

# Mikko Hokka

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

1,333  
citations

361413

20  
h-index

377865

34  
g-index

73  
all docs

73  
docs citations

73  
times ranked

1312  
citing authors

#	ARTICLE	IF	CITATIONS
1	Deformation behavior of TRIP and DP steels in tension at different temperatures over a wide range of strain rates. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 507, 124-131.	5.6	169
2	Effects of strain rate and confining pressure on the compressive behavior of Kuru granite. <i>International Journal of Impact Engineering</i> , 2016, 91, 183-193.	5.0	135
3	Highly ductile amorphous oxide at room temperature and high strain rate. <i>Science</i> , 2019, 366, 864-869.	12.6	107
4	Numerical and experimental study of percussive drilling with a triple-button bit on Kuru granite. <i>International Journal of Impact Engineering</i> , 2014, 72, 56-66.	5.0	69
5	Numerical modeling and experimentation of dynamic Brazilian disc test on Kuru granite. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2013, 59, 128-138.	5.8	68
6	Crystallization and sintering of borosilicate bioactive glasses for application in tissue engineering. <i>Journal of Materials Chemistry B</i> , 2017, 5, 4514-4525.	5.8	48
7	Uncoupling the effects of strain rate and adiabatic heating on strain induced martensitic phase transformations in a metastable austenitic steel. <i>Acta Materialia</i> , 2019, 176, 134-144.	7.9	47
8	Composite Hydrogels Using Bioinspired Approach with in Situ Fast Gelation and Self-Healing Ability as Future Injectable Biomaterial. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 11950-11960.	8.0	43
9	Adiabatic Heating of Austenitic Stainless Steels at Different Strain Rates. <i>Journal of Dynamic Behavior of Materials</i> , 2019, 5, 221-229.	1.7	41
10	Effects of Adiabatic Heating and Strain Rate on the Dynamic Response of a CoCrFeMnNi High-Entropy Alloy. <i>Journal of Dynamic Behavior of Materials</i> , 2019, 5, 320-330.	1.7	36
11	Luminescence of Er <sup>3+</sup> doped oxyfluoride phosphate glasses and glass-ceramics. <i>Journal of Alloys and Compounds</i> , 2018, 751, 224-230.	5.5	35
12	3D finite elements modelling of percussive rock drilling: Estimation of rate of penetration based on multiple impact simulations with a commercial drill bit. <i>Computers and Geotechnics</i> , 2018, 99, 55-63.	4.7	35
13	The Taylor-Quinney coefficients and strain hardening of commercially pure titanium, iron, copper, and tin in high rate compression. <i>International Journal of Impact Engineering</i> , 2021, 156, 103940.	5.0	35
14	Characterization and numerical modeling of high strain rate mechanical behavior of Ti-15-3 alloy for machining simulations. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 550, 350-357.	5.6	33
15	Dynamic Behavior and High Speed Machining of Ti-6246 and Alloy 625 Superalloys: Experimental and Modeling Approaches. <i>Experimental Mechanics</i> , 2014, 54, 199-210.	2.0	27
16	Application of DIC Technique for Studies of Kuru Granite Rock under Static and Dynamic Loading. , 2014, 3, 691-697.		25
17	In-vivo deformation measurements of the human heart by 3D Digital Image Correlation. <i>Journal of Biomechanics</i> , 2015, 48, 2217-2220.	2.1	25
18	Wear of cemented tungsten carbide percussive drill-bit inserts: Laboratory and field study. <i>Wear</i> , 2017, 386-387, 106-117.	3.1	25

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19	Effects of Heat Shock on the Dynamic Tensile Behavior of Granitic Rocks. <i>Rock Mechanics and Rock Engineering</i> , 2017, 50, 1171-1182.	5.4	24
20	Effects of Test Temperature and Low Temperature Thermal Cycling on the Dynamic Tensile Strength of Granitic Rocks. <i>Rock Mechanics and Rock Engineering</i> , 2021, 54, 443-454.	5.4	23
21	Numerical 3D modeling of the effects of strain rate and confining pressure on the compressive behavior of Kuru granite. <i>Computers and Geotechnics</i> , 2017, 88, 1-8.	4.7	21
22	Experimental and numerical study of drill bit drop tests on Kuru granite. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2017, 375, 20160176.	3.4	21
23	Dynamic Mode II fracture behavior of rocks under hydrostatic pressure using the short core in compression (SCC) method. <i>International Journal of Mining Science and Technology</i> , 2021, 31, 927-937.	10.3	21
24	Thermomechanical Behavior of Steels in Tension Studied with Synchronized Full-Field Deformation and Temperature Measurements. <i>Experimental Techniques</i> , 2021, 45, 627-643.	1.5	18
25	Persistent luminescent particles containing bioactive glasses: Prospect toward tracking in-vivo implant mineralization using biophotonic ceramics. <i>Journal of the European Ceramic Society</i> , 2018, 38, 287-295.	5.7	12
26	Adiabatic heating and damage onset in a pultruded glass fiber reinforced composite under compressive loading at different strain rates.. <i>International Journal of Impact Engineering</i> , 2021, 147, 103728.	5.0	12
27	Fluorine losses in Er <sup>3+</sup> oxyfluoride phosphate glasses and glass-ceramics. <i>Journal of Alloys and Compounds</i> , 2019, 797, 797-803.	5.5	11
28	Characterization of strain rate and temperature dependent mechanical behavior of TWIP steels. <i>European Physical Journal Special Topics</i> , 2006, 134, 1301-1306.	0.2	10
29	Investigation of the effect of different cutting parameters on chip formation of low-lead brass with experiments and simulations. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2013, 227, 1620-1634.	2.4	10
30	High Temperature Dynamic Tension Behavior of Titanium Tested with Two Different Methods. <i>Procedia Engineering</i> , 2017, 197, 130-139.	1.2	10
31	An Optical Method for the In-Vivo Characterization of the Biomechanical Response of the Right Ventricle. <i>Scientific Reports</i> , 2018, 8, 6831.	3.3	10
32	Effects of strain rate on strain-induced martensite nucleation and growth in 301LN metastable austenitic steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 831, 142218.	5.6	10
33	Skin-conformable printed supercapacitors and their performance in wear. <i>Scientific Reports</i> , 2020, 10, 15194.	3.3	9
34	Successful preparation of fluorine containing glasses with persistent luminescence using the direct doping method. <i>Journal of Alloys and Compounds</i> , 2019, 787, 1260-1264.	5.5	8
35	Phosphate/oxyfluorophosphate glass crystallization and its impact on dissolution and cytotoxicity. <i>Materials Science and Engineering C</i> , 2020, 117, 111269.	7.3	8
36	Experimental study of adhesively bonded natural fibre composite “ steel hybrid laminates. <i>Composites Part C: Open Access</i> , 2021, 5, 100157.	3.2	8

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37	High Strain Rate Torsion Properties of Ultrafine-Grained Aluminum. <i>Experimental Mechanics</i> , 2012, 52, 195-203.	2.0	7
38	A numerical and experimental study on the tensile behavior of plasma shocked granite under dynamic loading. <i>Rakenteiden Mekaniikka</i> , 2017, 50, 41-62.	0.2	7
39	Finite-Element Simulations of Split Hopkinson Test of Ti-Based Alloy. <i>Advanced Materials Research</i> , 0, 223, 296-303.	0.3	6
40	Effects of strain rate and surface cracks on the mechanical behaviour of Balmoral Red granite. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2017, 375, 20160179.	3.4	5
41	Optical, structural and luminescence properties of oxyfluoride phosphate glasses and glass-ceramics doped with Yb <sup>3+</sup> . <i>Journal of Non-Crystalline Solids: X</i> , 2019, 1, 100003.	1.2	5
42	Thermal jet drilling of granite rock: a numerical 3D finite-element study. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2021, 379, 20200128.	3.4	5
43	Dynamic flexural failure of rocks under hydrostatic pressure: Laboratory test and theoretical modeling. <i>International Journal of Impact Engineering</i> , 2021, 156, 103946.	5.0	5
44	Effects of Microstructure on the Dynamic Strain Aging in Ferritic-Pearlitic Steels. <i>Journal of Dynamic Behavior of Materials</i> , 2018, 4, 452-463.	1.7	4
45	Synchronized Full-Field Strain and Temperature Measurements of Commercially Pure Titanium under Tension at Elevated Temperatures and High Strain Rates. <i>Metals</i> , 2022, 12, 25.	2.3	4
46	Modelling of the dynamic behaviour of hard-to-machine alloys. <i>EPJ Web of Conferences</i> , 2012, 26, 04009.	0.3	3
47	Experimental investigation of the impact response of novel steelbiocomposite hybrid materials. <i>EPJ Web of Conferences</i> , 2018, 183, 02040.	0.3	3
48	Characterization of the anisotropic deformation of the right ventricle during open heart surgery. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2020, 23, 103-113.	1.6	3
49	Strain Hardening and Adiabatic Heating of Stainless Steels After a Sudden Increase of Strain Rate. <i>Journal of Dynamic Behavior of Materials</i> , 0, , 1.	1.7	3
50	DIC Measurements of the Human Heart During Cardiopulmonary Bypass Surgery. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2016, , 51-59.	0.5	2
51	Numerical modeling of the dynamic strain aging in steels at high strain rates and high temperatures. <i>EPJ Web of Conferences</i> , 2021, 250, 02023.	0.3	2
52	Simultaneous full-field strain and temperature measurements in high strain rate testing. , 2022, , 255-285.		2
53	Numerical modeling and experimentation of dynamic indentation with single and triple indenters on Kuru granite. , 2013, , 415-421.		2
54	Failure prediction for high-strain rate and out-of-plane compression of fibrous composites. <i>Composites Science and Technology</i> , 2022, 218, 109141.	7.8	2

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55	Characterization of the mechanical behavior of ultrafinegrained metals using digital image correlation. EPJ Web of Conferences, 2010, 6, 05005.	0.3	1
56	Dynamic Compression Behavior and Numerical Modeling of Ti-6246 Alloy at Different Temperatures. Key Engineering Materials, 2012, 527, 159-164.	0.4	1
57	A method for stereoscopic strain analysis of the right ventricle by digital image correlation during coronary bypass surgery: short communication. Biomedizinische Technik, 2015, 60, 257-61.	0.8	1
58	Digital Image Correlation Study of the Deformation and Functioning of the Human Heart during Open-Heart Surgery. Conference Proceedings of the Society for Experimental Mechanics, 2018, , 19-27.	0.5	1
59	Strain rate jump tests on an austenitic stainless steel with a modified tensile Hopkinson split bar. EPJ Web of Conferences, 2018, 183, 02026.	0.3	1
60	Simultaneous Full-Field Strain and Temperature Measurements in Tensile Hopkinson Bar Experiments at Extreme Temperatures. EPJ Web of Conferences, 2021, 250, 01015.	0.3	1
61	Impact damage resistance of novel adhesively bonded natural fibre composite “ Steel hybrid laminates. International Journal of Lightweight Materials and Manufacture, 2022, 5, 29-43.	2.1	1
62	Microstructure and texture evolution in high manganese TWIP steels. , 2009, , .		1
63	Effects of surface cracks and strain rate on the tensile behavior of Balmoral Red granite. EPJ Web of Conferences, 2015, 94, 02007.	0.3	0
64	Effects of microstructure on the dynamic strain aging of ferriticpearlitic steels at high strain rates. EPJ Web of Conferences, 2018, 183, 03009.	0.3	0
65	Temperature Dependence of Material Behaviour at High Strain-Rate. Journal of Dynamic Behavior of Materials, 2019, 5, 197-197.	1.7	0
66	Quantitative assessment of full field deformation of right ventricle during open heart surgery. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2021, 9, 157-165.	1.9	0
67	On the effect of the microstructure on the dynamic behaviour of Ti-6Al-4V. EPJ Web of Conferences, 2021, 250, 02013.	0.3	0
68	Some aspects of the behavior of metastable austenitic steels at high strain rates. EPJ Web of Conferences, 2021, 250, 03011.	0.3	0
69	Homogenization effects on simulated pultruded glass fibre reinforced laminate under compression “ from static to dynamic models. EPJ Web of Conferences, 2021, 250, 02034.	0.3	0
70	Dynamic Behavior and Numerical Modeling of Titanium 15-3-3-3 Alloy. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 235-242.	0.5	0