Filip Å iÅ¡ka

List of Publications by Year
in descending order

49 papers	633 citations	516710 16 h-index	610901 24 g-index
49 all docs	49 docs citations	49 times ranked	709 citing authors

#	Article	IF	Citations
1	Numerical analysis of twin-precipitate interactions in magnesium alloys. Acta Materialia, 2021, 202, 80-87.	7.9	21
2	Interaction of Migrating Twin Boundaries with Obstacles in Magnesium. Metals, 2021, 11, 154.	2.3	3
3	On the dynamics of twinning in magnesium micropillars. Materials and Design, 2021, 203, 109563.	7.0	10
4	Numerical analysis of geometrically induced hardening in planar architectured materials. Composite Structures, 2020, 233, 111633.	5.8	2
5	Development of advanced Feâ€“Alâ€“O ODS alloy microstructure and properties due to heat treatment. Journal of Materials Research, 2020, 35, 2789-2797.	2.6	4
6	Characterization of bonding quality of a cold-sprayed deposit by laser resonant ultrasound spectroscopy. Ultrasonics, 2020, 106, 106140.	3.9	10
7	Effect of residual stresses to the crack path in alumina/zirconia laminates. Journal of the European Ceramic Society, 2020, 40, 5810-5818.	5.7	12
8	Twinning in CoCrFeNiMn high entropy alloy induced by nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 784, 139297.	5.6	12
9	Electrophoretic Deposition of Copper(II)â€“Chitosan Complexes for Antibacterial Coatings. International Journal of Molecular Sciences, 2020, 21, 2637.	4.1	32
10	Characterisation of mechanical and fracture behaviour of Al2O3/ZrO2/BaTiO3 laminate by indentation. Journal of the European Ceramic Society, 2020, 40, 4799-4807.	5.7	9
11	Electrolyte-Supported Fuel Cell: Co-Sintering Effects of Layer Deposition on Biaxial Strength. Materials, 2019, 12, 306.	2.9	16
12	Initiation of basal slip and tensile twinning in magnesium alloys during nanoindentation. Journal of Alloys and Compounds, 2018, 731, 620-630.	5.5	20
13	Elastic properties of multiâ€layered ceramic systems for SOCs. International Journal of Applied Ceramic Technology, 2018, 15, 370-379.	2.1	7
14	Strengthening mechanisms of different oxide particles in 9Cr ODS steel at high temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 732, 112-119.	5.6	26
15	Analysing single twinning events in Mg-6Zn using nanoindentation. Journal of Alloys and Compounds, 2018, 768, 510-516.	5.5	5
16	The Size Effect on J-R Curve for Construction Steels and its Prediction by Simplified Mechanical Model. , 2018, , .		0
17	The Application of Miniaturized Three-Point-Bend Specimens for Determination of the Reference Temperature of A533 Cl.1 Steel. Journal of Pressure Vessel Technology, Transactions of the ASME, 2017, 139, .	0.6	1
18	Fracture behavior of the ODS steels prepared by internal oxidation. Fusion Engineering and Design, 2017, 124, 1108-1111.	1.9	7

#	Article	IF	Citations
19	High temperature deformation mechanisms in the 14% Cr ODS alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 689, 34-39.	5.6	14
20	Kinetic study of static recrystallization in an Feâ€“Alâ€“O ultra-fine-grained nanocomposite. Philosophical Magazine Letters, 2017, 97, 379-385.	1.2	20
21	Survey of oxide candidate for advanced 9%, 14% and 17%Cr ODS steels for fusion applications. Fusion Engineering and Design, 2017, 124, 1028-1032.	1.9	9
22	Numerical analysis of twin thickening process in magnesium alloys. Acta Materialia, 2017, 124, 9-16.	7.9	35
23	Numerical study of stress distribution and size effect during AZ31 nanoindentation. Computational Materials Science, 2017, 126, 393-399.	3.0	6
24	The Effect of Specimen Size for the P91 Steel at Elevated and High Temperatures. , 2017, , .		0
25	Deformation and fracture behavior of the P91 martensitic steel at high temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 672, 1-6.	5.6	9
26	Distinguishing between slip and twinning events during nanoindentation of magnesium alloy AZ31. Scripta Materialia, 2016, 110, 10-13.	5.2	34
27	The Prediction of Size Effect on J-R Curve for Eurofer97 Steel by Simplified Mechanical Model. , 2015, , .		0
28	The Application of Miniaturized Three-Point-Bend Specimens for Determination of the Reference Temperature of JRQ Steel. , 2015, , .		1
29	Modelling of the stiffness evolution of truss core structures damaged by plastic buckling. Finite Elements in Analysis and Design, 2015, 100, 1-11.	3.2	3
30	Influence of Cold-Sprayed, Warm-Sprayed, and Plasma-Sprayed Layers Deposition on Fatigue Properties of Steel Specimens. Journal of Thermal Spray Technology, 2015, 24, 758-768.	3.1	23
31	Stiffness and strength degradation of damaged truss core composites. Composite Structures, 2015, 125, 287-294.	5.8	3
32	Modification of Plasma-sprayed TiO2 Coatings Characteristics via Controlling the In-flight Temperature and Velocity of the Powder Particles. Journal of Thermal Spray Technology, 2014, 23, 1339-1349.	3.1	17
33	Modeling of Ductile Tearing for RAFM Steel Eurofer97. , 2014, 3, 1155-1160.		4
34	Estimating Critical Stresses Required for Twin Growth in a Magnesium Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2962-2969.	2.2	28
35	Plastic relaxation of the internal stress induced by twinning. Acta Materialia, 2013, 61, 7859-7867.	7.9	70
36	Influence of temperature and plastic relaxation on tensile twinning in a magnesium alloy. Scripta Materialia, 2013, 69, 521-524.	5.2	26

#	Article	IF	Citations
37	Internal material â€œarchitectureâ€•for a kink-resistant metal tube. Acta Materialia, 2013, 61, 331-340.	7.9	2
38	PHYSICAL INTERPRETATION OF THE REFERENCE FEATURES IN TEXTURAL FRACTOGRAPHY OF FATIGUE FRACTURES. Acta Metallurgica Slovaca, 2013, 19, 141-148.	0.7	0
39	Twinning in magnesium-based lamellar microstructures. Scripta Materialia, 2012, 67, 704-707.	5.2	58
40	The reference texture: A proposal of a physical explanation. International Journal of Fatigue, 2012, 43, 120-127.	5.7	6
41	Validation of R5 assessment procedure for ITER test blanket module by finite element analysis. Fusion Engineering and Design, 2010, 85, 215-221.	1.9	1
42	Assessment of defects in EUROFER 97 first wall/blanket structures taking into account its viscoplastic behavior. Fusion Engineering and Design, 2010, 85, 2065-2069.	1.9	2
43	Comparison of mechanical behaviour of thin film simulated by discrete dislocation dynamics and continuum crystal plasticity. Computational Materials Science, 2009, 45, 793-799.	3.0	20
44	Finite element simulations of the cyclic elastoplastic behaviour of copper thin films. Modelling and Simulation in Materials Science and Engineering, 2007, 15, S217-S238.	2.0	20
45	Simulations of stressâ€“strain heterogeneities in copper thin films: Texture and substrate effects. Computational Materials Science, 2007, 39, 137-141.	3.0	18
46	An unifying concept for fatigue: The reference crack growth rate. Materials Characterization, 2006, 56, 257-265.	4.4	4
47	Textural Fractography of Fatigue Failures under Variable Cycle Loading. Materials Science Forum, 2005, 482, 259-262.	0.3	1
48	A Numerical Analysis of Deformation Processes in Oxide Dispersion-Strengthened Materials - Influence of Dislocation-Particle Interactions. Solid State Phenomena, 0, 258, 106-109.	0.3	0
49	Architectured Multi-Metallic Structures Prepared by Cold Dynamic Spray Deposition. Key Engineering Materials, 0, 810, 107-112.	0.4	2