

# Thomas Voisin

## List of Publications by Year in descending order

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Version: 2024-02-01

35  
papers

2,915  
citations

394286

19  
h-index

395590

33  
g-index

36  
all docs

36  
docs citations

36  
times ranked

2409  
citing authors

#	ARTICLE	IF	CITATIONS
1	Additively manufactured hierarchical stainless steels with high strength and ductility. <i>Nature Materials</i> , 2018, 17, 63-71.	13.3	1,517
2	New insights on cellular structures strengthening mechanisms and thermal stability of an austenitic stainless steel fabricated by laser powder-bed-fusion. <i>Acta Materialia</i> , 2021, 203, 116476.	3.8	234
3	Defects-dictated tensile properties of selective laser melted Ti-6Al-4V. <i>Materials and Design</i> , 2018, 158, 113-126.	3.3	168
4	Tensile properties, strain rate sensitivity, and activation volume of additively manufactured 316L stainless steels. <i>International Journal of Plasticity</i> , 2019, 120, 395-410.	4.1	155
5	Microscale residual stresses in additively manufactured stainless steel. <i>Nature Communications</i> , 2019, 10, 4338.	5.8	120
6	Temperature control during Spark Plasma Sintering and application to up-scaling and complex shaping. <i>Journal of Materials Processing Technology</i> , 2013, 213, 269-278.	3.1	97
7	Microstructures and mechanical properties of a multi-phase $\beta$ -solidifying TiAl alloy densified by spark plasma sintering. <i>Acta Materialia</i> , 2014, 73, 107-115.	3.8	95
8	An Innovative Way to Produce $\beta$ -TiAl Blades: Spark Plasma Sintering. <i>Advanced Engineering Materials</i> , 2015, 17, 1408-1413.	1.6	61
9	A processing diagram for high-density Ti-6Al-4V by selective laser melting. <i>Rapid Prototyping Journal</i> , 2018, 24, 1469-1478.	1.6	49
10	Nondiffractive beam shaping for enhanced optothermal control in metal additive manufacturing. <i>Science Advances</i> , 2021, 7, eabg9358.	4.7	47
11	Refinement of lamellar microstructures by boron incorporation in GE-TiAl alloys processed by Spark Plasma Sintering. <i>Intermetallics</i> , 2013, 36, 12-20.	1.8	35
12	Deformation modes and size effect in near- $\beta$ TiAl alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 679, 123-132.	2.6	30
13	Obtaining of a fine near-lamellar microstructure in TiAl alloys by Spark Plasma Sintering. <i>Intermetallics</i> , 2016, 71, 88-97.	1.8	29
14	Mechanical Properties of the TiAl IRIS Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 6097-6108.	1.1	28
15	Ultra-low-density digitally architected carbon with a strutted tube-in-tube structure. <i>Nature Materials</i> , 2021, 20, 1498-1505.	13.3	28
16	Pitting Corrosion in 316L Stainless Steel Fabricated by Laser Powder Bed Fusion Additive Manufacturing: A Review and Perspective. <i>Jom</i> , 2022, 74, 1668-1689.	0.9	27
17	Development of a TiAl Alloy by Spark Plasma Sintering. <i>Jom</i> , 2017, 69, 2576-2582.	0.9	26
18	Response of solidification cellular structures in additively manufactured 316 stainless steel to heavy ion irradiation: an <i>in situ</i> study. <i>Materials Research Letters</i> , 2019, 7, 290-297.	4.1	26

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19	Hydrogen uptake and its influence in selective laser melted austenitic stainless steel: A nanoindentation study. <i>Scripta Materialia</i> , 2021, 194, 113718.	2.6	20
20	Precipitation strengthening in nanostructured AZ31B magnesium thin films characterized by nano-indentation, STEM/EDS, HRTEM, and in situ TEM tensile testing. <i>Acta Materialia</i> , 2017, 138, 174-184.	3.8	19
21	In situ TEM observations of high-strain-rate deformation and fracture in pure copper. <i>Materials Today</i> , 2020, 33, 10-16.	8.3	19
22	The impact of nano-bubbles on the laser performance of hafnia films deposited by oxygen assisted ion beam sputtering method. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	16
23	Heavy ion irradiation response of an additively manufactured 316LN stainless steel. <i>Journal of Nuclear Materials</i> , 2021, 546, 152745.	1.3	16
24	Elaboration of Metallic Materials by SPS: Processing, Microstructures, Properties, and Shaping. <i>Metals</i> , 2021, 11, 322.	1.0	14
25	Critical differences between electron beam melted and selective laser melted Ti-6Al-4V. <i>Materials and Design</i> , 2022, 216, 110533.	3.3	11
26	TEM sample preparation by femtosecond laser machining and ion milling for high-rate TEM straining experiments. <i>Ultramicroscopy</i> , 2017, 175, 1-8.	0.8	7
27	High-kinetic inductance additive manufactured superconducting microwave cavity. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	6
28	Near-Net Shaping of Titanium-Aluminum Jet Engine Turbine Blades by SPS. , 2019, , 713-737.		4
29	First Investigations on a TiAl Alloy Processed by Spark Plasma Sintering. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1516, 17-22.	0.1	3
30	Investigation of UV, ns-laser damage resistance of hafnia films produced by electron beam evaporation and ion beam sputtering deposition methods. <i>Journal of Applied Physics</i> , 2021, 130, 043103.	1.1	2
31	DTEM In Situ Mechanical Testing: Defects Motion at High Strain Rates. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2017, , 209-213.	0.3	2
32	Understanding the High Strength of L-PBF Metals Using in and ex situ Characterization by TEM and Synchrotron XRD. <i>Microscopy and Microanalysis</i> , 2019, 25, 2560-2561.	0.2	1
33	A 3D nm-thin biomimetic membrane for ultimate molecular separation. <i>Materials Horizons</i> , 2020, 7, 2422-2430.	6.4	1
34	In Situ High-Rate Mechanical Testing in the Dynamic Transmission Electron Microscope. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2016, , 25-30.	0.3	1
35	High Creep Resistance of Titanium Aluminides Sintered by SPS. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2017, , 17-22.	0.3	0