JÄnis Andersons

List of Publications by Year
in descending order

113 papers	2,596 citations	201674 27 h-index	214800 47 g-index
114 all docs	114 docs citations	114 times ranked	1935 citing authors

#	Article	IF	Citations
1	Anisotropic thermal expansion of bio-based rigid low-density closed-cell polyurethane foams. Journal of Materials Research and Technology, 2022, 16, 1517-1525.	5.8	6
2	Modeling the Nonlinear Deformation of Highly Porous Cellular Plastics Filled with Clay Nanoplatelets. Materials, 2022, 15, 1033.	2.9	1
3	Light Microscopy of Medium-Density Rigid Polyurethane Foams Filled with Nanoclay. Polymers, 2022, 14, 1154.	4.5	2
4	The effect of cell shape anisotropy on fracture toughness of low-density brittle foams. Engineering Fracture Mechanics, 2022, 269, 108565.	4.3	9
5	Estimation of the effective diffusivity of blowing agents in closed-cell low-density polyurethane foams based on thermal aging data. Journal of Building Engineering, 2021, 44, 103365.	3.4	6
6	Bio-based rigid high-density polyurethane foams as a structural thermal break material. Construction and Building Materials, 2020, 260, 120471.	7.2	39
7	Reinforcement Efficiency of Cellulose Microfibers for the Tensile Stiffness and Strength of Rigid Low-Density Polyurethane Foams. Materials, 2020, 13, 2725.	2.9	21
8	Robustness of Empirical Vibration Correlation Techniques for Predicting the Instability of Unstiffened Cylindrical Composite Shells in Axial Compression. Polymers, 2020, 12, 3069.	4.5	3
9	Rigid PUR foam impact absorption material obtained from sustainable resources. AIP Conference Proceedings, 2019, , .	0.4	0
10	A probabilistic model of the tensile strength of a UD flaxâ€"fabricâ€reinforced polymer composite. Polymer Composites, 2018, 39, 2101-2109.	4.6	1
11	Modeling the mode I fracture toughness of anisotropic low-density rigid PUR and PIR foams. International Journal of Fracture, 2017, 205, 111-118.	2.2	18
12	A Refined Strut Model for Describing the Elastic Properties of Highly Porous Cellular Polymers Reinforced with Short Fibers. Mechanics of Composite Materials, 2017, 53, 321-334.	1.4	3
13	Applicability of the Vibration Correlation Technique for Estimation of the Buckling Load in Axial Compression of Cylindrical Isotropic Shells with and without Circular Cutouts. Shock and Vibration, 2017, 2017, 1-14.	0.6	16
14	Anisotropy of the stiffness and strength of rigid low-density closed-cell polyisocyanurate foams. Materials and Design, 2016, 92, 836-845.	7.0	54
15	Estimation of the elastic constants of highly porous cellular plastics reinforced with fibres embedded in foam struts. Journal of Composite Materials, 2016, 50, 1169-1180.	2.4	7
16	Apparent interfacial shear strength of short-flax-fiber/starch acetate composites. International Journal of Adhesion and Adhesives, 2016, 64, 78-85.	2.9	19
17	Experimental investigation on stiffness and strength of single-lap z-pinned joints in a laminated CFRP stress-ribbon strip. Baltic Journal of Road and Bridge Engineering, 2016, 11, 120-126.	0.8	9
18	Evaluation of the interfacial shear strength between pseudoplastic NiTi shape memory alloy wires and epoxy by the pull-out method. Smart Materials and Structures, 2015, 24, 125038.	3.5	2

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19	Modeling the nonlinear deformation of flax-fiber-reinforced polymer matrix laminates in active loading. Journal of Reinforced Plastics and Composites, 2015, 34, 248-256.	3.1	25
20	The effect of a circular hole on the tensile strength of neat and filled rigid PUR foams. Theoretical and Applied Fracture Mechanics, 2015, 78, 8-14.	4.7	9
21	Analysis of the effect of a stress raiser on the strength of a UD flax/epoxy composite in off-axis tension. Journal of Composite Materials, 2015, 49, 1071-1080.	2.4	30
22	Modeling the tensile strength of hemp fibers and short-hemp-fiber reinforced composites. WIT Transactions on State-of-the-art in Science and Engineering, 2015, , 13-26.	0.0	3
23	Mechanical Characterization and Properties of Cellulose Fibers. Materials and Energy, 2014, , 7-23.	0.1	0
24	The effect of dispersion technique of montmorillonite on polyisocyanurate nanocomposites. , 2014, , .		0
25	Rapeseed oil-based rigid polyisocyanurate foams modified with nanoparticles of various type. Polimery, 2014, 59, 207-212.	0.7	21
26	Calculating the elastic constants of a highly porous cellular plastic with an oriented structure. Mechanics of Composite Materials, 2013, 49, 121-128.	1.4	6
27	Strength-length scaling of elementary hemp fibers. Mechanics of Composite Materials, 2013, 49, 69-76.	1.4	9
28	Modeling the non-linear deformation of a short-flax-fiber-reinforced polymer composite by orientation averaging. Composites Part B: Engineering, 2013, 54, 188-193.	12.0	45
29	Predicting the tensile strength of A UD basalt/ epoxy composite used for the confinement of concrete structures. Mechanics of Composite Materials, 2013, 48, 611-618.	1.4	2
30	Evaluation of interfacial shear strength by tensile tests of impregnated flax fiber yarns. Journal of Composite Materials, 2012, 46, 351-357.	2.4	6
31	Evaluation of the apparent interfacial shear strength in short-flax-fiber/PP composites. Mechanics of Composite Materials, 2012, 48, 571-578.	1.4	12
32	Competition between the buckling-driven delamination and wrinkling in compressed thin coatings. Microelectronics Reliability, 2012, 52, 296-299.	1.7	13
33	A refined strut model for calculating the elastic constants of highly porous cellular plastics by the method of orientational averaging. Mechanics of Composite Materials, 2012, 47, 589-596.	1.4	5
34	Markov model of fatigue of a composite material with the poisson process of defect initiation. Mechanics of Composite Materials, 2012, 48, 217-228.	1.4	9
35	Interfacial shear strength of flax fibers in thermoset resins evaluated via tensile tests of UD composites. International Journal of Adhesion and Adhesives, 2012, 36, 39-43.	2.9	21
36	Mechanical damage characteristics of elementary hemp fibers and scale effect of fiber strength. WIT Transactions on the Built Environment, 2012, , .	0.0	1

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37	Modeling strength scatter of elementary flax fibers: The effect of mechanical damage and geometrical characteristics. Composites Part A: Applied Science and Manufacturing, 2011, 42, 543-549.	7.6	24
38	Estimation of the tensile strength of an oriented flax fiber-reinforced polymer composite. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1229-1235.	7.6	57
39	Applicability of empirical models for evaluation of stress ratio effect on the durability of fiber-reinforced creep ruptureâ€“susceptible composites. Journal of Materials Science, 2011, 46, 1705-1713.	3.7	5
40	Modeling the effect of reinforcement discontinuity on the tensile strength of UD flax fiber composites. Journal of Materials Science, 2011, 46, 5104-5110.	3.7	8
41	Model of the mechanical response of short flax fiber reinforced polymer matrix composites. Procedia Engineering, 2011, 10, 2016-2021.	1.2	18
42	Scale effect of the tensile strength of flax-fabric-reinforced polymer composites. Journal of Reinforced Plastics and Composites, 2011, 30, 1969-1974.	3.1	7
43	Ultimate strain and deformability of elementary flax fibres. Journal of Strain Analysis for Engineering Design, 2011, 46, 428-435.	1.8	7
44	Finite fracture mechanics analysis of crack onset at a stress concentration in a UD glass/epoxy composite in off-axis tension. Composites Science and Technology, 2010, 70, 1380-1385.	7.8	39
45	MinMaxDM distributions for an analysis of the tensile strength of a unidirectional composite. Mechanics of Composite Materials, 2010, 46, 275-286.	1.4	2
46	Influences of roll-to-roll process and polymer substrate anisotropies on the tensile failure of thin oxide films. Thin Solid Films, 2010, 518, 6984-6992.	1.8	12
47	Estimation of interfacial fracture toughness based on progressive edge delamination of a thin transparent coating on a polymer substrate. Acta Materialia, 2010, 58, 2948-2956.	7.9	30
48	Rotorâ€"frame contact in a centrifuge installed on board a ship. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2010, 224, 635-646.	2.1	0
49	Modeling elastic properties of short flax fiber-reinforced composites by orientation averaging. Computational Materials Science, 2010, 50, 595-599.	3.0	47
50	Strength and Damage of Elementary Flax Fibers Extracted from Tow and Long Line Flax. Journal of Composite Materials, 2009, 43, 2653-2664.	2.4	25
51	The effect of mechanical defects on the strength distribution of elementary flax fibres. Composites Science and Technology, 2009, 69, 2152-2157.	7.8	58
52	Uniformity of filament strength within a flax fiber batch. Journal of Materials Science, 2009, 44, 685-687.	3.7	6
53	Diameter variability and strength scatter of elementary flax fibers. Journal of Materials Science, 2009, 44, 5697-5699.	3.7	12
54	Analysis of the fiber length dependence of its strength by using the weakest-link approach 2. Analysis of test data. Mechanics of Composite Materials, 2009, 45, 45-52.	1.4	3

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55	Progressive cracking mastercurves of the transverse ply in a laminate. Polymer Composites, 2009, 30, 1175-1182.	4.6	9
56	Evaluation of thin film adhesion to a compliant substrate by the analysis of progressive buckling in the fragmentation test. Thin Solid Films, 2009, 517, 2007-2011.	1.8	50
57	Prediction of crack onset strain in composite laminates at mixed mode cracking. IOP Conference Series: Materials Science and Engineering, 2009, 5, 012018.	0.6	3
58	Markov model for analyzing the residual static strength of a fiber-reinforced composite. Mechanics of Composite Materials, 2008, 44, 389-396.	1.4	3
59	Analysis of the fiber length dependence of its strength by using the weakest-link approach 1. A family of weakest-link distribution functions. Mechanics of Composite Materials, 2008, 44, 479-486.	1.4	5
60	Estimation of laminate stiffness reduction due to cracking of a transverse ply by employing crack initiation-and propagation-based master curves. Mechanics of Composite Materials, 2008, 44, 441-450.	1.4	9
61	The onset of mixed-mode intralaminar cracking in a cross-ply composite laminate. Mechanics of Composite Materials, 2008, 44, 549-556.	1.4	5
62	Buckling of a coating strip of finite width bonded to elastic half-space. International Journal of Solids and Structures, 2008, 45, 593-600.	2.7	19
63	Evaluation of toughness by finite fracture mechanics from crack onset strain of brittle coatings on polymers. Theoretical and Applied Fracture Mechanics, 2008, 49, 151-157.	4.7	38
64	Statistical model of the transverse ply cracking in cross-ply laminates by strength and fracture toughness based failure criteria. Engineering Fracture Mechanics, 2008, 75, 2651-2665.	4.3	29
65	Mechanical performance of thermoplastic matrix natural-fibre composites. , 2008, , 402-459.		1
66	23.1: <i>Invited Paper</i>: Models and Experiments of Mechanical Integrity for Flexible Displays. Digest of Technical Papers SID International Symposium, 2008, 39, 310-313.	0.3	3
67	Analysis of Thin Film Cracking and Buckling on Compliant Substrate by Fragmentation Test. Key Engineering Materials, 2007, 348-349, 329-332.	0.4	5
68	A family of weakest link models for fiber strength distribution. Composites Part A: Applied Science and Manufacturing, 2007, 38, 1227-1233.	7.6	50
69	Coating fragmentation by branching cracks at large biaxial strain. Probabilistic Engineering Mechanics, 2007, 22, 285-292.	2.7	4
70	Modeling the nonlinear deformation of composite laminates based on plasticity theory. Mechanics of Composite Materials, 2007, 43, 203-210.	1.4	7
71	Mechanics of tunnelling cracks in trilayer elastic materials in tension. International Journal of Fracture, 2007, 148, 233-241.	2.2	8
72	The Effect of Crack Spacing Distribution on Stiffness Reduction of Cross-ply Laminates. Applied Composite Materials, 2007, 14, 59-66.	2.5	10

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73	Evaluation of interfacial stress transfer efficiency by coating fragmentation test. Mechanics of Materials, 2007, 39, 834-844.	3.2	52
74	Stiffness and strength of flax fiber/polymer matrix composites. Polymer Composites, 2006, 27, 221-229.	4.6	91
75	Overcritical high-speed rotor systems, full annular rub and accident. Journal of Sound and Vibration, 2006, 290, 910-927.	3.9	27
76	A new model family for the strength distribution of fibers in relation to their length. Mechanics of Composite Materials, 2006, 42, 119-128.	1.4	8
77	Advanced fragmentation stage of oxide coating on polymer substrate under biaxial tension. Thin Solid Films, 2005, 471, 209-217.	1.8	16
78	Strength distribution of elementary flax fibres. Composites Science and Technology, 2005, 65, 693-702.	7.8	187
79	The effect of defect location on coating fragmentation patterns under biaxial tension. Probabilistic Engineering Mechanics, 2005, 20, 103-108.	2.7	3
80	Interfacial shear strength of flax fiber/thermoset polymers estimated by fiber fragmentation tests. Journal of Materials Science, 2005, 40, 2721-2722.	3.7	32
81	Applicability Range of the One-Parameter Ply Plasticity Model for Prediction of the Nonlinear Response of Laminates. Advanced Composites Letters, 2005, 14, 096369350501400.	1.3	0
82	Empirical model for stress ratio effect on fatigue delamination growth rate in composite laminates. International Journal of Fatigue, 2004, 26, 597-604.	5.7	81
83	Channel cracking of Î²-NiAl thin films on Si substrates. Acta Materialia, 2004, 52, 2325-2336.	7.9	35
84	Dependence of fracture toughness of composite laminates on interface ply orientations and delamination growth direction. Composites Science and Technology, 2004, 64, 2139-2152.	7.8	151
85	Analysis of the initial fragmentation stage of oxide coatings on polymer substrates under biaxial tension. Thin Solid Films, 2003, 434, 203-215.	1.8	24
86	Strength and adhesion characteristics of elementary flax fibres with different surface treatments. Composites Part A: Applied Science and Manufacturing, 2003, 34, 603-612.	7.6	171
87	Response of Cross-Ply Composite to Off-Axis Loading. Journal of Composite Materials, 2002, 36, 2125-2134.	2.4	14
88	Glass fibre strength distribution determined by common experimental methods. Composites Science and Technology, 2002, 62, 131-145.	7.8	104
89	Fibre fragment distribution in a single-fibre composite tension test. Composites Part B: Engineering, 2001, 32, 323-332.	12.0	30
90	Biaxial fragmentation of thin silicon oxide coatings on poly(ethylene terephthalate). Journal of Materials Science, 2001, 36, 2213-2225.	3.7	38

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91	Model of Delamination Propagation in Brittle-Matrix Composites Under Cyclic Loading. Journal of Reinforced Plastics and Composites, 2001, 20, 431-450.	3.1	25
92	Analysis of brittle coating fragmentation under uniaxial tension for Weibull strength distributions. European Physical Journal B, 2000, 17, 261-268.	1.5	17
93	The effect of overloads on the residual strength and life of laminated GRP. Mechanics of Composite Materials, 1999, 35, 461-464.	1.4	4
94	Residual strength of GFRP at high-cycle fatigue. Mechanics of Composite Materials, 1999, 35, 395-402.	1.4	10
95	Creep and damage accumulation in orthotropic composites under cyclic loading. Mechanics of Composite Materials, 1998, 34, 321-330.	1.4	24
96	Statistical Model of Coating Fragmentation Under Equibiaxial Load. Materials and Manufacturing Processes, 1998, 13, 597-602.	4.7	5
97	Adhesion of silicon oxide layers on poly(ethylene terephthalate). I: Effect of substrate properties on coating's fragmentation process. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 1449-1461.	2.1	166
98	Adhesion of silicon oxide layers on poly (ethylene terephthalate). II: Effect of coating thickness on adhesive and cohesive strengths. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 1463-1472.	2.1	134
99	Application of CFRP as a rotor shaft material. Mechanics of Composite Materials, 1995, 31, 163-173.	1.4	1
100	Constrained fragmentation of composites under uniaxial loading. Mechanics of Composite Materials, 1995, 31, 26-33.	1.4	16
101	Strength and durability of mixed glass-fibre-reinforced laminates. Mechanics of Composite Materials, 1994, 30, 22-29.	1.4	5
102	Methods of fatigue prediction for composite laminates. A review. Mechanics of Composite Materials, 1994, 29, 545-554.	1.4	6
103	Fiber and interface strength distribution studies with the single-fiber composite test. Composites Science and Technology, 1993, 48, 57-63.	7.8	29
104	Effect of stress ratio on the fatigue strength of organic plastics. Mechanics of Composite Materials, 1991, 27, 276-283.	1.4	7
105	Calculating the distribution of fatigue life of a composite laminate. Mechanics of Composite Materials, 1991, 27, 34-42.	1.4	0
106	Fatigue failure of laminated carbon-fiber-reinforced plastic. Mechanics of Composite Materials, 1991, 27, 58-62.	1.4	4
107	Failure during axial loading of a plastic reinforced at oblique angles with organic fibers. Mechanics of Composite Materials, 1990, 26, 182-187.	1.4	5
108	The Effect of Damage and Geometrical Variability on the Tensile Strength Distribution of Flax Fibers. Key Engineering Materials, 0, 452-453, 137-140.	0.4	0

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109	Fracture Toughness of PIR Foams Produced from Renewable Resources. Key Engineering Materials, 0, 525-526, 29-32.	0.4	3
110	The Effect of Montmorillonite Type Nanoparticles on Stiffness and Flammability of Rapeseed Oil Based Polyisocyanurate Foams. Key Engineering Materials, 0, 559, 19-24.	0.4	6
111	Modeling the Effect of Foam Density and Strain Rate on the Compressive Response of Polyurethane Foams. SAE International Journal of Materials and Manufacturing, 0, 11, 131-138.	0.3	7
112	Evaluation of the Apparent Interfacial Shear Strength of Nanocellulose/PVA Composites. Key Engineering Materials, 0, 774, 54-59.	0.4	2
113	Modelling the Strength of Cellulose Nanofiber-Filled Rigid Low-Density PU Foams. Key Engineering Materials, 0, 827, 159-164.	0.4	4