

# Hj Maier

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

152  
papers

7,507  
citations

46  
h-index

82  
g-index

153  
ext. papers

8,306  
ext. citations

5.4  
avg, IF

5.84  
L-index

#	Paper	IF	Citations
152	Effect of off-stoichiometric compositions on microstructures and phase transformation behavior in Ni-Cu-Pd-Ti-Zr-Hf high entropy shape memory alloys. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 857, 157467	5.7	5
151	Temperature dependence of martensite variant reorientation in stress-induced martensite aged Ni <sub>49</sub> Fe <sub>18</sub> Ga <sub>27</sub> Co <sub>6</sub> single crystals. <i>Scripta Materialia</i> , <b>2021</b> , 194, 113618	5.6	2
150	Influence of coatings on degradation and osseointegration of open porous Mg scaffolds in vivo. <i>Materialia</i> , <b>2020</b> , 14, 100949	3.2	3
149	Comparison of degradation behaviour and osseointegration of the two magnesium scaffolds, LAE442 and La2, in vivo. <i>Materialia</i> , <b>2019</b> , 8, 100436	3.2	8
148	Compressive shape memory actuation response of stress-induced martensite aged Ni <sub>51</sub> Fe <sub>18</sub> Ga <sub>27</sub> Co <sub>4</sub> single crystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 746, 448-455	5.3	7
147	Cyclic deformation response of ultra-fine grained titanium at elevated temperatures. <i>International Journal of Fatigue</i> , <b>2019</b> , 122, 228-239	5	8
146	Joining of blanks by cold pressure welding: Incremental rolling and strategies for surface activation and heat treatment. <i>Materialwissenschaft Und Werkstofftechnik</i> , <b>2019</b> , 50, 924-939	0.9	2
145	Giant rubber-like behavior induced by martensite aging in Ni <sub>51</sub> Fe <sub>18</sub> Ga <sub>27</sub> Co <sub>4</sub> single crystals. <i>Scripta Materialia</i> , <b>2019</b> , 162, 387-390	5.6	8
144	Two-way shape memory effect and thermal cycling stability in Co <sub>35</sub> Ni <sub>35</sub> Al <sub>30</sub> single crystals by low-temperature martensite ageing. <i>Scripta Materialia</i> , <b>2018</b> , 150, 18-21	5.6	19
143	Hydrogen-enhanced orientation dependence of stress relaxation and strain-aging in Hadfield steel single crystals. <i>Scripta Materialia</i> , <b>2017</b> , 136, 101-105	5.6	11
142	Wear behaviour of thermally oxidised tool surfaces as low-friction separation layers for dry sheet metal forming. <i>Wear</i> , <b>2017</b> , 376-377, 1789-1803	3.5	6
141	Two-way shape memory effect under multi-cycles in [001]-oriented Ni <sub>49</sub> Fe <sub>18</sub> Ga <sub>27</sub> Co <sub>6</sub> single crystal. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 706, 95-103	5.3	19
140	Ni-Fe-Ga <i>Technical Physics Letters</i> , <b>2017</b> , 43, 86	0	
139	Strength prediction in NiCo alloys The role of composition and nanotwins. <i>International Journal of Plasticity</i> , <b>2016</b> , 79, 237-258	7.6	39
138	Effect of strain rate on hydrogen embrittlement susceptibility of twinning-induced plasticity steel pre-charged with high-pressure hydrogen gas. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 15362-15372	6.7	54
137	Influence of surface pre-treatments on the high-cycle fatigue behavior of Ti <sub>6</sub> Al <sub>4</sub> V From anodizing to laser-assisted techniques. <i>International Journal of Fatigue</i> , <b>2016</b> , 91, 195-203	5	11
136	Experimental and numerical investigation of increased formability in combined quasi-static and high-speed forming processes. <i>Journal of Materials Processing Technology</i> , <b>2016</b> , 237, 254-269	5.3	18

135	An exploration of plastic deformation dependence of cell viability and adhesion in metallic implant materials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2016</b> , 60, 177-186	4.1	18
134	Microstructure and transformation related behaviors of a Ni <sub>45.3</sub> Ti <sub>29.7</sub> Hf <sub>20</sub> Cu <sub>5</sub> high temperature shape memory alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 627, 82-94	5.3	38
133	One-way and two-way shape memory effect in ferromagnetic NiFeGaCo single crystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 640, 465-470	5.3	8
132	On the micro-deformation mechanisms active in high-manganese austenitic steels under impact loading. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 632, 29-34	5.3	26
131	Twinning activities in high-Mn austenitic steels under high-velocity compressive loading. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 648, 104-112	5.3	26
130	Functional and structural fatigue of titanium tantalum high temperature shape memory alloys (HT SMAs). <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 620, 359-366	5.3	29
129	Property Optimization for TWIP Steels [Effect of Pre-deformation Temperature on Fatigue Properties. <i>Materials Today: Proceedings</i> , <b>2015</b> , 2, S681-S685	1.4	5
128	Mechanical response of low stacking fault energy Co/Ni alloys [Continuum, mesoscopic and atomic level treatments. <i>International Journal of Plasticity</i> , <b>2015</b> , 71, 32-61	7.6	38
127	Effect of precipitation on mechanical and wear properties of ultrafine-grained Cu/Cr/Zr alloy. <i>Wear</i> , <b>2014</b> , 311, 149-158	3.5	78
126	Improvement of formability of ultrafine-grained materials by post-SPD annealing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 619, 119-128	5.3	23
125	Cyclic degradation mechanisms in aged FeNiCoAlTa shape memory single crystals. <i>Acta Materialia</i> , <b>2014</b> , 79, 126-137	8.4	45
124	Two-way shape memory effect in ferromagnetic Co <sub>35</sub> Ni <sub>35</sub> Al <sub>30</sub> single crystals aged under stress. <i>Scripta Materialia</i> , <b>2014</b> , 90-91, 10-13	5.6	17
123	Evaluation of passive oxide layer formation-biocompatibility relationship in NiTi shape memory alloys: geometry and body location dependency. <i>Materials Science and Engineering C</i> , <b>2014</b> , 36, 118-29	8.3	27
122	On the role of slip/twin interactions on the impact behavior of high-manganese austenitic steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 593, 120-126	5.3	18
121	Joining with electrochemical support (ECUF): Cold pressure welding of copper. <i>Journal of Materials Processing Technology</i> , <b>2014</b> , 214, 2179-2187	5.3	8
120	Microstructure and mechanical response of single-crystalline high-manganese austenitic steels under high-pressure torsion: The effect of stacking-fault energy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 604, 166-175	5.3	22
119	Dislocation slip stress prediction in shape memory alloys. <i>International Journal of Plasticity</i> , <b>2014</b> , 54, 247-266	7.6	42
118	Thermal cycling behavior of an aged FeNiCoAlTa single-crystal shape memory alloy. <i>Scripta Materialia</i> , <b>2014</b> , 81, 28-31	5.6	24

117	Effects of nanoprecipitation on the shape memory and material properties of an Ni-rich NiTiHf high temperature shape memory alloy. <i>Acta Materialia</i> , <b>2013</b> , 61, 7422-7431	8.4	169
116	Laser induced surface nano-structuring of Ti6Al4V for adhesive bonding. <i>International Journal of Adhesion and Adhesives</i> , <b>2013</b> , 45, 112-117	3.4	60
115	Inconel 939 processed by selective laser melting: Effect of microstructure and temperature on the mechanical properties under static and cyclic loading. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 588, 188-195	5.3	151
114	Surface strain evolution of ultrafine-grained aluminum alloy laminates under tension [Microscale plastic instabilities and the Portevin-Chatelier effect. <i>Scripta Materialia</i> , <b>2013</b> , 68, 809-812	5.6	9
113	Comparison of the monotonic and cyclic mechanical properties of ultrafine-grained low carbon steels processed by continuous and conventional equal channel angular pressing. <i>Materials &amp; Design</i> , <b>2013</b> , 47, 138-142		10
112	On the mechanical behaviour of titanium alloy TiAl6V4 manufactured by selective laser melting: Fatigue resistance and crack growth performance. <i>International Journal of Fatigue</i> , <b>2013</b> , 48, 300-307	5	822
111	Additively manufactured cellular structures: Impact of microstructure and local strains on the monotonic and cyclic behavior under uniaxial and bending load. <i>Journal of Materials Processing Technology</i> , <b>2013</b> , 213, 1558-1564	5.3	118
110	Shape memory effect and high-temperature superelasticity in high-strength single crystals. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 577, S393-S398	5.7	31
109	Dependence of functional degradation on crystallographic orientation in NiTi shape memory alloys aged under stress. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 577, S219-S221	5.7	6
108	Plastic deformation of NiTi shape memory alloys. <i>Acta Materialia</i> , <b>2013</b> , 61, 67-78	8.4	108
107	Hydrogen Effects on Cyclic Deformation Behaviour of a Low Alloy Steel <b>2013</b> , 343-354		
106	In-situ characterization of transformation plasticity during an isothermal austenite-to-bainite phase transformation. <i>Materials Characterization</i> , <b>2012</b> , 65, 100-108	3.9	19
105	Anisotropy of ultrafine-grained alloys under impact loading: The case of biomedical niobium-zirconium. <i>Scripta Materialia</i> , <b>2012</b> , 66, 435-438	5.6	14
104	In situ characterization of backstress effects on the austenite-to-bainite phase transformation. <i>Scripta Materialia</i> , <b>2012</b> , 67, 368-371	5.6	11
103	Evolution of transformation plasticity in austenite-to-bainite phase transformation: A multi parameter problem. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 541, 73-80	5.3	9
102	Corrosion fatigue behavior of a biocompatible ultrafine-grained niobium alloy in simulated body fluid. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2012</b> , 5, 181-92	4.1	49
101	Transformation and slip behavior of Ni2FeGa. <i>International Journal of Plasticity</i> , <b>2012</b> , 39, 61-74	7.6	33
100	Microstructural stability of ultrafine-grained niobium-zirconium alloy at elevated temperatures. <i>Journal of Alloys and Compounds</i> , <b>2012</b> , 517, 61-68	5.7	11

99	Deformation mechanisms in high-manganese steels showing twinning-induced plasticity: Fine-grained material and single crystals at ambient and cryogenic temperatures. <i>Scripta Materialia</i> , <b>2012</b> , 67, 875-878	5.6	14
98	On the low-cycle fatigue response of pre-strained austenitic Fe61Mn24Ni6.5Cr8.5 alloy showing TWIP effect. <i>International Journal of Fatigue</i> , <b>2012</b> , 40, 51-60	5	51
97	On the simulation of austenite to bainite phase transformation. <i>Computational Materials Science</i> , <b>2011</b> , 50, 1823-1829	3.2	17
96	In situ characterization of the deformation and failure behavior of non-stochastic porous structures processed by selective laser melting. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 7962-7967	5.3	146
95	Comparative analysis of the effects of severe plastic deformation and thermomechanical training on the functional stability of Ti50.5Ni24.5Pd25 high-temperature shape memory alloy. <i>Scripta Materialia</i> , <b>2011</b> , 64, 315-318	5.6	45
94	In situ characterization of martensite variant formation in nickel-titanium shape memory alloy under biaxial loading. <i>Scripta Materialia</i> , <b>2011</b> , 65, 915-918	5.6	16
93	High-resolution in-situ characterization of the surface evolution of a polycrystalline NiTi SMA-alloy under pseudoelastic deformation. <i>Materials Characterization</i> , <b>2011</b> , 62, 298-303	3.9	22
92	The role of twinning on microstructure and mechanical response of severely deformed single crystals of high-manganese austenitic steel. <i>Materials Characterization</i> , <b>2011</b> , 62, 588-592	3.9	22
91	Energetics of twinning in martensitic NiTi. <i>Acta Materialia</i> , <b>2011</b> , 59, 5893-5904	8.4	66
90	Effect of internal oxidation on wear behavior of ultrafine-grained NbZr. <i>Acta Materialia</i> , <b>2011</b> , 59, 7683-7694	8.4	28
89	Underlying mechanism of dual hysteresis in NiMnGa single crystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 1877-1881	5.3	12
88	On the volume change in CoNiAl during pseudoelasticity. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 2875-2881	5.3	20
87	PM-IRRAS studies of the adsorption and stability of organophosphonate monolayers on passivated NiTi surfaces. <i>Applied Surface Science</i> , <b>2011</b> , 257, 2011-2018	6.7	22
86	A comprehensive evaluation of parameters governing the cyclic stability of ultrafine-grained FCC alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 6345-6355	5.3	14
85	Equal-channel angular sheet extrusion of interstitial-free (IF) steel: Microstructural evolution and mechanical properties. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 6573-6583	5.3	49
84	Severe plastic deformation of Ti74Nb26 shape memory alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 7628-7635	5.3	16
83	Effect of commercial purity levels on the mechanical properties of ultrafine-grained titanium. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 2303-2308	5.3	60
82	Tension/compression asymmetry of functional properties in [001]-oriented ferromagnetic NiFeGaCo single crystals. <i>Intermetallics</i> , <b>2010</b> , 18, 2458-2463	3.5	49

81	Crack growth behavior of low-alloy bainitic 51CrV4 steel. <i>Procedia Engineering</i> , <b>2010</b> , 2, 1373-1382		4
80	Pre-deformation transformation plasticity relationship during martensitic transformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 625-633	5.3	15
79	High-temperature superelasticity and competing microstructural mechanisms in Co <sub>49</sub> Ni <sub>21</sub> Ga <sub>30</sub> shape memory alloy single crystals under tension. <i>Scripta Materialia</i> , <b>2010</b> , 62, 368-371	5.6	23
78	Three-dimensional modeling of the grain boundary misorientation angle distribution based on two-dimensional experimental texture measurements. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 5604-5612	5.3	18
77	Defect formation in thin polyelectrolyte films on polycrystalline NiTi substrates. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2010</b> , 3, 436-45	4.1	11
76	Fatigue crack growth microstructure relationships in a high-manganese austenitic TWIP steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 2412-2417	5.3	72
75	Superelastic cycling and room temperature recovery of Ti <sub>74</sub> Nb <sub>26</sub> shape memory alloy. <i>Acta Materialia</i> , <b>2010</b> , 58, 2216-2224	8.4	27
74	Cyclic deformation and austenite stabilization in Co <sub>35</sub> Ni <sub>35</sub> Al <sub>30</sub> single crystalline high-temperature shape memory alloys. <i>Acta Materialia</i> , <b>2009</b> , 57, 6123-6134	8.4	26
73	Fatigue damage in cancellous bone: an experimental approach from continuum to micro scale. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2009</b> , 2, 113-9	4.1	23
72	Mechanical and wear properties of ultrafine-grained pure Ti produced by multi-pass equal-channel angular extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 517, 97-104	5.3	106
71	Cyclic stability of ultrafine-grained interstitial-free steel at elevated temperatures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 503, 160-162	5.3	13
70	Monitoring the fatigue-induced damage evolution in ultrafine-grained interstitial-free steel utilizing digital image correlation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 517, 225-234	5.3	38
69	The role of monotonic pre-deformation on the fatigue performance of a high-manganese austenitic TWIP steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 499, 518-524	5.3	101
68	On the cyclic stability of nanocrystalline copper obtained by powder consolidation at room temperature. <i>Scripta Materialia</i> , <b>2008</b> , 58, 307-310	5.6	11
67	Improvement of the fatigue performance of an ultrafine-grained Nb <sub>2</sub> Zr alloy by nano-sized precipitates formed by internal oxidation. <i>Scripta Materialia</i> , <b>2008</b> , 58, 571-574	5.6	22
66	Shape memory and pseudoelasticity response of NiMnCoIn magnetic shape memory alloy single crystals. <i>Scripta Materialia</i> , <b>2008</b> , 58, 815-818	5.6	42
65	On the incorporation of length scales associated with pearlitic and bainitic microstructures into a visco-plastic self-consistent model. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 485, 258-271	5.3	17
64	On the cyclic deformation response of ultrafine-grained AlMg alloys at elevated temperatures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 496, 114-120	5.3	18

63	Pseudoelasticity and Cyclic Stability in Co <sub>49</sub> Ni <sub>21</sub> Ga <sub>30</sub> Shape-Memory Alloy Single Crystals at Ambient Temperature. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2008</b> , 39, 2026-2039	2.3	50
62	Anisotropy of the fatigue behaviour of cancellous bone. <i>Journal of Biomechanics</i> , <b>2008</b> , 41, 636-41	2.9	47
61	Inter-martensite strain evolution in NiMnGa single crystals. <i>Acta Materialia</i> , <b>2008</b> , 56, 2231-2236	8.4	19
60	Full-field strain evolution during intermartensitic transformations in single-crystal NiFeGa. <i>Acta Materialia</i> , <b>2008</b> , 56, 3791-3799	8.4	69
59	The role of heat treatment on the cyclic stress-strain response of ultrafine-grained interstitial-free steel. <i>International Journal of Fatigue</i> , <b>2008</b> , 30, 426-436	5	42
58	Orientation dependence and tension/compression asymmetry of shape memory effect and superelasticity in ferromagnetic Co <sub>40</sub> Ni <sub>33</sub> Al <sub>27</sub> , Co <sub>49</sub> Ni <sub>21</sub> Ga <sub>30</sub> and Ni <sub>54</sub> Fe <sub>19</sub> Ga <sub>27</sub> single crystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 481-482, 95-100	5.3	19
57	Orientation evolution in Hadfield steel single crystals under combined slip and twinning. <i>International Journal of Solids and Structures</i> , <b>2007</b> , 44, 34-50	3.1	32
56	On the stress-assisted magnetic-field-induced phase transformation in Ni <sub>2</sub> MnGa ferromagnetic shape memory alloys. <i>Acta Materialia</i> , <b>2007</b> , 55, 4253-4269	8.4	111
55	Inter-martensitic transitions in Ni <sub>50</sub> Fe <sub>50</sub> Ga single crystals. <i>Acta Materialia</i> , <b>2007</b> , 55, 4867-4876	8.4	75
54	Microstructure-mechanical property relationships in ultrafine-grained NbZr. <i>Acta Materialia</i> , <b>2007</b> , 55, 6596-6605	8.4	47
53	In-situ fatigue in an environmental scanning electron microscope [Potential and current limitations. <i>International Journal of Fatigue</i> , <b>2007</b> , 29, 1413-1425	5	33
52	The role of dense dislocation walls on the deformation response of aluminum alloyed hadfield steel polycrystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 454-455, 662-666	5.3	37
51	Mechanical response of NiFeGa alloys containing second-phase particles. <i>Scripta Materialia</i> , <b>2007</b> , 57, 497-499	5.6	21
50	On the Microstructural Stability of Ultrafine-Grained Interstitial-Free Steel under Cyclic Loading. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2007</b> , 38, 1946-1955	2.3	45
49	The Influence of Zirconium on the Low-Cycle Fatigue Response of Ultrafine-Grained Copper. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2007</b> , 38, 1916-1925	2.3	17
48	Hysteresis and deformation mechanisms of transforming FeNiCoTi. <i>Mechanics of Materials</i> , <b>2006</b> , 38, 538-550	3.3	37
47	Stress-assisted reversible magnetic field-induced phase transformation in Ni <sub>2</sub> MnGa magnetic shape memory alloys. <i>Scripta Materialia</i> , <b>2006</b> , 55, 403-406	5.6	67
46	Pseudoelasticity at elevated temperatures in [001] oriented Co <sub>49</sub> Ni <sub>21</sub> Ga <sub>30</sub> single crystals under compression. <i>Scripta Materialia</i> , <b>2006</b> , 55, 663-666	5.6	63

45	One-way shape memory effect due to stress-assisted magnetic field-induced phase transformation in Ni <sub>2</sub> MnGa magnetic shape memory alloys. <i>Scripta Materialia</i> , <b>2006</b> , 55, 803-806	5.6	18
44	Deformation behaviour of bovine cancellous bone. <i>Technology and Health Care</i> , <b>2006</b> , 14, 549-556	1.1	3
43	Pseudoelasticity in CoNiAl single and polycrystals. <i>Acta Materialia</i> , <b>2006</b> , 54, 587-599	8.4	58
42	Flow stress anisotropy and Bauschinger effect in ultrafine grained copper. <i>Acta Materialia</i> , <b>2006</b> , 54, 5477-5488	8.4	69
41	Thermally and stress-induced martensitic transformation in CoNiAl ferromagnetic shape memory alloy single crystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 438-440, 875-878	5.3	13
40	Cyclic stress-strain response of ultrafine grained copper. <i>International Journal of Fatigue</i> , <b>2006</b> , 28, 243-250		84
39	Cyclic stress-strain response and low-cycle fatigue damage in ultrafine grained copper. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 410-411, 457-461	5.3	34
38	Strain hardening behavior of aluminum alloyed Hadfield steel single crystals. <i>Acta Materialia</i> , <b>2005</b> , 53, 1831-1842	8.4	106
37	Magnetization, shape memory and hysteresis behavior of single and polycrystalline FeNiCoTi. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2005</b> , 292, 89-99	2.8	17
36	Transformation of CoNiAl single crystals in tension. <i>Scripta Materialia</i> , <b>2005</b> , 53, 131-136	5.6	38
35	Mechanical and thermal stability of mechanically induced near-surface nanostructures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 403, 318-327	5.3	55
34	Microstructural refinement and deformation twinning during severe plastic deformation of 316L stainless steel at high temperatures. <i>Journal of Materials Research</i> , <b>2004</b> , 19, 2268-2278	2.5	40
33	High temperature fatigue behavior and residual stress stability of laser-shock peened and deep rolled austenitic steel AISI 304. <i>Scripta Materialia</i> , <b>2004</b> , 50, 1345-1350	5.6	139
32	Stress dependence of the hysteresis in single crystal NiTi alloys. <i>Acta Materialia</i> , <b>2004</b> , 52, 3383-3402	8.4	254
31	Recoverable stress-induced martensitic transformation in a ferromagnetic CoNiAl alloy. <i>Scripta Materialia</i> , <b>2003</b> , 49, 831-836	5.6	82
30	Transformation and detwinning induced electrical resistance variations in NiTiCu. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 359, 280-289	5.3	17
29	Cyclic deformation mechanisms in precipitated NiTi shape memory alloys. <i>Acta Materialia</i> , <b>2002</b> , 50, 4643-4657	3.4	291
28	Modelling thermomechanical fatigue life. <i>Materials at High Temperatures</i> , <b>2002</b> , 19, 9-17	1.1	4



27	Strain rate temperature behavior of NiTiCu shape memory single crystals. <i>Acta Materialia</i> , <b>2001</b> , 49, 3621-3634	8.4	47
26	Instrumented micro-indentation of NiTi shape-memory alloys. <i>Acta Materialia</i> , <b>2001</b> , 49, 3205-3217	8.4	130
25	Competing mechanisms and modeling of deformation in austenitic stainless steel single crystals with and without nitrogen. <i>Acta Materialia</i> , <b>2001</b> , 49, 3919-3933	8.4	166
24	Shape memory and pseudoelastic behavior of 51.5%NiTi single crystals in solutionized and overaged state. <i>Acta Materialia</i> , <b>2001</b> , 49, 3609-3620	8.4	115
23	Extrinsic stacking faults and twinning in hadfield manganese steel single crystals. <i>Scripta Materialia</i> , <b>2001</b> , 44, 337-343	5.6	80
22	Deformation of FeNiCoTi shape memory single crystals. <i>Scripta Materialia</i> , <b>2001</b> , 44, 779-784	5.6	65
21	Cyclic stress-strain response of the ODS nickel-base, superalloy PM 1000 under variable amplitude loading at high temperatures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 281, 37-44	5.3	14
20	Modeling the deformation behavior of Hadfield steel single and polycrystals due to twinning and slip. <i>Acta Materialia</i> , <b>2000</b> , 48, 2031-2047	8.4	229
19	Compressive response of NiTi single crystals. <i>Acta Materialia</i> , <b>2000</b> , 48, 3311-3326	8.4	205
18	Deformation of single crystal Hadfield steel by twinning and slip. <i>Acta Materialia</i> , <b>2000</b> , 48, 1345-1359	8.4	298
17	High-temperature fatigue damage mechanisms in near- $\beta$ -titanium alloy IMI 834. <i>International Journal of Fatigue</i> , <b>1999</b> , 21, 779-789	5	46
16	The effect of strain rate on hydrogen distribution in round tensile specimens. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1999</b> , 271, 22-30	5.3	24
15	High-temperature fatigue of titanium alloys. <i>Materials at High Temperatures</i> , <b>1998</b> , 15, 3-14	1.1	9
14	Modeling of cyclic stress-strain behavior and damage mechanisms under thermomechanical fatigue conditions. <i>International Journal of Fatigue</i> , <b>1997</b> , 19, 267-274	5	20
13	The Bauschinger effect, Masing model and the Ramberg-Osgood relation for cyclic deformation in metals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1997</b> , 238, 377-390	5.3	91
12	Modelling of cyclic stress-strain behavior under thermomechanical fatigue conditions [A new approach based upon a multi-component model. <i>Scripta Materialia</i> , <b>1996</b> , 34, 609-615	5.6	16
11	Long-range internal stresses in cell and subgrain structures of copper during deformation at constant stress. <i>Acta Materialia</i> , <b>1996</b> , 44, 4337-4350	8.4	55
10	Effects of hydrogen on ductile fracture of a spheroidized low alloy steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1995</b> , 191, 17-26	5.3	29

9	Long-range internal stresses in steady-state subgrain structures. <i>Scripta Metallurgica Et Materialia</i> , <b>1993</b> , 29, 7-12		12
8	Local lattice parameter measurements in cyclically deformed copper by convergent-beam electron diffraction. <i>Ultramicroscopy</i> , <b>1993</b> , 51, 136-145	3.1	19
7	Local lattice parameter measurements in a creep-deformed nickel-base superalloy by convergent beam electron diffraction. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 27, 1167-1172		36
6	Environmental effects on the X-ray line profiles of fatigued low alloy steel. <i>Scripta Metallurgica Et Materialia</i> , <b>1990</b> , 24, 353-358		2
5	Environmental effects on the dislocation arrangement of fatigued low alloy steel. <i>Scripta Metallurgica Et Materialia</i> , <b>1990</b> , 24, 123-127		5
4	Plastic deformation: a major factor in hydrogen embrittlement of low alloy steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1989</b> , 117, L11-L15	5.3	9
3	A method to evaluate the critical hydrogen concentration for hydrogen-induced crack propagation. <i>Acta Metallurgica</i> , <b>1987</b> , 35, 875-880		32
2	Effect of SiC-Reinforcement on Thermo-mechanical Fatigue of a Dispersion-Strengthened High-Temperature Aluminum Alloy167-167-19		2
1	In-Situ Characterization of Stress-Induced Martensite and Related Magnetic Domain Structure in Ni-Fe-Ga Ferromagnetic Shape Memory Alloy Single Crystals246-254		