Daniel Barba

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3072212/publications.pdf

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28 papers	1,259 citations	566801 15 h-index	676716 22 g-index
28 all docs	28 docs citations	28 times ranked	1055 citing authors

#	Article	IF	Citations
1	Thermo-mechanics of Polymers at Extreme and Failure Conditions: Influence of Strain Rate and Temperature. , 2022, , 249-276.		0
2	Alloys-by-design: A low-modulus titanium alloy for additively manufactured biomedical implants. Acta Materialia, 2022, 229, 117749.	3.8	39
3	Biomechanical Comparison of Periprosthetic Femoral Fracture Risk in Three Femoral Components in a Sawbone Model. Journal of Arthroplasty, 2021, 36, 387-394.	1.5	11
4	On the mechanical behaviour of additively manufactured metamaterials under dynamic conditions. EPJ Web of Conferences, 2021, 250, 05006.	0.1	1
5	Temperature and strain rate dependences on hardening and softening behaviours in semi-crystalline polymers: Application to PEEK. International Journal of Solids and Structures, 2020, 182-183, 205-217.	1.3	58
6	On the size and orientation effect in additive manufactured Ti-6Al-4V. Materials and Design, 2020, 186, 108235.	3.3	95
7	A Novel Titanium Alloy for Additively Manufactured Orthopaedic Implants. Minerals, Metals and Materials Series, 2020, , 267-276.	0.3	1
8	On the Temperature Limits of Ni-Based Superalloys. Minerals, Metals and Materials Series, 2020, , 785-792.	0.3	2
9	Design of Metallic Lattices for Bone Implants by Additive Manufacturing. Minerals, Metals and Materials Series, 2020, , 745-759.	0.3	3
10	Smart Modelling of Additively Manufactured Metamaterials. , 2020, , .		1
11	On the Size Effects in Additively Manufactured Titanium and the Implications in AM Components. Minerals, Metals and Materials Series, 2020, , 449-456.	0.3	0
12	Rationalisation of the Micromechanisms Behind the High-Temperature Strength Limit in Single-Crystal Nickel-Based Superalloys. Minerals, Metals and Materials Series, 2020, , 260-272.	0.3	4
13	Thermo-mechanics of Polymers at Extreme and Failure Conditions: Influence of Strain Rate and Temperature. , 2020, , 1-28.		0
14	On Optimising Ring-Rolling Manufacturability of C&W Nickel Superalloys for Aero-engine Turbine Disc. Minerals, Metals and Materials Series, 2020, , 408-420.	0.3	0
15	Synthetic bone: Design by additive manufacturing. Acta Biomaterialia, 2019, 97, 637-656.	4.1	169
16	Alloys-by-design: Application to titanium alloys for optimal superplasticity. Acta Materialia, 2019, 178, 275-287.	3.8	75
17	Design of metallic bone by additive manufacturing. Scripta Materialia, 2019, 164, 110-114.	2.6	119
18	Ultrafast miniaturised assessment of high-temperature creep properties of metals. Materials Letters, 2019, 240, 287-290.	1.3	3

#	Article	IF	Citations
19	Grain boundary properties of a nickel-based superalloy: Characterisation and modelling. Acta Materialia, 2018, 151, 377-394.	3.8	42
20	A thermodynamically consistent constitutive model for diffusion-assisted plasticity in Ni-based superalloys. International Journal of Plasticity, 2018, 105, 74-98.	4.1	28
21	Combined modelling and miniaturised characterisation of high-temperature forging in a nickel-based superalloy. Materials and Design, 2018, 160, 683-697.	3.3	24
22	Segregation-Assisted Plasticity in Ni-Based Superalloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 4173-4185.	1.1	75
23	On the microtwinning mechanism in a single crystal superalloy. Acta Materialia, 2017, 135, 314-329.	3.8	102
24	On the composition of microtwins in a single crystal nickel-basedÂsuperalloy. Scripta Materialia, 2017, 127, 37-40.	2.6	59
25	On the role of boron on improving ductility in a new polycrystalline superalloy. Acta Materialia, 2017, 124, 489-500.	3.8	90
26	On the mechanisms of superplasticity in Tiâ€“6Alâ€“4V. Acta Materialia, 2016, 105, 449-463.	3.8	171
27	Multiscale modeling of the mechanical behavior of IN718 superalloy based on micropillar compression and computational homogenization. Acta Materialia, 2015, 98, 242-253.	3.8	83
28	Mechanisms of Superplasticity in Titanium Alloys: Measurement, <i>In Situ </i>Observations and Rationalization. Defect and Diffusion Forum, 0, 385, 65-71.	0.4	4