Koichi Tsuchiya

List of Publications by Year
in descending order

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239	6,910	57758	82547
papers	citations	44 h-index	72 g-index

245	245	245	5450
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Self-deployable origami stent grafts as a biomedical application of Ni-rich TiNi shape memory alloy foil. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 419, 131-137.	5.6	566
2	Demonstration of ultrahigh thermoelectric efficiency of â^¼47.3% in Mg3Sb2/MgAgSb module for low-temperature energy harvesting. Joule, 2021, 5, 1196-1208.	24.0	205
3	Nano-micro-porous skutterudites with 100% enhancement in ZT for high performance thermoelectricity. Nano Energy, 2017, 31, 152-159.	16.0	201
4	Structural rejuvenation in a bulk metallic glass induced by severe plastic deformation. Acta Materialia, 2010, 58, 429-438.	7.9	181
5	Mechanism of twinning-induced plasticity in Î²-type Tiâ€“15Mo alloy. Scripta Materialia, 2013, 69, 393-396.	5.2	171
6	Reversible transition of deformation mode by structural rejuvenation and relaxation in bulk metallic glass. Applied Physics Letters, 2012, 101, 121914.	3.3	144
7	Crystal refinement and amorphisation by cold rolling in tini shape memory alloys. Scripta Materialia, 2001, 44, 1781-1785.	5.2	138
8	Formation of Nanocrystalline Structure in Steels by Air Blast Shot Peening. Materials Transactions, 2003, 44, 1488-1493.	1.2	135
9	Influence of alloy additions on production and properties of bulk cementite. Scripta Materialia, 2001, 45, 391-397.	5.2	131
10	Phase Transformations of Nanocrystalline Martensitic Materials. MRS Bulletin, 2009, 34, 814-821.	3.5	128
11	Production of TiNi amorphous/nanocrystalline wires with high strength and elastic modulus by severe cold drawing. Scripta Materialia, 2009, 60, 749-752.	5.2	124
12	Martensitic transformation in nanostructured TiNi shape memory alloy formed via severe plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 643-648.	5.6	118
13	Occurrence of ferromagnetic shape memory alloys (invited). Journal of Applied Physics, 2000, 87, 4707-4711.	2.5	102
14	Modification of Niâ€“Mnâ€“Ga ferromagnetic shape memory alloy by addition of rare earth elements. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 378, 370-376.	5.6	102
15	The effect of coculture of chondrocytes with mesenchymal stem cells on their cartilaginous phenotype in vitro. Materials Science and Engineering C, 2004, 24, 391-396.	7.3	100
16	Enhancement of uniform elongation in high strength Tiâ€“Mo based alloys by combination of deformation modes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 4569-4578.	5.6	96
17	Origin of zero and negative thermal expansion in severely-deformed superelastic NiTi alloy. Acta Materialia, 2017, 124, 79-92.	7.9	94
18	Comparison of Nanocrystalline Surface Layer in Steels Formed by Air Blast and Ultrasonic Shot Peening. Materials Transactions, 2004, 45, 376-379.	1.2	82

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19	Tensile stress-strain analysis of single-structure steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 1785-1794.	2.2	74
20	Formation of a nanocrystalline surface layer on steels by air blast shot peening. Journal of Materials Science, 2007, 42, 7716-7720.	3.7	73
21	Effect of Strain Path in High-Pressure Torsion Process on Hardening in Commercial Purity Titanium. Materials Transactions, 2008, 49, 47-53.	1.2	71
22	Microstructure, tensile deformation mode and crevice corrosion resistance in Tiâ€“10Moâ€“xFe alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5499-5506.	5.6	68
23	Influence of High-Pressure Torsion Straining Conditions on Microstructure Evolution in Commercial Purity Aluminum. Materials Transactions, 2008, 49, 7-14.	1.2	67
24	Aluminum matrix composites reinforced with multi-walled boron nitride nanotubes fabricated by a high-pressure torsion technique. Materials and Design, 2015, 88, 451-460.	7.0	67
25	Effects of Fe addition on tensile deformation mode and crevice corrosion resistance in Tiâ€“15Mo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 2693-2701.	5.6	65
26	Role of strain gradient on grain refinement by severe plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 462, 264-268.	5.6	63
27	Improvement of room temperature ductility for Mo and Fe modified Ti2AlNb alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 355-362.	5.6	61
28	{332}ã€ˆ113ã€‰ Twinning system selection in a Î²-type Tiâ€“15Moâ€“5Zr polycrystalline alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 579, 164-169.	5.6	59
29	First-principles study of the phase stability and elastic properties of Ti-X alloys (XÂ=ÂMo, Nb, Al, Sn, Zr,) Tj ETQq1 1 0.784314 rgBT /Over	5.5	59
30	Formation Mechanism and Annealing Behavior of Nanocrystalline Ferrite in Pure Fe Fabricated by Ball Milling.. ISIJ International, 2001, 41, 1389-1396.	1.4	58
31	Reversible elastocaloric effect at ultra-low temperatures in nanocrystalline shape memory alloys. Acta Materialia, 2019, 165, 109-117.	7.9	57
32	Longitudinal Hierarchy Co3O4 Mesocrystals with High-dense Exposure Facets and Anisotropic Interfaces for Direct-Ethanol Fuel Cells. Scientific Reports, 2016, 6, 24330.	3.3	56
33	Production of bulk cementite and its characterization. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 2127-2131.	2.2	55
34	Formation of nanocrystalline structure in carbon steels by ball drop and particle impact techniques. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 375-377, 899-904.	5.6	54
35	Ultrafine grain formation in Mgâ€“Zn alloy by in situ precipitation during high-pressure torsion. Scripta Materialia, 2014, 78-79, 57-60.	5.2	53
36	A microstructural investigation of the surface of a drilled hole in carbon steels. Acta Materialia, 2007, 55, 1397-1406.	7.9	52

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37	Low Temperature Heat Capacity of a Severely Deformed Metallic Glass. Physical Review Letters, 2014, 112, 135501.	7.8	52
38	Strain-rate effect on work-hardening behavior in Î²-type Ti-10Mo-1Fe alloy with TWIP effect. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 707, 701-707.	5.6	51
39	Understanding diffraction patterns of glassy, liquid and amorphous materials via persistent homology analyses. Journal of the Ceramic Society of Japan, 2019, 127, 853-863.	1.1	50
40	Heterogeneous twin formation and its effect on tensile properties in Tiâ€“Mo based Î² titanium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 554, 53-60.	5.6	49
41	Phase Transformations and Magnetostriction in Ni–Mn–Ga Ferromagnetic Shape Memory Alloys. Materials Transactions, JIM, 2000, 41, 938-942.	0.9	47
42	Production and Characterization of Mn-Si Thermoelectric Material. Materials Science Forum, 2000, 343-346, 918-923.	0.3	47
43	Mechanical twinning and dislocation slip multilayered deformation microstructures in Î²-type Tiâ€“Mo base alloy. Scripta Materialia, 2015, 102, 79-82.	5.2	47
44	Process of Nanocrystallization and Partial Amorphization by Cold Rolling in TiNi. Materials Transactions, 2001, 42, 1987-1993.	1.2	46
45	Fundamental Properties of Cementite and Their Present Understanding. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2002, 88, 117-128.	0.4	46
46	Effect of oxygen content on deformation mode and corrosion behavior in Î²-type Ti-Mo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 534-541.	5.6	46
47	Accommodative {332}ãˆ113ã€‰ primary and secondary twinning in a slightly deformed Î²-type Ti-Mo titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 684, 456-465.	5.6	46
48	Nanostructured Fe-C alloys produced by ball milling. Scripta Materialia, 2001, 44, 1741-1745.	5.2	45
49	Grain size dependence of the elastic modulus in nanostructured NiTi. Scripta Materialia, 2010, 63, 977-980.	5.2	45
50	Effect of oxygen addition on microstructures and mechanical properties of Ti-7.5Mo alloy. Journal of Alloys and Compounds, 2018, 737, 221-229.	5.5	45
51	Interfacial segregation induced by severe plastic deformation in a Mgâ€“Znâ€“Y alloy. Scripta Materialia, 2016, 124, 169-173.	5.2	44
52	Mechanical Properties of Cementite and Fabrication of Artificial Pearlite. Materials Science Forum, 2003, 426-432, 859-864.	0.3	43
53	Formation of nanocrystalline structure in steels by ball drop test. Scripta Materialia, 2002, 46, 383-388.	5.2	42
54	Powder metallurgy routes toward aluminum boron nitride nanotube composites, their morphologies, structures and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 604, 9-17.	5.6	42

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55	Twinning behavior of orthorhombic-Î±â€•martensite in a Ti-7.5Mo alloy. Science and Technology of Advanced Materials, 2019, 20, 401-411.	6.1	39
56	Formation and annealing behavior of nanocrystalline ferrite in Fe-0.89C spheroidite steel produced by ball milling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2195-2203.	2.2	38
57	Deformation microstructural evolution and strain hardening of differently oriented grains in twinning-induced plasticity Î² titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 659, 1-11.	5.6	38
58	A strategy of designing high-entropy alloys with high-temperature shape memory effect. Scientific Reports, 2019, 9, 13140.	3.3	38
59	Comparison of the Characteristics of Nanocrystalline Ferrite in Fe-0.89C Steels with Pearlite and Spheroidite Structure Produced by Ball Milling. Materials Transactions, 2002, 43, 2205-2212.	1.2	34
60	Improvement of strengthâ€“ductility tradeoff in Î² titanium alloy through pre-strain induced twins combined with brittle Ï‰ phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 646, 279-287.	5.6	34
61	Effect of high-pressure torsion on the microstructure and thermoelectric properties of Fe2VAl-based compounds. Journal of Applied Physics, 2018, 124, .	2.5	34
62	Influence of Al content on martensitic transformation behavior in Zr50Cu50â^'Al. Journal of Alloys and Compounds, 2012, 522, 136-140.	5.5	33
63	Electron-microscopy investigation on nanocrystal formation in pure Fe and carbon steel during ball milling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 362, 322-326.	5.6	32
64	Influence of isothermal ageing on mechanical behaviour in Ni-rich Tiâ€“Zrâ€“Ni shape memory alloy. Scripta Materialia, 2006, 55, 1079-1082.	5.2	32
65	Fabrication of shape memory TiNi foils via Ti/Ni ultrafine laminates. Scripta Materialia, 2003, 48, 489-494.	5.2	31
66	Microstructure and composition of fly ash and ground granulated blast furnace slag cement pastes in 42-month cured samples. Construction and Building Materials, 2018, 191, 114-124.	7.2	31
67	High temperature deformation behavior of bulk cementite produced by mechanical alloying and spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 375-377, 894-898.	5.6	30
68	Effects of Î± phase precipitation on crevice corrosion and tensile strength in Tiâ€“15Mo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1480-1488.	5.6	30
69	Nanocrystalline Surface Layer of Steels Produced by Shot Peening. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2003, 67, 690-696.	0.4	30
70	Characterization of Bulk Cementite Produced by Mechanical Alloying and Spark Plasma Sintering. Journal of Metastable and Nanocrystalline Materials, 2003, 15-16, 607-614.	0.1	29
71	Tensile Property of Submicrocrystalline Pure Fe Produced by HPT-Straining. Materials Science Forum, 0, 584-586, 597-602.	0.3	28
72	Application of orthogonally arranged FIBâ€“SEM for precise microstructure analysis of materials. Journal of Alloys and Compounds, 2013, 577, S717-S721.	5.5	28

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73	Nanocrystal formation in a ball milled eutectoid steel. Scripta Materialia, 2001, 44, 1775-1779.	5.2	27
74	Microstructural evolution and its effect on the mechanical behavior of Ti-5Al-5Mo-5V-3Cr alloy during aging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 731, 239-248.	5.6	27
75	Microstructural Evolution during Isothermal Aging in Ni-Rich Ti-Zr-Ni Shape Memory Alloys. Materials Transactions, 2007, 48, 432-438.	1.2	26
76	Heterogeneous Process of Disordering and Structural Refinement in Ni₃Al during Severe Plastic Deformation by High-Pressure Torsion. Materials Transactions, 2010, 51, 14-22.	1.2	26
77	Enhancement of impact toughness of Î²-type Tiâ€“Mo alloy by {332}<113> twinning. Journal of Materials Science, 2019, 54, 11279-11291.	3.7	26
78	Synthesis of Ferrite Nanoparticles by Mechanochemical Processing Using a Ball Mill. Materials Transactions, 2003, 44, 277-284.	1.2	25
79	Formation of Nanocrystalline Structure at the Surface of Drill Hole in Steel. Materials Transactions, 2004, 45, 2209-2213.	1.2	25
80	Formation of Surface Nanocrystalline Structure in Steels by Shot Peening and Role of Strain Gradient on Grain Refinement by Deformation. ISIJ International, 2007, 47, 157-162.	1.4	25
81	Study of {332}<113> twinning in a multilayered Ti-10Mo-xFe (x = 1â€“3) alloy by ECCI and EBSD. Science and Technology of Advanced Materials, 2016, 17, 220-228.	6.1	25
82	Improvement of ductility in Ti-5Al-5Mo-5V-3Cr alloy by network-like precipitation of blocky Î± phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 722, 129-135.	5.6	25
83	Effect of Co and Ni on Martensitic Transformation and Magnetic Properties in Fe-Pd Ferromagnetic Shape Memory Alloys. Materials Transactions, 2003, 44, 2499-2502.	1.2	24
84	Transition of multi-deformation modes in Tiâ€“10Mo alloy with oxygen addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 88-96.	5.6	24
85	Micostructure and Magnetic Properties in Nanostructured Fe and Fe-Based Intermetallics Produced by High-Pressure Torsion. Materials Transactions, 2014, 55, 1286-1291.	1.2	24
86	Coupling effect of deformation mode and temperature on tensile properties in TWIP type Tiâ€“Mo alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 766, 138363.	5.6	24
87	Neutron diffraction study of temperature-dependent elasticity of B19â€² NiTi---Elinvar effect and elastic softening. Acta Materialia, 2019, 173, 281-291.	7.9	24
88	Micromechanical properties of steel corrosion products in concrete studied by nano-indentation technique. Corrosion Science, 2020, 163, 108304.	6.6	24
89	Relationship between hardness and tensile properties in various single structured steels. Materials Science and Technology, 2001, 17, 505-511.	1.6	23
90	Nanocrystalline structure formation in carbon steel introduced by high speed drilling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 435-436, 383-388.	5.6	23

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91	First-principles study of electronic structures and stability of body-centered cubic Tiâ€“Mo alloys by special quasirandom structures. Science and Technology of Advanced Materials, 2014, 15, 035014.	6.1	23
92	Effect of High-Pressure Torsion Process on Precipitation Behavior of α Phase in β-Type Ti–15Mo Alloy. Materials Transactions, 2014, 55, 877-884.	1.2	22
93	Theoretical investigation of effect of alloying elements on phase stability in body-centered cubic Ti-X alloys (X=V, Cr, Fe, Co, Nb, and Mo). Journal of Alloys and Compounds, 2015, 634, 193-199.	5.5	22
94	The role of W on the thermal stability of nanocrystalline NiTiWx thin films. Acta Materialia, 2018, 142, 181-192.	7.9	22
95	Wear behavior of HPT processed UFG AZ31B magnesium alloy. Materials Letters, 2018, 227, 194-198.	2.6	22
96	Mineralogical study of high SO3 clinker produced using waste gypsum board in a cement kiln. Construction and Building Materials, 2019, 217, 507-517.	7.2	22
97	Deformation Mechanism and Stabilization of Martensite in TiNi Shape Memory Alloy. Journal of Materials Science and Technology, 2010, 26, 936-940.	10.7	20
98	Crystalline to amorphous transformation in Zrâ€“Cuâ€“Al alloys induced by high pressure torsion. Intermetallics, 2013, 37, 52-58.	3.9	19
99	Size-dependent plastic deformation and failure mechanisms of nanotwinned Ni3Al: Insights from an atomistic cracking model. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 649, 449-460.	5.6	19
100	Precipitation behavior of an ultra-fine grained Mgâ€“Zn alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 644, 386-391.	5.6	18
101	Microstructure study of a severely plastically deformed Mg-Zn-Y alloy by application of low angle annular dark field diffraction contrast imaging. Science and Technology of Advanced Materials, 2016, 17, 115-127.	6.1	18
102	Domain structure and lattice effects in a severely plastically deformed CoCrFeMnNi high entropy alloy. Journal of Alloys and Compounds, 2020, 812, 152028.	5.5	18
103	Role of mill scale on corrosion behavior of steel rebars in mortar. Corrosion Science, 2020, 177, 108995.	6.6	18
104	Formation of Nanocrystalline Ferrite through Rolling and Ball Milling. Materials Science Forum, 2001, 360-362, 167-174.	0.3	17
105	Influence of Ni on stability of martensitic transformation in Zr50Cu50â^'xNix. Journal of Alloys and Compounds, 2013, 577, S136-S140.	5.5	17
106	Surface characterization of TiNi deformed by high-pressure torsion. Applied Surface Science, 2014, 289, 338-344.	6.1	17
107	Composition dependence of mechanically-induced structural rejuvenation in Zr-Cu-Al-Ni metallic glasses. Journal of Alloys and Compounds, 2017, 712, 250-255.	5.5	17
108	Nucleation of recrystallized magnesium grains over quasicrystalline phase during severe plastic deformation of a Mg-Zn-Y alloy at roomÂtemperature. Scripta Materialia, 2017, 134, 80-84.	5.2	17

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109	Effect of aging on martensitic transformation in Î³-MnCu alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 285, 353-356.	5.6	16
110	Enhanced uniform elongation by pre-straining with deformation twinning in high-strength Î²-titanium alloys with an isothermal Ï‰-phase. Philosophical Magazine Letters, 2012, 92, 726-732.	1.2	16
111	Formation and Annealing Behavior of Nanocrystalline Steels Produced by Ball Drop Test. Materials Transactions, 2002, 43, 2536-2542.	1.2	15
112	Cytocompatibility evaluation and surface characterization of TiNi deformed by high-pressure torsion. Materials Science and Engineering C, 2014, 43, 411-417.	7.3	15
113	First-principles Calculation of Effects of Carbon on Tetragonality and Magnetic Moment in Feâ€“C System. ISIJ International, 2015, 55, 2483-2491.	1.4	15
114	Effect of cold-working on phase formation during heat treatment in CrMnFeCoNi system high-entropy alloys with Al addition. Journal of Alloys and Compounds, 2021, 872, 159668.	5.5	15
115	Mechanical milling of fullerene with carbide forming elements. Journal of Materials Science, 2002, 37, 1229-1235.	3.7	14
116	Strength evaluation of Î± and Î² phases by nanoindentation in Tiâ€“15Mo alloys with Fe and Al addition. Materials Science and Technology, 2012, 28, 342-347.	1.6	14
117	Work Hardening and Microstructural Development during High-Pressure Torsion in Pure Iron. Materials Transactions, 2014, 55, 1097-1103.	1.2	14
118	Effect of Deformation Temperature on Low-Cycle Fatigue Properties of Fe-28Mn-6Si-5Cr Shape Memory Alloy. Materials Transactions, 2016, 57, 639-646.	1.2	14
119	Synthesis of Fe-Cu Nanoparticles by Mechanochemical Processing Using a Ball Mill. Materials Transactions, 2002, 43, 667-673.	1.2	13
120	Formation of Nanocrystalline Structure in Steels by Air Blast Shot Peening and Particle Impact Processing. Materials Science Forum, 2004, 449-452, 1149-1152.	0.3	13
121	Optimization of Strength, Ductility and Corrosion Resistance in Ti-Mo Base Alloys by Controlling Mo Equivalency and Bond Order. Materials Transactions, 2011, 52, 1611-1616.	1.2	13
122	Different stages in the continuous microstructural evolution of copper deformed to ultrahigh plastic strains. Scripta Materialia, 2012, 67, 1003-1006.	5.2	13
123	Formation of equiaxed Î± phase in Ti-5Al-5Mo-5V-3Cr alloy deformed by high-pressure torsion. Journal of Alloys and Compounds, 2018, 738, 283-291.	5.5	13
124	EBSD analysis of dual Î³/Îµ phase microstructures in tensile-deformed Fe-Mn-Si shape memory alloy. Journal of Alloys and Compounds, 2019, 797, 529-536.	5.5	13
125	Correlation between fccâ€“fct transformation behavior and spinodal decomposition in Î³-MnCu alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 273-275, 181-185.	5.6	12
126	Dissolution of cementite in carbon steels by ball drop deformation and laser heating. Journal of Alloys and Compounds, 2007, 434-435, 497-500.	5.5	12

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127	Effect of Nanostructuring and High-Pressure Torsion Process on Thermal Conductivity of Carrier-Doped Chalcopyrite. Journal of Electronic Materials, 2016, 45, 1642-1647.	2.2	12
128	Vanishing of room-temperature slip avalanches in a face-centered-cubic high-entropy alloy by ultrafine grain formation. Scripta Materialia, 2018, 155, 99-103.	5.2	12
129	Exploring the hydrogen absorption and strengthening behavior in nanocrystalline face-centered cubic high-entropy alloys. Scripta Materialia, 2021, 203, 114069.	5.2	12
130	Nanocrystallization in Fe-C Alloys by Ball Milling and Ball Drop Test.. ISIJ International, 2002, 42, 1430-1437.	1.4	12
131	Improving thermoelectric performance of Fe2VAl-based Heusler compounds via high-pressure torsion. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	12
132	Effect of Nanocrystallization and Twinning on Hardness in Ni₃Al Deformed by High-Pressure Torsion. Materials Transactions, 2009, 50, 1123-1127.	1.2	11
133	Martensitic stabilization and defects induced by deformation in TiNi shape memory alloys. International Journal of Minerals, Metallurgy and Materials, 2011, 18, 66-69.	4.9	11
134	Pronounced Structural Rejuvenation in Zr₅₀Cu₄₀Al₁₀ Metallic Glass Strained by Torsional Straining at Elevated Temperature. Materials Transactions, 2014, 55, 220-222.	1.2	11
135	Formation of Nanocrystalline Structure by Shot Peening. Materials Science Forum, 2006, 503-504, 669-674.	0.3	10
136	Role of strain gradient on the formation of nanocrystalline structure produced by severe plastic deformation. Journal of Alloys and Compounds, 2007, 434-435, 290-293.	5.5	10
137	Effect of Swirly Segregation of Mo on Omega Phase Precipitation Behavior and Tensile Property of Ti-12Mo Alloy. Key Engineering Materials, 0, 551, 180-185.	0.4	10
138	Reduction of shear localization through structural rejuvenation in Zrâ€“Cuâ€“Al bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138304.	5.6	10
139	Evaluating the phase stability of binary titanium alloy Ti-X (X = Mo, Nb, Al, and Zr) using first-principles calculations and a Debye model. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2020, 71, 102207.	1.6	10
140	Formation of Nanocrystalline Ferrite in Fe-0.89C Spheroidite by Ball Milling. Materials Science Forum, 2002, 386-388, 323-328.	0.3	9
141	Growth of Fe3O4 whiskers from solid solution nanoparticles of Feâ€“Cu and Feâ€“Ag systems produced by DC plasma jet method. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 340, 114-122.	5.6	9
142	Nanostructured Shape Memory Alloys for Biomedical Applications. Materials Science Forum, 0, 539-543, 505-510.	0.3	9
143	Comparison of Reverse Transformation Behaviors of Thermally- and Deformation-Induced Îµ-Martensite in Fe-28Mn-6Si-5Cr Shape Memory Alloy. Materials Transactions, 2016, 57, 1707-1713.	1.2	9
144	{332}<113> detwinning in a multilayered bcc-Tiâ€“10Moâ€“Fe alloy. Journal of Materials Science, 2017, 52, 7858-7867.	3.7	9

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145	Concurrent solid-state amorphization and structural rejuvenation in Zr-Cu-Al alloy by high-pressure torsion. Materials Letters, 2017, 204, 138-140.	2.6	9
146	Effect of annealing on nanoindentation slips in a bulk metallic glass. Physical Review B, 2017, 96, .	3.2	9
147	Phase transformation and microstructures in Ni-Mn-Ga ferromagnetic shape memory alloys. European Physical Journal Special Topics, 2001, 11, Pr8-263-Pr8-268.	0.2	8
148	Deformation and dissolution of spheroidal cementite in eutectoid steel by heavy cold rolling. Materials Science and Technology, 2001, 17, 1347-1352.	1.6	8
149	Nanocrystalline Structure in Steels Produced by Various Severe Plastic Deformation Processes. Materials Science Forum, 2006, 503-504, 11-18.	0.3	8
150	TEM investigation of intermediate phase transformation and micromodulation in Niâ€“Mnâ€“Ga ferromagnetic shape memory alloys. Materials Science and Technology, 2008, 24, 920-926.	1.6	8
151	Microstructure and Aging Behavior of Cu-Be Alloy Processed by High-Pressure Torsion. Materials Science Forum, 0, 783-786, 2707-2712.	0.3	8
152	Effect of processing strain rate and temperature on interfacial segregation of zinc in a magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 703, 54-67.	5.6	8
153	Decoupling the roles of constituent phases in the strengthening of hydrogenated nanocrystalline dual-phase high-entropy alloys. Scripta Materialia, 2022, 210, 114472.	5.2	8
154	Mechanically driven phase transition of fullerene. Journal of Physics and Chemistry of Solids, 2000, 61, 1119-1122.	4.0	7
155	Influence of Heat Treatment on Phase Transformation of Ni-rich TiNi Foils Produced via Ultrafine Laminates. Materials Transactions, 2004, 45, 219-224.	1.2	7
156	Effect of Aging on Microstructure and Martensitic Transformation in Ti-Zr-Ni Shape Memory Alloys. Materials Science Forum, 2007, 539-543, 3163-3168.	0.3	7
157	Property of Amorphous/Nanocrystalline Hybrid Wires of TiNi-Base Shape Memory Alloys. Journal of Materials Engineering and Performance, 2011, 20, 517-521.	2.5	7
158	Effect of high-pressure torsion deformation on surface properties and biocompatibility of Ti-50.9â€‰mol. %Ni alloys. Biointerphases, 2014, 9, 029007.	1.6	7
159	Smart photonic coating for civil engineering field: for a future inspection technology on concrete bridge. Proceedings of SPIE, 2017, , .	0.8	7
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