Benoit Duchemin

List of Publications by Year
in descending order

34 papers	941 citations	566801 15 h-index	454577 30 g-index
34 all docs	34 docs citations	34 times ranked	1124 citing authors

#	Article	IF	Citations
1	All-cellulose composites by partial dissolution in the ionic liquid 1-butyl-3-methylimidazolium chloride. Composites Part A: Applied Science and Manufacturing, 2009, 40, 2031-2037.	3.8	119
2	Structureâ€“property relationship of all-cellulose composites. Composites Science and Technology, 2009, 69, 1225-1230.	3.8	105
3	All-cellulose composites based on microfibrillated cellulose and filter paper via a NaOH-urea solvent system. Cellulose, 2016, 23, 593-609.	2.4	78
4	Phase transformations in microcrystalline cellulose due to partial dissolution. Cellulose, 2007, 14, 311-320.	2.4	72
5	Aerocellulose based on allâ€cellulose composites. Journal of Applied Polymer Science, 2010, 115, 216-221.	1.3	71
6	Ultrastructure of cellulose crystallites in flax textile fibres. Cellulose, 2012, 19, 1837-1854.	2.4	57
7	Mercerisation of cellulose in aqueous NaOH at low concentrations. Green Chemistry, 2015, 17, 3941-3947.	4.6	53
8	Obtaining cellulose nanocrystals from pineapple crown fibers by free-chlorite hydrolysis with sulfuric acid: physical, chemical and structural characterization. Cellulose, 2020, 27, 5745-5756.	2.4	48
9	Plant cell wall inspired xyloglucan/cellulose nanocrystals aerogels produced by freeze-casting. Carbohydrate Polymers, 2020, 247, 116642.	5.1	38
10	Solvent infusion processing of all-cellulose composite laminates using an aqueous NaOH/urea solvent system. Composites Part A: Applied Science and Manufacturing, 2016, 82, 130-140.	3.8	36
11	Size, shape, orientation and crystallinity of cellulose Iβ by X-ray powder diffraction using a free spreadsheet program. Cellulose, 2017, 24, 2727-2741.	2.4	26
12	Concentration driven cocrystallisation and percolation in all-cellulose nanocomposites. Cellulose, 2016, 23, 529-543.	2.4	21
13	Treatment of Harakeke fiber for biocomposites. Journal of Applied Polymer Science, 2009, 112, 2710-2715.	1.3	20
14	Engineering properties of dredged sediments as a raw resource for fired bricks. Bulletin of Engineering Geology and the Environment, 2021, 80, 2643-2658.	1.6	20
15	Surface tension of concentrated cellulose solutions in 1-ethyl-3-methylimidazolium acetate. Cellulose, 2016, 23, 1043-1050.	2.4	17
16	The alkyl polyglucoside/fatty alcohol ratio effect on the formation of liquid crystal phases in binary systems. Journal of Molecular Liquids, 2018, 253, 45-52.	2.3	16
17	Nanostructured cellulose-xyloglucan blends via ionic liquid/water processing. Carbohydrate Polymers, 2017, 168, 163-172.	5.1	15
18	Growth of Clathrate Hydrates from Water Drops in Cyclopentane. Energy & Fuels, 2018, 32, 2693-2698.	2.5	13

#	Article	IF	Citations
19	Temperature effect on dynamic wetting of cellulosic substrates by molten polymers for composite processing. Composites Part A: Applied Science and Manufacturing, 2018, 114, 307-315.	3.8	13
20	Assessment of clogging of managed aquifer recharge in a semi-arid region. Science of the Total Environment, 2020, 730, 139107.	3.9	13
21	Positive size and scale effects of all-cellulose composite laminates. Composites Part A: Applied Science and Manufacturing, 2016, 85, 65-75.	3.8	12
22	High-yield cellulose hydrolysis by HCl vapor: co-crystallization, deuterium accessibility and high-temperature thermal stability. Cellulose, 2020, 27, 3085-3105.	2.4	12
23	Mechanical anisotropy of paper-based all-cellulose composites. Composites Part A: Applied Science and Manufacturing, 2018, 113, 150-157.	3.8	11
24	Dynamic Wetting of Molten Polymers on Cellulosic Substrates: Model Prediction for Total and Partial Wetting. Frontiers in Materials, 2020, 7, .	1.2	10
25	Temperature-dependence of the static contact angle: A transition state theory approach. Journal of Colloid and Interface Science, 2021, 592, 215-226.	5.0	8
26	Grafting amount and structural characteristics of microcrystalline cellulose functionalized with different aminosilane contents. Cellulose, 2022, 29, 3209-3224.	2.4	8
27	From Cellulose Dissolution and Regeneration to Added Value Applications â€" Synergism Between Molecular Understanding and Material Development. , 0, , .		7
28	Effect of natural geotextile on the cotransport of heavy metals (Cu2+, Pb2+, and Zn2+) and kaolinite particles. Environmental Technology (United Kingdom), 2021, 42, 558-570.	1.2	5
29	Highâ€Temperature Viscoelastic Relaxation in Allâ€Cellulose Composites. Macromolecular Symposia, 2014, 340, 52-58.	0.4	4
30	Nonwoven flax fibres geotextiles effects on solute heavy metals transport in porous media. Environmental Technology (United Kingdom), 2020, 41, 2061-2072.	1.2	4
31	Toward a facile fabrication route for all-cellulose composite laminates via partial dissolution in aqueous tetrabutylphosphonium hydroxide solution. Composites Part A: Applied Science and Manufacturing, 2021, 140, 106148.	3.8	4
32	The sustainability of phytomass-derived materials: thermodynamical aspects, life cycle analysis and research perspectives. Green Chemistry, 2022, 24, 2653-2679.	4.6	3
33	The Mechanical and Crystallographic Evolution of Stipa tenacissima Leaves During In-Soil Biodegradation. Journal of Renewable Materials, 2018, , .	1.1	1
34	Fusion-bonding behavior of plasticized corn proteins in fused deposition modeling process. AIP Conference Proceedings, 2019, , .	0.3	1