

# Filip Å iÅjka

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Plastic relaxation of the internal stress induced by twinning. <i>Acta Materialia</i> , 2013, 61, 7859-7867.	7.9	70
2	Twinning in magnesium-based lamellar microstructures. <i>Scripta Materialia</i> , 2012, 67, 704-707.	5.2	58
3	Numerical analysis of twin thickening process in magnesium alloys. <i>Acta Materialia</i> , 2017, 124, 9-16.	7.9	35
4	Distinguishing between slip and twinning events during nanoindentation of magnesium alloy AZ31. <i>Scripta Materialia</i> , 2016, 110, 10-13.	5.2	34
5	Electrophoretic Deposition of Copper(II)–Chitosan Complexes for Antibacterial Coatings. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2637.	4.1	32
6	Estimating Critical Stresses Required for Twin Growth in a Magnesium Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 2962-2969.	2.2	28
7	Influence of temperature and plastic relaxation on tensile twinning in a magnesium alloy. <i>Scripta Materialia</i> , 2013, 69, 521-524.	5.2	26
8	Strengthening mechanisms of different oxide particles in 9Cr ODS steel at high temperatures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 732, 112-119.	5.6	26
9	Influence of Cold-Sprayed, Warm-Sprayed, and Plasma-Sprayed Layers Deposition on Fatigue Properties of Steel Specimens. <i>Journal of Thermal Spray Technology</i> , 2015, 24, 758-768.	3.1	23
10	Numerical analysis of twin-precipitate interactions in magnesium alloys. <i>Acta Materialia</i> , 2021, 202, 80-87.	7.9	21
11	Finite element simulations of the cyclic elastoplastic behaviour of copper thin films. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2007, 15, S217-S238.	2.0	20
12	Comparison of mechanical behaviour of thin film simulated by discrete dislocation dynamics and continuum crystal plasticity. <i>Computational Materials Science</i> , 2009, 45, 793-799.	3.0	20
13	Kinetic study of static recrystallization in an Fe–Al–O ultra-fine-grained nanocomposite. <i>Philosophical Magazine Letters</i> , 2017, 97, 379-385.	1.2	20
14	Initiation of basal slip and tensile twinning in magnesium alloys during nanoindentation. <i>Journal of Alloys and Compounds</i> , 2018, 731, 620-630.	5.5	20
15	Simulations of stress–strain heterogeneities in copper thin films: Texture and substrate effects. <i>Computational Materials Science</i> , 2007, 39, 137-141.	3.0	18
16	Modification of Plasma-sprayed TiO <sub>2</sub> Coatings Characteristics via Controlling the In-flight Temperature and Velocity of the Powder Particles. <i>Journal of Thermal Spray Technology</i> , 2014, 23, 1339-1349.	3.1	17
17	Electrolyte-Supported Fuel Cell: Co-Sintering Effects of Layer Deposition on Biaxial Strength. <i>Materials</i> , 2019, 12, 306.	2.9	16
18	High temperature deformation mechanisms in the 14% Cr ODS alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 689, 34-39.	5.6	14

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	Characterization of bonding quality of a cold-sprayed deposit by laser resonant ultrasound spectroscopy. Ultrasonics, 2020, 106, 106140.	3.9	10
22	On the dynamics of twinning in magnesium micropillars. Materials and Design, 2021, 203, 109563.	7.0	10
23	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
24	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
25	Characterisation of mechanical and fracture behaviour of Al <sub>2</sub> O <sub>3</sub> /ZrO <sub>2</sub> /BaTiO <sub>3</sub> laminate by indentation. Journal of the European Ceramic Society, 2020, 40, 4799-4807.	5.7	9
26	Fracture behavior of the ODS steels prepared by internal oxidation. Fusion Engineering and Design, 2017, 124, 1108-1111.	1.9	7
27	Elastic properties of multi-layered ceramic systems for SOCs. International Journal of Applied Ceramic Technology, 2018, 15, 370-379.	2.1	7
28	The reference texture: A proposal of a physical explanation. International Journal of Fatigue, 2012, 43, 120-127.	5.7	6
29	Numerical study of stress distribution and size effect during AZ31 nanoindentation. Computational Materials Science, 2017, 126, 393-399.	3.0	6
30	Analysing single twinning events in Mg-6Zn using nanoindentation. Journal of Alloys and Compounds, 2018, 768, 510-516.	5.5	5
31	An unifying concept for fatigue: The reference crack growth rate. Materials Characterization, 2006, 56, 257-265.	4.4	4
32	Modeling of Ductile Tearing for RAFM Steel Eurofer97. , 2014, 3, 1155-1160.		4
33	Development of advanced Fe-Al-O ODS alloy microstructure and properties due to heat treatment. Journal of Materials Research, 2020, 35, 2789-2797.	2.6	4
34	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
35	Stiffness and strength degradation of damaged truss core composites. Composite Structures, 2015, 125, 287-294.	5.8	3
36	Interaction of Migrating Twin Boundaries with Obstacles in Magnesium. Metals, 2021, 11, 154.	2.3	3

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37	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
38	Internal material "architecture" for a kink-resistant metal tube. Acta Materialia, 2013, 61, 331-340.	7.9	2
39	Architected Multi-Metallic Structures Prepared by Cold Dynamic Spray Deposition. Key Engineering Materials, 0, 810, 107-112.	0.4	2
40	Numerical analysis of geometrically induced hardening in planar architected materials. Composite Structures, 2020, 233, 111633.	5.8	2
41	Textural Fractography of Fatigue Failures under Variable Cycle Loading. Materials Science Forum, 2005, 482, 259-262.	0.3	1
42	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
43	The Application of Miniaturized Three-Point-Bend Specimens for Determination of the Reference Temperature of JRQ Steel. , 2015, , .		1
44	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
45	The Prediction of Size Effect on J-R Curve for Eurofer97 Steel by Simplified Mechanical Model. , 2015, , .		0
46	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
47	The Effect of Specimen Size for the P91 Steel at Elevated and High Temperatures. , 2017, , .		0
48	PHYSICAL INTERPRETATION OF THE REFERENCE FEATURES IN TEXTURAL FRACTOGRAPHY OF FATIGUE FRACTURES. Acta Metallurgica Slovaca, 2013, 19, 141-148.	0.7	0
49	The Size Effect on J-R Curve for Construction Steels and its Prediction by Simplified Mechanical Model. , 2018, , .		0