

Randall M German

List of Publications by Year in descending order

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69
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69
docs citations

69
times ranked

2622
citing authors

#	ARTICLE	IF	CITATIONS
1	Factors affecting properties of Ti-6Al-4V alloy additive manufactured by metal fused filament fabrication. Powder Technology, 2021, 386, 9-19.	2.1	33
2	Titanium sintering science: A review of atomic events during densification. International Journal of Refractory Metals and Hard Materials, 2020, 89, 105214.	1.7	36
3	The Emergence of Quantitative Sintering Theory from 1945 to 1955. Jom, 2017, 69, 630-634.	0.9	3
4	The Manufacturing of High Porosity Iron with an Ultra-Fine Microstructure via Free Pressureless Spark Plasma Sintering. Materials, 2016, 9, 495.	1.3	18
5	Replication Experiments in Microgravity Liquid Phase Sintering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2286-2299.	1.1	2
6	Sintering Trajectories: Description on How Density, Surface Area, and Grain Size Change. Jom, 2016, 68, 878-884.	0.9	49
7	Fabrication. , 2016, , 225-280.		0
8	Powder-processing linkages to properties for complex titanium shapes by injection molding. , 2015, , 361-382.		3
9	Designing for Metal Powder Injection Molding. , 2015, , 848-854.		1
10	Measurement Tools and Experimental Observations. , 2014, , 71-130.		2
11	Microstructure Coarsening. , 2014, , 227-246.		2
12	Geometric Trajectories during Sintering. , 2014, , 141-181.		8
13	Consolidation Techniques. , 2014, , 237-263.		4
14	Coordination number changes during powder densification. Powder Technology, 2014, 253, 368-376.	2.1	75
15	Progress in Titanium Metal Powder Injection Molding. Materials, 2013, 6, 3641-3662.	1.3	128
16	Review: Thermal Debinding Process in Particulate Materials Processing. Materials and Manufacturing Processes, 2012, 27, 103-118.	2.7	71
17	Densification mechanisms of spark plasma sintering: multi-step pressure dilatometry. Journal of Materials Science, 2012, 47, 7036-7046.	1.7	50
18	In-Situ Characterization of Strength and Distortion During Powder Metal Processing. Jom, 2012, 64, 28-34.	0.9	2

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19	Effect of additives on sintering response of titanium by powder injection moulding. Powder Metallurgy, 2011, 54, 420-426.	0.9	17
20	Effects of process parameters in plastic, metal, and ceramic injection molding processes. Korea Australia Rheology Journal, 2011, 23, 127-138.	0.7	13
21	Equilibrium States of Liquid, Solid, and Vapor and the Configurations for Copper, Tungsten, and Pores in Liquid-Phase Sintering. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2011, 42, 202-209.	1.0	4
22	Investigation on Sintering Mechanism of Nanoscale Tungsten Powder Based on Atomistic Simulation. , 2010, , .		1
23	The Effects of Composition and Microstructure on the Thermal Conductivity of Liquid-Phase-Sintered W-Cu. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 1564-1572.	1.1	14
24	Microstructure analysis of samples sintered at different gravitational conditions. Journal of Materials Science, 2010, 45, 4454-4461.	1.7	6
25	DSC analysis of Al6061 aluminum alloy powder by rapid solidification. Journal of Thermal Analysis and Calorimetry, 2010, 100, 361-366.	2.0	15
26	Coarsening in Sintering: Grain Shape Distribution, Grain Size Distribution, and Grain Growth Kinetics in Solid-Pore Systems. Critical Reviews in Solid State and Materials Sciences, 2010, 35, 263-305.	6.8	222
27	Review: liquid phase sintering. Journal of Materials Science, 2009, 44, 1-39.	1.7	976
28	Development of a Ti-based alloy: Design and experiment. Jom, 2009, 61, 60-66.	0.9	24
29	Rheological and Thermal Debinding Behaviors in Titanium Powder Injection Molding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 215-222.	1.1	66
30	Grain Growth in Dilute Tungsten Heavy Alloys during Liquid-Phase Sintering under Microgravity Conditions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 426-437.	1.1	17
31	Master Sintering Curve Formulated from Constitutive Models. Journal of the American Ceramic Society, 2009, 92, 1410-1413.	1.9	26
32	Linearization of Master Sintering Curve. Journal of the American Ceramic Society, 2009, 92, 1403-1409.	1.9	41
33	Fragmentation behaviour in particulate materials processing. Powder Metallurgy, 2009, 52, 196-204.	0.9	1
34	Master Sintering Curve for Densification Derived from a Constitutive Equation with Consideration of Grain Growth: Application to Tungsten Heavy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 2941-2948.	1.1	25
35	Master curves based on time integration of thermal work in particulate materials. International Journal of Materials and Structural Integrity, 2007, 1, 128.	0.1	17
36	Application of Work-of-sintering concepts in powder metals. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 2827-2835.	1.1	57

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37	Densification behavior of tungsten heavy alloy based on master sintering curve concept. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 2837-2848.	1.1	57
38	Grain growth behavior of tungsten heavy alloys based on the master sintering curve concept. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 3337-3346.	1.1	52
39	Quantitative microstructure analysis of tungsten heavy alloys (Wâ€“Niâ€“Cu) during initial stage liquid phase sintering. International Journal of Refractory Metals and Hard Materials, 2005, 23, 99-108.	1.7	32
40	Mapping the compaction and sintering response of tungsten-based materials into the nanoscale size range. International Journal of Refractory Metals and Hard Materials, 2005, 23, 294-300.	1.7	26
41	Simulation of the sintering densification and shrinkage behavior of powder-injection-molded 17-4 PH stainless steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 257-263.	1.1	32
42	Densification during the supersolidus liquid-phase sintering of nickel-based prealloyed powder mixtures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 2201-2208.	1.1	17
43	Densification and shape distortion in liquid-phase sintering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 3211-3217.	1.1	39
44	Combined effects of time and temperature on strength evolution using integral work-of-sintering concepts. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 465-470.	1.1	12
45	Effective Length Scale for Predicting Solventâ€“Debinding Times of Components Produced by Powder Injection Molding. Journal of the American Ceramic Society, 1999, 82, 1146-1152.	1.9	46
46	Modeling grain growth dependence on the liquid content in liquid-phase-sintered materials. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 3057-3067.	1.1	61
47	Shape distortion in liquid-phase-sintered tungsten heavy alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 2631-2638.	1.1	45
48	Microstructural effects on distortion and solid-liquid segregation during liquid phase sintering under microgravity conditions. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1998, 29, 857-866.	1.0	44
49	A Comparison of Particle Size Measuring Instruments using Fine Metal and Ceramic Powders. Particulate Science and Technology, 1997, 15, 143-143.	1.1	0
50	Thermal Processing Optimization of Injection Molded Stainless Steel Powders. Materials and Manufacturing Processes, 1997, 12, 713-735.	2.7	4
51	Gravitational effects on grain coarsening during liquid-phase sintering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 215-221.	1.1	27
52	Supersolidus liquid-phase sintering of prealloyed powders. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 1553-1567.	1.1	146
53	Theoretical modeling of densification during activated solid-state sintering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 441-450.	1.1	60
54	Solid-state contributions to densification during liquid-phase sintering. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1996, 27, 901-909.	1.0	59

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55	Microstructure of the gravitationally settled region in a liquid-phase sintered dilute tungsten heavy alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1995, 26, 279-288.	1.1	57
56	Liquid-Phase sintering under microgravity conditions. Jom, 1995, 47, 46-48.	0.9	36
57	Gravity induced solid grain packing during liquid phase sintering. Acta Metallurgica Et Materialia, 1995, 43, 1587-1592.	1.9	43
58	Homogeneity Effects on Feedstock Viscosity in Powder Injection Molding. Journal of the American Ceramic Society, 1994, 77, 283-285.	1.9	35
59	Powder Metallurgy Processing of Intermetallic Matrix Composites. Materials Research Society Symposia Proceedings, 1994, 350, 13.	0.1	0
60	A Model for the Thermal Properties of Liquid-Phase Sintered Composites. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1993, 24, 1745-1752.	1.4	40
61	Powder Processing of Refractory Metals and Alloys. Materials Research Society Symposia Proceedings, 1993, 322, 341.	0.1	0
62	Grain Growth Kinetics in Liquid-Phase-Sintered Zinc Oxide-Barium Oxide Ceramics. Journal of the American Ceramic Society, 1991, 74, 3085-3090.	1.9	22
63	Corrosion and tarnishing characteristics of low gold content dental casting alloys. Gold Bulletin, 1988, 21, 99-110.	3.2	6
64	Liquid Phase Sintering. , 1985, , .		502
65	Chemical stability of gold dental alloys. Gold Bulletin, 1984, 17, 46-54.	3.2	24