Gary Chinga-Carrasco

List of Publications by Citations

95 papers	3,649 citations	37 h-index	58 g-index
101 ext. papers	4,296 ext. citations	5 avg, IF	6.05 L-index

#	Paper	IF	Citations
95	Cellulose fibres, nanofibrils and microfibrils: The morphological sequence of MFC components from a plant physiology and fibre technology point of view. *Nanoscale Research Letters*, **2011**, 6, 417	5	219
94	Lignocellulosics as sustainable resources for production of bioplastics A review. *Journal of Cleaner Production*, **2017**, 162, 646-664	10.3	215
93	Cytotoxicity tests of cellulose nanofibril-based structures. *Cellulose*, **2013**, 20, 1765-1775	5.5	174
92	3D Bioprinting of Carboxymethylated-Periodate Oxidized Nanocellulose Constructs for Wound Dressing Applications. *BioMed Research International*, **2015**, 2015, 925757	3	142
91	Hemicellulose-reinforced nanocellulose hydrogels for wound healing application. *Cellulose*, **2016**, 23, 3129-3143	5.5	130
90	A comparative study of Eucalyptus and Pinus radiata pulp fibres as raw materials for production of cellulose nanofibrils. *Carbohydrate Polymers*, **2011**, 84, 1033-1038	10.3	119
89	From paper to nanopaper: evolution of mechanical and physical properties. *Cellulose*, **2014**, 21, 2599-2609	5.5	103
88	Pretreatment-dependent surface chemistry of wood nanocellulose for pH-sensitive hydrogels. *Journal of Biomaterials Applications*, **2014**, 29, 423-32	2.9	87
87	Effects of bagasse microfibrillated cellulose and cationic polyacrylamide on key properties of bagasse paper. *Carbohydrate Polymers*, **2014**, 99, 311-8	10.3	84
86	Controlling the elastic modulus of cellulose nanofibril hydrogels scaffolds with potential in tissue engineering. *Cellulose*, **2015**, 22, 473-481	5.5	80
85	Reduction of water wettability of nanofibrillated cellulose by adsorption of cationic surfactants. *Cellulose*, **2011**, 18, 257-270	5.5	78
84	Films made of cellulose nanofibrils: surface modification by adsorption of a cationic surfactant and characterization by computer-assisted electron microscopy. *Journal of Nanoparticle Research*, **2011**, 13, 773-782	2.3	78
83	Strength variability of single flax fibres. *Journal of Materials Science*, **2011**, 46, 6344-6354	4.3	71
82	Assessing the combined benefits of clay and nanofibrillated cellulose in layered TMP-based sheets. *Cellulose*, **2009**, 16, 795-806	5.5	69
81	Structure of nanofibrillated cellulose layers at the o/w interface. *Journal of Colloid and Interface Science*, **2011**, 356, 58-62	9.3	69
80	Producing ultrapure wood cellulose nanofibrils and evaluating the cytotoxicity using human skin cells. *Carbohydrate Polymers*, **2016**, 150, 65-73	10.3	69
79	Potential and Limitations of Nanocelluloses as Components in Biocomposite Inks for Three-Dimensional Bioprinting and for Biomedical Devices. *Biomacromolecules*, **2018**, 19, 701-711	6.9	68

78	Temperature stability of nanocellulose dispersions. *Carbohydrate Polymers*, **2017**, 157, 114-121	10.3	64
77	The effect of MFC on the pressability and paper properties of TMP and GCC based sheets. *Nordic Pulp and Paper Research Journal*, **2012**, 27, 388-396	1.1	64
76	On the morphology of cellulose nanofibrils obtained by TEMPO-mediated oxidation and mechanical treatment. *Micron*, **2015**, 72, 28-33	2.3	60
75	Bio-polyethylene reinforced with thermomechanical pulp fibers: Mechanical and micromechanical characterization and its application in 3D-printing by fused deposition modelling. *Composites Part B: Engineering*, **2018**, 153, 70-77	10	59
74	Quantitative electron microscopy of cellulose nanofibril structures from Eucalyptus and Pinus radiata kraft pulp fibers. *Microscopy and Microanalysis*, **2011**, 17, 563-71	0.5	58
73	An investigation of Pseudomonas aeruginosa biofilm growth on novel nanocellulose fibre dressings. *Carbohydrate Polymers*, **2016**, 137, 191-197	10.3	55
72	Quantification of paper mass distributions within local picking areas. *Nordic Pulp and Paper Research Journal*, **2007**, 22, 441-446	1.1	55
71	Mechanical characteristics of nanocellulose-PEG bionanocomposite wound dressings in wet conditions. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 69, 377-384	4.1	54
70	Lignin: A Biopolymer from Forestry Biomass for Biocomposites and 3D Printing. *Materials*, **2019**, 12,	3.5	54
69	Viscoelastic properties of nanocellulose based inks for 3D printing and mechanical properties of CNF/alginate biocomposite gels. *Cellulose*, **2019**, 26, 581-595	5.5	53
68	Enzymatic-Assisted Modification of Thermomechanical Pulp Fibers To Improve the Interfacial Adhesion with Poly(lactic acid) for 3D Printing. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 9338-9346	8.3	52
67	On the structure and oxygen transmission rate of biodegradable cellulose nanobarriers. *Nanoscale Research Letters*, **2012**, 7, 192	5	50
66	Cross-linking cellulose nanofibrils for potential elastic cryo-structured gels. *Nanoscale Research Letters*, **2011**, 6, 626	5	49
65	The interaction of wood nanocellulose dressings and the wound pathogen P. aeruginosa. *Carbohydrate Polymers*, **2017**, 157, 1955-1962	10.3	47
64	Computer-assisted quantification of the multi-scale structure of films made of nanofibrillated cellulose. *Journal of Nanoparticle Research*, **2010**, 12, 841-851	2.3	44
63	PVA/(ligno)nanocellulose biocomposite films. Effect of residual lignin content on structural, mechanical, barrier and antioxidant properties. *International Journal of Biological Macromolecules*, **2019**, 141, 197-206	7.9	43
62	Inkjet-printed silver nanoparticles on nano-engineered cellulose films for electrically conducting structures and organic transistors: concept and challenges. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	43
61	Bleached and unbleached MFC nanobarriers: properties and hydrophobisation with hexamethyldisilazane. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	43

60	Optical methods for the quantification of the fibrillation degree of bleached MFC materials. *Micron*, **2013**, 48, 42-8	2.3	37
59	The effect of residual fibres on the micro-topography of cellulose nanopaper. *Micron*, **2014**, 56, 80-4	2.3	37
58	A non-destructive X-ray microtomography approach for measuring fibre length in short-fibre composites. *Composites Science and Technology*, **2012**, 72, 1901-1908	8.6	36
57	Environmental aspects of Norwegian production of pulp fibres and printing paper. *Journal of Cleaner Production*, **2013**, 57, 293-301	10.3	35
56	Translucent and ductile nanocellulose-PEG bionanocomposites A novel substrate with potential to be functionalized by printing for wound dressing applications. *Industrial Crops and Products*, **2016**, 93, 193-202	5.9	34
55	On the nanofibrillation of corn husks and oat hulls fibres. *Industrial Crops and Products*, **2017**, 95, 528-534	3.9	33
54	3D Printable Filaments Made of Biobased Polyethylene Biocomposites. *Polymers*, **2018**, 10,	4.5	30
53	Exploring the multi-scale structure of printing paper--a review of modern technology. *Journal of Microscopy*, **2009**, 234, 211-42	1.9	29
52	Pulping and Pretreatment Affect the Characteristics of Bagasse Inks for Three-dimensional Printing. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 4068-4075	8.3	27
51	CO2 Adsorption of Surface-Modified Cellulose Nanofibril Films Derived from Agricultural Wastes. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 12603-12612	8.3	27
50	Three-dimensional microstructural properties of nanofibrillated cellulose films. *International Journal of Molecular Sciences*, **2014**, 15, 6423-40	6.3	25
49	Structure characterisation of pigment coating layer on paper by scanning electron microscopy and image analysis. *Nordic Pulp and Paper Research Journal*, **2002**, 17, 307-312	1.1	25
48	Wide range humidity sensors printed on biocomposite films of cellulose nanofibril and poly(ethylene glycol). *Journal of Applied Polymer Science*, **2019**, 136, 47920	2.9	23
47	Bagasse A major agro-industrial residue as potential resource for nanocellulose inks for 3D printing of wound dressing devices. *Additive Manufacturing*, **2019**, 28, 267-274	6.1	22
46	Nanocellulose-Based Inks-Effect of Alginate Content on the Water Absorption of 3D Printed Constructs. *Bioengineering*, **2019**, 6,	5.3	21
45	Use of bacterial cellulose in degraded paper restoration. Part II: application on real samples. *Journal of Materials Science*, **2016**, 51, 1553-1561	4.3	20
44	The effect of xylan on the fibrillation efficiency of DED bleached soda bagasse pulp and on nanopaper characteristics. *Cellulose*, **2015**, 22, 385-395	5.5	20
43	Use of bacterial cellulose in degraded paper restoration. Part I: application on model papers. *Journal of Materials Science*, **2016**, 51, 1541-1552	4.3	19

42	Wear resistance of nanoparticle coatings on paperboard. *Wear*, **2013**, 307, 112-118	3.5	19
41	New advances in the 3D characterization of mineral coating layers on paper. *Journal of Microscopy*, **2008**, 232, 212-24	1.9	19
40	Micro-structural characterisation of homogeneous and layered MFC nano-composites. *Micron*, **2013** , 44, 331-8	2.3	17
39	Computer-assisted scanning electron microscopy of wood pulp fibres: dimensions and spatial distributions in a polypropylene composite. *Micron*, **2009**, 40, 761-8	2.3	17
38	Review: Bio-polyethylene from Wood Wastes. *Journal of Polymers and the Environment*, **2020**, 28, 1-16	4.5	17
37	Life cycle assessment of bagasse fiber reinforced biocomposites. *Science of the Total Environment*, **2020**, 720, 137586	10.2	16
36	Viability and properties of roll-to-roll coating of cellulose nanofibrils on recycled paperboard. *Nordic Pulp and Paper Research Journal*, **2017**, 32, 179-188	1.1	16
35	Influence of initial chemical composition and characteristics of pulps on the production and properties of lignocellulosic nanofibers. *International Journal of Biological Macromolecules*, **2020**, 143, 453-461	7.9	14
34	Antimicrobial activity of biocomposite films containing cellulose nanofibrils and ethyl lauroyl arginate. *Journal of Materials Science*, **2019**, 54, 12159-12170	4.3	13
33	Relationship between rheological and morphological characteristics of cellulose nanofibrils in dilute dispersions. *Carbohydrate Polymers*, **2020**, 230, 115588	10.3	13
32	Structural quantification of wood fibre surfaces--morphological effects of pulping and enzymatic treatment. *Micron*, **2010**, 41, 648-59	2.3	12
31	Nanocomposite membranes with high-charge and size-screened phosphorylated nanocellulose fibrils for CO2 separation. *Green Energy and Environment*, **2021**, 6, 585-596	5.7	12
30	Ultrapure Wood Nanocellulose-Assessments of Coagulation and Initial Inflammation Potential.. *ACS Applied Bio Materials*, **2019**, 2, 1107-1118	4.1	11
29	Mechanical properties of cellulose nanofibril films: effects of crystallinity and its modification by treatment with liquid anhydrous ammonia. *Cellulose*, **2019**, 26, 6615-6627	5.5	10
28	Biocomposites of Bio-Polyethylene Reinforced with a Hydrothermal-Alkaline Sugarcane Bagasse Pulp and Coupled with a Bio-Based Compatibilizer. *Molecules*, **2020**, 25,	4.8	10
27	Cellulose Nanofibril Formulations Incorporating a Low-Molecular-Weight Alginate Oligosaccharide Modify Bacterial Biofilm Development. *Biomacromolecules*, **2019**, 20, 2953-2961	6.9	10
26	Nanorobotic Testing to Assess the Stiffness Properties of Nanopaper. *IEEE Transactions on Robotics* , **2014**, 30, 115-119	6.5	10
25	Aerodynamic and comfort characteristics of a double layer knitted fabric assembly for high speed winter sports. *Procedia Engineering*, **2010**, 2, 2837-2843		10

24	A quadtree decomposition approach for surface assessment. *Pattern Analysis and Applications*, **2006**, 9, 94-101	2.3	10
23	Reviewing environmental life cycle impacts of biobased polymers: current trends and methodological challenges. *International Journal of Life Cycle Assessment*, **2020**, 25, 2169-2189	4.6	9
22	Photopolymerization of Bio-Based Polymers in a Biomedical Engineering Perspective. *Biomacromolecules*, **2021**, 22, 1795-1814	6.9	9
21	Cross-sectional dimensions of fiber and pore networks based on Euclidean distance maps. *Nordic Pulp and Paper Research Journal*, **2007**, 22, 500-507	1.1	8
20	Structural Characterisation of Kraft Pulp Fibres and Their Nanofibrillated Materials for Biodegradable Composite Applications **2011**,		7
19	A method for estimating the fibre length in fibre-PLA composites. *Journal of Microscopy*, **2013**, 250, 15-20	1.9	6
18	Comprehensive characterization of silica-modified silicon rubbers. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 101, 103427	4.1	6
17	Elastic models coupling the cellulose nanofibril to the macroscopic film level. *RSC Advances*, **2015**, 5, 58091-58099	3.7	5
16	3D Printing High-Consistency Enzymatic Nanocellulose Obtained from a Soda-Ethanol-O Pine Sawdust Pulp. *Bioengineering*, **2019**, 6,	5.3	5
15	PAPER PHYSICS .The effect of newsprint furnish composition and sheet structure on wet pressing efficiency. *Nordic Pulp and Paper Research Journal*, **2012**, 27, 790-797	1.1	5
14	The Potential of Functionalized Ceramic Particles in Coatings for Improved Scratch Resistance. *Coatings*, **2018**, 8, 224	2.9	4
13	PAPER PHYSICS. The web structure in relation to the furnish composition and shoe press pulse profiles during wet pressing. *Nordic Pulp and Paper Research Journal*, **2012**, 27, 798-805	1.1	4
12	On surface details affecting the quality of commercial SC paper for gravure printing. *Nordic Pulp and Paper Research Journal*, **2007**, 22, 331-335	1.1	3
11	Characterization and Antibacterial Properties of Autoclaved Carboxylated Wood Nanocellulose. *Biomacromolecules*, **2021**, 22, 2779-2789	6.9	3
10	Characterization of Porous Structures of Cellulose Nanofibrils Loaded with Salicylic Acid. *Polymers*, **2020**, 12,	4.5	2
9	Optimized alginate-based 3D printed scaffolds as a model of patient derived breast cancer microenvironments in drug discovery. *Biomedical Materials (Bristol)*, **2021**, 16,	3.5	2
8	Reinforcement ability of lignocellulosic components in biocomposites and their 3D printed applications A review. *Composites Part C: Open Access*, **2021**, 6, 100171	1.6	2
7	Biocomposites of Polyhydroxyalkanoates and Lignocellulosic Components: A Focus on Biodegradation and 3D Printing **2021**, 325-345		2

6	Measuring intrinsic thickness of rough membranes: application to nanofibrillated cellulose films. *Journal of Materials Science*, **2015**, 50, 6926-6934	4.3	1
5	Oxygenated Nanocellulose-A Material Platform for Antibacterial Wound Dressing Devices.. *ACS Applied Bio Materials*, **2021**, 4, 7554-7562	4.1	1
4	Nanocelluloses - Nanotoxicology, Safety Aspects and 3D Bioprinting.. *Advances in Experimental Medicine and Biology*, **2022**, 1357, 155-177	3.6	1
3	Side streams from flooring laminate production Characterisation and recycling in biocomposite formulations for injection moulding. *Composites Part A: Applied Science and Manufacturing*, **2021**, 153, 106723	8.4	0
2	Classification of Wood Pulp Fibre Cross-Sectional Shapes. *Lecture Notes in Computer Science*, **2010**, 144-151	0.9	
1	Structural effects on print-through and set-off. *Nordic Pulp and Paper Research Journal*, **2012**, 27, 596-603	1.1	