

Stephen J Eichhorn

List of Publications by Year in descending order

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81
papers

8,531
citations

61984

43
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64796

79
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81
docs citations

81
times ranked

9212
citing authors

#	ARTICLE	IF	CITATIONS
1	Ice-templated, Sustainable Carbon Aerogels with Hierarchically Tailored Channels for Sodium- and Potassium-Ion Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	67
2	Octylamine-Modified Cellulose Nanocrystal-Enhanced Stabilization of Pickering Emulsions for Self-Healing Composite Coatings. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 12722-12733.	8.0	18
3	Beyond What Meets the Eye: Imaging and Imagining Wood Mechanical-Structural Properties. <i>Advanced Materials</i> , 2021, 33, e2001613.	21.0	46
4	Continuous and sustainable cellulose filaments from ionic liquid dissolved paper sludge nanofibres. <i>Journal of Cleaner Production</i> , 2021, 280, 124503.	9.3	19
5	Chemoenzymatic Synthesis of Fluorinated Cellodextrins Identifies a New Allomorph for Cellulose-Like Materials**. <i>Chemistry - A European Journal</i> , 2021, 27, 1374-1382.	3.3	18
6	Natural Fibres as a Sustainable Reinforcement Constituent in Aligned Discontinuous Polymer Composites Produced by the HiPerDiF Method. <i>Materials</i> , 2021, 14, 1885.	2.9	12
7	The physicochemical effect of sugar alcohol plasticisers on oxidised nanocellulose gels and extruded filaments. <i>Cellulose</i> , 2021, 28, 7829-7843.	4.9	6
8	Postsynthesis Self- And Coassembly of Enzymatically Produced Fluorinated Cellodextrins and Cellulose Nanocrystals. <i>Langmuir</i> , 2021, 37, 9215-9221.	3.5	4
9	Structure-property-function relationships of natural and engineered wood. <i>Nature Reviews Materials</i> , 2020, 5, 642-666.	48.7	616
10	Employing photoluminescence to rapidly follow aggregation and dispersion of cellulose nanofibrils. <i>Analyst</i> , 2020, 145, 4836-4843.	3.5	11
11	Carbon Nanofiber Aerogel/Magnetic Core-Shell Nanoparticle Composites as Recyclable Oil Sorbents. <i>ACS Applied Nano Materials</i> , 2020, 3, 3939-3950.	5.0	44
12	Hydrophobization of Cellulose Nanocrystals for Aqueous Colloidal Suspensions and Gels. <i>Biomacromolecules</i> , 2020, 21, 1812-1823.	5.4	38
13	Rapid Determination of the Distribution of Cellulose Nanomaterial Aggregates in Composites Enabled by Multi-Channel Spectral Confocal Microscopy. <i>Microscopy and Microanalysis</i> , 2019, 25, 682-689.	0.4	13
14	Thermosensitive supramolecular and colloidal hydrogels via self-assembly modulated by hydrophobized cellulose nanocrystals. <i>Cellulose</i> , 2019, 26, 529-542.	4.9	30
15	Stress transfer and matrix-cohesive fracture mechanism in microfibrillated cellulose-gelatin nanocomposite films. <i>Carbohydrate Polymers</i> , 2018, 195, 89-98.	10.2	29
16	Current characterization methods for cellulose nanomaterials. <i>Chemical Society Reviews</i> , 2018, 47, 2609-2679.	38.1	690
17	Cellulose nanofibres for photonics and plasmonics. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2018, 12, 1-7.	5.9	8
18	Regenerated Cellulose and Willow Lignin Blends as Potential Renewable Precursors for Carbon Fibers. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 5903-5910.	6.7	49

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19	Magnetically responsive and flexible bacterial cellulose membranes. <i>Carbohydrate Polymers</i> , 2018, 192, 251-262.	10.2	34
20	Quantitative analysis of the distribution and mixing of cellulose nanocrystals in thermoplastic composites using Raman chemical imaging. <i>RSC Advances</i> , 2018, 8, 35831-35839.	3.6	8
21	White magnetic paper based on a bacterial cellulose nanocomposite. <i>Journal of Materials Chemistry C</i> , 2018, 6, 11427-11435.	5.5	30
22	Mechanically Robust Gels Formed from Hydrophobized Cellulose Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 19318-19322.	8.0	30
23	Characterization of pulp derived nanocellulose hydrogels using AVAPÂ® technology. <i>Carbohydrate Polymers</i> , 2018, 198, 270-280.	10.2	34
24	Superbase ionic liquids for effective cellulose processing from dissolution to carbonisation. <i>Green Chemistry</i> , 2017, 19, 5949-5957.	9.0	44
25	Hybrid carbon fibreâ€“carbon nanotube composite interfaces. <i>Composites Science and Technology</i> , 2014, 95, 114-120.	7.8	46
26	Deformation micromechanics of all-cellulose nanocomposites: Comparing matrix and reinforcing components. <i>Carbohydrate Polymers</i> , 2014, 100, 31-39.	10.2	49
27	Supercapacitance from Cellulose and Carbon Nanotube Nanocomposite Fibers. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 9983-9990.	8.0	183
28	Carbon nanofibres produced from electrospun cellulose nanofibres. <i>Carbon</i> , 2013, 58, 66-75.	10.3	147
29	Oriented surfaces of adsorbed cellulose nanowhiskers promote skeletal muscle myogenesis. <i>Acta Biomaterialia</i> , 2013, 9, 4707-4715.	8.3	105
30	Isolation and characterization of microcrystalline cellulose from oil palm biomass residue. <i>Carbohydrate Polymers</i> , 2013, 93, 628-634.	10.2	335
31	Coaxially Electrospun Axon-Mimicking Fibers for Diffusion Magnetic Resonance Imaging. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 6311-6316.	8.0	34
32	Stiff as a Board: Perspectives on the Crystalline Modulus of Cellulose. <i>ACS Macro Letters</i> , 2012, 1, 1237-1239.	4.8	45
33	Stress-transfer in microfibrillated cellulose reinforced poly(lactic acid) composites using Raman spectroscopy. <i>Composites Part A: Applied Science and Manufacturing</i> , 2012, 43, 1145-1152.	7.6	51
34	Micromechanics of TEMPO-Oxidized Fibrillated Cellulose Composites. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 331-337.	8.0	54
35	Effective Youngâ€™s Modulus of Bacterial and Microfibrillated Cellulose Fibrils in Fibrous Networks. <i>Biomacromolecules</i> , 2012, 13, 1340-1349.	5.4	189
36	Influence of Magnetic Field Alignment of Cellulose Whiskers on the Mechanics of All-Cellulose Nanocomposites. <i>Biomacromolecules</i> , 2012, 13, 2528-2536.	5.4	105

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37	Bioinspired Mechanically Adaptive Polymer Nanocomposites with Water-Activated Shape-Memory Effect. <i>Macromolecules</i> , 2011, 44, 6827-6835.	4.8	301
38	Cross-Linked Bacterial Cellulose Networks Using Glyoxalization. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 490-499.	8.0	49
39	The Effective Young's Modulus of Carbon Nanotubes in Composites. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 433-440.	8.0	91
40	An artificial biomineral formed by incorporation of copolymer micelles in calcite crystals. <i>Nature Materials</i> , 2011, 10, 890-896.	27.5	248
41	Stress Transfer in Cellulose Nanowhisker Composites—Influence of Whisker Aspect Ratio and Surface Charge. <i>Biomacromolecules</i> , 2011, 12, 1363-1369.	5.4	117
42	Cellulose nanowhiskers: promising materials for advanced applications. <i>Soft Matter</i> , 2011, 7, 303-315.	2.7	732
43	Surface only modification of bacterial cellulose nanofibres with organic acids. <i>Cellulose</i> , 2011, 18, 595-605.	4.9	177
44	Jet deposition in near-field electrospinning of patterned polycaprolactone and sugar-polycaprolactone core-shell fibres. <i>Polymer</i> , 2011, 52, 3603-3610.	3.8	68
45	Comparing single-walled carbon nanotubes and samarium oxide as strain sensors for model glass-fibre/epoxy composites. <i>Composites Science and Technology</i> , 2010, 70, 88-93.	7.8	30
46	Elastic coils: deformation micromechanics of coir and celery fibres. <i>Cellulose</i> , 2010, 17, 1-11.	4.9	33
47	Characterisation of amino acid modified cellulose surfaces using ToF-SIMS and XPS. <i>Cellulose</i> , 2010, 17, 747-756.	4.9	35
48	Bio-Inspired Synthesis and Mechanical Properties of Calcite-Polymer Particle Composites. <i>Advanced Materials</i> , 2010, 22, 2082-2086.	21.0	122
49	Discrimination of matrix-fibre interactions in all-cellulose nanocomposites. <i>Composites Science and Technology</i> , 2010, 70, 2325-2330.	7.8	50
50	Optimization of the Mechanical Performance of Bacterial Cellulose/Poly(l-lactic) Acid Composites. <i>ACS Applied Materials & Interfaces</i> , 2010, 2, 321-330.	8.0	101
51	Directing the Morphology and Differentiation of Skeletal Muscle Cells Using Oriented Cellulose Nanowhiskers. <i>Biomacromolecules</i> , 2010, 11, 2498-2504.	5.4	125
52	Stress-Transfer in Anisotropic and Environmentally Adaptive Cellulose Whisker Nanocomposites. <i>Biomacromolecules</i> , 2010, 11, 762-768.	5.4	106
53	Relationships between specific surface area and pore size in electrospun polymer fibre networks. <i>Journal of the Royal Society Interface</i> , 2010, 7, 641-649.	3.4	114
54	Tensile and shear properties of fingernails as a function of a changing humidity environment. <i>Journal of Biomechanics</i> , 2009, 42, 1230-1235.	2.1	26

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55	Deformation micromechanics of a model cellulose/glass fibre hybrid composite. <i>Composites Science and Technology</i> , 2009, 69, 2218-2224.	7.8	24
56	An estimation of the Young's modulus of bacterial cellulose filaments. <i>Cellulose</i> , 2008, 15, 507-513.	4.9	322
57	Debundling, Isolation, and Identification of Carbon Nanotubes in Electrospun Nanofibers. <i>Small</i> , 2008, 4, 930-933.	10.0	18
58	Controlling cell morphology on amino acid-modified cellulose. <i>Soft Matter</i> , 2008, 4, 1059.	2.7	31
59	The effect of humidity on the fracture properties of human fingernails. <i>Journal of Experimental Biology</i> , 2008, 211, 3677-3681.	1.7	35
60	Deformation of isolated single-wall carbon nanotubes in electrospun polymer nanofibres. <i>Nanotechnology</i> , 2007, 18, 235707.	2.6	64
61	Influence of Domain Orientation on the Mechanical Properties of Regenerated Cellulose Fibers. <i>Biomacromolecules</i> , 2007, 8, 624-630.	5.4	27
62	Deformation mechanisms in polymer fibres and nanocomposites. <i>Polymer</i> , 2007, 48, 2-18.	3.8	95
63	Deformation micromechanics of model regenerated cellulose fibre-epoxy/polyester composites. <i>Composites Science and Technology</i> , 2007, 67, 2150-2159.	7.8	40
64	Analysis of interfacial micromechanics in microdroplet model composites using synchrotron microfocus X-ray diffraction. <i>Composites Science and Technology</i> , 2006, 66, 2197-2205.	7.8	19
65	Modelling the crystalline deformation of native and regenerated cellulose. <i>Cellulose</i> , 2006, 13, 291-307.	4.9	142
66	Crystalline and amorphous deformation of process-controlled cellulose-II fibres. <i>Polymer</i> , 2005, 46, 6380-6390.	3.8	56
67	Crystallographic texturing in single poly(p-phenylene benzobisoxazole) fibres investigated using synchrotron radiation. <i>Polymer</i> , 2005, 46, 1935-1942.	3.8	22
68	Elastic Modulus and Stress-Transfer Properties of Tunicate Cellulose Whiskers. <i>Biomacromolecules</i> , 2005, 6, 1055-1061.	5.4	841
69	The role of residual stress in the fracture properties of a natural ceramic. <i>Journal of Materials Chemistry</i> , 2005, 15, 947.	6.7	18
70	Modeling Crystal and Molecular Deformation in Regenerated Cellulose Fibers. <i>Biomacromolecules</i> , 2005, 6, 507-513.	5.4	111
71	Statistical geometry of pores and statistics of porous nanofibrous assemblies. <i>Journal of the Royal Society Interface</i> , 2005, 2, 309-318.	3.4	288
72	Crystal lattice deformation in single poly(p-phenylene benzobisoxazole) fibres. <i>Polymer</i> , 2004, 45, 7693-7704.	3.8	46

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73	Composite micromechanics of hemp fibres and epoxy resin microdroplets. Composites Science and Technology, 2004, 64, 767-772.	7.8	126
74	Analysis of Stress Transfer in Two-Phase Polymer Systems Using Synchrotron Microfocus X-ray Diffraction. Macromolecules, 2004, 37, 9503-9509.	4.8	22
75	Deformation micromechanics of natural cellulose fibre networks and composites. Composites Science and Technology, 2003, 63, 1225-1230.	7.8	64
76	Characterisation of the microstructure and deformation of high modulus cellulose fibres. Polymer, 2003, 44, 5901-5908.	3.8	50
77	The Young's modulus of a microcrystalline cellulose. Cellulose, 2001, 8, 197-207.	4.9	224
78	Deformation Processes in Regenerated Cellulose Fibers. Textile Research Journal, 2001, 71, 121-129.	2.2	40
79	Strain induced shifts in the Raman spectra of natural cellulose fibers. Journal of Materials Science Letters, 2000, 19, 721-723.	0.5	37
80	Resource extraction as a tool of racism in West Papua. International Journal of Human Rights, 0, , 1-23.	1.2	1
81	Numerical simulation of transverse compression and densification of wood. Wood Science and Technology, 0, , .	3.2	2