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An overview of nitinol medical applications

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#	Paper	IF	Citations
1199	Retrieval and analysis of surgical implants in Brazil: The need for proper regulation. 2001 , 1, 53-61		6
1198	Effect of the composition and thermal annealing on the transformation temperatures of sputtered TiNi shape memory alloy thin films. 2001 , 401, 52-59		75
1197	Characterization of TiNi shape-memory alloy thin films for MEMS applications. <i>Surface and Coatings Technology</i> , 2001 , 145, 107-112	4.4	170
1196	Titanium-Nickel Shape Memory Alloys in Medical Applications. 2001 , 53-86		6
1195	Training of the Two-Way Shape Memory Effect by Bending in NiTi Alloys. 2002 , 124, 397-401		34
1194	In Vivo Result of Porous TiNi Shape Memory Alloy: Bone Response and Growth. 2002 , 43, 1045-1048		38
1193	Creep of binary Ni-rich NiTi shape memory alloys and the influence of pre-creep on martensitic transformations. 2002 , 93, 654-660		23
1192	Phenomenological Modeling and Numerical Simulation of Shape Memory Alloys: A Thermo-Plastic-Phase Transformation Coupled Model. 2002 , 13, 261-273		52
1191	[Retrieval and failure analysis of surgical implants in Brazil: the need for proper regulation]. 2002 , 18, 1347-58		5
1190	Effect of electrolytic hydrogen pre-charging on the cavitation erosion resistance of NiTi: a preliminary study. 2002 , 47, 89-94		12
1189	Shape Memory Materials for Biomedical Applications. 2002 , 4, 91-104		353
1188	The mechanism of multistage martensitic transformations in aged Ni-rich NiTi shape memory alloys. <i>Acta Materialia</i> , 2002 , 50, 793-803	8.4	258
1187	Surface characterization of NiTi modified by plasma source ion implantation. <i>Acta Materialia</i> , 2002 , 50, 4449-4460	8.4	130
1186	Ni ₄ Ti ₃ -precipitation during aging of NiTi shape memory alloys and its influence on martensitic phase transformations. <i>Acta Materialia</i> , 2002 , 50, 4255-4274	8.4	483
1185	Failure analysis of surgical implants in Brazil. 2002 , 9, 621-633		48
1184	Some effects of martensitic transformation on fatigue resistance. 2002 , 25, 785-790		18
1183	Surface oxidation of NiTi shape memory alloy. 2002 , 23, 4863-71		306

1182	Chaos in a shape memory two-bar truss. 2002 , 37, 1387-1395		53
1181	Crack initiation and propagation in 50.9 at. pct Ni-Ti pseudoelastic shape-memory wires in bending-rotation fatigue. 2003 , 34, 2847-2860		101
1180	Constrained phase-transformation of a TiNi shape-memory alloy. 2003 , 34, 219-223		31
1179	The endovascular repair of abdominal aortic aneurysm: an update analysis of structural failure modes of endovascular stent grafts. 2003 , 16, 103-12		16
1178	Effect of chemical etching and aging in boiling water on the corrosion resistance of Nitinol wires with black oxide resulting from manufacturing process. 2003 , 66, 331-40		22
1177	Porous titanium-nickel for intervertebral fusion in a sheep model: part 2. Surface analysis and nickel release assessment. 2003 , 64, 121-9		49
1176	Nonlinear dynamics and chaos in coupled shape memory oscillators. 2003 , 40, 5139-5156		56
1175	Susceptibility to delayed fracture of NiTi superelastic alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 341, 91-97	5-3	48
1174	Theoretical modelling of the effect of plasticity on reverse transformation in superelastic shape memory alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 354, 146-157	5-3	44
1173	Degradation of tensile strength of NiTi superelastic alloy due to hydrogen absorption in methanol solution containing hydrochloric acid. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 360, 153-159	5-3	49
1172	Preliminary study of micro-scale abrasive wear of a NiTi shape memory alloy. 2003 , 254, 1299-1306		37
1171	Twinning and detwinning of <0 1 1> type II twin in shape memory alloy. <i>Acta Materialia</i> , 2003 , 51, 5529-5543		71
1170	Multiple-step martensitic transformations in Ni-rich NiTi alloys--an in-situ transmission electron microscopy investigation. 2003 , 83, 339-363		112
1169	Influencing factors of martensitic transformation behavior of Ni60Al19Mn16Fe5 high-temperature shape memory alloy. 2003 , 358, 245-251		2
1168	A Domain Wall Model for Hysteresis in Ferroelastic Materials. 2003 , 14, 455-471		25
1167	Shape memory effect in nanoindentation of nickel-titanium thin films. 2003 , 83, 257-259		101
1166	Analysis of prolapse in cardiovascular stents: a constitutive equation for vascular tissue and finite-element modelling. 2003 , 125, 692-9		124
1165	The effect of hydride and martensite on the fracture toughness of TiNi shape memory alloy. <i>Smart Materials and Structures</i> , 2004 , 13, N24-N28	3-4	10

1164	Pseudoelasticity of shape-memory titanium–nickel films subjected to dynamic nanoindentation. 2004 , 84, 4274-4276		42
1163	Superelastic Thin Film NiTi-Polymer-Composites and Sputtered Thin-walled Tubes. 2004 , 855, 7		1
1162	A nonlinear finite element method applied to shape memory bars. <i>Smart Materials and Structures</i> , 2004 , 13, 1118-1130	3-4	3
1161	Multiple-step martensitic transformations in Ni-rich NiTi shape memory alloys. 2004 , 50, 187-192		98
1160	In situ TEM observation of two-step martensitic transformation in aged NiTi shape memory alloy. 2004 , 50, 819-823		28
1159	Anatase coating on NiTi via a low-temperature sol-gel route for improving corrosion resistance. 2004 , 51, 1041-1045		39
1158	Using a modified Knoop Indentation Technique to estimate the cavitation erosion resistance of NiTi. <i>Materials Characterization</i> , 2004 , 52, 129-134	3-9	8
1157	Effect of electrothermal annealing on the transformation behavior of TiNi shape memory alloy and two-way shape memory spring actuated by direct electrical current. 2004 , 349, 365-370		8
1156	Annealing-induced evolution of transformation characteristics in TiNi shape memory alloys. 2004 , 353, 9-14		17
1155	Fabrication of porous NiTi shape memory alloy for hard tissue implants by combustion synthesis. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 366, 114-119	5-3	149
1154	Medical shape memory alloy applications—the market and its products. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 378, 16-23	5-3	541
1153	Structural and functional fatigue of NiTi shape memory alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 378, 24-33	5-3	544
1152	Sputter deposition of NiTi to investigate the Ti loss rate as a function of composition from cast melted targets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 378, 429-433	5-3	18
1151	A preliminary study of laser cladding of AISI 316 stainless steel using preplaced NiTi wire. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 380, 20-29	5-3	44
1150	Effect of constituent phase of NiTi shape memory alloy on susceptibility to hydrogen embrittlement. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 374, 177-183	5-3	36
1149	Multiscale structure and properties of cast and deformation processed polycrystalline NiTi shape-memory alloys. 2004 , 35, 2013-2025		82
1148	Surface modification of TiNi alloy through tantalum immersion ion implantation. <i>Surface and Coatings Technology</i> , 2004 , 176, 261-265	4-4	29
1147	Development of medical guide wire of Cu-Al-Mn-base superelastic alloy with functionally graded characteristics. 2004 , 69, 64-9		48

1146	The role of hydride, martensite and atomic hydrogen in hydrogen-induced delayed fracture of TiNi alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 364, 333-338	5.3	15
1145	Microstructure and martensitic transformation behavior of porous NiTi shape memory alloy prepared by hot isostatic pressing processing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 382, 181-187	5.3	99
1144	Characterisation of surface oxidation of nickel-titanium alloy by ion-beam and electrochemical techniques. 2004 , 50, 11-18		59
1143	Surface characteristics and corrosion resistance properties of TiNi shape memory alloy coated with Ta. <i>Surface and Coatings Technology</i> , 2004 , 186, 346-352	4.4	46
1142	TiNi-based thin films in MEMS applications: a review. 2004 , 112, 395-408		610
1141	On the Fremont's constitutive model for shape memory alloys. 2004 , 31, 677-688		26
1140	Influence of thermo-mechanical processing on the microstructure of Cu-based shape memory alloys produced by powder metallurgy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 378, 263-268	5.3	13
1139	Structural fatigue of pseudoelastic NiTi shape memory wires. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 378, 105-109	5.3	103
1138	Studies of surface modified NiTi alloy. 2004 , 235, 126-131		85
1137	SHAPE MEMORY ALLOYS IN SEISMIC RESISTANT DESIGN AND RETROFIT: A CRITICAL REVIEW OF THEIR POTENTIAL AND LIMITATIONS. 2004 , 8, 415-429		94
1136	Shape memory alloy actuators in smart structures: Modeling and simulation. 2004 , 57, 23-46		156
1135	Training and two-way shape memory in NiTi alloys: influence on thermal parameters. 2004 , 381, 130-136		59
1134	High quality vacuum induction melting of small quantities of NiTi shape memory alloys in graphite crucibles. 2004 , 385, 214-223		156
1133	Investigations on Temperature Induced Martensitic Transformations in Sputtered TiNi Thin Films. 2005 , 329, 139-143		0
1132	High Strain-Rate, Small Strain Response of a NiTi Shape-Memory Alloy. 2005 , 127, 83-89		76
1131	Laser fabrication of porous surface layer on NiTi shape memory alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 404, 173-178	5.3	20
1130	Phase transformation behaviors in porous Ni-rich NiTi shape memory alloy fabricated by combustion synthesis. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 392, 106-111	5.3	17
1129	A study on the electrodeposition of tantalum on NiTi alloy in an ionic liquid and corrosion behaviour of the coated alloy. 2005 , 7, 941-946		95

1128	A homogenized free energy model for hysteresis in thin-film shape memory alloys. 2005 , 489, 266-290		24
1127	Surface characterization and immersion tests of TiNi alloy coated with Ta. <i>Surface and Coatings Technology</i> , 2005 , 190, 428-433	4-4	24
1126	On the reaction between NiTi melts and crucible graphite during vacuum induction melting of NiTi shape memory alloys. <i>Acta Materialia</i> , 2005 , 53, 3971-3985	8.4	64
1125	A constitutive model for shape memory alloys considering tensile/compressive asymmetry and plasticity. 2005 , 42, 3439-3457		138
1124	Effect of electrolytic ZrO ₂ coatings on the breakdown potential of NiTi wires used as endovascular implants. <i>Materials Letters</i> , 2005 , 59, 754-758	3-3	22
1123	Crystallographic texture for tube and plate of the superelastic/shape-memory alloy Nitinol used for endovascular stents. 2005 , 72, 190-9		36
1122	Fabrication and characteristics of bioactive sodium titanate/titania graded film on NiTi shape memory alloy. 2005 , 75, 595-602		27
1121	Polymer/NiTi-composites: Fundamental Aspects, Processing and Properties. 2005 , 7, 1014-1023		19
1120	Experimental study of one-dimensional superelastic capability of a nearly equi-atomic NiTi shape memory alloy. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2005 , 36, 438-442	0.9	2
1119	Effects of oxygen ion implantation on wear behavior of NiTi shape memory alloy. 2005 , 37, 1059-1068		17
1118	Thermal processing of polycrystalline NiTi shape memory alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 405, 34-49	5-3	163
1117	Describing internal subloops due to incomplete phase transformations in shape memory alloys. 2005 , 74, 637-647		30
1116	Biomedical Properties of Tantalum Coatings Prepared by Multi Arc Ion-Plating. 2005 , 475-479, 2349-2352		
1115	Investigation of interface electronic structure of annealed Ti/Ni multilayers. 2005 , 17, 7465-7488		5
1114	Microstructural analysis and phase transformation in Ni ₄₉ Mn ₄₉ Ta ferromagnetic shape memory alloys. <i>Smart Materials and Structures</i> , 2005 , 14, 1403-1409	3-4	4
1113	Precision instrument for characterizing shape memory alloy wires in bias spring actuation. 2005 , 76, 065105		10
1112	Pseudoelasticity of martensitic titanium-nickel shape-memory films studied by in situ heating nanoindentation and transmission electron microscopy. 2005 , 87, 263108		30
1111	In situ transmission electron microscopy and nanoindentation studies of phase transformation and pseudoelasticity of shape-memory titanium-nickel films. 2005 , 20, 1808-1813		22

1110	A thin film nitinol heart valve. 2005 , 127, 915-8	28
1109	The possibility of muscle tissue reconstruction using shape memory alloys. 2005 , 2, 2-5	4
1108	Shape recovery of NiTi shape memory alloy under various pre-strain and constraint conditions. <i>Smart Materials and Structures</i> , 2005 , 14, S273-S286	3-4 36
1107	Pseudoelastic cycling of ultra-fine-grained NiTi shape-memory wires. 2005 , 96, 608-618	88
1106	Effect of diamond-like carbon (DLC) on the properties of the NiTi alloys. 2006 , 15, 1720-1726	45
1105	Stents. 2006 ,	5
1104	3D Finite Element Simulation for Shape Memory Alloys. 2006 , 227-236	4
1103	Martensitic transformation of Ni ₅₀ Ti ₄₅ Ta ₅ shape memory alloy. 2006 , 419, 61-65	9
1102	A study on lattice parameters of martensite in Ni ₅₀ Ti ₄₅ Ta ₅ shape memory alloys. 2006 , 426, 144-147	7
1101	Influence of simulated clinical use on the torsional behavior of nickel-titanium rotary endodontic instruments. 2006 , 101, 675-80	65
1100	Corrosion behavior of laser-oxidized NiTi in hanks solution. 2006 ,	
1099	Intermetallics. 2006 ,	1
1098	Property Change During Fixtured Sintering of NiTi Memory Alloy. 2006 , 21, 87-96	24
1097	Near Net-Shape Fabrication of Superelastic NiTi Devices by Sputtering and Photoetching. 2006 , 47, 523-526	5
1096	Vacuum Induction Melting of Ternary NiTiX (X=Cu, Fe, Hf, Zr) Shape Memory Alloys Using Graphite Crucibles. 2006 , 47, 661-669	28
1095	Electropolishing of NiTi shape memory alloys in methanolic H ₂ SO ₄ . 2006 , 52, 1290-1295	51
1094	Effect of phase formation on valence band photoemission and photoresonance study of Ti/Ni multilayers using synchrotron radiation. 2006 , 152, 56-66	4
1093	Shape memory properties of poly(D,L-lactide)/hydroxyapatite composites. 2006 , 27, 4288-95	201

1092	Modeling the atomic structure of an amorphous Ni ₄₆ Ti ₅₄ alloy produced by mechanical alloying using RMC simulations. 2006 , 430, 108-112		4
1091	High ultimate tensile stress in nano-grained superelastic NiTi thin films. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 415, 304-308	5-3	17
1090	Self-deployable origami stent grafts as a biomedical application of Ni-rich TiNi shape memory alloy foil. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 419, 131-137	5-3	424
1089	Surface characteristics and biological properties of paclitaxel-embedding PLGA coatings on TiNi alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 438-440, 1119-1123	5-3	3
1088	Electrochemical corrosion behaviour of Ti ₄₄ Ni ₄₇ Nb ₉ alloy in simulated body fluids. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 438-440, 504-508	5-3	15
1087	Theoretical investigation of wear-resistance mechanism of superelastic shape memory alloy NiTi. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 427, 348-355	5-3	44
1086	Structural properties of FCC and HCP phases in the FeMnSi system: A neutron diffraction experiment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 437, 323-327	5-3	12
1085	Surface modification of NiTi alloys using diamond-like carbon (DLC) fabricated by plasma immersion ion implantation and deposition (PIIID). 2006 , 248, 67-70		23
1084	Formation of diamond-like carbon (DLC) film on the NiTi alloys via plasma immersion ion implantation and deposition (PIIID) for improving corrosion resistance. 2006 , 253, 2050-2055		27
1083	Synthesis and characterization of two shape-memory polymers containing short aramid hard segments and poly(ϵ -caprolactone) soft segments. 2006 , 47, 4251-4260		85
1082	Modeling pore growth in semi-solid alloy foams. 2006 , 178, 88-97		1
1081	Stress and strain states in a pseudoelastic wire subjected to bending rotation. 2006 , 38, 1012-1025		26
1080	Surface oxidation of NiTi shape memory alloy in a boiling aqueous solution containing hydrogen peroxide. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 417, 104-109	5-3	53
1079	Ways to lower transformation temperatures of porous NiTi shape memory alloy fabricated by self-propagating high-temperature synthesis. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 438-440, 883-886	5-3	15
1078	Effect of Cu and Hf additions on NiTi martensitic transformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 438-440, 661-665	5-3	20
1077	Orientation relationship between TiC carbides and B2 phase in as-cast and heat-treated NiTi shape memory alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 438-440, 879-882	5-3	14
1076	Effects of thermo-mechanical cycling on the strain response of NiTiCu shape memory alloy wire actuator. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 428, 217-224	5-3	29
1075	Oxygen depth profiling by resonant RBS in NiTi after plasma immersion ion implantation. 2006 , 249, 355-357		8

1074	The corrosion behavior and hemocompatibility of TiNi alloys coated with DLC by plasma based ion implantation. <i>Surface and Coatings Technology</i> , 2006 , 200, 4543-4548	4-4	28
1073	Structure and wear properties of laser gas nitrided NiTi surface. <i>Surface and Coatings Technology</i> , 2006 , 200, 4879-4884	4-4	24
1072	Plasma surface modification of NiTi shape memory alloy. <i>Surface and Coatings Technology</i> , 2006 , 201, 1542-1547	4-4	21
1071	Investigations on the mechanical behaviour of rough surfaces of TiNi thin films by nano indentation studies. <i>Surface and Coatings Technology</i> , 2006 , 201, 3253-3259	4-4	16
1070	High temperature annealing effect on structural and magnetic properties of Ti/Ni multilayers. 2006 , 253, 2572-2580		19
1069	Surface modification of NiTi alloy with tantalum to improve its biocompatibility and radiopacity. <i>Journal of Materials Science</i> , 2006 , 41, 4961-4964	4-3	63
1068	Influence of negative voltage on the structure and properties of DLC films deposited on NiTi alloys by PBII. <i>Journal of Materials Science</i> , 2006 , 41, 4179-4183	4-3	5
1067	Finite Element Analysis of Shape Memory Alloy Adaptive Trusses with Geometrical Nonlinearities. 2006 , 76, 133		9
1066	Phase transformation and second phases in ternary NiTiCu shape memory alloys. 2006 , 96, 183-187		18
1065	The electrochemical behavior of a Ti50Ni47Fe3 shape memory alloy. <i>Materials Letters</i> , 2006 , 60, 1646-1650	5-9	7
1064	Effect of N ₂ /Ar gas flow ratio on the deposition of TiN/Ti coatings on NiTi shape memory alloy by PIII. <i>Materials Letters</i> , 2006 , 60, 2243-2247	3-3	14
1063	Biomimetic deposition process of an apatite coating on NiTi shape memory alloy. <i>Materials Letters</i> , 2006 , 60, 3002-3006	3-3	7
1062	Effect of prestrain on martensitic transformation in a Ti _{46.4} Ni _{47.6} Nb _{6.0} superelastic alloy and its application to medical stents. 2006 , 76, 179-83		13
1061	Micromanipulator for enhancing surgeon's dexterity in cochlear atraumatic surgery. 2006 , 2006, 335-8		3
1060	High maneuverability guidewire with functionally graded properties using new superelastic alloys. 2006 , 15, 204-8		7
1059	Thermoelastic studies on Nitinol stents. 2006 , 41, 481-495		13
1058	A New Approach to Stress Analysis of Vascular Devices Using High Resolution Thermoelastic Stress Analysis. 2006 , 5-6, 63-70		2
1057	Shape Memory Alloys for Biomedical Applications. 2006 , 49, 109-118		23

1056	Experimental Studies on Active Shape Control of Composite Structures using SMA Actuators. 2006 , 17, 767-777		30
1055	Improvement of Shape-Memory Characteristics and Mechanical Properties of CopperZincAluminum Shape-Memory Alloy with Low Aluminum Content by Grain Refinement. 2006 , 21, 789-795		27
1054	New aspects of bending rotation fatigue in ultra-fine-grained pseudo-elastic NiTi wires. <i>International Journal of Materials Research</i> , 2006 , 97, 1687-1696	0.5	19
1053	Effect of Thermal Processing on Microstructure and Shape-Memory Characteristics of a CopperZincAluminum Shape-Memory Alloy. 2007 , 22, 9-14		7
1052	Transformation fatigue and stress relaxation of shape memory alloy wires. <i>Smart Materials and Structures</i> , 2007 , 16, 2560-2570	3-4	24
1051	Crystallographic mechanisms of fracture in a textured polycrystalline TiNi shape memory alloy. 2007 , 102, 043526		9
1050	The Determination and Evaluation of Nitinol Constitutive Models for Finite Element Analysis. 2007 , 7-8, 81-88		3
1049	Phase Transformation in Ti-Ni-Ta Shape Memory Alloy. 2007 , 130, 147-150		1
1048	Mechanical Properties and Shape Memory Effects of TiNiNb Shape Memory Alloys with Low Niobium Content. 2007 , 546-549, 2261-2264		1
1047	Martensitic Transformation and Superelasticity of Ti-Nb-Pt Alloys. 2007 , 48, 400-406		41
1046	Experimental and numerical study of the superelastic behaviour on NiTi thin-walled tube under biaxial loading. 2007 , 40, 246-254		21
1045	An electrochemical study of the crevice corrosion resistance of NiTi in Hanks'solution. 2007 , 437, 322-328		26
1044	Microstructural characterization of oxide film formed on NiTi by anodization in acetic acid. 2007 , 438, 238-242		59
1043	Reactive extrusion synthesis of mechanically activated Ti ₅₀ Ni powders. 2007 , 15, 1623-1631		22
1042	PdInFe shape memory alloy. 2007 , 90, 261906		17
1041	Laser surface alloying fabricated porous coating on NiTi shape memory alloy. 2007 , 17, 228-231		2
1040	Phase formation of NiTi via solid state reaction. 2007 , T129, 250-254		47
1039	Martensitic transformation and plastic deformation: a comparison. <i>Smart Materials and Structures</i> , 2007 , 16, S115-S125	3-4	7

1038	Nanostructured Shape Memory Alloys for Biomedical Applications. 2007 , 539-543, 505-510		8
1037	Titanium and Titanium Alloy Applications in Medicine. 2007 , 533-576		11
1036	The Effect of Surface Defects on the Cyclic Fatigue Fracture of HEROShaper Ni-Ti rotary files in a Dynamic Model: A Fractographic Analysis. 2007 , 32, 130		4
1035	The Investigation of a Shape Memory Alloy Micro-Damper for MEMS Applications. <i>Sensors</i> , 2007 , 7, 1887-1900		45
1034	Understanding the Deformation and Fracture of Nitinol Endovascular Stents Using In Situ Synchrotron X-Ray Microdiffraction. <i>Advanced Materials</i> , 2007 , 19, 1183-1186	24	32
1033	Magnetic resonance imaging of phase transitions in nitinol. 2007 , 80, 938-45		2
1032	Fracture of Ni-Ti superelastic alloy under sustained tensile load in physiological saline solution containing hydrogen peroxide. 2007 , 82, 558-67		18
1031	Biocorrosion investigation of two shape memory nickel based alloys: Ni-Mn-Ga and thin film NiTi. 2007 , 82, 768-76		24
1030	The effect of grain orientation on the tensile-compressive asymmetry of polycrystalline NiTi shape memory alloy. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2007 , 38, 294-298	0.9	1
1029	Laserstrahlschweißen von Mikrodrüfen aus Nickel-Titan-Formgedächtnislegierungen und austenitischem Stahl. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2007 , 38, 489-493	0.9	1
1028	Effects of pulsing frequency on shape recovery and investigation of nickel out-diffusion after mechanical bending of nitrogen plasma implanted NiTi shape memory alloys. <i>Surface and Coatings Technology</i> , 2007 , 201, 8286-8290	4.4	7
1027	Effect of bias voltage on the structure and the electrochemical corrosion behavior of hydrogenated amorphous carbon (a-C:H) films on NiTi alloys. <i>Surface and Coatings Technology</i> , 2007 , 201, 6906-6909	4.4	8
1026	Characterization and corrosion studies of titania-coated NiTi prepared by sol-gel technique and steam crystallization. 2007 , 253, 6762-6768		46
1025	Surface XPS characterization of NiTi shape memory alloy after advanced oxidation processes in UV/H ₂ O ₂ photocatalytic system. 2007 , 253, 8507-8512		49
1024	Electrochemical micromachining of nitinol by confined-etchant-layer technique. 2007 , 52, 4191-4196		31
1023	Evolution of microstructure and thermomechanical properties during superelastic compression cycling in Cu ₄₉ Ni single crystals. <i>Acta Materialia</i> , 2007 , 55, 4789-4798	8.4	56
1022	Evolution of crack-tip transformation zones in superelastic Nitinol subjected to in situ fatigue: A fracture mechanics and synchrotron X-ray microdiffraction analysis. <i>Acta Materialia</i> , 2007 , 55, 6198-6207	8.4	136
1021	Oxygen and sodium plasma-implanted nickel-titanium shape memory alloy: A novel method to promote hydroxyapatite formation and suppress nickel leaching. 2007 , 257, 687-691		4

1020	Determination of diffusing species from marker experiments in the system NiTiD. 2007 , 257, 714-717		9
1019	Rotating disc electrode study of the electropolishing mechanism of NiTi in methanolic sulfuric acid. 2007 , 53, 915-919		23
1018	Characterization of oxide film formed on NiTi by laser oxidation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 448, 97-103	5:3	40
1017	DLC films fabricated by plasma immersion ion implantation and deposition on the NiTi alloys for improving their corrosion resistance and biocompatibility. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 454-455, 472-476	5:3	31
1016	Numerical study of effect of surface roughness on superelastic behaviour of shape memory alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 458, 312-318	5:3	2
1015	Vacuum induction melting of NiTi shape memory alloys in graphite crucible. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 465, 44-48	5:3	47
1014	Improvement in corrosion resistance of NiTi by anodization in acetic acid. <i>Materials Letters</i> , 2007 , 61, 2385-2388	3:3	51
1013	Laser oxidation of NiTi for improving corrosion resistance in Hanks' solution. <i>Materials Letters</i> , 2007 , 61, 3391-3394	3:3	36
1012	NiTiAg shape memory thin films. 2007 , 56, 1075-1077		27
1011	Hydrogen absorption and thermal desorption behaviors of NiTi superelastic alloy subjected to sustained tensile-straining test with hydrogen charging. 2007 , 57, 393-396		32
1010	Recent advances in nonlinear control technologies for shape memory alloy actuators. 2007 , 8, 818-829		40
1009	Shape memory effects of poly(L-lactide) and its copolymer with poly(ϵ -caprolactone). 2007 , 58, 381-391		51
1008	Corrosion degradation and prevention by surface modification of biometallic materials. 2007 , 18, 725-51		167
1007	Superelasticity in a New BiImplant Material: Ni-rich 55NiTi Alloy. 2007 , 47, 365-371		56
1006	Delivery and release of nitinol stent in carotid artery and their interactions: a finite element analysis. 2007 , 40, 3034-40		80
1005	Surface structure and properties of biomedical NiTi shape memory alloy after Fenton's oxidation. 2007 , 3, 795-806		67
1004	Effects of water plasma immersion ion implantation on surface electrochemical behavior of NiTi shape memory alloys in simulated body fluids. 2007 , 253, 3154-3159		21
1003	Mechanical properties, bioactivity and corrosion resistance of oxygen and sodium plasma treated nickel titanium shape memory alloy. <i>Surface and Coatings Technology</i> , 2007 , 202, 1308-1312	4:4	9

1002	In situ EBSD investigations of the asymmetric stress-induced martensitic transformation in TiNi shape memory alloys under bending. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 498, 278-282	5.3	22
1001	Properties of Zr/Cr/DLC gradient films on TiNi alloy by the PIIID technique combined with PECVD. <i>Surface and Coatings Technology</i> , 2008 , 202, 3011-3016	4.4	38
1000	Study on the shape memory effects of poly(L-lactide-co-epsilon-caprolactone) biodegradable polymers. 2008 , 19, 395-9		43
999	Laser welding of NiTi orthodontic archwires for selective force application. 2008 , 19, 525-9		41
998	Effect of ceramic conversion treatments on the surface damage and nickel ion release of NiTi alloys under fretting corrosion conditions. 2008 , 19, 937-46		11
997	Progress in the understanding of NiTi shape memory alloys. 2008 , 61, 435-445		7
996	Processing and property assessment of NiTi and NiTiCu shape memory actuator springs. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2008 , 39, 499-510	0.9	51
995	Mechanical property analysis of Nitinol defective stent under uniaxial loading/unloading. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2008 , 39, 479-485	0.9	3
994	Computational mechanics of Nitinol stent grafts. 2008 , 41, 2370-8		177
993	Mechanical modeling of self-expandable stent fabricated using braiding technology. 2008 , 41, 3202-12		73
992	Laser welding of NiTi wires. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 481-482, 668-671	5.3	104
991	Surface modifications of Nitinol for biomedical applications. 2008 , 67, 132-9		58
990	High-strength superelastic TiNi microtubes fabricated by sputter deposition. <i>Acta Materialia</i> , 2008 , 56, 2063-2072	8.4	10
989	Lattice stability, elastic constants and macroscopic moduli of NiTi martensites from first principles. <i>Acta Materialia</i> , 2008 , 56, 6232-6245	8.4	174
988	Corrosion behavior and surface characterization of tantalum implanted TiNi alloy. <i>Surface and Coatings Technology</i> , 2008 , 202, 3017-3022	4.4	40
987	Corrosion and wear properties of laser surface modified NiTi with Mo and ZrO ₂ . 2008 , 254, 6725-6730		39
986	Marker experiments to determine diffusing species and diffusion path in medical Nitinol alloys. 2008 , 255, 1107-1109		17
985	Surface structure and biomedical properties of chemically polished and electropolished NiTi shape memory alloys. 2008 , 28, 1430-1434		35

984	Influence of heat treatments on the mechanical properties of high-quality Ni-rich NiTi produced by powder metallurgical methods. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 481-482, 630-634	5.3	26
983	Structuring of sputtered superelastic NiTi thin films by photolithography and etching. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 481-482, 623-625	5.3	15
982	Glassy and liquid vortex matter dynamics in faulted martensites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 481-482, 28-35	5.3	2
981	Direct transmission electron microscopy observations of martensitic transformations in Ni-rich NiTi single crystals during in situ cooling and straining. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 481-482, 452-456	5.3	35
980	Powder metallurgical processing of NiTi shape memory alloys with elevated transformation temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 491, 270-278	5.3	76
979	Influence of the temperature on the structure of an amorphous Ni ₄₆ Ti ₅₄ alloy produced by mechanical alloying. 2008 , 64, 201-209		7
978	Nanocrystalline platinum layer deposited on NiTiCu shape memory strip. 2008 , 158, 33-38		1
977	Thermoelastic Stress Analysis of Vascular Devices. 2008 , 44, 102-118		8
976	Mechanical behavior and fracture characterization of a monocrystalline Cu ₄₁ Ni ₅₉ subjected to thermal cycling treatments under load. <i>Materials Characterization</i> , 2008 , 59, 1630-1637	3.9	16
975	Effects of anodic oxidation in H ₂ SO ₄ electrolyte on the biocompatibility of NiTi shape memory alloy. <i>Materials Letters</i> , 2008 , 62, 3512-3514	3.3	12
974	Metallic and Ceramic Biomaterials: Current and Future Developments. 2008 , 1-14		8
973	Ti-TiC-TiC/DLC gradient nano-composite film on a biomedical NiTi alloy. 2008 , 3, 044103		15
972	Influence of thermomechanical training deformations on TWSME in TiNiCu alloy spring. 2008 , 448, 219-222		10
971	Powder metallurgical production of TiNiNb and TiNiCu shape memory alloys by combination of pre-alloyed and elemental powders. 2008 , 463, 250-256		22
970	Numerical investigation of sintering porous NiTi shape memory alloy by self-propagating high-temperature synthesis. 2008 , 42, 558-563		3
969	Selective de-alloying of NiTi by oxochloridation. 2008 , 50, 1368-1375		14
968	Effects of potential, temperature and pH on hydrogen absorption and thermal desorption behaviors of NiTi superelastic alloy in 0.9% NaCl solution. 2008 , 50, 2061-2069		22
967	Effects of acid type on corrosion and fracture behavior of NiTi superelastic alloy under sustained tensile load in physiological saline solution containing hydrogen peroxide. 2008 , 50, 2785-2795		13

966	Visualization of local electrochemical activity and local nickel ion release on laser-welded NiTi/steel joints using combined alternating current mode and stripping mode SECM. 2008 , 133, 1700-6		26
965	The role of martensite reorientation in the fretting behaviour of nickel titanium shape memory alloy. 2008 , 222, 887-897		12
964	A RATE-INDEPENDENT MODEL FOR THE ISOTHERMAL QUASI-STATIC EVOLUTION OF SHAPE-MEMORY MATERIALS. 2008 , 18, 125-164		45
963	Understanding the Fatigue Behaviour of NiTiCu Shape Memory Alloy Wire Thermal Actuators. 2008 , 378-379, 301-316		13
962	Joining of shape memory alloys. 2008 , 620-632		0
961	Analytical Study of SDOF Systems with Superelastic Shape Memory Alloy Properties. 2008 ,		1
960	Nanoindentation studies of graded shape memory alloy thin films processed using diffusion modification. 2008 , 103, 064315		17
959	A transmission electron microscopy procedure for in-situ straining of miniature pseudoelastic NiTi specimens. <i>International Journal of Materials Research</i> , 2008 , 99, 1150-1156	0.5	8
958	Reversible nanoscale deformation in compositionally graded shape memory alloy films. 2009 , 94, 193114		17
957	Phase Transformations of Nanocrystalline Martensitic Materials. 2009 , 34, 814-821		111
956	Nanoindentation of pseudoelastic NiTi shape memory alloys: Thermomechanical and microstructural aspects. <i>International Journal of Materials Research</i> , 2009 , 100, 936-942	0.5	20
955	Initial oxidation of pure and K doped NiTi shape memory alloys. 2009 , 105, 123501		12
954	Influence of plasma electrolytic oxidation on mechanical characteristics of NiTi alloy. 2009 , 25, 565-569		19
953	Electrochemical Etching of NiTi Alloy in a Neutral Fluoride Solution. 2009 , 156, C428		5
952	Surface modification of TiNi alloys for biomedical applications. 2009 , 173-193		2
951	Regulation, orthopedic, dental, endovascular and other applications of TiNi shape memory alloys. 2009 , 306-326		1
950	Surface investigation of NiTi rotary endodontic instruments after magnetoelectropolishing. 2009 , 1244, 301		1
949	In vivo human electrochemical properties of a NiTi-based alloy (Nitinol) used for minimally invasive implants. 2009 , 89, 1072-8		13

948	Mechanisms of cytotoxicity of nickel ions based on gene expression profiles. 2009 , 30, 141-8		137
947	Effect of mechanical cycling on the stress-strain response of a martensitic Nitinol shape memory alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 525, 60-67	5-3	35
946	XPS and biocompatibility studies of titania film on anodized NiTi shape memory alloy. 2009 , 20, 223-8		23
945	Elementary Transformation and Deformation Processes and the Cyclic Stability of NiTi and NiTiCu Shape Memory Spring Actuators. 2009 , 40, 2530-2544		87
944	Nanomechanical Characterisation of Graded NiTi Films Fabricated Through Diffusion Modification. 2009 , 45, 232-237		11
943	Improvements in fracture properties of NiTi superelastic alloy in physiological saline solution containing hydrogen peroxide by surface modification. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 513-514, 267-275	5-3	6
942	Radiation suppressed oxide growth in the system NiTiO. 2009 , 267, 1634-1637		1
941	Corrosion behaviour of NiTi alloy. 2009 , 54, 921-926		130
940	Adhesion and elasticity of plasma deposited wear resistant a-C:H coatings on nickel-titanium. <i>Surface and Coatings Technology</i> , 2009 , 203, 3214-3218	4-4	7
939	Phase transformation behavior of porous NiTi alloy fabricated by powder metallurgical method. 2009 , 29, 2203-2207		17
938	Fabrication of porous NiTi-shape memory alloy objects by partially hydrided titanium powder for biomedical applications. 2009 , 30, 4483-4487		45
937	Nonlinear dynamics of a nonsmooth shape memory alloy oscillator. 2009 , 40, 197-209		34
936	A macroscopic constitutive model for shape-memory alloys: Theory and finite-element simulations. 2009 , 198, 1074-1086		28
935	Fracture mechanics and microstructure in NiTi shape memory alloys. <i>Acta Materialia</i> , 2009 , 57, 1015-1025.4	5-4	126
934	Microstructure, nickel suppression and mechanical characteristics of electropolished and photoelectrocatalytically oxidized biomedical nickel titanium shape memory alloy. 2009 , 5, 2238-45		27
933	Biocompatible PEG Grafting on DLC-coated Nitinol Alloy for Vascular Stents. 2009 , 24, 316-328		32
932	Selective surface oxidation and nitridation of NiTi shape memory alloys by reduction annealing. 2009 , 51, 635-641		31
931	Surface treatment of NiTi shape memory alloy by modified advanced oxidation process. 2009 , 19, 575-580		11

930	Blood compatibilities of carbon nitride film deposited on biomedical NiTi alloy. 2009 , 18, 1321-1325		18
929	Hydrogen Absorption and Thermal Desorption Behavior of Ni-Ti Superelastic Alloy Immersed in Neutral NaCl and NaF Solutions under Applied Potential. 2009 , 50, 1843-1849		12
928	Shape memory alloys: metallurgy, biocompatibility, and biomechanics for neurosurgical applications. 2009 , 64, 199-214; discussion 214-5		13
927	Surface modifications and their effect on the nickel release rate in nickel-titanium shape memory alloys. <i>International Journal of Materials Research</i> , 2009 , 100, 1099-1108	0.5	2
926	Microstructural and mechanical challenges in biomedical NiTi. <i>Journal of Physics: Conference Series</i> , 2010 , 240, 012004	0.3	1
925	Response of Hydrogen-Induced Bending Deformation in ZrNi Amorphous Membranes. 2010 , 51, 2181-2187		3
924	A 3D finite strain phenomenological constitutive model for shape memory alloys considering martensite reorientation. 2010 , 22, 345-362		30
923	Multifunctional materials: engineering applications and processing challenges. 2010 , 49, 803-826		74
922	Phase volume fractions and strain measurements in an ultrafine-grained NiTi shape-memory alloy during tensile loading. <i>Acta Materialia</i> , 2010 , 58, 2344-2354	8.4	125
921	Relationship between microstructure, cytotoxicity and corrosion properties of a Cu-Al-Ni shape memory alloy. 2010 , 6, 308-17		37
920	Singlet oxygen generating nanolayer coatings on NiTi alloy for photodynamic application. <i>Surface and Coatings Technology</i> , 2010 , 205, S62-S67	4.4	9
919	Aging effects on hardness and dynamic compressive behavior of TiB5Ni (at.%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 1665-1676	5.3	48
918	Influence of cold work and texture on the high-strain-rate response of Nitinol. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 5255-5267	5.3	11
917	Analytical study of the nonlinear behavior of a shape memory oscillator: Part II Resonance secondary. 2010 , 60, 513-524		14
916	Comparison of seismic performance of three restrainers for multiple-span bridges using fragility analysis. 2010 , 61, 83-99		13
915	Tribological behavior of NiTi alloy against 52100 steel and WC at elevated temperatures. <i>Materials Characterization</i> , 2010 , 61, 689-695	3.9	27
914	Effects of cathodic voltages on the structure and properties of ceramic coatings formed on NiTi alloy by micro-arc oxidation. 2010 , 121, 172-177		37
913	Localization Events and Microstructural Evolution in Ultra-Fine Grained NiTi Shape Memory Alloys during Thermo-Mechanical Loading. 2010 , 12, 453-459		8

912	Suppression of Ni ₄ Ti ₃ Precipitation by Grain Size Refinement in Ni-Rich NiTi Shape Memory Alloys. 2010 , 12, 747-753		48
911	Fabrication of Load-Bearing NiTi Scaffolds for Bone Ingrowth by Ni Foam Conversion. 2010 , 12, B320-B325		7
910	Multifunctional shape-memory polymers. <i>Advanced Materials</i> , 2010 , 22, 3388-410	24	724
909	Nanoindentation of a Pseudoelastic NiTiFe Shape Memory Alloy. 2010 , 12, 13-19		30
908	Modular adaptive bone plate connected by Nitinol staple. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2010 , 41, 1070-1080	0.9	5
907	Nitinol one-way shape memory springs: Thermomechanical characterization and actuator design. 2010 , 157, 113-117		33
906	Photopolymerized Thiol-Ene Systems as Shape Memory Polymers. 2010 , 51, 4383-4389		109
905	Constitutive model for uniaxial transformation ratchetting of super-elastic NiTi shape memory alloy at room temperature. <i>International Journal of Plasticity</i> , 2010 , 26, 441-465	7.6	109
904	Variation of mechanical properties of shape memory alloy bars in tension under cyclic loadings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 4412-4417	5.3	6
903	Biocompatibility and corrosion behavior of the shape memory NiTi alloy in the physiological environments simulated with body fluids for medical applications. 2010 , 30, 1112-1117		53
902	Microstructure, mechanical properties, and blood compatibility of zirconium nitride deposited on nickel-titanium shape memory alloy. <i>Surface and Coatings Technology</i> , 2010 , 204, 2841-2845	4.4	8
901	Wear resistance of NiTi alloy after surface mechanical attrition treatment. <i>Surface and Coatings Technology</i> , 2010 , 205, 506-510	4.4	26
900	Influence of Ni on martensitic phase transformations in NiTi shape memory alloys. <i>Acta Materialia</i> , 2010 , 58, 3444-3458	8.4	526
899	Characterization and corrosion behavior of hydroxyapatite/zirconia composite coating on NiTi fabricated by electrochemical deposition. 2010 , 257, 1774-1778		79
898	Surface chemistry and topographical changes of an electropolished NiTi shape memory alloy. 2010 , 207, 807-811		7
897	A metallurgical characterization of ten endodontic Ni-Ti instruments: assessing the clinical relevance of shape memory and superelastic properties of Ni-Ti endodontic instruments. 2010 , 43, 125-34		73
896	TEM studies of the nitrated/oxidized Ni-Ti surface layer. 2010 , 237, 435-8		4
895	Fatigue Life Curves of NiTi Alloys The Z Effect. 2010 , 643, 69-77		0

894	Wavelength Dependent Remote Power Supply for Shape Memory Alloy. 2010 , 21, 175-184	13
893	A Novel Fabrication Method for Nitinol Shape Memory Alloys. 2010 , 442, 309-315	4
892	The response of macrophages to a Cu-Al-Ni shape memory alloy. 2010 , 25, 269-86	6
891	The Effects of Homogenization Time and Cooling Environment on Microstructure and Transformation Temperatures of Ni-42.5wt%Ti-7.5wt%Cu Alloy. 2010 , 297-301, 344-350	5
890	An in situ tensile tester for studying electrochemical repassivation behavior: fabrication and challenges. 2010 , 81, 033902	4
889	Influence of heat treatment and microstructure on the tensile pseudoelastic response of an Ni-rich NiTi shape memory alloy. <i>International Journal of Materials Research</i> , 2010 , 101, 623-630	0.5 6
888	Fiber-optic nonlinear endomicroscopy with focus scanning by using shape memory alloy actuation. 2010 , 15, 060506	13
887	Corrosion products and mechanism on NiTi shape memory alloy in physiological environment. 2010 , 25, 350-358	36
886	Effect of low-temperature precipitation on the transformation characteristics of Ni-rich NiTi shape memory alloys during thermal cycling. 2010 , 18, 1172-1179	61
885	Cyclic fatigue resistance of rotary nickel-titanium instruments submitted to nitrogen ion implantation. 2010 , 36, 1183-6	24
884	Synthesis of nanocrystalline intermetallic compounds in NiTiAl system by mechanochemical method. 2010 , 491, 344-348	4
883	NiTi Production via the FFC Cambridge Process: Refinement of Process Parameters. 2010 , 157, E36	14
882	Characterization of the FFC Cambridge Process for NiTi Production Using In Situ X-Ray Synchrotron Diffraction. 2010 , 157, E57	16
881	Elastic Constants of Austenitic and Martensitic Phases of NiTi Shape Memory Alloy. 2010 , 1-6	0
880	A flexible optrode for deep brain neurophotronics. 2011 ,	1
879	Torsional Behavior of NiTi Wires and Tubes: Modeling and Experimentation. 2011 , 22, 1239-1248	23
878	The Effect of Heat Treatment on the Shape Memory Effect of Ni-Ti Alloy Ultra-Thin Wires. 2011 , 332-334, 912-915	
877	Stabilizing Effect of (100) Compound Twinning in NiTi Martensite. 2011 , 465, 81-84	1

876	Seismic Response Control Using Shape Memory Alloys: A Review. 2011 , 22, 1531-1549		253
875	Induction heating vs conventional heating for the hydrothermal treatment of nitinol and its subsequent 2-(methacryloyloxy)ethyl 2-(trimethylammonio)ethyl phosphate coating by surface-initiated atom transfer radical polymerization. 2011 , 3, 4059-66		26
874	The location of atomic hydrogen in NiTi alloy: A first principles study. 2011 , 50, 820-823		15
873	Property-Control of TiNi System Intermetallics and Their Characteristics. 2011 , 52, 2189-2196		4
872	Investigating microstructural evolution during homogenization of the equiatomic NiTi shape memory alloy produced by vacuum arc remelting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 7952-7955	5-3	20
871	Effects of temperature and loading rate on the deformation characteristics of superelastic TiNi shape memory alloys under localized compressive loads. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 530, 628-632	5-3	15
870	Characteristics of DLC containing Ti and Zr films deposited by reactive magnetron sputtering. 2011 , 18, 9-15		12
869	Corrosion behavior on orthopedic NiTi alloy with nanocrystalline/amorphous surface. 2011 , 126, 102-107		43
868	Design Principles for Rapid Prototyping Forces Sensors using 3D Printing. 2011 , PP, 1-5		89
867	Functionalization of Nitinol surface toward a versatile platform for post-grafting chemical reactions. 2011 , 56, 8129-8137		13
866	Mechanical and microstructural integrity of nickel-titanium and stainless steel laser joined wires. <i>Acta Materialia</i> , 2011 , 59, 6538-6546	8-4	45
865	Fracture of thermally activated NiTi shape memory alloy wires. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 5502-5510	5-3	15
864	Solid, shape recovered Bulk Nitinol: Part II Mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 5551-5559	5-3	6
863	Introduction of antibacterial function into biomedical TiNi shape memory alloy by the addition of element Ag. 2011 , 7, 2758-67		119
862	Preparation and characterization of hydroxyapatite/titania composite coating on NiTi alloy by electrochemical deposition. <i>Surface and Coatings Technology</i> , 2011 , 205, 3280-3284	4-4	74
861	Properties and rapid consolidation of nanostructured NiTi by pulsed current activated sintering. 2011 , 17, 239-243		1
860	Effects of Process Parameters upon the Shape Memory and Pseudo-Elastic Behaviors of Laser-Welded NiTi Thin Foil. 2011 , 42, 2264-2270		51
859	On the Stress-Induced Formation of R-Phase in Ultra-Fine-Grained Ni-Rich NiTi Shape Memory Alloys. 2011 , 42, 2556-2574		44

858	The Effect of Material Removal on the Corrosion Resistance and Biocompatibility of Nitinol Laser-Cut and Wire-Form Products. <i>Journal of Materials Engineering and Performance</i> , 2011 , 20, 802-806	1.6	7
857	Analysis of Wire Position and Operating Conditions on Functioning of NiTi Wires for Shape Memory Actuators. <i>Journal of Materials Engineering and Performance</i> , 2011 , 20, 688-696	1.6	6
856	Improvement in corrosion resistance of commercial pure titanium for the enhancement of its biocompatibility. 2011 , 62, 310-319		26
855	On the robustness and efficiency of integration algorithms for a 3D finite strain phenomenological SMA constitutive model. 2011 , 85, 107-134		25
854	Topology optimization of planar shape memory alloy thermal actuators using element connectivity parameterization. 2011 , 88, 817-840		15
853	The intrinsically high pitting corrosion resistance of mechanically polished nitinol in simulated physiological solutions. 2011 , 99, 1-13		13
852	An improved, fully symmetric, finite-strain phenomenological constitutive model for shape memory alloys. 2011 , 47, 166-174		31
851	On the effect of superimposed external stresses on the nucleation and growth of Ni ₄ Ti ₃ particles: A parametric phase field study. <i>Acta Materialia</i> , 2011 , 59, 3287-3296	8.4	43
850	Transmission electron microscopy investigation of dislocation slip during superelastic cycling of NiTi wires. <i>International Journal of Plasticity</i> , 2011 , 27, 282-297	7.6	220
849	Fabrication, properties, and cytocompatibility of ZrC film on electropolished NiTi shape memory alloy. 2011 , 31, 423-427		24
848	Characterization and corrosion study of NiTi laser surface alloyed with Nb or Co. 2011 , 257, 3269-3274		17
847	Laser welding of thin foil nickel-titanium shape memory alloy. 2011 , 49, 121-126		50
846	Effect of electrical heating conditions on functional fatigue of thin NiTi wire for shape memory actuators. 2011 , 10, 3423-3428		27
845	Characteristics and in vitro biological assessment of (Ti, O, N)/Ti composite coating formed on NiTi shape memory alloy. 2011 , 519, 4623-4628		8
844	Ab initio study of pressure stabilized NiTi allotropes: Pressure-induced transformations and hysteresis loops. 2011 , 84,		29
843	Minimally-invasive epileptogenic focus detection using the subdural electrodes manipulated by the shape-memory-alloy thin wire. 2011 ,		2
842	Effect of hydrogen on the tensile strength of aged NiTi superelastic alloy. 2011 , 22, 2053-2059		32
841	Microstructure Observation of Ni ₅₀ Ti ₄₅ Ta ₅ Shape Memory Alloy. 2011 , 391-392, 452-456		

840	High-temperature deformation processing maps for a NiTiCu shape memory alloy. 2011 , 26, 2484-2492		8
839	Alleviating fatigue and failure of NiTi endodontic files by a coating containing inorganic fullerene-like WS ₂ nanoparticles. 2011 , 26, 1234-1242		23
838	Simulation on Pipe Joints Expansion Technology of NiTiNb Shape Memory Alloy. 2011 , 189-193, 1711-1717		3
837	Subdural Electroocutogram Measurement with a Minimally-Invasive Procedure Using an SMA-Manipulated Microelectrode Array. 2011 , 222, 313-317		6
836	Effects of Hypophosphate Concentrations on the Characteristics of Micro-Arc Oxidation Coatings Formed on Biomedical NiTi Alloy. 2011 , 314-316, 240-244		1
835	Tribological Behavior of Heat Treated Ni-rich NiTi Alloys. 2011 , 133,		3
834	Biomaterials for improving the blood and tissue compatibility of total artificial hearts (TAH) and ventricular assist devices (VAD). 2011 , 207-235		2
833	Comparison between Einstein and Debye models for an amorphous Ni ₄₆ Ti ₅₄ alloy produced by mechanical alloying investigated using extended x-ray absorption fine structure and cumulant expansion. 2011 , 134, 064503		10
832	Effect of Annealing Temperature on the Transformation Temperature and Texture of Ni ₄₇ Ti ₄₄ Nb ₉ Cold-Rolled Plate. 2012 , 557-559, 1281-1287		3
831	Numerical durability evaluation of Nitinol stent. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012 , 15 Suppl 1, 99-101	2.1	1
830	Shape memory, superelastic and low Young's modulus alloys. 2012 , 462-490		7
829	In Vitro Blood Compatibility of Alumina Coatings Prepared by Micro-Arc Oxidation on Biomedical NiTi Alloy. 2012 , 184-185, 1021-1024		1
828	Effect of Normal Load and Sliding Distance on the Wear Behavior of NiTi Alloy. 2012 , 55, 677-684		18
827	Biocompatible, smooth, plasma-treated nickel-titanium surface--an adequate platform for cell growth. 2012 , 26, 707-31		12
826	Experimental Tests on Fine Nitinol Wires Used in Medical Applications. 2012 , 188, 65-69		
825	Enhanced thermomechanical functionality of a laser processed hybrid NiTi/NiTiCu shape memory alloy. <i>Smart Materials and Structures</i> , 2012 , 21, 045018	3.4	10
824	Mechanical fatigue and fracture of Nitinol. 2012 , 57, 1-37		240
823	Laser surface modification of nickel-titanium (NiTi) alloy biomaterials to improve biocompatibility and corrosion resistance. 2012 , 124-151		1

822	Cytocompatibility and haemocompatibility of Zr, ZrC and ZrCN films. 2012 , 28, 448-452		3
821	Introduction to Active Smart Materials for Biomedical Applications. 2012 , 1-27		5
820	Design optimization of a shape memory alloy-actuated robotic catheter. 2012 , 23, 545-562		42
819	Fracture and corrosion behaviors of NiTi superelastic alloy under sustained tensile loading in neutral fluoride solution containing hydrogen peroxide. 2012 , 544, 24-29		7
818	Oxygen Adsorption and Diffusion on NiTi Alloy (100) Surface: A Theoretical Study. 2012 , 116, 21771-21779		15
817	Polyelectrolyte Multilayer Deposition on Nickel Modified with Self-Assembled Monolayers of Organophosphonic Acids for Biomaterials: Electrochemical and Spectroscopic Evaluation. 2012 , 116, 19252-19261		10
816	Porous NiTi surfaces for biomedical applications. 2012 , 258, 5244-5249		23
815	PIIID-formed (Ti, O)/Ti, (Ti, N)/Ti and (Ti, O, N)/Ti coatings on NiTi shape memory alloy for medical applications. 2012 , 32, 1469-79		10
814	Shape optimization of stress concentration-free lattice for self-expandable Nitinol stent-grafts. 2012 , 45, 1028-35		31
813	Susceptibility to stress corrosion cracking of NiTi laser weldment in Hanks solution. 2012 , 57, 260-269		21
812	Potentiodynamic polarization study on electropolished nitinol vascular implants. 2012 , 100, 2231-8		9
811	Analysis of the compression process and dimensional optimization of self-expanding stent of a nickel titanium alloy. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2012 , 43, 719-724	0.9	1
810	Effect of micro-arc oxidation surface modification on the properties of the NiTi shape memory alloy. 2012 , 23, 2839-46		14
809	Incorporation of Shape Memory Alloy Actuators into Morphing Aerostructures. 2012 , 231-260		3
808	The biocompatibility and mechanical properties of cylindrical NiTi thin films produced by magnetron sputtering. 2012 , 32, 2523-2528		23
807	Fatigue-Life Computational Analysis for the Self-Expanding Endovascular Nitinol Stents. <i>Journal of Materials Engineering and Performance</i> , 2012 , 21, 2218-2230	1.6	13
806	Hydrothermal Growth Mechanism of Controllable Hydrophilic Titanate Nanostructures on Medical NiTi Shape Memory Alloy. <i>Journal of Materials Engineering and Performance</i> , 2012 , 21, 2600-2606	1.6	11
805	Process Mechanics of Low Plasticity Burnishing of Nitinol Alloy. <i>Journal of Materials Engineering and Performance</i> , 2012 , 21, 2607-2617	1.6	15

804	Effect of post-weld-annealing on the tensile deformation characteristics of laser-welded NiTi thin foil. 2012 , 18, 691-697		4
803	Effect of thermal oxidation on the surface characteristics and corrosion behavior of a Ta-implanted Ti-50.6Ni shape memory alloy. 2012 , 19, 1134-1141		3
802	Effects of Ni/Ti Ratio and Heat-Treatment on Transformation Temperature, Mechanical Properties and Shape Recovery Strain of Ni-Ti-Nb Alloy. 2012 , 535-537, 919-923		1
801	Geometry optimization in buckling of a shape memory alloy column due to constrained recovery. 2012 , 23, 65-76		7
800	Mechanical properties of stent-graft materials. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2012 , 226, 330-341	1.3	4
799	Biointerface: protein enhanced stem cells binding to implant surface. 2012 , 23, 2203-15		17
798	Deflecting load of nickel titanium rotary instruments during cyclic fatigue. 2012 , 31, 389-93		11
797	Characterisation of the surface microstructure of a melt-spun Ni-Ti shape memory ribbon. 2012 , 44, 997-1000	o	
796	Nonlinear dynamics and vibration reduction of a dry friction oscillator with SMA restraints. 2012 , 69, 1365-1381		9
795	The influence of secondary phase carbide particles on the passivity behaviour of NiTi shape memory alloys. 2012 , 63, n/a-n/a		2
794	Two-Stage Reactive Polymer Network Forming Systems. 2012 , 22, 1502-1510		108
793	Influence of blocked polyisocyanate on thermomechanical, shape memory and biodegradable properties of poly(lactic acid)/poly(ethylene glycol) blends. 2012 , 21, 317-323		9
792	Oxide Scales Formed on NiTi and NiPtTi Shape Memory Alloys. 2012 , 43, 2325-2341		14
791	Cast-Replicated NiTiCu Foams with Superelastic Properties. 2012 , 43, 2939-2944		13
790	Effect of Postweld Heat Treatment on the Microstructure and Cyclic Deformation Behavior of Laser-Welded NiTi-Shape Memory Wires. 2012 , 43, 1956-1965		35
789	Microstructure and Phase Transformation Behavior of a Stress-Assisted Heat-Treated Ti-Rich NiTi Shape Memory Alloy. <i>Journal of Materials Engineering and Performance</i> , 2012 , 21, 1806-1812	1.6	14
788	The Effect of Deformation Heating on Restoration and Constitutive Equation of a Wrought Equi-Atomic NiTi Alloy. <i>Journal of Materials Engineering and Performance</i> , 2012 , 21, 516-523	1.6	8
787	Characterisation of melt spun Ni-Ti shape memory Ribbons microstructure. 2012 , 18, 413-417		5

786	Experimental analysis of the quasi-static and dynamic torsional behaviour of shape memory alloys. 2012 , 49, 32-42		19
785	Stimulus-responsive shape memory materials: A review. 2012 , 33, 577-640		709
784	Laser welding of TiNi shape memory alloy and stainless steel using Ni interlayer. 2012 , 39, 285-293		72
783	Orientation dependence of stress-induced phase transformation and dislocation plasticity in NiTi shape memory alloys on the micro scale. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 538, 265-271	5.3	46
782	Susceptibility to environmentally induced cracking of laser-welded NiTi wires in Hanks solution at open-circuit potential. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 544, 38-47	5.3	13
781	X-ray analyses of thermally grown and reactively sputtered tantalum oxide films on NiTi alloy. 2012 , 284, 49-52		5
780	Experimental study on dieless drawing of Nickel-Titanium alloy. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012 , 8, 8-20	4.1	11
779	Topography of four different endodontic rotary systems, before and after being used for the 12th time. 2012 , 75, 97-102		19
778	In Situ Synthesis and Characterization of Shape Memory Alloy Nitinol by Laser Direct Deposition. 2012 , 43, 650-657		46
777	Origin of Microstructural Irreversibility in Ni-Ti Based Shape Memory Alloys during Thermal Cycling. 2012 , 43, 1277-1287		8
776	OliverPharr indentation method in determining elastic moduli of shape memory alloysA phase transformable material. 2013 , 61, 2015-2033		71
775	Modeling of Residual Stresses in Shape Memory Alloy - Ceramic Composites. 2013 ,		
774	Characteristics of the stress-induced formation of R-phase in ultrafine-grained NiTi shape memory wire. 2013 , 579, 249-252		18
773	Bending rotation HCF testing of pseudoelastic Ni-Ti shape memory alloys. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2013 , 44, 633-640	0.9	11
772	Formation of a nano-patterning NiTi surface with Ni-depleted superficial layer to promote corrosion resistance and endothelial cell-material interaction. 2013 , 24, 105-14		16
771	Uniaxial and buckling mechanical response of auxetic cellular tubes. <i>Smart Materials and Structures</i> , 2013 , 22, 084008	3.4	58
770	Shaping tissue with shape memory materials. 2013 , 65, 515-35		159
769	Dent Resistance and Effect of Indentation Loading Rate on Superelastic TiNi Alloy. 2013 , 44, 3544-3551		22

768	Reduction of environmentally induced cracking of laser-welded shape memory NiTi wires via post-weld heat-treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 588, 388-394	5.3	7
767	Electronic and structural influence of Ni by Pd substitution on the hydrogenation properties of TiNi. 2013 , 198, 475-484		13
766	Design and finite element-based fatigue prediction of a new self-expandable percutaneous mitral valve stent. 2013 , 45, 1153-1158		21
765	Rotary-bending fatigue characteristics of medical-grade Nitinol wire. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013 , 27, 19-32	4.1	61
764	Simultaneous measurement of mechanical and electrical contact resistances during nanoindentation of NiTi shape memory alloys. <i>Acta Materialia</i> , 2013 , 61, 5119-5129	8.4	19
763	A transforming metal nanocomposite with large elastic strain, low modulus, and high strength. 2013 , 339, 1191-4		190
762	Electrografting of in situ generated pyrrole derivative diazonium salt for the surface modification of nickel. 2013 , 109, 781-789		18
761	Titanium and Nitinol (NiTi). 2013 , 120-124		5
760	Rate dependent damping of single crystal CuAlNi shape memory alloy. <i>Materials Letters</i> , 2013 , 109, 287-290		30
759	Impact of material structure on the fatigue behaviour of NiTi leading to a modified Coffin-Manson equation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 585, 356-362	5.3	29
758	A recoil resilient lumen support, design, fabrication and mechanical evaluation. 2013 , 23, 065001		6
757	Ti _{80.8} at.% Ni wire with variable mechanical properties created by spatial electrical resistance over-ageing. 2013 , 577, S245-S250		12
756	Enteral stents in malignant bowel obstruction. 2013 , 23, 153-64		2
755	In vitro mesenchymal stem cell responses on laser-welded NiTi alloy. 2013 , 33, 1344-54		9
754	Microstructure and precipitates in annealed Co ₃₈ Ni ₃₃ Al ₂₉ ferromagnetic shape memory alloy. 2013 , 572, 5-10		9
753	Machinability and surface integrity of Nitinol shape memory alloy. 2013 , 62, 83-86		95
752	The processing of NiTi shape memory alloys by equal-channel angular pressing at room temperature. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 576, 178-184	5.3	39
751	Effects of Anodic Voltages on Microstructure and Properties of Plasma Electrolytic Oxidation Coatings on Biomedical NiTi Alloy. 2013 , 29, 22-28		18

750	Electrochemically deposited chitosan/Ag complex coatings on biomedical NiTi alloy for antibacterial application. <i>Surface and Coatings Technology</i> , 2013 , 232, 370-375	4.4	38
749	Characterization of ZrC coatings deposited on biomedical 316L stainless steel by magnetron sputtering method. <i>Surface and Coatings Technology</i> , 2013 , 224, 34-41	4.4	22
748	Evolution of microstructure and texture in Ni _{49.4} Ti _{38.6} Hf ₁₂ shape memory alloy during hot rolling. 2013 , 42, 1-8		10
747	An in situ neutron diffraction study of shape setting shape memory NiTi. <i>Acta Materialia</i> , 2013 , 61, 3585-3599		29
746	Resistance welding of NiTi shape memory alloy tubes. 2013 , 213, 1139-1145		30
745	High-temperature mechanical and shape memory properties of TiPtZr and TiPtRu alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 564, 34-41	5.3	28
744	Laser welding of NiTi shape memory alloy: Comparison of the similar and dissimilar joints to AISI 304 stainless steel. <i>Optics and Laser Technology</i> , 2013 , 54, 151-158	4.2	62
743	Effects of the thickness of Cu filler metal on the microstructure and properties of laser-welded TiNi alloy and stainless steel joint. 2013 , 50, 342-350		53
742	Study of the formation process and the characteristics of tantalum layers electrodeposited on Nitinol plates in the 1-butyl-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide ionic liquid. 2013 , 89, 346-358		14
741	Design and fabrication of a bending rotation fatigue test rig for in situ electrochemical analysis during fatigue testing of NiTi shape memory alloy wires. 2013 , 84, 035102		13
740	Impurity levels and fatigue lives of pseudoelastic NiTi shape memory alloys. <i>Acta Materialia</i> , 2013 , 61, 3667-3686	8.4	110
739	On the crystallographic anisotropy of nanoindentation in pseudoelastic NiTi. <i>Acta Materialia</i> , 2013 , 61, 602-616	8.4	49
738	Fatigue behavior of laser-welded NiTi wires in small-strain cyclic bending. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 407-415	5.3	38
737	Phase transformation characteristics and mechanical characterization of nitinol synthesized by laser direct deposition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 836-843	5.3	57
736	Laser welding of TiNi shape memory alloy and stainless steel using Co filler metal. <i>Optics and Laser Technology</i> , 2013 , 45, 453-460	4.2	48
735	Bending-rotation tests of Niti superelastic wires used in medical applications. 2013 ,		
734	Biomimetic deposition of apatite coatings on biomedical NiTi alloy coated with amorphous titanium oxide by microarc oxidation. 2013 , 29, 749-753		2
733	Radio-Controlled Microactuator Based on Shape-Memory-Alloy Spiral-Coil Inductor. 2013 , 22, 331-338		22

732	Effect of Cold-Rolling Rate on Texture in Ti-Mo-Al-Zr Shape Memory Alloy. 2013 , 738-739, 262-266		6
731	Compliant articulation structure using superelastic NiTiNOL. <i>Smart Materials and Structures</i> , 2013 , 22, 094018	3-4	23
730	Functionality Evaluation of a Novel Smart Expandable Pedicle Screw to Mitigate Osteoporosis Effect in Bone Fixation: Modeling and Experimentation. 2013 , 2013, 1-8		5
729	Thermomechanical Constraints on Pseudoelasticity During Nanoindentation of Binary and Ternary NiTi(Fe) Alloys. 2013 , 639-644		
728	Texture evolution during nitinol martensite detwinning and phase transformation. 2013 , 103, 241909		21
727	Indentation-induced two-way shape-memory effect in NiTi. 2013 ,		
726	Micropatterned Freestanding Superelastic TiNi Films. 2013 , 15, 66-69		51
725	Diffusionless Transformations. 2013 ,		6
724	Fabrication of a novel laser-processed NiTi shape memory microgripper with enhanced thermomechanical functionality. 2013 , 24, 984-990		22
723	WITHDRAWN: In situ W/NiTi shape memory alloy composite of high radiopacity. 2013 ,		
722	High performance shape memory effect in nitinol wire for actuators with increased operating temperature range. 2014 , 07, 1450063		10
721	Materials Used in Biomaterial Applications. 2014 , 27-81		
720	Synthesis and characterization of hybrid micro/nano-structured NiTi surfaces by a combination of etching and anodizing. 2014 , 25, 055602		15
719	Strain rate response of a NiTi shape memory alloy after hydrogen charging. 2014 , 94, 30-36		15
718	Effect of high-pressure torsion deformation on surface properties and biocompatibility of Ti-50.9 mol. %Ni alloys. 2014 , 9, 029007		5
717	Effect of SLM Parameters on Transformation Temperatures of Shape Memory Nickel Titanium Parts. 2014 , 16, 1140-1146		141
716	Shake table tests and analytical simulations of a steel structure with shape memory alloy dampers. <i>Smart Materials and Structures</i> , 2014 , 23, 125002	3-4	21
715	Microarc oxidation of nearly equiatomic NiTi alloy under constant current. 2014 , 18, S4-968-S4-972		

714	Martensitic Transformation Behaviour of Ti50Pt50-xCox Shape Memory Alloys. 2014 , 1019, 385-390		
713	Effect of Heat Treatment Condition on Texture in Ti-Mo-Al-Zr Shape Memory Alloy. 2014 , 922, 622-625		3
712	Effect of ternary element addition on the corrosion behaviour of NiTi shape memory alloys. 2014 , 65, 18-22		22
711	The improved superelasticity of NiTi alloy via electropulsing treatment for minutes. 2014 , 584, 225-231		28
710	An overview of NiTi shape memory alloy: Corrosion resistance and antibacterial inhibition for dental application. 2014 , 583, 455-464		47
709	Improvement of corrosion resistance and antibacterial effect of NiTi orthopedic materials by chitosan and gold nanoparticles. 2014 , 292, 390-399		47
708	The effect of notches on the fatigue behavior in NiTi shape memory alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 610, 188-196	5.3	3
707	Quintupling fatigue resistance of intravascular stents via a simple design concept. 2014 , 86, 57-63		8
706	Site occupation of Nb atoms in ternary NiTiNb shape memory alloys. <i>Acta Materialia</i> , 2014 , 74, 85-95	8.4	28
705	Fiber laser drilling of Ni46Mn27Ga27 ferromagnetic shape memory alloy. <i>Optics and Laser Technology</i> , 2014 , 63, 1-7	4.2	10
704	The surface oxidation behavior of Ni5.16%Ti shape memory alloys at different temperatures. 2014 , 115, 561-565		13
703	A mesoscopic thermomechanically coupled model for thin-film shape-memory alloys by dimension reduction and scale transition. 2014 , 26, 683-713		1
702	An intriguing design concept to enhance the pulsatile fatigue life of self-expanding stents. 2014 , 16, 133-41		15
701	Pseudoelastic behaviour of perforated NiTi shape memory plates under tension. 2014 , 50, 59-64		20
700	Nanostructured titanium-based materials for medical implants: Modeling and development. 2014 , 81, 1-19		166
699	Effect of laser treatment on the attachment and viability of mesenchymal stem cell responses on shape memory NiTi alloy. 2014 , 42, 254-63		25
698	Photo-driven Super Absorber as an Active Metamaterial with a Tunable Molecular-Plasmonic Coupling. 2014 , 2, 705-710		28
697	State of the art in nonlinear dynamic analysis of smart structures with SMA members. 2014 , 75, 108-117		7

696	Thermal cycling of stress-induced martensite for high-performance shape memory effect. 2014 , 80, 13-16	22
695	Ab initio study of point defects in NiTi-based alloys. 2014 , 89,	23
694	Polyelectrolyte Multilayers Deposition on Nitinol Modified by In Situ Generated Diazonium in Gentle Conditions. 2014 , 161, G55-G62	7
693	Electrodeposition of polypyrrole on Nitinol alloy in the presence of inhibitor ions for corrosion protection. 2014 , 81, 36-44	28
692	A review of shape memory alloy research, applications and opportunities. 2014 , 56, 1078-1113	2000
691	Vickers Indentation Induced One-Way and Two-Way Shape Memory Effect in Austenitic NiTi. 2014 , 16, 72-79	10
690	The effect of heating rate on the surface chemistry of NiTi. 2014 , 10, 4919-4923	13
689	Programmable mechanically assisted geometric deformations of glassy two-stage reactive polymeric materials. 2014 , 6, 6111-9	21
688	Thermomechanical properties of Ni-Ti shape memory wires containing nanoscale precipitates induced by stress-assisted ageing. 2014 , 10, 5178-5192	28
687	A predictive model and validation of laser cutting of nitinol with a novel moving volumetric pulsed heat flux. 2014 , 214, 2926-2934	5
686	Austenite \rightarrow martensite phase transformation of biomedical Nitinol by ball burnishing. 2014 , 214, 3122-3130	22
685	Sudden stress-induced transformation events during nanoindentation of NiTi shape memory alloys. <i>Acta Materialia</i> , 2014 , 78, 144-160	8.4 32
684	An original architected NiTi silicone rubber structure for biomedical applications. 2014 , 45, 184-90	16
683	Applications of shape memory polymers (SMPs) in mechanobiology and bone repair. 2014 , 111-146	2
682	Nitinol-based nanotubular coatings for the modulation of human vascular cell function. 2014 , 14, 5021-8	36
681	Porous NiTi shape memory alloys produced by SHS: microstructure and biocompatibility in comparison with Ti ₂ Ni and TiNi ₃ . 2014 , 25, 2277-85	29
680	Poly(glycerol sebacate urethane)-cellulose nanocomposites with water-active shape-memory effects. 2014 , 15, 2663-71	91
679	A subspace thermodynamic model for shape memory alloy wire elements undergoing combined thermo-mechanical axial and torsional loads. <i>Smart Materials and Structures</i> , 2014 , 23, 085027	3.4 1

678	Dissimilar Laser Joining of NiTi SMA and MP35N Wires. 2014 , 45, 3533-3544		24
677	Effect of Inclusion Size and Distribution on the Corrosion Behavior of Medical-Device Grade Nitinol Tubing. <i>Journal of Materials Engineering and Performance</i> , 2014 , 23, 2635-2640	1.6	18
676	Microstructure, Phase Transformations, and Properties of Hot-Extruded Ni-Rich NiTi Shape Memory Alloy. <i>Journal of Materials Engineering and Performance</i> , 2014 , 23, 2362-2367	1.6	10
675	A phenomenological constitutive model for the pseudoelastic behavior of shape memory alloys. 2014 , 28, 979-988		2
674	Effect of laser microcutting on thermo-mechanical properties of NiTiCu shape memory alloy. 2014 , 20, 83-92		12
673	A study on the pseudoelasticity of low temperature aged and thermomechanically treated Ti-51.5 at.% Ni shape memory alloy. <i>International Journal of Materials Research</i> , 2014 , 105, 1173-1178	0.5	3
672	Evaluation of passive oxide layer formation-biocompatibility relationship in NiTi shape memory alloys: geometry and body location dependency. 2014 , 36, 118-29		27
671	Mechanical, microstructural and thermal properties of a 50:50at.% nickel titanium alloy subjected to a dieless drawing process. <i>Acta Materialia</i> , 2014 , 68, 140-149	8.4	8
670	Surface integrity evolution from main cut mode to finish trim cut mode in W-EDM of shape memory alloy. 2014 , 308, 253-260		30
669	Microstructure and transformation temperatures in rapid solidified NiTi alloys. Part I: The effect of cooling rate. 2014 , 589, 628-632		16
668	Comparison studies on solid state diffusion of NiTi and NiTiH ₂ under CaH ₂ reducing environment. <i>Materials Letters</i> , 2014 , 121, 36-39	3.3	4
667	Microstructure and transformation temperatures in rapid solidified NiTi alloys. Part II: The effect of copper addition. 2014 , 589, 633-642		4
666	Evaluation of the biocompatibility of NiTi dental wires: a comparison of laboratory experiments and clinical conditions. 2014 , 40, 142-7		19
665	Orientation dependence of stress-induced martensite formation during nanoindentation in NiTi shape memory alloys. <i>Acta Materialia</i> , 2014 , 68, 19-31	8.4	27
664	In situ WEDM of NiTi shape memory alloy composite of high radiopacity. 2014 , 81, 4-7		10
663	Hydrogen effect on the austenite to martensite transformation of the cycled Ni-Ti alloy. 2014 , 25, 980-988		20
662	Study of Unrecovered Strain and Critical Stresses in One-Way Shape Memory Nitinol. <i>Journal of Materials Engineering and Performance</i> , 2014 , 23, 2885-2893	1.6	12
661	Surface Integrity Evolution from Main Cut to Finish Trim Cut in W-EDM of Shape Memory Alloy. <i>Procedia CIRP</i> , 2014 , 13, 137-142	1.8	18

660	Microstructure-based modeling of the impact response of a biomedical niobium-zirconium alloy. 2014 , 29, 1123-1134		8
659	Effects of grain size on the rate-dependent thermomechanical responses of nanostructured superelastic NiTi. <i>Acta Materialia</i> , 2014 , 76, 186-197	8.4	135
658	Polydisperse NiTi nanoparticles investigated by X-ray standing waves and electron microscopyA comparative study. 2014 , 98, 60-64		6
657	Tension, compression, and bending of superelastic shape memory alloy tubes. 2014 , 63, 506-537		129
656	High-Temperature Motors. 2014 , 297-312		3
655	Ultra-short pulse lasers as versatile tools in the fabrication of medical micro implants. 2014 ,		
654	Load bearing and stiffness tailored NiTi implants produced by additive manufacturing: a simulation study. 2014 ,		6
653	Effects of Higher Order Terms in Fracture Mechanics of Shape Memory Alloys Bydigital Image Correlation. 2015 , 109, 457-464		14
652	Introduction. 2015 , 1-43		
651	Effect of Al and Cu Contents on Mechanical Properties of Au-Cu-Al Shape Memory Alloys. 2015 , 80, 27-36		6
650	Stress transfer during different deformation stages in a nano-precipitate-strengthened Ni-Ti shape memory alloy. 2015 , 107, 201901		6
649	A novel multifunctional NiTi/Ag hierarchical composite. 2014 , 4, 5267		15
648	Investigation on Crack Tip Transformation in NiTi Alloys: Effect of the Temperature. <i>Shape Memory and Superelasticity</i> , 2015 , 1, 275-283	2.8	20
647	Capability of Sputtered Micro-patterned NiTi Thick Films. <i>Shape Memory and Superelasticity</i> , 2015 , 1, 286-293	2.8	13
646	In Situ Synchrotron X-ray Diffraction of the Martensitic Transformation in Superelastic Ti-27Nb and NiTi Alloys: A Comparative Study. <i>Materials Today: Proceedings</i> , 2015 , 2, S917-S920	1.4	3
645	Infrared brazing of Ti50Ni50 shape memory alloy and 316L stainless steel with Au-22Ni-8Pd filler. 2015 , 48, 57-62		3
644	One dimensional modeling of the thermoelastic behavior of shape memory alloys. 2015 , 16, 511		
643	Structure Changes of Coating on NiTi Alloy Prepared by Micro-Arc Oxidation in Na2SiO3 Electrolyte. 2015 , 815, 440-445		

642	The formation of the two-way shape memory effect in rapidly quenched TiNiCu alloy under laser radiation. <i>Smart Materials and Structures</i> , 2015 , 24, 115031	3.4	6
641	Laser melting of NiTi and its effects on in vitro mesenchymal stem cell responses. 2015 , 653-676		1
640	The High Performance Shape Memory Effect (HP-SME) in Ni Rich NiTi Wires: In Situ X-Ray Diffraction on Thermal Cycling. 2015 , 33, 03008		0
639	Role of grain size on the martensitic transformation and ultra-fast superelasticity in shape memory alloys. <i>Acta Materialia</i> , 2015 , 95, 37-43	8.4	20
638	Shape memory alloys. Ultralow-fatigue shape memory alloy films. 2015 , 348, 1004-7		274
637	1-Pyrrolyl-10-decylammoniumphosphonate monolayer: a molecular nanolink between electropolymerized pyrrole films and nickel or titanium surfaces. 2015 , 170, 218-228		10
636	Applications of Nickel-Titanium Alloy. 2015 , 5, 1		37
635	Investigation of crystal structures of one-way shape memory Nitinol wire actuators for active steerable needle. 2015 ,		1
634	A large-stroke shape memory alloy spring actuator using double-coil configuration. <i>Smart Materials and Structures</i> , 2015 , 24, 095014	3.4	11
633	Microstructural evolution and surface strengthening of pulse-laser treated Ti/Ni multilayer thin films. 2015 , 4, 45-51		7
632	LigLAP: Encirclement and Ligation of Vessels in Laparoscopic Surgery: A Double-Layer Suture Sealing Approach. 2015 , 22, 606-14		
631	Review on structural fatigue of NiTi shape memory alloys: Pure mechanical and thermo-mechanical ones. 2015 , 5, 245-254		49
630	Dissimilar laser welding of NiTi shape memory alloy and copper. <i>Smart Materials and Structures</i> , 2015 , 24, 125036	3.4	34
629	Surface characterizations of laser modified biomedical grade NiTi shape memory alloys. 2015 , 50, 367-78		41
628	Microstructure dependent elastic modulus variation in NiTi shape memory alloy. 2015 , 633, 71-74		11
627	High compressive pre-strains reduce the bending fatigue life of nitinol wire. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 44, 96-108	4.1	26
626	The effect of cyclic tensile loading on the stress-induced transformation mechanism in superelastic NiTi alloys: an in-situ X-ray diffraction study. 2015 , 100, 59-62		29
625	Surface engineered nanostructures on metallic biomedical materials for anti-abrasion. 2015 , 349-383		

624	Micromachined rectangular-spiral-coil actuator for radio-controlled cantilever-like actuation. 2015 , 226, 107-115		4
623	Reversibly texturing active surfaces with spatial and temporal control. 2015 , 26, 328-339		4
622	Fatigue of Nitinol: The state-of-the-art and ongoing challenges. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 50, 228-54	4.1	108
621	Silver deposition on polypyrrole films electrosynthesised onto Nitinol alloy. Corrosion protection and antibacterial activity. 2015 , 56, 95-103		18
620	Laser surface treatment of polyamide and NiTi alloy and the effects on mesenchymal stem cell response. 2015 ,		
619	X-ray Diffraction Investigations of Shape Memory NiTi Wire. <i>Journal of Materials Engineering and Performance</i> , 2015 , 24, 3038-3048	1.6	4
618	Influence of Dynamic Compression on Phase Transformation of Martensitic NiTi Shape Memory Alloys. 2015 , 46, 4661-4668		14
617	Microstructure, Cyclic Deformation and Corrosion Behavior of Laser Welded NiTi Shape Memory Wires. <i>Journal of Materials Engineering and Performance</i> , 2015 , 24, 3356-3364	1.6	12
616	Assessing the performance characteristics and clinical forces in simulated shape memory bone staple surgical procedure: The significance of SMA material model. 2015 , 62, 185-95		10
615	Solid-beam finite element analysis of Nitinol stents. 2015 , 291, 42-63		15
614	Inhibition of localized corrosion of NiTi superelastic alloy in NaCl solution by hydrogen charging. 2015 , 639, 365-372		15
613	On the role of SMA modeling in simulating Nitinol self-expanding stenting surgeries to assess the performance characteristics of mechanical and thermal activation schemes. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 49, 43-60	4.1	7
612	Experimental Study of NiTi Thin-Walled Tubes Under Uniaxial Tension, Torsion, Proportional and Non-Proportional Loadings. 2015 , 55, 1151-1164		15
611	Introduction to Shape Memory Alloys. 2015 , 1-31		3
610	Surface modification of TiNi-based shape memory alloys by dry electrical discharge machining. 2015 , 221, 279-284		34
609	Temperature dependent local phase transformation in shape memory alloys by nanoindentation. 2015 , 101, 64-67		39
608	Evolution of Intergranular Stresses in a Martensitic and an Austenitic NiTi Wire During Loading/Unloading Tensile Deformation. 2015 , 46, 2476-2490		6
607	The superelastic anisotropy in a NiTi shape memory alloy thin sheet. <i>Acta Materialia</i> , 2015 , 95, 411-427	8.4	45

606	An overview of thin film nitinol endovascular devices. 2015 , 21, 20-34			35
605	Fracture mechanics of shape memory alloys: review and perspectives. 2015 , 191, 191-213			46
604	Shape-memory polymers for vascular and coronary devices. 2015 , 249-265			0
603	Selective Tumor Cell Inhibition Effect of Ni-Ti Layered Double Hydroxides Thin Films Driven by the Reversed pH Gradients of Tumor Cells. 2015 , 7, 7843-54			33
602	High Strain Rate Compression of Martensitic NiTi Shape Memory Alloys. <i>Shape Memory and Superelasticity</i> , 2015 , 1, 310-318	2.8		13
601	Review and perspectives: shape memory alloy composite systems. 2015 , 226, 3907-3960			112
600	On the widths of the hysteresis of mechanically and thermally induced martensitic transformations in NiTi-based shape memory alloys. <i>International Journal of Materials Research</i> , 2015 , 106, 1029-1039	0.5		16
599	Microstructure and corrosion behavior of laser processed NiTi alloy. 2015 , 57, 309-13			65
598	Tailoring the magnetic properties of new Fe-Ni-Co-Al-(Ta,Nb)-B superelastic rapidly quenched microwires. 2015 , 117, 17E512			9
597	Nitinol Modified by In Situ Generated Diazonium from Its Nitro Precursor for the SI-ATRP of 2-Hydroxyethyl Methacrylate. 2015 , 162, G94-G102			8
596	Design and Evaluation of a Novel Fixation Mechanism for a Transcatheter Pacemaker. 2015 , 62, 2316-23			11
595	Influences of aging and thermomechanical treatments on the martensitic transformation and superelasticity of highly Ni-rich Ti-51.5at.% Ni shape memory alloy. 2015 , 616, 14-19			14
594	Role of microstructure on phase transformation behavior in NiTiFe shape memory alloys during thermal cycling. 2015 , 652, 459-469			6
593	Microstructural evolution in a Ti-Ta high-temperature shape memory alloy during creep. <i>International Journal of Materials Research</i> , 2015 , 106, 331-341	0.5		8
592	Transformation activity in ultrafine grained pseudoelastic NiTi wires during small amplitude loading/unloading experiments. 2015 , 651, 655-665			7
591	The development of carotid stent material. 2015 , 3, 67-77			13
590	A three-species model for simulating torsional response of shape memory alloy components using thermodynamic principles and discrete Preisach models. 2015 , 20, 345-372			12
589	Microstructure, mechanical properties and superelasticity of biomedical porous NiTi alloy prepared by microwave sintering. 2015 , 46, 387-93			51

588	Superelastic properties of biomedical (Ti-Zr)-Mo-Sn alloys. 2015 , 48, 11-20		72
587	Progressive tool-wear in machining of room-temperature austenitic NiTi alloys: The influence of cooling/lubricating, melting, and heat treatment conditions. 2015 , 215, 95-104		44
586	Micromachining NiTi tubes for use in medical devices by using a femtosecond laser. 2015 , 66, 34-40		34
585	Lattice instability during the martensitic transformation in the high temperature shape memory alloy Zr(Cu _{0.5} Co _{0.25} Ni _{0.25}). 2015 , 618, 469-474		5
584	Phenomenology of Shape Memory Alloys. 2015 , 33-56		6
583	Effect of nanoprecipitates on the transformation behavior and functional properties of a Ti _{80.8} at.% Ni alloy with micron-sized grains. <i>Acta Materialia</i> , 2015 , 82, 224-233	8.4	85
582	SMA Biomedical Applications. 2015 , 307-341		20
581	SMA Cardiovascular Applications and Computer-Based Design. 2015 , 343-367		4
580	Smart features in fibrous implantable medical devices. 2016 , 257-307		1
579	Do Mechanical and Physicochemical Properties of Orthodontic NiTi Wires Remain Stable In Vivo?. 2016 , 2016, 5268629		4
578	Implant Materials and Their Processing Technologies. 2016 ,		6
577	Atomistic Study on Size Effects in Thermally Induced Martensitic Phase Transformation of NiTi. 2016 , 2016, 1-12		6
576	Brief Overview on Nitinol as Biomaterial. 2016 , 2016, 1-9		49
575	A Novel Nitinol Spherical Occlusion Device for Liver Cancer. 2016 , 9,		7
574	Titanium and Titanium Alloy Applications in Medicine. 2016 , 475-517		9
573	Endoscopes and robots for tight surgical spaces: use of precurved elastic elements to enhance curvature. 2016 ,		
572	Micro-Scale Cyclic Bending Response of NiTi Shape Memory Alloy. 2016 , 57, 472-475		1
571	Microstructured Thin Film Nitinol for a Neurovascular Flow-Diverter. 2016 , 6, 23698		13

570	Method for Fabricating Miniaturized NiTi Self-Expandable Thin Film Devices with Increased Radiopacity. <i>Shape Memory and Superelasticity</i> , 2016 , 2, 391-398	2.8	9
569	Biomechanical evaluation of shape-memory alloy staples for internal fixation-an in vitro study. 2016 , 3, 19		20
568	Comparison of the mechanical properties of NiTi/Cu bilayer by nanoindentation and tensile test: molecular dynamics simulation. 2016 , 3, 126504		5
567	Suitability of nitinol electrodes in neural prostheses such as endovascular neural interfaces. 2016 , 2016, 4463-4466		1
566	Laser additive manufacturing of bulk and porous shape-memory NiTi alloys: From processes to potential biomedical applications. 2016 , 41, 765-774		89
565	A stabilized, high stress self-biasing shape memory alloy actuator. <i>Smart Materials and Structures</i> , 2016 , 25, 095027	3.4	9
564	A numerical simulation of the effect of using porous superelastic Nitinol and stiff Titanium fixation hardware on the bone remodeling. 2016 ,		0
563	Development of a flexible nanocomposite TiO ₂ film as a protective coating for bioapplications of superelastic NiTi alloys. 2016 , 375, 42-49		23
562	A novel low-profile ventriculoamniotic shunt for foetal aqueductal stenosis. 2016 , 40, 186-98		6
561	Microstructure and phase composition characterization in a Co ₃₈ Ni ₃₃ Al ₂₉ ferromagnetic shape memory alloy. <i>Materials Characterization</i> , 2016 , 118, 9-13	3.9	3
560	Fatigue of NiTi SMA Bulley system using Taguchi and ANOVA. <i>Smart Materials and Structures</i> , 2016 , 25, 057001	3.4	2
559	In situ synthesis of Ni(OH) ₂ /TiO ₂ composite film on NiTi alloy for non-enzymatic glucose sensing. 2016 , 232, 150-157		65
558	Effect of Post Weld Heat Treatment on Mechanical and Corrosion Behaviors of NiTi and Stainless Steel Laser-Welded Wires. <i>Journal of Materials Engineering and Performance</i> , 2016 , 25, 2395-2402	1.6	7
557	Design of an improved surgical instrument for the removal of bladder tumours. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2016 , 230, 579-87	1.7	1
556	Poly(styrenesulfonate)-Modified Ni-Ti Layered Double Hydroxide Film: A Smart Drug-Eluting Platform. 2016 , 8, 24491-501		19
555	Electroassisted Auto-Assembly of Alkylphosphonic Acids Monolayers on Nitinol. 2016 , 163, G173-G177		4
554	Improvement of mechanical and biological properties of TiNi alloys by addition of Cu and Co to orthodontic archwires. 2016 , 14, 295-310		4
553	Hydrothermally grown and self-assembled modified titanium and nickel oxide composite nanosheets on Nitinol-based fibers for efficient solid phase microextraction. 2016 , 1468, 33-41		26

552	[Not Available]. 2016 , 14, 295-310		4
551	Drug-eluting stent with rhombic-shape reservoirs for drug delivery. 2016 ,		1
550	Effect of oxygen plasma immersion ion implantation on the formation of nanostructures over NiTi alloy. 2016 , 6, 74493-74499		8
549	Mechanical characteristics of novel polyester/NiTi wires braided composite stent for the medical application. 2016 , 6, 440-446		20
548	Obtaining and characterization of Ni-Ti/Ti-Mo joints welded by TIG process. 2016 , 133, 58-69		7
547	A review of modeling techniques for advanced effects in shape memory alloy behavior. <i>Smart Materials and Structures</i> , 2016 , 25, 103001	3-4	61
546	Deployment of a Bulk Metallic Glass-Based Self-Expandable Stent in a Patient-Specific Descending Aorta. 2016 , 2, 1951-1958		12
545	Effects of aging on the shape memory and superelasticity behavior of ultra-high strength Ni 54 Ti 46 alloys under compression. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 678, 93-100	5-3	12
544	Laser welding of NiTi shape memory alloy wires and tubes for multi-functional design applications. <i>Smart Materials and Structures</i> , 2016 , 25, 085001	3-4	34
543	A lightweight shape-memory magnesium alloy. 2016 , 353, 368-70		109
542	Electrochemical and corrosion behaviors of sputtered TiNi shape memory films. <i>Smart Materials and Structures</i> , 2016 , 25, 035039	3-4	5
541	Mechanoactive materials in cardiac science. 2016 , 4, 7350-7362		5
540	On the Transformation Behavior of NiTi Shape-Memory Alloy Produced by SLM. <i>Shape Memory and Superelasticity</i> , 2016 , 2, 310-316	2.8	68
539	Shakedown based model for high-cycle fatigue of shape memory alloys. <i>Smart Materials and Structures</i> , 2016 , 25, 115012	3-4	11
538	Formation of Porous Layer with Low Ni Content on NiTi Substrate by Dealloying in Metallic Melts. 2016 , 63, 766-770		
537	Change in Microstructure, Mechanical Strength and Corrosion Resistance of Ti-8Mo-xNi Alloys through Various Sintering Temperatures. 2016 , 57, 1363-1369		5
536	Thermo-magnetic shape control of nano-ferromagnetic particle doped shape memory alloy for orthopedic devices and rehabilitation techniques. 2016 ,		
535	Temperature dependent fracture properties of shape memory alloys: novel findings and a comprehensive model. 2016 , 6, 17		41

534	Shape Memory Alloys. 2016 , 155-188		6
533	Grafting of 4-pyrrolyphenyldiazonium in situ generated on NiTi, an adhesion promoter for pyrrole electropolymerisation?. 2016 , 211, 879-890		12
532	Stable Crack Growth During Thermal Actuation of Shape Memory Alloys. <i>Shape Memory and Superelasticity</i> , 2016 , 2, 104-113	2.8	22
531	A Comparative Study on White Layer Properties by Laser Cutting vs. Electrical Discharge Machining of Nitinol Shape Memory Alloy. <i>Procedia CIRP</i> , 2016 , 42, 246-251	1.8	11
530	Influence of the microstructure on the resulting 18R martensitic transformation of polycrystalline Cu Al Zn thin films obtained by sputtering and reactive annealing. <i>Materials Characterization</i> , 2016 , 114, 289-295	3.9	3
529	Thermomechanical fatigue of post-weld heat treated NiTi shape memory alloy wires. 2016 , 92, 1-7		18
528	A Concentric Tube Continuum Robot with Piezoelectric Actuation for MRI-Guided Closed-Loop Targeting. 2016 , 44, 2863-2873		27
527	Twinning-Induced Elasticity in NiTi Shape Memory Alloys. <i>Shape Memory and Superelasticity</i> , 2016 , 2, 145-159	2.8	22
526	Effects of grain size on tensile fatigue life of nanostructured NiTi shape memory alloy. 2016 , 88, 166-177		74
525	Formation of TiN Grid on NiTi by Laser Gas Nitriding for Improving Wear Resistance in Hanks' Solution. 2016 , 32, 459-464		19
524	Insertion trauma of a cochlear implant electrode array with Nitinol inlay. 2016 , 273, 3573-3585		0
523	Multiaxial stress-strain response and displacive transformations in NiTi alloy from first principles. <i>Acta Materialia</i> , 2016 , 109, 223-229	8.4	6
522	Texture and anisotropy in selective laser melting of NiTi alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 650, 225-232	5.3	99
521	Experimental validation of a one-dimensional model for monolithic shape memory alloys with multiple pseudoelastic plateaus. 2016 , 27, 2102-2111		5
520	Rapid, Reliable Shape Setting of Superelastic Nitinol for Prototyping Robots. 2016 , 1, 98-105		23
519	Effect of ternary additions to structural properties of NiTi alloys. 2016 , 112, 347-355		28
518	Phase evolution during the reactive sintering of ternary AlNiTi powder compacts. 2016 , 661, 294-305		20
517	Electro-sinter-forged NiTi alloy. 2016 , 68, 31-41		15

516	Study of electropulse heat treatment of cold worked NiTi wire: From uniform to localised tensile behaviour. 2016 , 227, 244-250		12
515	Miniaturizing Floating Traps to Increase RF Safety of Magnetic-Resonance-Guided Percutaneous Procedures. 2017 , 64, 329-340		4
514	Feasibility of using bulk metallic glass for self-expandable stent applications. 2017 , 105, 1874-1882		13
513	Effects of orientation on the shape memory behavior of Ni 51 Ti 49 single crystals. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 686, 73-81	5.3	15
512	Effect of temperature and texture on the reorientation of martensite variants in NiTi shape memory alloys. <i>Acta Materialia</i> , 2017 , 127, 143-152	8.4	86
511	Photostress analysis of stress-induced martensite phase transformation in superelastic NiTi. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 688, 202-209	5.3	11
510	Fatigue behaviour of NiTi shape memory alloy scaffolds produced by SLM, a unit cell design comparison. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 70, 53-59	4.1	94
509	Predictive Modeling of the Constitutive Response of Precipitation Hardened Ni-Rich NiTi. <i>Shape Memory and Superelasticity</i> , 2017 , 3, 9-23	2.8	7
508	NiTi shape-memory alloy oxidized in low-temperature plasma with carbon coating: Characteristic and a potential for cardiovascular applications. 2017 , 421, 89-96		9
507	Multi-stage martensitic transformation in Ni-rich NiTi shape memory alloys. 2017 , 10, 1740004		23
506	Influences of granular constraints and surface effects on the heterogeneity of elastic, superelastic, and plastic responses of polycrystalline shape memory alloys. 2017 , 102, 46-66		29
505	A short review on the interaction of precipitates and martensitic transitions in CuZnAl shape memory alloys. 2017 , 10, 1740006		5
504	Nitinol laser cutting: microstructure and functional properties of femtosecond and continuous wave laser processing. <i>Smart Materials and Structures</i> , 2017 , 26, 035006	3.4	8
503	Electroassisted Functionalization of Nitinol Surface, a Powerful Strategy for Polymer Coating through Controlled Radical Surface Initiation. 2017 , 33, 2977-2985		4
502	Laser shape setting of superelastic nitinol wires: Functional properties and microstructure. 2017 , 10, 1740008		4
501	Tribological behaviour of biomedical TiZr-based shape memory alloys. 2017 , 36, 478-484		23
500	Welding and Joining of NiTi Shape Memory Alloys: A Review. 2017 , 88, 412-466		165
499	The role of inelastic deformations in the mechanical response of endovascular shape memory alloy devices. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2017 , 231, 391-404	1.7	10

498	Crystallinity as a tunable switch of poly(L-lactide) shape memory effects. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 66, 144-151	4.1	20
497	Analysis of fatigue damage in shape memory alloys by nanoindentation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 684, 335-343	5.3	21
496	NADH-fluorescence scattering correction for absolute concentration determination in a liquid tissue phantom using a novel multispectral magnetic-resonance-imaging-compatible needle probe. 2017 , 28, 075903		4
495	Feasibility and scalability of spring parameters in distraction enterogenesis in a murine model. 2017 , 215, 219-224		5
494	Numerical simulation of pseudoelastic shape memory alloys using the large time increment method. <i>Smart Materials and Structures</i> , 2017 , 26, 045016	3.4	4
493	Innovative Technology for Preparation of Seamless Nitinol Tubes Using SHS Without Forming. 2017 , 48, 1524-1527		3
492	Evolution of internal strain in austenite phase during thermally induced martensitic phase transformation in NiTi shape memory alloys. 2017 , 133, 52-59		6
491	The effect of severe grain refinement on the damage tolerance of a superelastic NiTi shape memory alloy. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 71, 337-348	4.1	15
490	Elastocaloric effect induced by the rubber-like behavior of nanocrystalline wires of a Ti-50.8Ni (at.%) alloy. 2017 , 134, 42-46		34
489	Corrosion, wear, and cell culture studies of oxygen ion implanted NiTi alloy. 2017 , 49, 828-836		6
488	Microwave sintering effects on the microstructure and mechanical properties of Ti51at%Ni shape memory alloys. 2017 , 24, 280-288		9
487	Engineering challenges and the future prospects of transcatheter mitral valve replacement technologies: a comprehensive review of case studies. 2017 , 14, 297-307		2
486	Additively Manufactured and Surface Biofunctionalized Porous Nitinol. 2017 , 9, 1293-1304		51
485	Fretting corrosion behavior of nitinol spinal rods in conjunction with titanium pedicle screws. 2017 , 72, 601-610		11
484	A compliant mechanism for inspecting extremely confined spaces. <i>Smart Materials and Structures</i> , 2017 , 26, 115028	3.4	1
483	Grain Nucleation and Growth in Deformed NiTi Shape Memory Alloys: An In Situ TEM Study. <i>Shape Memory and Superelasticity</i> , 2017 , 3, 347-360	2.8	8
482	Effects of upper cycle temperature on the actuation fatigue response of NiTiHf high temperature shape memory alloys. <i>Acta Materialia</i> , 2017 , 138, 185-197	8.4	35
481	On the competition between the stress-induced formation of martensite and dislocation plasticity during crack propagation in pseudoelastic NiTi shape memory alloys. 2017 , 32, 4433-4442		13

480	Corrosion behavior of HPT-deformed TiNi alloys in cell culture medium. 2017 ,		0
479	A Two-Way Shape Memory Study on Ni-Rich NiTi Shape Memory Alloy by Combination of the All-Round Treatment and the R-Phase Transformation. <i>Journal of Materials Engineering and Performance</i> , 2017 , 26, 5801-5810	1.6	4
478	In vitro cytotoxicity and corrosion studies of some copper base shape memory alloys. <i>Materials Today: Proceedings</i> , 2017 , 4, 10672-10681	1.4	
477	Wear Behaviour of Cu-Al-Be-Mn Shape Memory Alloys by Using Taguchi Technique. <i>Materials Today: Proceedings</i> , 2017 , 4, 11168-11174	1.4	
476	Superhydrophobic NiTi shape memory alloy surfaces fabricated by anodization and surface mechanical attrition treatment. 2017 , 425, 594-602		7
475	Preparation of Ca doping ZrO ₂ coating on NiTi shape memory alloy by cathodic plasma electrolytic deposition and its structure, in-vitro bioactivity and biocompatibility analysis. <i>Surface and Coatings Technology</i> , 2017 , 325, 136-144	4.4	8
474	Corrosion Resistance of Surface Treated NiTi Alloy Tested in Artificial Plasma. 2017 , 17-24		2
473	The effect of APS parameter on the microstructural, mechanical and corrosion properties of plasma sprayed Ni-Ti-Al intermetallic coatings. <i>Surface and Coatings Technology</i> , 2017 , 309, 959-968	4.4	23
472	High Strain Rate Compression of Martensitic NiTi Shape Memory Alloy at Different Temperatures. 2017 , 48, 601-608		14
471	Curve micromachining on the edges of nitinol biliary stent by ultrashort pulses laser. <i>Optics and Laser Technology</i> , 2017 , 90, 1-6	4.2	24
470	RF Heating Study of a New Medical Implant Lead for 1.5 T, 3 T, and 7 T MRI Systems. 2017 , 59, 360-366		19
469	Graphene enhanced anti-corrosion and biocompatibility of NiTi alloy. 2017 , 7, 7-14		20
468	Origin of zero and negative thermal expansion in severely-deformed superelastic NiTi alloy. <i>Acta Materialia</i> , 2017 , 124, 79-92	8.4	62
467	The influence of the substrate on the adhesive strength of the micro-arc oxidation coating developed on TiNi shape memory alloy. 2017 , 392, 581-589		9
466	Effects of aging and cooling rate on the transformation of nanostructured Ti-50.8Ni. 2017 , 693, 150-163		8
465	Influence of Ce addition on biomedical porous Ti-51 atomic percentage (at. %) Ni shape memory alloy fabricated by microwave sintering. 2017 ,		1
464	Sodium Hypochlorite Treatment and Nitinol Performance for Medical Devices. <i>Journal of Materials Engineering and Performance</i> , 2017 , 26, 4245-4254	1.6	2
463	A novel bending fatigue test device based on self-excited vibration principle and its application to superelastic Nitinol microwire study. <i>Smart Materials and Structures</i> , 2017 , 26, 105020	3.4	4

462	Improved Functional Properties and Efficiencies of Nitinol Wires Under High-Performance Shape Memory Effect (HP-SME). <i>Journal of Materials Engineering and Performance</i> , 2017 , 26, 4964-4969	1.6	5
461	Fatigue modeling in percutaneous caval valved stents. 2017 , 214, 98-106		
460	Development of Faster SMA Actuators. 2017 ,		7
459	Surface Characterization of NiTi Superelastic and Shape Memory Alloys After Electrolytic Polishing. 2017 , 20, 572-579		10
458	Metallic Biomaterials: Current Challenges and Opportunities. 2017 , 10,		258
457	The Boom in 3D-Printed Sensor Technology. <i>Sensors</i> , 2017 , 17,	3.8	161
456	Microstructures and Mechanical Properties of Shape Memory Alloy Using Pre-mixed TiNi Powders with TiO ₂ Particles. 2017 , 64, 589-594		3
455	Innovation of New Occlusion Devices for Cancers. <i>Applied Sciences (Switzerland)</i> , 2017 , 7, 530	2.6	1
454	Fabrication of NiTi alloy: A review. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2018 , 232, 250-269	1.3	19
453	The impact of shape memory test on degradation profile of a bioresorbable polymer. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 81, 39-45	4.1	4
452	Molecular dynamics simulation on the shape memory effect and superelasticity in NiTi shape memory alloy. 2018 , 146, 61-69		22
451	Effect of Ta addition on the electrochemical behavior and functional fatigue life of metastable Ti-Zr-Nb based alloy for indwelling implant applications. 2018 , 748, 51-56		8
450	Nitinol Stents in the Femoropopliteal Artery: A Mechanical Perspective on Material, Design, and Performance. 2018 , 46, 684-704		46
449	A micromechanical constitutive model for grain size dependent thermo-mechanically coupled inelastic deformation of super-elastic NiTi shape memory alloy. <i>International Journal of Plasticity</i> , 2018 , 105, 99-127	7.6	42
448	In Situ Synchrotron Radiation X-ray Diffraction Study on Phase and Oxide Growth during a High Temperature Cycle of a NiTi-20 at.% Zr High Temperature Shape Memory Alloy. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 174-185	2.8	12
447	Energy transduction ferroic materials. 2018 , 21, 771-784		23
446	Atomic Layer-Deposited TiO ₂ Coatings on NiTi Surface. <i>Journal of Materials Engineering and Performance</i> , 2018 , 27, 572-579	1.6	5
445	The Efficacy of Laser Material Processing for Enhancing Stem Cell Adhesion and Growth on Different Materials. 2018 , 373-397		2

444	Laser Shock Wave-Assisted Patterning on NiTi Shape Memory Alloy Surfaces. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 224-231	2.8	7
443	Negative and Zero Thermal Expansion NiTi Superelastic Shape Memory Alloy by Microstructure Engineering. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 158-164	2.8	2
442	Increased affinity of endothelial cells to NiTi using ultraviolet irradiation: An in vitro study. 2018 , 106, 1034-1038		2
441	Mixed-mode fracture of a superelastic NiTi alloy: Experimental and numerical investigations. 2018 , 190, 273-287		16
440	Impact of nitinol stent surface processing on in-vivo nickel release and biological response. 2018 , 72, 424-433		19
439	Cold Forming of Ni-Ti Shape Memory Alloy Sheet. 2018 , 317, 012079		2
438	Uniaxial, pure bending, and column buckling experiments on superelastic NiTi rods and tubes. 2018 , 146, 1-28		15
437	Electrodeposition study of polypyrrole-heparin and polypyrrole-salicylate coatings on Nitinol. 2018 , 209, 76-85		10
436	Kinetics of interface alloy phase formation at nanometer length scale in ultra-thin films: X-ray and polarized neutron reflectometry. 2018 , 96, 1-50		21
435	Frontiers of Theoretical Research on Shape Memory Alloys: A General Overview. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 26-40	2.8	8
434	Synthesis of NiTi microtubes via the Kirkendall effect during interdiffusion of Ti-coated Ni wires. 2018 , 92, 42-48		18
433	Atomistic study on the super-elasticity of single crystal bulk NiTi shape memory alloy under adiabatic condition. 2018 , 142, 38-46		18
432	Rotary bending fatigue analysis of shape memory alloys. 2018 , 29, 1183-1195		4
431	On the Ni-Ion release rate from surfaces of binary NiTi shape memory alloys. 2018 , 427, 434-443		19
430	Effects of microstructural mechanisms on the localized oxidation behavior of NiTi shape memory alloys in simulated body fluid. <i>Journal of Materials Science</i> , 2018 , 53, 948-958	4.3	7
429	A Review of Recent Progress in Solid State Fabrication of Composites and Functionally Graded Systems Via Friction Stir Processing. 2018 , 43, 334-366		72
428	Effect of Sn additions on the microstructure, mechanical properties, corrosion and bioactivity behaviour of biomedical Ti ₆ Al ₄ V shape memory alloys. 2018 , 131, 1165-1175		10
427	Load path change on superelastic NiTi alloys: In situ synchrotron XRD and SEM DIC. <i>Acta Materialia</i> , 2018 , 144, 874-883	8.4	33

426	Temperature-induced transformations and martensitic reorientation processes in ultra-fine-grained Ni rich pseudoelastic NiTi wires studied by electrical resistance. 2018 , 735, 2574-2583		2
425	Fatigue resistance of branching phase-transformation fronts in pseudoelastic NiTi polycrystalline strips. 2018 , 135, 233-244		13
424	Grain size effects on NiTi shape memory alloy fatigue crack growth. 2018 , 33, 91-107		30
423	Design and Anchorage Dependence of Shape Memory Alloy Actuators on Enhanced Voiding of a Bladder. <i>Advanced Materials Technologies</i> , 2018 , 3, 1700184	6.8	9
422	Role of defectivity on the crystallography of martensitic transformations in Ti50Ni40Cu10: an XRD investigation. 2018 , 233, 337-348		
421	Dependence of processing window and microstructural evolution on initial material state in direct electric resistance heat treatment of NiTi alloy. 2018 , 139, 549-564		4
420	Phase engineering and supercompatibility of shape memory alloys. 2018 , 21, 265-277		76
419	Cylindrical cross-axis flexural pivots. 2018 , 51, 604-613		17
418	Microstructural characterization of laser micro-welded Nitinol wires. <i>Materials Characterization</i> , 2018 , 135, 40-45	3.9	15
417	Processing Technologies Applied for Realizing New Medical Micro-Devices Components. 2018 , 27, 98-102		
416	Assessment of performance of Nitinol-based arch wedge supports in bearing forces and stresses due to human movement using FEA. 2018 , 19, 351-362		1
415	Numerical Investigation of Preload Process of Bolted Joint with Superelastic Shape Memory Alloy. 2018 , 8, 730		
414	3D Expandable Microwire Electrode Arrays Made of Programmable Shape Memory Materials. 2018 ,		1
413	Modeling of the Two-Way Shape Memory Effect. 2018 ,		
412	Effects of the amount of Ni by powder metallurgy TiNi alloy aimed for thinned stents in superficial femoral artery and biological evaluation by animal test. 2018 , 84, 17-00491-17-00491		
411	Nitinol Modified by In Situ Generated Diazonium Salts as Adhesion Promoters for Photopolymerized Pyrrole. 2018 , 3, 11800-11808		1
410	Deep Drawing of a Ni-Ti Shape Memory Alloy Sheet. 2018 , 207, 03020		0
409	Influence of Micro-EDM on the Phase Transformation Behaviour of Medical-Grade Nitinol. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 450-461	2.8	4

408	Steerable catheters for minimally invasive surgery: a review and future directions. 2018 , 23, 21-41		48
407	Computational modelling of Ti50Pt 50-XVx potential shape memory alloys. 2018 , 430, 012021		
406	Fatigue Crack Growth in Cold-Rolled and Annealed Polycrystalline Superelastic NiTi Alloys. 2018 , 31, 599-607		4
405	Processing-induced strain glass states in a Ni49.5Ti50.5 shape memory alloy. 2018 , 113, 131901		1
404	Effect of Shape Memory Heat Treatment on Microstructures and Mechanical Properties of Powder Metallurgy TiNi Shape Memory Alloy. 2018 , 65, 85-90		2
403	Analytical model for a superelastic Timoshenko shape memory alloy beam subjected to a loading-unloading cycle. 2018 , 29, 3902-3922		10
402	State of the Art in Dual-Curing Acrylate Systems. 2018 , 10,		52
401	Surface oxidation of NiTi and its effects on thermal and mechanical properties. 2018 , 103, 52-62		18
400	Introduction to Inorganic Fibers. 2018 , 1-29		
399	An experimentally-driven approach to model bending in a thermally activated SMA-based beam. <i>Smart Materials and Structures</i> , 2018 , 27, 125004	3-4	4
398	Multi-objective Bayesian materials discovery: Application on the discovery of precipitation strengthened NiTi shape memory alloys through micromechanical modeling. 2018 , 160, 810-827		50
397	Towards Water-Jet Steerable Needles. 2018 ,		4
396	Biocompatibility of the Ti81Nb13Ta3Zr3 Alloy. 2018 , 482, 204-206		11
395	Virtual Extensometer Analysis of Martensite Band Nucleation, Growth, and Strain Softening in Pseudoelastic NiTi Subjected to Different Load Cases. 2018 , 11,		3
394	In Vitro Corrosion Assessment of Additively Manufactured Porous NiTi Structures for Bone Fixation Applications. 2018 , 8, 164		51
393	Load sequence effects and variable amplitude fatigue of superelastic NiTi. <i>International Journal of Mechanical Sciences</i> , 2018 , 148, 307-315	5-5	14
392	Effect of cutting parameters on strain hardening of nickel-titanium shape memory alloy. <i>Smart Materials and Structures</i> , 2018 , 27, 075027	3-4	10
391	Atomistic simulation of shape memory effect (SME) and superelasticity (SE) in nano-porous NiTi shape memory alloy (SMA). 2018 , 152, 28-37		7

390	Click-based dual-curing thermosets and their applications. 2018 , 511-541		9
389	Review of Superelastic Differential Force Archwires for Producing Ideal Orthodontic Forces: an Advanced Technology Potentially Applicable to Orthognathic Surgery and Orthopedics. 2018 , 16, 380-386		5
388	Shape-memory characterization of NiTi microtubes fabricated through interdiffusion of Ti-Coated Ni wires. <i>Acta Materialia</i> , 2018 , 156, 1-10	8.4	7
387	Experimental validation of shape memory material model implemented in commercial finite element software under multiaxial loading. 2018 , 29, 2954-2965		2
386	Effect of Shape Memory Heat Treatment on Microstructures and Mechanical Properties of Powder Metallurgy TiNi Shape Memory Alloy. 2018 , 59, 805-810		2
385	Laser-Induced Superelasticity in NiTinol Stent Strut. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 377-382	2.8	1
384	Microstructures and Mechanical Properties of Shape Memory Alloy Using Pre-Mixed TiNi Powders with TiO ₂ Particles. 2018 , 59, 117-122		4
383	A Critical Review on Metallic Glasses as Structural Materials for Cardiovascular Stent Applications. 2018 , 9,		41
382	Microstructure and Corrosion Resistance of Laser-Welded Crossed Nitinol Wires. 2018 , 11,		3
381	Biodegradable Metallic Wires in Dental and Orthopedic Applications: A Review. 2018 , 8, 212		22
380	Manufacturing and Characterization of NiTi Alloy with Functional Properties by Selective Laser Melting. 2018 , 8, 342		26
379	Rhombic-Shaped Channel Stent with Enhanced Drug Capacity and Fatigue Life. 2017 , 9,		4
378	Nanocantilevers with Adjustable Static Deflection and Significantly Tunable Spectrum Resonant Frequencies for Applications in Nanomechanical Mass Sensors. 2018 , 8,		13
377	Phase Formation in TiNi Binary System during Solid-State Synthesis. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 351-359	2.8	3
376	A micromechanical model for the grain size dependent super-elasticity degeneration of NiTi shape memory alloys. 2018 , 125, 35-51		23
375	A Review of Selective Laser Melted NiTi Shape Memory Alloy. 2018 , 11,		58
374	Stretchable, Implantable, Nanostructured Flow-Diverter System for Quantification of Intra-aneurysmal Hemodynamics. 2018 , 12, 8706-8716		15
373	Improved performance of the functionalized nitinol as a prospective bone implant material. 2018 , 33, 2554-2564		4

372	Structure, morphology and selected mechanical properties of magnetron sputtered (Mo, Ta, Nb) thin films on NiTi shape memory alloys. <i>Surface and Coatings Technology</i> , 2018 , 347, 379-389	4.4	24
371	A robotic suture-passing device for possible use in SILS and NOTES. 2018 , 14, e1916		1
370	On the Electropolishing Mechanism of Nickel Titanium in Methanolic Sulfuric acid [An Electrochemical Impedance Study. 2018 , 215, 1800011		1
369	Multi-scale characterization and biological evaluation of composite surface layers produced under glow discharge conditions on NiTi shape memory alloy for potential cardiological application. 2018 , 114, 14-22		9
368	Remarks on the Particular Behavior in Martensitic Phase Transition in Cu-Based and NiTi Shape Memory Alloys. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 272-284	2.8	2
367	Formability of Annealed Ni-Ti Shape Memory Alloy Sheet. 2018 , 324, 012038		1
366	Additively manufactured metals for medical applications. 2018 , 261-309		12
365	Fibre laser treatment of martensitic NiTi alloys for load-bearing implant applications: Effects of surface chemistry on inhibiting Staphylococcus aureus biofilm formation. <i>Surface and Coatings Technology</i> , 2018 , 349, 488-502	4.4	9
364	Analytical model for the torsional response of superelastic shape memory alloy circular sections subjected to a loading-unloading cycle. 2019 , 156-157, 49-60		7
363	Nitinol living hinges for millimeter-sized robots and medical devices. 2019 ,		2
362	Development of new endovascular stent-graft system for type B thoracic aortic dissection with finite element analysis and experimental verification. 2019 , 35, 2682-2692		3
361	Laser shape setting of superelastic NiTi wire: effects of laser beam power and axial pre-load. <i>Smart Materials and Structures</i> , 2019 , 28, 075043	3.4	2
360	Martensitic transformation in free-standing Cu-Al-Ni thin films with micrometric grain size. 2019 , 6, 096556		1
359	Assessment of Ni ion release from TiTaHfNbZr high entropy alloy coated NiTi shape memory substrates in artificial saliva and gastric fluid. 2019 , 236, 121802		13
358	Modelling of transition zone formation between thin Si or Ta film deposited on TiNi under low-energy electron beam irradiation. 2019 , 6, 1065g5		1
357	Design, Simulation, and Experimentation of Colonic Stents. 2019 , 33-61		
356	One-step fabrication of Ag@Polydopamine film modified NiTi alloy with strong antibacterial property and enhanced anticorrosion performance. <i>Surface and Coatings Technology</i> , 2019 , 380, 125013	4.4	3
355	A numerical study of the indentation mechanics of shape memory alloys in different temperature regimes. 2019 , 139, 103212		3

354	First-Principles Calculations of Structural, Mechanical, and Electronic Properties of the B2-Phase NiTi Shape-Memory Alloy Under High Pressure. 2019 , 7, 57		6
353	Identification of hysteresis models using real-coded genetic algorithms. 2019 , 134, 1		5
352	Recoverability of large strains and deformation twinning in martensite during tensile deformation of NiTi shape memory alloy polycrystals. <i>Acta Materialia</i> , 2019 , 180, 243-259	8.4	38
351	MECHANICAL CHARACTERIZATION OF BRAIDED SELF-EXPANDING STENTS: IMPACT OF DESIGN PARAMETERS. 2019 , 19, 1950038		7
350	An interventional image-guided microdevice implantation and retrieval method for in-vivo drug response assessment. 2019 , 46, 5134-5143		3
349	Use of Superelastic Nitinol and Highly-Stretchable Latex to Develop a Tongue Prosthetic Assist Device and Facilitate Swallowing for Dysphagia Patients. 2019 , 12,		3
348	Prediction of NiTi B19? Martensite Twin Activation Below a Spherical Indenter Tip. <i>Shape Memory and Superelasticity</i> , 2019 , 5, 313-326	2.8	
347	Electrophoretic deposited graphene based functional coatings for biocompatibility improvement of Nitinol. 2019 , 692, 137616		6
346	Effect of Heat Treatment Temperature on Martensitic Transformation and Superelasticity of the TiNi Shape Memory Alloy. 2019 , 12,		3
345	Effects of Temperature on Fatigue Crack Propagation in Pseudoelastic NiTi Shape Memory Alloys. <i>Shape Memory and Superelasticity</i> , 2019 , 5, 278-291	2.8	13
344	Effect of heat treatment on the corrosion-fatigue of NiTi shape memory alloy. 2019 ,		0
343	In situ monitoring of the transpassivation and repassivation of the passive film on nitinol biomaterial by scanning electrochemical microscopy. 2019 , 107, 106539		9
342	Microstructure Property correlations for additively manufactured NiTi based shape memory alloys. <i>Materialia</i> , 2019 , 8, 100456	3.2	30
341	Electrochemical Characterization of a Welded Joint of NiTi/TiMo Dissimilar Wires. <i>Materials Today: Proceedings</i> , 2019 , 14, 671-677	1.4	0
340	The First-Row Transition Metals in the Periodic Table of Medicine. 2019 , 7, 111		16
339	Effect of Fe Addition on Microstructure and Mechanical Properties of As-cast TiNi Alloy. 2019 , 12,		2
338	New insights into nickel-free superelastic titanium alloys for biomedical applications. 2019 , 23, 100783		19
337	A Comparative Study of the Electro-Assisted Grafting of Mono- and Bi-Phosphonic Acids on Nitinol. 2019 , 2, 520-530		

336	Modeling of torsion fatigue in shape memory alloys. 2019 , 30, 3146-3162		5
335	Effects of superelasticity and plasticity on the spherical indentation response of shape memory alloys: a finite element analysis. <i>Smart Materials and Structures</i> , 2019 , 28, 035028	3.4	7
334	Extended Cyclic Deformation Recovery of the Indentation-Induced Two-Way Shape-Memory Effect in Nickel-Titanium. 2019 , 21, 1801020		2
333	On the tensile behaviour of coarse and ultrafine grained NiTi. <i>Materials Characterization</i> , 2019 , 149, 41-53	3.9	8
332	Effects of process parameters on the quality aspects of weld-bead in laser welding of NiTiNol sheets. 2019 , 34, 648-659		16
331	Deformation and degradation of superelastic NiTi under multiaxial loading. <i>Acta Materialia</i> , 2019 , 167, 149-158	8.4	27
330	Corrosion of Metallic Biomaterials: A Review. 2019 , 12,		250
329	Tensile Deformation of Superelastic NiTi Wires in Wide Temperature and Microstructure Ranges. <i>Shape Memory and Superelasticity</i> , 2019 , 5, 42-62	2.8	29
328	Effects of Composition and Post Heat Treatment on Shape Memory Characteristics and Mechanical Properties for Laser Direct Deposited Nitinol. 2019 , 6, 41-58		9
327	One-Dimensional Macroscopic Constitutive Model for Ratcheting of Superelastic Shape Memory Alloys. 2019 , 145, 04019007		2
326	Development of a New Ultra-High-Precision Magnetic Abrasive Finishing for Wire Material Using a Rotating Magnetic Field. 2019 , 12,		10
325	Fracture investigation of the shape memory alloy using GTN model. 2019 , 216, 106519		8
324	Corrosion behavior, in vitro and in vivo biocompatibility of a newly developed Ti-16Nb-3Mo-1Sn superelastic alloy. 2019 , 104, 109906		3
323	Elastic recovery of polymeric braided stents under cyclic loading: Preliminary assessment. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019 , 98, 131-136	4.1	11
322	A customized multispectral needle probe combined with a virtual photometric setup for in vivo detection of Lewis lung carcinoma in an animal model. 2019 , 30, 104001		5
321	Role of microstructure on the actuation fatigue performance of Ni-Rich NiTiHf high temperature shape memory alloys. <i>Acta Materialia</i> , 2019 , 175, 107-120	8.4	23
320	Advances in Biomaterials and Technologies for Vascular Embolization. <i>Advanced Materials</i> , 2019 , 31, e1901071	24	59
319	Machining of biocompatible materials [Recent advances. 2019 , 68, 629-652		25

318	Flexible Fingers Based on Shape Memory Alloy Actuated Modules. 2019 , 7, 40	5
317	On the versatility and distinctiveness in the use of microwave energy for the ignition of low exothermic NiTi intermetallics combustion synthesis. 2019 , 233, 220-229	4
316	Neutron diffraction study of temperature-dependent elasticity of B19' NiTi---Elinvar effect and elastic softening. <i>Acta Materialia</i> , 2019 , 173, 281-291	8.4 13
315	Analyses of orientation dependent nanoindentation response of pseudoelastic NiTi alloy using a crystal plasticity model. 2019 , 135, 1-12	8
314	Effect of Hydrogen Doping on Stress-Induced Martensitic Transformation in a Ti-Ni Shape Memory Alloy. 2019 , 50, 3033-3037	3
313	New nitinol endovascular stent-graft system for abdominal aortic aneurysm with finite element analysis and experimental verification. 2019 , 38, 495-502	6
312	Elements-Added Diamond-Like Carbon Film for Biomedical Applications. 2019 , 2019, 1-11	6
311	A concentric tube-based 4-DOF puncturing needle with a novel miniaturized actuation system for vitrectomy. 2019 , 18, 46	5
310	Temperature and microstructure dependence of localized tensile deformation of superelastic NiTi wires. 2019 , 174, 107797	31
309	Phase equilibrium, structure, mechanical and biocompatible properties of TiNi-based alloy with silver. 2019 , 6, 066559	4
308	Surface Modification Methods for Titanium and Its Alloys and Their Corrosion Behavior in Biological Environment: A Review. 2019 , 5, 1	32
307	Shape Memory Behavior of Ni49.5Ti50.5 Processing-Induced Strain Glass Alloys. 2019 , 1411-1420	0
306	A gastric resident drug delivery system for prolonged gram-level dosing of tuberculosis treatment. 2019 , 11,	20
305	Influence of microstructure on mechanical and magnetic properties of an Fe-Ni-Co-Al-Ta-B shape memory alloy. 2019 , 6, 075701	6
304	Modelling the alloy element composition change in NiTi achieved through laser induced vaporization. 2019 , 231, 87-94	8
303	Electrografting of mixed organophosphonic monolayers for SI-ATRP of 2-methacryloyloxyethyl phosphorylcholine. 2019 , 16, 1121-1132	5
302	A numerical study of functional fatigue of closed-cell NiTi shape memory foams. 2019 , 131, 11-21	4
301	Electropolishing of Nitinol Wires and Its Influence on Corrosion Mechanisms. 2019 , 358, 052058	

300	Microstructure and mechanical properties of as-cast TiNiBe alloys. 2019 , 6, 126580		1
299	Design and Testing of a New Vascular Stent with Enhanced Fatigue Life. 2019 , 644, 012015		1
298	A finite element simulation method to evaluate the crimpability of curved stents. 2019 , 74, 162-165		4
297	Fiber Laser Surface Melting of a NiTi Superelastic Alloy: Influence on Structural and Mechanical Properties. 2019 , 9, 1268		2
296	High-temperature martensitic transformation of CuNiHfTiZr high- entropy alloys. 2019 , 9, 19598		7
295	Fatigue behavior of Nitinol medical devices under multi-axial non-proportional loads. 2019 , 300, 12001		0
294	A multistage elastocaloric refrigerator and heat pump with 28 K temperature span. 2019 , 9, 18532		22
293	The Role of Parent Phase Compliance on the Fatigue Lifetime of NiTi. <i>Shape Memory and Superelasticity</i> , 2019 , 5, 407-414	2.8	4
292	Selective solid-phase microextraction of ultraviolet filters in environmental water with oriented ZnO nanosheets coated nickel-titanium alloy fibers followed by high performance liquid chromatography with UV detection. 2019 , 191, 193-201		17
291	Stress induced martensitic transformation and shape memory effect in Zr-Nb-Sn alloys. 2019 , 162, 412-415		11
290	Data science for finite strain mechanical science of ductile materials. 2019 , 64, 33-45		17
289	Effects of Sn Addition on NiTi Shape Memory Alloys. <i>Shape Memory and Superelasticity</i> , 2019 , 5, 125-135	2.8	2
288	Fretting damage of Ni-rich ultrafine grained NiTi superelastic wires. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019 , 90, 655-664	4.1	3
287	A comparative study of surface characterization and corrosion performance properties of laser surface modified biomedical grade nitinol. 2019 , 469, 753-763		7
286	. 2019 , 3, 148-156		2
285	Fundamental aspects and recent developments in electropolishing. 2019 , 139, 1-23		72
284	Three-dimensional in situ characterization of phase transformation induced austenite grain refinement in nickel-titanium. 2019 , 162, 361-366		21
283	High-energy synchrotron radiation X-ray diffraction measurements during in situ aging of a NiTi-15 at. % Hf high temperature shape memory alloy. <i>Materialia</i> , 2019 , 5, 100220	3.2	3

282	Development and Finite Element Implementation of a Simple Constitutive Model to Address Superelasticity and Hysteresis of Nitinol. 2019 , 171-187		
281	Formation mechanism of Ni ₂ Ti ₄ O in NITI shape memory alloy. <i>Materialia</i> , 2019 , 5, 100194	3.2	18
280	Synthesis and characterization of nickel free titaniumHydroxyapatite composite coating over Nitinol surface through in-situ laser cladding and alloying. <i>Surface and Coatings Technology</i> , 2019 , 358, 539-550	4.4	21
279	Microstructure and shape memory effect of laser welded Nitinol wires. <i>Materials Letters</i> , 2019 , 238, 1-5	3.3	5
278	Pin-up Glottoplasty: Feasibility Study of a Novel Approach Medializing or Lateralizing Immobile Vocal Folds. 2019 , 33, 162-168		2
277	A thermodynamic driving force approach for analyzing functional degradation of shape memory alloy components. <i>Mechanics of Advanced Materials and Structures</i> , 2019 , 26, 1543-1555	1.8	3
276	An Automated Extracorporeal Knot-tying System Using Two Concentric Tube Robotic Arms for Deployment through a 3-mm Port. 2020 , 18, 1-9		16
275	A review on crucibles for induction melting of titanium alloys. 2020 , 186, 108295		25
274	Mathematical model for superelastic shape memory alloy springs with large spring index. 2020 , 185-186, 159-169		11
273	Microstructure and properties of equiatomic TiNi alloy fabricated by selective laser melting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 771, 138586	5.3	19
272	Shape optimization of SMA structures with respect to fatigue. 2020 , 189, 108456		6
271	Effect of Ni ion release on the cells in contact with NiTi alloys. 2020 , 27, 7934-7942		4
270	Incidence of stent graft failure from type IIIB endoleak in contemporary endovascular abdominal aortic aneurysm repair. 2020 , 71, 645-653		5
269	The effect of incident energy, incident angle and substrate temperature on surface morphology and atomic distribution of NiTi films. 2020 , 187, 108350		3
268	High Speed In Situ Synchrotron Observation of Cyclic Deformation and Phase Transformation of Superelastic Nitinol at Ultrasonic Frequency. 2020 , 60, 317-328		3
267	Experimental investigations and parametric optimization of laser beam welding of NiTi sheets by metaheuristic techniques and desirability function analysis. <i>Optics and Laser Technology</i> , 2020 , 124, 105982	4.2	6
266	Modeling the interface structure of type II twin boundary in B19' NiTi from an atomistic and topological standpoint. <i>Acta Materialia</i> , 2020 , 183, 93-109	8.4	19
265	Martensitic twin boundary migration as a source of irreversible slip in shape memory alloys. <i>Acta Materialia</i> , 2020 , 186, 50-67	8.4	15

264	Effect of Environmentally Friendly Oil on Ni-Ti Stent Wire Using Ultraprecision Magnetic Abrasive Finishing. 2020 , 10, 1309		1
263	Martensitic transition in molecular crystals for dynamic functional materials. 2020 , 49, 8287-8314		37
262	Effect of number of crowns on the crush resistance in open-cell stent design. 2020 , 15, 75-86		1
261	Mechanical, physical, chemical and biological properties of the new Ti ₃₀ Nb ₁₃ Ta ₅ Zr alloy. <i>Journal of Materials Science</i> , 2020 , 55, 14516-14529	4.3	19
260	Corrosion behavior of orthodontic wires in artificial saliva with presence of beverage. 2020 , 471-504		0
259	The Nature of the B ₂ Transformation in Ti-Nb Alloys. 2020 , 321, 11052		
258	Inter-Relationship between Coating Micro/Nanostructure and the Tribological Performance of ZrO ₂ Gradient Coatings. 2020 , 10, 1121		3
257	Material selection for medical devices. 2020 , 31-94		2
256	The influence of microstructural condition on the phase transformations in Ti-24Nb (at.%). <i>Acta Materialia</i> , 2020 , 199, 129-140	8.4	5
255	A scanning electrochemical microscopy characterization of the localized corrosion reactions occurring on nitinol in saline solution after anodic polarization. 2020 , 321, 128610		6
254	Mechanical suitability of an endovascular braincomputer interface. 2020 ,		0
253	Environmental fatigue of superelastic NiTi wire with two surface finishes. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020 , 111, 104028	4.1	5
252	Experimental study on whole-life one-way shape memory cyclic degradation and fatigue failure of NiTi shape memory alloy. <i>Materials Today Communications</i> , 2020 , 25, 101621	2.5	5
251	Microstructural and mechanical properties of dissimilar nitinol and stainless steel wire joints produced by micro electron beam welding without filler material. 2020 , 64, 2159-2168		0
250	A Stiffness Adjustable 6-DOF Robotic System for Pituitary Tumor Resection Under MRI. 2020 , 8, 192557-192568		
249	Shape-memory materials and their clinical applications. 2020 , 1-21		6
248	Larger surface area can reduce nitinol corrosion resistance. 2020 , 4,		0
247	Surface Engineering of Cardiovascular Devices for Improved Hemocompatibility and Rapid Endothelialization. 2020 , 9, e2000920		18

246	Effect of True Strains in Isothermal abc Pressing on Mechanical Properties of Ti49.8Ni50.2 Alloy. 2020 , 10, 1313		3
245	In-situ synchrotron high energy X-ray diffraction study of micro-mechanical behaviour of R phase reorientation in nanocrystalline NiTi alloy. <i>Acta Materialia</i> , 2020 , 194, 565-576	8.4	13
244	Development of a long-acting direct-acting antiviral system for hepatitis C virus treatment in swine. 2020 , 117, 11987-11994		5
243	Corrosion resistance of a Nitinol ocular microstent: Implications on biocompatibility. 2020 , 108, 2681-2690		1
242	Tailoring hardness gradient in Ni50BTi29.7HF20 high temperature shape memory alloy through thermal treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 787, 139518	5.3	2
241	Machinability Analysis and Optimization in Wire EDM of Medical Grade NiTiNOL Memory Alloy. 2020 , 13,		15
240	Experimental Continuous Casting of Nitinol. 2020 , 10, 505		8
239	On the Importance of Structural and Functional Fatigue in Shape Memory Technology. <i>Shape Memory and Superelasticity</i> , 2020 , 6, 213-222	2.8	7
238	Nickel-Titanium self-knotting suture wire for deep surgical field: A validated numerical model. <i>Materials Today Communications</i> , 2020 , 24, 101038	2.5	1
237	Microstructure, properties and applications of Zr-carbide, Zr-nitride and Zr-carbonitride coatings: a review. 2020 , 1, 1012-1037		11
236	Toward low and high cycle fatigue behavior of SLM-fabricated NiTi: Considering the effect of build orientation and employing a self-heating approach. <i>International Journal of Mechanical Sciences</i> , 2020 , 185, 105878	5.5	21
235	The influence of mean strain on the high-cycle fatigue of Nitinol with application to medical devices. 2020 , 143, 104057		9
234	A review of shape memory alloy based filtration devices. 2020 , 10, 060701		5
233	Functional and Structural Fatigue of Pseudoelastic NiTi: Global Vs Local Thermo-Mechanical Response. <i>Shape Memory and Superelasticity</i> , 2020 , 6, 242-255	2.8	4
232	Investigation and Composition Characterization of a NiTi-like Alloy Combining High Temperature Shape Memory and High Entropy. <i>Shape Memory and Superelasticity</i> , 2020 , 6, 273-283	2.8	5
231	Superelastic Behavior of Biomedical Metallic Alloys. 2020 , 51, 3733-3741		4
230	Computational Evaluation of Potential Correction Methods for Unicoronal Craniosynostosis. 2020 , 31, 692-696		3
229	Deformation mechanisms in a superelastic NiTi alloy: An in-situ high resolution digital image correlation study. 2020 , 191, 108622		19

228	Study on behaviors of shape memory alloy materials under temperature cycling considering the damage. 2020 , 31, 990-997		1
227	Materials as Machines. <i>Advanced Materials</i> , 2020 , 32, e1906564	24	118
226	The Overview of Porous, Bioactive Scaffolds as Instructive Biomaterials for Tissue Regeneration and Their Clinical Translation. 2020 , 12,		34
225	Microstructural and Mechanical Response of NiTi Lattice 3D Structure Produced by Selective Laser Melting. 2020 , 10, 814		6
224	The effect of deposition conditions on the properties of Zr-carbide, Zr-nitride and Zr-carbonitride coatings: A review. 2020 , 1, 988-1011		14
223	Thermal expansion property and anisotropy of columnar-grained Cu _{71.5} Al _{18.5} Mn ₁₀ shape memory alloy under pre-deformation. <i>Materialia</i> , 2020 , 9, 100629	3.2	0
222	Physical and Structural Characterization of Monocrystalline Cu-13.7% Al-4.2% Ni Alloy Submitted to Thermo-Cyclical Treatments under Applied Loads. 2020 , 10, 219		1
221	Surface integrity aspects for NiTi shape memory alloys during wire electric discharge machining: A review. 2020 , 35, 537-558		20
220	Synthesis of co-sputter deposited NiTi thin alloy films and their compositional characterization using depth sensitive techniques. 2020 , 697, 137800		9
219	Filmed over with CAR-T cells. 2020 , 4, 142-143		2
218	A Review on Additive Manufacturing of Shape-Memory Materials for Biomedical Applications. 2020 , 72, 1229-1253		50
217	Effects of Ni powder addition on microstructure and mechanical properties of NiTi to AISI 304 stainless steel archwire dissimilar laser welds. 2020 , 55, 13-21		8
216	Nitinol Memory Rods Versus Titanium Rods: A Biomechanical Comparison of Posterior Spinal Instrumentation in a Synthetic Corpectomy Model. 2021 , 11, 277-282		1
215	Grain size-dependent energy partition in phase transition of NiTi shape memory alloys studied by molecular dynamics simulation. 2021 , 221, 31-41		15
214	Designing Better Cardiovascular Stent Materials - A Learning Curve. 2021 , 31,		13
213	Bending of a Nitinol cantilever and its fatigue performance. 2021 , 42, 101083		2
212	High-entropy alloys: emerging materials for advanced functional applications. 2021 , 9, 663-701		49
211	Effects of texture on the functional and structural fatigue of a NiTi shape memory alloy. 2021 , 221, 150-164		6

210	Effect of off-stoichiometric compositions on microstructures and phase transformation behavior in Ni-Cu-Pd-Ti-Zr-Hf high entropy shape memory alloys. 2021 , 857, 157467		5
209	Materials Properties and Manufacturing Processes of Nitinol Endovascular Devices. 2021 , 59-79		1
208	State of the art in processing of shape memory alloys with electrical discharge machining: A review. 2021 , 235, 333-366		16
207	WITHDRAWN: Recent advances in multicomponent NiTi-based shape memory alloy using metallic glass as a precursor. 2021 , 118, 100756		3
206	Investigation of the superelastic behavior of a Ti-16Zr-13Nb-2Sn sputtered film by nanoindentation. <i>Surface and Coatings Technology</i> , 2021 , 405, 126690	4-4	1
205	Nickel-Titanium peripheral stents: Which is the best criterion for the multi-axial fatigue strength assessment?. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 113, 104142	4-1	5
204	Effect of substrate bias voltage on the mechanical properties and deformation mechanisms in the nanostructured Ti-22Nb-10Zr coating. <i>Surface and Coatings Technology</i> , 2021 , 405, 126674	4-4	0
203	Laser power modulated microstructure evolution, phase transformation and mechanical properties in NiTi fabricated by laser powder bed fusion. 2021 , 861, 157959		12
202	Revisiting the effects of low-concentration hydrogen in NiTi self-expandable stents. 2021 , 118, 111405		1
201	Prediction of the NiTi shape memory alloy composition with the best corrosion resistance for dental applications utilizing artificial intelligence. 2021 , 258, 123974		5
200	Study on Improving the Performance of Nitinol Cardiovascular Stent by Fiber Laser Electropolishing 2021 , 31-40		
199	Titanium alloys. 2021 , 157-187		0
198	Intraductal Tissue Sampling Device Designed for the Biliary Tract. 2021 , 9, 2500112		
197	SMA cardiovascular applications and computer-based design. 2021 , 659-685		1
196	Effects of constraint between filaments on the radial compression properties of poly (l-lactic acid) self-expandable braided stents. 2021 , 93, 106963		3
195	Historical background and future perspectives. 2021 , 3-52		
194	Free Response and Musical Pitch of Shape Memory Alloy Wires under Voltage Loading. 2021 , 1-1		1
193	Microstructure and mechanical property improvement of dissimilar metal joints for TC4 Ti alloy to Nitinol NiTi alloy by laser welding. <i>International Journal of Materials Research</i> , 2021 ,	0-5	0

192	Application of Active-Screen Plasma Nitriding to an Austenitic Stainless Steel Small-Diameter Thin Pipe. 2021 , 11, 366		6
191	The Investigation of Microstructure and Mechanical Behavior and the Fractographic Analysis of the Ti49.1Ni50.9 Alloy in States with Different Activation Deformation Volumes. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 3052	2.6	
190	Endodontic Instruments and Canal Preparation Techniques. 2021 , 81-131		1
189	A Review on Application of Shape Memory Alloys. 2021 , 9, 111-120		1
188	Development of Ni44Ti35Zr15Cu6 Quaternary Shape Memory Alloy: Experimental and Density Functional Theory Studies. <i>Journal of Materials Engineering and Performance</i> , 2021 , 30, 3624-3631	1.6	
187	A 20-gauge active needle design with thin-film printed circuitry for interventional MRI at 0.55T. 2021 , 86, 1786-1801		2
186	Study on Interference Connection Based on Shape Recovery of NiTiNb Shape Memory Alloy. 2021 , 14,		
185	Strain-sensitive topological evolution of twin interfaces. <i>Acta Materialia</i> , 2021 , 208, 116716	8.4	9
184	PVA/gelatin-based hydrogel coating of nickel-titanium alloy for improved tissue-implant interface. 2021 , 127, 1		3
183	Quantitative analysis of compatible microstructure by electron backscatter diffraction. 2021 , 379, 20200112		1
182	Fatigue Crack Growth in Austenitic and Martensitic NiTi: Modeling and Experiments. <i>Shape Memory and Superelasticity</i> , 2021 , 7, 250-261	2.8	1
181	Investigating the Influences of Wet Fiber Laser Cutting Upon the Surface Integrity of Nitinol Cardiovascular Stents. 2021 , 22, 1237-1248		1
180	Assessment of mechanical and biocompatible performance of ultra-large nitinol endovascular devices fabricated via a low-energy laser joining process. 2021 , 36, 332-345		1
179	Transcatheter Heart Valves: A Biomaterials Perspective. 2021 , 10, e2100115		2
178	Atmospheric Plasma Spray Coating of NiTi on Mild Steel Substrate: An Microstructural Investigation. 2021 , 7, 1		5
177	Laboratory-Scale Processing and Performance Assessment of TiTiAl High-Temperature Shape Memory Spring Actuators. <i>Shape Memory and Superelasticity</i> , 2021 , 7, 222-234	2.8	
176	Advances in enhancing structural and functional fatigue resistance of superelastic NiTi shape memory alloy: A Review. 1045389X2110235		0
175	Chemical Polishing of Additively Manufactured, Porous, NickelTitanium Skeletal Fixation Plates.		5

174	Effect of Bone Quality and Leg Depth on the Biomechanical Performance of a Nitinol Staple. <i>Journal of Foot and Ankle Surgery</i> , 2021 ,	1.6	
173	Uniaxial tensile deformation behavior of a sandwich-like structural TiNb-NiTi composite for biomedical applications. 2021 , 40, 3627-3634		0
172	Architected material analogs for shape memory alloys. 2021 , 4, 1990-2012		4
171	Thermal, microstructural and elastic modulus behavior of Ti50Ni50-xNbx (x=0-5%at) shape memory alloys obtained by plasma arc melting. 2021 , 866, 158970		2
170	Design and validation of a multi-point injection technology for MR-guided convection enhanced delivery in the brain.		
169	Kirkendall pore evolution during interdiffusion and homogenization of titanium-coated nickel microwires. 2021 , 134, 107199		1
168	Recent advances in multicomponent NiTi-based shape memory alloy using metallic glass as a precursor. 2021 , 123, 100855		0
167	Is Gutta-Percha Still the "Gold Standard" among Filling Materials in Endodontic Treatment?. <i>Processes</i> , 2021 , 9, 1467	2.9	3
166	Ambient-Temperature Indentation Creep of Shape Memory NiTi Alloys: Additively Manufactured versus Cast. 2021 , 5, 87		2
165	Mechanical mechanism and deformation behavior of polycrystalline and gradient Ni50-xTi50Alx alloys using molecular dynamics. <i>Materials Today Communications</i> , 2021 , 28, 102724	2.5	0
164	Control of laser-gas-material interactions to enhance the surface properties of NiTi for orthopaedic applications. <i>Surface and Coatings Technology</i> , 2021 , 421, 127403	4.4	1
163	High-temperature shape memory properties of Cu15Ni35Ti25Hf12.5Zr12.5 high-entropy alloy. <i>Journal of Materials Research and Technology</i> , 2021 , 14, 1235-1242	5.5	5
162	Position Control and Force Estimation Method for Surgical Forceps Using SMA Actuators and Sensors. 2021 , 14,		2
161	Advancing Regenerative Medicine Through the Development of Scaffold, Cell Biology, Biomaterials and Strategies of Smart Material. 1		
160	Fatigue Properties of Nickel Titanium and their Improvement Using Low-Energy High-Current Electron Beams. 1		
159	Mechanical properties and fracture mechanisms of martensitic NiTi shape memory alloy based on various thermomechanical-processing microstructures. 2021 , 883, 160797		1
158	The property of adhesion and biocompatibility of silicon and fluorine doped diamond-like carbon films. 2021 , 119, 108558		2
157	Effect of microstructure on fatigue of superelastic NiTi wires. 2021 , 152, 106400		4

156	Enhancement of mechanical properties and shape memory effect of Ti-Cr-based alloys via Au and Cu modifications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 123, 104707	4.1	3
155	An experimental evaluation of the microstructure, mechanical and functional fatigue properties of the boron-doped Cu-Al-Be SMA wires. 2021 , 210, 110081		0
154	Molecular dynamics simulations on one-way shape memory effect of nanocrystalline NiTi shape memory alloy and its cyclic degeneration. <i>International Journal of Mechanical Sciences</i> , 2021 , 211, 106777	5.5	2
153	SMA biomedical applications. 2021 , 627-658		5
152	A Cost-Effective Mock Circulatory System for Initial Testing of Cardiovascular Devices. 2021 , 1889-1896		
151	Effect of Cutting Speed on Shape Recovery of Work Material in Cutting Process of Super-Elastic NiTi Alloy. 2021 , 15, 24-33		1
150	Modeling the Behavior of Shape Memory Alloys and Memory Alloy-Based Devices. 2021 , 496-509		
149	Emerging Trends in the Applications of Metallic and Ceramic Biomaterials. 2021 , 1-17		3
148	Nd:YAG laser joining between stainless steel and nickel-titanium shape memory alloys. 2008 , 501-502		2
147	Modular Orthopedic Devices Based on Shape Memory Alloys. 2010 , 709-721		4
146	Enhancing biocompatibility of NiTi shape memory alloys by simple NH ₃ treatments. 2020 , 525, 146547		4
145	Effects of post-processing on the thermomechanical fatigue properties of laser modified NiTi. 2019 , 118, 307-315		7
144	Hydrogen effects on Ni-Ti fatigue performance by self-heating method. <i>Smart Materials and Structures</i> , 2017 , 26, 105016	3.4	6
143	NiTi shape memory alloy cellular meshes: manufacturing by investment casting and characterization. <i>Smart Materials and Structures</i> , 2020 , 29, 125008	3.4	3
142	Thermoelastic and vibration response analysis of shape memory alloy reinforced active bimorph composites. <i>Smart Materials and Structures</i> , 2021 , 30, 015033	3.4	3
141	Unusual composition dependence of transformation temperatures in Ti-Ta-X shape memory alloys. <i>Physical Review Materials</i> , 2018 , 2,	3.2	10
140	Crystallographic orientation dependence of mechanical properties in the superelastic Ti-24Nb-4Zr-8Sn alloy. <i>Physical Review Materials</i> , 2019 , 3,	3.2	5
139	Tuning crystallographic compatibility to enhance shape memory in ceramics. <i>Physical Review Materials</i> , 2019 , 3,	3.2	10

138	Shape Memory Alloys/Effect. 2005 , 175-271	1
137	Design and testing of a minimally invasive intervertebral cage for spinal fusion surgery. 2013 , 11, 283-297	3
136	Retrieval and analysis of surgical implants in Brazil: The need for proper regulation. 2001 , 1, 53	2
135	Finite Element Framework for Fatigue Performance Assessment of Superelastic Nitinol Used in Medical Devices. 2019 , 31-53	0
134	Features of Martensitic Transformation in the Area of Welding of Medical Ti _{49.2} Ni _{50.6} Ag _{0.2} Alloy. 2016 , 37, 1339-1348	1
133	Medical applications of shape memory alloys. 2003 , 36, 683-91	314
132	On the determination of the volume fraction of Ni ₄ Ti ₃ precipitates in binary Ni-rich NiTi shape memory alloys. 2004 , 95, 518-524	15
131	A Phenomenological Constitutive Model for Pseudoelastic Shape Memory Alloy. 2010 , 19, 468-473	3
130	Experimental Investigation of Electropolishing in Ethylene Glycol-NaCl Electrolyte for Surface Integrity of Nitinol Cardiovascular Stents. 2020 , 88, 325-329	1
129	Design and Validation of a Multi-Point Injection Technology for MR-Guided Convection Enhanced Delivery in the Brain.. 2021 , 3, 725844	0
128	Mechanical properties and scaling laws of polycrystalline CuZr shape memory alloy. 2021 , 130, 155106	1
127	Shape Memory Alloys, Applications.	2
126	Superelastic Biomedical Guidewire, Functionally Graded. 2005 , 1-7	
125	Endovascular Grafts. 2006 , 589-606	
124	Application of Ni-free Ti-Mo-Sn shape memory alloys to medical tools. 2007 , 32, 639-642	
123	Corrosion resistance of TiN coated implant alloys in artificial physiological solution. 2010 , 7, 187-193	
122	Evaluation of Mechanical Properties of Ni-Ti Bi-Layer Thin Film. 609-616	
121	Metals and Alloys. 1071-1097	

- 120 Microstructural Investigation of Melt-Spun NiTi Based Ribbons. **2012**, 49, 544-555
- 119 Endovascular Therapy for Abdominal Aortic Aneurysms. **2013**, 493-505
- 118 In-Situ TEM Observations of Martensitic Transformations in Ni-rich NiTi Single Crystals with Coherent and Aligned Precipitates. 89-93
- 117 Biocompatibility and corrosion response of laser joined NiTi to stainless steel wires. **2014**,
- 116 Evaluation of cyclic deformation behavior of laser-welded shape memory NiTi alloys at different working temperatures. **2014**,
- 115 Encyclopedia of Nanotechnology. **2016**, 3874-3880
- 114 Thermo-mechanical behavior of shape memory alloy made stent- graft by multi-plane model. **2016**, 1, 21-36
- 113 Potential Capabilities of Shape Memory Driven Automotive Devices. **2017**, 536-546
- 112 Changes in Microstructure and Properties of Ni-Ti Alloy after Addition of Ternary Alloying Element. **2016**, 16, 1359-1363 2
- 111 Full-Field Micromechanics of Precipitated Shape Memory Alloys. **2018**, 225-255
- 110 ~~Ekil hafızalı alaşımların biyomedikal uygulamaları~~
- 109 Preliminary Results with the Shape Memory Nail: A Self-contained Distal Locking Mechanism for Diaphyseal Femur Fractures. **2019**, 14, 115-120 0
- 108 Retrieval and Analysis of Surgical Implants in Brazil: The Need for Proper Regulation. **2019**, 1
- 107 What Are the Chances of Resilon to Dominate the Market Filling Materials for Endodontics?. **2021**, 11, 1744 3
- 106 Plasma Electrolytic Polishing of Nitinol: Investigation of Functional Properties. **2021**, 14, 0
- 105 Fabrication of multi-functional NiTi alloys by laser powder bed fusion. 1 0
- 104 Biodegradable shape memory alloys: Progress and prospects. **2021**, 279, 121215 5
- 103 Shape Memory Biomaterials and Their Clinical Applications. **2021**, 195-255 0

102 J stylet-A preliminary report. **2020**, 3, 102

101 Corrosion Behaviors of Sputtered NiTiCu Shape Memory Films. **2020**, 08, 7-15

100 Influence of fatigue stress on the radial strength of polymeric braided vascular stents. 0

99 On the microstructure and superelastic evolution of laser annealed thin NiTiInol wires. *Smart Materials and Structures*, **2020**, 29, 115010 3.4

98 Effect of pressure sensitivity on spherical indentation response of shape memory alloys. *Smart Materials and Structures*, **2020**, 29, 115033 3.4 0

97 Origins of the transformability of nickel-titanium shape memory alloys. *Physical Review Materials*, **2020**, 4, 3.2 1

96 Local chemical fluctuation mediated ultra-sluggish martensitic transformation in high-entropy intermetallics.. *Materials Horizons*, **2021**, 14.4 1

95 Continuous Heating Dissolution and Continuous Cooling Precipitation Diagrams of a Nickel-Titanium Shape Memory Alloy. *Shape Memory and Superelasticity*, 1 2.8

94 Original implementation of low-temperature SPS for bioactive glass used as a bone biomaterial. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 126, 104988 4.1 0

93 On the impact of lattice parameter accuracy of atomistic simulations on the microstructure of Ni-Ti shape memory alloys. *Modelling and Simulation in Materials Science and Engineering*, 2

92 Strain rate dependent micromechanical properties of NiTi shape memory alloys: Laser powder bed fusion versus casting. *Forces in Mechanics*, **2021**, 5, 100055 1.5 0

91 Shape memory alloys-polymer composites: interfacial strength under mechanical and thermal loading. *Procedia Structural Integrity*, **2021**, 33, 1073-1081 1

90 Nanostructured hydroxyapatite coatings on NiTi shape memory alloys by ultrasonic mechanical coating and armouring. *Surface and Coatings Technology*, **2022**, 431, 127998 4.4 0

89 Microstructural evolution and nanoindentation study of magnetic pulse welded Nitinol and Aluminium sheets. *Materials Characterization*, **2022**, 184, 111690 3.9 0

88 Finite element simulation and experimental investigation on the effect of temperature on pseudoelastic behavior of perforated NiTi shape memory alloy strips. *Smart Materials and Structures*, **2022**, 31, 025031 3.4 0

87 Corrosion of Additively Manufactured Metallic Components: A Review. *Arabian Journal for Science and Engineering*, 1 2.5 1

86 Nitinol Type Alloys General Characteristics and Applications in Endodontics. *Processes*, **2022**, 10, 101 2.9 1

85 Estimation of titanium oxide layer thickness on thermally oxidized NiTi alloy based on color variations. *Materialwissenschaft Und Werkstofftechnik*, **2022**, 53, 47-55 0.9 0

84	Investigation of mechanical behaviors and improved design of V-shaped braid stents.. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2022 , 9544119221076946	1.7	0
83	Corrosion resistance of a superelastic NiTi alloy coated with grapheneBased coatings. <i>Progress in Organic Coatings</i> , 2022 , 165, 106727	4.8	1
82	Nano Scaled Checkerboards: A Long Range Ordering in NiCoMnAl Magnetic Shape Memory Alloy Thin Films with Martensitic Intercalations. <i>Applied Sciences (Switzerland)</i> , 2022 , 12, 1748	2.6	
81	Introduction to polymers and plastics for medical devices. 2022 , 1-26		
80	Study on a Fault Mitigation Scheme for Rub-Impact of an Aero-Engine Based on NiTi Wires.. <i>Sensors</i> , 2022 , 22,	3.8	0
79	A Wirelessly Controlled Shape-Memory Alloy-Based Bistable Metal Swimming Device. <i>Advanced Intelligent Systems</i> , 2100251	6	0
78	In Vitro Microstructure, Shape Memory, Corrosion, and Biocompatibility Characteristics of Porous Ti-51at.%Ni-xSn Shape Memory Alloys. <i>Metallography, Microstructure, and Analysis</i> , 2022 , 11, 150-157	1.1	1
77	Effect of Simulated Bone Resorption on the Biomechanical Performance of Intramedullary Devices for Foot and Ankle Arthrodesis.. <i>Journal of Foot and Ankle Surgery</i> , 2022 ,	1.6	0
76	Microstructure-Based MultiStage Fatigue Modeling of NiTi Alloy Fabricated via Direct Energy Deposition(DED). <i>Journal of Materials Engineering and Performance</i> , 1	1.6	0
75	Effect of welding current on the microstructure, residual stresses, mechanical properties and nano-mechanical behaviour of P-TIG welded TiNi binary shape-memory alloy. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 146442072210856	1.3	1
74	Effects of microstructure and composition on constitutive response of high temperature shape memory alloys: micromechanical modeling using 3-D reconstructions with experimental validation. <i>Acta Materialia</i> , 2022 , 117929	8.4	0
73	Plastic deformation mechanisms that explain hot-rolling textures in NickelTitanium. <i>International Journal of Plasticity</i> , 2022 , 153, 103257	7.6	1
72	Hydrogen absorption due to wear between NiTi superelastic alloys in water. <i>Materials Letters</i> , 2022 , 318, 132205	3.3	0
71	Role of alloying additions on phase transformations, mechanical and pseudoelastic behavior of Cu-Al-Be shape memory alloys. <i>Materials Today: Proceedings</i> , 2021 ,	1.4	
70	Electrolytic plasma polishing of NiTi alloy. <i>Mathematical Models in Engineering</i> , 2021 , 7, 70-80	0.5	
69	Intelligent Implant System for Bone Lengthening. <i>Lecture Notes in Networks and Systems</i> , 2022 , 647-655	0.5	
68	Effect of a constant laser energy density on the evolution of microstructure and mechanical properties of NiTi shape memory alloy fabricated by laser powder bed fusion. <i>Optics and Laser Technology</i> , 2022 , 152, 108182	4.2	0
67	The role of NiTi shape memory alloys in quality of life improvement through medical advancements: A comprehensive review.. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2022 , 9544119221093460	1.7	0

66	Influence of structural size on mechanical properties of nitinol left atrial appendage occluder. <i>Journal of Physics: Conference Series</i> , 2022 , 2256, 012008	0.3	
65	Relevant Aspects of Laser Cutting of NiTi Shape Memory Alloys. <i>Journal of Materials Research and Technology</i> , 2022 ,	5.5	2
64	Flexible and Tough Superelastic Co-Cr Alloys for Biomedical Applications.. <i>Advanced Materials</i> , 2022 , e2202305	24	1
63	Achieving high quality nitinol parts with minimised input thermal energy by optimised pulse wave laser powder bed fusion process. <i>Results in Materials</i> , 2022 , 14, 100279	2.3	0
62	On the determination of the volume fraction of Ni ₄ Ti ₃ precipitates in binary Ni-rich NiTi shape memory alloys. <i>International Journal of Materials Research</i> , 2022 , 95, 518-524	0.5	
61	Combination of Shape-Memory Polymers and Metal Alloys. 2022 , 311-339		
60	Neural Network Modeling of NiTiHf Shape Memory Alloy Transformation Temperatures. <i>Journal of Materials Engineering and Performance</i> ,	1.6	0
59	New structure and insight on the phase transition within the Cu-Pd-Sn system with 25 at. % Sn.. <i>Materialia</i> , 2022 , 101461	3.2	
58	Tailoring thermal and electrical conductivities of a Ni-Ti-Hf-based shape memory alloy by microstructure design. <i>Journal of Materials Science</i> ,	4.3	0
57	Predicting the Effect of Mo Addition on Metastable Phase Equilibria and Diffusion Path of Fe in NiAl Laser-Clad Coatings Using First-Principle Calculations and CALPHAD Simulations. <i>Processes</i> , 2022 , 10, 1228	2.9	
56	Influence of process parameters on surface topography of nitinol manufactured by fiber laser cutting for medical applications.. <i>Procedia CIRP</i> , 2022 , 110, 82-86	1.8	0
55	Dynamic, Tunable, and Conformal Wearable Compression Using Active Textiles. <i>Advanced Materials Technologies</i> , 2200467	6.8	0
54	Design and prediction of healing assessment for AA2014-Nitinol strip-Solder alloy based hybrid self-healing composite structure via Taguchi analysis and fuzzy logic approach. <i>Mechanics of Advanced Materials and Structures</i> , 1-20	1.8	1
53	Pre-strain and Mean Strain Effects on the Fatigue Behavior of Superelastic Nitinol Medical Devices. <i>Shape Memory and Superelasticity</i> ,	2.8	0
52	A discrete particle model study of the effect of temperature and geometry on the pseudoelastic response of shape memory alloys. <i>International Journal of Mechanical Sciences</i> , 2022 , 107527	5.5	0
51	Experimental investigation and numerical analysis: fracture mechanics and microstructural development in Ni _{55.8} Ti superalloy under mixed-mode loading at different temperatures. <i>Meccanica</i> ,	2.1	
50	On the role of internal stresses on the superelastic behaviour of Ti-24Nb (at.%). <i>Acta Materialia</i> , 2022 , 118161	8.4	0
49	Promoted mechanical properties and functionalities via Tailored Ti ₆₀ Al ₄₀ shape memory alloys towards biomedical applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022 , 133, 105358	4.1	0

- 48 Investigation of changing geometry parameters of nickel-titanium shape memory alloys wire stent in cardiovascular implants. *Computer Methods in Biomechanics and Biomedical Engineering*, 1-8 2.1
- 47 Study on laser beam butt-welding of NiTiInol sheet and input-output modelling using neural networks trained by metaheuristic algorithms. *Materials Today Communications*, **2022**, 104089 2.5 ○
- 46 Visible Light 3D Printing of High-Resolution Superelastic Microlattices of Poly(ethylene glycol) Diacrylate/Graphene Oxide Nanocomposites via Continuous Liquid Interface Production.
- 45 The Development and Verification of a Simulation Model of Shape-Memory Alloy Wires for Strain Prediction. **2022**, 12, 1121
- 44 Numerical Analysis of Joule Heating in a NiTi Segmented Wire used in Sensing Applications.
- 43 In vitro and in vivo assessment of a novel ultra-flexible ventriculoamniotic shunt for treating fetal hydrocephalus. 088532822211253 ○
- 42 Process optimization and thermodynamic modeling of weld zone in nickel powder-added dissimilar pulsed-laser NiTi/ASS joint. **2022**, 20, 4197-4212 ○
- 41 Laser powder bed fusion (LPBF) of NiTi alloy using elemental powders: the influence of remelting on printability and microstructure. ○
- 40 Shape Memory Alloy-Based Wearables: A Review, and Conceptual Frameworks on HCI and HRI in Industry 4.0. **2022**, 22, 6802 ○
- 39 Comparison of a 22G Crown-Cut Needle with a Conventional 22G Needle with EBUS Guidance in Diagnosis of Sarcoidosis. **2022**, 200, 633-641 1
- 38 Nitinol: From historical milestones to functional properties and biomedical applications. 095441192211231 1
- 37 Catechol-functionalized sulfobetaine polymer for uniform zwitterionization via pH transition approach. **2022**, 220, 112879 ○
- 36 Resultant Physical Properties of As-Built Nitinol Processed at Specific Volumetric Energy Densities and Correlation with In-Situ Melt Pool Temperatures. **2022**, 1 1
- 35 Present status and future trend of friction stir-based fabrication of NiTiInol: a review. ○
- 34 Synchrotron-based multiscale study on phase transformation in a cold-rolled NiTi shape memory alloy: Effects of preexisting defects. **2022**, 107862 ○
- 33 Unraveling the passive film formation and degradation mechanism of NiTi shape memory alloy: An experimental investigation. **2022**, 33, 104734 ○
- 32 An investigation on reorientation and textural evolution in a martensitic NiTi rolled sheet using EBSD. **2022**, 159, 103468 ○
- 31 Single walled carbon nanotubes reinforced intermetallic TiNi matrix nanocomposites by spark plasma sintering. 145-159 ○

30	Imperfections Formation in Thin Layers of NiTi Triply Periodic Minimal Surface Lattices Fabricated Using Laser Powder Bed Fusion. 2022 , 15, 7950	0
29	Additive manufacturing in biomedical field: a critical review on fabrication method, materials used, applications, challenges, and future prospects.	1
28	Plasma Electrolytic Polishing of Porous Nitinol Structures. 2022 , 5, 555-568	0
27	Improved stability of superelasticity and elastocaloric effect in Ti-Ni alloys by suppressing Lüders-like deformation under tensile load. 2022 ,	0
26	A comparative study on the fatigue strength and service life of lower limb arterial stent at different stenosis rates.	0
25	Data-Driven Study of Shape Memory Behavior of Multi-Component NiTi Alloys in Large Compositional and Processing Space.	0
24	Current status of biopsy markers for the breast in clinical settings. 1-11	0
23	Functional Behaviour of Cold-Worked and Straight-Annealed NiTi Elements Processed with Ultrashort Laser Cutting. 2023 , 13, 16	0
22	Latest Developments and Insights of Orthopedic Implants in Biomaterials Using Additive Manufacturing Technologies. 2022 , 6, 162	0
21	Heat Source Reconstruction and Its Relationship with Functional Fatigue of Pseudoelastic NiTi Ribbons.	0
20	Phase formation in the Ni-enriched zone below the surface oxide on NiTi. 2023 , 154, 107817	0
19	Laser beam welding of NiTiNol sheets in butt joint arrangement and optimization of the process using desirability function analysis and metaheuristic techniques. 095440892211445	0
18	Design of Porous Shape Memory Alloys with Small Mechanical Hysteresis. 2023 , 13, 34	0
17	Analysis of the Local Functional Evolution in NiTi Shape Memory Alloys by Multicycle Nanoindentations.	0
16	Considerations on Tension-Tension Fatigue Predictions for Nitinol.	0
15	Surface amorphization of bulk NiTi induced by laser radiation. 2023 , 38, 102827	0
14	A numerical study towards shape memory alloys application in orthotic management of pediatric knee lateral deviations. 2023 , 13,	0
13	Ultrashort Laser Texturing of Superelastic NiTi: Effect of Laser Power and Scanning Speed on Surface Morphology, Composition and Wettability. 2023 , 13, 381	0

- 12 Biomechanical comparison of nitinol compression staples versus fully threaded lag screws for talonavicular arthrodesis. **2023**, 37, 64-68 ○
- 11 A study on the Wire-EDM of Ni55.8Ti shape memory superalloy: an experimental investigation and a hybrid ANN/PSO approach for optimization. **2023**, 45, ○
- 10 Impeded Lüders banding during forward and reverse phase transformations in a cold-rolled NiTi shape memory alloy. ○
- 9 Structure and Mechanical Properties of the NiTi Wire Joined by Laser Welding. **2023**, 16, 2543 ○
- 8 Advances in Ultrathin Soft Sensors, Integrated Materials, and Manufacturing Technologies for Enhanced Monitoring of Human Physiological Signals. 2201294 ○
- 7 Analysis of Fatigue Strength and Reliability of Lower Limb Arterial Stent at Different Vascular Stenosis Rates and Stent-to-Artery Ratios. ○
- 6 Effects of Tapered-Strut Design on Fatigue Life Enhancement of Peripheral Stents. **2023**, 10, 443 ○
- 5 3D Printable NiTi Alloys for Biomedical Applications: A State of Art. **2022**, ○
- 4 Relevant Choices Affecting the Fatigue Analysis of Ni-Ti Endovascular Devices. **2023**, 16, 3178 ○
- 3 Effect of Homogenization on the Transformation Temperatures and Mechanical Properties of Cu₁₅Ni₃₅Hf_{12.5}Ti₂₅Zr_{12.5} and Cu₁₅Ni₃₅Hf₁₅Ti₂₀Zr₁₅ High-Entropy Shape Memory Alloys. **2023**, 16, 3212 ○
- 2 Effect of Arthrodesis Device Type and Trajectory on Subtalar Joint Compression. **2023**, ○
- 1 Frequency Response Characterization of Thin-Film Shape Memory Alloy Actuator for Reconfigurable Antenna. ○