Yong Liu

List of Publications by Year
in descending order

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101 papers	4,875 citations	109137 35 h-index	98622 67 g-index
102 all docs	102 docs citations	102 times ranked	3725 citing authors

#	Article	IF	Citations
1	Review of mechanisms and deformation behaviors in 4D printing. International Journal of Advanced Manufacturing Technology, 2019, 105, 4633-4649.	1.5	48
2	Effect of Heat Treatment on Repetitively Scanned SLM NiTi Shape Memory Alloy. Materials, 2019, 12, 77.	1.3	32
3	Effect of Grain Boundary on the Wear Behaviour of NiTi Shape Memory Alloys When MfÂ‹ÂTÂ‹ÂAf. Tribology Letters, 2018, 66, 1.	1.2	2
4	Fabrication of SLM NiTi Shape Memory Alloy via Repetitive Laser Scanning. Shape Memory and Superelasticity, 2018, 4, 112-120.	1.1	34
5	Design and 4D Printing of Cross-Folded Origami Structures: A Preliminary Investigation. Materials, 2018, 11, 376.	1.3	40
6	A Review of Selective Laser Melted NiTi Shape Memory Alloy. Materials, 2018, 11, 519.	1.3	88
7	Hierarchically self-morphing structure through 4D printing. Virtual and Physical Prototyping, 2017, 12, 61-68.	5.3	70
8	Multi-stage responsive 4D printed smart structure through varying geometric thickness of shape memory polymer. Smart Materials and Structures, 2017, 26, 125001.	1.8	53
9	A jumping shape memory alloy under heat. Scientific Reports, 2016, 6, 21754.	1.6	23
10	Effect of Deformation Mode on the Wear Behavior of NiTi Shape Memory Alloys. Shape Memory and Superelasticity, 2016, 2, 204-217.	1.1	4
11	Effect of Cu Content on Atomic Positions of Ti50Ni50â€'xCux Shape Memory Alloys Based on Density Functional Theory Calculations. Metals, 2015, 5, 2222-2235.	1.0	6
12	Wear Behavior of Austenitic NiTi Shape Memory Alloy. Shape Memory and Superelasticity, 2015, 1, 58-68.	1.1	24
13	The superelastic anisotropy in a NiTi shape memory alloy thin sheet. Acta Materialia, 2015, 95, 411-427.	3.8	65
14	Effect of temperature on the wear behavior of NiTi shape memory alloy. Journal of Materials Research, 2015, 30, 186-196.	1.2	26
15	3D printing of smart materials: A review on recent progresses in 4D printing. Virtual and Physical Prototyping, 2015, 10, 103-122.	5.3	660
16	An investigation on the crystal structures of Ti50Ni50â^'xCux shape memory alloys based on density functional theory calculations. Intermetallics, 2014, 53, 20-25.	1.8	29
17	Enhanced wear resistance of NiTi alloy by surface modification with Nb ion implantation. Rare Metals, 2014, 33, 244-248.	3.6	14
18	The mechanism clarification of Niâ€"Mnâ€"Feâ€"Ga alloys with excellent and stable functional properties. Journal of Alloys and Compounds, 2013, 560, 84-91.	2.8	24

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19	Wear behaviour of martensitic NiTi shape memory alloy under ball-on-disk sliding tests. Tribology International, 2013, 66, 219-224.	3.0	34
20	Exchange Bias and Inverse Magnetocaloric Effect in Co and Mn Co-Doped Ni2MnGa Shape Memory Alloy. Metals, 2013, 3, 69-76.	1.0	15
21	Nano-hardness, wear resistance and pseudoelasticity of hafnium implanted NiTi shape memory alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 13, 174-184.	1.5	47
22	Large exchange bias obtainable through zero-field cooling from an unmagnetized state in Ni-Mn-Sn alloys. Journal of Applied Physics, 2012, 111, 043912.	1.1	45
23	Martensite stabilization and thermal cycling stability of two-phase NiMnGa-based high-temperature shape memory alloys. Acta Materialia, 2012, 60, 4255-4267.	3.8	52
24	Large Exchange Bias after Zero-Field Cooling from an Unmagnetized State. Physical Review Letters, 2011, 106, 077203.	2.9	279
25	Evolution of local atomic structure in a melt-spun Ni₂₅Ti₅₀Cu₂₅shape memory alloy during crystallization. Philosophical Magazine, 2011, 91, 404-420.	0.7	10
26	Effect of precipitation on two-way shape memory effect of melt-spun Ti50Ni25Cu25 ribbon. Materials Chemistry and Physics, 2010, 120, 221-224.	2.0	17
27	Enhanced magnetoresistance through magnetic-field-induced phase transition in Ni2MnGa co-doped with Co and Mn. Journal of Magnetism and Magnetic Materials, 2010, 322, 715-717.	1.0	16
28	Strong thermal-history-dependent magnetoresistance behavior in Ni49.5Mn34.5In16. Journal of Applied Physics, 2009, 106, 063909.	1.1	39
29	The ductility and shape-memory properties of Niâ€“Mnâ€“Coâ€“Ga high-temperature shape-memory alloys. Acta Materialia, 2009, 57, 3232-3241.	3.8	98
30	Transformation temperature changes due to second phase precipitation in NiTi-based shape memory alloys. Intermetallics, 2009, 17, 914-919.	1.8	57
31	A second-order ferromagnetic transition in the martensitic state of Ni49.5Mn32.5Cu4Sn14: A critical behavior study. Journal of Applied Physics, 2009, 105, .	1.1	26
32	Dependence of Transformation Temperatures of NiTiâ€based Shapeâ€Memory Alloys on the Number and Concentration of Valence Electrons. Advanced Functional Materials, 2008, 18, 2789-2794.	7.8	131
33	Effect of precipitation on the shape memory effect of Ti50Ni25Cu25 melt-spun ribbon. Acta Materialia, 2008, 56, 1721-1732.	3.8	34
34	On the two-way shape memory behavior in NiTi alloyâ€”An experimental analysis. Acta Materialia, 2008, 56, 3266-3277.	3.8	36
35	Phase transformation in NiTiHf shape memory alloy thin films. Thin Solid Films, 2008, 516, 5393-5396.	0.8	23
36	Thermomechanical training and the shape recovery characteristics of NiTi alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 166-169.	2.6	27

#	Article	IF	Citations
37	Shape Memory Alloy as Actuator to Deflect a Wing Flap. , 2008, , .		9
38	On the mechanisms of two-way memory effect and stress-assisted two-way memory effect in NiTi shape memory alloy. Journal of Alloys and Compounds, 2008, 449, 125-128.	2.8	37
39	Crystallization behavior of a Ti50Ni25Cu25 melt-spun ribbon. Journal of Alloys and Compounds, 2008, 449, 152-155.	2.8	27
40	Effect of surface oxidation on detwinning stress and transformation temperature of Tiâ€“50Ni shape memory alloy. Journal of Alloys and Compounds, 2008, 448, 171-176.	2.8	9
41	Characterization of a rapidly annealed Ti50Ni25Cu25 melt-spun ribbon. Journal of Alloys and Compounds, 2008, 456, 170-177.	2.8	17
42	The crystal chemistry of martensite in NiTiHf shape memory alloys. Intermetallics, 2008, 16, 876-883.	1.8	49
43	Exchange bias and its training effect in the martensitic state of bulk polycrystalline Ni49.5Mn34.5In16. Journal of Applied Physics, 2008, 104, .	1.1	62
44	Microstructure and texture development in Ti50Ni25Cu25 melt-spun ribbon. Acta Materialia, 2007, 55, 361-369.	3.8	31
45	Effect of stress-induced martensitic transformation on the crack tip stress-intensity factor in Niâ€“Mnâ€“Ga shape memory alloy. Acta Materialia, 2007, 55, 5621-5629.	3.8	35
46	Properties of Ti50Ni25Cu25 Melt-Spun Ribbon. , 2006, , .		1
47	Some factors affecting the shape recovery properties of NiTi SMA. , 2006, , .		2
48	Transformation characteristics of annealed Ti50Ni25Cu25 melt spun ribbon. Journal of Alloys and Compounds, 2006, 415, 182-187.	2.8	22
49	Thermally induced fracture of single crystal Niâ€“Mnâ€“Ga ferromagnetic shape memory alloy. Journal of Alloys and Compounds, 2006, 415, 188-192.	2.8	21
50	Properties of rapidly annealed Ti50Ni25Cu25 melt-spun ribbon. Journal of Alloys and Compounds, 2006, 416, 188-193.	2.8	20
51	Electrical transport and thermal properties of ferromagnetic shape memory alloy Ni49.4Mn30Ga20.6. Journal of Magnetism and Magnetic Materials, 2006, 303, 261-265.	1.0	10
52	Texture and shape memory property of annealed Ti50Ni25Cu25 ribbons. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 425, 268-271.	2.6	11
53	Thermomechanical stability of Niâ€“Mnâ€“Ga single crystal. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 432, 178-183.	2.6	8
54	The Rational Nature of Type II Twin in NiTi Shape Memory Alloy. Journal of Intelligent Material Systems and Structures, 2006, 17, 1083-1090.	1.4	8

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55	Stress-induced change of magnetization in a Niâ€“Mnâ€“Ga single crystal under magnetomechanical training. Applied Physics Letters, 2006, 88, 232504.	1.5	4
56	Fracture mechanism of a Niâ€“Mnâ€“Ga ferromagnetic shape memory alloy single crystal. Journal of Magnetism and Magnetic Materials, 2005, 285, 410-416.	1.0	21
57	Surface morphology of sputtered NiTi-based shape memory alloy thin films. Surface and Coatings Technology, 2005, 190, 400-405.	2.2	13
58	Characterization of a nanocrystalline NiTiHf high temperature shape memory alloy thin film. Scripta Materialia, 2005, 52, 983-987.	2.6	43
59	Some aspects of strain-induced change of magnetization in a Niâ€“Mnâ€“Ga single crystal. Scripta Materialia, 2005, 53, 829-834.	2.6	14
60	Shape Memory and Related Technologies. Smart Materials and Structures, 2005, 14, .	1.8	1
61	Factors affecting the generation of stress-assisted two-way memory effect in NiTi shape memory alloy. Journal of Alloys and Compounds, 2005, 400, 163-170.	2.8	19
62	Shape recovery of NiTi shape memory alloy under various pre-strain and constraint conditions. Smart Materials and Structures, 2005, 14, S273-S286.	1.8	39
63	A dynamic indentation method for characterizing soft incompressible viscoelastic materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 379, 334-340.	2.6	19
64	Substrate-induced stress and transformation characteristics of a deposited Tiâ€“Niâ€“Cu thin film. Philosophical Magazine, 2004, 84, 1919-1936.	0.7	27
65	The work production of shape memory alloy. Smart Materials and Structures, 2004, 13, 552-561.	1.8	18
66	HRTEM study of âŸ¨011âŸ© type II twin in NiTi shape memory alloy. Philosophical Magazine, 2004, 84, 3497-3507.	0.7	26
67	Effect of SiO2 buffer layer on properties of sputter-deposited NiTi shape memory alloy thin films. Surface and Coatings Technology, 2003, 167, 148-153.	2.2	2
68	Substrate-induced stress and the transformation behavior of sputter-deposited NiTi thin films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 352, 314-317.	2.6	4
69	Mechanical and thermomechanical properties of a Ti50Ni25Cu25 melt spun ribbon. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 354, 286-291.	2.6	65
70	TEM in situ study of the pre-strained NiTi shape memory alloyâ€”driving force for shape recovery?. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 361, 185-190.	2.6	8
71	Twinning and detwinning of â€˜0â€˜1â€˜1â€‰ type II twin in shape memory alloy. Acta Materialia, 2003, 51, 5529-5543.	5.5	88
72	Twinning and Detwinning of <011> Type II Twins in NiTi Shape Memory Alloy. Materials Science Forum, 2003, 426-432, 2291-2296.	0.3	1

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73	Rate dependence of deformation mechanisms in a shape memory alloy. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 2461-2473.	0.8	33
74	Prediction of the detwinning anisotropy in textured NiTi shape memory alloy. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 665-683.	0.8	23
75	Some factors affecting the properties of sputter deposited NiTi-based shape memory alloy thin films. , 2002, 4934, 210.		7
76	On the Detwinning Mechanism in Shape Memory Alloys. Solid Mechanics and Its Applications, 2002, , 37-44.	0.1	7
77	Dynamic deformation of shape-memory alloys: Evidence of domino detwinning?. Philosophical Magazine Letters, 2002, 82, 511-517.	0.5	20
78	Strengthening of virgin martensite through cryogenic deformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 3576-3578.	1.1	1
79	Effect of annealing on the transformation behavior and superelasticity of NiTi shape memory alloy. Scripta Materialia, 2001, 45, 153-160.	2.6	190
80	<title>Detwinning process and its anisotropy in shape memory alloys</title>. , 2001, 4234, 82.		45
81	<title>Anisotropy of detwinning process in textured NiTi shape memory alloy</title>. , 2000, , .		1
82	On the deformation of the twinned domain in Niti shape memory alloys. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2000, 80, 1935-1953.	0.8	81
83	Effect of texture orientation on the martensite deformation of NiTi shape memory alloy sheet. Acta Materialia, 1999, 47, 645-660.	3.8	143
84	Cyclic deformation of NiTi shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 273-275, 673-678.	2.6	93
85	Deformation of shape memory alloys associated with twinned domain re-configurations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 273-275, 679-684.	2.6	46
86	High strain rate deformation of martensitic NiTi shape memory alloy. Scripta Materialia, 1999, 41, 89-95.	2.6	63
87	Some results on the detwinning process in NiTi shape memory alloys. Scripta Materialia, 1999, 41, 1273-1281.	2.6	87
88	LÃ¼ders-like deformation associated with martensite reorientation in NiTi. Scripta Materialia, 1998, 39, 1047-1055.	2.6	111
89	Microstructure of NiTi shape memory alloy due to tensionâ€“compression cyclic deformation. Acta Materialia, 1998, 46, 1989-2000.	3.8	148
90	Asymmetry of stressâ€“strain curves under tension and compression for NiTi shape memory alloys. Acta Materialia, 1998, 46, 4325-4338.	3.8	317

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91	Two-way shape memory effect developed by martensite deformation in NiTi. Acta Materialia, 1998, 47, 199-209.	3.8	217
92	Some aspects of the properties of NiTi shape memory alloy. Journal of Alloys and Compounds, 1997, 247, 115-121.	2.8	139
93	Internal friction of Fe-N martensite at low temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 231, 183-188.	2.6	3
94	Stabilization of retained austenite due to partial martensitic transformations. Acta Metallurgica Et Materialia, 1994, 42, 4117-4133.	1.9	18
95	Internal friction associated with dislocation relaxations in virgin martensiteâ€”II. Interpretation. Acta Metallurgica Et Materialia, 1994, 42, 621-630.	1.9	15
96	Effects of martensite morphology on the aging behaviour of virgin martensite. Acta Metallurgica Et Materialia, 1993, 41, 1587-1593.	1.9	6
97	Internal friction associated with dislocation relaxations in virgin martensiteâ€”I. Experiments. Acta Metallurgica Et Materialia, 1993, 41, 3277-3287.	1.9	17
98	Zig-zag martensite formed at low temperatures. Scripta Metallurgica Et Materialia, 1992, 27, 887-892.	1.0	5
99	Influence of martensitic morphology on the behaviour of virgin martensite at low temperatures. Scripta Metallurgica Et Materialia, 1991, 25, 1345-1350.	1.0	6
100	Two-Way Memory Effect in NiTi Shape Memory Alloys. Advances in Science and Technology, 0, , .	0.2	1
101	Rate dependence of deformation mechanisms in a shape memory alloy. , 0, .		8