Alain Couret

List of Publications by Year
in descending order

29 papers	1,035 citations	430874 18 h-index	526287 27 g-index
29 all docs	29 docs citations	29 times ranked	605 citing authors

#	Article	IF	Citations
1	Microstructures and mechanical properties of TiAl alloys consolidated by spark plasma sintering. Intermetallics, 2008, 16, 1134-1141.	3.9	147
2	Temperature control during Spark Plasma Sintering and application to up-scaling and complex shaping. Journal of Materials Processing Technology, 2013, 213, 269-278.	6.3	97
3	Microstructures and mechanical properties of a multi-phase Î²-solidifying TiAl alloy densified by spark plasma sintering. Acta Materialia, 2014, 73, 107-115.	7.9	95
4	Phase transformations in TiAl based alloys. Acta Materialia, 2005, 53, 2653-2664.	7.9	93
5	Spark plasma sintering mechanisms at the necks between TiAl powder particles. Acta Materialia, 2016, 118, 100-108.	7.9	83
6	An Innovative Way to Produce Î³â€TiAl Blades: Spark Plasma Sintering. Advanced Engineering Materials, 2015, 17, 1408-1413.	3.5	61
7	Microstructure and mechanical properties of high niobium containing TiAl alloys elaborated by spark plasma sintering. Intermetallics, 2010, 18, 2312-2321.	3.9	60
8	Identification of microstructural mechanisms during densification of a TiAl alloy by spark plasma sintering. Journal of Alloys and Compounds, 2011, 509, 9826-9835.	5.5	60
9	On the high creep strength of the W containing IRIS-TiAl alloy at 850â€¯Â°C. Acta Materialia, 2019, 181, 331-341.	7.9	33
10	Improvement of the creep properties of TiAl alloys densified by Spark Plasma Sintering. Intermetallics, 2014, 46, 1-3.	3.9	31
11	Deformation modes and size effect in near-Î³ TiAl alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 679, 123-132.	5.6	30
12	Obtaining of a fine near-lamellar microstructure in TiAl alloys by Spark Plasma Sintering. Intermetallics, 2016, 71, 88-97.	3.9	29
13	Interpretation of the stress dependence of creep by a mixed climb mechanism in TiAl. Philosophical Magazine, 2004, 84, 3671-3687.	1.6	28
14	Mechanical Properties of the TiAl IRIS Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 6097-6108.	2.2	28
15	Development of a TiAl Alloy by Spark Plasma Sintering. Jom, 2017, 69, 2576-2582.	1.9	26
16	Effect of ageing on the properties of the W-containing IRIS-TiAl alloy. Acta Materialia, 2020, 199, 169-180.	7.9	21
17	Effects of tungsten alloying and fluorination on the oxidation behavior of intermetallic titanium aluminides for aerospace applications. Intermetallics, 2021, 139, 107270.	3.9	20
18	Glide mechanism of ordinary dislocations in the Î³ phase of TiAl. Intermetallics, 2001, 9, 899-906.	3.9	18

#	Article	IF	Citations
19	Elaboration of Metallic Materials by SPS: Processing, Microstructures, Properties, and Shaping. Metals, 2021, 11, 322.	2.3	14
20	In-situ observation of the phase evolution during an electromagnetic-assisted sintering experiment of an intermetallic Î³-TiAl based alloy. Scripta Materialia, 2022, 206, 114233.	5.2	14
21	A microscopic study of the creep of a cast TiAl alloy at 750Â°C under 150MPa. Scripta Materialia, 2011, 65, 198-201.	5.2	11
22	Pure climb of [001] dislocations in TiAl at 850 Â°C. Scripta Materialia, 2018, 149, 53-57.	5.2	9
23	Î³-allotriomorphs precipitation and lamellar transformation in a TiAl-based alloy. Intermetallics, 2011, 19, 1627-1629.	3.9	8
24	Chemical heterogeneities in tungsten containing TiAl alloys processed by powder metallurgy. Materialia, 2021, 18, 101147.	2.7	7
25	Near-Net Shaping of Titanium-Aluminum Jet Engine Turbine Blades by SPS. , 2019, , 713-737.		4
26	Microstructure characterization of high temperature mechanisms in a Nbâ€"Tiâ€"Si alloy. Intermetallics, 2022, 144, 107509.	3.9	4
27	How Si affects the microstructural evolution and phase transformations of intermetallic Î³-TiAl based alloys. Materialia, 2022, 24, 101475.	2.7	3
28	Study of the low cyclic behaviour of the IRIS alloy at high temperature. MATEC Web of Conferences, 2018, 165, 06007.	0.2	1
29	High Creep Resistance of Titanium Aluminides Sintered by SPS. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 17-22.	0.5	0