

# Ruben Santamarta

## List of Publications by Year in descending order

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58  
papers

2,584  
citations

172457

29  
h-index

189892

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 Ni-Mn-Ga shape memory alloys. <i>Acta Materialia</i> , 2000, 48, 3027-3038.  | 7.9 | 601       |
| 2  | TEM study of structural and microstructural characteristics of a precipitate phase in Ni-rich Ni-Ti-Hf and Ni-Ti-Zr shape memory alloys. <i>Acta Materialia</i> , 2013, 61, 6191-6206.  | 7.9 | 169       |
| 3  | Ferromagnetic shape memory alloys: Alternatives to Ni-Mn-Ga. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 481-482, 57-65.  | 5.6 | 119       |
| 4  | Microstructural characterization and shape memory characteristics of the Ni <sub>50.3</sub> Ti <sub>34.7</sub> Hf <sub>15</sub> shape memory alloy. <i>Acta Materialia</i> , 2015, 83, 48-60.   | 7.9 | 115       |
| 5  | Relationship between crystallographic compatibility and thermal hysteresis in Ni-rich NiTiHf and NiTiZr high temperature shape memory alloys. <i>Acta Materialia</i> , 2016, 121, 374-383.  | 7.9 | 89        |
| 6  | Long-period martensitic structures of Ni-Mn-Ga alloys studied by high-resolution transmission electron microscopy. <i>Journal of Applied Physics</i> , 2005, 97, 083516.  | 2.5 | 84        |
| 7  | Effect of atomic order on the martensitic transformation of Ni-Fe-Ga alloys. <i>Scripta Materialia</i> , 2006, 54, 1985-1989.   | 5.2 | 79        |
| 8  | Effect of precipitation on the microstructure and the shape memory response of the Ni <sub>50.3</sub> Ti <sub>29.7</sub> Zr <sub>20</sub> high temperature shape memory alloy. <i>Scripta Materialia</i> , 2013, 69, 354-357.   | 5.2 | 74        |
| 9  | EFFECT OF AGING ON THE MARTENSITIC TRANSFORMATION CHARACTERISTICS OF A Ni-RICH NiTiHf HIGH TEMPERATURE SHAPE MEMORY ALLOY. <i>Functional Materials Letters</i> , 2012, 05, 1250038.   | 1.2 | 69        |
| 10 | On the microstructural origins of martensitic transformation arrest in a NiCoMnIn magnetic shape memory alloy. <i>Acta Materialia</i> , 2018, 142, 95-106.  | 7.9 | 67        |
| 11 | Microstructural characterization and superelastic response of a Ni <sub>50.3</sub> Ti <sub>29.7</sub> Zr <sub>20</sub> high-temperature shape memory alloy. <i>Scripta Materialia</i> , 2014, 81, 12-15.  | 5.2 | 54        |
| 12 | Effect of ageing on the martensitic transformation of Ni-Fe-Ga alloys. <i>Scripta Materialia</i> , 2006, 54, 1105-1109.   | 5.2 | 53        |
| 13 | Shape memory properties of Ni-Ti based melt-spun ribbons. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004, 35, 761-770.   | 2.2 | 50        |
| 14 | Isothermal and athermal martensitic transformations in Ni-Ti shape memory alloys. <i>Acta Materialia</i> , 2012, 60, 2578-2592.   | 7.9 | 49        |
| 15 | Two way shape memory effect in NiTiHf high temperature shape memory alloy tubes. <i>Acta Materialia</i> , 2019, 163, 1-13.  | 7.9 | 47        |
| 16 | Role of microstructure on the actuation fatigue performance of Ni-Rich NiTiHf high temperature shape memory alloys. <i>Acta Materialia</i> , 2019, 175, 107-120.  | 7.9 | 44        |
| 17 | Role of nano-precipitation on the microstructure and shape memory characteristics of a new Ni <sub>50.3</sub> Ti <sub>34.7</sub> Zr <sub>15</sub> shape memory alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 655, 193-203. | 5.6 | 39        |
| 18 | Thermal stability of high-temperature Ni-Mn-Ga alloys. <i>Scripta Materialia</i> , 2008, 58, 259-262.   | 5.2 | 38        |

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|----|--|-----|-----------|
| 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.  | 5.2 | 37        |
| 20 | Martensite stabilisation in Ni <sub>50</sub> Ti <sub>32.2</sub> Hf <sub>17.7</sub> . Scripta Materialia, 1999, 41, 867-872.  | 5.2 | 36        |
| 21 | Microstructural design considerations in Fe-Mn-Al-Ni shape memory alloy wires: Effects of natural aging. Scripta Materialia, 2018, 142, 153-157.   | 5.2 | 36        |
| 22 | Effect of amorphous/crystalline interfaces on the martensitic transformation in Ti <sub>50</sub> Ni <sub>25</sub> Cu <sub>25</sub> . Scripta Materialia, 2004, 50, 1423-1427.  | 5.2 | 35        |
| 23 | HREM study of different martensitic phases in Ni-Mn-Ga alloys. Materials Chemistry and Physics, 2003, 81, 457-459.   | 4.0 | 34        |
| 24 | Structure of the layered martensitic phases of Ni-Mn-Ga alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 931-934.  | 5.6 | 34        |
| 25 | Thermal and microstructural evolution under ageing of several high-temperature Ni-Mn-Ga alloys. Intermetallics, 2010, 18, 977-983.   | 3.9 | 34        |
| 26 | Solidification process and effect of thermal treatments on Ni-Co-Mn-Sn metamagnetic shape memory alloys. Acta Materialia, 2015, 93, 164-174.   | 7.9 | 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. | 5.6 | 33        |
| 28 | Structural anelasticity, elasticity and broken ergodicity in Ni-Ti shape memory alloys. Acta Materialia, 2014, 73, 275-286.  | 7.9 | 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.   | 3.5 | 32        |
| 30 | H-Phase Precipitation and Martensitic Transformation in Ni-rich Ni-Ti-Hf and Ni-Ti-Zr High-Temperature Shape Memory Alloys. Shape Memory and Superelasticity, 2018, 4, 85-92.  | 2.2 | 32        |
| 31 | Entropy change linked to the magnetic field induced Morin transition in Hematite nanoparticles. Applied Physics Letters, 2012, 100, 063102.  | 3.3 | 30        |
| 32 | Isothermal and athermal martensitic transformations in the B <sub>2</sub> R-B <sub>19</sub> sequence in Ni-Ti shape memory alloys. Scripta Materialia, 2010, 63, 1240-1243.  | 5.2 | 27        |
| 33 | Microstructure of a Partially Crystallised Ti <sub>50</sub> Ni <sub>25</sub> Cu <sub>25</sub> Melt-Spun Ribbon. Materials Transactions, 2003, 44, 1760-1767.   | 1.2 | 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.   | 5.6 | 21        |
| 35 | Strain glass state in Ni-rich Ni-Ti-Zr shape memory alloys. Acta Materialia, 2021, 218, 117232.  | 7.9 | 21        |
| 36 | Effect of precipitates on the stress-strain behavior under compression in polycrystalline Ni-Fe-Ga alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 101-104. | 5.6 | 20        |

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|----|---|-----|-----------|
| 37 | The effect of annealing on the transformation and the microstructure of Mn <sub>1-x</sub> Cr <sub>x</sub> CoGe alloys. <i>Materials Characterization</i> , 2014, 93, 24-31.   | 4.4 | 20        |
| 38 | Thermal stability and microstructure of Ni-Mn-Ga-Cu high temperature shape memory alloys. <i>Journal of Alloys and Compounds</i> , 2015, 648, 903-911.  | 5.5 | 19        |
| 39 | Unexpected ordering behaviour of Pt <sub>3</sub> Al intermetallic precipitates. <i>Journal of Alloys and Compounds</i> , 2007, 432, 96-102.   | 5.5 | 18        |
| 40 | Effect of ageing in Ni-Fe-Ga ferromagnetic shape memory alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 438-440, 919-922.   | 5.6 | 14        |
| 41 | Thermal stability and ordering effects in Ni-Fe-Ga ferromagnetic shape memory alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 481-482, 262-265.   | 5.6 | 14        |
| 42 | Effect of Thermal Treatments on Ni-Mn-Ga and Ni-Rich Ni-Ti-Hf/Zr High-Temperature Shape Memory Alloys. <i>Shape Memory and Superelasticity</i> , 2015, 1, 418-428.  | 2.2 | 13        |
| 43 | Twinned b.c.c. spherical particles in a partially crystallized Ti <sub>50</sub> Ni <sub>25</sub> Cu <sub>25</sub> melt-spun ribbon. <i>Intermetallics</i> , 2004, 12, 341-348.  | 3.9 | 12        |
| 44 | Microstructure changes in two phase $\beta_2 + \beta_3$ Co-Ni-Al ferromagnetic shape memory alloys in relation to Al/Co ratio. <i>European Physical Journal: Special Topics</i> , 2008, 158, 137-142.   | 2.6 | 12        |
| 45 | Structure and growth of core-shell nanoprecipitates in Al-Er-Sc-Zr-V-Si high-temperature alloys. <i>Journal of Materials Science</i> , 2019, 54, 1857-1871.   | 3.7 | 12        |
| 46 | Applications of advanced transmission electron microscopic techniques to Ni-Ti based shape memory materials. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 378, 11-15.                        | 5.6 | 9         |
| 47 | Crystallization in Partially Amorphous Ni <sub>50</sub> Ti <sub>32</sub> Hf <sub>18</sub> Melt Spun Ribbon. <i>Materials Transactions</i> , 2004, 45, 1811-1818.  | 1.2 | 8         |
| 48 | HYPERSTABILIZATION OF MARTENSITES. <i>Functional Materials Letters</i> , 2012, 05, 1250005.   | 1.2 | 8         |
| 49 | Mechanical Spectroscopy of Hyperstabilized Martensites. <i>Solid State Phenomena</i> , 2012, 184, 355-360.  | 0.3 | 7         |
| 50 | Thermo-mechanical behaviour of a Ni-Ti-Cu melt spun alloy. <i>European Physical Journal Special Topics</i> , 2001, 11, Pr8-351-Pr8-356.   | 0.2 | 6         |
| 51 | Structure investigations of ferromagnetic Co-Ni-Al alloys obtained by powder metallurgy. <i>Journal of Microscopy</i> , 2010, 237, 374-378.   | 1.8 | 6         |
| 52 | Strain-Glass Revisited. <i>Materials Science Forum</i> , 0, 738-739, 274-275.   | 0.3 | 5         |
| 53 | Structure of multi-grain spherical particles in an amorphous Ti <sub>50</sub> Ni <sub>25</sub> Cu <sub>25</sub> melt-spun ribbon. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 378, 143-147. | 5.6 | 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         |