Thaddeus Maloney

List of Publications by Year
in descending order

74 papers	2,154 citations	257101 24 h-index	253896 43 g-index
75 all docs	75 docs citations	75 times ranked	2471 citing authors

#	Article	IF	Citations
1	General overview of graphene: Production, properties and application in polymer composites. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 215, 9-28.	1.7	289
2	A comparative study of mechanical, thermal and electrical properties of graphene-, graphene oxide- and reduced graphene oxide-doped microfibrillated cellulose nanocomposites. Composites Part B: Engineering, 2018, 147, 104-113.	5.9	128
3	Highly Porous Willow Wood-Derived Activated Carbon for High-Performance Supercapacitor Electrodes. ACS Omega, 2019, 4, 18108-18117.	1.6	111
4	Quantification of water in different states of interaction with wood pulp fibres. Cellulose, 1996, 3, 189-202.	2.4	103
5	Hydration and swelling of pulp fibers measured with differential scanning calorimetry. Nordic Pulp and Paper Research Journal, 1998, 13, 31-36.	0.3	81
6	The role of MFC/NFC swelling in the rheological behavior and dewatering of high consistency furnishes. Cellulose, 2013, 20, 2847-2861.	2.4	73
7	Microcrystalline cellulose-water interaction--a novel approach using thermoporosimetry. Pharmaceutical Research, 2001, 18, 1562-1569.	1.7	60
8	Rheological characterization of fibrillated cellulose suspensions via bucket vane viscometer. Cellulose, 2014, 21, 1305-1312.	2.4	57
9	Chirality and bound water in the hierarchical cellulose structure. Cellulose, 2019, 26, 5877-5892.	2.4	55
10	Ionic liquid extraction method for upgrading eucalyptus kraft pulp to high purity dissolving pulp. Cellulose, 2014, 21, 3655-3666.	2.4	54
11	The influence of shear on the dewatering of high consistency nanofibrillated cellulose furnishes. Cellulose, 2013, 20, 1853-1864.	2.4	53
12	Fibre porosity development of dissolving pulp during mechanical and enzymatic processing. Cellulose, 2014, 21, 3667-3676.	2.4	52
13	Effect of xylan in hardwood pulp on the reaction rate of TEMPO-mediated oxidation and the rheology of the final nanofibrillated cellulose gel. Cellulose, 2016, 23, 277-293.	2.4	51
14	Porosity of wood pulp fibers in the wet and highly open dry state. Microporous and Mesoporous Materials, 2016, 234, 326-335.	2.2	47
15	High-concentration shear-exfoliated colloidal dispersion of surfactantâ€“polymer-stabilized few-layer graphene sheets. Journal of Materials Science, 2017, 52, 8321-8337.	1.7	47
16	Network swelling of TEMPO-oxidized nanocellulose. Holzforschung, 2015, 69, 207-213.	0.9	42
17	The effect of micro and nanofibrillated cellulose water uptake on high filler content composite paper properties and furnish dewatering. Cellulose, 2015, 22, 4003-4015.	2.4	41
18	Effect of lignin on the morphology and rheological properties of nanofibrillated cellulose produced from Î³-valerolactone/water fractionation process. Cellulose, 2018, 25, 179-194.	2.4	41

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19	The role of hornification in the disintegration behaviour of TEMPO-oxidized bleached hardwood fibres in a high-shear homogenizer. Cellulose, 2014, 21, 1163-1174.	2.4	40
20	Dissolution enthalpies of cellulose in ionic liquids. Carbohydrate Polymers, 2014, 113, 67-76.	5.1	36
21	Furfural production in a biphasic system using a carbonaceous solid acid catalyst. Applied Catalysis A: General, 2019, 585, 117180.	2.2	31
22	Effect of fibril length, aspect ratio and surface charge on ultralow shear-induced structuring in micro and nanofibrillated cellulose aqueous suspensions. Cellulose, 2018, 25, 117-136.	2.4	28
23	Micro nanofibrillated cellulose (MNFC) gel dewatering induced at ultralow-shear in presence of added colloidally-unstable particles. Cellulose, 2017, 24, 1463-1481.	2.4	26
24	Swelling of mechanical pulp fines. Cellulose, 1999, 6, 123-136.	2.4	25
25	Effect of cellulase family and structure on modification of wood fibres at high consistency. Cellulose, 2019, 26, 5085-5103.	2.4	24
26	Influence on Pore Structure of Micro/Nanofibrillar Cellulose in Pigmented Coating Formulations. Transport in Porous Media, 2014, 103, 155-179.	1.2	23
27	From colloidal spheres to nanofibrils: Extensional flow properties of mineral pigment and mixtures with micro and nanofibrils under progressive double layer suppression. Journal of Colloid and Interface Science, 2015, 446, 31-43.	5.0	23
28	Rheological characterization of liquid electrolytes for drop-on-demand inkjet printing. Organic Electronics, 2016, 38, 307-315.	1.4	23
29	Thermoporosimetry of hard (silica) and soft (cellulosic) materials by isothermal step melting. Journal of Thermal Analysis and Calorimetry, 2015, 121, 7-17.	2.0	22
30	Atomistic molecular dynamics simulations on the interaction of TEMPO-oxidized cellulose nanofibrils in water. Cellulose, 2016, 23, 3449-3462.	2.4	22
31	Sound absorption properties of wood-based pulp fibre foams. Cellulose, 2021, 28, 4267-4279.	2.4	21
32	Press dewatering and nip rewetting of paper containing nano- and microfibril cellulose. Nordic Pulp and Paper Research Journal, 2013, 28, 582-587.	0.3	21
33	Preparation and characterization of corn starchâ€“calcium carbonate hybrid pigments. Industrial Crops and Products, 2016, 83, 294-300.	2.5	20
34	Co-exfoliation and fabrication of graphene based microfibrillated cellulose composites â€“ mechanical and thermal stability and functional conductive properties. Nanoscale, 2018, 10, 9569-9582.	2.8	20
35	Consolidation and dewatering of a microfibrillated cellulose fiber composite paper in wet pressing. European Polymer Journal, 2015, 68, 585-591.	2.6	18
36	Changes in the hygroscopic behavior of cellulose due to variations in relative humidity. Cellulose, 2018, 25, 87-104.	2.4	18

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37	Birch wood pre-hydrolysis vs pulp post-hydrolysis for the production of xylan-based compounds and cellulose for viscose application. Carbohydrate Polymers, 2018, 190, 212-221.	5.1	17
38	Impact of mechanical and enzymatic pretreatments on softwood pulp fiber wall structure studied with NMR spectroscopy and X-ray scattering. Cellulose, 2015, 22, 1565-1576.	2.4	15
39	Enhanced pre-treatment of cellulose pulp prior to dissolution into NaOH/ZnO. Cellulose, 2015, 22, 3981-3990.	2.4	15
40	Dissolution of enzyme-treated cellulose using freezingâ€“thawing method and the properties of fibres regenerated from the solution. Cellulose, 2015, 22, 1653-1674.	2.4	14
41	Gel structure phase behavior in micro nanofibrillated cellulose containing <i>in situ</i> precipitated calcium carbonate. Journal of Applied Polymer Science, 2016, 133, .	1.3	14
42	The effect of fiber swelling on press dewatering. Nordic Pulp and Paper Research Journal, 1998, 13, 285-291.	0.3	13
43	High consistency mechano-enzymatic pretreatment for kraft fibres: effect of treatment consistency on fibre properties. Cellulose, 2020, 27, 5311-5322.	2.4	13
44	Biological activity of multicomponent bio-hydrogels loaded with tragacanth gum. International Journal of Biological Macromolecules, 2022, 215, 691-704.	3.6	13
45	Forming and Dewatering of a Microfibrillated Cellulose Composite Paper. BioResources, 2015, 10, .	0.5	12
46	Activation of softwood Kraft pulp at high solids content by endoglucanase and lytic polysaccharide monooxygenase. Industrial Crops and Products, 2021, 166, 113463.	2.5	12
47	Bio-based materials for nonwovens. Cellulose, 2021, 28, 8939-8969.	2.4	12
48	Acid dissociation of surface bound water on cellulose nanofibrils in aqueous micro nanofibrillated cellulose (MNFC) gel revealed by adsorption of calcium carbonate nanoparticles under the application of ultralow shear. Cellulose, 2017, 24, 3155-3178.	2.4	11
49	Extraction of Thickness and Water-Content Gradients in Hydrogel-Based Water-Backed Corneal Phantoms Via Submillimeter-Wave Reflectometry. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 647-659.	2.0	11
50	Tuning the Porosity, Water Interaction, and Redispersion of Nanocellulose Hydrogels by Osmotic Dehydration. ACS Applied Polymer Materials, 2022, 4, 24-28.	2.0	11
51	Nitrogen plasma surface treatment for improving polar ink adhesion on micro/nanofibrillated cellulose films. Cellulose, 2019, 26, 3845-3857.	2.4	10
52	Genetically engineered protein based nacre-like nanocomposites with superior mechanical and electrochemical performance. Journal of Materials Chemistry A, 2020, 8, 656-669.	5.2	10
53	Chemical pulp refining for optimum combination of dewatering and tensile strength. Nordic Pulp and Paper Research Journal, 2005, 20, 442-447.	0.3	9
54	The investigation of rheological and strength properties of NFC hydrogels and aerogels from hardwood pulp by short catalytic bleaching (Hcat). Cellulose, 2018, 25, 1637-1655.	2.4	9

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55	Chemical characterization and ultrastructure study of pulp fibers. Materials Today Chemistry, 2020, 17, 100324.	1.7	9
56	Willow Bark for Sustainable Energy Storage Systems. Materials, 2020, 13, 1016.	1.3	9
57	Submillimeter-Wave Permittivity Measurements of Bound Water in Collagen Hydrogels via Frequency Domain Spectroscopy. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 538-547.	2.0	9
58	Property optimization of calcium carbonate precipitated in a high shear, circulation reactor. Powder Technology, 2016, 303, 241-250.	2.1	8
59	Defining a strainâ€induced time constant for oriented low shearâ€induced structuring in high consistency MFC/NFCâ€filler composite suspensions. Journal of Applied Polymer Science, 2015, 132, .	1.3	7
60	Assessing the reactivity of cellulose by oxidation with 4-acetamido-2,2,6,6-tetramethylpiperidine-1-oxo-piperidinium cation under mild conditions. Carbohydrate Polymers, 2017, 176, 293-298.	5.1	7
61	Assessing wood pulp reactivity through its rheological behavior under dissolution. Cellulose, 2019, 26, 9877-9888.	2.4	7
62	The Effect of Carbonation Conditions on the Properties of Carbohydrate-Calcium Carbonate Hybrid Pigments. BioResources, 2015, 10, .	0.5	6
63	Improving the properties of never-dried chemical pulp by pressing before refining. Nordic Pulp and Paper Research Journal, 2006, 21, 135-139.	0.3	5
64	Multidimensional Coâ€Exfoliated Activated Grapheneâ€Based Carbon Hybrid for Supercapacitor Electrode. Energy Technology, 2019, 7, 1900578.	1.8	5
65	Flow characteristics of ink-jet inks used for functional printing. Journal of Applied Engineering Science, 2015, 13, 207-212.	0.4	5
66	Effect of Enzymatic Depolymerization of Cellulose and Hemicelluloses on the Direct Dissolution of Prehydrolysis Kraft Dissolving Pulp. Biomacromolecules, 2021, 22, 4805-4813.	2.6	5
67	Characterising exfoliated few-layer graphene interactions in co-processed nanofibrillated cellulose suspension via water retention and dispersion rheology. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 242, 37-51.	1.7	4
68	Effect of compression refining on fiber properties. BioResources, 2020, 15, 8696-8707.	0.5	4
69	The effect of pressure pulsing on the mechanical dewatering of nanofiber suspensions. Chemical Engineering Science, 2020, 212, 115267.	1.9	3
70	Fast dewatering of high nanocellulose content papers with in-situ generated cationic micro-nano bubbles. Drying Technology, 0, , 1-14.	1.7	3
71	The effect of the outermost fibre layers on solubility of dissolving grade pulp. Cellulose, 2015, 22, 3955-3965.	2.4	2
72	Time-triggered calcium ion bridging in preparation of films of oxidized microfibrillated cellulose and pulp. Carbohydrate Polymers, 2019, 218, 63-67.	5.1	2

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73	10.5937/jaes12-5021 = Processing plate-plate immobilization data of MNFC furnishes. Journal of Applied Engineering Science, 2014, 12, 145-152.	0.4	2
74	Improving the optical performance of the nanostructured starch-calcium carbonate hybrid pigments. Nordic Pulp and Paper Research Journal, 2017, 32, 211-221.	0.3	0