

# Hanoch Daniel Wagner

## List of Publications by Year in descending order

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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	The role of surfactants in dispersion of carbon nanotubes. <i>Advances in Colloid and Interface Science</i> , 2006, 128-130, 37-46.	7.0	1,224
2	On the mechanical behavior of WS2 nanotubes under axial tension and compression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 523-528.	3.3	263
3	Nanocomposites: issues at the interface. <i>Materials Today</i> , 2004, 7, 38-42.	8.3	218
4	Nanotube-polymer adhesion: a mechanics approach. <i>Chemical Physics Letters</i> , 2002, 361, 57-61.	1.2	201
5	Rubbery and glassy epoxy resins reinforced with carbon nanotubes. <i>Composites Science and Technology</i> , 2005, 65, 1861-1868.	3.8	170
6	On the tensile strength distribution of multiwalled carbon nanotubes. <i>Applied Physics Letters</i> , 2005, 87, 203106.	1.5	148
7	Correlation between interfacial molecular structure and mechanics in CNT/epoxy nano-composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2010, 41, 1093-1098.	3.8	138
8	On nanocomposite toughness. <i>Composites Science and Technology</i> , 2008, 68, 329-331.	3.8	136
9	Micro-structure and mechanical properties of the turtle carapace as a biological composite shield. <i>Acta Biomaterialia</i> , 2013, 9, 5890-5902.	4.1	116
10	Fracture behavior of nanotube-polymer composites: Insights on surface roughness and failure mechanism. <i>Composites Science and Technology</i> , 2013, 87, 157-163.	3.8	91
11	Young's modulus of peritubular and intertubular human dentin by nano-indentation tests. <i>Journal of Structural Biology</i> , 2011, 174, 23-30.	1.3	86
12	Paving the way to stronger materials. <i>Nature Nanotechnology</i> , 2007, 2, 742-744.	15.6	85
13	Hierarchical carbon nanotube carbon fiber unidirectional composites with preserved tensile and interfacial properties. <i>Composites Science and Technology</i> , 2015, 117, 139-145.	3.8	83
14	Nanocomposite toughness from a pull-out mechanism. <i>Composites Science and Technology</i> , 2013, 83, 27-31.	3.8	74
15	Tough Nanocomposites: The Role of Carbon Nanotube Type. <i>Nano Letters</i> , 2009, 9, 1423-1426.	4.5	63
16	The Effect of WS2 Nanotubes on the Properties of Epoxy-Based Nanocomposites. <i>Journal of Adhesion Science and Technology</i> , 2011, 25, 1603-1617.	1.4	57
17	In situ TEM measurements of the mechanical properties and behavior of WS2 nanotubes. <i>Nano Research</i> , 2008, 1, 22.	5.8	55
18	Mechanical model for staggered bio-structure. <i>Journal of the Mechanics and Physics of Solids</i> , 2011, 59, 1685-1701.	2.3	51

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19	Toughness of carbon nanotubes conforms to classic fracture mechanics. <i>Science Advances</i> , 2016, 2, e1500969.	4.7	49
20	The turtle carapace as an optimized multi-scale biological composite armor – A review. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 73, 50-67.	1.5	48
21	Continuous carbon nanotube synthesis on charged carbon fibers. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 112, 525-538.	3.8	47
22	Stiffness, Strength, and Toughness of Electrospun Nanofibers: Effect of Flow-Induced Molecular Orientation. <i>Macromolecules</i> , 2016, 49, 6518-6530.	2.2	45
23	Bending mechanics of the red-eared slider turtle carapace. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 30, 223-233.	1.5	42
24	Application of continuously-monitored single fiber fragmentation tests to carbon nanotube/carbon microfiber hybrid composites. <i>Composites Science and Technology</i> , 2012, 72, 1711-1717.	3.8	41
25	Nanocomposite toughness, strength and stiffness: role of filler geometry. <i>Nanocomposites</i> , 2015, 1, 3-17.	2.2	40
26	Nanoindentation of osteonal bone lamellae. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 9, 198-206.	1.5	39
27	Using carbon nanotubes to detect polymer transitions. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 1492-1495.	2.4	38
28	Two-dimensional strain mapping in model fiber-polymer composites using nanotube Raman sensing. <i>Composites Part A: Applied Science and Manufacturing</i> , 2003, 34, 1219-1225.	3.8	38
29	Osteonal lamellae elementary units: Lamellar microstructure, curvature and mechanical properties. <i>Acta Biomaterialia</i> , 2013, 9, 5956-5962.	4.1	38
30	Effects of tungsten disulphide nanotubes and glutaric acid on the thermal and mechanical properties of polyvinyl alcohol. <i>Composites Science and Technology</i> , 2016, 127, 47-53.	3.8	34
31	Direction-sensitive stress measurements with carbon nanotube sensors. <i>Polymers for Advanced Technologies</i> , 2002, 13, 759-764.	1.6	32
32	Mechanics of electrospun collagen and hydroxyapatite/collagen nanofibers. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 13, 185-193.	1.5	32
33	Interphase tuning for stronger and tougher composites. <i>Scientific Reports</i> , 2016, 6, 26305.	1.6	30
34	Should polymer nanocomposites be regarded as molecular composites?. <i>Journal of Materials Science</i> , 2017, 52, 8357-8361.	1.7	29
35	Multilevel composite using carbon nanotube fibers (CNTF). <i>Composites Science and Technology</i> , 2016, 137, 35-43.	3.8	28
36	Fracture behavior of short-fiber reinforced materials. <i>Journal of Materials Research</i> , 1992, 7, 3120-3131.	1.2	27

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37	Nested helicoids in biological microstructures. <i>Nature Communications</i> , 2020, 11, 224.	5.8	27
38	The red-eared slider turtle carapace under fatigue loading: The effect of rib suture arrangement. <i>Materials Science and Engineering C</i> , 2015, 53, 128-133.	3.8	26
39	The exoskeleton of scorpions' pincers: Structure and micro-mechanical properties. <i>Acta Biomaterialia</i> , 2019, 94, 565-573.	4.1	26
40	Intermittent beading in fiber composites. <i>Composites Science and Technology</i> , 2018, 160, 21-31.	3.8	24
41	Optimized toughness of short fiber-based composites: The effect of fiber diameter. <i>Composites Science and Technology</i> , 2009, 69, 1323-1325.	3.8	22
42	Beaded fiber composites' Stiffness and strength modeling. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 125, 384-400.	2.3	17
43	Mechanical properties of electrospun PMMA micro-yarns: Effects of NaCl mediation and yarn twist. <i>Polymer</i> , 2012, 53, 5037-5044.	1.8	16
44	Effective moduli of multi-scale composites. <i>Composites Science and Technology</i> , 2012, 72, 566-573.	3.8	15
45	New insights into the Young's modulus of staggered biological composites. <i>Materials Science and Engineering C</i> , 2013, 33, 603-607.	3.8	15
46	The emergence of an unusual stiffness profile in hierarchical biological tissues. <i>Acta Biomaterialia</i> , 2013, 9, 8099-8109.	4.1	13
47	Enhanced Mechanical Properties of Electrospun Nano-Fibers Through NaCl Mediation. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 7931-7936.	0.9	12
48	Polymer beads as interfacial obstacles in fibre composites. <i>Composites Science and Technology</i> , 2021, 210, 108793.	3.8	12
49	A novel experimental method for the local mechanical testing of human coronal dentin. <i>Dental Materials</i> , 2010, 26, 179-184.	1.6	10
50	Molecular dynamic simulation of oblique pullout of carbon nanotube from resin. <i>Computational Materials Science</i> , 2014, 83, 504-512.	1.4	10
51	Effect of scale and surface chemistry on the mechanical properties of carbon nanotubes-based composites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 957-962.	2.4	9
52	Gelatin yarns inspired by tendons' Structural and mechanical perspectives. <i>Materials Science and Engineering C</i> , 2015, 47, 1-7.	3.8	9
53	Composite Reinforcement by Magnetic Control of Fiber Density and Orientation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 16802-16811.	4.0	9
54	Stiffness of the Extrafibrillar Phase in Staggered Biological Arrays. <i>Physical Review Letters</i> , 2012, 109, 078102.	2.9	7

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55	Structural analysis across length scales of the scorpion pincer cuticle. Bioinspiration and Biomimetics, 2021, 16, 026013.	1.5	6
56	Hierarchical Interfaces as Fracture Propagation Traps in Natural Layered Composites. Materials, 2021, 14, 6855.	1.3	5
57	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
58	A perspective on the structure and properties of nanocomposites. Polymer Composites, 2020, 41, 2986-2989.	2.3	3
59	A polarized micro-Raman study of necked epoxy fibers. Polymer, 2021, 230, 124034.	1.8	3
60	Fragmentation of Beaded Fibres in a Composite. Materials, 2022, 15, 890.	1.3	3
61	Nanocomposite thin film coatings for brittle materials. Nanocomposites, 2016, 2, 162-168.	2.2	1
62	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