Wolfgang Bauer

List of Publications by Year
in descending order

58	903	516710 16	552781 26
papers	citations	h-index	g-index

59	59	59	946
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Alginate and Chitosan as a Functional Barrier for Paper-Based Packaging Materials. Coatings, 2018, 8, 235.	2.6	79
2	What holds paper together: Nanometre scale exploration of bonding between paper fibres. Scientific Reports, 2013, 3, 2432.	3.3	59
3	Influence of Oxygen and Mediators on Laccase-Catalyzed Polymerization of Lignosulfonate. ACS Sustainable Chemistry and Engineering, 2016, 4, 5303-5310.	6.7	55
4	Laccase mediated oxidation of industrial lignins: Is oxygen limiting?. Process Biochemistry, 2015, 50, 1277-1283.	3.7	49
5	Pulp Finesâ€"Characterization, Sheet Formation, and Comparison to Microfibrillated Cellulose. Polymers, 2017, 9, 366.	4.5	43
6	Testing of individual fiber-fiber joints under biaxial load and simultaneous analysis of deformation. Nordic Pulp and Paper Research Journal, 2012, 27, 237-244.	0.7	30
7	Laccase modified lignosulfonates as novel binder in pigment based paper coating formulations. Reactive and Functional Polymers, 2018, 123, 20-25.	4.1	30
8	Imaging of the formerly bonded area of individual fibre to fibre joints with SEM and AFM. Cellulose, 2014, 21, 251-260.	4.9	28
9	Morphology and rheology of cellulose nanofibrils derived from mixtures of pulp fibres and papermaking fines. Cellulose, 2016, 23, 2439-2448.	4.9	27
10	Strength of individual hardwood fibres and fibre to fibre joints. Cellulose, 2016, 23, 2049-2060.	4.9	27
11	A novel approach to determining the contribution of the fiber and fines fraction to the water retention value (WRV) of chemical and mechanical pulps. Cellulose, 2017, 24, 3029-3036.	4.9	26
12	Influence of relative humidity on the strength of hardwood and softwood pulp fibres and fibre to fibre joints. Cellulose, 2018, 25, 2681-2690.	4.9	24
13	Heat of sorption: A comparison between isotherm models and calorimeter measurements of wood pulp. Drying Technology, 2016, 34, 563-573.	3.1	21
14	Paper physics. Nordic Pulp and Paper Research Journal, 2009, 24, 199-205.	0.7	20
15	Automated serial sectioning applied to 3D paper structure analysis. Journal of Microscopy, 2011, 242, 197-205.	1.8	19
16	Application of Industrially Produced Chitosan in the Surface Treatment of Fibre-Based Material: Effect of Drying Method and Number of Coating Layers on Mechanical and Barrier Properties. Polymers, 2018, 10, 1232.	4.5	19
17	Reinforcement effect of pulp fines and microfibrillated cellulose in highly densified binderless paperboards. Journal of Cleaner Production, 2021, 281, 125258.	9.3	19
18	Characterization of natural polymers as functional barriers for cellulose-based packaging materials. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2019, 36, 976-988.	2.3	17

#	Article	IF	Citations
19	Cationic starches in paper-based applicationsâ€"A review on analytical methods. Carbohydrate Polymers, 2020, 235, 115964.	10.2	17
20	Automated 3D measurement of fiber cross section morphology in handsheets. Nordic Pulp and Paper Research Journal, 2012, 27, 264-269.	0.7	17
21	Pulp Fiber Bending Stiffness in Wet and Dry State Measured from Moment of Inertia and Modulus of Elasticity. BioResources, 2014, 9, .	1.0	16
22	Technical Lignins and Their Utilization in the Surface Sizing of Paperboard. Industrial & Engineering Chemistry Research, 2018, 57, 6284-6291.	3.7	15
23	Revisiting polarized light microscopy for fiber-fiber bond area measurement - Part II: Proving the applicability. Nordic Pulp and Paper Research Journal, 2010, 25, 71-75.	0.7	13
24	Calendering Effects on Coating Pore Structure and Ink Setting Behavior. Tappi Journal, 2010, 9, 27-35.	0.5	13
25	Revisiting polarized light microscopy for fiber-fiber bond area measurement - Part I: Theoretical fundamentals. Nordic Pulp and Paper Research Journal, 2010, 25, 65-70.	0.7	12
26	Improved microscopy method for morphological characterisation of pulp fines. Nordic Pulp and Paper Research Journal, 2017, 32, 244-252.	0.7	12
27	How cellulose nanofibrils and cellulose microparticles impact paper strengthâ€"A visualization approach. Carbohydrate Polymers, 2021, 254, 117406.	10.2	12
28	Modifying cellulose fibers by adsorption/precipitation of xylan. Cellulose, 2015, 22, 189-201.	4.9	11
29	How xylan effects the breaking load of individual fiberâ€"fiber joints and the single fiber tensile strength. Cellulose, 2015, 22, 849-859.	4.9	11
30	The influence of fibrillation on the oxygen barrier properties of films from microfibrillated cellulose. Nordic Pulp and Paper Research Journal, 2016, 31, 548-560.	0.7	11
31	White Water Recirculation Method as a Means to Evaluate the Influence of Fines on the Properties of Handsheets. BioResources, 2015, 10, .	1.0	10
32	A method for preparing extensible paper on the laboratory scale. Nordic Pulp and Paper Research Journal, 2014, 29, 317-321.	0.7	9
33	Mechanistic understanding of size-based fiber separation in coiled tubes. International Journal of Multiphase Flow, 2016, 83, 239-253.	3.4	9
34	Localization of cellulosic fines in paper via fluorescent labeling. Cellulose, 2019, 26, 6933-6942.	4.9	9
35	Fine Cellulosic Materials Produced from Chemical Pulp: the Combined Effect of Morphology and Rate of Addition on Paper Properties. Nanomaterials, 2019, 9, 321.	4.1	9
36	Willow Bark for Sustainable Energy Storage Systems. Materials, 2020, 13, 1016.	2.9	9

#	Article	IF	Citations
37	Biorefining: the role of endoglucanases in refining of cellulose fibers. Cellulose, 2021, 28, 7633-7650.	4.9	9
38	Nanocellulose from fractionated sulfite wood pulp. Cellulose, 2020, 27, 9325-9336.	4.9	8
39	Effects of enzymes on the refining of different pulps. Journal of Biotechnology, 2020, 320, 1-10.	3.8	8
40	Mechanistic investigation of the effect of endoglucanases related to pulp refining. Cellulose, 2022, 29, 2579-2598.	4.9	8
41	Green Procedure to Manufacture Nanoparticle-Decorated Paper Substrates. Materials, 2018, 11, 2412.	2.9	7
42	Affinity of Serum Albumin and Fibrinogen to Cellulose, Its Hydrophobic Derivatives and Blends. Frontiers in Chemistry, 2019, 7, 581.	3.6	7
43	A continuum micromechanics approach to the elasticity and strength of planar fiber networks: Theory and application to paper sheets. European Journal of Mechanics, A/Solids, 2019, 75, 516-531.	3.7	7
44	Registration and point wise correlation of local paper properties. Nordic Pulp and Paper Research Journal, 2008, 23, 374-381.	0.7	6
45	Cobalt Ferrite Nanoparticles for Three-Dimensional Visualization of Micro- and Nanostructured Cellulose in Paper. ACS Applied Nano Materials, 2019, 2, 3864-3869.	5.0	5
46	Towards a better understanding of synergistic enzyme effects during refining of cellulose fibers. Carbohydrate Polymer Technologies and Applications, 2022, 4, 100223.	2.6	5
47	Theory and practice of European co-operative education and training for the support of energy transition. Energy, Sustainability and Society, 2019, 9, .	3.8	4
48	Comparison of the Functional Barrier Properties of Chitosan Acetate Films with Conventionally Applied Polymers. Molecules, 2020, 25, 3491.	3.8	4
49	Investigation of the Adsorption Behavior of Jet-Cooked Cationic Starches on Pulp Fibers. Polymers, 2020, 12, 2249.	4.5	4
50	The effect of Dean Flow in a tube flow fractionation device. Nordic Pulp and Paper Research Journal, 2016, 31, 641-647.	0.7	3
51	Softwood kraft pulp fines: application and impact on specific refining energy and strength properties. Cellulose, 2020, 27, 10359-10367.	4.9	3
52	Detecting Paper Fibre Cross Sections in Microtomy Images. , 2010, , .		2
53	Laccase: old enzyme with new applications. New Biotechnology, 2018, 44, S29.	4.4	2
54	A novel approach to quantify spatial coating-layer formation. Tappi Journal, 2010, 9, 7-13.	0.5	2

#	Article	IF	Citations
55	Fast evaluation of spatial coating layer formation using ultraviolet scanner imaging. Tappi Journal, 2015, 14, 527-535.	0.5	1
56	Evaluation of fines separation from unbleached softwood kraft pulp using microperforated hole screens. Nordic Pulp and Paper Research Journal, 2022, 37, 1-13.	0.7	1
57	Evaluation of cut quality of woodfree coated papers. Tappi Journal, 2013, 12, 9-15.	0.5	0
58	A new test device to analyse the flow resistance and compressive behaviour of fibre mats. Nordic Pulp and Paper Research Journal, 2016, 31, 634-640.	0.7	0