Hanoch Daniel Wagner

List of Publications by Year
in descending order

62 papers	4,240 citations	147726 31 h-index	118793 62 g-index
62 all docs	62 docs citations	62 times ranked	5557 citing authors

#	Article	IF	Citations
1	Fragmentation of Beaded Fibres in a Composite. Materials, 2022, 15, 890.	1.3	3
2	Synergistic effect of crosslinking and dual reinforcement on the thermal and mechanical properties of polyvinyl alcohol. Polymer Composites, 2021, 42, 1214-1223.	2.3	1
3	Structural analysis across length scales of the scorpion pincer cuticle. Bioinspiration and Biomimetics, 2021, 16, 026013.	1.5	6
4	Polymer beads as interfacial obstacles in fibre composites. Composites Science and Technology, 2021, 210, 108793.	3.8	12
5	A polarized micro-Raman study of necked epoxy fibers. Polymer, 2021, 230, 124034.	1.8	3
6	Hierarchical Interfaces as Fracture Propagation Traps in Natural Layered Composites. Materials, 2021, 14, 6855.	1.3	5
7	A perspective on the structure and properties of nanocomposites. Polymer Composites, 2020, 41, 2986-2989.	2.3	3
8	Nested helicoids in biological microstructures. Nature Communications, 2020, 11, 224.	5.8	27
9	The exoskeleton of scorpionsâ€™ pincers: Structure and micro-mechanical properties. Acta Biomaterialia, 2019, 94, 565-573.	4.1	26
10	Beaded fiber compositesâ€"Stiffness and strength modeling. Journal of the Mechanics and Physics of Solids, 2019, 125, 384-400.	2.3	17
11	Intermittent beading in fiber composites. Composites Science and Technology, 2018, 160, 21-31.	3.8	24
12	Composite Reinforcement by Magnetic Control of Fiber Density and Orientation. ACS Applied Materials & Interfaces, 2018, 10, 16802-16811.	4.0	9
13	The role of carbon and tungsten disulphide nanotubes in the fracture of polymer-interlayered ceramic composites: a microscopy study. Journal of Materials Science, 2018, 53, 5879-5890.	1.7	3
14	Continuous carbon nanotube synthesis on charged carbon fibers. Composites Part A: Applied Science and Manufacturing, 2018, 112, 525-538.	3.8	47
15	The turtle carapace as an optimized multi-scale biological composite armor â€" A review. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 73, 50-67.	1.5	48
16	Should polymer nanocomposites be regarded as molecular composites?. Journal of Materials Science, 2017, 52, 8357-8361.	1.7	29
17	Nanocomposite thin film coatings for brittle materials. Nanocomposites, 2016, 2, 162-168.	2.2	1
18	Stiffness, Strength, and Toughness of Electrospun Nanofibers: Effect of Flow-Induced Molecular Orientation. Macromolecules, 2016, 49, 6518-6530.	2.2	45

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19	Multilevel composite using carbon nanotube fibers (CNTF). Composites Science and Technology, 2016, 137, 35-43.	3.8	28
20	Interphase tuning for stronger and tougher composites. Scientific Reports, 2016, 6, 26305.	1.6	30
21	Toughness of carbon nanotubes conforms to classic fracture mechanics. Science Advances, 2016, 2, e1500969.	4.7	49
22	Effects of tungsten disulphide nanotubes and glutaric acid on the thermal and mechanical properties of polyvinyl alcohol. Composites Science and Technology, 2016, 127, 47-53.	3.8	34
23	Nanocomposite toughness, strength and stiffness: role of filler geometry. Nanocomposites, 2015, 1, 3-17.	2.2	40
24	The red-eared slider turtle carapace under fatigue loading: The effect of ribâ€“suture arrangement. Materials Science and Engineering C, 2015, 53, 128-133.	3.8	26
25	Hierarchical carbon nanotube carbon fiber unidirectional composites with preserved tensile and interfacial properties. Composites Science and Technology, 2015, 117, 139-145.	3.8	83
26	Gelatin yarns inspired by tendons â€” Structural and mechanical perspectives. Materials Science and Engineering C, 2015, 47, 1-7.	3.8	9
27	Molecular dynamic simulation of oblique pullout of carbon nanotube from resin. Computational Materials Science, 2014, 83, 504-512.	1.4	10
28	Bending mechanics of the red-eared slider turtle carapace. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 30, 223-233.	1.5	42
29	The emergence of an unusual stiffness profile in hierarchical biological tissues. Acta Biomaterialia, 2013, 9, 8099-8109.	4.1	13
30	Fracture behavior of nanotubeâ€“polymer composites: Insights on surface roughness and failure mechanism. Composites Science and Technology, 2013, 87, 157-163.	3.8	91
31	Micro-structure and mechanical properties of the turtle carapace as a biological composite shield. Acta Biomaterialia, 2013, 9, 5890-5902.	4.1	116
32	Nanocomposite toughness from a pull-out mechanism. Composites Science and Technology, 2013, 83, 27-31.	3.8	74
33	Osteonal lamellae elementary units: Lamellar microstructure, curvature and mechanical properties. Acta Biomaterialia, 2013, 9, 5956-5962.	4.1	38
34	New insights into the Young's modulus of staggered biological composites. Materials Science and Engineering C, 2013, 33, 603-607.	3.8	15
35	Stiffness of the Extrafibrillar Phase in Staggered Biological Arrays. Physical Review Letters, 2012, 109, 078102.	2.9	7
36	Application of continuously-monitored single fiber fragmentation tests to carbon nanotube/carbon microfiber hybrid composites. Composites Science and Technology, 2012, 72, 1711-1717.	3.8	41

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37	Mechanical properties of electrospun PMMA micro-yarns: Effects of NaCl mediation and yarn twist. Polymer, 2012, 53, 5037-5044.	1.8	16
38	Mechanics of electrospun collagen and hydroxyapatite/collagen nanofibers. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 13, 185-193.	1.5	32
39	Effect of scale and surface chemistry on the mechanical properties of carbon nanotubesâ€based composites. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 957-962.	2.4	9
40	Effective moduli of multi-scale composites. Composites Science and Technology, 2012, 72, 566-573.	3.8	15
41	Nanoindentation of osteonal bone lamellae. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 9, 198-206.	1.5	39
42	Youngâ€™s modulus of peritubular and intertubular human dentin by nano-indentation tests. Journal of Structural Biology, 2011, 174, 23-30.	1.3	86
43	Mechanical model for staggered bio-structure. Journal of the Mechanics and Physics of Solids, 2011, 59, 1685-1701.	2.3	51
44	The Effect of WS2 Nanotubes on the Properties of Epoxy-Based Nanocomposites. Journal of Adhesion Science and Technology, 2011, 25, 1603-1617.	1.4	57
45	Enhanced Mechanical Properties of Electrospun Nano-Fibers Through NaCl Mediation. Journal of Nanoscience and Nanotechnology, 2011, 11, 7931-7936.	0.9	12
46	A novel experimental method for the local mechanical testing of human coronal dentin. Dental Materials, 2010, 26, 179-184.	1.6	10
47	Correlation between interfacial molecular structure and mechanics in CNT/epoxy nano-composites. Composites Part A: Applied Science and Manufacturing, 2010, 41, 1093-1098.	3.8	138
48	Optimized toughness of short fiber-based composites: The effect of fiber diameter. Composites Science and Technology, 2009, 69, 1323-1325.	3.8	22
49	Tough Nanocomposites: The Role of Carbon Nanotube Type. Nano Letters, 2009, 9, 1423-1426.	4.5	63
50	In situ TEM measurements of the mechanical properties and behavior of WS2 nanotubes. Nano Research, 2008, 1, 22.	5.8	55
51	On nanocomposite toughness. Composites Science and Technology, 2008, 68, 329-331.	3.8	136
52	Paving the way to stronger materials. Nature Nanotechnology, 2007, 2, 742-744.	15.6	85
53	On the mechanical behavior of WS2 nanotubes under axial tension and compression. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 523-528.	3.3	263
54	The role of surfactants in dispersion of carbon nanotubes. Advances in Colloid and Interface Science, 2006, 128-130, 37-46.	7.0	1,224

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55	Rubbery and glassy epoxy resins reinforced with carbon nanotubes. Composites Science and Technology, 2005, 65, 1861-1868.	3.8	170
56	On the tensile strength distribution of multiwalled carbon nanotubes. Applied Physics Letters, 2005, 87, 203106.	1.5	148
57	Nanocomposites: issues at the interface. Materials Today, 2004, 7, 38-42.	8.3	218
58	Two-dimensional strain mapping in model fiber-polymer composites using nanotube Raman sensing. Composites Part A: Applied Science and Manufacturing, 2003, 34, 1219-1225.	3.8	38
59	Direction-sensitive stress measurements with carbon nanotube sensors. Polymers for Advanced Technologies, 2002, 13, 759-764.	1.6	32
60	Nanotubeâ€"polymer adhesion: a mechanics approach. Chemical Physics Letters, 2002, 361, 57-61.	1.2	201
61	Using carbon nanotubes to detect polymer transitions. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 1492-1495.	2.4	38
62	Fracture behavior of short-fiber reinforced materials. Journal of Materials Research, 1992, 7, 3120-3131.	1.2	27