Chris Berndt

List of Publications by Year
in descending order

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230	11,150	26630	37204
papers	citations	56 h-index	96 g-index

245	245	245	7990
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Material fundamentals and clinical performance of plasma-sprayed hydroxyapatite coatings: A review. Journal of Biomedical Materials Research Part B, 2001, 58, 570-592.	3.1	895
2	A review of the application of anodization for the fabrication of nanotubes on metal implant surfaces. Acta Biomaterialia, 2012, 8, 2875-2888.	8.3	359
3	Transition metal-substituted cobalt ferrite nanoparticles for biomedical applications. Acta Biomaterialia, 2013, 9, 5830-5837.	8.3	284
4	The 2016 Thermal Spray Roadmap. Journal of Thermal Spray Technology, 2016, 25, 1376-1440.	3.1	243
5	On the size-dependent phase transformation in nanoparticulate zirconia. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 286, 169-178.	5.6	236
6	Microstructural characteristics of cold-sprayed nanostructured WCâ€“Co coatings. Thin Solid Films, 2002, 416, 129-135.	1.8	223
7	Thermal processing of hydroxyapatite for coating production. Journal of Biomedical Materials Research Part B, 1998, 39, 580-587.	3.1	211
8	Amorphous phase formation in plasma-sprayed hydroxyapatite coatings. , 1998, 39, 407-414.		192
9	Concept of Functionally Graded Materials for Advanced Thermal Barrier Coating Applications. Journal of the American Ceramic Society, 1996, 79, 3003-3012.	3.8	188
10	Evaluation of microhardness and elastic modulus of thermally sprayed nanostructured zirconia coatings. Surface and Coatings Technology, 2001, 135, 166-172.	4.8	185
11	Bimodal distribution of mechanical properties on plasma sprayed nanostructured partially stabilized zirconia. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 327, 224-232.	5.6	184
12	Plasma spray synthesis of nanomaterial powders and deposits. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 238, 275-286.	5.6	181
13	Impact of Nanoscale Roughness of Titanium Thin Film Surfaces on Bacterial Retention. Langmuir, 2010, 26, 1973-1982.	3.5	177
14	Phase, structural and microstructural investigations of plasma sprayed hydroxyapatite coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 360, 70-84.	5.6	174
15	Thermal Analysis of Amorphous Phases in Hydroxyapatite Coatings. Journal of the American Ceramic Society, 1998, 81, 106-112.	3.8	173
16	Thermal Spray High-Entropy Alloy Coatings: A Review. Journal of Thermal Spray Technology, 2020, 29, 857-893.	3.1	162
17	Cell response of anodized nanotubes on titanium and titanium alloys. Journal of Biomedical Materials Research - Part A, 2013, 101A, 2726-2739.	4.0	159
18	Plasma-Sprayed High Entropy Alloys: Microstructure and Properties of AlCoCrFeNi and MnCoCrFeNi. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 791-800.	2.2	149

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19	Integrity of nanostructured partially stabilized zirconia after plasma spray processing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 313, 75-82.	5.6	147
20	Elastic Response of Thermal Spray Deposits under Indentation Tests. Journal of the American Ceramic Society, 1997, 80, 2093-2099.	3.8	138
21	A review of testing methods for thermal spray coatings. International Materials Reviews, 2014, 59, 179-223.	19.3	138
22	Surface characteristics and dissolution behavior of plasma-sprayed hydroxyapatite coating. Journal of Biomedical Materials Research Part B, 2002, 62, 228-236.	3.1	123
23	Effects of Pores on Mechanical Properties of Plasmaâ€Sprayed Ceramic Coatings. Journal of the American Ceramic Society, 2000, 83, 578-584.	3.8	123
24	Microstructural characterization of yttria-stabilized zirconia plasma-sprayed deposits using multiple small-angle neutron scattering. Acta Materialia, 2001, 49, 1661-1675.	7.9	117
25	Characteristics of the liquid flame spray process. Surface and Coatings Technology, 1997, 90, 210-216.	4.8	113
26	Nanomaterial powders and deposits prepared by flame spray processing of liquid precursors. Scripta Materialia, 1997, 8, 61-74.	0.5	107
27	Multiscale mechanical performance and corrosion behaviour of plasma sprayed AlCoCrFeNi high-entropy alloy coatings. Journal of Alloys and Compounds, 2021, 854, 157140.	5.5	107
28	Measurement and analysis of adhesion strength for thermally sprayed coatings. Journal of Thermal Spray Technology, 1994, 3, 75-104.	3.1	103
29	Effects of thermal gradient and residual stresses on thermal barrier coating fracture. Mechanics of Materials, 1998, 27, 91-110.	3.2	101
30	Effect of ultrafine-grained titanium surfaces on adhesion of bacteria. Applied Microbiology and Biotechnology, 2009, 83, 925-937.	3.6	100
31	Influence of Spray Angle on the Pore and Crack Microstructure of Plasmaâ€Sprayed Deposits. Journal of the American Ceramic Society, 1997, 80, 733-742.	3.8	97
32	A review on hybrid nanolaminate materials synthesized by deposition techniques for energy storage applications. Journal of Materials Chemistry A, 2014, 2, 3695-3708.	10.3	96
33	Oxyapatite in hydroxyapatite coatings. Journal of Materials Science, 1998, 33, 3985-3991.	3.7	94
34	Biomedical Application of Apatites. Reviews in Mineralogy and Geochemistry, 2002, 48, 631-672.	4.8	93
35	Performance of thermal barrier coatings in high heat flux environments. Thin Solid Films, 1984, 119, 195-202.	1.8	92
36	Microstructural and antibacterial properties of zinc-substituted cobalt ferrite nanopowders synthesized by sol-gel methods. Journal of Applied Physics, 2012, 112, .	2.5	90

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37	Statistical analysis of microhardness variations in thermal spray coatings. Journal of Materials Science, 1995, 30, 111-117.	3.7	88
38	Evolution of the void structure in plasma-sprayed YSZ deposits during heating. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 272, 215-221.	5.6	88
39	Nanomaterial Deposits Formed by DC Plasma Spraying of Liquid Feedstocks. Journal of the American Ceramic Society, 1998, 81, 121-128.	3.8	88
40	Development of Surface Nano-Crystallization in Alloys by Surface Mechanical Attrition Treatment (SMAT). Critical Reviews in Solid State and Materials Sciences, 2015, 40, 164-181.	12.3	85
41	Deposition effects of WC particle size on cold sprayed WCâ€“Co coatings. Surface and Coatings Technology, 2011, 205, 3260-3267.	4.8	83
42	Influence of plasma spray parameters on mechanical properties of yttria stabilized zirconia coatings. I: Four point bend test. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 284, 29-40.	5.6	82
43	Preparation of nanophase materials by thermal spray processing of liquid precursors. Scripta Materialia, 1997, 9, 137-140.	0.5	79
44	Mechanical characterization of plasma sprayed ceramic coatings on metal substrates by contact testing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 208, 158-165.	5.6	78
45	Effects of the spray angle on splat morphology during thermal spraying. Surface and Coatings Technology, 1997, 91, 107-115.	4.8	77
46	Failure during thermal cycling of plasma-sprayed thermal barrier coatings. Thin Solid Films, 1983, 108, 427-437.	1.8	71
47	Microscopic observation of laser glazed yttria-stabilized zirconia coatings. Applied Surface Science, 2010, 256, 6213-6218.	6.1	70
48	Fatigue and deformation of HVOF sprayed WCâ€“Co coatings and hard chrome plating. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 456, 114-119.	5.6	69
49	In vitro testing of plasma-sprayed hydroxyapatite coatings. Journal of Materials Science: Materials in Medicine, 1994, 5, 219-224.	3.6	67
50	Tensile toughness test and high temperature fracture analysis of thermal barrier coatings. Acta Materialia, 1997, 45, 1767-1784.	7.9	67
51	Deposition efficiency, mechanical properties and coating roughness in cold-sprayed titanium. Journal of Materials Science Letters, 2002, 21, 1687-1689.	0.5	67
52	Fatigue and mechanical properties of nanostructured and conventional titania (TiO2) thermal spray coatings. Surface and Coatings Technology, 2007, 201, 7589-7596.	4.8	66
53	Modelling of elastic constants of plasma spray deposits with ellipsoid-shaped voids. Acta Materialia, 1999, 47, 1575-1586.	7.9	65
54	Application of High-Density Electropulsing to Improve the Performance of Metallic Materials: Mechanisms, Microstructure and Properties. Materials, 2018, 11, 185.	2.9	64

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55	Thermal Conductivity of a Zirconia Thermal Barrier Coating. Journal of Thermal Spray Technology, 1998, 7, 43-46.	3.1	63
56	Plasma-Enhanced Synthesis of Bioactive Polymeric Coatings from Monoterpene Alcohols: A Combined Experimental and Theoretical Study. Biomacromolecules, 2010, 11, 2016-2026.	5.4	63
57	Selection of the implant and coating materials for optimized performance by means of nanoindentation. Acta Biomaterialia, 2011, 7, 874-881.	8.3	63
58	Numerical modelling of particle impact and residual stresses in cold sprayed coatings: A review. Surface and Coatings Technology, 2021, 409, 126835.	4.8	63
59	Evaluation of off-angle thermal spray. Surface and Coatings Technology, 1997, 89, 213-224.	4.8	56
60	The influence of titaniaâ€“zirconiaâ€“zirconium titanate nanotube characteristics on osteoblast cell adhesion. Acta Biomaterialia, 2015, 12, 281-289.	8.3	56
61	Nanocomposite coatings: thermal spray processing, microstructure and performance. International Materials Reviews, 2015, 60, 195-244.	19.3	55
62	Contact Damage in Plasma-Sprayed Alumina-Based Coatings. Journal of the American Ceramic Society, 1996, 79, 1907-1914.	3.8	54
63	Nanostructured and conventional YSZ coatings deposited using APS and TTPR techniques. Surface and Coatings Technology, 2006, 201, 338-346.	4.8	53
64	Influence of plasma spray parameters on mechanical properties of yttria stabilized zirconia coatings. II: Acoustic emission response. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 284, 41-50.	5.6	51
65	2D layered organicâ€“inorganic heterostructures for clean energy applications. Journal of Materials Chemistry A, 2018, 6, 3824-3849.	10.3	51
66	Fabrication of a novel organic polymer thin film. Thin Solid Films, 2008, 516, 3884-3887.	1.8	50
67	Nanolaminated composite materials: structure, interface role and applications. RSC Advances, 2016, 6, 109361-109385.	3.6	50
68	Failure analysis of plasma-sprayed thermal barrier coatings. Thin Solid Films, 1984, 119, 173-184.	1.8	49
69	Structural changes of thermally sprayed hydroxyapatite investigated by Rietveld analysis. Biomaterials, 1996, 17, 639-645.	11.4	49
70	Quantitative Evaluation of Void Distributions within a Plasmaâ€Sprayed Ceramic. Journal of the American Ceramic Society, 1999, 82, 17-21.	3.8	49
71	Porosity determinations in thermally sprayed hydroxyapatite coatings. Journal of Materials Science, 2001, 36, 3891-3896.	3.7	48
72	Image-based extended finite element modeling of thermal barrier coatings. Surface and Coatings Technology, 2006, 201, 2369-2380.	4.8	48

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73	Biocompatibility of transition metal-substituted cobalt ferrite nanoparticles. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	48
74	Measurement of adhesion for thermally sprayed materials. Journal of Adhesion Science and Technology, 1993, 7, 1235-1264.	2.6	45
75	Long-term engineering properties of recycled plastic lumber used in pier construction. Resources, Conservation and Recycling, 1998, 23, 243-258.	10.8	45
76	Current problems in plasma spray processing. Journal of Thermal Spray Technology, 1992, 1, 341.	3.1	43
77	Effects of vacuum plasma spray processing parameters on splat morphology. Journal of Thermal Spray Technology, 1995, 4, 67-74.	3.1	42
78	Alumina-base plasma-sprayed materialsâ€”Part II: Phase transformations in aluminas. Journal of Thermal Spray Technology, 1997, 6, 439-444.	3.1	42
79	Evaluation of the mechanical properties of plasma sprayed hydroxyapatite coatings. Applied Surface Science, 2014, 303, 155-162.	6.1	42
80	Yield stress and zeta potential of washed and highly spherical oxide dispersions â€” Critical zeta potential and Hamaker constant. Powder Technology, 2010, 198, 114-119.	4.2	40
81	Fabrication and Characterization of Nanoporous Niobia, and Nanotubular Tantala, Titania and Zirconia via Anodization. Journal of Functional Biomaterials, 2015, 6, 153-170.	4.4	40
82	Artificial Neural Network application for predicting in-flight particle characteristics of an atmospheric plasma spray process. Surface and Coatings Technology, 2011, 205, 4886-4895.	4.8	38
83	Effect of substrate and bond coat on contact damage in zirconia-based plasma-sprayed coatings. Thin Solid Films, 1997, 293, 251-260.	1.8	37
84	Relationships between the mode II fracture toughness and microstructure of thermal spray coatings. Surface and Coatings Technology, 1999, 114, 114-128.	4.8	37
85	A Review of Hydroxyapatite Coatings Manufactured by Thermal Spray. Springer Series in Biomaterials Science and Engineering, 2014, , 267-329.	1.0	37
86	A test for coating adhesion on flat substratesâ€”a technical note. Journal of Thermal Spray Technology, 1994, 3, 184-190.	3.1	36
87	Corrosion and oxidation properties of NiCr coatings sprayed in presence of gas shroud system. Applied Surface Science, 2010, 256, 4322-4327.	6.1	36
88	Sliding Wear of Conventional and Suspension Sprayed Nanocomposite WC-Co Coatings: An Invited Review. Journal of Thermal Spray Technology, 2021, 30, 800-861.	3.1	36
89	Tensile adhesion testing methodology for thermally sprayed coatings. Journal of Materials Engineering, 1990, 12, 151-158.	0.3	35
90	Mercury intrusion porosimetry of plasma-sprayed ceramic. Journal of Materials Science, 1997, 32, 3925-3932.	3.7	35

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91	Mechanical property variations within thermal barrier coatings. Surface and Coatings Technology, 2007, 202, 362-369.	4.8	35
92	Effect of Power and Stand-Off Distance on Plasma Sprayed Hydroxyapatite Coatings. Materials and Manufacturing Processes, 2013, 28, 1279-1285.	4.7	34
93	Strengthening mechanisms in CrMoNbTiW refractory high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 819, 141503.	5.6	34
94	The variability in strength of thermally sprayed coatings. Surface and Coatings Technology, 1988, 34, 43-50.	4.8	33
95	Failure processes within ceramic coatings at high temperatures. Journal of Materials Science, 1989, 24, 3511-3520.	3.7	33
96	Fabrication and characterization of TiO₂â€“ZrO₂â€“ZrTiO₄nanotubes on TiZr alloy manufactured via anodization. Journal of Materials Chemistry B, 2014, 2, 71-83.	5.8	33
97	Influence of Plasma Spray Parameters on Formation and Morphology of ZrO2?8 wt% Y2O3Deposits. Journal of the American Ceramic Society, 2001, 84, 693-700.	3.8	32
98	Thermal Spray Maps: Material Genomics of Processing Technologies. Journal of Thermal Spray Technology, 2013, 22, 1170-1183.	3.1	32
99	Enhanced thick thermal barrier coatings that exhibit varying porosity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 476, 1-7.	5.6	31
100	Influence of Cold Spray Parameters on Bonding Mechanisms: A Review. Metals, 2021, 11, 2016.	2.3	31
101	Microstructural Index to Quantify Thermal Spray Deposit Microstructures Using Image Analysis. Journal of Thermal Spray Technology, 1998, 7, 229-241.	3.1	30
102	Hydroxyapatite/polymer composite flame-sprayed coatings for orthopedic applications. Journal of Biomaterials Science, Polymer Edition, 2002, 13, 977-990.	3.5	30
103	Artificial Neural Networks vs. Fuzzy Logic: Simple Tools to Predict and Control Complex Processesâ€”Application to Plasma Spray Processes. Journal of Thermal Spray Technology, 2008, 17, 365-376.	3.1	29
104	Microstructure, composition and hardness of laser-assisted hydroxyapatite and Ti-6Al-4V composite coatings. Surface and Coatings Technology, 2013, 232, 482-488.	4.8	29
105	Influence of Plasma Spray Parameters on In-Flight Characteristics of ZrO2?8 wt% Y2O3Ceramic Particles. Journal of the American Ceramic Society, 2001, 84, 685-692.	3.8	28
106	IFTHSE Global 21: heat treatment and surface engineering in the twenty-first century Part 10 â€“ Thermal spray coatings: a technology review. International Heat Treatment and Surface Engineering, 2010, 4, 7-13.	0.2	28
107	Sol-Gel Synthesized Copper-Substituted Cobalt Ferrite Nanoparticles for Biomedical Applications. Journal of Nano Research, 0, 22, 95-106.	0.8	28
108	Review on the Oxidation of Metallic Thermal Sprayed Coatings: A Case Study with Reference to Rare-Earth Permanent Magnetic Coatings. Journal of Thermal Spray Technology, 2013, 22, 1069-1091.	3.1	27

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109	Development of Processing Windows for HVOF Carbide-Based Coatings. Journal of Thermal Spray Technology, 2016, 25, 28-35.	3.1	27
110	Evaluating the influence of microstructural attributes: Fraction, composition, size and spatial distribution of phases on the oxidation behaviour of high-entropy alloys. Corrosion Science, 2021, 184, 109381.	6.6	27
111	Variability of hydroxyapatite-coated dental implants. International Journal of Oral and Maxillofacial Implants, 1998, 13, 601-10.	1.4	27
112	Multifunctional cold spray coatings for biological and biomedical applications: A review. Progress in Surface Science, 2022, 97, 100654.	8.3	27
113	Computational Study and Experimental Comparison of the In-Flight Particle Behavior for an External Injection Plasma Spray Process. Journal of Thermal Spray Technology, 2003, 12, 508-522.	3.1	26
114	Quality control of the intrinsic deposition efficiency from the controls of the splat morphologies and the deposit microstructure. Journal of Thermal Spray Technology, 1997, 6, 153-166.	3.1	25
115	Antibacterial Longevity of a Novel Gallium Liquid Metal/Hydroxyapatite Composite Coating Fabricated by Plasma Spray. ACS Applied Materials & Interfaces, 2022, 14, 18974-18988.	8.0	24
116	Corrosion and mechanical performance of HVOF WC-based coatings with alloyed nickel binder for use in marine hydraulic applications. Surface and Coatings Technology, 2021, 418, 127239.	4.8	23
117	The coalescence of combustion-sprayed ethyleneâ€“methacrylic acid copolymer. Journal of Materials Science, 1997, 32, 2099-2106.	3.7	22
118	Acoustic emission studies on thermal spray materials. Surface and Coatings Technology, 1998, 102, 1-7.	4.8	22
119	Indentation Response of Molybdenum Disilicide. Journal of Materials Research, 1998, 13, 2662-2671.	2.6	22
120	Sol-Gel Synthesized Copper-Substituted Cobalt Ferrite Nanoparticles for Biomedical Applications. Journal of Nano Research, 0, 25, 110-121.	0.8	22
121	Acoustic Emission Evaluation of Plasma-Sprayed Thermal Barrier Coatings. Journal of Engineering for Gas Turbines and Power, 1985, 107, 142-146.	1.1	21
122	Peel-strength behavior of bilayer thermal-sprayed polymer coatings. Journal of Applied Polymer Science, 2003, 88, 214-226.	2.6	21
123	Carbide dissolution in WC-17Co thermal spray coatings: Part 1-project concept and as-sprayed coatings. Journal of Alloys and Compounds, 2021, 856, 157464.	5.5	21
124	Acoustic Emission Studies of Aluminaâ€13% Titania Freeâ€Standing Forms during Fourâ€Point Bend Tests. Journal of the American Ceramic Society, 1997, 80, 2382-2394.	3.8	20
125	Manufacturing of nickel based cermet coatings by the HVOF process. Surface Engineering, 2016, 32, 713-724.	2.2	20
126	Neutron and X-ray diffraction of plasma-sprayed zirconia-yttria thermal barrier coatings. Thin Solid Films, 1984, 119, 159-171.	1.8	19

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127	Investigating the anisotropic mechanical properties of plasma sprayed yttria-stabilised zirconia coatings. Surface and Coatings Technology, 2014, 259, 551-559.	4.8	19
128	Nano- and micro-mechanical properties and corrosion performance of a HVOF sprayed AlCoCrFeNi high-entropy alloy coating. Journal of Alloys and Compounds, 2022, 912, 165000.	5.5	19
129	An evaluation of methacrylic acid-modified poly(ethylene) coatings applied by flame spray technology. Progress in Organic Coatings, 1995, 25, 205-216.	3.9	18
130	Intelligent system for prediction and control: Application in plasma spray process. Expert Systems With Applications, 2011, 38, 260-271.	7.6	18
131	Improving the Generalization Ability of an Artificial Neural Network in Predicting In-Flight Particle Characteristics of an Atmospheric Plasma Spray Process. Journal of Thermal Spray Technology, 2012, 21, 935-949.	3.1	18
132	Effects of standoff distance on porosity, phase distribution and mechanical properties of plasma sprayed Ndâ€“Feâ€“B coatings. Surface and Coatings Technology, 2013, 216, 127-138.	4.8	18
133	Modular implementation of artificial neural network in predicting in-flight particle characteristics of an atmospheric plasma spray process. Engineering Applications of Artificial Intelligence, 2015, 45, 57-70.	8.1	18
134	Determination of the Mechanical Properties of Plasma-Sprayed Hydroxyapatite Coatings Using the Knoop Indentation Technique. Journal of Thermal Spray Technology, 2015, 24, 865-877.	3.1	18
135	The effect of high-velocity oxygen fuel, thermally sprayed WCâ€“Co coatings on the high-cycle fatigue of aluminium alloy and steel. Journal of Materials Science, 1998, 33, 3095-3100.	3.7	16
136	Thermal Spray Processing of Nanoscale Materials II. Journal of Thermal Spray Technology, 2001, 10, 147-182.	3.1	16
137	Mechanical and erosion properties of CaCO3-EMAA thermal sprayed coatings. Polymer Engineering and Science, 2004, 44, 1448-1459.	3.1	16
138	Instrumented tensile adhesion tests on plasma sprayed thermal barrier coatings. Journal of Materials Engineering, 1989, 11, 275-282.	0.3	15
139	Characterization of the closed porosity in plasma-sprayed alumina. Journal of Materials Science, 1997, 32, 3407-3410.	3.7	15
140	Erosion behavior of thermal sprayed, recycled polymer and ethyleneâ€“methacrylic acid composite coatings. Wear, 2007, 262, 274-281.	3.1	15
141	Splat formation of polypropylene flame sprayed onto a flat surface. Surface and Coatings Technology, 2010, 205, 2518-2524.	4.8	15
142	Investigation of bacterial attachment on hydroxyapatite-coated titanium and tantalum. International Journal of Surface Science and Engineering, 2014, 8, 255.	0.4	15
143	Splat taxonomy of polymeric thermal spray coating. Surface and Coatings Technology, 2011, 205, 5028-5034.	4.8	14
144	Quantification and Taxonomy of Pores in Thermal Spray Coatings by Image Analysis and Stereology Approach. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 4844-4858.	2.2	14

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145	Cell response and bioactivity of titaniaâ€“zirconiaâ€“zirconium titanate nanotubes with different nanoscale topographies fabricated in a non-aqueous electrolyte. Biomaterials Science, 2015, 3, 636-644.	5.4	14
146	Thermally induced metallurgical transformations in WC-17Co thermal spray coatings as a function of carbide dissolution: Part 2 - Heat-treated coatings. International Journal of Refractory Metals and Hard Materials, 2021, 96, 105486.	3.8	14
147	Failure and Acoustic-Emission Response of Plasma-Sprayed ZrO2-8 wt% Y2O3 Coatings. Ceramic Engineering and Science Proceedings, 0, , 772-792.	0.1	14
148	Thermal expansion properties of metallic and cermet coatings. Surface and Coatings Technology, 1998, 102, 19-24.	4.8	13
149	Ammonium phosphate slurry rheology and particle propertiesâ€”The influence of Fe(III) and Al(III) impurities, solid concentration and degree of neutralization. Chemical Engineering Science, 2006, 61, 5856-5866.	3.8	13
150	Tantalum- and Silver-Doped Titanium Dioxide Nanosheets Film: Influence on Interfacial Bonding Structure and Hardness of the Surface System. Industrial & Engineering Chemistry Research, 2017, 56, 434-439.	3.7	13
151	The manufacture and microstructure of fiber-reinforced thermally sprayed coatings. Surface and Coatings Technology, 1989, 37, 89-110.	4.8	12
152	Materials properties of barricade bricks for mining applications. Geotechnical and Geological Engineering, 2007, 25, 449-471.	1.7	12
153	Micro- to nano-scale chemical and mechanical mapping of antimicrobial-resistant fungal biofilms. Nanoscale, 2020, 12, 19888-19904.	5.6	12
154	Optimization of modulation-assisted drilling of Ti-6Al-4V aerospace alloy via response surface method. Materials and Manufacturing Processes, 2020, 35, 1313-1329.	4.7	12
155	Mechanical performance and residual stress of WC-Co coatings manufactured by Kinetic Metallizationâ„¢. Surface and Coatings Technology, 2021, 421, 127359.	4.8	12
156	Tribological and corrosion performance of an atmospheric plasma sprayed AlCoCr0.5Ni high-entropy alloy coating. Wear, 2022, 506-507, 204443.	3.1	12
157	Simulation of Hardness Testing on Plasma-Sprayed Coatings. Journal of the American Ceramic Society, 1995, 78, 1406-1410.	3.8	11
158	Effect of Zinc Substitution on Microstructure and Antibacterial Properties of Cobalt Ferrite Nanopowders Synthesized by Sol-Gel Methods. Advanced Materials Research, 2012, 535-537, 436-439.	0.3	11
159	Effect of the chelating agent contents on the topography, composition and phase of SPPS-deposited cobalt ferrite splats. Surface and Coatings Technology, 2013, 232, 247-253.	4.8	11
160	Baghdadite coating formed by hybrid water-stabilized plasma spray for bioceramic applications: Mechanical and biological evaluations. Materials Science and Engineering C, 2021, 122, 111873.	7.3	11
161	Physical and relaxation properties of flame-sprayed ethylene-methacrylic acid copolymer. Polymer Engineering and Science, 1998, 38, 1873-1881.	3.1	10
162	Small-angle neutron scattering study of the role of feedstock particle size on the microstructural behavior of plasma-sprayed yttria-stabilized zirconia deposits. Journal of Materials Research, 2003, 18, 624-634.	2.6	10

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163	Highâ€Temperature Chemical Stability of Plasmaâ€Sprayed Ca05Sr05Zr4P6O24 Coatings on Nicalon/SiC Ceramic Matrix Composite and Niâ€Based Superalloy Substrates. Journal of the American Ceramic Society, 1996, 79, 2759-2762.	3.8	10
164	Influence of the different organic chelating agents on the topography, physical properties and phase of SPPS-deposited spinel ferrite splats. Applied Surface Science, 2013, 284, 171-178.	6.1	10
165	Thermal spray forming of titanium and its alloys. , 2015, , 425-446.		10
166	Influence of charged defects on the interfacial bonding strength of tantalum- and silver-doped nanograined TiO₂. Physical Chemistry Chemical Physics, 2017, 19, 11881-11891.	2.8	10
167	The Adhesion of Plasma Sprayed Ceramic Coatings to Metals. , 1981, , 619-628.		10
168	Acoustic emission responses of plasma-sprayed alumina-3% titania deposits. Thin Solid Films, 1997, 310, 108-114.	1.8	9
169	Design and manufacture of Ndâ€“Feâ€“B thick coatings by the thermal spray process. Surface and Coatings Technology, 2011, 205, 4697-4704.	4.8	9
170	An Extreme Learning Machine Algorithm to Predict the In-flight Particle Characteristics of an Atmospheric Plasma Spray Process. Plasma Chemistry and Plasma Processing, 2013, 33, 993-1023.	2.4	9
171	Ethylene Methacrylic Acid (EMAA) Single Splat Morphology. Coatings, 2013, 3, 82-97.	2.6	9
172	Mechanical Properties of Strontiumâ€“Hardystoniteâ€“Gahnite Coating Formed by Atmospheric Plasma Spray. Coatings, 2019, 9, 759.	2.6	9
173	Mechanical Property Measurements of Plasma-Sprayed Thermal-Barrier Coatings Subjected to Oxidation. Ceramic Engineering and Science Proceedings, 0, , 479-490.	0.1	9
174	Composite Coatings of Si₃N₄-Soda Lime Silica Produced by the Thermal Spray Process. Journal of Materials Engineering and Performance, 2000, 9, 603-608.	2.5	8
175	Deformation of Plasma Sprayed Thermal Barrier Coatings. Journal of Engineering for Gas Turbines and Power, 2000, 122, 387-392.	1.1	8
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