Daqiang Jiang

List of Publications by Citations

65 papers	791 citations	14 h-index	24 g-index
67 ext. papers	1,006 ext. citations	6.8 avg, IF	3.79 L-index

#	Paper	IF	Citations
65	A transforming metal nanocomposite with large elastic strain, low modulus, and high strength. *Science*, **2013**, 339, 1191-4	33.3	190
64	Synchrotron high energy X-ray diffraction study of microstructure evolution of severely cold drawn NiTi wire during annealing. *Acta Materialia*, **2016**, 115, 35-44	8.4	47
63	In situ synchrotron high-energy X-ray diffraction study of microscopic deformation behavior of a hard-soft dual phase composite containing phase transforming matrix. *Acta Materialia*, **2017**, 130, 297-309	8.4	36
62	Grain size effect on the R-phase transformation of nanocrystalline NiTi shape memory alloys. *Journal of Materials Science*, **2014**, 49, 4643-4647	4.3	26
61	Point defect engineering and machinability in n-type Mg3Sb2-based materials. *Materials Today Physics*, **2020**, 15, 100269	8	25
60	New route toward building active ruthenium nanoparticles on ordered mesoporous carbons with extremely high stability. *Scientific Reports*, **2014**, 4, 4540	4.9	21
59	A biopolymer-like metal enabled hybrid material with exceptional mechanical prowess. *Scientific Reports*, **2015**, 5, 8357	4.9	19
58	In situ synchrotron investigation of the deformation behavior of nanolamellar Ti5Si3/TiNi composite. *Scripta Materialia*, **2014**, 78-79, 53-56	5.6	19
57	Retaining Large and Adjustable Elastic Strains of Kilogram-Scale Nb Nanowires. *ACS Applied Materials & Interfaces*, **2016**, 8, 2917-22	9.5	17
56	Influence of internal stress coupling on the deformation behavior of NiTiNb nanowire composites. *Scripta Materialia*, **2014**, 77, 75-78	5.6	17
55	Determining intrinsic stress and strain state of fibre-textured thin films by X-ray diffraction measurements using combined asymmetrical and Bragg-Brentano configurations. *Materials and Design*, **2019**, 181, 108063	8.1	16
54	High strength W/TiNi micro-laminated composite with transformation-mediated ductility. *Materials and Design*, **2016**, 106, 415-419	8.1	15
53	A novel multifunctional NiTi/Ag hierarchical composite. *Scientific Reports*, **2014**, 4, 5267	4.9	15
52	Revealing ultralarge and localized elastic lattice strains in Nb nanowires embedded in NiTi matrix. *Scientific Reports*, **2015**, 5, 17530	4.9	14
51	A novel stretchable coaxial NiTi-sheath/Cu-core composite with high strength and high conductivity. *Advanced Materials*, **2013**, 25, 1199-202	24	14
50	In-situ synchrotron high energy X-ray diffraction study of micro-mechanical behaviour of R phase reorientation in nanocrystalline NiTi alloy. *Acta Materialia*, **2020**, 194, 565-576	8.4	13
49	High damping NiTi/Ti3Sn in situ composite with transformation-mediated plasticity. *Materials & Design*, **2014**, 63, 460-463		13

48	Achieving large linear elasticity and high strength in bulk nanocompsite via synergistic effect. *Scientific Reports*, **2015**, 5, 8892	4.9	13
47	Achieving 5.9% elastic strain in kilograms of metallic glasses: Nanoscopic strain engineering goes macro. *Materials Today*, **2020**, 37, 18-26	21.8	12
46	Dual Phase Synergy Enabled Large Elastic Strains of Nanoinclusions in a Dislocation Slip Matrix Composite. *Nano Letters*, **2018**, 18, 2976-2983	11.5	12
45	Fabrication of ultrafine manganese oxide-decorated carbon nanofibers for high-performance electrochemical capacitors. *Electrochimica Acta*, **2016**, 211, 524-532	6.7	12
44	Locality and rapidity of the ultra-large elastic deformation of Nb nanowires in a NiTi phase-transforming matrix. *Scientific Reports*, **2014**, 4, 6753	4.9	12
43	In situ synchrotron X-ray diffraction study of deformation behavior and load transfer in a Ti2Ni-NiTi composite. *Applied Physics Letters*, **2014**, 105, 041910	3.4	12
42	Constrained martensitic transformation in an in situ lamella TiNi/NbTi shape memory composite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2009**, 515, 131-133	5.3	12
41	Local strain matching between Nb nanowires and a phase transforming NiTi matrix in an in-situ composite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 610, 6-9	5.3	11
40	Fabrication, microstructure and mechanical properties of WNiTi composites. *Journal of Alloys and Compounds*, **2017**, 695, 1976-1983	5.7	10
39	Superior strength-ductility synergy by hetero-structuring high manganese steel. *Materials Research Letters*, **2020**, 8, 417-423	7.4	10
38	A nano lamella NbTiNiTi composite with high strength. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 633, 121-124	5.3	9
37	Microstructure, transformation behavior and mechanical properties of a (Ti50Ni38Cu12)93Nb7 alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 627, 348-350	5.3	9
36	Nanostructured Nb reinforced NiTi shape memory alloy composite with high strength and narrow hysteresis. *Applied Physics Letters*, **2013**, 102, 231905	3.4	9
35	Achieving ultra-high bearing strength of tungsten nanoribbons in a transforming metal matrix. *Journal of Alloys and Compounds*, **2019**, 781, 1-7	5.7	9
34	High performance Nb/TiNi nanocomposites produced by packaged accumulative roll bonding. *Composites Part B: Engineering*, **2020**, 202, 108403	10	8
33	Deformation behavior of Nb nanowires in TiNiCu shape memory alloy matrix. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 646, 52-56	5.3	7
32	Achieving Superior Two-Way Actuation by the Stress-Coupling of Nanoribbons and Nanocrystalline Shape Memory Alloy. *ACS Applied Materials & Interfaces*, **2016**, 8, 16310-6	9.5	7
31	Negative thermal expansion arrest point memory effect in TiNi shape memory alloy and NbTi/TiNi composite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 549, 114-117	5.3	7

30	Effect of deformation on the stability of stress-induced martensite in nanocrystalline NiTi shape memory alloy. *Materials Letters*, **2014**, 131, 233-235	3.3	6
29	Transformation behavior of explosively welded TiNi/TiNi laminate after diffusion annealing and aging. *Materials Research Bulletin*, **2013**, 48, 5033-5035	5.1	6
28	Superelastic memory effect in in-situ NbTi-nanowire-NiTi nanocomposite. *Applied Physics Letters*, **2012**, 101, 173115	3.4	6
27	Achieving ultra-large elastic strains in Nb thin films on NiTi phase-transforming substrate by the principle of lattice strain matching. *Materials and Design*, **2021**, 197, 109257	8.1	6
26	Narrow hysteresis behavior of TiNi shape memory alloy constrained by NbTi matrix during incomplete transformation. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 536, 33-36	5.3	5
25	In situ TEM observation of buffering the anode volume change by using NiTi alloy during electrochemical lithiation/delithiation. *Nanotechnology*, **2013**, 24, 325702	3.4	5
24	"Lattice Strain Matching"-Enabled Nanocomposite Design to Harness the Exceptional Mechanical Properties of Nanomaterials in Bulk Forms. *Advanced Materials*, **2020**, 32, e1904387	24	5
23	NiTi-Enabled Composite Design for Exceptional Performances. *Shape Memory and Superelasticity*, **2017**, 3, 67-81	2.8	4
22	Temperature-dependence of superelastic stress in nanocrystalline NiTi with complete transformation capability. *Intermetallics*, **2020**, 127, 106970	3.5	4
21	Microstructure of stress-induced martensite in nanocrystalline NiTi shape memory alloy. *Rare Metals*, **2014**, 33, 379-382	5.5	4
20	Constrained martensitic transformation in nanocrystalline TiNi/NbTi shape memory composites. *Journal of Alloys and Compounds*, **2013**, 577, S749-S751	5.7	4
19	In situ X-ray diffraction study of deformation behavior in a Fe/NiTi composite. *Applied Physics Letters*, **2012**, 101, 221904	3.4	4
18	Enhanced superelasticity of nanocrystalline NiTi/NiTiNbFe laminar composite. *Journal of Alloys and Compounds*, **2021**, 853, 157309	5.7	4
17	Grain-size gradient NiTi ribbons with multiple-step shape transition prepared by melt-spinning. *Journal of Materials Science and Technology*, **2021**, 71, 163-168	9.1	4
16	Fabrication and Property of W/Tininb Shape Memory Alloy Laminated Composite. *Materials Science Forum*, **2015**, 815, 211-216	0.4	3
15	Graphene sensing an inhomogeneous strain due to the surface relief in FeNiCoTi shape memory alloy. *Journal of Raman Spectroscopy*, **2014**, 45, 1-6	2.3	3
14	In situ NiTi/Nb(Ti) composite. *Materials Research Bulletin*, **2013**, 48, 5049-5052	5.1	3
13	Transferring elastic strain in Mo/Nb/TiNi multilayer nanocomposites by the principle of lattice strain matching. *Composites Part B: Engineering*, **2021**, 215, 108784	10	3

List of Publications

12	3D-Printing Damage-Tolerant Architected Metallic Materials with Shape Recoverability via Special Deformation Design of Constituent Material. *ACS Applied Materials & Interfaces*, **2021**, 13, 39915-39924	9.5	3
11	In Situ High-Energy X-Ray Diffraction Study of Load Partitioning in Nb/NiTi Nanocomposite Plate. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 3271-3275	2.3	2
10	In situ observation of structure and electrical property changes of a Ga-doped ZnO/graphene flexible transparent electrode during deformation. *Applied Physics Letters*, **2014**, 104, 221907	3.4	2
9	Large elastic strains and ductile necking of W nanowires embedded in TiNi matrix. *Journal of Materials Science and Technology*, **2021**, 60, 56-60	9.1	2
8	Step-wise R phase transformation rendering high-stability two-way shape memory effect of a NiTiFe-Nb nanowire composite. *Acta Materialia*, **2021**, 219, 117258	8.4	2
7	Influence of Annealing and Pre-Straining on the Coupling Effect of a TiNi-Nb Nanowire Composite. *Materials Science Forum*, **2014**, 787, 307-312	0.4	1
6	Effects of Thermal Cycling on the Temperature Memory Effect of TiNiNb Alloy. *Journal of Materials Engineering and Performance*, **2010**, 19, 1022-1024	1.6	1
5	Small-scale confined R-phase transformation in Ni47Ti49Fe2-Nb2 alloy. *Materialia*, **2021**, 20, 101262	3.2	1
4	Large-strain L□ders-type deformation of B19Tmartensite in Ni47Ti49Nb2Fe2 alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 829, 142136	5.3	0
3	DuctileBrittle Variation Phenomenon and a Special Transformation-Induced Plasticity Effect in NbTi-NiTi Composite. *Journal of Materials Engineering and Performance*, **2020**, 29, 296-302	1.6	
2	A New Class of Metal Nanocomposites with Superior Mechanical Properties: Unusual Thermal Expansion in NbTi-Nanowires/NiTi-Matrix Composite **2014**, 125-135		
1	A New Class of Metal Nanocomposites With Superior Mechanical Properties: Unusual Thermal Expansion in NbTi-Nanowires / NiTi-Matrix Composite **2014**, 127-135		