

Petr Skalka

List of Publications by Year in descending order

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Version: 2024-02-01

20
papers

186
citations

1163117

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1058476

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20
all docs

20
docs citations

20
times ranked

169
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite element simulation of stresses in a plasma-sprayed thermal barrier coating with a crack at the TGO/bond-coat interface. <i>Surface and Coatings Technology</i> , 2018, 337, 321-334.	4.8	40
2	Finite element simulation of stresses in a plasma-sprayed thermal barrier coating with an irregular top-coat/bond-coat interface. <i>Surface and Coatings Technology</i> , 2016, 304, 574-583.	4.8	29
3	Bending fatigue failure of atmospheric-plasma-sprayed CoNiCrAlY+YSZ thermal barrier coatings. <i>International Journal of Fatigue</i> , 2015, 70, 186-195.	5.7	26
4	Stability of plasma-sprayed thermal barrier coatings: The role of the waviness of the bond coat and the thickness of the thermally grown oxide layer. <i>Surface and Coatings Technology</i> , 2015, 274, 26-36.	4.8	22
5	Estimation of the effective elastic constants of bone scaffolds fabricated by direct ink writing. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1586-1594.	5.7	18
6	Novel approach to FE solution of crack problems in the Laplacian-based gradient elasticity. <i>Mechanics of Materials</i> , 2016, 95, 28-48.	3.2	9
7	Ab initio aided strain gradient elasticity theory in prediction of nanocomponent fracture. <i>Mechanics of Materials</i> , 2019, 136, 103074.	3.2	9
8	A novel multiscale approach to brittle fracture of nano/micro-sized components. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2020, 43, 1630-1645.	3.4	9
9	Factors governing the dimensional accuracy and fracture modes under compression of regular and shifted orthogonal scaffolds. <i>Journal of the European Ceramic Society</i> , 2020, 40, 4923-4931.	5.7	8
10	Crack bridging modelling in Bioglass [®] based scaffolds reinforced by poly-vinyl alcohol/microfibrillated cellulose composite coating. <i>Mechanics of Materials</i> , 2017, 110, 16-28.	3.2	5
11	Thermal cycling effect on the phase stability and fracture resistance of synthetic barium/magnesium aluminosilicate systems. <i>Ceramics International</i> , 2020, 46, 24129-24136.	4.8	3
12	Influence of the Ceramic Foam Structure Irregularity on the Tensile Response. <i>Solid State Phenomena</i> , 0, 258, 161-164.	0.3	2
13	Failure analysis of massively failed compressed air cartridge. <i>Engineering Failure Analysis</i> , 2017, 82, 776-782.	4.0	2
14	Applicability of the Critical Energy Release Rate for Predicting the Growth of a Crack in Nanoscale Materials Applying the Strain Gradient Elasticity Theory. <i>Key Engineering Materials</i> , 2017, 754, 185-188.	0.4	2
15	Prediction of the Critical Energy Release Rate of Nanostructured Solids Using the Laplacian Version of the Strain Gradient Elasticity Theory. <i>Key Engineering Materials</i> , 0, 774, 447-452.	0.4	1
16	Determination of Mechanical and Fracture Properties of Silicon Single Crystal from Indentation Experiments and Finite Element Modelling. <i>Materials</i> , 2021, 14, 6864.	2.9	1
17	Crack Bridging Modelling in Bioglass [®] Based Scaffolds Using Gradient Elasticity Theory. <i>Key Engineering Materials</i> , 0, 665, 105-108.	0.4	0
18	Computational Analysis of Crack Bridging in Bioglass [®] -Based Porous Scaffolds by Using Polymer Coatings. <i>Solid State Phenomena</i> , 0, 258, 325-328.	0.3	0

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19	Plasma-sprayed thermal barrier coatings: numerical study on damage localization and evolution. <i>Frattura Ed Integrita Strutturale</i> , 2016, 10, 322-329.	0.9	0
20	The Influence of Surface Dipping and Bulk Filling Agents on Properties of High-Speed Grinding Wheels: Materialographic-Based Numerical Modelling. <i>Defect and Diffusion Forum</i> , 0, 405, 43-47.	0.4	0