

# Vadim V Silberschmidt

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8778678/publications.pdf>

Version: 2024-02-01

561  
papers

10,663  
citations

44069

48  
h-index

74163

75  
g-index

577  
all docs

577  
docs citations

577  
times ranked

7073  
citing authors

#	ARTICLE	IF	CITATIONS
1	Modelling of nonlinear crack-wave interactions for damage detection based on ultrasound A review. <i>Journal of Sound and Vibration</i> , 2014, 333, 1097-1118.	3.9	252
2	Drilling in carbon/epoxy composites: Experimental investigations and finite element implementation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2013, 47, 41-51.	7.6	234
3	Behavior of aluminum oxide, intermetallics and voids in Cu-Al wire bonds. <i>Acta Materialia</i> , 2011, 59, 5661-5673.	7.9	202
4	Experimental investigations of forces and torque in conventional and ultrasonically-assisted drilling of cortical bone. <i>Medical Engineering and Physics</i> , 2011, 33, 234-239.	1.7	177
5	Characterization of ultrasonically peened and laser-shock peened surface layers of AISI 321 stainless steel. <i>Surface and Coatings Technology</i> , 2008, 202, 4875-4883.	4.8	155
6	Variability and anisotropy of mechanical behavior of cortical bone in tension and compression. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013, 21, 109-120.	3.1	151
7	Ultrasonically assisted turning of aviation materials: simulations and experimental study. <i>Ultrasonics</i> , 2004, 42, 81-86.	3.9	150
8	Size effects and idealized dislocation microstructure at small scales: Predictions of a Phenomenological model of Mesoscopic Field Dislocation Mechanics: Part I. <i>Journal of the Mechanics and Physics of Solids</i> , 2006, 54, 1687-1710.	4.8	138
9	Analysis of anisotropic viscoelastoplastic properties of cortical bone tissues. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 807-820.	3.1	118
10	Evolution of CuSn intermetallics between molten SnAgCu solder and Cu substrate. <i>Acta Materialia</i> , 2008, 56, 4291-4297.	7.9	111
11	Microstructures and properties of new Sn-Ag-Cu lead-free solder reinforced with Ni-coated graphene nanosheets. <i>Journal of Alloys and Compounds</i> , 2016, 656, 500-509.	5.5	109
12	Finite element approximation of field dislocation mechanics. <i>Journal of the Mechanics and Physics of Solids</i> , 2005, 53, 143-170.	4.8	108
13	Finite element analysis of ultrasonically assisted turning of Inconel 718. <i>Journal of Materials Processing Technology</i> , 2004, 153-154, 233-239.	6.3	107
14	Micro-scale modelling of bovine cortical bone fracture: Analysis of crack propagation and microstructure using X-FEM. <i>Computational Materials Science</i> , 2012, 52, 128-135.	3.0	106
15	Effect of ultrasonically-assisted drilling on carbon-fibre-reinforced plastics. <i>Journal of Sound and Vibration</i> , 2014, 333, 5939-5952.	3.9	102
16	A re-examination of the mechanism of thermosonic copper ball bonding on aluminium metallization pads. <i>Scripta Materialia</i> , 2009, 61, 165-168.	5.2	95
17	Analysis of forces in ultrasonically assisted turning. <i>Journal of Sound and Vibration</i> , 2007, 308, 845-854.	3.9	93
18	Chemical functionalization of graphene oxide for improving mechanical and thermal properties of polyurethane composites. <i>Materials and Design</i> , 2015, 85, 808-814.	7.0	93

#	ARTICLE	IF	CITATIONS
19	Temperature-dependent mechanical behaviour of PMMA: Experimental analysis and modelling. <i>Polymer Testing</i> , 2017, 58, 86-95.	4.8	90
20	Analysis of material response to ultrasonic vibration loading in turning Inconel 718. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 424, 318-325.	5.6	89
21	Finite element analysis of forces of plane cutting of cortical bone. <i>Computational Materials Science</i> , 2009, 46, 738-743.	3.0	89
22	Vibration characteristics of MR cantilever sandwich beams: experimental study. <i>Smart Materials and Structures</i> , 2010, 19, 015005.	3.5	89
23	Enhanced ultrasonically assisted turning of a $\hat{1}^2$ -titanium alloy. <i>Ultrasonics</i> , 2013, 53, 1242-1250.	3.9	87
24	Enhanced machinability of SiC-reinforced metal-matrix composite with hybrid turning. <i>Journal of Materials Processing Technology</i> , 2019, 268, 149-161.	6.3	86
25	Analysis of fracture processes in cortical bone tissue. <i>Engineering Fracture Mechanics</i> , 2013, 110, 448-458.	4.3	84
26	Analysis of a free machining $\hat{1}\pm\hat{1}^2$ titanium alloy using conventional and ultrasonically assisted turning. <i>Journal of Materials Processing Technology</i> , 2014, 214, 906-915.	6.3	82
27	Finite element simulations of ultrasonically assisted turning. <i>Computational Materials Science</i> , 2003, 28, 645-653.	3.0	79
28	Size effects and idealized dislocation microstructure at small scales: Predictions of a Phenomenological model of Mesoscopic Field Dislocation Mechanics: Part II. <i>Journal of the Mechanics and Physics of Solids</i> , 2006, 54, 1711-1743.	4.8	78
29	Tensile properties of semi-crystalline thermoplastic polymers: Effects of temperature and strain rates. <i>Polymer Testing</i> , 2013, 32, 413-425.	4.8	78
30	When superhydrophobic coatings are icephobic: Role of surface topology. <i>Surface and Coatings Technology</i> , 2019, 358, 207-214.	4.8	76
31	Growth of Intermetallic Compounds in Thermosonic Copper Wire Bonding on Aluminum Metallization. <i>Journal of Electronic Materials</i> , 2010, 39, 124-131.	2.2	75
32	Effect of lubrication and cutting parameters on ultrasonically assisted turning of Inconel 718. <i>Journal of Materials Processing Technology</i> , 2005, 162-163, 649-654.	6.3	72
33	Thermomechanical finite element simulations of ultrasonically assisted turning. <i>Computational Materials Science</i> , 2005, 32, 463-471.	3.0	67
34	Shear strength and fracture toughness of carbon fibre/epoxy interface: effect of surface treatment. <i>Materials and Design</i> , 2015, 85, 800-807.	7.0	67
35	Damage response of steel plate to underwater explosion: Effect of shaped charge liner. <i>International Journal of Impact Engineering</i> , 2017, 103, 38-49.	5.0	67
36	Generation of higher harmonics in longitudinal vibration of beams with breathing cracks. <i>Journal of Sound and Vibration</i> , 2016, 381, 206-219.	3.9	65

#	ARTICLE	IF	CITATIONS
37	3D finite element analysis of ultrasonically assisted turning. Computational Materials Science, 2007, 39, 149-154.	3.0	64
38	Improved analytical prediction of chip formation in orthogonal cutting of titanium alloy Ti6Al4V. International Journal of Mechanical Sciences, 2017, 133, 357-367.	6.7	63
39	FE/SPH modelling of orthogonal micro-machining of f.c.c. single crystal. Computational Materials Science, 2013, 78, 104-109.	3.0	61
40	Performance of Sn <sup>3.0Ag</sup> 0.5Cu composite solder with TiC reinforcement: Physical properties, solderability and microstructural evolution under isothermal ageing. Journal of Alloys and Compounds, 2016, 685, 680-689.	5.5	61
41	A micromechanism study of thermosonic gold wire bonding on aluminum pad. Journal of Applied Physics, 2010, 108, .	2.5	60
42	Experimental and Numerical Investigations in Conventional and Ultrasonically Assisted Drilling of CFRP Laminate. Procedia CIRP, 2012, 1, 455-459.	1.9	58
43	A novel concept to develop composite structures with isotropic negative Poisson's ratio: Effects of random inclusions. Composites Science and Technology, 2012, 72, 1848-1854.	7.8	58
44	Machinability of natural-fibre-reinforced polymer composites: Conventional vs ultrasonically-assisted machining. Composites Part A: Applied Science and Manufacturing, 2019, 119, 188-195.	7.6	58
45	Finite-element modelling of bending of CFRP laminates: Multiple delaminations. Computational Materials Science, 2012, 52, 147-156.	3.0	56
46	Computation of mechanical anisotropy in thermally bonded bicomponent fibre nonwovens. Computational Materials Science, 2012, 52, 157-163.	3.0	55
47	Initial formation of CuSn intermetallic compounds between molten SnAgCu solder and Cu substrate. Scripta Materialia, 2009, 60, 333-335.	5.2	53
48	Measurements of Surface Roughness in Conventional and Ultrasonically Assisted Bone Drilling. American Journal of Biomedical Sciences, 0, , 312-320.	0.2	53
49	Metamaterials with Negative Poisson's Ratio: A Review of Mechanical Properties and Deformation Mechanisms. Engineering Materials, 2015, , 155-179.	0.6	50
50	Microstructural evolution of Ti6Al4V in ultrasonically assisted cutting: Numerical modelling and experimental analysis. Ultrasonics, 2017, 78, 70-82.	3.9	50
51	Damage evolution in adhesive joints subjected to impact fatigue. Journal of Sound and Vibration, 2007, 308, 467-478.	3.9	49
52	Thermal analysis of orthogonal cutting of cortical bone using finite element simulations. International Journal of Experimental and Computational Biomechanics, 2010, 1, 236.	0.4	49
53	Finite element modelling of thermally bonded bicomponent fibre nonwovens: Tensile behaviour. Computational Materials Science, 2011, 50, 1286-1291.	3.0	49
54	Transparent icephobic coatings using bio-based epoxy resin. Materials and Design, 2018, 140, 516-523.	7.0	49

#	ARTICLE	IF	CITATIONS
55	Modelling of Ag <sub>3</sub> Sn coarsening and its effect on creep of Sn–Ag eutectics. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 427, 60-68.	5.6	48
56	2D finite element analysis of thermally bonded nonwoven materials: Continuous and discontinuous models. <i>Computational Materials Science</i> , 2009, 46, 700-707.	3.0	48
57	Damage in adhesively bonded CFRP joints: Sinusoidal and impact-fatigue. <i>Composites Science and Technology</i> , 2008, 68, 2663-2670.	7.8	47
58	Fracture process in cortical bone: X-FEM analysis of microstructured models. <i>International Journal of Fracture</i> , 2013, 184, 43-55.	2.2	47
59	Thermally enhanced ultrasonically assisted machining of Ti alloy. <i>CIRP Journal of Manufacturing Science and Technology</i> , 2014, 7, 159-167.	4.5	47
60	Surface-roughness Improvement in Ultrasonically Assisted Turning. <i>Procedia CIRP</i> , 2014, 13, 49-54.	1.9	47
61	Preparation, characterization and properties of polycaprolactone diol-functionalized multi-walled carbon nanotube/thermoplastic polyurethane composite. <i>Composites Part A: Applied Science and Manufacturing</i> , 2015, 70, 8-15.	7.6	47
62	In-situ SEM study of slip-controlled short-crack growth in single-crystal nickel superalloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 742, 564-572.	5.6	47
63	Finite element simulation of low-density thermally bonded nonwoven materials: Effects of orientation distribution function and arrangement of bond points. <i>Computational Materials Science</i> , 2011, 50, 1292-1298.	3.0	46
64	Dynamic bending behaviour of woven composites for sports products: Experiments and damage analysis. <i>Materials and Design</i> , 2015, 88, 149-156.	7.0	46
65	Comparing Machinability of Ti-15-3-3-3 and Ni-625 Alloys in Ulat. <i>Procedia CIRP</i> , 2012, 1, 330-335.	1.9	45
66	Numerical analysis of progressive damage in nonwoven fibrous networks under tension. <i>International Journal of Solids and Structures</i> , 2014, 51, 1670-1685.	2.7	45
67	Inelastic behaviour of bacterial cellulose hydrogel: In aqua cyclic tests. <i>Polymer Testing</i> , 2015, 44, 82-92.	4.8	45
68	Fracture of 3D-printed polymers: Crucial role of filament-scale geometric features. <i>Engineering Fracture Mechanics</i> , 2020, 224, 106818.	4.3	45
69	Intermetallic phase transformations in Au–Al wire bonds. <i>Intermetallics</i> , 2011, 19, 1808-1816.	3.9	44
70	Printed hydrogel nanocomposites: fine-tuning nanostructure for anisotropic mechanical and conductive properties. <i>Advanced Composites and Hybrid Materials</i> , 2020, 3, 315-324.	21.1	44
71	A new low-temperature hermetic composite edge seal for the fabrication of triple vacuum glazing. <i>Vacuum</i> , 2015, 120, 73-82.	3.5	43
72	Strength prediction for bi-axial braided composites by a multi-scale modelling approach. <i>Journal of Materials Science</i> , 2016, 51, 6002-6018.	3.7	43

#	ARTICLE	IF	CITATIONS
73	Low-cycle fatigue of single crystal nickel-based superalloy “ mechanical testing and TEM characterisation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 744, 538-547.	5.6	43
74	Experimental and Numerical Analysis of Damage in Woven GFRP Composites Under Large-deflection Bending. <i>Applied Composite Materials</i> , 2012, 19, 769-783.	2.5	42
75	Delamination in adhesively bonded CFRP joints: Standard fatigue, impact-fatigue and intermittent impact. <i>Composites Science and Technology</i> , 2008, 68, 2401-2409.	7.8	41
76	A Finite Element Model of Ultrasonically Assisted Drilling in Carbon/Epoxy Composites. <i>Procedia CIRP</i> , 2013, 8, 141-146.	1.9	41
77	Analysis of temperature in conventional and ultrasonically-assisted drilling of cortical bone with infrared thermography. <i>Technology and Health Care</i> , 2014, 22, 243-252.	1.2	41
78	Characterisation of mechanical behaviour and damage analysis of 2D woven composites under bending. <i>Composites Part B: Engineering</i> , 2015, 75, 156-166.	12.0	41
79	Braided textile composites for sports protection: Energy absorption and delamination in impact modelling. <i>Materials and Design</i> , 2017, 136, 258-269.	7.0	41
80	Underwater explosion of cylindrical charge near plates: Analysis of pressure characteristics and cavitation effects. <i>International Journal of Impact Engineering</i> , 2018, 121, 91-105.	5.0	41
81	Micro-texturing of polymer surfaces using lasers: a review. <i>International Journal of Advanced Manufacturing Technology</i> , 2022, 120, 103-135.	3.0	41
82	Hot Ultrasonically Assisted Turning of $\hat{2}$ -Ti Alloy. <i>Procedia CIRP</i> , 2012, 1, 336-341.	1.9	40
83	Penetration of cutting tool into cortical bone: Experimental and numerical investigation of anisotropic mechanical behaviour. <i>Journal of Biomechanics</i> , 2014, 47, 1117-1126.	2.1	40
84	Rotary ultrasonic bone drilling: Improved pullout strength and reduced damage. <i>Medical Engineering and Physics</i> , 2017, 41, 1-8.	1.7	40
85	Effect of environment on mechanical properties of 3D printed polylactide for biomedical applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 102, 103510.	3.1	40
86	Micromechanical modelling of SnAgCu solder joint under cyclic loading: Effect of grain orientation. <i>Computational Materials Science</i> , 2007, 39, 187-197.	3.0	39
87	Sequential permutation table method for optimization of stacking sequence in composite laminates. <i>Composite Structures</i> , 2016, 141, 240-252.	5.8	38
88	Time-dependent rheological behaviour of bacterial cellulose hydrogel. <i>Materials Science and Engineering C</i> , 2016, 58, 153-159.	7.3	38
89	A study of computational mechanics of 3D spacer fabric: factors affecting its compression deformation. <i>Journal of Materials Science</i> , 2012, 47, 3989-3999.	3.7	36
90	Mechanism of material removal in orthogonal cutting of cortical bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 104, 103618.	3.1	36

#	ARTICLE	IF	CITATIONS
91	Numerical analysis of thermo-mechanical behavior of indium micro-joint at cryogenic temperatures. Computational Materials Science, 2012, 52, 274-281.	3.0	35
92	SPH-FEM simulation of shaped-charge jet penetration into double hull: A comparison study for steel and SPS. Composite Structures, 2016, 155, 135-144.	5.8	34
93	Material model for modeling clay at high strain rates. International Journal of Impact Engineering, 2016, 90, 1-11.	5.0	34
94	Linear ultrasonic motor for absolute gravimeter. Ultrasonics, 2017, 77, 88-94.	3.9	34
95	Matrix cracking in cross-ply laminates: effect of randomness. Composites Part A: Applied Science and Manufacturing, 2005, 36, 129-135.	7.6	33
96	Damage modelling in woven-fabric CFRP laminates under large-deflection bending. Computational Materials Science, 2012, 64, 130-135.	3.0	33
97	Effect of micro-randomness on macroscopic properties and fracture of laminates. Journal of Materials Science, 2006, 41, 6768-6776.	3.7	32
98	Formation of Ag <sub>3</sub> Sn plates in SnAgCu solder bumps. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 2588-2591.	5.6	31
99	Effect of bonding duration and substrate temperature in copper ball bonding on aluminium pads: A TEM study of interfacial evolution. Microelectronics Reliability, 2011, 51, 113-118.	1.7	31
100	Analysis of forces in conventional and ultrasonically assisted plane cutting of cortical bone. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2013, 227, 636-642.	1.8	31
101	Micro-cutting of single-crystal metal: Finite-element analysis of deformation and material removal. International Journal of Mechanical Sciences, 2016, 118, 135-143.	6.7	31
102	Failure analysis of plain woven glass/epoxy laminates: Comparison of off-axis and biaxial tension loadings. Polymer Testing, 2017, 60, 307-320.	4.8	31
103	Meso-scale deformation and damage in thermally bonded nonwovens. Journal of Materials Science, 2013, 48, 2334-2345.	3.7	30
104	Optimising curvature of carbon fibre-reinforced polymer composite panel for improved blast resistance: Finite-element analysis. Materials & Design, 2014, 57, 719-727.	5.1	30
105	Improvements of machinability of aerospace-grade Inconel alloys with ultrasonically assisted hybrid machining. International Journal of Advanced Manufacturing Technology, 2019, 101, 1143-1156.	3.0	30
106	Damage and fracture in carbon fabric reinforced composites under impact bending. Composite Structures, 2013, 101, 144-156.	5.8	29
107	Effect of microstructure on anomalous strain-rate-dependent behaviour of bacterial cellulose hydrogel. Materials Science and Engineering C, 2016, 62, 130-136.	7.3	29
108	Numerical Modelling of Vibration-Assisted Turning of Ti-15333. Procedia CIRP, 2012, 1, 347-352.	1.9	28

#	ARTICLE	IF	CITATIONS
109	A parametric finite element analysis method for low-density thermally bonded nonwovens. <i>Computational Materials Science</i> , 2012, 52, 164-170.	3.0	28
110	Numerical modelling of damage initiation in low-density thermally bonded nonwovens. <i>Computational Materials Science</i> , 2012, 64, 112-115.	3.0	28
111	A composite material with Poisson's ratio tunable from positive to negative values: an experimental and numerical study. <i>Journal of Materials Science</i> , 2013, 48, 8493-8500.	3.7	28
112	Properties and application of polyimide-based composites by blending surface functionalized boron nitride nanoplates. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	2.6	28
113	Mechanical analysis of bi-component-fibre nonwovens: Finite-element strategy. <i>Composites Part B: Engineering</i> , 2015, 68, 327-335.	12.0	28
114	Application of Smoothed Particle Hydrodynamics in analysis of shaped-charge jet penetration caused by underwater explosion. <i>Ocean Engineering</i> , 2017, 145, 177-187.	4.3	28
115	Hybrid machining of metal-matrix composite. <i>Procedia CIRP</i> , 2019, 82, 184-189.	1.9	28
116	Significantly retarded interfacial reaction between an electroless Ni-W-P metallization and lead-free Sn-3.5Ag solder. <i>Journal of Alloys and Compounds</i> , 2013, 565, 11-16.	5.5	27
117	Ultrasonically assisted drilling of aerospace CFRP/Ti stacks. <i>Procedia CIRP</i> , 2018, 77, 383-386.	1.9	27
118	Simulations of delamination in CFRP laminates: Effect of microstructural randomness. <i>Computational Materials Science</i> , 2009, 46, 607-613.	3.0	26
119	New mechanisms of void growth in Au-Al wire bonds: Volumetric shrinkage and intermetallic oxidation. <i>Scripta Materialia</i> , 2011, 65, 642-645.	5.2	26
120	Damage accumulation in braided textiles-reinforced composites under repeated impacts: Experimental and numerical studies. <i>Composite Structures</i> , 2018, 204, 256-267.	5.8	26
121	Comprehensive experimental analysis and sustainability assessment of machining Nimonic 90 using ultrasonic-assisted turning facility. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 109, 1447-1462.	3.0	26
122	Continuum theory and methods for coarse-grained, mesoscopic plasticity. <i>Scripta Materialia</i> , 2006, 54, 705-710.	5.2	25
123	Cutting forces in ultrasonically assisted drilling of carbon fibre-reinforced plastics. <i>Journal of Physics: Conference Series</i> , 2012, 382, 012019.	0.4	25
124	A numerical study of gypsum plasterboard behaviour under standard and natural fire conditions. <i>Fire and Materials</i> , 2012, 36, 107-126.	2.0	25
125	Numerical analysis of composite structure with in-plane isotropic negative Poisson's ratio: Effects of materials properties and geometry features of inclusions. <i>Composites Part B: Engineering</i> , 2014, 58, 152-159.	12.0	25
126	Modeling of normal force and finishing torque considering shearing and ploughing effects in ultrasonic assisted magnetic abrasive finishing process with sintered magnetic abrasive powder. <i>Wear</i> , 2017, 390-391, 11-22.	3.1	25



#	ARTICLE	IF	CITATIONS
127	Coupling crystal plasticity and continuum damage mechanics for creep assessment in Cr-based power-plant steel. <i>Mechanics of Materials</i> , 2019, 130, 29-38.	3.2	25
128	Thermal performance of additively manufactured polymer lattices. <i>Journal of Building Engineering</i> , 2021, 39, 102243.	3.4	25
129	Computational Study of Ultrasonically-Assisted Turning of Ti Alloys. <i>Advanced Materials Research</i> , 2011, 223, 30-36.	0.3	24
130	Behaviour of semi-crystalline thermoplastic polymers: Experimental studies and simulations. <i>Computational Materials Science</i> , 2012, 52, 139-146.	3.0	24
131	Mechanical and thermal characterisation of poly (l-lactide) composites reinforced with hemp fibres. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012010.	0.4	24
132	Thermo-migration behavior of SAC305 lead-free solder reinforced with fullerene nanoparticles. <i>Journal of Materials Science</i> , 2016, 51, 10077-10091.	3.7	24
133	Temperature-dependent crystal-plasticity model for magnesium: A bottom-up approach. <i>Mechanics of Materials</i> , 2017, 113, 44-56.	3.2	24
134	Structural integrity analysis and damage assessment of a long composite wind turbine blade under extreme loading. <i>Composite Structures</i> , 2020, 246, 112426.	5.8	24
135	Microstructural and Mechanical Characterization of Thin-Walled Tube Manufactured with Selective Laser Melting for Stent Application. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 696-710.	2.5	24
136	Intelligent Manipulator with Flexible Link and Joint: Modeling and Vibration Control. <i>Shock and Vibration</i> , 2020, 2020, 1-15.	0.6	24
137	Mixed-mode crack growth in bonded composite joints under standard and impact-fatigue loading. <i>Journal of Materials Science</i> , 2008, 43, 6704-6713.	3.7	23
138	Ti particle-reinforced surface layers in Al: Effect of particle size on microstructure, hardness and wear. <i>Materials Characterization</i> , 2010, 61, 1126-1134.	4.4	23
139	Non-uniformity of deformation in low-density thermally point bonded non-woven material: effect of microstructure. <i>Journal of Materials Science</i> , 2011, 46, 307-315.	3.7	23
140	An advanced numerical tool to study fatigue crack propagation in aluminium plates repaired with a composite patch. <i>Engineering Fracture Mechanics</i> , 2013, 99, 62-78.	4.3	23
141	Numerical modelling of micro-machining of f.c.c. single crystal: Influence of strain gradients. <i>Computational Materials Science</i> , 2014, 94, 273-278.	3.0	23
142	Polydimethylsiloxane and poly(ether) ether ketone functionally graded composites for biomedical applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 93, 130-142.	3.1	23
143	Numerical modelling of low-density cellular materials. <i>Computational Materials Science</i> , 2008, 43, 65-74.	3.0	22
144	Finite element analysis of drilling in carbon fiber reinforced polymer composites. <i>Journal of Physics: Conference Series</i> , 2012, 382, 012014.	0.4	22

#	ARTICLE	IF	CITATIONS
145	Crack as modulator, detector and amplifier in structural health monitoring. <i>Journal of Sound and Vibration</i> , 2012, 331, 3587-3598.	3.9	22
146	Assessing stiffness of nanofibres in bacterial cellulose hydrogels: Numerical-experimental framework. <i>Materials Science and Engineering C</i> , 2017, 77, 9-18.	7.3	22
147	Formation of Sn dendrites and SnAg eutectics in a SnAgCu solder. <i>Scripta Materialia</i> , 2009, 61, 682-685.	5.2	21
148	Analysis of Forces in Vibro-Impact and Hot Vibro-Impact Turning of Advanced Alloys. <i>Applied Mechanics and Materials</i> , 0, 70, 315-320.	0.2	21
149	Through-thickness stress relaxation in bacterial cellulose hydrogel. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 59, 90-98.	3.1	21
150	Effect of graphene-oxide enhancement on large-deflection bending performance of thermoplastic polyurethane elastomer. <i>Composites Part B: Engineering</i> , 2016, 89, 1-8.	12.0	21
151	Comparison of plane-stress, generalized-plane-strain and 3D FEM elastic-plastic analyses of thick-walled cylinders subjected to radial thermal gradient. <i>International Journal of Mechanical Sciences</i> , 2017, 131-132, 744-752.	6.7	21
152	Hybrid machining process: experimental and numerical analysis of hot ultrasonically assisted turning. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 97, 2173-2192.	3.0	21
153	Tensile properties of 3D multi-layer wrapping braided composite: Progressive damage analysis. <i>Composites Part B: Engineering</i> , 2019, 176, 107334.	12.0	21
154	Mechanistic evaluation of long-term in-stent restenosis based on models of tissue damage and growth. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 1425-1446.	2.8	21
155	Energy-Based Analysis of Ultrasonically Assisted Turning. <i>Shock and Vibration</i> , 2011, 18, 333-341.	0.6	21
156	Initial bond formation in thermosonic gold ball bonding on aluminium metallization pads. <i>Journal of Materials Processing Technology</i> , 2010, 210, 1035-1042.	6.3	20
157	Finite-Element Analysis of Forces in Drilling of Ti-Alloys at Elevated Temperature. <i>Solid State Phenomena</i> , 0, 188, 250-255.	0.3	20
158	Indentation studies in b.c.c. crystals with enhanced model of strain-gradient crystal plasticity. <i>Computational Materials Science</i> , 2013, 79, 896-902.	3.0	20
159	Mechanical behaviour of nonwovens: Analysis of effect of manufacturing parameters with parametric computational model. <i>Computational Materials Science</i> , 2014, 94, 8-16.	3.0	20
160	A framework for design and optimization of tapered composite structures. Part I: From individual panel to global blending structure. <i>Composite Structures</i> , 2016, 154, 106-128.	5.8	20
161	Indentation in single-crystal 6H silicon carbide: Experimental investigations and finite element analysis. <i>International Journal of Mechanical Sciences</i> , 2018, 144, 858-864.	6.7	20
162	Interlayer bonding has bulk-material strength in extrusion additive manufacturing: New understanding of anisotropy. <i>Additive Manufacturing</i> , 2020, 34, 101297.	3.0	20

#	ARTICLE	IF	CITATIONS
163	Matrix cracking in cross-ply laminates: effect of randomness. Composites Part A: Applied Science and Manufacturing, 2005, 36, 129-135.	7.6	20
164	Analysis of Cracking in Rock Salt. Rock Mechanics and Rock Engineering, 2000, 33, 53-70.	5.4	19
165	Analysis of Machinability of Ti- and Ni-Based Alloys. Solid State Phenomena, 0, 188, 330-338.	0.3	19
166	A risk based approach to asset integrity management. Journal of Quality in Maintenance Engineering, 2012, 18, 417-431.	1.7	19
167	Thermal fatigue life estimation and delamination mechanics studies of multilayered MEMS structures. Microelectronics Reliability, 2012, 52, 1665-1678.	1.7	19
168	Finite Element Modelling of Conventional and Hybrid Oblique Turning Processes of Titanium Alloy. Procedia CIRP, 2013, 8, 510-515.	1.9	19
169	Experimental Study on the Effect of Point Angle on Force and Temperature in Ultrasonically Assisted Bone Drilling. Journal of Medical and Biological Engineering, 2018, 38, 236-243.	1.8	19
170	Characterising variability and regional correlations of microstructure and mechanical competence of human tibial trabecular bone: An in-vivo HR-pQCT study. Bone, 2019, 121, 139-148.	2.9	19
171	Dry vs. wet: Properties and performance of collagen films. Part I. Mechanical behaviour and strain-rate effect. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 103983.	3.1	19
172	Mesomechanical modelling of SnAgCu solder joints in flip chip. Computational Materials Science, 2008, 43, 199-211.	3.0	18
173	Effect of ultrasonic energy on nanoscale interfacial structure in copper wire bonding on aluminium pads. Journal Physics D: Applied Physics, 2011, 44, 145301.	2.8	18
174	Effect of Cutting Conditions on Temperature Generated in Drilling Process: a FEA Approach. Advanced Materials Research, 0, 223, 240-246.	0.3	18
175	Modeling of Micro-machining Single-crystal f.c.c. Metals. Procedia CIRP, 2013, 8, 346-350.	1.9	18
176	Characterisation and numerical modelling of complex deformation behaviour in thermally bonded nonwovens. Computational Materials Science, 2013, 71, 165-171.	3.0	18
177	Evolution and interaction of damage modes in fabric-reinforced composites under dynamic flexural loading. Composites Science and Technology, 2014, 92, 55-63.	7.8	18
178	Crack initiation and propagation in ductile specimens with notches: experimental and numerical study. Acta Mechanica, 2016, 227, 203-215.	2.1	18
179	Incorporation and evolution of ZrO <sub>2</sub> nano-particles in Pt-modified aluminide coating for high temperature applications. Surface and Coatings Technology, 2017, 311, 238-247.	4.8	18
180	Low cycle fatigue of a directionally solidified nickel-based superalloy: Testing, characterisation and modelling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 708, 503-513.	5.6	18

#	ARTICLE	IF	CITATIONS
181	Experimental and computational studies of poly-L-lactic acid for cardiovascular applications: recent progress. <i>Mechanics of Advanced Materials and Modern Processes</i> , 2017, 3, .	2.2	18
182	Failure behaviour of short-fibre-reinforced PBT composites: Effect of strain rate. <i>Engineering Failure Analysis</i> , 2019, 105, 466-476.	4.0	18
183	Multi-objective optimization of ultrasonic-assisted magnetic abrasive finishing process. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 101, 1661-1670.	3.0	18
184	Damage and damping of short-glass-fibre-reinforced PBT composites under dynamic conditions: Effect of matrix behaviour. <i>Composite Structures</i> , 2019, 226, 111286.	5.8	17
185	SPH-BEM simulation of underwater explosion and bubble dynamics near rigid wall. <i>Science China Technological Sciences</i> , 2019, 62, 1082-1093.	4.0	17
186	Deformation and damage of random fibrous networks. <i>International Journal of Solids and Structures</i> , 2020, 184, 233-247.	2.7	17
187	Analytical prediction of shear angle and frictional behaviour in vibration-assisted cutting. <i>Journal of Manufacturing Processes</i> , 2021, 62, 37-46.	5.9	17
188	The effect of material stochasticity on crack-damage interaction and crack propagation. <i>Engineering Fracture Mechanics</i> , 1994, 48, 379-387.	4.3	16
189	Analysis of thermal residual stresses in duplex-type materials. <i>Computational Materials Science</i> , 1999, 16, 39-52.	3.0	16
190	Interaction of Matrix Cracking and Delamination in Cross-ply Laminates: Simulations with Stochastic Cohesive Zone Elements. <i>Applied Composite Materials</i> , 2011, 18, 3-16.	2.5	16
191	An effective thermal property framework for softwood in parametric design fires: Comparison of the Eurocode 5 parametric charring approach and advanced calculation models. <i>Construction and Building Materials</i> , 2011, 25, 2584-2595.	7.2	16
192	Ultrasonically Assisted Drilling of Carbon Fibre Reinforced Plastics. <i>Solid State Phenomena</i> , 2012, 188, 170-175.	0.3	16
193	Influence of strain gradients on lattice rotation in nano-indentation experiments: A numerical study. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 608, 73-81.	5.6	16
194	Retained ratio of reinforcement in SAC305 composite solder joints: effect of reinforcement type, processing and reflow cycle. <i>Soldering and Surface Mount Technology</i> , 2016, 28, 159-166.	1.5	16
195	Mechanically Robust Transparent Anti-icing Coatings: Roles of Dispersion Status of Titanate Nanotubes. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800773.	3.7	16
196	A review: microstructure and properties of tin-silver-copper lead-free solder series for the applications of electronics. <i>Soldering and Surface Mount Technology</i> , 2019, 32, 115-126.	1.5	16
197	Finite element evaluation of artery damage in deployment of polymeric stent with pre- and post-dilation. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 47-60.	2.8	16
198	Finite element analysis of lead-free surface mount devices. <i>Computational Materials Science</i> , 2008, 43, 212-220.	3.0	15

#	ARTICLE	IF	CITATIONS
199	Large scale natural fire tests on protected engineered timber floor systems. Fire Safety Journal, 2010, 45, 168-182.	3.1	15
200	Turning of Advanced Alloys with Vibrating Cutting Tool. Solid State Phenomena, 2012, 188, 277-284.	0.3	15
201	Response of semi-crystalline thermoplastic polymers to dynamic loading: A finite element study. Computational Materials Science, 2012, 64, 116-121.	3.0	15
202	Hybrid equilibrium finite element formulation for composite beams with partial interaction. Composite Structures, 2014, 108, 646-656.	5.8	15
203	Controlled failure warning and mitigation of prematurely failing beam through adhesive. Composite Structures, 2017, 161, 119-131.	5.8	15
204	Microstructural evolution of 96.5Sn-3Ag-0.5Cu lead free solder reinforced with nickel-coated graphene reinforcements under large temperature gradient. Journal of Materials Science: Materials in Electronics, 2018, 29, 5253-5263.	2.2	15
205	Hybrid-hybrid machining of SiC-reinforced aluminium metal matrix composite. Manufacturing Letters, 2022, 32, 63-66.	2.2	15
206	Effects of process parameters on bondability in thermosonic copper ball bonding. , 2008, , .		14
207	Modelling of Damage Evolution in Braided Composites: Recent Developments. Mechanics of Advanced Materials and Modern Processes, 2017, 3, .	2.2	14
208	Experimental studies of shear bands in Zr-Cu metallic glass. Journal of Non-Crystalline Solids, 2018, 484, 40-48.	3.1	14
209	Modeling of finishing force and torque in ultrasonic-assisted magnetic abrasive finishing process. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 411-425.	2.4	14
210	Numerical study of crack initiation and growth in human cortical bone: Effect of micro-morphology. Engineering Fracture Mechanics, 2020, 232, 107051.	4.3	14
211	Printability and mechanical performance of biomedical PDMS-PEEK composites developed for material extrusion. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 115, 104291.	3.1	14
212	Exploring the Mechanical Properties and Performance of Type-I Collagen at Various Length Scales: A Progress Report. Materials, 2022, 15, 2753.	2.9	14
213	Fractal models in rock fracture analysis. Terra Nova, 1990, 2, 483-488.	2.1	13
214	MODEL OF MATRIX CRACKING IN CARBON FIBER-REINFORCED CROSS-PLY LAMINATES. Mechanics of Advanced Materials and Structures, 1997, 4, 23-38.	2.6	13
215	Viscoelasticity of multi-layer textile reinforced polymer composites used in soccer balls. Journal of Materials Science, 2008, 43, 2833-2843.	3.7	13
216	Stresses in ultrasonically assisted bone cutting. Journal of Physics: Conference Series, 2009, 181, 012014.	0.4	13

#	ARTICLE	IF	CITATIONS
217	Full-scale natural fire tests on gypsum lined structural insulated panel (SIP) and engineered floor joist assemblies. <i>Fire Safety Journal</i> , 2011, 46, 528-542.	3.1	13
218	Analysis of Forces and Temperatures in Conventional and Ultrasonically-Assisted Cutting of Bone. <i>Advanced Materials Research</i> , 2011, 223, 247-254.	0.3	13
219	Comparative study of conventional and ultrasonically-assisted bone drilling. <i>Technology and Health Care</i> , 2014, 22, 253-262.	1.2	13
220	Effect of through-thickness compression on in-plane tensile strength of glass/epoxy composites: Experimental study. <i>Polymer Testing</i> , 2016, 49, 1-7.	4.8	13
221	Dynamic interfacial fracture of a double cantilever beam. <i>Engineering Fracture Mechanics</i> , 2020, 225, 106246.	4.3	13
222	Effect of Stochasticity on the Damage Accumulation in Solids. <i>International Journal of Damage Mechanics</i> , 1994, 3, 57-70.	4.2	12
223	SCALING AND MULTIFRACTAL CHARACTER OF MATRIX CRACKING IN CARBON FIBRE-REINFORCED CROSS-PLY LAMINATES. <i>Mechanics of Advanced Materials and Structures</i> , 1995, 2, 243-255.	0.3	12
224	Thermally induced surface roughness in austenitic-ferritic duplex stainless steels. <i>Acta Materialia</i> , 2003, 51, 1525-1537.	7.9	12
225	Crack propagation in random materials: computational analysis. <i>Computational Materials Science</i> , 2003, 26, 159-166.	3.0	12
226	Impact Fatigue of Adhesive Joints. <i>Key Engineering Materials</i> , 0, 399, 71-78.	0.4	12
227	Creep damage study at powercycling of lead-free surface mount device. <i>Computational Materials Science</i> , 2009, 45, 638-645.	3.0	12
228	The role of bonding duration in wire bond formation: a study of footprints of thermosonic gold wire on aluminium pad. <i>Microelectronics International</i> , 2010, 27, 11-16.	0.6	12
229	On the modelling of dynamic structures with discontinuities. <i>Nonlinear Dynamics</i> , 2012, 67, 2651-2669.	5.2	12
230	Ballistic impact behaviour of woven fabric composite: Finite element analysis and experiments. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012019.	0.4	12
231	In-vitro experimental analysis and numerical study of temperature in bone drilling. <i>Technology and Health Care</i> , 2015, 23, 775-783.	1.2	12
232	Modelling of Vibration Assisted Machining f.c.c Single Crystal. <i>Procedia CIRP</i> , 2015, 31, 393-398.	1.9	12
233	Effects of surface-functionalized aluminum nitride on thermal, electrical, and mechanical behaviors of polyarylene ether nitrile-based composites. <i>Polymer Composites</i> , 2016, 37, 3033-3041.	4.6	12
234	Nonwovens modelling: a review of finite-element strategies. <i>Journal of the Textile Institute</i> , 2016, 107, 225-232.	1.9	12

#	ARTICLE	IF	CITATIONS
235	Mechanical and chemical characterisation of bioresorbable polymeric stent over two-year in vitro degradation. <i>Journal of Biomaterials Applications</i> , 2019, 34, 61-73.	2.4	12
236	Dry vs. wet: Properties and performance of collagen films. Part II. Cyclic and time-dependent behaviours. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 112, 104040.	3.1	12
237	High-impact exercise stimulated localised adaptation of microarchitecture across distal tibia in postmenopausal women. <i>Osteoporosis International</i> , 2021, 32, 907-919.	3.1	12
238	Impact of polyurea-coated metallic targets: Computational framework. <i>Composite Structures</i> , 2021, 267, 113893.	5.8	12
239	Patient-specific modelling of stent overlap: Lumen gain, tissue damage and in-stent restenosis. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 109, 103836.	3.1	12
240	On material immanent ratchetting of two-phase materials under cyclic purely thermal loading. <i>Archive of Applied Mechanics</i> , 1999, 69, 727-750.	2.2	11
241	Semi-analytical analysis of thermally induced damage in thin ceramic coatings. <i>International Journal of Solids and Structures</i> , 2005, 42, 4738-4757.	2.7	11
242	Facilitating intermetallic formation in wire bonding by applying a pre-ultrasonic energy. <i>Microelectronic Engineering</i> , 2011, 88, 3155-3157.	2.4	11
243	Viscoelasticity of periodontal ligament: an analytical model. <i>Mechanics of Advanced Materials and Modern Processes</i> , 2015, 1, 7.	2.2	11
244	Repair of damage in aircraft composite sound-absorbing panels. <i>Composite Structures</i> , 2015, 120, 153-166.	5.8	11
245	Size-dependent crystal plasticity: From micro-pillar compression to bending. <i>Mechanics of Materials</i> , 2016, 100, 31-40.	3.2	11
246	Strain-gradient crystal-plasticity modelling of micro-cutting of b.c.c. single crystal. <i>Meccanica</i> , 2016, 51, 371-381.	2.0	11
247	A crystal-plasticity model of extruded AM30 magnesium alloy. <i>Computational Materials Science</i> , 2019, 170, 109140.	3.0	11
248	Experimental investigation on the effect of drill quality on the performance of bone drilling. <i>Biomedizinische Technik</i> , 2020, 65, 113-120.	0.8	11
249	The fractal characterization of propagating cracks. <i>International Journal of Fracture</i> , 1992, 56, R33-R38.	2.2	10
250	A Model to Predict the Anomalous Fatigue Crack Growth Behaviour Seen in Mixed Mechanism Fracture. <i>Journal of Adhesion</i> , 2010, 86, 522-538.	3.0	10
251	Modelling the effect of microstructural randomness on the mechanical response of composite laminates through the application of stochastic cohesive zone elements. <i>Computational Materials Science</i> , 2012, 52, 95-100.	3.0	10
252	Finite element modelling of fibrous networks: Analysis of strain distribution in fibres under tensile load. <i>Computational Materials Science</i> , 2013, 79, 143-158.	3.0	10

#	ARTICLE	IF	CITATIONS
253	Characterization and application of aggregated porous copper oxide flakes for cupric source of copper electrodeposition. <i>Materials Letters</i> , 2015, 139, 458-461.	2.6	10
254	Numerical Representation of Multiple Premature Failures in Steel-Plated RC Beams. <i>International Journal of Computational Methods</i> , 2017, 14, 1750035.	1.3	10
255	Effect of micro-morphology of cortical bone tissue on fracture toughness and crack propagation. <i>Procedia Structural Integrity</i> , 2017, 6, 64-68.	0.8	10
256	3D DDD modelling of dislocationâ€“precipitate interaction in a nickel-based single crystal superalloy under cyclic deformation. <i>Philosophical Magazine</i> , 2018, 98, 1550-1575.	1.6	10
257	Dynamic delamination on elastic interface. <i>Composite Structures</i> , 2020, 234, 111670.	5.8	10
258	Delamination propagation under high loading rate. <i>Composite Structures</i> , 2020, 253, 112734.	5.8	10
259	CONVEX (CONtinuously Varied EXtrusion): A new scale of design for additive manufacturing. <i>Additive Manufacturing</i> , 2021, 37, 101576.	3.0	10
260	Mechanical performance of 3D printed polylactide during degradation. <i>Additive Manufacturing</i> , 2021, 38, 101764.	3.0	10
261	A computational study of fatigue resistance of nitinol stents subjected to walkâ€“induced femoropopliteal artery motion. <i>Journal of Biomechanics</i> , 2021, 118, 110295.	2.1	10
262	Title is missing!. <i>Journal of Medical and Biological Engineering</i> , 2013, , .	1.8	10
263	Stability and mechanical performance of collagen films under different environmental conditions. <i>Polymer Degradation and Stability</i> , 2022, 197, 109853.	5.8	10
264	Fracture behaviour and toughening mechanisms of dry and wet collagen. <i>Acta Biomaterialia</i> , 2022, 142, 174-184.	8.3	10
265	Impact fatigue in adhesive joints. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2008, 222, 1981-1994.	2.1	9
266	Analysis of Nonlinear Shear Deformations in CFRP and GFRP Textile Laminates. <i>Applied Mechanics and Materials</i> , 0, 70, 363-368.	0.2	9
267	Dynamic Response of Thermally Bonded Bicomponent Fibre Nonwovens. <i>Applied Mechanics and Materials</i> , 0, 70, 405-409.	0.2	9
268	Finite element analysis of the high strain rate testing of polymeric materials. <i>Journal of Physics: Conference Series</i> , 2012, 382, 012043.	0.4	9
269	Strength of fibres in low-density thermally bonded nonwovens: An experimental investigation. <i>Journal of Physics: Conference Series</i> , 2012, 382, 012018.	0.4	9
270	On-line analysis of cracking in cortical bone under wedge penetration. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2012, 226, 709-717.	1.8	9



#	ARTICLE	IF	CITATIONS
271	Ti Alloy with Enhanced Machinability in UAT Turning. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2768-2775.	2.2	9
272	Relative behaviour of premature failures in adhesively plated RC beam using controllable and existing parameters. Composite Structures, 2017, 180, 75-87.	5.8	9
273	A framework for design and optimization of tapered composite structures. Part II: Enhanced design framework with a global blending model. Composite Structures, 2018, 188, 531-552.	5.8	9
274	Mesoscale damage analysis of needle-punched carbon/carbon composite considering randomness of inherent defects. Composites Science and Technology, 2019, 183, 107821.	7.8	9
275	Ice vs. steel: Ballistic impact of woven carbon/epoxy composites. Part II – Numerical modelling. Engineering Fracture Mechanics, 2020, 225, 106297.	4.3	9
276	Mechanical modification of bacterial cellulose hydrogel under biaxial cyclic tension. Mechanics of Materials, 2020, 142, 103272.	3.2	9
277	Size effect in flexural behaviour of unidirectional GFRP composites. Journal of Mechanical Science and Technology, 2020, 34, 5053-5061.	1.5	9
278	Interfacial debonding in compacted graphite iron: effect of thermal loading. Procedia Structural Integrity, 2020, 28, 1286-1294.	0.8	9
279	Thermal Loading of Duplex Steels. Journal of Engineering Materials and Technology, Transactions of the ASME, 2003, 125, 56-64.	1.4	8
280	Effect of material's randomness on scaling of crack propagation in ceramics. International Journal of Fracture, 2006, 140, 73-85.	2.2	8
281	Account for Random Microstructure in Multiscale Models. , 2008, , 1-35.		8
282	Analysis of nonlinear deformations and damage in CFRP textile laminates. Journal of Physics: Conference Series, 2011, 305, 012045.	0.4	8
283	Analysis of Creep Behavior of Polypropylene Fibers. Applied Mechanics and Materials, 0, 70, 410-415.	0.2	8
284	Indentation in F.C.C. Single Crystals. Solid State Phenomena, 2012, 188, 219-225.	0.3	8
285	Damage in woven CFRP laminates subjected to low velocity impacts. Journal of Physics: Conference Series, 2012, 382, 012015.	0.4	8
286	Ultrasonically assisted turning of Ti-6Al-2Sn-4Zr-6Mo. Journal of Physics: Conference Series, 2012, 382, 012016.	0.4	8
287	Parametric code for generation of finite element model of nonwovens accounting for orientation distribution of fibres. International Journal for Numerical Methods in Engineering, 2013, 94, 441-453.	2.8	8
288	Large deformation of thermally bonded random fibrous networks: microstructural changes and damage. Journal of Materials Science, 2014, 49, 4081-4092.	3.7	8

#	ARTICLE	IF	CITATIONS
289	Interfacial fracture of 3D-printed bioresorbable polymers. <i>Procedia Structural Integrity</i> , 2018, 13, 625-630.	0.8	8
290	Ultrasonically assisted drilling in marble. <i>Journal of Sound and Vibration</i> , 2019, 460, 114880.	3.9	8
291	Modeling of friction in manufacturing processes. , 2020, , 415-444.		8
292	A brief review on the mechanical behavior of nonwoven fabrics. <i>Journal of Engineered Fibers and Fabrics</i> , 2020, 15, 155892502097019.	1.0	8
293	Analytical corrections for double-cantilever beam tests. <i>International Journal of Fracture</i> , 2021, 229, 269-276.	2.2	8
294	Simulation of buckling-driven progressive damage in composite wind turbine blade under extreme wind loads. <i>Engineering Failure Analysis</i> , 2022, 140, 106574.	4.0	8
295	On the Multifractal Character of Load Distribution Near the Cracks. <i>Europhysics Letters</i> , 1993, 23, 593-598.	2.0	7
296	Multifractal characteristics of matrix cracking in laminates under T-fatigue. <i>Computational Materials Science</i> , 1998, 13, 154-159.	3.0	7
297	Stresses in Ultrasonically Assisted Turning. <i>Applied Mechanics and Materials</i> , 2006, 5-6, 351-358.	0.2	7
298	Effect of Impact-Fatigue on Damage in Adhesive Joints. <i>Key Engineering Materials</i> , 2007, 347, 653-658.	0.4	7
299	Tensile Behavior of Low Density Thermally Bonded Nonwoven Material. <i>Journal of Engineered Fibers and Fabrics</i> , 2009, 4, 155892500900400.	1.0	7
300	Crack Propagation in a Toughened Epoxy Adhesive under Repeated Impacts. <i>Shock and Vibration</i> , 2011, 18, 157-170.	0.6	7
301	Finite element modelling of thermally bonded nonwovens: Effect of manufacturing parameters on tensile stiffness. <i>Computational Materials Science</i> , 2012, 64, 192-197.	3.0	7
302	Control of ultrasonic transducers for machining applications. , 2013, , .		7
303	Analysis of rate-dependent tensile properties of polypropylene fibres used in thermally bonded nonwovens. <i>Journal of the Textile Institute</i> , 2013, 104, 965-971.	1.9	7
304	Study of ultrasonically assisted turning of stainless steel and brass alloys. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012037.	0.4	7
305	Numerical analysis of the interactive damage mechanisms in two-dimensional carbon fabric-reinforced thermoplastic composites under low velocity impacts. <i>Journal of Composite Materials</i> , 2015, 49, 3127-3143.	2.4	7
306	Fracture Behaviour of Bacterial Cellulose Hydrogel: Microstructural Effect. <i>Procedia Structural Integrity</i> , 2016, 2, 1237-1243.	0.8	7

#	ARTICLE	IF	CITATIONS
307	Effect of Machining on Shear-Zone Microstructure in Ti-15V-3Cr-3Al-3Sn: Conventional and Ultrasonically Assisted Turning. <i>Journal of Materials Engineering and Performance</i> , 2016, 25, 3766-3773.	2.5	7
308	Numerical Simulation of Bone Cutting. , 2018, , 187-201.		7
309	Ice vs. steel: Ballistic impact of woven carbon/epoxy composites. Part I " Deformation and damage behaviour. <i>Engineering Fracture Mechanics</i> , 2020, 225, 106270.	4.3	7
310	Ultrasonically Assisted Machining of Titanium Alloys. <i>Materials Forming, Machining and Tribology</i> , 2014, , 131-147.	1.1	7
311	Microstructure-based damage and fracture modelling of alumina coatings. <i>Computational Materials Science</i> , 2005, 32, 620-628.	3.0	6
312	Grain Features of SnAgCu Solder and their Effect on Mechanical Behavior of Micro-Joints. , 0, , .		6
313	Micromechanical analysis of effective properties of plasma sprayed alumina coatings. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 417, 287-293.	5.6	6
314	Damage Assessment of a Cracked Bar: Effect of Material Nonlinearity on Vibro-Impact Response. <i>Key Engineering Materials</i> , 0, 413-414, 237-244.	0.4	6
315	Finite-Element Simulations of Split Hopkinson Test of Ti-Based Alloy. <i>Advanced Materials Research</i> , 0, 223, 296-303.	0.3	6
316	Drilling-Induced Damage in CFRP Laminates: Experimental and Numerical Analysis. <i>Solid State Phenomena</i> , 2012, 188, 150-157.	0.3	6
317	Plastic deformation of multicrystalline thin films: Grain size distribution vs. grain orientation. <i>Computational Materials Science</i> , 2012, 52, 20-24.	3.0	6
318	Experimental and numerical analysis of Izod impact test of cortical bone tissue. <i>European Physical Journal: Special Topics</i> , 2012, 206, 41-50.	2.6	6
319	Multiphysics modeling approach for micro electro"thermo"mechanical actuator: Failure mechanisms coupled analysis. <i>Microelectronics Reliability</i> , 2015, 55, 771-782.	1.7	6
320	Copper coin-embedded printed circuit board for heat dissipation: manufacture, thermal simulation and reliability. <i>Circuit World</i> , 2015, 41, 55-60.	0.9	6
321	Analysis of impact induced damage in composites for wind turbine blades. , 2015, , .		6
322	Computational assessment of residual formability in sheet metal forming processes for sustainable recycling. <i>International Journal of Mechanical Sciences</i> , 2016, 119, 187-196.	6.7	6
323	Effect of morphological state of graphene on mechanical properties of nanocomposites. <i>Journal of Materials Science</i> , 2016, 51, 4037-4046.	3.7	6
324	Variation of cutting forces in machining of f.c.c. single crystals. <i>Acta Mechanica</i> , 2016, 227, 3-9.	2.1	6

#	ARTICLE	IF	CITATIONS
325	Impact damage in woven carbon fibre/epoxy laminates: analysis of damage and dynamic strain fields. <i>Procedia Engineering</i> , 2017, 199, 2500-2505.	1.2	6
326	Theoretical Analysis on Needle-Punched Carbon/Carbon Composites. <i>Applied Composite Materials</i> , 2019, 26, 805-816.	2.5	6
327	Production of high-quality extremely-thin histological sections by ultrasonically assisted cutting. <i>Journal of Materials Processing Technology</i> , 2020, 276, 116403.	6.3	6
328	Pioneering personalised design of femoropopliteal nitinol stents. <i>Materials Science and Engineering C</i> , 2021, 130, 112462.	7.3	6
329	Fracture process in cortical bone: X-FEM analysis of microstructured models. , 2014, , 43-55.		6
330	Multi-scale Model of Damage Evolution in Stochastic Rocks: Fractal Approach. , 1994, , 53-64.		6
331	Challenges and issues in continuum modelling of tribology, wear, cutting and other processes involving high-strain rate plastic deformation of metals. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 130, 105185.	3.1	6
332	Computational modelling of the size effect of damage inhomogeneity in ceramics. <i>Computational Materials Science</i> , 1998, 13, 160-167.	3.0	5
333	Dynamics of Stochastic Damage Evolution. <i>International Journal of Damage Mechanics</i> , 1998, 7, 84-98.	4.2	5
334	Dynamics and Scaling Characteristics of Shear Crack Propagation. , 2000, 157, 523-538.		5
335	Computational and Experimental Mechanics of Advanced Materials. <i>Journal of Engineering Materials and Technology</i> , <i>Transactions of the ASME</i> , 2003, 125, 1-1.	1.4	5
336	Effect of multi-impacts on a PMMA sheet material. <i>Journal of Materials Processing Technology</i> , 2008, 204, 206-212.	6.3	5
337	Anisotropic Elastic-Plastic Mechanical Properties of Thermally Bonded Bicomponent Fibre Nonwovens. , 2010, , .		5
338	Viscoelastic Properties of Semi-Crystalline Thermoplastic Polymers: Dynamic Analysis and Creep. <i>Solid State Phenomena</i> , 2012, 188, 211-218.	0.3	5
339	Numerical Modelling of Thermally Bonded Nonwovens: Continuous and Discontinuous Approaches. <i>Solid State Phenomena</i> , 2012, 188, 164-169.	0.3	5
340	Application of Smooth-Particle Hydrodynamics in Metal Machining. <i>Journal of Physics: Conference Series</i> , 2012, 382, 012017.	0.4	5
341	Effect of random microstructure on crack propagation in cortical bone tissue under dynamic loading. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012033.	0.4	5
342	Ultrasonically Assisted Drilling: Machining towards Improved Structural Integrity in Carbon/Epoxy Composites. <i>Key Engineering Materials</i> , 0, 569-570, 49-55.	0.4	5

#	ARTICLE	IF	CITATIONS
343	Indentation-induced deformation localisation in Zr-Cu-based metallic glass. <i>Journal of Alloys and Compounds</i> , 2014, 615, S93-S97.	5.5	5
344	Assessment of structural integrity of subsea wellhead system: analytical and numerical study. <i>Frattura Ed Integrita Strutturale</i> , 2015, 9, 97-119.	0.9	5
345	A diffusion-based approach for modelling crack tip behaviour under fatigue-oxidation conditions. <i>International Journal of Fracture</i> , 2018, 213, 157-170.	2.2	5
346	8.14 Composites Under Dynamic Loads at High Velocities. , 2018, , 262-285.		5
347	Characterisation of Additively Manufactured Metallic Stents. <i>Procedia Structural Integrity</i> , 2019, 15, 41-45.	0.8	5
348	Fracture of 3D-printed micro-tensile specimens: filament-scale geometry-induced anisotropy. <i>Procedia Structural Integrity</i> , 2020, 28, 591-601.	0.8	5
349	ZigZagZ: Improving mechanical performance in extrusion additive manufacturing by nonplanar toolpaths. <i>Additive Manufacturing</i> , 2021, 38, 101715.	3.0	5
350	Anisotropic mechanical behaviour of calendered nonwoven fabrics: Strain-rate dependency. <i>Journal of Composite Materials</i> , 2021, 55, 1783-1798.	2.4	5
351	MaTrEx AM: A new hybrid additive manufacturing process to selectively control mechanical properties. <i>Additive Manufacturing</i> , 2021, 47, 102337.	3.0	5
352	Improvements of material removal in cortical bone via impact cutting method. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 108, 103791.	3.1	5
353	Personalised nitinol stent for focal plaques: Design and evaluation. <i>Journal of Biomechanics</i> , 2022, 130, 110873.	2.1	5
354	Ultrasonically assisted turning of micro-SiCp/Al 2124 composite. <i>Procedia Structural Integrity</i> , 2022, 37, 282-291.	0.8	5
355	Thermal debonding of inclusions in compacted graphite iron: effect of matrix phases. <i>Engineering Failure Analysis</i> , 2022, , 106476.	4.0	5
356	Enhanced fracture energy and effects of temperature at spalling in ceramics: continuum damage modelling. <i>Archive of Applied Mechanics</i> , 2000, 70, 145-157.	2.2	4
357	Computational analysis of thermally loaded duplex stainless steels: the role of the free surfaces and the microstructure. <i>Computational Materials Science</i> , 2000, 19, 1-12.	3.0	4
358	Analysis of damage evolution in thick ceramic coatings. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 426, 121-127.	5.6	4
359	Analysis of Stress Distribution in SnAgCu Solder Joint. <i>Applied Mechanics and Materials</i> , 2006, 5-6, 359-366.	0.2	4
360	TEM Microstructural Analysis of As-bonded Copper Ball Bonds on Aluminum Metallization. , 2008, , .		4

#	ARTICLE	IF	CITATIONS
361	A Risk Based Methodology for Spare Parts Inventory Optimisation. , 2008, , .		4
362	Intermetallics formation and evolution in pure indium joint for cryogenic application. , 2009, , .		4
363	Amorphous metallic thin films as copper diffusion barrier for advanced interconnect applications. , 2009, , .		4
364	Three-Dimensional Analysis of the Effect of Material Randomness on the Damage Behaviour of CFRP Laminates with Stochastic Cohesive-Zone Elements. Applied Composite Materials, 2014, 21, 71-89.	2.5	4
365	Damage mechanisms of random fibrous networks. Journal of Physics: Conference Series, 2015, 628, 012093.	0.4	4
366	Ultrasonically-assisted Polymer Molding: An Evaluation. Physics Procedia, 2016, 87, 61-71.	1.2	4
367	Modelling plastic deformation in a single-crystal nickel-based superalloy using discrete dislocation dynamics. Mechanics of Advanced Materials and Modern Processes, 2016, 2, .	2.2	4
368	Dynamic Fracture in Carbon-fibre Composites: Effect of Steel and Ice Projectiles. Procedia Structural Integrity, 2016, 2, 366-372.	0.8	4
369	Enhanced gradient crystal-plasticity study of size effects in $\alpha^2$ -titanium alloy. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 035013.	2.0	4
370	Retardation effects due to overloads in aluminium alloy aeronautical components. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 1484-1500.	3.4	4
371	Computational modelling of wounded tissue subject to negative pressure wound therapy following trans-femoral amputation. Biomechanics and Modeling in Mechanobiology, 2017, 16, 1819-1832.	2.8	4
372	Failure analysis of a frangible composite cover: A transient-dynamics study. Journal of Composite Materials, 2017, 51, 2607-2617.	2.4	4
373	Dynamic damage in woven carbon/epoxy composites due to air blast. Procedia Structural Integrity, 2017, 6, 5-10.	0.8	4
374	Dynamic interfacial fracture of a thin-layered structure. Procedia Structural Integrity, 2018, 13, 613-618.	0.8	4
375	Computational Evaluation of Artery Damage in Stent Deployment. Procedia Structural Integrity, 2018, 13, 187-191.	0.8	4
376	Ultrasonically assisted drilling of rocks. AIP Conference Proceedings, 2018, , .	0.4	4
377	Remodelling of trabecular bone in human distal tibia: A model based on an in-vivo HR-pQCT study. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 119, 104506.	3.1	4
378	Theory of dynamic mode-II delamination in end-notched flexure tests. Composite Structures, 2021, 274, 114332.	5.8	4

#	ARTICLE	IF	CITATIONS
379	Stochastic dynamics of damage evolution in brittle rocks. <i>Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie</i> , 1996, 85, 103.	1.3	4
380	The Fracture of Solids with Microcracks: Experiments, Statistical Thermodynamics and Constitutive Equations. , 1989, , 3845-3852.		4
381	Damage in extrusion additive manufactured parts: effect of environment and cyclic loading. <i>Procedia Structural Integrity</i> , 2020, 28, 452-457.	0.8	4
382	Damage Analysis of CFRP under Impact Fatigue. <i>Shock and Vibration</i> , 2012, 19, 573-584.	0.6	4
383	Analysis of tool wear in ultrasonically assisted turning of $\text{Ti-15V-3Al-3Cr-3Sn}$ alloy. <i>Scientia Iranica</i> , 2016, 23, 1800-1810.	0.4	4
384	Deformation response and microstructural evolution of as-cast Mg alloys AM30 and AM50 during hot compression. <i>International Journal of Materials Research</i> , 2019, 110, 524-533.	0.3	4
385	Thermal Fatigue Life Estimation and Fracture Mechanics Studies of Multilayered MEMS Structures Using a Sub-Domain Approach. <i>World Journal of Mechanics</i> , 2012, 02, 61-76.	0.4	4
386	Effect of stochasticity on scaling properties of crack propagation. <i>International Journal of Fracture</i> , 1993, 61, R35-R40.	2.2	3
387	Evolution of a laser-generated shock wave in iron and its interaction with martensitic transformation and twinning. <i>Shock Waves</i> , 1998, 8, 177-181.	1.9	3
388	Crystallographic Structure and Mechanical Behaviour of SnAgCu Solder Interconnects under a Constant Loading Rate. , 2007, , .		3
389	Development of Delamination in Cross-Ply Laminates: Effect of Microstructure. <i>Key Engineering Materials</i> , 0, 413-414, 229-236.	0.4	3
390	Mechanical response of indium micro-joints to low temperature cycling. , 2009, , .		3
391	Micro-Scale Numerical Model of Bovine Cortical Bone: Analysis of Plasticity Localization. , 2010, , .		3
392	Dynamic Properties of Cortical Bone Tissue: Impact Tests and Numerical Study. <i>Applied Mechanics and Materials</i> , 0, 70, 387-392.	0.2	3
393	Void growth in thermosonic copper/gold wire bonding on aluminum pads. , 2011, , .		3
394	Effect of crack induced nonlinearity on dynamics of structures: application to structural health monitoring. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012015.	0.4	3
395	Modelling the dynamic behaviour of hard-to-cut alloys under conditions of vibro-impact cutting. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012030.	0.4	3
396	Vibration-assisted machining of single crystal. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012038.	0.4	3

#	ARTICLE	IF	CITATIONS
397	Tailoring structure of inclusion with strain-induced closure to reduce Poisson's ratio of composite materials. Journal of Applied Physics, 2014, 115, 224903.	2.5	3
398	Modelling fracture processes in bones. , 2014, , 268-302.		3
399	Effect of micromorphology of cortical bone tissue on crack propagation under dynamic loading. EPJ Web of Conferences, 2015, 94, 03005.	0.3	3
400	Ballistic damage in hybrid composite laminates. Journal of Physics: Conference Series, 2015, 628, 012092.	0.4	3
401	Hybrid Cutting of Bio-tissues. Procedia CIRP, 2016, 46, 567-570.	1.9	3
402	Analysis of pulsed electroplasticity in metals. , 2017, , .		3
403	Effects of the Manufacturing Process on the Reliability of the Multilayer Structure in MetalMUMPs Actuators: Residual Stresses and Variation of Design Parameters. Micromachines, 2017, 8, 348.	2.9	3
404	Effect of hybrid machining on structural integrity of aerospace-grade materials. Procedia CIRP, 2018, 77, 163-166.	1.9	3
405	Experimental Study of Synthesized Co-polymer for Stent Application. Procedia Structural Integrity, 2019, 15, 55-59.	0.8	3
406	Theory of dynamic mode-II delamination in end-loaded split tests. Composites Part C: Open Access, 2020, 3, 100055.	3.2	3
407	Shear band widening mechanism in TiAl <sub>4</sub> under high strain rate deformation. Journal of Materials Research, 2020, 35, 1623-1634.	2.6	3
408	Effect of microstructure on porosity of random fibrous networks. Journal of the Textile Institute, 2020, 111, 1713-1723.	1.9	3
409	Fractal approach in modelling of earthquakes. Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie, 1996, 85, 116.	1.3	3
410	Fracture Behaviour of Collagen: Effect of Environment. Procedia Structural Integrity, 2020, 28, 843-849.	0.8	3
411	Polyurea-coated glass-fibre-reinforced laminate under high-speed impact: experimental study. Procedia Structural Integrity, 2020, 28, 1572-1578.	0.8	3
412	Fractal and Multifractal Characteristics of Propagating Cracks. European Physical Journal Special Topics, 1996, 06, C6-287-C6-294.	0.2	3
413	Numerical modelling of size effects in micro-cutting of f.c.c. single crystal: Influence of strain gradients. Journal of Manufacturing Processes, 2022, 74, 511-519.	5.9	3
414	Failure behaviour of human trabecular bone. Procedia Structural Integrity, 2022, 37, 257-262.	0.8	3



#	ARTICLE	IF	CITATIONS
415	Fracture mechanisms of additively manufactured polylactide: Effect of in vitro hydrolytic degradation. <i>Engineering Fracture Mechanics</i> , 2022, 269, 108572.	4.3	3
416	On statistical thermodynamics of deformation twinning. <i>Continuum Mechanics and Thermodynamics</i> , 1992, 4, 269-277.	2.2	2
417	Effect of thermal aging on interfacial behaviour of copper ball bonds. , 2008, , .		2
418	Enhanced finite element model of ultrasonically assisted turning. <i>International Journal of Machining and Machinability of Materials</i> , 2009, 6, 159.	0.1	2
419	Heterogeneous Intragranular Inelastic Behavior of a Sn-Ag-Cu Alloy. <i>Journal of Electronic Materials</i> , 2009, 38, 2429-2435.	2.2	2
420	Fatigue Crack Growth in Adhesively Bonded Joints with Intermittent Impacts. <i>Key Engineering Materials</i> , 0, 452-453, 5-8.	0.4	2
421	Vibro-Impact Response of a Cracked Bar. <i>Shock and Vibration</i> , 2011, 18, 147-156.	0.6	2
422	Analysis of the High Strain-Rate Behaviour of Polyethylene Based Nanocomposites. <i>Applied Mechanics and Materials</i> , 0, 70, 237-242.	0.2	2
423	Variability and Anisotropy of Fracture Toughness of Cortical Bone Tissue. <i>Journal of Physics: Conference Series</i> , 2012, 382, 012045.	0.4	2
424	Damage in woven CFRP laminates under impact loading. <i>EPJ Web of Conferences</i> , 2012, 26, 04004.	0.3	2
425	Blast response of curved carbon/epoxy composite panels: Experimental study and finite-element analysis. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012018.	0.4	2
426	Numerical study of strain-rate effect in cold rolls forming of steel. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012041.	0.4	2
427	Ultrasonically assisted drilling: A finite-element model incorporating acoustic softening effects. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012040.	0.4	2
428	Plastic behaviour of microstructural constituents of cortical bone tissue: a nanoindentation study. <i>International Journal of Experimental and Computational Biomechanics</i> , 2013, 2, 136.	0.4	2
429	Optical properties of graphene-based materials in transparent polymer matrices. <i>Applied Physics Letters</i> , 2016, 109, 081905.	3.3	2
430	Crystal-Plasticity Simulation of Micromachining of Single-Crystal Metal: Methodology and Analysis. <i>Advanced Structured Materials</i> , 2016, , 165-183.	0.5	2
431	Noncontact blood perfusion mapping in clinical applications. , 2016, , .		2
432	Effect of surgical defect localization on ultimate load-bearing capacity of human femur: finite-element energy-based assessment. <i>Procedia Structural Integrity</i> , 2017, 6, 27-33.	0.8	2

#	ARTICLE	IF	CITATIONS
433	Experimental and Morphological Investigations of Fracture Behavior of PBT/TPEE. <i>Procedia Structural Integrity</i> , 2018, 13, 511-516.	0.8	2
434	Mechanical Performance of Self-expandable Nitinol Stent with Lesion-specific Design. <i>Procedia Structural Integrity</i> , 2019, 15, 24-27.	0.8	2
435	Finite element simulations of conventional and ultrasonically assisted turning processes with plane and textured cutting inserts. <i>Journal of Micromanufacturing</i> , 2020, 3, 54-68.	1.1	2
436	Modelling strain localization in Ti-6Al-4V at high loading rate: a phenomenological approach. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190105.	3.4	2
437	Modelling indentation of human lower-limb soft tissue: simulation parameters and their effects. <i>Continuum Mechanics and Thermodynamics</i> , 2023, 35, 939-955.	2.2	2
438	Temperature Calculations in Orthogonal Cutting of Cortical Bone Using Finite Element Analysis. <i>IFMBE Proceedings</i> , 2009, , 151-152.	0.3	2
439	9th International Conference on Damage Assessment of Structures (DAMAS 2011). <i>Journal of Physics: Conference Series</i> , 2011, 305, 011001.	0.4	2
440	Discussion on the microscale geometry as the dominant factor for strength anisotropy in material extrusion additive manufacturing. <i>Additive Manufacturing</i> , 2021, 48, 102390.	3.0	2
441	Fractal Characteristics of Joint Development in Stochastic Rocks. , 1994, , 65-76.		2
442	Trabecular bone remodelling: finite-element simulation. <i>Procedia Structural Integrity</i> , 2020, 28, 577-583.	0.8	2
443	Bulk-Material Bond Strength Exists in Extrusion Additive Manufacturing for a Wide Range of Temperatures, Speeds, and Layer Times. <i>3D Printing and Additive Manufacturing</i> , 2023, 10, 514-523.	2.9	2
444	Algorithm to determine orientation distribution function from microscopic images of fibrous networks: Validation with X-ray microtomography. <i>Micron</i> , 2022, 160, 103321.	2.2	2
445	Creep Analysis of a Lead-free Surface Mount Device. , 2007, , .		1
446	Thermo-mechanical damage accumulation during power cycling of lead-free surface mount solder joints. , 2008, , .		1
447	3D Study of Thermal Stresses in Lead-Free Surface Mount Devices. <i>Journal of Thermal Stresses</i> , 2008, 31, 1039-1055.	2.0	1
448	Minimization of fracture-pulse energy under contact interaction. <i>Doklady Physics</i> , 2009, 54, 322-324.	0.7	1
449	Numerical analysis of response of indium micro-joint to low-temperature cycling. , 2009, , .		1
450	Repetitive indentation of Ti-based alloys: A numerical study. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010, 10, 012105.	0.6	1

#	ARTICLE	IF	CITATIONS
451	Energy aspects of ultrasonic intensification of treatment of metals. Doklady Physics, 2010, 55, 184-185.	0.7	1
452	Effect of ultrasonic energy on interfacial structure and bond strength in copper wire bonding. , 2010, , .		1
453	Interfacial failure under thermal fatigue loading in multilayered MEMS structures. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012087.	0.6	1
454	Damage assessment in CFRP laminates exposed to impact fatigue loading. Journal of Physics: Conference Series, 2011, 305, 012047.	0.4	1
455	Effect of fire-induced damage on the uniaxial strength characteristics of solid timber: A numerical study. Journal of Physics: Conference Series, 2011, 305, 012039.	0.4	1
456	Analysis of Deformation Characteristics of Cortical Bone Tissue. Solid State Phenomena, 2012, 188, 118-123.	0.3	1
457	Advanced Fire Design of Timber Structures Using Computational Techniques - Simple Indeterminate Structures. Journal of Structural Fire Engineering, 2012, 3, 215-234.	0.8	1
458	Numerical analysis and noise detection for design optimisation of an ultrasonic transducer. Journal of Physics: Conference Series, 2012, 382, 012062.	0.4	1
459	Bio-inspired structured boron carbide-boron nitride composite by reactive spark plasma sintering. Virtual and Physical Prototyping, 2013, 8, 253-258.	10.4	1
460	Effect of Plate Curvature on Blast Response of Carbon/Epoxy Composite. Key Engineering Materials, 0, 569-570, 41-48.	0.4	1
461	Damage and fracture in fabric-reinforced composites under quasi-static and dynamic bending. Journal of Physics: Conference Series, 2013, 451, 012020.	0.4	1
462	Numerical analysis of dynamic out-of-plane loading of nonwovens. Journal of Physics: Conference Series, 2013, 451, 012021.	0.4	1
463	Damage analysis of carbon fabric-reinforced composites under dynamic bending. , 2014, , .		1
464	Finite element analysis of hypervelocity impact behaviour of CFRP-Al/HC sandwich panel. EPJ Web of Conferences, 2015, 94, 04051.	0.3	1
465	Deformation and Damage of Thermally Bonded Nonwoven Networks. Engineering Materials, 2015, , 181-199.	0.6	1
466	Non-destructive defect detection for MEMS devices using transient thermography. , 2016, , .		1
467	Ultrasonically Assisted Cutting of Bio-tissues in Microtomy. Physics Procedia, 2016, 87, 118-124.	1.2	1
468	Dynamic damage in FRPs. , 2016, , 193-222.		1

#	ARTICLE	IF	CITATIONS
469	Dynamic large-deflection bending of laminates. , 2016, , 559-582.		1
470	Evaluation of the chemical and biomechanical viscoelastic properties of decellularised tracheal scaffolds. Cytotherapy, 2017, 19, S26.	0.7	1
471	Micro CT Analysis of Dynamic Damage in Laminates: Impact vs. blast loading. Journal of Physics: Conference Series, 2017, 842, 012077.	0.4	1
472	Notches in fibrous materials: micro-mechanisms of deformation and damage. Procedia Structural Integrity, 2017, 6, 168-173.	0.8	1
473	Discontinuous Finite Element Model of Hydrogels. , 2018, , 3-16.		1
474	Finite Element Modeling and Analysis of Ultrasonically-Assisted Drilling of Bone. , 2018, , .		1
475	Finite Element Modelling of Stent Deployment in a Patient-specific Coronary Artery. Procedia Structural Integrity, 2019, 15, 28-32.	0.8	1
476	Quantifying the mechanical properties of polymeric tubing and scaffold using atomic force microscopy and nanoindentation. Polymer Engineering and Science, 2019, 59, 1084-1091.	3.1	1
477	Damage in extrusion additive manufactured biomedical polymer: Effects of testing direction and environment during cyclic loading. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 118, 104397.	3.1	1
478	Analysis of Damage Propagation in Single Lap Joints in Impact Fatigue. Lecture Notes in Applied and Computational Mechanics, 2009, , 247-257.	2.2	1
479	Stresses in Ultrasonically Assisted Turning. , 0, , 351-358.		1
480	Effect of Impact-Fatigue on Damage in Adhesive Joints. Key Engineering Materials, 0, , 653-658.	0.4	1
481	Dynamics and Scaling Characteristics of Shear Crack Propagation. , 2000, , 523-538.		1
482	Multi- scale modelling of cracking in cross- ply laminates. , 2005, , .		1
483	Experimental Investigation of the Mechanics of Conventional and Ultrasonically-Assisted Drilling of Cortical Bone. , 2011, , .		1
484	Numerical models of random fibrous networks. , 2022, , 113-143.		1
485	Dynamic Crack Propagation along Elastic Interfaces in Double Cantilever Beams under High Loading Rates. Journal of Aerospace Engineering, 2022, 35, .	1.4	1
486	Thermal debonding in compacted graphite iron: effect of interaction of graphite inclusions. Procedia Structural Integrity, 2022, 37, 209-216.	0.8	1

#	ARTICLE	IF	CITATIONS
487	Assessment of dynamic mode-I delamination driving force in double cantilever beam tests for fiber-reinforced polymer composite and adhesive materials. <i>Composites Science and Technology</i> , 2022, , 109632.	7.8	1
488	Kinetics and topological aspects of the quasibrittle failure of carbon-bearing composites. <i>Mechanics of Composite Materials</i> , 1991, 27, 63-69.	1.4	0
489	Stochastic dynamics of damage evolution in brittle rocks. <i>Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie</i> , 1996, 85, 103.	1.3	0
490	Fractal approach in modelling of earthquakes. <i>Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie</i> , 1996, 85, 116.	1.3	0
491	Analysis of Shear Damage Evolution. <i>International Journal of Damage Mechanics</i> , 1998, 7, 167-179.	4.2	0
492	Mechanical Behaviour of Grains in SnAgCu Solder Joints. , 2006, , .		0
493	Modelling the Effect of Microstructural Randomness on the Fracture of Composite Laminates with Stochastic Cohesive Zone Elements. <i>Key Engineering Materials</i> , 0, 417-418, 13-16.	0.4	0
494	TEM interfacial characteristics of thermosonic gold wire bonding on aluminium metallization. , 2009, , .		0
495	A 3D Numerical Study to Investigate the Effects of Temperature Variation and Residual Stresses in Representative Volume MEMS Elements. , 2010, , .		0
496	Damage assessment in multilayered MEMS structures under thermal fatigue. <i>Journal of Physics: Conference Series</i> , 2011, 305, 012046.	0.4	0
497	Dynamic Behavior of Advanced Ti Alloy under Impact Loading: Experimental and Numerical Analysis. <i>Applied Mechanics and Materials</i> , 0, 70, 207-212.	0.2	0
498	Thermo-mechanical characteristics of indium micro-joint under various low-temperature excursions. , 2012, , .		0
499	Thermo-mechanical behaviour analysis of micro-solder joints by finite element modelling. , 2012, , .		0
500	Experimental and numerical analysis of stress wave propagation in polymers and the role of interfaces in armour systems. <i>Open Engineering</i> , 2012, 2, .	1.6	0
501	Vibro-impact response of the cracked structures to monitor structural health. <i>MATEC Web of Conferences</i> , 2012, 1, 02003.	0.2	0
502	Diagnostic tool for structural health monitoring: effect of material nonlinearity and vibro-impact process. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012027.	0.4	0
503	Thermo-Mechanical Investigation of Ultra-High Molecular Weight Polyethylene for High Strain-Rate Applications. <i>Key Engineering Materials</i> , 0, 577-578, 493-496.	0.4	0
504	Component based modelling of piezoelectric ultrasonic actuators for machining applications. <i>Journal of Physics: Conference Series</i> , 2013, 451, 012036.	0.4	0

#	ARTICLE	IF	CITATIONS
505	International Symposium on Dynamic Deformation and Fracture of Advanced Materials (D2FAM 2013). Journal of Physics: Conference Series, 2013, 451, 011001.	0.4	0
506	Quasi-static and dynamic deformation behaviour of Zr-based bulk metallic glass. Journal of Physics: Conference Series, 2013, 451, 012009.	0.4	0
507	Flexural Properties of Polyamides: Influence of Strain Rate, Friction and Moulding-Induced Anisotropy. Key Engineering Materials, 2014, 601, 29-32.	0.4	0
508	&lt;i>In Vitro</i> Experimental and Numerical Analysis of Forces in Plane Cutting of Cortical Bone. Applied Mechanics and Materials, 0, 799-800, 509-514.	0.2	0
509	Dynamic fractures of adhesively bonded carbon fibre-reinforced polymeric joints. , 2015, , 581-639.		0
510	Bulk Metallic Glasses: Mechanical Properties and Performance. Engineering Materials, 2015, , 101-134.	0.6	0
511	Numerical assessment of residual formability in sheet metal products: towards design for sustainability. Journal of Physics: Conference Series, 2016, 734, 032030.	0.4	0
512	Dynamic fracture in carbon-fibre composites: Air-blast loading. Procedia Structural Integrity, 2016, 2, 417-421.	0.8	0
513	174â€¦Comparison of the mechanical performance of polymeric and metallic scaffolds â€œ testing and modelling. Heart, 2017, 103, A121.2-A122.	2.9	0
514	Magneto-forming studies. , 2017, , .		0
515	Ultrasonic Assisted Turning: A Comparative Study of Surface Integrity. Lecture Notes on Multidisciplinary Industrial Engineering, 2018, , 337-360.	0.6	0
516	Simulation of Crack Propagation Under Mixed-Mode Loading. , 2018, , 1-38.		0
517	Numerical and analytical model of long tubular bones with anisotropic distribution of elastic properties. Procedia Structural Integrity, 2018, 13, 636-641.	0.8	0
518	Relations between Parameters of Fracture Processes on Different Scale Levels. Doklady Physics, 2018, 63, 459-461.	0.7	0
519	Nonwovensâ€”Structure-process-property relationships. , 2019, , 109-143.		0
520	Characterisation of Mechanical Properties of Polymeric Stent using Nanoindentation. Procedia Structural Integrity, 2019, 15, 51-54.	0.8	0
521	Simulation of Crack Propagation Under Mixed-Mode Loading. , 2019, , 1465-1502.		0
522	Editorial: 22nd European Conference on Fracture (ECF 22). International Journal of Fatigue, 2020, 139, 105658.	5.7	0

#	ARTICLE	IF	CITATIONS
523	Machining in monocrystals. , 2020, , 243-267.		0
524	Microstructural changes in machining. , 2020, , 269-296.		0
525	Mechanics of ultrasonically assisted drilling. , 2020, , 229-241.		0
526	A numerical study on influence of strain gradients on lattice rotation in micro-machining of a single crystal. Challenge Journal of Structural Mechanics, 2021, 7, 117.	0.3	0
527	Oblique penetration mechanism of hybrid composite laminates. Science and Engineering of Composite Materials, 2021, 28, 568-578.	1.4	0
528	Multi-scale modelling of cracking in cross-ply laminates. , 2005, , 196-216.		0
529	Effect of Microstructure: Multi-scale Modelling. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2010, , 225-259.	0.6	0
530	Experimental Analysis of Mechanical Behaviour of Advanced Materials. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2010, , 1-49.	0.6	0
531	Introduction to Micromechanics and Nanomechanics. Assembly Automation, 2010, 30, .	1.7	0
532	Mechanics of Materials for Microelectronic Components and Packages. Advanced Structured Materials, 2013, , 307-316.	0.5	0
533	Boron Carbide-Based Nanostructured Composite by Spark Plasma Sintering. , 2014, , .		0
534	DAMAGE IN FIBRE-REINFORCED LAMINATES UNDER DYNAMIC LOADING. , 0, , .		0
535	Fracture of Cortical Bone Tissue. Advanced Structured Materials, 2015, , 143-170.	0.5	0
536	Nonlinear Vibro-acoustic Interactions for Crack Detection in Beams. , 0, , .		0
537	Finite Element Modelling of 2D Brittle Fracture: The Phase-Field Approach. Engineering Materials, 2015, , 1-21.	0.6	0
538	Crystalline Deformation in the Small Scale. Engineering Materials, 2015, , 23-42.	0.6	0
539	Constitutive Properties of Pure Indium in Wide Temperature Range. Engineering Materials, 2015, , 135-154.	0.6	0
540	COMPUTATIONAL MODELLING OF MECHANICAL BEHAVIOR OF BIOLOGICAL TISSUES FOR BIOMEDICAL APPLICATIONS. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
541	Formation of microcracks near surgical defect in femur: Assessment of ultimate loading conditions. Scientific Letters of Rzeszow University of Technology - Mechanics, 2016, , 91-99.	0.2	0
542	Estimation of cutting forces in conventional and ultrasonic-vibration assisted turning using inverse modelling. International Journal of Additive and Subtractive Materials Manufacturing, 2017, 1, 265.	0.2	0
543	Estimation of cutting forces in conventional and ultrasonic-vibration assisted turning using inverse modelling. International Journal of Additive and Subtractive Materials Manufacturing, 2017, 1, 265.	0.2	0
544	Dynamic Behaviour of $\hat{1}^2$ -Ti-15333 in Ultrasonically Assisted Turning: Experimental and Numerical Analysis. Scientia Iranica, 2017, .	0.4	0
545	Dynamics and Thermodynamics of Fracture Mechanics. , 2018, , 1-6.		0
546	Influence of Tool Material on Forces, Temperature and Surface Quality of Ti-15333 Alloy in CT and UAT. Scientia Iranica, 2018, .	0.4	0
547	IDENTIFICATION OF ELASTIC PARAMETERS OF COMPOSITE USING EXPERIMENTAL DATA ON MODAL CHARACTERISTICS OF SAMPLES. PNRPU Mechanics Bulletin, 2019, , .	0.4	0
548	Small-Scale Machining Simulations. Lecture Notes on Multidisciplinary Industrial Engineering, 2019, , 349-362.	0.6	0
549	Initiation and growth of short cracks in a nickel-based single crystal superalloy. , 2019, , 388-391.		0
550	Experimental and Numerical Methods to Analyse Deformation and Damage in Random Fibrous Networks. Advanced Structured Materials, 2020, , 151-174.	0.5	0
551	Simulations of Machining Processes at Small Spatio-temporal Scales. , 2021, , 241-254.		0
552	High-Speed Mode-I Delamination. Structural Integrity, 2020, , 3-8.	1.4	0
553	Fractal approaches in mechanics of jointed rocks. , 2020, , 83-86.		0
554	Ballistic performance of polyurea-coated thin aluminium plates: numerical study. Procedia Structural Integrity, 2020, 28, 1258-1266.	0.8	0
555	Wound contraction under negative pressure therapy measured with digital image correlation and finite-element analysis in tissue phantoms and wound models. Medical Engineering and Physics, 2021, 98, 104-114.	1.7	0
556	Scale invariance in stochastic fracture of rocks. , 2020, , 49-54.		0
557	Mechanics of fibrous networks: Basic behaviour. , 2022, , 1-12.		0
558	Deformation and damage of random fibrous networks. , 2022, , 203-219.		0



#	ARTICLE	IF	CITATIONS
559	Interfacial damage in flexible electronics with collagen substrate: effect of environmental conditions. <i>Procedia Structural Integrity</i> , 2022, 37, 131-138.	0.8	0
560	Ultrasonically Assisted Cutting of Histological Sections for Reducing the Environmental and Financial Impact of Microtomy. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2022, 35, .	3.7	0
561	Analysis of Stress Distribution in SnAgCu Solder Joint. , 0, , 359-366.		0