Ruben Santamarta

List of Publications by Year
in descending order

58 papers	2,584 citations	172386 29 h-index	189801 50 g-index
58 all docs	58 docs citations	58 times ranked	1449 citing authors

#	Article	IF	Citations
1	Crystal structure of martensitic phases in Niâ€“Mnâ€“Ga shape memory alloys. Acta Materialia, 2000, 48, 3027-3038.	3.8	601
2	TEM study of structural and microstructural characteristics of a precipitate phase in Ni-rich Niâ€“Tiâ€“Hf and Niâ€“Tiâ€“Zr shape memory alloys. Acta Materialia, 2013, 61, 6191-6206.	3.8	169
3	Ferromagnetic shape memory alloys: Alternatives to Niâ€“Mnâ€“Ga. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 57-65.	2.6	119
4	Microstructural characterization and shape memory characteristics of the Ni50.3Ti34.7Hf15 shape memory alloy. Acta Materialia, 2015, 83, 48-60.	3.8	115
5	Relationship between crystallographic compatibility and thermal hysteresis in Ni-rich NiTiHf and NiTiZr high temperature shape memory alloys. Acta Materialia, 2016, 121, 374-383.	3.8	89
6	Long-period martensitic structures of Ni-Mn-Ga alloys studied by high-resolution transmission electron microscopy. Journal of Applied Physics, 2005, 97, 083516.	1.1	84
7	Effect of atomic order on the martensitic transformation of Niâ€“Feâ€“Ga alloys. Scripta Materialia, 2006, 54, 1985-1989.	2.6	79
8	Effect of precipitation on the microstructure and the shape memory response of the Ni50.3Ti29.7Zr20 high temperature shape memory alloy. Scripta Materialia, 2013, 69, 354-357.	2.6	74
9	EFFECT OF AGING ON THE MARTENSITIC TRANSFORMATION CHARACTERISTICS OF A Ni-RICH NiTiHf HIGH TEMPERATURE SHAPE MEMORY ALLOY. Functional Materials Letters, 2012, 05, 1250038.	0.7	69
10	On the microstructural origins of martensitic transformation arrest in a NiCoMnIn magnetic shape memory alloy. Acta Materialia, 2018, 142, 95-106.	3.8	67
11	Microstructural characterization and superelastic response of a Ni50.3Ti29.7Zr20 high-temperature shape memory alloy. Scripta Materialia, 2014, 81, 12-15.	2.6	54
12	Effect of ageing on the martensitic transformation of Niâ€“Feâ€“Ga alloys. Scripta Materialia, 2006, 54, 1105-1109.	2.6	53
13	Shape memory properties of Ni-Ti based melt-spun ribbons. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 761-770.	1.1	50
14	Isothermal and athermal martensitic transformations in Niâ€“Ti shape memory alloys. Acta Materialia, 2012, 60, 2578-2592.	3.8	49
15	Two way shape memory effect in NiTiHf high temperature shape memory alloy tubes. Acta Materialia, 2019, 163, 1-13.	3.8	47
16	Role of microstructure on the actuation fatigue performance of Ni-Rich NiTiHf high temperature shape memory alloys. Acta Materialia, 2019, 175, 107-120.	3.8	44
17	Role of nano-precipitation on the microstructure and shape memory characteristics of a new Ni50.3Ti34.7Zr15 shape memory alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 655, 193-203.	2.6	39
18	Thermal stability of high-temperature Niâ€“Mnâ€“Ga alloys. Scripta Materialia, 2008, 58, 259-262.	2.6	38

#	Article	IF	Citations
19	Stability of a Ni-rich Ni-Ti-Zr high temperature shape memory alloy upon low temperature aging and thermal cycling. Scripta Materialia, 2016, 124, 47-50.	2.6	37
20	Martensite stabilisation in Ni50Ti32.2Hf17.7. Scripta Materialia, 1999, 41, 867-872.	2.6	36
21	Microstructural design considerations in Fe-Mn-Al-Ni shape memory alloy wires: Effects of natural aging. Scripta Materialia, 2018, 142, 153-157.	2.6	36
22	Effect of amorphousâ€“crystalline interfaces on the martensitic transformation in Ti50Ni25Cu25. Scripta Materialia, 2004, 50, 1423-1427.	2.6	35
23	HREM study of different martensitic phases in Niâ€“Mnâ€“Ga alloys. Materials Chemistry and Physics, 2003, 81, 457-459.	2.0	34
24	Structure of the layered martensitic phases of Niâ€“Mnâ€“Ga alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 931-934.	2.6	34
25	Thermal and microstructural evolution under ageing of several high-temperature Niâ€“Mnâ€“Ga alloys. Intermetallics, 2010, 18, 977-983.	1.8	34
26	Solidification process and effect of thermal treatments on Niâ€“Coâ€“Mnâ€“Sn metamagnetic shape memory alloys. Acta Materialia, 2015, 93, 164-174.	3.8	34
27	Effects of training on the thermomechanical behavior of NiTiHf and NiTiZr high temperature shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 794, 139857.	2.6	33
28	Structural anelasticity, elasticity and broken ergodicity in Niâ€“Ti shape memory alloys. Acta Materialia, 2014, 73, 275-286.	3.8	32
29	Effects of Ni content on the shape memory properties and microstructure of Ni-rich NiTi-20Hf alloys. Smart Materials and Structures, 2016, 25, 095029.	1.8	32
30	H-Phase Precipitation and Martensitic Transformation in Ni-rich Niâ€“Tiâ€“Hf and Niâ€“Ti-Zr High-Temperature Shape Memory Alloys. Shape Memory and Superelasticity, 2018, 4, 85-92.	1.1	32
31	Entropy change linked to the magnetic field induced Morin transition in Hematite nanoparticles. Applied Physics Letters, 2012, 100, 063102.	1.5	30
32	Isothermal and athermal martensitic transformations in the B2â€“Râ€“B19â€² sequence in Niâ€“Ti shape memory alloys. Scripta Materialia, 2010, 63, 1240-1243.	2.6	27
33	Microstructure of a Partially Crystallised Ti₅₀Ni₂₅Cu₂₅ Melt-Spun Ribbon. Materials Transactions, 2003, 44, 1760-1767.	0.4	21
34	Impact fatigue behavior of superelastic NiTi shape memory alloy wires. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 764-769.	2.6	21
35	Strain glass state in Ni-rich Ni-Ti-Zr shape memory alloys. Acta Materialia, 2021, 218, 117232.	3.8	21
36	Effect of precipitates on the stressâ€“strain behavior under compression in polycrystalline Niâ€“Feâ€“Ga alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 101-104.	2.6	20

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37	The effect of annealing on the transformation and the microstructure of Mn1â^'Cr CoGe alloys. Materials Characterization, 2014, 93, 24-31.	1.9	20
38	Thermal stability and microstructure of Niâ€“Mnâ€“Gaâ€“Cu high temperature shape memory alloys. Journal of Alloys and Compounds, 2015, 648, 903-911.	2.8	19
39	Unexpected ordering behaviour of Pt3Al intermetallic precipitates. Journal of Alloys and Compounds, 2007, 432, 96-102.	2.8	18
40	Effect of ageing in Niâ€“Feâ€“Ga ferromagnetic shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 919-922.	2.6	14
41	Thermal stability and ordering effects in Niâ€“Feâ€“Ga ferromagnetic shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 262-265.	2.6	14
42	Effect of Thermal Treatments on Niâ€“Mnâ€“Ga and Ni-Rich Niâ€“Tiâ€“Hf/Zr High-Temperature Shape Memory Alloys. Shape Memory and Superelasticity, 2015, 1, 418-428.	1.1	13
43	Twinned b.c.c. spherical particles in a partially crystallized Ti50Ni25Cu25 melt-spun ribbon. Intermetallics, 2004, 12, 341-348.	1.8	12
44	Microstructure changes in two phase Î²+ Î³ Co-Ni-Al ferromagnetic shape memory alloys in relation to Al/Co ratio. European Physical Journal: Special Topics, 2008, 158, 137-142.	1.2	12
45	Structure and growth of coreâ€“shell nanoprecipitates in Alâ€“Erâ€“Scâ€“Zrâ€“Vâ€“Si high-temperature alloys. Journal of Materials Science, 2019, 54, 1857-1871.	1.7	12
46	Applications of advanced transmission electron microscopic techniques to Niâ€“Ti based shape memory materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 378, 11-15.	2.6	9
47	Crystallization in Partially Amorphous Ni₅₀Ti₃₂Hf₁₈ Melt Spun Ribbon. Materials Transactions, 2004, 45, 1811-1818.	0.4	8
48	HYPERSTABILIZATION OF MARTENSITES. Functional Materials Letters, 2012, 05, 1250005.	0.7	8
49	Mechanical Spectroscopy of Hyperstabilized Martensites. Solid State Phenomena, 2012, 184, 355-360.	0.3	7
50	Thermo-mechanical behaviour of a Ni-Ti-Cu melt spun alloy. European Physical Journal Special Topics, 2001, 11, Pr8-351-Pr8-356.	0.2	6
51	Structure investigations of ferromagnetic Coâ€Niâ€Al alloys obtained by powder metallurgy. Journal of Microscopy, 2010, 237, 374-378.	0.8	6
52	Strain-Glass Revisited. Materials Science Forum, 0, 738-739, 274-275.	0.3	5
53	Structure of multi-grain spherical particles in an amorphous Ti50Ni25Cu25 melt-spun ribbon. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 378, 143-147.	2.6	4
54	AGEING EFFECTS IN Ni-Ti BASED SHAPE MEMORY ALLOYS. , 2001, , .		3

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55	Thermal martensite stabilization in Ni-Ti based alloys. European Physical Journal Special Topics, 2003, 112, 647-650.	0.2	2
56	A CRITICAL REVIEW OF THE ORGANIZATION, METHODOLOGY AND ASSESSMENT IN THE FIRST-YEAR LABORATORY LECTURES OF SCIENCE AND ENGINEERING DEGREES AT THE UNIVERSITY OF THE BALEARIC ISLANDS (SPAIN). EDULEARN Proceedings, 2019, , .	0.0	2
57	IMPROVEMENT OF THE LABORATORY SKILLS ON FIRST-YEAR ENGINEERING STUDENTS AT THE UNIVERSITY OF THE BALEARIC ISLANDS (SPAIN) BY CHANGING SOME TEACHING STRATEGIES OF THE LABORATORY LESSONS. , 2020, , .		1
58	Ageing Behaviour of High-Temperature Ni-Mn-Ga Alloys. , 0, , 633-638.		0