Jean-Pierre Kruth

List of Publications by Year
in descending order

37 papers	3,812 citations	279798 23 h-index	330143 37 g-index
39 all docs	39 docs citations	39 times ranked	3816 citing authors

#	Article	IF	Citations
1	The effect of pore geometry on the in vitro biological behavior of human periosteum-derived cells seeded on selective laser-melted Ti6Al4V bone scaffolds. Acta Biomaterialia, 2012, 8, 2824-2834.	8.3	594
2	Effects of build orientation and heat treatment on the microstructure and mechanical properties of selective laser melted Ti6Al4V lattice structures. Additive Manufacturing, 2015, 5, 77-84.	3.0	313
3	Processing AlSi10Mg by selective laser melting: Parameter optimisation and material characterisation. Materials Science and Technology, 2015, 31, 917-923.	1.6	312
4	Additively manufactured porous tantalum implants. Acta Biomaterialia, 2015, 14, 217-225.	8.3	309
5	Improving the fatigue performance of porous metallic biomaterials produced by Selective Laser Melting. Acta Biomaterialia, 2017, 47, 193-202.	8.3	233
6	Effect of SLM Parameters on Transformation Temperatures of Shape Memory Nickel Titanium Parts. Advanced Engineering Materials, 2014, 16, 1140-1146.	3.5	200
7	Additive manufacturing of zirconia parts by indirect selective laser sintering. Journal of the European Ceramic Society, 2014, 34, 81-89.	5.7	183
8	Fatigue behaviour of NiTi shape memory alloy scaffolds produced by SLM, a unit cell design comparison. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 70, 53-59.	3.1	172
9	Additive manufacturing of alumina parts by indirect selective laser sintering and post processing. Journal of Materials Processing Technology, 2013, 213, 1484-1494.	6.3	152
10	Laser additive manufacturing of bulk and porous shape-memory NiTi alloys: From processes to potential biomedical applications. MRS Bulletin, 2016, 41, 765-774.	3.5	132
11	Selective Laser Melting to Manufacture â€œIn Situâ€•Metal Matrix Composites: A Review. Advanced Engineering Materials, 2019, 21, 1801244.	3.5	130
12	Revival of pure titanium for dynamically loaded porous implants using additive manufacturing. Materials Science and Engineering C, 2015, 54, 94-100.	7.3	126
13	Optimization of Scan Strategies in Selective Laser Melting of Aluminum Parts With Downfacing Areas. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2014, 136, .	2.2	106
14	Super-hydrophobic 3D printed polysulfone membranes with a switchable wettability by self-assembled candle soot for efficient gravity-driven oil/water separation. Journal of Materials Chemistry A, 2017, 5, 25401-25409.	10.3	103
15	On the Transformation Behavior of NiTi Shape-Memory Alloy Produced by SLM. Shape Memory and Superelasticity, 2016, 2, 310-316.	2.2	98
16	Surface and Sub-Surface Quality of Steel after EDM. Advanced Engineering Materials, 2006, 8, 15-25.	3.5	85
17	Additively Manufactured and Surface Biofunctionalized Porous Nitinol. ACS Applied Materials & Interfaces, 2017, 9, 1293-1304.	8.0	78
18	Direct laser sintering of reaction bonded silicon carbide with low residual silicon content. Journal of the European Ceramic Society, 2018, 38, 3709-3717.	5.7	65

#	Article	IF	Citations
19	Influence of Carbon Nanoparticle Addition (and Impurities) on Selective Laser Melting of Pure Copper. Materials, 2019, 12, 2469.	2.9	58
20	Novel Composite Powders with Uniform TiB2 Nano-Particle Distribution for 3D Printing. Applied Sciences (Switzerland), 2017, 7, 250.	2.5	46
21	Gelatin functionalised porous titanium alloy implants for orthopaedic applications. Materials Science and Engineering C, 2014, 42, 396-404.	7.3	35
22	Statistical Analysis of Experimental Parameters in Selective Laser Sintering. Advanced Engineering Materials, 2005, 7, 750-755.	3.5	29
23	Role of powder particle size on laser powder bed fusion processability of AlSi10mg alloy. Additive Manufacturing, 2021, 37, 101630.	3.0	29
24	Mechanical and electrical properties of selective laserâ€melted parts produced from surfaceâ€oxidized copper powder. Material Design and Processing Communications, 2020, 2, e94.	0.9	24
25	Resonating Shell: A Spherical-Omnidirectional Ultrasound Transducer for Underwater Sensor Networks. Sensors, 2019, 19, 757.	3.8	22
26	Additively manufactured metals for medical applications. , 2018, , 261-309.		21
27	Modification of Electrical and Mechanical Properties of Selective Laserâ€Melted CuCr0.3 Alloy Using Carbon Nanoparticles. Advanced Engineering Materials, 2020, 22, 1900946.	3.5	21
28	Crack mitigation in Laser Powder Bed Fusion processed Hastelloy X using a combined numerical-experimental approach. Journal of Alloys and Compounds, 2021, 864, 158803.	5.5	21
29	Normal-directional and normal-hemispherical reflectances of micron- and submicron-sized powder beds at 633 and 790nm. Journal of Applied Physics, 2006, 99, 113528.	2.5	19
30	Selective laser sintering of polystyrene: a single-layer approach. Plastics, Rubber and Composites, 2018, 47, 2-8.	2.0	19
31	In situ transformations during SLM of an ultra-strong TiC reinforced Ti composite. Scientific Reports, 2020, 10, 10523.	3.3	18
32	Hybrid dual laser processing for improved quality of inclined up-facing surfaces in laser powder bed fusion of metals. Journal of Materials Processing Technology, 2021, 298, 117263.	6.3	16
33	Melt pool feature analysis using a high-speed coaxial monitoring system for laser powder bed fusion of Ti-6Al-4ÂV grade 23. International Journal of Advanced Manufacturing Technology, 2022, 120, 6497-6514.	3.0	11
34	Polystyreneâ€coated alumina powder via dispersion polymerization for indirect selective laser sintering applications. Journal of Applied Polymer Science, 2013, 128, 2121-2128.	2.6	8
35	Laser powder bed fusion as a net-shaping method for reaction bonded SiC and B₄C. Virtual and Physical Prototyping, 2022, 17, 854-863.	10.4	6
36	Single-Element Omnidirectional Piezoelectric Ultrasound Transducer for under Water Communication. Proceedings (mdpi), 2017, 1, .	0.2	5

#	Article	IF	Citations
37	Description and validation of a circular padding method for linear roughness measurements of short data lengths. MethodsX, 2020, 7, 101122.	1.6	1