

# Lorenz S Sigl

## List of Publications by Year in descending order

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38  
papers

1,878  
citations

516710

16  
h-index

395702

33  
g-index

38  
all docs

38  
docs citations

38  
times ranked

1192  
citing authors

#	ARTICLE	IF	CITATIONS
1	On the toughness of brittle materials reinforced with a ductile phase. <i>Acta Metallurgica</i> , 1988, 36, 945-953.	2.1	396
2	Core/Rim Structure of Liquid-Phase-Sintered Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 1993, 76, 773-776.	3.8	276
3	Effect of Interface Mechanical Properties on Pullout in a SiC-Fiber-Reinforced Lithium Aluminum Silicate Glass-Ceramic. <i>Journal of the American Ceramic Society</i> , 1989, 72, 525-532.	3.8	255
4	On the fracture toughness of cemented carbides. <i>Acta Metallurgica</i> , 1988, 36, 887-897.	2.1	207
5	Thermal conductivity of liquid phase sintered silicon carbide. <i>Journal of the European Ceramic Society</i> , 2003, 23, 1115-1122.	5.7	91
6	Effects of residual stress and frictional sliding on cracking and pull-out in brittle matrix composites. <i>Mechanics of Materials</i> , 1989, 8, 1-12.	3.2	90
7	Mechanical Properties of Injection Molded B <sub>4</sub> C Ceramics. <i>Journal of Solid State Chemistry</i> , 1997, 133, 68-76.	2.9	77
8	Multi-layer thin-film electrolytes for metal supported solid oxide fuel cells. <i>Journal of Power Sources</i> , 2014, 256, 52-60.	7.8	57
9	Interface characteristics affecting electrical properties of Y-doped SiC. <i>Journal of Materials Research</i> , 2003, 18, 2608-2617.	2.6	53
10	Multi-physical simulation of selective laser melting. <i>Metal Powder Report</i> , 2017, 72, 331-338.	0.1	49
11	Fundamental analysis of the influence of powder characteristics in Selective Laser Melting of molybdenum based on a multi-physical simulation model. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 72, 1-8.	3.8	42
12	Microcrack toughening in brittle materials containing weak and strong interfaces. <i>Acta Materialia</i> , 1996, 44, 3599-3609.	7.9	39
13	The Status of Metal-Supported SOFC Development and Industrialization at Plansee. <i>ECS Transactions</i> , 2013, 57, 471-480.	0.5	33
14	A finite element study of crack growth in WC-Co. <i>International Journal of Fracture</i> , 1988, 36, 305-317.	2.2	29
15	The flow stress and hardness of metal-reinforced brittle composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1989, 108, 121-129.	5.6	19
16	Development of Metal-Supported Solid Oxide Fuel Cells. <i>ECS Transactions</i> , 2011, 35, 343-349.	0.5	19
17	Evaluation of the Thermal Diffusivity of Thin Specimens from Laser Flash Data. <i>International Journal of Thermophysics</i> , 2009, 30, 599-607.	2.1	16
18	CFDEM modelling of particle heating and acceleration in cold spraying. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 73, 192-198.	3.8	15

#	ARTICLE	IF	CITATIONS
19	Development of metal supported solid oxide fuel cells based on powder metallurgical manufacturing route. Powder Metallurgy, 2013, 56, 382-387.	1.7	13
20	CFY-Stacks for Use in Stationary SOFC and SOEC Applications. ECS Transactions, 2013, 57, 89-98.	0.5	11
21	Long Term Performance of Stacks with Chromium-Based Interconnects (CFY). ECS Transactions, 2013, 57, 2235-2244.	0.5	11
22	CFY-Stack Technology: The Next Design. ECS Transactions, 2015, 68, 2159-2168.	0.5	10
23	Highly Loaded P/M Gears Produced by Selective Surface Densification. , 0, , .		9
24	When the going gets tough PM gears can cope. Metal Powder Report, 2007, 62, 22-26.	0.1	9
25	OpenFOAM Modeling of Particle Heating and Acceleration in Cold Spraying. Journal of Thermal Spray Technology, 2018, 27, 135-144.	3.1	9
26	On the stability of cracks in flexure specimens. International Journal of Fracture, 1991, 51, 241-254.	2.2	9
27	Fractography of critical and subcritical cracks in hard materials. International Journal of Refractory Metals and Hard Materials, 2001, 19, 329-334.	3.8	6
28	DensiFormÂ® Technology for Wrought-Steel-Like Performance of Powder Metal Components. , 2006, , .		5
29	Pulsed thermography of CFC monoblock divertor components. Fusion Engineering and Design, 2009, 84, 1867-1870.	1.9	5
30	Properties of Surface Densified P/M Gears. , 2005, , .		4
31	A method for measuring the high temperature emittance of refractory metal surfaces. International Journal of Refractory Metals and Hard Materials, 2018, 73, 7-12.	3.8	4
32	Finite element analysis of the high-temperature creep deformation of a TZM heavy duty charge carrier. International Journal of Refractory Metals and Hard Materials, 2015, 53, 104-110.	3.8	3
33	On the sintering of molybdenum with two liquid phases. Materialia, 2020, 9, 100600.	2.7	3
34	Metal-supported palladium membranes for hydrogen separation. Powder Metallurgy, 2015, 58, 250-253.	1.7	2
35	Timing right for PM to gear up for competition. Metal Powder Report, 2008, 63, 26-33.	0.1	1
36	Diffusion assisted reactive coating for plasma resistant tungsten surfaces. Metal Powder Report, 2016, 71, 328-332.	0.1	1

#	ARTICLE	IF	CITATIONS
37	Comparison of the Performance and Cost Properties of Automatic Transmission and Four Wheel Drive Transfer Case Planetary Carriers. , 0, , .		0
38	Determination of mechanical properties direct from production components. Powder Metallurgy, 2005, 48, 13-16.	1.7	0