhancement of osteoblast and bactericidal functions. **2020**, 69, 629-639		19

337	Titanium/Zirconium functionally graded materials with porosity gradients for potential biomedical applications. **2020**, 36, 972-977		9
336	Theoretical investigation of β phase transformation mechanism in Ti-Mo alloys. **2020**, 171, 109277		3
335	Shuffle-induced modulated structure and heating-induced ordering in the metastable β titanium alloy, Ti-5Al-5Mo-5V-3Cr. **2020**, 176, 7-11		18
334	Microstructural and mechanical properties of β type Ti–Mo–Nb biomedical alloys with low elastic modulus. *Journal of Alloys and Compounds*, **2020**, 815, 152412	5.7	34
333	Machine learning recommends affordable new Ti alloy with bone-like modulus. **2020**, 34, 41-50		31
332	Room-temperature micro and macro mechanical properties of the metastable Ti–29Nb–14Ta–4.5Zr alloy holding nano-sized precipitates. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 771, 138583	5.3	11
331	Fabrication of high strength, antibacterial and biocompatible Ti-5Mo-5Ag alloy for medical and surgical implant applications. **2020**, 106, 110165		19
330	Microstructure and Mechanical Properties of Ti-Nb Alloys Prepared by Mechanical Alloying and Spark Plasma Sintering. **2020**, 29, 1445-1452		7
329	Microstructural evolution and strain-hardening in TWIP Ti alloys. **2020**, 183, 155-164		56
328	Zirconia versus titanium in dentistry: A review. **2020**, 39, 24-36		34
327	The Effect of Oxygen Addition on Microstructure and Mechanical Properties of Various Beta-Titanium Alloys. **2020**, 72, 1656-1663		4
326	Tribological Performance and Electrochemical Behavior of Ti-29Nb-14Ta-4.5Zr Alloy in Simulated Physiological Solution. *Advanced Engineering Materials*, **2020**, 22, 1900758	3.5	3
325	On the bio-corrosion and biocompatibility of TiTaNb medium entropy alloy films. **2020**, 508, 145307		14
324	Impact of the rare earth elements scandium and yttrium on beta-type Ti-24Nb-38Zr-2Mo-base alloys for orthopedic applications. **2020**, 9, 100586		5
323	Relationship between phase stability and mechanical properties on near/metastable β type Ti–Cr-(Mn) cast alloys. *Journal of Alloys and Compounds*, **2020**, 821, 153516	5.7	7
322	Surface Modification of Titanium and Titanium Alloys: Technologies, Developments, and Future Interests. *Advanced Engineering Materials*, **2020**, 22, 1901258	3.5	148
321	Effects of alloying elements and annealing treatment on the microstructure and mechanical properties of Nb-Ta-Ti alloys fabricated by partial diffusion for biomedical applications. **2020**, 110, 110542		2
320	Influence of thermo-mechanical processing on structure and mechanical properties of a new metastable β Ti–29Nb–2Mo–8Zr alloy with low Young's modulus. *Journal of Alloys and Compounds*, **2020**, 820, 153078	5.7	11

319	precipitation: Deformation regulator in metastable titanium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 772, 138687	5.3	5
318	Linear-superelastic metals by controlled strain release via nanoscale concentration-gradient engineering. **2020**, 33, 17-23		12
317	Effect of the severe plastic deformation by ECAP on microstructure and phase transformations in Ti-15Mo alloy. **2020**, 22, 100811		10
316	RETRACTED: In vitro corrosion resistance and in vivo osseointegration testing of new multifunctional beta-type quaternary TiMoZrTa alloys. **2020**, 108, 110485		4
315	Novel Type Ti-Fe-Cu Alloys Containing Sn with Pertinent Mechanical Properties. *Metals*, **2020**, 10, 34	2.3	1
314	The Deformation Behavior of Oxygen-Modified Ti-29Nb-13Ta-4.6Zr(wt.%). **2020**, 321, 11003		
313	Structures and Properties of Titanium Alloys Doped with Trace Transition Metals: A Density Functional Theory Study. **2020**, 94, 2055-2063		0
312	A Review on Bio-functionalization of Ti Alloys. **2020**, 6, 1		8
311	Performance Effects of Different Table Tennis Ball Materials. **2020**, 8, 84-94		0
310	Ultra-High Molecular Weight Polyethylene/Titanium-Hybrid Implant for Bone-Defect Replacement. *Materials*, **2020**, 13,	3.5	3
309	Comparative analysis of corrosion resistance between beta titanium and Ti-6Al-4V alloys: A systematic review. **2020**, 62, 126618		25
308	Preparation, structural and microstructural characterization of Ti–Nb–Ta–Zr alloy for biomedical applications. *Journal of Materials Research and Technology*, **2020**, 9, 16018-16028	5.5	9
307	Strain-hardenability of new strengthened TRIP/TWIP titanium alloys. **2020**, 321, 11056		
306	Material selection for medical devices. **2020**, 31-94		2
305	Superelastic Behavior of Ti-Nb Alloys Obtained by the Laser Engineered Net Shaping (LENS) Technique. *Materials*, **2020**, 13,	3.5	4
304	Hot Deformation Behaviors and Intrinsic Hot Workability Map of Ti-12Mo-4Zr-5Sn Alloy Based on Physical Model and Polar Reciprocity Model. *Metals*, **2020**, 10, 956	2.3	4
303	Graphene-coated Ti-Nb-Ta-Mn foams: A promising approach towards a suitable biomaterial for bone replacement. **2020**, 401, 126250		4
302	Cluster-formula-embedded machine learning for design of multicomponent Ti alloys with low Young modulus. **2020**, 6,		13

301	Microstructural and mechanical properties of Ti-Mo alloys designed by the cluster plus glue atom model for biomedical application. **2020**, 111, 1237-1246		2
300	Evaluating the phase stability of binary titanium alloy Ti-X (X = Mo, Nb, Al, and Zr) using first-principles calculations and a Debye model. **2020**, 71, 102207		7
299	Microstructural study of Ti 45Nb alloy before and after HPT processing using experimental and ab initio data mining approach. **2020**, 169, 110635		4
298	Selective laser melting of high-strength, low-modulus Tiâ35Nbâ7Zrâ5Ta alloy. **2020**, 14, 100941		19
297	Plasma Spray Deposition of HA-TiO2 on phase Ti-35Nb-7Ta-5Zr Alloy for Hip Stem: Characterization of Bio-mechanical Properties, Wettability, and Wear Resistance. **2020**, 17, 1029-1044		17
296	Recent Development in Beta Titanium Alloys for Biomedical Applications. *Metals*, **2020**, 10, 1139	2.3	65
295	Microstructure, Mechanical Properties, and Springback of Ti-Nb Alloys Modified by Mo Addition. **2020**, 29, 5366-5373		1
294	Experimental measurement of diffusion coefficients and assessment of diffusion mobilities in HCP Mgâliâal alloys. **2020**, 71, 101999		1
293	First-Principles Investigation of Titanium Doping with Trace Transition Metal Elements. **2020**, 730, 012016		
292	Strength-Ductility Synergy in a Metastable Titanium Alloy by Stress Induced Interfacial Twin Boundary Phase at Cryogenic Temperatures. *Materials*, **2020**, 13,	3.5	0
291	Thermomechanical Processing of Cost-Affordable Powder Metallurgy Ti-5Fe Alloys from the Blended Elemental Approach: Microstructure, Tensile Deformation Behavior, and Failure. *Metals*, **2020**, 10, 1405	2.3	2
290	Factors affecting thermal stability of collagen from the aspects of extraction, processing and modification. **2020**, 2,		23
289	Production and Characterization of the Ti-12Mo-30Nb Alloy. **2020**, 1012, 506-510		
288	Microstructural Analysis and Mechanical Properties of TiMoZrTaSi Alloys as Biomaterials. *Materials*, **2020**, 13,	3.5	2
287	The Influence of Severe Plastic Deformation on Microstructure and In Vitro Biocompatibility of the New Ti-Nb-Zr-Ta-Fe-O Alloy Composition. *Materials*, **2020**, 13,	3.5	4
286	Open Porous Titanium Alloy by Liquid Metal Dealloying for Biomedical Applications. *Metals*, **2020**, 10, 1450	2.3	8
285	Microstructural and mechanical properties of Ti-Mo-W alloy by mechanical alloying and conventional sintering. **2020**, 27, 1674-1680		2
284	Assessment of Atomic Mobilities for bcc Phase in the Ti-Nb-V System. **2020**, 41, 191-206		2

283	Low Youngâ Modulus and High Strength Obtained in Ti-Nb-Zr-Cr Alloys by Optimizing Zr Content. **2020**, 29, 2871-2878		6
282	A low-cost metastable beta Ti alloy with high elastic admissible strain and enhanced ductility for orthopaedic application. *Journal of Alloys and Compounds*, **2020**, 835, 155391	5.7	15
281	Microstructure of a Tiâ 0 wt% Ta alloy produced via laser powder bed fusion. **2020**, 33, 981-990		8
280	Mechanical properties and corrosion behavior of type Ti-Zr-Nb-Mo alloys for biomedical application. *Journal of Alloys and Compounds*, **2020**, 842, 155693	5.7	32
279	Phase Stability of Two Biomedical Titanium Alloys During Severe Plastic Deformation. **2020**, 72, 2937-2948		2
278	Metallic implants with properties and latest production techniques: a review. **2020**, 6, 405-440		24
277	Role of titanium in bio implants and additive manufacturing: An overview. **2020**, 26, 3071-3080		20
276	Immunological response triggered by metallic 3D printing powders. **2020**, 35, 101392		3
275	Chatter Prediction in High Speed Machining of Titanium Alloy (Ti-6Al-4V) using Machine Learning Techniques. **2020**, 24, 350-358		5
274	The influence of heat treatment processing on microstructure and mechanical properties of Tiâ 4Nbâ Zrâ Sn alloy by powder metallurgy. **2020**, 13, 100803		5
273	Titanium Alloys, Including Nitinol. **2020**, 229-247		1
272	Deposition of HA-TiO2 by plasma spray on phase Ti-35Nb-7Ta-5Zr alloy for hip stem: Characterization, mechanical properties, corrosion, and in-vitro bioactivity. **2020**, 398, 126072		21
271	Additive manufacturing of low-cost porous titanium-based composites for biomedical applications: Advantages, challenges and opinion for future development. *Journal of Alloys and Compounds*, **2020**, 827, 154263	5.7	69
270	How a new strain transformable titanium-based biomedical alloy can be designed for balloon expendable stents. **2020**, 10, 100638		7
269	Breaking the limit of Youngâ modulus in low-cost Tiâ Nbâ r alloy for biomedical implant applications. *Journal of Alloys and Compounds*, **2020**, 828, 154401	5.7	22
268	Pulsed electromagnetic fields modify the adverse effects of glucocorticoids on bone architecture, bone strength and porous implant osseointegration by rescuing bone-anabolic actions. **2020**, 133, 115266		10
267	Cold rolling deformation and annealing behavior of a type Tiâ 4Nbâ 5Zr titanium alloy for biomedical applications. *Journal of Materials Research and Technology*, **2020**, 9, 2308-2318	5.5	12
266	Crystal Structure Evolution, Microstructure Formation, and Properties of Mechanically Alloyed Ultrafine-Grained Ti-Zr-Nb Alloys at 36â Tiâ 0 (at. %). *Materials*, **2020**, 13,	3.5	4

265	Effect of hydroxyapatite and Ag, Ta2O5 or CeO2 addition on the properties of ultrafine-grained Ti31Mo alloy. *Journal of Alloys and Compounds*, **2020**, 823, 153749	5.7	3
264	Microstructural, mechanical and shape memory characterizations of Ti□Mo□Sn alloys. **2020**, 30, 688-700		10
263	Effect of Various Annealing Temperature on Microstructure and Properties of Metastable □Type Ti-35Nb-2Ta-3Zr Alloy for Biomedical Applications. *Frontiers in Materials*, **2020**, 7,	4	2
262	A review on alloy composition and synthesis of □Titanium alloys for biomedical applications. **2020**, 26, 3297-3304		8
261	Addition of Sn to TiNb alloys to improve mechanical performance and surface properties conducive to enhanced cell activity. **2020**, 115, 110839		4
260	Anodization of titanium alloys for biomedical applications. **2020**, 211-275		2
259	Additively manufactured biomedical Ti-Nb-Ta-Zr lattices with tunable Young's modulus: Mechanical property, biocompatibility, and proteomics analysis. **2020**, 114, 110903		16
258	Microstructure evolution and mechanical properties of Ti□Nb□Fe-0.2O alloy with high elastic admissible strain for orthopedic implant applications. **2020**, 30, 100-105		6
257	Comprehensive review on alloy design, processing, and performance of □Titanium alloys as biomedical materials. **2021**, 66, 114-139		31
256	A systematic study of □type Ti-based PVD coatings on magnesium for biomedical application. **2021**, 183, 109850		14
255	A high strength and low modulus metastable □Ti-12Mo-6Zr-2Fe alloy fabricated by laser powder bed fusion in-situ alloying. **2021**, 37, 101708		2
254	Microstructure and properties of a novel ternary Ti□Zr□Fe alloy for biomedical applications. *Journal of Alloys and Compounds*, **2021**, 854, 157119	5.7	11
253	High-throughput development and applications of the compositional mechanical property map of the □titanium alloys. *Journal of Materials Science and Technology*, **2021**, 71, 201-210	9.1	12
252	A review on alloy design, biological response, and strengthening of □itanium alloys as biomaterials. **2021**, 121, 111661		39
251	Effect of Thermomechanical Treatments on the Mechanical Properties of New Low-Cost Ti-Fe-Nb-Zr Alloys. 1016, 465-469		
250	□Ti-Based Alloys for Medical Applications. **2021**, 62, 54-63		1
249	Titanium alloys. **2021**, 157-187		0
248	Deformation twinning-induced single-variant □plates in metastable □i alloys containing athermal □precipitates. **2021**, 56, 7710-7726		3

247	The effect of bioinert electroexplosive coatings on stress distribution near the dental implant-bone interface. **2021**, 8, 015016		2
246	Introduction and overview. **2021**, 1-31		
245	Prospect of Metal Ceramic (Titanium-Wollastonite) Composite as Permanent Bone Implants: A Narrative Review. *Materials*, **2021**, 14,	3.5	2
244	Effects of Nb on deformation-induced transformation and mechanical properties of HfNbxTa0.2TiZr high entropy alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 805, 140798	5.3	5
243	The Ultrafine-Grain Yttria-Stabilized Zirconia Reinforced Titanium Matrix Composites. *Metals*, **2021**, 11, 240	2.3	1
242	Improved corrosion resistance of dental Ti50Zr alloy with (TiZr)N coating in fluoridated acidic artificial saliva. **2021**, 40, 2927-2936		2
241	Evaluation of mechanical properties, in vitro corrosion resistance and biocompatibility of Gum Metal in the context of implant applications. **2021**, 115, 104289		4
240	Elastically Graded Titanium Alloy Produced by Mechanical Surface Deformation. *Frontiers in Materials*, **2021**, 8,	4	1
239	Comparison of Biocompatible Coatings Produced by Plasma Electrolytic Oxidation on cp-Ti and Ti-Zr-Nb Superelastic Alloy. **2021**, 11, 401		2
238	Factors Controlling the Synthesis of Porous Ti-Based Biomedical Alloys by Electrochemical Deoxidation in Molten Salts. **2021**, 52, 1590-1602		
237	Deformation twinning in Ti48.9Zr32.0Nb12.6Ta6.5 medium entropy alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 809, 140931	5.3	4
236	Construction and Biological Performance of Surface Treated Porous Titanium Scaffold Using Nanotube Arrays of Anatase. **2021**, 16, 577-583		
235	Development and heat treatment of phase titanium alloy for orthopedic application. **2021**,		3
234	Influence of Process Parameters on Mechanical and Corrosion Behavior of DED-Processed Biomedical Ti-35Nb-7Zr-5Ta Alloy. **2021**, 73, 1819-1827		4
233	Effect of phase transition mechanism on biomechanical properties of spinal fixation device. **2021**, 11, 349-355		
232	Refractory Metal Coated Alumina Foams as Support Material for Stem Cell and Fibroblasts Cultivation. *Materials*, **2021**, 14,	3.5	
231	Development of Mg-based biodegradable composite using friction stir processing for orthopedic application. **2021**, 50, 684-684		1
230	Further development of mechanically biocompatible metallic biomaterials. **2021**, 60, 273-280		

229	Alloy design by tailoring phase stability in commercial Ti alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 815, 141229	5.3	3
228	Surface Effect in a Metastable Ti-Nb-Sn Alloy. 1035, 562-567		
227	The effect of molybdenum content on the microstructural evolution and tensile properties of as-cast Ti-Mo alloys. **2021**, 27, 102347		4
226	Emerging metallic systems for additive manufacturing: In-situ alloying and multi-metal processing in laser powder bed fusion. **2021**, 119, 100795		67
225	Synthesis and Characterization of Ti-Nb Alloy Films Obtained by Magnetron Sputtering and Low-Energy High-Current Electron Beam Treatment. *Materials*, **2021**, 14,	3.5	0
224	Empirical rule for predicting mechanical properties of Ti-6Al-4V bone implants with radial-gradient porosity bionic structures. **2021**, 27, 102346		2
223	Effects of Deformation and Phase Transformation Microstructures on Springback Behavior and Biocompatibility in Type Ti-15Mo Alloy. 1		0
222	Evolution of the Microstructure and Mechanical Properties of a Ti35Nb2Sn Alloy Post-Processed by Hot Isostatic Pressing for Biomedical Applications. *Metals*, **2021**, 11, 1027	2.3	1
221	Significant enhancement in yield strength for a metastable beta titanium alloy by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 816, 141291	5.3	2
220	Novel approach of alloy design and selection for additive manufacturing towards targeted applications. *Journal of Alloys and Compounds*, **2021**, 866, 158965	5.7	2
219	Materials information and mechanical response of TRIP/TWIP Ti alloys. **2021**, 7,		1
218	Biotribocorrosion of 3D-Printed silica-coated Ti6Al4V for load-bearing implants.. **2021**, 36, 3974-3984		1
217	Omega versus alpha precipitation mediated by process parameters in additively manufactured high strength Tiâ1Alâ8Vâ5Fe alloy and its impact on mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 821, 141627	5.3	3
216	Additively processed TiAl6Nb7 alloy for biomedical applications. **2021**, 52, 703-716		3
215	Ti-29Nbâ13Taâ4Mo alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 819, 141500	5.3	4
214	Enhanced corrosion resistance of the surface modified Ti-13Nb-13Zr alloy by ultrasonic shot peening. **2021**, 189, 109597		16
213	A novel biomedical titanium alloy with high antibacterial property and low elastic modulus. *Journal of Materials Science and Technology*, **2021**, 81, 13-25	9.1	22
212	The advances of topology optimization techniques in orthopedic implants: A review. **2021**, 59, 1673-1689		1

211	A novel deformation mechanism in Ti-V binary metastable □Ti alloys: Deformation kinking promoted by dislocation accumulation. *Journal of Alloys and Compounds*, **2021**, 875, 159982	5.7	1
210	Effect of Ag alloying and trace precipitation on corrosion resistance of Ti-Ta-Ag ternary alloy. **2021**, 8, 210243		
209	Microstructure, tensile properties and deformation behaviour of a promising bio-applicable new Ti35Zr15Nb25Ta25 medium entropy alloy (MEA). *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 824, 141805	5.3	3
208	Comprehensive servo control strategies for flexible and high-efficient wire electric discharge machining. A systematic review. **2021**, 71, 7-28		3
207	Effect of alloying elements on laser surface modification of powder metallurgy to improve surface mechanical properties of beta titanium alloys for biomedical application. *Journal of Materials Research and Technology*, **2021**, 14, 1222-1234	5.5	3
206	In-silico design and experimental validation of TiNbTaZrMoSn to assess accuracy of mechanical and biocompatibility predictive models. **2021**, 124, 104858		0
205	Differences in the effect of surface texturing on the wear loss of □type Ti-Nb-Ta-Zr and (□+□)type Ti-6Al-4V ELI alloys in contact with zirconia in physiological saline solution. **2021**, 124, 104808		1
204	Design of a new Ti-Mo-Cu alloy with excellent mechanical and antibacterial properties as implant materials. **2022**, 306, 130875		4
203	Lattice structures made by laser powder bed fusion. **2021**, 423-465		2
202	Review of recent developments in surface nanocrystallization of metallic biomaterials. **2021**, 13, 2286-2301		11
201	Functionality of Porous Titanium Improved by Biopolymer Filling. 91-101		1
200	Effect of TiB2 or Y2O3 Additions on Mechanical Biofunctionality of Ti-29Nb-13Ta-4.6Zr for Biomedical Applications. 75-81		4
199	Phase Stability and Young's Modulus of Ti-Cr-Sn-Zr Alloys. 47-54		1
198	Mechanical Properties of Biomedical □Type Titanium Alloy with Rare-Earth Metal Oxide Particles Formed by Rare-Earth Metal Addition. **2014**, 129-135		1
197	Mechanical Properties of Low-Cost Beta-Type Ti-Mn Alloys Fabricated by Metal Injection Molding. **2013**, 1115-1122		2
196	Mechanical Properties of Meta-Stable Ti-Cr-Sn-Zr Alloys. **2013**, 1537-1542		1
195	Mechanically Multifunctional Properties and Microstructure of New Beta-Type Titanium Alloy, Ti-29Nb-13Ta-4.6Zr, for Biomedical Applications. **2008**, 167-183		2
194	Functionally Graded Metallic Biomaterials. **2015**, 181-209		2

193	Multifunctional low-rigidity Ltype Ti-Nb-Ta-Zr system alloys as biomaterials. **2007**, 75-84		1
192	Effect of Mo, Ta, V and Zr on a duplex bcc+orthorhombic refractory complex concentrated alloy using diffusion couples. **2020**, 124, 106836		2
191	Partially biodegradable Ti-based composites for biomedical applications subjected to intense and cyclic loading. *Journal of Alloys and Compounds*, **2020**, 839, 155663	5.7	5
190	Improved fatigue properties with maintaining low Young's modulus achieved in biomedical beta-type titanium alloy by oxygen addition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 704, 10-17	5.3	34
189	Research on microstructure and properties of Ti-15Mo-3Al alloy with high oxygen content. **2020**, 7, 116528		2
188	Structural Dependence of Corrosion Properties of Zrâ1.0% Nb Alloy in Saline Solution. **2016**, 36, 917-933		3
187	Regularities of Formation of Structureâ Phase States and Functional Properties of Zirconium Alloys in Conditions of Ultrasonic Impact Treatment. **2016**, 17, 119-152		1
186	In-vitro corrosion resistance study of hot worked Ti-6Al-7Nb alloy in a isotonic medium. **2001**, 18, 47-59		2
185	PLAZMA DALDIRMA YON MPLANTASYONU VE BRKTRME (PIII&D) PROSESLERLMLERNN AZOT PLAZMASINDA ORTOPEDK MPLANT MALZEMESTi6Al4V YZEYNDE OLUTURULAN Ag KAPLAMALARININ MORFOLOJLERNE, FAZ OLUUMLARINA ve E-Coli. ADEZYONUNA ETKLER **2017**, 32,		2
184	Development of New Ti–Fe–Ta and Ti–Fe–Ta–Zr System Alloys for Biomedical Applications [Retracted]. **2005**, 46, 1532-1539		11
183	Injection Molding of Mechanical Alloyed Ti–Fe–Zr Powder. **2012**, 53, 1100-1105		7
182	Anisotropy of Young's Modulus in a Ti-Mo-Al-Zr Alloy with Goss Texture. **2016**, 57, 1998-2001		5
181	Effect of Nb Addition on Oxide Formation on TiâNb Alloys. **2019**, 60, 2204-2212		3
180	Effect of Medical Polymer Filling on Tensile Properties of Biomedical Porous Pure Titanium. **2008**, 55, 312-317		6
179	Possibilities and limits in thermohydrogen processing of beta titanium alloy Timetal 10-2-3. **2006**, 97, 1355-1362		2
178	Fundamentals of Medical Implant Materials. **2012**, 6-17		19
177	The Effect of Hot Working on the Mechanical Properties of High Strength Biomedical Ti-Nb-Ta-Zr-O Alloy. *Materials*, **2019**, 12,	3.5	7
176	Desarrollo de las aleaciones de titanio y tratamientos superficiales para incrementar la vida til de los implantes. **2016**, 52, 084		9

175	The corrosion behaviour of nanograined metals and alloys. **2012**, 48, 377-394	16
174	Caracterizaci□n mec□nica de aleaciones Ti-Nb mediante ensayos de flexi□n biaxial. **2010**, 46, 19-25	4
173	Application of atmospheric-pressure plasma treatment to coat Ti-alloy orthodontic wire with white oxide layer. **2020**, 59, SAAC09	1
172	Enhancing Properties of TiZrHfNbTa Alloy by Surface Layers Nanostructuring Using Cryogenic Ultrasonic Impact Treatment. **2021**,	
171	Machine Learning-Driven Biomaterials Evolution. **2021**, e2102703	13
170	Achieving superior strength-ductility balance in a novel heterostructured strong metastable □Ti alloy. **2021**, 147, 103126	4
169	The influence of zirconium content on the microstructure, mechanical properties, and biocompatibility of in-situ alloying Ti-Nb-Ta based □alloys processed by selective laser melting. **2021**, 131, 112486	2
168	Improvement of Fatigue Properties in Ultrafine Grained Pure Ti after ECAP(Equal Channel Angular Pressing). **2005**, 29, 1494-1502	
167	The Effect of HEMM on Microstructure and Mechanical Properties of Ti-Nb Alloy for Implant Biomedical Materials. **2007**, 17, 587-592	
166	Laser-assisted development of Ti alloys: The search for new biomedical alloys. **2009**,	
165	Mechanical Properties of Implant Rods Made of Low-Modulus □Type Titanium Alloy, Ti-29Nb-13Ta-4.6Zr, for Spinal Fixture. 83-90	
164	Performance Improvement of Joint Prosthesis and Its Future Tasks. **2010**, 51, 182-186	
163	Microstructures and Mechanical Properties of Ternary Ti^|^ndash;10Cr^|^ndash;(V, Fe, Mo) Alloys with Self-tunable Young's Moduli for Biomedical Applications. **2012**, 52, 1655-1660	2
162	Metal-polymer Hybrid Biomaterials with High Mechanical and Biological Compatibilities. 397-408	
161	Surface Treatment of the Ti-Based Nanomaterials. **2012**, 221-303	
160	Analysis of the Bioactive Surface of Ti-35Nb-7Zr Alloy After Alkaline Treatment and Solution Body Fluid. **2013**, 143-152	
159	Deformation Induced Changeable Youngâ□ Modulus in Ternary Ti-Cr-O Alloys for Spinal Fixation Applications. **2013**, 1635-1641	
158	Endurance of Low-Modulus □Type Titanium Alloys for Spinal Fixation. **2014**, 205-212	

157	Mechanical Properties of Biomedical Type Titanium Alloy with Rare-Earth Metal Oxide Particles Formed by Rare-Earth Metal Addition. 129-135	
156	Corrosion Characteristics of Ti alloy for Removable Partial Denture. **2014**, 14, 237-242	
155	Effect of Zr Addition on Recrystallization Behavior in Rolled Ti-Zr Alloys. **2015**, 981-988	1
154	Effect of Zr Addition on Recrystallization Behavior in Rolled Ti-Zr Alloys. 979-988	
153	Chemical Aspects of Biocompatible Interfaces. **2015**, 1-22	
152	Evaluation of Long-Term Mechanical and Biological Biocompatibility of Low-Cost Type Ti-Mn Alloys for Biomedical Applications. 1-12	
151	Mechanisms of Plastic Deformation in Ti-Nb-Zr-Ta Based Biomedical Alloys with Fe and Si Content. **2015**, 128, 574-578	1
150	Titanium Alloy Ti-6Al-4V Prepared by Selective Laser Melting (SLM). **2016**, 16, 691-697	7
149	ZrâNb-Based Alloys â Promising Functional Materials. **2016**, 36, 1651-1660	1
148	Low-Modulus Ti Alloys Suitable for Rods in Spinal Fixation Devices. **2017**, 3-21	1
147	A cluster-formula composition design approach based on the local short-range order in solid solution structure. **2017**, 66, 026102	1
146	Hardness and corrosion resistance of dental Ti-Zr alloy by changes of zirconium contents. **2017**, 44, 387-394	0
145	Plastic Deformation Behavior of Single Crystalline Martensite in Titanium Shape Memory Alloy. **2018**, 57, 345-348	
144	Effect of Loading Mode and Simulated Body Fluid Environment on Fatigue Properties of Implanted Ti-6Al-7Nb Alloy. **2019**, 08, 65-72	
143	The problem of biomechanical compatibility of metallic materials and ways of solving it. **2019**, 42-49	1
142	Electrochemical Corrosion of Dental Alloys. **2019**, 20, 310-346	1
141	Optimal design and characterization of novel biomedical Zr-based alloys for hard tissue substitution. **2019**, 110, 656-663	
140	Effects of {332}<113> Deformation Twinning on Fatigue Behavior of TiâMn System Alloys. **2019**, 60, 1850-1856	

139	Applicability of As-Cast on Type Titanium Alloys Proposed in the Compositional Region with Different Tensile Deformation Types. **2019**, 60, 2426-2434	2
138	Deformation mechanisms and effect of oxygen addition on mechanical properties of Ti-7.5Mo alloy with martensite. **2020**, 321, 11059	
137	Effect of cross-sectional area reduction rate and alloy composition on the formation of -fiber texture in Ti-Mo-Al-Zr alloy wire. **2020**, 321, 11019	
136	Controlling of mechanical property in additive manufactured porous titanium by structural control and alloying for bone substitutes. **2020**, 321, 05004	
135	Additive manufacturing of metallic lattice structures: Unconstrained design, accurate fabrication, fascinated performances, and challenges. **2021**, 146, 100648	25
134	Near-Threshold Fatigue Crack Propagation in Biomedical Titanium Alloy Ti-29Nb-13Ta-4.6Zr with Low Youngâ Modulus. **2020**, 69, 875-881	
133	Ti-based alloys for medical applications. **2020**, 52-64	
132	The Effect of Anodization and Glow Discharge Plasma Oxidation Surface Treatments on the Wear Resistance of Ti6Al4V Alloy. 189-201	
131	Preparaõ e caracterizaõ de uma liga de titõio com a adiõ de tõtalo e zircõio para aplicaes biomdicas. **2020**, 25,	
130	Mechanical and electrochemical response in Surface treated low modulus biomedical alloy Ti-Nb-Ta-O. **2020**, 321, 05014	
129	Influences of Mo addition on mechanical properties and deformation behavior of type Ti alloys. **2020**, 321, 05001	
128	Development and Perspectives of High Entropy alloys composed by light metal elements and that for metallic biomaterials with BCC. **2020**, 70, 14-23	1
127	Deformation behaviour of beta phase with similar chemical composition in beta and alpha+beta titanium alloys. **2020**, 321, 11082	0
126	Effects of Alloying Elements on the Microstructure and Mechanical Properties of Novel Dual-Phase Ti-Nb-Ta-Zr Alloys. *SSRN Electronic Journal*,	1
125	Design of Zirconium Quaternary System Alloys and Their Properties. **2020**, 61, 776-781	1
124	Tipi Ti Alaşımlarõn Özellikleri Üzerine Bir Derleme: Mikroyapõ-Mekanik, Korozyon Özellikleri ve Üretim Yöntemleri.	0
123	Exfoliation Resistance, Microstructure, and Oxide Formation Mechanisms of the White Oxide Layer on CP Ti and Ti-Nb-Ta-Zr Alloys. *Materials*, **2021**, 14,	3.5
122	Recent Progress in Mechanically Biocompatible Titanium-Based Materials. 206-212	

121	Factors Leading to Low Elastic Modulus and Current Status of Medically Applied Research of Type Ti-Nb-based Alloys. **2020**, 59, 588-593		2
120	Towards Fleck defect free additively manufactured titanium alloys by promoting the columnar to equiaxed transition and grain refinement. **2022**, 224, 117511		3
119	Development of biomedical Ti-Nb-Zr-Mn alloys with enhanced mechanical properties and corrosion resistance. **2022**, 30, 103027		2
118	Effect of martensite on {332} twinning formation in a metastable beta titanium alloy. *Journal of Alloys and Compounds*, **2021**, 162598	5.7	1
117	Development of a novel metastable beta titanium alloy with ultrahigh yield strength and good ductility based on laser power bed fusion. **2021**, 49, 102501		
116	Microstructure and properties of TiB2-reinforced Ti35Nb7Zr5Ta processed by laser-powder bed fusion. 1		0
115	Ti Alloys for Orthopedic and Dental Applications: A Review of Progress on Improvement of Properties through Surface Modification. **2021**, 11, 1446		5
114	Microstructure, tensile properties of SLMed TNT5Zr-0.2O alloys without/with keyholes produced by different Post-processing treatments. **2022**, 309, 131448		
113	Design and physical metallurgy of biomedical Ti alloys. **2022**, 27-53		
112	Low Cycle Fatigue Performance of Additively Processed and Heat-Treated Ti-6Al-7Nb Alloy for Biomedical Applications. *Metals*, **2022**, 12, 122	2.3	2
111	Effect of Nb Content and water quenching on microstructure and mechanical properties of Ti-Nb alloys fabricated by spark plasma sintering. 1-13		0
110	Overview of the development and application of biomedical metal materials. **2022**, 1-26		
109	Facile formation with HA/SrCO-based composite coatings via green hydrothermal treatment on type TiNbTaZr alloys: Morphological and electrochemical insights. **2022**, 1		0
108	Metastable dual-phase Ti36Nb5Sn2Zr and Ti36Nb5Sn2Fe alloys with high strength-to-modulus ratio. **2022**, 30, 103168		1
107	Development of non-toxic low-cost bioactive porous Ti2Fe2Si bulk metallic glass with bone-like mechanical properties for orthopedic implants. *Journal of Materials Research and Technology*, **2022**, 17, 1319-1329	5.5	0
106	The influence of advanced hot isostatic pressing on phase transformations, mechanical properties of Ti-34Nb-13Ta-5Zr-0.2O alloy manufactured by In-situ alloying via selective laser melting. *Journal of Alloys and Compounds*, **2022**, 903, 163974	5.7	2
105	Influence of tantalum composition on mechanical behavior and deformation mechanisms of TiZrHfTax high entropy alloys. *Journal of Alloys and Compounds*, **2022**, 903, 163796	5.7	2
104	Tailoring Porosity and Microstructure of Alpha-Titanium by Combining Powder Metallurgy and Ultrasonic Impact Treatment to Control Elastic and Fatigue Properties.		1

103	Revisiting alloy design of low-modulus biomedical □Ti alloys using an artificial neural network. **2022**, 21, 101313		3
102	An Overview on Metallic and Ceramic Biomaterials. **2022**, 149-165		0
101	Microstructure and mechanical properties of TiâNbâFeâZr alloys with high strength and low elastic modulus. **2022**, 32, 503-512		1
100	Changes in the morphology, mechanical strength and biocompatibility of polymer and metal/polymer fabricated hydroxyapatite for orthopaedic implants: a review. **2022**, 42, 298-322		1
99	Influence of Nb content on mechanical behavior and microstructure of TiâNb alloys. **2022**, 113, 205-213		
98	Recent developments in nonferrous metals and related materials for biomedical applications in China: a review. **2022**, 41, 1410-1433		1
97	Microstructure, Mechanical Properties, and Cytotoxicity of □Type Ti-Nb-Cr Alloys Designed by Electron Parameter. 1		0
96	Polymorphic nature of {332} < 113 > twinning mode in BCC alloys. *Materials Research Letters*, **2022**, 10, 334-342	7.4	0
95	Study of Electrochemical and Biological Characteristics of As-Cast Ti-Nb-Zr-Ta System Based on Its Microstructure. *Metals*, **2022**, 12, 476	2.3	0
94	Achieving high strength and low elastic modulus in interstitial biomedical TiâNbâZrâO alloys through compositional optimization. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 839, 142833	5.3	1
93	Controlling the Youngâ□ modulus of a □type Ti-Nb alloy via strong texturing by LPBF. *Materials and Design*, **2022**, 216, 110516	8.1	0
92	Heat treatment of titanium manufactured by selective laser melting: Microstructure and tensile properties. *Journal of Materials Research and Technology*, **2022**, 18, 245-254	5.5	0
91	Design and preparation of a biomedical titanium alloy with low elastic modulus and high antibacterial property based on Ti-Mo-Ag system. *Journal of Alloys and Compounds*, **2022**, 908, 164639	5.7	0
90	The effect of Al content on Ti/Zr-based bulk metallic glass composite by additive manufacturing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2022**, 143162	5.3	
89	A compilation of experimental data on the mechanical properties and microstructural features of Ti-alloys.. **2022**, 9, 188		2
88	Ti6Al7Nbâ□TiB nanocomposites for ortho-implant applications. 1		0
87	Microstructural Evolution, Mechanical Properties, and Preosteoblast Cell Response of a Post-Processing-Treated TNT5Zr □Ti Alloy Manufactured via Selective Laser Melting.. **2022**,		0
86	Ab initio systematic description of thermodynamic and mechanical properties of binary bcc Ti-based alloys. **2022**, 31, 103583		

85	Design of TiZrNbTa multi-principal element alloys with outstanding mechanical properties and wear resistance. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 845, 143203	5.3	0
84	Titanium Drawing. *Key Engineering Materials*, 910, 193-199	0.4	
83	Strontium-loaded titanium-15molybdenum surface improves physicochemical and biological properties in vitro. *Biomedical Physics and Engineering Express*,	1.5	
82	Composition design of a novel Ti-6Mo-3.5Cr-1Zr alloy with high-strength and ultrahigh-ductility. *Journal of Materials Science and Technology*, **2022**,	9.1	0
81	Evolution of Microstructural and Mechanical Properties during Cold-Rolling Deformation of a Biocompatible Ti-Nb-Zr-Ta Alloy. *Materials*, **2022**, 15, 3580	3.5	
80	A Review of In Situ Observations of Deformation-Induced □<-> □Martensite Transformations in Metastable □Ti Alloys. *Advanced Engineering Materials*, 2200281	3.5	0
79	IMPLANT MATERIAL SPECIFIC PROPERTIES AND CORROSION TESTING PROCEDURE: A STUDY. *I-manager□s Journal on Future Engineering and Technology*, **2021**, 17, 29	0.6	1
78	Effects of microalloying on the microstructure, tribological and electrochemical properties of novel Ti-Mo based biomedical alloys in simulated physiological solution. *Tribology - Materials, Surfaces and Interfaces*, 1-16	1.4	
77	Effect of electropolishing on mechanical property enhancement of Ti6Al4V porous materials fabricated by selective laser melting. *Virtual and Physical Prototyping*, 1-13	10.1	0
76	Microstructure evolution and deformation mechanism of □ □dual-phase Ti-xNb-yTa-2Zr alloys with high performance. *Journal of Materials Science and Technology*, **2022**, 131, 68-81	9.1	1
75	Dynamic Response and Adiabatic Shear Behavior Of □Type Ti-Mo Alloys with Different Deformation Modes. *SSRN Electronic Journal*,	1	
74	□duplex phase Ti-Zr-Nb-Ag alloys with impressive mechanical properties, excellent antibacterial and good biocompatibility. *Journal of Materials Research and Technology*, **2022**,	5.5	0
73	In Vitro and Electrochemical Characterization of Laser-Cladded Ti-Nb-Ta Alloy for Biomedical Applications. *Crystals*, **2022**, 12, 954	2.3	
72	Demonstrating a duplex TRIP/TWIP titanium alloy via the introduction of metastable retained □phase. *Materials Research Letters*, **2022**, 10, 754-761	7.4	0
71	The Influence of Copper Content on the Elastic Modulus and Antibacterial Properties of Ti-13Nb-13Zr-xCu Alloy. *Metals*, **2022**, 12, 1132	2.3	0
70	Deciphering the microstructural evolution and adiabatic shearing behavior of the titanium alloy with stress-induced □phase transformation during dynamic compression. *Materials and Design*, **2022**, 221, 110939	8.1	0
69	Effect of Ultrasonic Surface Mechanical Attrition Treatment-Induced Nanograins on the Mechanical Properties and Biocompatibility of Pure Titanium. *Materials*, **2022**, 15, 5097	3.5	1
68	Study on Stability and Elastic Properties of □TiX (X=Nb, Ta) Alloys From First-Principles Calculations. *Frontiers in Materials*, 9,	4	

67	Research progress of biodegradable magnesium-based biomedical materials: A review. *Journal of Alloys and Compounds*, **2022**, 923, 166377	5.7	0
66	Preparation, characterization, and biocompatibility of chondroitin sulfate-based sol-gel coatings and investigation of their effects on osseointegration improvement. 1-19		
65	Effects of Element (Al, Mo, Sn and Fe) Doping on Phase Structure and Mechanical Properties of the Ti-Nb-Based Alloys. **2022**, 12, 1249		
64	Effect of Molybdenum Content on Microstructure and Mechanical Properties of Ti-Mo-Fe Alloys by Powder Metallurgy. **2022**, 12, 7257		0
63	Evaluation of hardness and elasticity of thermo-mechanically processed low modulus Ti alloys for dental application. **2022**,		
62	Effect of Alloying Elements on the Compressive Mechanical Properties of Biomedical Titanium Alloys: A Systematic Review.		1
61	Additive Manufacturing of BiomaterialsâDesign Principles and Their Implementation. **2022**, 15, 5457		2
60	Feasibility study on Ti-15Mo-7Cu with low elastic modulus and high antibacterial property.		
59	Effects of heat treatment of various pure metals on osteoblast cell activity.		
58	Medical Applications of Vat Polymerization. **2022**, 1-9		
57	Ti-Mo-xTiC composites manufactured by U-FAST reactive sintering. **2022**, 108, 105960		
56	Correlation between microstructure and tensile properties of powder metallurgy Ti-6Nb-x(Fe or Mn) alloys. **2022**, 926, 166805		0
55	Oxidation mechanism of a near Ti alloy. **2022**, 223, 111144		1
54	Microstructural evolution and mechanical properties of a novel biomedical Tiâ6Zrâ4Fe alloy during solution and aging treatment. **2022**, 21, 429-437		0
53	Optimization of a thermomechanical treatment of superelastic Ti-Zr-Nb alloys for the production of bar stock for orthopedic implants. **2022**, 928, 167143		1
52	Effect of mechanical alloying on microstructure and mechanical properties of Ti-24Nb-4Zr-3Mn alloys prepared by spark plasma sintering. **2022**, 927, 167023		0
51	Optimization of a Thermomechanical Treatment of Superelastic Ti-Zr-Nb Alloys for the Production of Bar Stock for Orthopedic Implants.		0
50	Unusual martensitic strain accommodation mechanism in an electron beam processed metastable Ti alloy. **2023**, 223, 115069		0

49	Relationship between the Composition and Elastic Modulus of TiZrTa Alloys for Implant Materials. **2022**, 12, 1582	1
48	Laser Ultrasonic Measurements of Phase Transformation Kinetics in Lean Ti–Mo Alloys. **2022**, 53, 3893-3905	0
47	Additively manufactured novel Ti6Al7Nb circular honeycomb cellular solid for energy absorbing applications. **2022**, 854, 143887	0
46	Finite element analysis of tie wings rotation: A new phenomenon in orthodontic bracket-archwire contact assembly during simulated torque. 095441192211220	0
45	Microstructural engineering of a dual-phase Ti-Al-V-Fe alloy via in situ alloying during laser powder bed fusion. **2022**, 59, 103173	0
44	Dynamic response and adiabatic shear behavior of -type Ti–Mo alloys with different deformation modes. **2022**, 857, 144108	0
43	Directed-Energy Deposition. **2022**, 130-159	0
42	An in´vivo preclinical study assessing biocompatibility of Pd-based bulk metallic´glass. **2022**, 1-9	0
41	Titanium and titanium alloys in dentistry: current trends, recent developments, and future prospects. **2022**, e11300	3
40	High-throughput characterization of elastic moduli of Ti-Nb-Zr-O biomedical alloys fabricated by field-assisted sintering technique. **2023**, 932, 167656	0
39	Microplasma spraying of coatings using zirconium wire. **2022**, 2022, 45-50	0
38	Powder bed fusion manufacturing of beta-type titanium alloys for biomedical implant applications: a review. **2022**, 168099	0
37	Additive manufacturing of the high-strength and low modulus biomedical Ti-10Nb alloy under reactive atmosphere. **2022**, 104837	0
36	Processing, microstructures and mechanical response of a metastable Ti-14Mo alloy fabricated by Electron Beam Powder Bed Fusion. **2023**, 61, 103340	0
35	Effect of Niobium and Oxygen Contents on Microstructure and Mechanical Properties of Type Ti–(5–25)Nb–(0.5–1)O (mass%) Alloys for Biomedical Applications. **2023**, 64, 138-146	0
34	Trapped powder removal from sheet-based porous structures based on triply periodic minimal surfaces fabricated by electron beam powder bed fusion. **2023**, 862, 144479	1
33	Microstructure and tensile properties of a multi-alloyed + titanium alloy Ti4.5Al10.5V3Fe. **2023**, 295, 127110	1
32	Microplasma spraying of coatings using zirconium wire. **2022**, 2022, 41-46	0

31	EXPERIMENTAL DETERMINATION OF BIOFILM AND MECHANICAL PROPERTIES OF SURFACES OBTAINED BY CO2 LASER GAS-ASSISTED NITRIDING OF Tiâ6Alâ4V ALLOY. **2022**, 29,	0
30	Wear Characterization of Laser Cladded Ti-Nb-Ta Alloy for Biomedical Applications. **2022**, 12, 1716	0
29	A review of Gum Metal: Developments over the years and new perspectives.	0
28	Mechanical and Anticorrosive Properties of TiNbTa and TiNbTaZr Films on Ti-6Al-4V Alloy. **2022**, 12, 1985	0
27	Effect of interference laser treatment on the surface region homogeneity of a biomedical Ti alloy. **2022**, 156211	0
26	Bi-continuous Mg-Ti interpenetrating-phase composite as a partially degradable and bioactive implant material. **2022**,	0
25	Corrosion response and biocompatibility of graphene oxide (GO) serotonin (Ser) coatings on Ti6Al7Nb and Ti29Nb13Ta4.6Zr (TNTZ) alloys fabricated by electrophoretic deposition (EPD). **2022**, 105236	0
24	Surface Hardening of Ti6Al4V Alloy Using High-Frequency Mechanical Impacts. **2022**, 44, 1453-1474	0
23	A review on Ti alloys for biomedical applications: The influence of alloy composition and thermomechanical processing on mechanical properties, phase composition, and microstructure. 146442072211417	0
22	Surface Modification Techniques for Metallic Biomedical Alloys: A Concise Review. **2023**, 13, 82	2
21	Improved mechanical and wear properties of Tiâ35Nbâ5Taâ7Zrâ1Si alloys fabricated by selective electron beam melting for biomedical application. **2022**, 29, 3825-3835	0
20	Metals and Alloys Choice for Implants. **2023**, 23-48	0
19	Mechanical Aspects of Implant Materials. **2023**, 93-180	0
18	Materials for 3D printing in medicine: metals, polymers, ceramics, and hydrogels. **2023**, 59-103	0
17	Development of a Low-Density and High-Strength Titanium Alloy. **2023**, 13, 251	1
16	A review on various phases and alloy design methods of Ti alloys for biomedical applications. 146442072311520	0
15	Developing alkaline titanate surfaces for medical applications. 1-48	0
14	Surface Modified Ti-18Mo-6Nb-5Ta (wt%) Alloy for Bone Implant Applications: Composite Characterization and Cytocompatibility Assessment. **2023**, 14, 94	0

13	A strategy to regulate the yield ratio of a metastable high Zr-containing □titanium alloy: Synergistic effects of the □domain, □stability and /□nterfaces by varying the □phase content. **2023**, 952, 170024	0
12	Effects of Ga on the structural, mechanical and electronic properties of □Ti-45Nb alloy by experiments and ab initio calculations. **2023**, 140, 105728	0
11	Influence of antibacterial surface treatment on dental implants on cell viability: A systematic review. **2023**, 9, e13693	0
10	Microstructure characteristics and superelastic properties of novel Ti□Cr□Sn superelastic alloys. **2023**, 869, 144790	0
9	Titanium Alloy Fabricated by Additive Manufacturing for Medical Applications: Obtaining, Characterization and Application□Review. **2023**, 13, 462	0
8	Role of Ta in improving corrosion resistance of titanium alloys under highly reducing condition. **2023**, 23, 4955-4964	0
7	Review of the developments in composite materials over the last 15 years. **2023**,	0
6	Titanium alloys developed on the basis of the addition of cheap strong eutectoid □stabilisers. **2023**, 58, 5037-5047	0
5	Fabrication and mechanical properties of Bi-added Ti□Cr alloys for biomedical applications. **2023**, 23, 5644-5652	0
4	A comparative study on the machinability of □type novel Ti29Nb13Ta4.6Zr (TNTZ) biomedical alloys under micro-milling operation. **2023**, 92, 135-146	0
3	Investigation on the Microstructure and Mechanical Properties of the Ti-Ta Alloy with Unmelted Ta Particles by Laser Powder Bed Fusion. **2023**, 16, 2208	0
2	Design of Ti-Mo-W Alloys and Its Correlation with Corrosion Resistance in Simulated Body Fluid (SBF). **2023**, 16, 2453	0
1	Modeling of Severe Plastic Deformation by HSHPT of As-Cast Ti-Nb-Zr-Ta-Fe-O Gum Alloy for Orthopedic Implant. **2023**, 16, 3188	0