Fabrizio Scarpa

List of Publications by Year in descending order

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438 papers

17,604 citations

70 h-index

11646

25787 108 g-index

448 all docs

448 docs citations

448 times ranked 9619 citing authors

#	Article	IF	CITATIONS
1	Alkali Treatment Effect on Physicochemical and Tensile Properties of Date Palm Rachis Fibers. Journal of Natural Fibers, 2022, 19, 3770-3787.	3.1	20
2	Tensile Properties Optimization of Date Palm Leaflets Using Taguchi Method. Journal of Natural Fibers, 2022, 19, 6348-6364.	3.1	7
3	Numerical and experimental investigations on sandwich panels made with eco-friendly components under low-velocity impact. Journal of Sandwich Structures and Materials, 2022, 24, 419-447.	3.5	8
4	Full-Gradient Optimization of the Vibroacoustic Performance of (Non-)auxetic Sandwich Panels. Transport in Porous Media, 2022, 142, 139-156.	2.6	9
5	Bentonite-based sodium alginate/ dextrin cross-linked poly (acrylic acid) hydrogel nanohybrids for facile removal of paraquat herbicide from aqueous solutions. Chemosphere, 2022, 291, 133002.	8.2	43
6	Environmental assessment of discarded plastic caps as a honeycomb core: An ecoâ€mechanical perspective. Journal of Industrial Ecology, 2022, 26, 643-654.	5.5	3
7	A core rigidity classifier method and a novel approach to account for geometric effects on the elastic properties of sandwich structures. Composite Structures, 2022, 282, 115075.	5.8	3
8	Effect of hygrothermal ageing on the shear creep behaviour of eco-friendly sandwich cores. Composites Part B: Engineering, 2022, 231, 109572.	12.0	2
9	Form-finding of tessellated tensegrity structures. Engineering Structures, 2022, 252, 113627.	5.3	15
10	An optimization approach to design deformation patterns in perforated mechanical metamaterials using distributions of Poisson's ratio-based unit cells. Composite Structures, 2022, 281, 115015.	5.8	9
11	Statistical and numerical approaches of particulate reinforced polymers and their effect on the interlocking effect of hybrid composite joints. Journal of Composite Materials, 2022, 56, 1267-1285.	2.4	3
12	Impact properties of uniaxially thermoformed auxetic foams. International Journal of Impact Engineering, 2022, 163, 104176.	5.0	16
13	The influence of the humidity on the mechanical properties of 3D printed continuous flax fibre reinforced poly(lactic acid) composites. Composites Part A: Applied Science and Manufacturing, 2022, 155, 106805.	7.6	22
14	Design and Characterisation of a Muscle-Mimetic Dielectrophoretic Ratcheting Actuator. IEEE Robotics and Automation Letters, 2022, 7, 3938-3944.	5.1	2
15	Sound absorption in Hilbert fractal and coiled acoustic metamaterials. Applied Physics Letters, 2022, 120, .	3.3	7
16	Improving the damping properties of carbon fiber reinforced polymer composites by interfacial sliding of oriented multilayer graphene oxide. Composites Science and Technology, 2022, 224, 109309.	7.8	30
17	Programmable and reconfigurable hygro-thermo morphing materials with multifunctional shape transformation. Applied Materials Today, 2022, 27, 101414.	4.3	6
18	Impact Properties of Novel Natural Fibre Metal Laminated Composite Materials. Applied Sciences (Switzerland), 2022, 12, 1869.	2.5	9

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19	The impact behaviour of hybrid fibre-particle composites based on a full factorial design. Materials Today Communications, 2022, 31, 103459.	1.9	5
20	Manufacturing, characteristics and applications of auxetic foams: A state-of-the-art review. Composites Part B: Engineering, 2022, 235, 109733.	12.0	111
21	Anisotropy in conventional and uniaxially thermoformed auxetic polymer foams. Composites Part B: Engineering, 2022, 237, 109849.	12.0	11
22	High-velocity impact resistance of doubly curved sandwich panels with re-entrant honeycomb and foam core. International Journal of Impact Engineering, 2022, 165, 104230.	5.0	38
23	Mechanics of novel asymmetrical re-entrant metamaterials and metastructures. Composite Structures, 2022, 291, 115604.	5.8	15
24	A dynamic poroelastic model for auxetic polyurethane foams involving viscoelasticity and pneumatic damping effects in the linear regime. Mechanical Systems and Signal Processing, 2022, 179, 109375.	8.0	11
25	Large datasets of water vapor sorption, mass diffusion immersed in water, hygroscopic expansion and mechanical properties of flax fibre/shape memory epoxy hygromorph composites. Data in Brief, 2022, 43, 108367.	1.0	1
26	Design and verification of a magnetorheological elastomer-based actuator to reduce rotor vibration. International Journal of Mechanics and Materials in Design, 2022, 18, 701-718.	3.0	5
27	A dynamic data-driven response prediction method for thermal protection tiles and experimental validation. Applied Thermal Engineering, 2022, 215, 118959.	6.0	4
28	Transverse fastening reinforcement of sandwich panels with upcycled bottle caps core. Journal of Composite Materials, 2021, 55, 927-936.	2.4	4
29	Two-dimensional graded metamaterials with auxetic rectangular perforations. Composite Structures, 2021, 261, 113313.	5.8	28
30	Measure of porosity in flax fibres reinforced polylactic acid biocomposites. Composites Part A: Applied Science and Manufacturing, 2021, 141, 106183.	7.6	27
31	In-plane mechanical behavior of novel auxetic hybrid metamaterials. Thin-Walled Structures, 2021, 159, 107191.	5.3	40
32	Investigation of the Date Palm Fiber for Green Composites Reinforcement: Thermo-physical and Mechanical Properties of the Fiber. Journal of Natural Fibers, 2021, 18, 717-734.	3.1	48
33	Biosafe sustainable antimicrobial encapsulation and coatings for targeted treatment and infections prevention: Preparation for another pandemic. Current Research in Green and Sustainable Chemistry, 2021, 4, 100074.	5.6	9
34	Multiphase lattice metamaterials with enhanced mechanical performance. Smart Materials and Structures, 2021, 30, 025014.	3.5	35
35	Abnormal stiffness behaviour in artificial cactus-inspired reinforcement materials. Bioinspiration and Biomimetics, 2021, 16, 026004.	2.9	1
36	Sustainable Sandwich Panels Made of Aluminium Skins and Bamboo Rings. Materials Research, 2021, 24,	1.3	4

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37	Embedded Actuation for Shape-Adaptive Origami. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	2.9	5
38	Identifying optimal rotating pitch angles in composites with Bouligand structure. Composites Communications, 2021, 23, 100602.	6.3	25
39	Ecoâ€friendly panels made of autoclaved flax composites and upcycled bottle caps core: experimental and numerical analysis. Composites Part C: Open Access, 2021, 4, 100114.	3.2	4
40	Morphing wingtip structure based on active inflatable honeycomb and shape memory polymer composite skin: A conceptual work. Aerospace Science and Technology, 2021, 111, 106541.	4.8	31
41	Mechanics of penta-graphene with vacancy defects under large amplitude tensile and shear loading. Nanotechnology, 2021, 32, 275706.	2.6	11
42	Mechanical properties of a hybrid auxetic metamaterial and metastructure system. Journal of Reinforced Plastics and Composites, 2021, 40, 785-799.	3.1	8
43	Interatomic forces breaking carbon-carbon bonds. Carbon, 2021, 175, 420-428.	10.3	7
44	Low-velocity impact resistance of composite sandwich panels with various types of auxetic and non-auxetic core structures. Thin-Walled Structures, 2021, 163, 107738.	5.3	101
45	Enhancement of the vibro-acoustic performance of anti-tetra-chiral auxetic sandwich panels using topologically optimized local resonators. Applied Acoustics, 2021, 177, 107930.	3.3	29
46	Out-of-plane elastic constants of curved cell walls honeycombs. Composite Structures, 2021, 268, 113959.	5.8	9
47	Experimental and numerical assessment of sustainable bamboo core sandwich panels under low-velocity impact. Construction and Building Materials, 2021, 292, 123437.	7.2	13
48	Mechanical characterization of mortar reinforced by date palm mesh fibers: Experimental and statistical analysis. Construction and Building Materials, 2021, 300, 124067.	7.2	14
49	Effects of hydrogenation on the tensile and shear mechanical properties of defective penta-graphene. Nanotechnology, 2021, 32, 495706.	2.6	1
50	Sound absorption enhancement in poro-elastic materials in the viscous regime using a mass–spring effect. Journal of Sound and Vibration, 2021, 511, 116353.	3.9	3
51	Harnessing fractal cuts to design robust lattice metamaterials for energy dissipation. Additive Manufacturing, 2021, 46, 102126.	3.0	8
52	Topological characteristics and mechanical properties of uniaxially thermoformed auxetic foam. Materials and Design, 2021, 211, 110139.	7.0	22
53	Design and manufacturing of highly tailorable pre-bent bi-stable composites. Composite Structures, 2021, 276, 114519.	5.8	2
54	Hierarchical network structural composites for extraordinary energy dissipation inspired by the cat paw. Applied Materials Today, 2021, 25, 101222.	4.3	9

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55	Impact of non-linear resonators in periodic structures using a perturbation approach. Mechanical Systems and Signal Processing, 2020, 135, 106408.	8.0	17
56	Designing multi-stable structures with enhanced designability and deformability by introducing transition elements. Composite Structures, 2020, 233, 111580.	5.8	18
57	Multi-cell energy-absorbing structures with hollow columns inspired by the beetle elytra. Journal of Materials Science, 2020, 55, 4279-4291.	3.7	23
58	Thermoformability characterisation of Flax reinforced polypropylene composite materials. Composites Part B: Engineering, 2020, 184, 107727.	12.0	12
59	A novel sandwich panel made of prepreg flax skins and bamboo core. Composites Part C: Open Access, 2020, 3, 100048.	3.2	6
60	Hybrid polymer composites made of sugarcane bagasse fibres and disposed rubber particles. Polymers and Polymer Composites, 2020, , 096739112094345.	1.9	4
61	Large stiffness thermoformed open cell foams with auxeticity. Applied Materials Today, 2020, 20, 100775.	4.3	18
62	Tensile and flexural properties of epoxy laminates with natural papaya bast fibre cellular layers. Composites Part C: Open Access, 2020, 2, 100017.	3.2	4
63	Ageing of autoclaved epoxy/flax composites: Effects on water absorption, porosity and flexural behaviour. Composites Part B: Engineering, 2020, 202, 108380.	12.0	18
64	Eco-friendly Sandwich Panel Based on Recycled Bottle Caps Core and Natural Fibre Composite Facings. Fibers and Polymers, 2020, 21, 1798-1807.	2.1	9
65	Recycled polyethylene bottle caps as sandwich panel circular honeycomb: Experimental and numerical approach. Polymer Composites, 2020, 41, 4678-4691.	4.6	8
66	Eco-friendly sandwich panel based on bottle caps core and sustainable components: Static and dynamic characterisation. Composites Part C: Open Access, 2020, 3, 100069.	3.2	3
67	Biopolymeric Coacervate Microvectors for the Delivery of Functional Proteins to Cells. Advanced Biology, 2020, 4, e2000101.	3.0	8
68	Auxetics and Other Systems with "Negative―Characteristics. Physica Status Solidi (B): Basic Research, 2020, 257, 2000496.	1.5	10
69	Mechanics of paper-folded origami: A cautionary tale. Mechanics Research Communications, 2020, 107, 103540.	1.8	15
70	Edgewise compression of novel hexagonal hierarchical and asymmetric unit cells honeycomb metamaterials. Materials Today Communications, 2020, 24, 101102.	1.9	13
71	Determining the Tensile Properties and Dispersion Characterization of CNTs in Epoxy Using Tem and Raman Spectroscopy. Mechanics of Composite Materials, 2020, 56, 215-226.	1.4	7
72	Composite Piezoelectric Energy Harvesters with Symmetric Angleâ€Ply Stacking Sequences and Variable Throughâ€theâ€Thickness Poisson's Ratios. Physica Status Solidi (B): Basic Research, 2020, 257, 1900689.	1.5	2

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73	Temperature dependence of elastic constants in unidirectional carbon fiber reinforced shape memory polymer composites. Mechanics of Materials, 2020, 148, 103518.	3.2	19
74	Improved sustainable sandwich panels based on bottle caps core. Composites Part B: Engineering, 2020, 199, 108165.	12.0	18
7 5	Bioinspired multilayered cellular composites with enhanced energy absorption and shape recovery. Additive Manufacturing, 2020, 36, 101430.	3.0	20
76	Engineering foam skeletons with multilayered graphene oxide coatings for enhanced energy dissipation. Composites Part A: Applied Science and Manufacturing, 2020, 137, 106035.	7.6	17
77	Tunable, multi-modal, and multi-directional vibration energy harvester based on three-dimensional architected metastructures. Applied Energy, 2020, 264, 114615.	10.1	46
78	In-plane elastic constants of a new curved cell walls honeycomb concept. Thin-Walled Structures, 2020, 149, 106613.	5.3	38
79	Reinforced biobased adhesive for eco-friendly sandwich panels. International Journal of Adhesion and Adhesives, 2020, 98, 102550.	2.9	22
80	Perforation of needle-punched carbon-carbon composites during high-temperature and high-velocity ballistic impacts. Composite Structures, 2020, 245, 112224.	5.8	27
81	Chondroinduction of Mesenchymal Stem Cells on Cellulose-Silk Composite Nanofibrous Substrates: The Role of Substrate Elasticity. Frontiers in Bioengineering and Biotechnology, 2020, 8, 197.	4.1	10
82	Development of Cycloaliphatic Epoxy-POSS Nanocomposite Matrices with Enhanced Resistance to Atomic Oxygen. Molecules, 2020, 25, 1483.	3.8	18
83	Static, fatigue and impact behaviour of an autoclaved flax fibre reinforced composite for aerospace engineering. Composites Part B: Engineering, 2020, 197, 108049.	12.0	30
84	Investigation of the date palm fiber for green composites reinforcement: Quasi-static and fatigue characterization of the fiber. Industrial Crops and Products, 2020, 146, 112135.	5.2	22
85	Balancing optimization of a multiple speeds flexible rotor. Journal of Sound and Vibration, 2020, 480, 115405.	3.9	16
86	A Statistical Analysis of Size, Shape and Tensile Properties of Fibres Extracted from Date Palm (Phoenix) Tj ETQq() 0 0 rgBT	/Oyerlock 10
87	Switching of amorphous silicon thin-film actuators for optically functional robotic devices. , 2020, , .		O
88	Predictive models and experiments for high-velocity and high-temperature impacts in Inconel-alloy panels. Materials and Design, 2019, 182, 108032.	7.0	11
89	Toroidal Sandwich Panels with Auxetic Core Under Impact Loads: Numerical Simulations. , 2019, , .		0
90	Impact Response of Sandwich Structures with Auxetic and Honeycomb Core. , 2019, , .		1

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91	Magnetorheological elastomers with particle chain orientation: modelling and experiments. Smart Materials and Structures, 2019, 28, 095008.	3.5	20
92	Bioinspired Electroâ€Thermoâ€Hygro Reversible Shapeâ€Changing Materials by 4D Printing. Advanced Functional Materials, 2019, 29, 1903280.	14.9	64
93	Strain Reversal in Actuated Origami Structures. Physical Review Letters, 2019, 123, 025501.	7.8	16
94	Topology and mechanics of metal rubber via X-ray tomography. Materials and Design, 2019, 181, 108067.	7.0	23
95	Engineering Graphene Wrinkles for Large Enhancement of Interlaminar Friction Enabled Damping Capability. ACS Applied Materials & Samp; Interfaces, 2019, 11, 30278-30289.	8.0	26
96	Extraction and characterization of vascular bundle and fiber strand from date palm rachis as potential bio-reinforcement in composite. Carbohydrate Polymers, 2019, 222, 114997.	10.2	74
97	In-Plane Mechanical Behavior of a New Star-Re-Entrant Hierarchical Metamaterial. Polymers, 2019, 11, 1132.	4.5	36
98	Multifunctional composites: a metamaterial perspective. Multifunctional Materials, 2019, 2, 043001.	3.7	59
99	Stiffness, Energy Dissipation, and Hyperelasticity in Hierarchical Multilayer Composite Nanocoated Openâ€Cell Polyurethane Foams. Advanced Engineering Materials, 2019, 21, 1900459.	3.5	9
100	Probabilistic Reliability Analysis of Carbon/Carbon Composite Nozzle Cones with Uncertain Parameters. Journal of Spacecraft and Rockets, 2019, 56, 1765-1774.	1.9	5
101	Epoxy polymers reinforced with carbon microfibre wastes. Materials Today: Proceedings, 2019, 8, 847-852.	1.8	3
102	Auxetics and Other Systems of Anomalous Characteristics. Physica Status Solidi (B): Basic Research, 2019, 256, 1800736.	1.5	8
103	Investigations on sustainable honeycomb sandwich panels containing eucalyptus sawdust, Piassava and cement particles. Thin-Walled Structures, 2019, 143, 106191.	5.3	22
104	Interlaminar Toughening of Epoxy Carbon Fiber Reinforced Laminates: Soluble Versus Non-Soluble Veils. Polymers, 2019, 11, 1029.	4.5	17
105	Harnessing multi-layered soil to design seismic metamaterials with ultralow frequency band gaps. Materials and Design, 2019, 175, 107813.	7.0	68
106	Artificial cell membrane binding thrombin constructs drive in situ fibrin hydrogel formation. Nature Communications, 2019, 10, 1887.	12.8	30
107	Application of Multifunctional Mechanical Metamaterials. Advanced Engineering Materials, 2019, 21, 1900084.	3.5	9
108	Dome-Shape Auxetic Cellular Metamaterials: Manufacturing, Modeling, and Testing. Frontiers in Materials, 2019, 6, .	2.4	29

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109	Shear Stiffness and Energy Absorption of Auxetic Open Cell Foams as Sandwich Cores. Physica Status Solidi (B): Basic Research, 2019, 256, 1800411.	1.5	27
110	Stretchable Piezoelectric Sensing Systems for Selfâ€Powered and Wireless Health Monitoring. Advanced Materials Technologies, 2019, 4, 1900100.	5.8	96
111	Layered composite entangled wire materials blocks as pre-tensioned vertebral rocking columns. Composite Structures, 2019, 214, 153-163.	5.8	21
112	In-plane shear moduli of a new curved cell walls honeycomb plates for application in wings of wind turbines. , 2019 , , .		0
113	In-plane compression behavior of anti-tetrachiral and re-entrant lattices. Smart Materials and Structures, 2019, 28, 115028.	3.5	37
114	Static and dynamic behavior of PU foams with multilayer coatings. Procedia Structural Integrity, 2019, 19, 388-394.	0.8	4
115	Matrix-graded and fibre-steered composites to tackle stress concentrations. Composite Structures, 2019, 207, 72-80.	5.8	15
116	Impact behavior of triggered and non-triggered crash tubes with auxetic lattices. Multiscale and Multidisciplinary Modeling, Experiments and Design, 2019, 2, 119-127.	2.1	27
117	Sisal-glass hybrid composites reinforced with silica microparticles. Polymer Testing, 2019, 74, 57-62.	4.8	44
118	Enhanced upconversion luminescence in NaYF ₄ :Yb, Er nanoparticles by using graphitic carbon shells. Materials Research Express, 2019, 6, 045040.	1.6	4
119	Bending shape recovery of unidirectional carbon fiber reinforced epoxy-based shape memory polymer composites. Composites Part A: Applied Science and Manufacturing, 2019, 116, 169-179.	7.6	74
120	Auxetic Properties of a f.c.c. Crystal of Hard Spheres with an Array of [001]â€Nanochannels Filled by Hard Spheres of Another Diameter. Physica Status Solidi (B): Basic Research, 2019, 256, 1800611.	1.5	32
121	Humidity responsive actuation of bioinspired hygromorph biocomposites (HBC) for adaptive structures. Composites Part A: Applied Science and Manufacturing, 2019, 116, 36-45.	7.6	42
122	Impact of hybrid composites based on rubber tyres particles and sugarcane bagasse fibres. Composites Part B: Engineering, 2019, 159, 157-164.	12.0	28
123	High-voltage photonic switching of dielectric elastomers with amorphous silicon thin-films. , 2019, , .		2
124	Evaluation of the stiffening mechanism based on micro-sized particle inclusions in laminated composites. Materials Research, 2019, 22, .	1.3	4
125	Microwave Properties of Metacomposites Containing Carbon Fibres and Ferromagnetic Microwires. Research, 2019, 2019, 3239879.	5.7	24
126	The two-dimensional elasticity of a chiral hinge lattice metamaterial. International Journal of Solids and Structures, 2018, 141-142, 254-263.	2.7	21

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127	Evaluation of hybrid-short-coir-fibre-reinforced composites via full factorial design. Composite Structures, 2018, 202, 313-323.	5.8	40
128	Highâ€performance infrared emissivity of microâ€arc oxidation coatings formed on titanium alloy for aerospace applications. International Journal of Applied Ceramic Technology, 2018, 15, 579-591.	2.1	12
129	Statistical Analysis of 3-Point Bending Properties of Polymer Concretes Made From Marble Powder Waste, Sand Grains, and Polyester Resin. Mechanics of Composite Materials, 2018, 53, 781-790.	1.4	10
130	In-plane crashworthiness of bio-inspired hierarchical honeycombs. Composite Structures, 2018, 192, 516-527.	5.8	95
131	Hybrid composites based on sisal fibers and silica nanoparticles. Polymer Composites, 2018, 39, 146-156.	4.6	27
132	High-temperature high-velocity impact on honeycomb sandwich panels. Composites Part B: Engineering, 2018, 138, 1-11.	12.0	33
133	Vibroacoustics of 2D gradient auxetic hexagonal honeycomb sandwich panels. Composite Structures, 2018, 187, 593-603.	5.8	52
134	3D printed hierarchical honeycombs with shape integrity under large compressive deformations. Materials and Design, 2018, 137, 226-234.	7.0	189
135	Hybrid biobased recyclable epoxy composites for mass production. Polymer Composites, 2018, 39, E2217.	4.6	8
136	Multi-stiffness topology optimization of zero Poisson's ratio cellular structures. Composites Part B: Engineering, 2018, 140, 35-43.	12.0	40
137	The effect of surface charge on the thermal stability and ice recrystallization inhibition activity of antifreeze protein III (AFP III). Biochemical and Biophysical Research Communications, 2018, 495, 1055-1060.	2.1	8
138	Meta-tensegrity: Design of a tensegrity prism with metal rubber. Composite Structures, 2018, 206, 644-657.	5.8	27
139	The effect of Portland cement inclusions in hybrid glass fibre reinforced composites based on a full factorial design. Composite Structures, 2018, 202, 233-240.	5.8	14
140	Hybrid bio-composites reinforced with sisal-glass fibres and Portland cement particles: A statistical approach. Composites Part B: Engineering, 2018, 149, 58-65.	12.0	24
141	Impact Behaviour of Hybrid Carbon Fibre Composites Reinforced with Silica Micro- and Functionalized Nanoparticles. Nano Hybrids and Composites, 2018, 21, 1-9.	0.8	2
142	Sustainable sandwich structures made from bottle caps core and aluminium skins: A statistical approach. Thin-Walled Structures, 2018, 130, 362-371.	5.3	25
143	Kirigami stretchable strain sensors with enhanced piezoelectricity induced by topological electrodes. Applied Physics Letters, 2018, 112, .	3.3	58
144	Tensegrity cell mechanical metamaterial with metal rubber. Applied Physics Letters, 2018, 113, .	3.3	22

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145	An E-shape broadband piezoelectric energy harvester induced by magnets. Journal of Intelligent Material Systems and Structures, 2018, 29, 2477-2491.	2.5	11
146	A novel composite multi-layer piezoelectric energy harvester. Composite Structures, 2018, 201, 121-130.	5.8	50
147	Identification and optimization of unbalance parameters in rotor-bearing systems. Journal of Sound and Vibration, 2018, 431, 54-69.	3.9	42
148	Hybrid silica micro and PDDA/nanoparticles-reinforced carbon fibre composites. Journal of Composite Materials, 2017, 51, 783-795.	2.4	10
149	Variable stiffness corrugated composite structure with shape memory polymer for morphing skin applications. Smart Materials and Structures, 2017, 26, 035052.	3.5	24
150	Novel Frame Model for Mistuning Analysis of Bladed Disk Systems. Journal of Vibration and Acoustics, Transactions of the ASME, 2017, 139, .	1.6	10
151	Significantly enhanced creep resistance of low volume fraction in-situ TiBw/Ti6Al4V composites by architectured network reinforcements. Scientific Reports, 2017, 7, 40823.	3.3	16
152	Lattice Metamaterials with Mechanically Tunable Poisson's Ratio for Vibration Control. Physical Review Applied, 2017, 7, .	3.8	250
153	Novel fibre metal laminate sandwich composite structure with sisal woven core. Industrial Crops and Products, 2017, 99, 189-195.	5.2	50
154	Smart Kirigami open honeycombs in shape changing actuation and dynamics. Proceedings of SPIE, 2017, ,	0.8	1
155	Characterization of a novel natural cellulosic fiber from Juncus effusus L Carbohydrate Polymers, 2017, 171, 163-172.	10.2	256
156	A Kirigami shape memory polymer honeycomb concept for deployment. Smart Materials and Structures, 2017, 26, 05LT03.	3.5	37
157	AUXHEX – A Kirigami inspired zero Poisson's ratio cellular structure. Composite Structures, 2017, 176, 433-441.	5.8	46
158	Super stretchable hexagonal boron nitride Kirigami. Thin Solid Films, 2017, 632, 35-43.	1.8	19
159	Measurement of highâ€temperature strains in superalloy and carbon/carbon composites using chemical composition gratings. Strain, 2017, 53, e12218.	2.4	1
160	Broadband and multiband vibration mitigation in lattice metamaterials with sinusoidally-shaped ligaments. Extreme Mechanics Letters, 2017, 17, 24-32.	4.1	77
161	Flexible piezoelectric devices for gastrointestinal motility sensing. Nature Biomedical Engineering, 2017, 1, 807-817.	22.5	127
162	Numerical analysis of the impact resistance in aluminum alloy bi-tubular thin-walled structures designs inspired by beetle elytra. Journal of Materials Science, 2017, 52, 13247-13260.	3.7	62

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163	Interfacial contact stiffness of fractal rough surfaces. Scientific Reports, 2017, 7, 12874.	3.3	38
164	Natural fibres actuators for smart bio-inspired hygromorph biocomposites. Smart Materials and Structures, 2017, 26, 125009.	3.5	58
165	High Solar Desalination Efficiency Achieved with 3D Cu ₂ ZnSnS ₄ Nanosheetâ€Assembled Membranes. Advanced Sustainable Systems, 2017, 1, 1700064.	5.3	25
166	On the design of porous structures with enhanced fatigue life. Extreme Mechanics Letters, 2017, 16, 13-17.	4.1	30
167	Sustainable sandwich composite structures made from aluminium sheets and disposed bottle caps. Thin-Walled Structures, 2017, 120, 38-45.	5.3	27
168	Mechano-physical properties and statistical design of jute yarns. Measurement: Journal of the International Measurement Confederation, 2017, 111, 284-294.	5.0	30
169	Shape memory polymer-based hybrid honeycomb structures with zero Poisson's ratio and variable stiffness. Composite Structures, 2017, 179, 437-443.	5.8	27
170	In-plane elasticity of a multi re-entrant auxetic honeycomb. Composite Structures, 2017, 180, 130-139.	5.8	62
171	Experimental investigation of auxetic structures subjected to quasi static axial load. , 2017, , .		6
172	The Elastic Uniaxial Properties of a Center Symmetric Honeycomb with Curved Cell Walls: Effect of Density and Curvature. Physica Status Solidi (B): Basic Research, 2017, 254, 1600818.	1.5	10
173	Size-dependent mechanical behavior and boundary layer effects in entangled metallic wire material systems. Journal of Materials Science, 2017, 52, 3741-3756.	3.7	27
174	Left-handed metacomposites containing carbon fibers and ferromagnetic microwires. AIP Advances, 2017, 7, 056110.	1.3	6
175	In-plane elasticity of a novel auxetic honeycomb design. Composites Part B: Engineering, 2017, 110, 72-82.	12.0	115
176	Mechanics and band gaps in hierarchical auxetic rectangular perforated composite metamaterials. Composite Structures, 2017, 160, 1042-1050.	5.8	77
177	Efficient computational techniques for mistuning analysis of bladed discs: A review. Mechanical Systems and Signal Processing, 2017, 87, 71-90.	8.0	54
178	Hybrid glass fibre reinforced composites containing silica and cement microparticles based on a design of experiment. Polymer Testing, 2017, 57, 87-93.	4.8	21
179	Auxetics and Other Systems of Anomalous Characteristics. Physica Status Solidi (B): Basic Research, 2017, 254, 1770266.	1.5	7
180	Industrial-Graded Epoxy Nanocomposites with Mechanically Dispersed Multi-Walled Carbon Nanotubes: Static and Damping Properties. Materials, 2017, 10, 1222.	2.9	13

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181	Piezoelectric effects in boron nitride nanotubes predicted by the atomistic finite element method and molecular mechanics. Nanotechnology, 2017, 28, 355705.	2.6	13
182	Application of CCG Sensors to a High-Temperature Structure Subjected to Thermo-Mechanical Load. Sensors, 2016, 16, 1686.	3.8	1
183	Hybrid auxetic foam and perforated plate composites for human body support. Physica Status Solidi (B): Basic Research, 2016, 253, 1378-1386.	1.5	22
184	Blocked Shape Memory Effect in Negative Poisson's Ratio Polymer Metamaterials. ACS Applied Materials & Los Applied Material	8.0	37
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