Robert Vassen

List of Publications by Year
in descending order

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250 papers	12,347 citations	23500 58 h-index	32761 100 g-index
260 all docs	260 docs citations	260 times ranked	4674 citing authors

#	Article	IF	Citations
1	Zirconates as New Materials for Thermal Barrier Coatings. Journal of the American Ceramic Society, 2000, 83, 2023-2028.	1.9	1,068
2	Overview on advanced thermal barrier coatings. Surface and Coatings Technology, 2010, 205, 938-942.	2.2	933
3	Thermal Conductivity and Thermal Expansion Coefficients of the Lanthanum Rareâ€Earthâ€Element Zirconate System. Journal of the American Ceramic Society, 2003, 86, 1338-1344.	1.9	409
4	Recent Developments in the Field of Thermal Barrier Coatings. Journal of Thermal Spray Technology, 2009, 18, 181-186.	1.6	284
5	Ceramic Top Coats of Plasma-Sprayed Thermal Barrier Coatings: Materials, Processes, and Properties. Journal of Thermal Spray Technology, 2017, 26, 992-1010.	1.6	263
6	New Thermal Barrier Coatings Based on Pyrochlore/YSZ Doubleâ€Layer Systems. International Journal of Applied Ceramic Technology, 2004, 1, 351-361.	1.1	245
7	The 2016 Thermal Spray Roadmap. Journal of Thermal Spray Technology, 2016, 25, 1376-1440.	1.6	243
8	Atmospheric plasma sprayed thick thermal barrier coatings with high segmentation crack density. Surface and Coatings Technology, 2004, 186, 353-363.	2.2	240
9	Development of a micromechanical life prediction model for plasma sprayed thermal barrier coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 303, 100-109.	2.6	194
10	Perovskiteâ€Type Strontium Zirconate as a New Material for Thermal Barrier Coatings. Journal of the American Ceramic Society, 2008, 91, 2630-2635.	1.9	170
11	New material concepts for the next generation of plasma-sprayed thermal barrier coatings. Journal of Thermal Spray Technology, 2004, 13, 76-83.	1.6	167
12	Atmospheric plasma sprayed thermal barrier coatings with high segmentation crack densities: Spraying process, microstructure and thermal cycling behavior. Surface and Coatings Technology, 2011, 206, 16-23.	2.2	159
13	Review of New Developments in Suspension and Solution Precursor Thermal Spray Processes. Journal of Thermal Spray Technology, 2011, 20, 677-695.	1.6	159
14	Application of Suspension Plasma Spraying (SPS) for Manufacture of Ceramic Coatings. Journal of Thermal Spray Technology, 2008, 17, 115-123.	1.6	158
15	Thermophysical properties and thermal cycling behavior of plasma sprayed thick thermal barrier coatings. Surface and Coatings Technology, 2005, 192, 48-56.	2.2	151
16	Stress distributions in plasma-sprayed thermal barrier coatings as a function of interface roughness and oxide scale thickness. Surface and Coatings Technology, 2002, 161, 26-35.	2.2	143
17	Molten salt shielded synthesis of oxidation prone materials in air. Nature Materials, 2019, 18, 465-470.	13.3	134
18	Gadolinium Zirconate/<scp>YSZ</scp> Thermal Barrier Coatings: Plasma Spraying, Microstructure, and Thermal Cycling Behavior. Journal of the American Ceramic Society, 2014, 97, 4045-4051.	1.9	133

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19	Yb2O3 and Gd2O3 doped strontium zirconate for thermal barrier coatings. Journal of the European Ceramic Society, 2008, 28, 3071-3081.	2.8	127
20	Lifetime of Plasma-Sprayed Thermal Barrier Coatings: Comparison of Numerical and Experimental Results. Journal of Thermal Spray Technology, 2009, 18, 835-845.	1.6	114
21	Sintering and Creep Processes in Plasma-Sprayed Thermal Barrier Coatings. Journal of Thermal Spray Technology, 2004, 13, 432-442.	1.6	107
22	Porosityâ€“Property Relationships of Plasmaâ€Sprayed Gd₂Zr₂O₇/<scp>YSZ</scp> Thermal Barrier Coatings. Journal of the American Ceramic Society, 2015, 98, 2647-2654.	1.9	105
23	Suspension Plasma Spraying: Process Characteristics and Applications. Journal of Thermal Spray Technology, 2010, 19, 219-225.	1.6	104
24	Plasma-Sprayed Thermal Barrier Coatings: New Materials, Processing Issues, and Solutions. Journal of Thermal Spray Technology, 2013, 22, 646-658.	1.6	103
25	Component interactions after long-term operation of an SOFC stack with LSM cathode. Journal of Power Sources, 2012, 201, 196-203.	4.0	101
26	Manufacturing of high performance solid oxide fuel cells (SOFCs) with atmospheric plasma spraying (APS). Surface and Coatings Technology, 2007, 202, 499-508.	2.2	97
27	Process development and coating characteristics of plasma spray-PVD. Surface and Coatings Technology, 2013, 220, 219-224.	2.2	97
28	Yb2Si2O7 Environmental Barrier Coatings Deposited by Various Thermal Spray Techniques: A Preliminary Comparative Study. Journal of Thermal Spray Technology, 2017, 26, 1011-1024.	1.6	97
29	Influence of impurity content and porosity of plasma-sprayed yttria-stabilized zirconia layers on the sintering behaviour. Surface and Coatings Technology, 2001, 141, 135-140.	2.2	95
30	Solid particle erosion of thermal spray and physical vapour deposition thermal barrier coatings. Wear, 2011, 271, 2909-2918.	1.5	91
31	Columnar-Structured Thermal Barrier Coatings (TBCs) by Thin Film Low-Pressure Plasma Spraying (LPPS-TF). Journal of Thermal Spray Technology, 2011, 20, 116-120.	1.6	91
32	Functional performance of Gd2Zr2O7/YSZ multi-layered thermal barrier coatings deposited by suspension plasma spray. Surface and Coatings Technology, 2017, 318, 208-216.	2.2	88
33	Modelling of the agglomeration of Ni-particles in anodes of solid oxide fuel cells. Journal of Materials Science, 2001, 36, 147-151.	1.7	83
34	Correlation of splat morphologies with porosity and residual stress in plasma-sprayed YSZ coatings. Surface and Coatings Technology, 2017, 318, 157-169.	2.2	83
35	A life time model for ceramic thermal barrier coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 358, 255-265.	2.6	82
36	Comparison and Applications of DPV-2000 and Accuraspray-g3 Diagnostic Systems. Journal of Thermal Spray Technology, 2007, 16, 414-424.	1.6	82

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37	Improved Thermal Cycling Durability of Thermal Barrier Coatings Manufactured by PS-PVD. Journal of Thermal Spray Technology, 2014, 23, 182-189.	1.6	81
38	Plasma and Particle Temperature Measurements in Thermal Spray: Approaches and Applications. Journal of Thermal Spray Technology, 2011, 20, 391-406.	1.6	80
39	Process Conditions and Microstructures of Ceramic Coatings by Gas Phase Deposition Based on Plasma Spraying. Journal of Thermal Spray Technology, 2013, 22, 83-89.	1.6	80
40	Deposition and Characteristics of Submicrometer-Structured Thermal Barrier Coatings by Suspension Plasma Spraying. Journal of Thermal Spray Technology, 2012, 21, 416-424.	1.6	78
41	Novel opportunities for thermal spray by PS-PVD. Surface and Coatings Technology, 2015, 268, 52-57.	2.2	78
42	Advanced thermal spray technologies for applications in energy systems. Surface and Coatings Technology, 2008, 202, 4432-4437.	2.2	77
43	Characteristics of Ceramic Coatings Made by Thin Film Low Pressure Plasma Spraying (LPPS-TF). Journal of Thermal Spray Technology, 2012, 21, 435-440.	1.6	77
44	La2(Zr0.7Ce0.3)2O7â€”A new oxide ceramic material with high sintering-resistance. Materials Letters, 2008, 62, 2667-2669.	1.3	76
45	Application of Plasma-Sprayed Complex Perovskites as Thermal Barrier Coatings. Journal of Thermal Spray Technology, 2009, 18, 187-193.	1.6	74
46	Thermal Cycling Setup for Testing Thermal Barrier Coatings. Advanced Engineering Materials, 2003, 5, 429-432.	1.6	73
47	Development of YSZ Thermal Barrier Coatings Using Axial Suspension Plasma Spraying. Coatings, 2017, 7, 120.	1.2	73
48	Hot Corrosion of Lanthanum Zirconate and Partially Stabilized Zirconia Thermal Barrier Coatings. Journal of Engineering for Gas Turbines and Power, 2006, 128, 144-152.	0.5	71
49	Thermal-gradient testing of thermal barrier coatings under simultaneous attack by molten glassy deposits and its mitigation. Surface and Coatings Technology, 2010, 204, 2683-2688.	2.2	70
50	Design of next generation thermal barrier coatings â€” Experiments and modelling. Surface and Coatings Technology, 2013, 220, 20-26.	2.2	70
51	Effect of processing on high-velocity water vapor recession behavior of Yb-silicate environmental barrier coatings. Journal of the European Ceramic Society, 2019, 39, 1507-1513.	2.8	70
52	Processing and Properties of Nanograin Silicon Carbide. Journal of the American Ceramic Society, 1999, 82, 2585-2593.	1.9	69
53	A novel test approach for plasma-sprayed coatings tested simultaneously under CMAS and thermal gradient cycling conditions. Surface and Coatings Technology, 2010, 205, 2287-2295.	2.2	69
54	New Generation Perovskite Thermal Barrier Coating Materials. Journal of Thermal Spray Technology, 2008, 17, 831-837.	1.6	67

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55	Testing and evaluation of thermal-barrier coatings. MRS Bulletin, 2012, 37, 911-916.	1.7	66
56	Enhanced Characteristics of HVOF-sprayed MCrAlY Bond Coats for TBC Applications. Journal of Thermal Spray Technology, 2011, 20, 1209-1216.	1.6	65
57	Tailoring columnar microstructure of axial suspension plasma sprayed TBCs for superior thermal shock performance. Materials and Design, 2018, 144, 192-208.	3.3	63
58	Plasma_sprayed components for SOFC applications. Surface and Coatings Technology, 2006, 201, 2002-2005.	2.2	61
59	Stress Distributions in Plasma-Sprayed Thermal Barrier Coatings Under Thermal Cycling in a Temperature Gradient. Journal of Applied Mechanics, Transactions ASME, 2011, 78, .	1.1	59
60	Isothermal and cyclic oxidation behavior of free standing MCrAlY coatings manufactured by high-velocity atmospheric plasma spraying. Surface and Coatings Technology, 2017, 313, 191-201.	2.2	58
61	Correlation Between Spraying Conditions and Microcrack Density and Their Influence on Thermal Cycling Life of Thermal Barrier Coatings. Journal of Thermal Spray Technology, 2004, 13, 396-404.	1.6	57
62	Multi-layer thin-film electrolytes for metal supported solid oxide fuel cells. Journal of Power Sources, 2014, 256, 52-60.	4.0	57
63	Densification of ultrafine SiC powders. Journal of Materials Science, 1996, 31, 3623-3637.	1.7	55
64	Atmospheric plasma spraying of yttria-stabilized zirconia coatings with specific porosity. Surface and Coatings Technology, 2009, 204, 172-179.	2.2	54
65	Gadolinium zirconate/YSZ thermal barrier coatings: Mixed-mode interfacial fracture toughness and sintering behavior. Surface and Coatings Technology, 2016, 286, 119-128.	2.2	54
66	Sintering resistance of advanced plasma-sprayed thermal barrier coatings with strain-tolerant microstructures. Journal of the European Ceramic Society, 2018, 38, 5092-5100.	2.8	54
67	Processing and properties of nanophase non-oxide ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 301, 59-68.	2.6	52
68	Performance of YSZ and Gd2Zr2O7/YSZ double layer thermal barrier coatings in burner rig tests. Journal of the European Ceramic Society, 2020, 40, 480-490.	2.8	51
69	Erosion Performance of Gadolinium Zirconate-Based Thermal Barrier Coatings Processed by Suspension Plasma Spray. Journal of Thermal Spray Technology, 2017, 26, 108-115.	1.6	49
70	Recent Activities in the Field of Thermal Barrier Coatings Including Burner Rig Testing in the European Union. Advanced Engineering Materials, 2008, 10, 907-921.	1.6	47
71	Lifetime and failure modes of plasma sprayed thermal barrier coatings in thermal gradient rig tests with simultaneous CMAS injection. Surface and Coatings Technology, 2017, 324, 36-47.	2.2	46
72	Synthesis of Ti3SiC2 MAX phase powder by a molten salt shielded synthesis (MS3) method in air. Journal of the European Ceramic Society, 2019, 39, 3651-3659.	2.8	46

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73	Thin and Dense Ceramic Coatings by Plasma Spraying at Very Low Pressure. Journal of Thermal Spray Technology, 2010, 19, 495-501.	1.6	45
74	Functionally graded vacuum plasma sprayed and magnetron sputtered tungsten/EUROFER97 interlayers for joints in helium-cooled divertor components. Journal of Nuclear Materials, 2013, 436, 29-39.	1.3	42
75	Improving Atmospheric Plasma Spraying of Zirconate Thermal Barrier Coatings Based on Particle Diagnostics. Journal of Thermal Spray Technology, 2012, 21, 363-371.	1.6	41
76	Mechanical properties of zirconia composite ceramics. Ceramics International, 2013, 39, 7595-7603.	2.3	41
77	Investigation of the resistance of open-column-structured PS-PVD TBCs to erosive and high-temperature corrosive attack. Surface and Coatings Technology, 2017, 324, 222-235.	2.2	39
78	Environmental resistance of Cr₂AlC MAX phase under thermal gradient loading using a burner rig. Journal of the American Ceramic Society, 2018, 101, 1841-1846.	1.9	39
79	Detection of Melting Temperatures and Sources of Errors Using Two-Color Pyrometry During In-flight Measurements of Atmospheric Plasma-Sprayed Particles. International Journal of Thermophysics, 2008, 29, 764-786.	1.0	38
80	Preparation and sintering behaviour of La5.4WO12â" asymmetric membranes with optimised microstructure for hydrogen separation. Journal of Membrane Science, 2015, 492, 439-451.	4.1	38
81	Tailored microstructures of gadolinium zirconate/YSZ multi-layered thermal barrier coatings produced by suspension plasma spray: Durability and erosion testing. Journal of Materials Processing Technology, 2019, 264, 283-294.	3.1	38
82	Atmospheric Plasma Spraying of High Melting Temperature Complex Perovskites for TBC Application. Journal of Thermal Spray Technology, 2010, 19, 303-310.	1.6	37
83	The processing of vacuum plasma-sprayed tungstenâ€"copper composite coatings for high heat flux components. Fusion Engineering and Design, 2003, 66-68, 259-263.	1.0	36
84	Impact of Al2O3-40 wt.% TiO2 feedstock powder characteristics on the sprayability, microstructure and mechanical properties of plasma sprayed coatings. Journal of the European Ceramic Society, 2019, 39, 5391-5402.	2.8	36
85	Thermal cycling performances of multilayered yttriaâ€stabilized zirconia/gadolinium zirconate thermal barrier coatings. Journal of the American Ceramic Society, 2020, 103, 2048-2061.	1.9	36
86	Thermal cycling testing of TBCs on Cr2AlC MAX phase substrates. Surface and Coatings Technology, 2018, 340, 17-24.	2.2	35
87	Cr₂AlC MAX phase as bond coat for thermal barrier coatings: Processing, testing under thermal gradient loading, and future challenges. Journal of the American Ceramic Society, 2020, 103, 2362-2375.	1.9	35
88	Modeling precursor diffusion and reaction of atomic layer deposition in porous structures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	34
89	Highâ€temperature oxidation and compressive strength of Cr₂AlC <scp>MAX</scp> phase foams with controlled porosity. Journal of the American Ceramic Society, 2018, 101, 542-552.	1.9	34
90	Coatings with Columnar Microstructures for Thermal Barrier Applications. Advanced Engineering Materials, 2020, 22, 1900988.	1.6	34

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91	Cold spray deposition of Cr2AlC MAX phase for coatings and bond-coat layers. Journal of the European Ceramic Society, 2019, 39, 860-867.	2.8	33
92	High-velocity water vapor corrosion of Yb-silicate: Sprayed vs. sintered body. Scripta Materialia, 2020, 178, 468-471.	2.6	33
93	Resistance of pure and mixed rare earth silicates against calciumâ€magnesiumâ€aluminosilicate (CMAS): A comparative study. Journal of the American Ceramic Society, 2020, 103, 7056-7071.	1.9	33
94	Process diagnostics in suspension plasma spraying. Surface and Coatings Technology, 2010, 205, 961-966.	2.2	32
95	Suspension and Air Plasmaâ€Sprayed Ceramic Thermal Barrier Coatings with High Infrared Reflectance. International Journal of Applied Ceramic Technology, 2012, 9, 561-574.	1.1	32
96	Ceramic materials for H2 transport membranes applicable for gas separation under coal-gasification-related conditions. Journal of the European Ceramic Society, 2014, 34, 2381-2389.	2.8	32
97	Investigations on the Nature of Ceramic Deposits in Plasma Sprayâ€“Physical Vapor Deposition. Journal of Thermal Spray Technology, 2017, 26, 83-92.	1.6	32
98	A Perspective on Thermally Sprayed Thermal Barrier Coatings: Current Status and Trends. Journal of Thermal Spray Technology, 2022, 31, 685-698.	1.6	32
99	New Environmental Barrier Coating System on Carbon-Fiber Reinforced Silicon Carbide Composites. Journal of Thermal Spray Technology, 2005, 14, 268-272.	1.6	31
100	Modelling of arc behaviour inside a F4 APS torch. Journal Physics D: Applied Physics, 2006, 39, 3323-3331.	1.3	31
101	Self-healing atmospheric plasma sprayed Mn1.0Co1.9Fe0.1O4 protective interconnector coatings for solid oxide fuel cells. Journal of Power Sources, 2017, 363, 185-192.	4.0	31
102	Sintering behavior of columnar thermal barrier coatings deposited by axial suspension plasma spraying (SPS). Journal of the European Ceramic Society, 2019, 39, 482-490.	2.8	31
103	Manufacturing of high performance solid oxide fuel cells (SOFCs) with atmospheric plasma spraying (APS) and plasma spray-physical vapor deposition (PS-PVD). Surface and Coatings Technology, 2017, 318, 170-177.	2.2	30
104	Advanced crystallographic study of the columnar growth of YZS coatings produced by PS-PVD. Journal of the European Ceramic Society, 2018, 38, 2449-2453.	2.8	30
105	Improving Powder Injection in Plasma Spraying by Optical Diagnostics of the Plasma and Particle Characterization. Journal of Thermal Spray Technology, 2011, 20, 3-11.	1.6	29
106	Impact of processing conditions and feedstock characteristics on thermally sprayed MCrAlY bondcoat properties. Surface and Coatings Technology, 2017, 318, 114-121.	2.2	29
107	Metal-Glass Based Composites for Novel TBC-Systems. Materialwissenschaft Und Werkstofftechnik, 2001, 32, 669-672.	0.5	28
108	Plasma spraying of efficient photoactive TiO2 coatings. Surface and Coatings Technology, 2013, 220, 40-43.	2.2	27

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109	Environmental Barrier Coatings Made by Different Thermal Spray Technologies. Coatings, 2019, 9, 784.	1.2	27
110	YAlO3â€"A Novel Environmental Barrier Coating for Al2O3/Al2O3â€"Ceramic Matrix Composites. Coatings, 2019, 9, 609.	1.2	26
111	Investigation on growth mechanisms of columnar structured YSZ coatings in Plasma Spray-Physical Vapor Deposition (PS-PVD). Journal of the European Ceramic Society, 2019, 39, 3129-3138.	2.8	26
112	Unique performance of thermal barrier coatings made of yttriaâ€stabilized zirconia at extreme temperatures (>1500Â°C). Journal of the American Ceramic Society, 2021, 104, 463-471.	1.9	26
113	Plasma Spray Physical Vapor Deposition of La1â^'x Sr x Co y Fe1â^'y O3â^'Î´ Thin-Film Oxygen Transport Membrane on Porous Metallic Supports. Journal of Thermal Spray Technology, 2014, 23, 213-219.	1.6	25
114	Cycling Performance of a Columnar-Structured Complex Perovskite in a Temperature Gradient Test. Journal of Thermal Spray Technology, 2015, 24, 1205-1212.	1.6	25
115	Monte Carlo simulation of column growth in plasma spray physical vapor deposition process. Surface and Coatings Technology, 2018, 335, 188-197.	2.2	25
116	Microstructure and phase evolution of atmospheric plasma sprayed Mn-Co-Fe oxide protection layers for solid oxide fuel cells. Journal of the European Ceramic Society, 2019, 39, 449-460.	2.8	25
117	Influence of Feedstock Powder Modification by Heat Treatments on the Properties of APS-Sprayed Al2O3-40% TiO2 Coatings. Journal of Thermal Spray Technology, 2018, 27, 654-666.	1.6	24
118	Vacuum plasma spraying of functionally graded tungsten/EUROFER97 coatings for fusion applications. Fusion Engineering and Design, 2018, 133, 148-156.	1.0	24
119	In situ SANS study of pore microstructure in YSZ thermal barrier coatings. Acta Materialia, 2004, 52, 3305-3312.	3.8	23
120	Atmospheric Plasma Spraying of Single Phase Lanthanum Zirconate Thermal Barrier Coatings with Optimized Porosity. Coatings, 2016, 6, 49.	1.2	23
121	Aging of atmospherically plasma sprayed chromium evaporation barriers. Surface and Coatings Technology, 2016, 291, 115-122.	2.2	23
122	Development of W-coating with functionally graded W/EUROFER-layers for protection of First-Wall materials. Fusion Engineering and Design, 2018, 128, 58-67.	1.0	23
123	Superior cyclic life of thermal barrier coatings with advanced bond coats on single-crystal superalloys. Surface and Coatings Technology, 2019, 361, 150-158.	2.2	23
124	Synthesis, sintering, and effect of surface roughness on oxidation of submicron Ti₂AlC ceramics. Journal of the American Ceramic Society, 2021, 104, 1669-1688.	1.9	23
125	Microstructure and phase composition evolution of silicon-hafnia feedstock during plasma spraying and following cyclic oxidation. Acta Materialia, 2021, 214, 117007.	3.8	23
126	Fabrication of Oxide Dispersion Strengthened Bond Coats with Low Al2O3 Content. Journal of Thermal Spray Technology, 2017, 26, 868-879.	1.6	22

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127	Diagnostics of Cold-Sprayed Particle Velocities Approaching Critical Deposition Conditions. Journal of Thermal Spray Technology, 2017, 26, 1423-1433.	1.6	22
128	Conditions for nucleation and growth in the substrate boundary layer at plasma spray-physical vapor deposition (PS-PVD). Surface and Coatings Technology, 2019, 371, 417-427.	2.2	22
129	Preliminary study on the TriplexProâ„¢-200 gun for atmospheric plasma spraying of yttria-stabilized zirconia. Surface and Coatings Technology, 2008, 202, 4374-4381.	2.2	21
130	Application of High-Velocity Oxygen-Fuel (HVOF) Spraying to the Fabrication of Yb-Silicate Environmental Barrier Coatings. Coatings, 2017, 7, 55.	1.2	21
131	Mechanism for breakaway oxidation of the Ti2AlC MAX phase. Acta Materialia, 2021, 215, 117025.	3.8	21
132	Potential of nanocrystalline low-Z materials for plasma facing, structural applications in fusion reactors. Journal of Nuclear Materials, 1996, 233-237, 708-712.	1.3	20
133	Suspension plasma spraying of TiO2 for the manufacture of photovoltaic cells. Surface and Coatings Technology, 2009, 203, 2146-2149.	2.2	20
134	Partial Evaporation of Strontium Zirconate During Atmospheric Plasma Spraying. Journal of Thermal Spray Technology, 2009, 18, 694-701.	1.6	20
135	MCrAlY Bondcoats by High-Velocity Atmospheric Plasma Spraying. Journal of Thermal Spray Technology, 2014, 23, 140-146.	1.6	20
136	Systematic Investigation on the Influence of Spray Parameters on the Mechanical Properties of Atmospheric Plasma-Sprayed YSZ Coatings. Journal of Thermal Spray Technology, 2018, 27, 566-580.	1.6	20
137	Thermal barrier coatings with novel architectures for diesel engine applications. Surface and Coatings Technology, 2020, 396, 125950.	2.2	20
138	Process Design and Monitoring for Plasma Sprayed Abradable Coatings. Journal of Thermal Spray Technology, 2010, 19, 756-764.	1.6	19
139	Scale Formation of Alloy 602 CA During Isothermal Oxidation at 800â€“1100ÂÂ°C in Different Types of Water Vapor Containing Atmospheres. Oxidation of Metals, 2015, 84, 661-694.	1.0	19
140	Atomic-layer-controlled deposition of TEMAZ/O2â€“ZrO2 oxidation resistance inner surface coatings for solid oxide fuel cells. Surface and Coatings Technology, 2016, 288, 211-220.	2.2	19
141	Probabilistic lifetime model for atmospherically plasma sprayed thermal barrier coating systems. Mechanics of Materials, 2016, 93, 199-208.	1.7	19
142	Manufacturing of Composite Coatings by Atmospheric Plasma Spraying Using Different Feed-Stock Materials as YSZ and MoSi2. Journal of Thermal Spray Technology, 2017, 26, 708-716.	1.6	19
143	Lanthanum tungstate membranes for H2 extraction and CO2 utilization: Fabrication strategies based on sequential tape casting and plasma-spray physical vapor deposition. Separation and Purification Technology, 2019, 219, 100-112.	3.9	19
144	An investigation on burner rig testing of environmental barrier coatings for aerospace applications. Journal of the European Ceramic Society, 2020, 40, 6236-6240.	2.8	19

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145	Title is missing!. Journal of Materials Science, 1999, 34, 257-265.	1.7	18
146	Thin Electrolyte Layers for SOFC via Wet Powder Spraying (WPS). Advanced Engineering Materials, 2002, 4, 659-662.	1.6	18
147	Controlling the oxygen contents in vacuum plasma sprayed metal alloy coatings. Surface and Coatings Technology, 2007, 201, 4796-4799.	2.2	18
148	Decomposition of Ba(Mg1/3Ta2/3)O3 perovskite during atmospheric plasma spraying. Surface and Coatings Technology, 2012, 206, 2515-2520.	2.2	18
149	Laâ€“Srâ€“Feâ€“Co oxygen transport membranes on metal supports deposited by low pressure plasma spraying-physical vapour deposition. Journal of Membrane Science, 2013, 442, 119-123.	4.1	18
150	Development of Functionally Graded Tungsten/EUROFER Coating System for First Wall Application. Fusion Science and Technology, 2015, 68, 578-581.	0.6	18
151	Architecture designs for extending thermal cycling lifetime of suspension plasma sprayed thermal barrier coatings. Ceramics International, 2019, 45, 18471-18479.	2.3	18
152	Comparison of Atmospheric Plasma Sprayed Anode Layers for SOFCs Using Different Feedstock. Journal of Thermal Spray Technology, 2006, 15, 593-597.	1.6	17
153	Thick tool steel coatings using HVOF spraying for wear resistance applications. Surface and Coatings Technology, 2010, 205, 2449-2454.	2.2	17
154	Deposition of La1â^'x Sr x Fe1â^'y Co y O3â^'Î´ Coatings with Different Phase Compositions and Microstructures by Low-Pressure Plasma Spraying-Thin Film (LPPS-TF) Processes. Journal of Thermal Spray Technology, 2012, 21, 441-447.	1.6	17
155	Influence of vacuum heat treatment parameters on the surface composition of MCrAlY coatings. Surface and Coatings Technology, 2013, 215, 24-29.	2.2	17
156	High-temperature behavior of oxide dispersion strengthening CoNiCrAlY. Materials at High Temperatures, 2018, 35, 108-119.	0.5	17
157	Evolution of porosity, crack density, and CMAS penetration in thermal barrier coatings subjected to burner rig testing. Journal of the American Ceramic Society, 2019, 102, 6163-6175.	1.9	17
158	Correlation of Microstructure and Properties of Cold Gas Sprayed INCONEL 718 Coatings. Journal of Thermal Spray Technology, 2020, 29, 1455-1465.	1.6	17
159	Columnar Thermal Barrier Coatings Produced by Different Thermal Spray Processes. Journal of Thermal Spray Technology, 2021, 30, 1437-1452.	1.6	17
160	Investigation and Comparison of In-Flight Particle Velocity During the Plasma-Spray Process as Measured by Laser Doppler Anemometry and DPV-2000. Journal of Thermal Spray Technology, 2013, 22, 892-900.	1.6	16
161	Near Net Shaping of Monolithic and Composite <scp>MAX</scp> Phases by Injection Molding. Journal of the American Ceramic Society, 2016, 99, 3210-3213.	1.9	16
162	Three-Dimensional, Fibrous Lithium Iron Phosphate Structures Deposited by Magnetron Sputtering. ACS Applied Materials & Interfaces, 2015, 7, 22594-22600.	4.0	15

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163	Investigations on the Initial Stress Evolution During Atmospheric Plasma Spraying of YSZ by In Situ Curvature Measurement. Journal of Thermal Spray Technology, 2016, 25, 672-683.	1.6	15
164	Degradation of zirconia in moisture. Corrosion Science, 2020, 176, 109038.	3.0	15
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