Zdenek Pala

List of Publications by Year
in descending order

71 papers	919 citations	471509 17 h-index	580821 25 g-index
72 all docs	72 docs citations	72 times ranked	898 citing authors

#	Article	IF	Citations
1	Microstructure and sliding wear properties of HVOF sprayed, laser remelted and laser clad Stellite 6 coatings. Surface and Coatings Technology, 2017, 318, 129-141.	4.8	68
2	Effect of Heat Treatment on the Microstructure and Properties of HVOF-Sprayed Co-Cr-W Coating. Journal of Thermal Spray Technology, 2016, 25, 546-557.	3.1	41
3	Microstructure and phase stability of suspension high velocity oxy-fuel sprayed yttria stabilised zirconia coatings from aqueous and ethanol based suspensions. Journal of the European Ceramic Society, 2018, 38, 1878-1887.	5.7	40
4	Influence of Microstructure on Thermal Properties of Axial Suspension Plasma-Sprayed YSZ Thermal Barrier Coatings. Journal of Thermal Spray Technology, 2016, 25, 202-212.	3.1	35
5	Plasma sprayed manganeseâ€“cobalt spinel coatings: Process sensitivity on phase, electrical and protective performance. Journal of Power Sources, 2016, 304, 234-243.	7.8	33
6	Gas and liquid-fuelled HVOF spraying of Ni50Cr coating: Microstructure and high temperature oxidation. Surface and Coatings Technology, 2017, 318, 224-232.	4.8	33
7	Development of suspension plasma sprayed alumina coatings with high enthalpy plasma torch. Surface and Coatings Technology, 2017, 325, 277-288.	4.8	31
8	On the dielectric strengths of atmospheric plasma sprayed Al2O3, Y2O3, ZrO2â€“7% Y2O3 and (Ba,Sr)TiO3 coatings. Ceramics International, 2015, 41, 11169-11176.	4.8	27
9	Suspension High Velocity Oxy-Fuel (SHVOF)-Sprayed Alumina Coatings: Microstructure, Nanoindentation and Wear. Journal of Thermal Spray Technology, 2016, 25, 1700-1710.	3.1	26
10	Structure and properties of plasma sprayed BaTiO3 coatings: Spray parameters versus structure and photocatalytic activity. Ceramics International, 2011, 37, 2561-2567.	4.8	23
11	Impact of Impurity Content on the Sintering Resistance and Phase Stability of Dysprosia- and Yttria-Stabilized Zirconia Thermal Barrier Coatings. Journal of Thermal Spray Technology, 2014, 23, 160-169.	3.1	23
12	Laser Clad and HVOF-Sprayed Stellite 6 Coating in Chlorine-Rich Environment with KCl at 700ÂÂ°C. Oxidation of Metals, 2017, 88, 749-771.	2.1	23
13	Suspension high velocity oxy-fuel spraying of TiO 2 : A quantitative approach to phase composition. Journal of the European Ceramic Society, 2017, 37, 801-810.	5.7	22
14	Phase stabilization in plasma sprayed BaTiO3. Ceramics International, 2013, 39, 5039-5048.	4.8	20
15	Microstructure and Properties of Plasma-Sprayed Mixture of Cr2O3 and TiO2. Journal of Thermal Spray Technology, 2013, 22, 1163-1169.	3.1	19
16	Post-treatment of Plasma-Sprayed Amorphous Ceramic Coatings by Spark Plasma Sintering. Journal of Thermal Spray Technology, 2015, 24, 637-643.	3.1	19
17	Abradable Coatings for Small Turboprop Engines: A Case Study of Nickel-Graphite Coating. Journal of Thermal Spray Technology, 2019, 28, 794-802.	3.1	18
18	Structure and properties of plasma sprayed BaTiO3 coatings after thermal posttreatment. Ceramics International, 2015, 41, 7453-7460.	4.8	17

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19	The influence of substrate temperature on properties of APS and VPS W coatings. Surface and Coatings Technology, 2015, 268, 7-14.	4.8	17
20	Titanium Dioxide Coatings Sprayed by a Water-Stabilized Plasma Gun (WSP) with Argon and Nitrogen as the Powder Feeding Gas: Differences in Structural, Mechanical and Photocatalytic Behavior. Journal of Thermal Spray Technology, 2012, 21, 425-434.	3.1	16
21	Wâ€“steel and Wâ€“WCâ€“steel composites and FGMs produced by hot pressing. Fusion Engineering and Design, 2015, 100, 364-370.	1.9	16
22	Metallurgical bond between magnesium AZ91 alloy and aluminium plasma sprayed coatings. Surface and Coatings Technology, 2015, 282, 163-170.	4.8	16
23	Microstructure and Properties of Plasma Sprayed Lead Zirconate Titanate (PZT) Ceramics. Coatings, 2012, 2, 64-75.	2.6	15
24	Optimization of High Porosity Thermal Barrier Coatings Generated with a Porosity Former. Journal of Thermal Spray Technology, 2015, 24, 622-628.	3.1	15
25	Controlling Microstructure of Yttria-Stabilized Zirconia Prepared from Suspensions and Solutions by Plasma Spraying with High Feed Rates. Journal of Thermal Spray Technology, 2017, 26, 1787-1803.	3.1	15
26	Photocatalytic activity of visible-light-active iron-doped coatings prepared by plasma spraying. Ceramics International, 2014, 40, 2365-2372.	4.8	14
27	Feasibility of suspension spraying of yttria-stabilized zirconia with water-stabilized plasma torch. Surface and Coatings Technology, 2015, 268, 58-62.	4.8	14
28	Structural and photocatalytic characteristics of TiO2 coatings produced by various thermal spray techniques. Journal of Advanced Ceramics, 2013, 2, 218-226.	17.4	13
29	Calcium titanate (CaTiO 3) dielectrics prepared by plasma spray and post-deposition thermal treatment. Materials Research Bulletin, 2015, 72, 123-132.	5.2	13
30	Photocatalytic and electrochemical properties of single- and multi-layer sub-stoichiometric titanium oxide coatings prepared by atmospheric plasma spraying. Journal of Advanced Ceramics, 2016, 5, 126-136.	17.4	13
31	Failure analysis of thermally cycled columnar thermal barrier coatings produced by high-velocity-air fuel and axial-suspension-plasma spraying: A design perspective. Ceramics International, 2018, 44, 3161-3172.	4.8	13
32	Splat formation and microstructure of solution precursor thermal sprayed Nb-doped titanium oxide coatings. Ceramics International, 2020, 46, 5098-5108.	4.8	13
33	Resonance bending fatigue testing with simultaneous damping measurement and its application on layered coatings. International Journal of Fatigue, 2016, 82, 300-309.	5.7	12
34	Suspensions Plasma Spraying of Ceramics with Hybrid Water-Stabilized Plasma Technology. Journal of Thermal Spray Technology, 2017, 26, 37-46.	3.1	12
35	Suspension high velocity oxy-fuel (SHVOF) spray of delta-theta alumina suspension: Phase transformation and tribology. Surface and Coatings Technology, 2019, 371, 97-106.	4.8	12
36	Dielectric properties of CaTiO₃ coatings prepared by plasma spraying. Surface Engineering, 2013, 29, 384-389.	2.2	10

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37	Optimizing Thermoelectric Properties of In Situ Plasma-Spray-Synthesized Sub-stoichiometric TiO2â^’x Deposits. Journal of Thermal Spray Technology, 2018, 27, 968-982.	3.1	10
38	YAG thermal barrier coatings deposited by suspension and solution precursor thermal spray. Ceramics International, 2021, 47, 23803-23813.	4.8	10
39	The impact of various cooling environments on the distribution of macroscopic residual stresses in near-surface layers of ground steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 497, 200-205.	5.6	9
40	The influence of plasma sprayed multilayers of Cr2O3 and Ni10wt%Al on fatigue resistance. Surface and Coatings Technology, 2014, 251, 143-150.	4.8	9
41	Improving dielectric properties of plasma sprayed calcium titanate (CaTiO3) coatings by thermal annealing. Ceramics International, 2014, 40, 13049-13055.	4.8	9
42	Small punch creep testing of thermally sprayed Stellite 6 coating: A comparative study of as-received vs post-heat treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 749, 137-147.	5.6	8
43	Study of Residual Stress Surface Distribution on Laser Welded Steel Sheets. Applied Mechanics and Materials, 0, 486, 3-8.	0.2	7
44	Study on the plasma sprayed amorphous diopside and annealed fine-grained crystalline diopside. Ceramics International, 2015, 41, 10578-10586.	4.8	7
45	Dielectric and electrochemical properties through-thickness mapping on extremely thick plasma sprayed TiO 2. Ceramics International, 2016, 42, 7183-7191.	4.8	7
46	A suspension high velocity oxy-fuel thermal spray manufacturing route for silicon carbide â€" YAG composite coatings. Materials Letters, 2020, 281, 128601.	2.6	6
47	Plasma spraying of cerium-doped YAG. Journal of Materials Research, 2014, 29, 2344-2351.	2.6	5
48	High Temperature Resistance of Selected HVOF Coatings. Key Engineering Materials, 2015, 662, 111-114.	0.4	5
49	On reactive suspension plasma spraying of calcium titanate. Ceramics International, 2016, 42, 4607-4615.	4.8	5
50	Fatigue Performance of TBCs on Hastelloy X Substrate During Cyclic Bending. Journal of Thermal Spray Technology, 2016, 25, 231-243.	3.1	5
51	Non-Destructive Inspection of Surface Integrity in Milled Turbine Blades of Inconel 738LC. Applied Mechanics and Materials, 0, 486, 9-15.	0.2	4
52	The Research of the Surface Profile after Profiling of Inconel 738LC. Procedia Engineering, 2014, 69, 974-979.	1.2	4
53	The Influence of Spraying Parameters on Stresses and Mechanical Properties of HVOF-Sprayed Co-Cr-W-C Coatings. Key Engineering Materials, 0, 606, 171-174.	0.4	4
54	Combining XRD with Hole-Drilling Method in Residual Stress Gradient Analysis of Laser Hardened C45 Steel. Advanced Materials Research, 2014, 996, 277-282.	0.3	4

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55	Behavior and microstructural changes in different tungsten-based materials under pulsed plasma loading. Nuclear Materials and Energy, 2016, 9, 123-127.	1.3	4
56	Plasma-Sprayed Fine-grained Zirconium Silicate and Its Dielectric Properties. Journal of Materials Engineering and Performance, 2017, 26, 2388-2393.	2.5	4
57	Fabrication and microstrain evolution of Al-TiB2 composite coating by cold spray deposition. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2019, 233, 1044-1052.	1.1	4
58	Residual stresses determination in textured substrates for plasma sprayed coatings. IOP Conference Series: Materials Science and Engineering, 2015, 82, 012112.	0.6	3
59	Structural characterization of semi-heusler/light metal composites prepared by spark plasma sintering. Scientific Reports, 2018, 8, 11133.	3.3	3
60	X-ray diffraction study of anisotropic state of residual stress after down-cut and up-cut face grinding. Powder Diffraction, 2009, 24, 99-101.	0.2	2
61	Real Structure of Milled Inconel 738LC Turbine Blades. Advanced Materials Research, 0, 996, 646-651.	0.3	2
62	Effect of Boriding Time on Microstructure and Residual Stresses in Borided Highly Alloyed X210CR12 Steel. Key Engineering Materials, 0, 606, 27-30.	0.4	2
63	Plasma Spraying of Silica-Rich Calcined Clay Shale. Journal of Thermal Spray Technology, 2014, 23, 732-741.	3.1	2
64	Study of residual stresses, microstructure, and hardness in FeB and Fe₂B ultra-hard layers. Powder Diffraction, 2015, 30, S83-S89.	0.2	2
65	Properties of Ultrafine-Grained Tungsten Prepared by Ball Milling and Spark Plasma Sintering. Applied Mechanics and Materials, 0, 821, 399-404.	0.2	2
66	Grinding of Inconel 713 Superalloy for Gas Turbines. Manufacturing Technology, 2016, 16, 38-45.	1.4	2
67	Surface Layers' Real Structure of Metals Exposed to Inhomogeneous Thermal Fields and Plastic Deformation. Solid State Phenomena, 0, 163, 59-63.	0.3	1
68	Effect of Grit-Blasting on Residual Stress Field. Key Engineering Materials, 2014, 606, 91-94.	0.4	1
69	Gradients of Parameters of the Real Structure in Steels Surface Layers after Mechanical Treatment. Solid State Phenomena, 2007, 130, 77-80.	0.3	0
70	The Influence of Mineralogical Composition Changes of Sandstone Cement on Physical-Mechanical Properties. Advanced Materials Research, 2014, 923, 71-74.	0.3	0
71	Influence of Beam Speed on Residual Stresses in the Vicinity of Laser Welds. Advanced Materials Research, 2014, 996, 463-468.	0.3	0