

# Gary Chinga-Carrasco

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/5355002/gary-chinga-carrasco-publications-by-year.pdf>

**Version:** 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Nanocelluloses - Nanotoxicology, Safety Aspects and 3D Bioprinting.. <i>Advances in Experimental Medicine and Biology</i> , <b>2022</b> , 1357, 155-177	3.6	1
94	Side streams from flooring laminate production [Characterisation and recycling in biocomposite formulations for injection moulding. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2021</b> , 153, 106723	8.4	0
93	Photopolymerization of Bio-Based Polymers in a Biomedical Engineering Perspective. <i>Biomacromolecules</i> , <b>2021</b> , 22, 1795-1814	6.9	9
92	Optimized alginate-based 3D printed scaffolds as a model of patient derived breast cancer microenvironments in drug discovery. <i>Biomedical Materials (Bristol)</i> , <b>2021</b> , 16,	3.5	2
91	Characterization and Antibacterial Properties of Autoclaved Carboxylated Wood Nanocellulose. <i>Biomacromolecules</i> , <b>2021</b> , 22, 2779-2789	6.9	3
90	Nanocomposite membranes with high-charge and size-screened phosphorylated nanocellulose fibrils for CO2 separation. <i>Green Energy and Environment</i> , <b>2021</b> , 6, 585-596	5.7	12
89	Oxygenated Nanocellulose-A Material Platform for Antibacterial Wound Dressing Devices.. <i>ACS Applied Bio Materials</i> , <b>2021</b> , 4, 7554-7562	4.1	1
88	Reinforcement ability of lignocellulosic components in biocomposites and their 3D printed applications [A review. <i>Composites Part C: Open Access</i> , <b>2021</b> , 6, 100171	1.6	2
87	Biocomposites of Polyhydroxyalkanoates and Lignocellulosic Components: A Focus on Biodegradation and 3D Printing <b>2021</b> , 325-345		2
86	Characterization of Porous Structures of Cellulose Nanofibrils Loaded with Salicylic Acid. <i>Polymers</i> , <b>2020</b> , 12,	4.5	2
85	Biocomposites of Bio-Polyethylene Reinforced with a Hydrothermal-Alkaline Sugarcane Bagasse Pulp and Coupled with a Bio-Based Compatibilizer. <i>Molecules</i> , <b>2020</b> , 25,	4.8	10
84	Life cycle assessment of bagasse fiber reinforced biocomposites. <i>Science of the Total Environment</i> , <b>2020</b> , 720, 137586	10.2	16
83	Relationship between rheological and morphological characteristics of cellulose nanofibrils in dilute dispersions. <i>Carbohydrate Polymers</i> , <b>2020</b> , 230, 115588	10.3	13
82	Influence of initial chemical composition and characteristics of pulps on the production and properties of lignocellulosic nanofibers. <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 143, 453-461	7.9	14
81	Reviewing environmental life cycle impacts of biobased polymers: current trends and methodological challenges. <i>International Journal of Life Cycle Assessment</i> , <b>2020</b> , 25, 2169-2189	4.6	9
80	Comprehensive characterization of silica-modified silicon rubbers. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2020</b> , 101, 103427	4.1	6
79	Review: Bio-polyethylene from Wood Wastes. <i>Journal of Polymers and the Environment</i> , <b>2020</b> , 28, 1-16	4.5	17

78	PVA/(ligno)nanocellulose biocomposite films. Effect of residual lignin content on structural, mechanical, barrier and antioxidant properties. <i>International Journal of Biological Macromolecules</i> , <b>2019</b> , 141, 197-206	7.9	43
77	Lignin: A Biopolymer from Forestry Biomass for Biocomposites and 3D Printing. <i>Materials</i> , <b>2019</b> , 12,	3.5	54
76	Ultrapur Wood Nanocellulose-Assessments of Coagulation and Initial Inflammation Potential.. <i>ACS Applied Bio Materials</i> , <b>2019</b> , 2, 1107-1118	4.1	11
75	BagasseA major agro-industrial residue as potential resource for nanocellulose inks for 3D printing of wound dressing devices. <i>Additive Manufacturing</i> , <b>2019</b> , 28, 267-274	6.1	22
74	Mechanical properties of cellulose nanofibril films: effects of crystallinity and its modification by treatment with liquid anhydrous ammonia. <i>Cellulose</i> , <b>2019</b> , 26, 6615-6627	5.5	10
73	Antimicrobial activity of biocomposite films containing cellulose nanofibrils and ethyl lauroyl arginate. <i>Journal of Materials Science</i> , <b>2019</b> , 54, 12159-12170	4.3	13
72	Wide range humidity sensors printed on biocomposite films of cellulose nanofibril and poly(ethylene glycol). <i>Journal of Applied Polymer Science</i> , <b>2019</b> , 136, 47920	2.9	23
71	Nanocellulose-Based Inks-Effect of Alginate Content on the Water Absorption of 3D Printed Constructs. <i>Bioengineering</i> , <b>2019</b> , 6,	5.3	21
70	3D Printing High-Consistency Enzymatic Nanocellulose Obtained from a Soda-Ethanol-O Pine Sawdust Pulp. <i>Bioengineering</i> , <b>2019</b> , 6,	5.3	5
69	Cellulose Nanofibril Formulations Incorporating a Low-Molecular-Weight Alginate Oligosaccharide Modify Bacterial Biofilm Development. <i>Biomacromolecules</i> , <b>2019</b> , 20, 2953-2961	6.9	10
68	Viscoelastic properties of nanocellulose based inks for 3D printing and mechanical properties of CNF/alginate biocomposite gels. <i>Cellulose</i> , <b>2019</b> , 26, 581-595	5.5	53
67	Potential and Limitations of Nanocelluloses as Components in Biocomposite Inks for Three-Dimensional Bioprinting and for Biomedical Devices. <i>Biomacromolecules</i> , <b>2018</b> , 19, 701-711	6.9	68
66	Pulping and Pretreatment Affect the Characteristics of Bagasse Inks for Three-dimensional Printing. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 4068-4075	8.3	27
65	Bio-polyethylene reinforced with thermomechanical pulp fibers: Mechanical and micromechanical characterization and its application in 3D-printing by fused deposition modelling. <i>Composites Part B: Engineering</i> , <b>2018</b> , 153, 70-77	10	59
64	The Potential of Functionalized Ceramic Particles in Coatings for Improved Scratch Resistance. <i>Coatings</i> , <b>2018</b> , 8, 224	2.9	4
63	3D Printable Filaments Made of Biobased Polyethylene Biocomposites. <i>Polymers</i> , <b>2018</b> , 10,	4.5	30
62	CO2 Adsorption of Surface-Modified Cellulose Nanofibril Films Derived from Agricultural Wastes. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 12603-12612	8.3	27
61	Mechanical characteristics of nanocellulose-PEG bionanocomposite wound dressings in wet conditions. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2017</b> , 69, 377-384	4.1	54

60	The interaction of wood nanocellulose dressings and the wound pathogen <i>P. aeruginosa</i> . <i>Carbohydrate Polymers</i> , <b>2017</b> , 157, 1955-1962	10.3	47
59	Lignocellulosics as sustainable resources for production of bioplastics I A review. <i>Journal of Cleaner Production</i> , <b>2017</b> , 162, 646-664	10.3	215
58	Viability and properties of roll-to-roll coating of cellulose nanofibrils on recycled paperboard. <i>Nordic Pulp and Paper Research Journal</i> , <b>2017</b> , 32, 179-188	1.1	16
57	Enzymatic-Assisted Modification of Thermomechanical Pulp Fibers To Improve the Interfacial Adhesion with Poly(lactic acid) for 3D Printing. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2017</b> , 5, 9338-9346	8.3	52
56	On the nanofibrillation of corn husks and oat hulls fibres. <i>Industrial Crops and Products</i> , <b>2017</b> , 95, 528-534	4.9	33
55	Temperature stability of nanocellulose dispersions. <i>Carbohydrate Polymers</i> , <b>2017</b> , 157, 114-121	10.3	64
54	Use of bacterial cellulose in degraded paper restoration. Part I: application on model papers. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 1541-1552	4.3	19
53	Use of bacterial cellulose in degraded paper restoration. Part II: application on real samples. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 1553-1561	4.3	20
52	Translucent and ductile nanocellulose-PEG bionanocomposites A novel substrate with potential to be functionalized by printing for wound dressing applications. <i>Industrial Crops and Products</i> , <b>2016</b> , 93, 193-202	5.9	34
51	An investigation of <i>Pseudomonas aeruginosa</i> biofilm growth on novel nanocellulose fibre dressings. <i>Carbohydrate Polymers</i> , <b>2016</b> , 137, 191-197	10.3	55
50	Producing ultrapure wood cellulose nanofibrils and evaluating the cytotoxicity using human skin cells. <i>Carbohydrate Polymers</i> , <b>2016</b> , 150, 65-73	10.3	69
49	Hemicellulose-reinforced nanocellulose hydrogels for wound healing application. <i>Cellulose</i> , <b>2016</b> , 23, 3129-3143	5.5	130
48	On the morphology of cellulose nanofibrils obtained by TEMPO-mediated oxidation and mechanical treatment. <i>Micron</i> , <b>2015</b> , 72, 28-33	2.3	60
47	The effect of xylan on the fibrillation efficiency of DED bleached soda bagasse pulp and on nanopaper characteristics. <i>Cellulose</i> , <b>2015</b> , 22, 385-395	5.5	20
46	Elastic models coupling the cellulose nanofibril to the macroscopic film level. <i>RSC Advances</i> , <b>2015</b> , 5, 58091-58099	3.7	5
45	Measuring intrinsic thickness of rough membranes: application to nanofibrillated cellulose films. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 6926-6934	4.3	1
44	Controlling the elastic modulus of cellulose nanofibril hydrogels scaffolds with potential in tissue engineering. <i>Cellulose</i> , <b>2015</b> , 22, 473-481	5.5	80
43	3D Bioprinting of Carboxymethylated-Periodate Oxidized Nanocellulose Constructs for Wound Dressing Applications. <i>BioMed Research International</i> , <b>2015</b> , 2015, 925757	3	142

42	Pretreatment-dependent surface chemistry of wood nanocellulose for pH-sensitive hydrogels. <i>Journal of Biomaterials Applications</i> , <b>2014</b> , 29, 423-32	2.9	87
41	Nanorobotic Testing to Assess the Stiffness Properties of Nanopaper. <i>IEEE Transactions on Robotics</i> , <b>2014</b> , 30, 115-119	6.5	10
40	From paper to nanopaper: evolution of mechanical and physical properties. <i>Cellulose</i> , <b>2014</b> , 21, 2599-2609	9.5	103
39	Three-dimensional microstructural properties of nanofibrillated cellulose films. <i>International Journal of Molecular Sciences</i> , <b>2014</b> , 15, 6423-40	6.3	25
38	The effect of residual fibres on the micro-topography of cellulose nanopaper. <i>Micron</i> , <b>2014</b> , 56, 80-4	2.3	37
37	Effects of bagasse microfibrillated cellulose and cationic polyacrylamide on key properties of bagasse paper. <i>Carbohydrate Polymers</i> , <b>2014</b> , 99, 311-8	10.3	84
36	Environmental aspects of Norwegian production of pulp fibres and printing paper. <i>Journal of Cleaner Production</i> , <b>2013</b> , 57, 293-301	10.3	35
35	Cytotoxicity tests of cellulose nanofibril-based structures. <i>Cellulose</i> , <b>2013</b> , 20, 1765-1775	5.5	174
34	Wear resistance of nanoparticle coatings on paperboard. <i>Wear</i> , <b>2013</b> , 307, 112-118	3.5	19
33	Optical methods for the quantification of the fibrillation degree of bleached MFC materials. <i>Micron</i> , <b>2013</b> , 48, 42-8	2.3	37
32	A method for estimating the fibre length in fibre-PLA composites. <i>Journal of Microscopy</i> , <b>2013</b> , 250, 15-20	2.9	6
31	Micro-structural characterisation of homogeneous and layered MFC nano-composites. <i>Micron</i> , <b>2013</b> , 44, 331-8	2.3	17
30	On the structure and oxygen transmission rate of biodegradable cellulose nanobarriers. <i>Nanoscale Research Letters</i> , <b>2012</b> , 7, 192	5	50
29	Inkjet-printed silver nanoparticles on nano-engineered cellulose films for electrically conducting structures and organic transistors: concept and challenges. <i>Journal of Nanoparticle Research</i> , <b>2012</b> , 14, 1	2.3	43
28	Bleached and unbleached MFC nanobarriers: properties and hydrophobisation with hexamethyldisilazane. <i>Journal of Nanoparticle Research</i> , <b>2012</b> , 14, 1	2.3	43
27	A non-destructive X-ray microtomography approach for measuring fibre length in short-fibre composites. <i>Composites Science and Technology</i> , <b>2012</b> , 72, 1901-1908	8.6	36
26	The effect of MFC on the pressability and paper properties of TMP and GCC based sheets. <i>Nordic Pulp and Paper Research Journal</i> , <b>2012</b> , 27, 388-396	1.1	64
25	PAPER PHYSICS .The effect of newsprint furnish composition and sheet structure on wet pressing efficiency. <i>Nordic Pulp and Paper Research Journal</i> , <b>2012</b> , 27, 790-797	1.1	5

24	PAPER PHYSICS. The web structure in relation to the furnish composition and shoe press pulse profiles during wet pressing. <i>Nordic Pulp and Paper Research Journal</i> , <b>2012</b> , 27, 798-805	1.1	4
23	Structural effects on print-through and set-off. <i>Nordic Pulp and Paper Research Journal</i> , <b>2012</b> , 27, 596-603.	1	
22	Structural Characterisation of Kraft Pulp Fibres and Their Nanofibrillated Materials for Biodegradable Composite Applications <b>2011</b> ,		7
21	Quantitative electron microscopy of cellulose nanofibril structures from Eucalyptus and Pinus radiata kraft pulp fibers. <i>Microscopy and Microanalysis</i> , <b>2011</b> , 17, 563-71	0.5	58
20	Cellulose fibres, nanofibrils and microfibrils: The morphological sequence of MFC components from a plant physiology and fibre technology point of view. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 417	5	219
19	Strength variability of single flax fibres. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 6344-6354	4.3	71
18	Reduction of water wettability of nanofibrillated cellulose by adsorption of cationic surfactants. <i>Cellulose</i> , <b>2011</b> , 18, 257-270	5.5	78
17	Films made of cellulose nanofibrils: surface modification by adsorption of a cationic surfactant and characterization by computer-assisted electron microscopy. <i>Journal of Nanoparticle Research</i> , <b>2011</b> , 13, 773-782	2.3	78
16	Cross-linking cellulose nanofibrils for potential elastic cryo-structured gels. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 626	5	49
15	A comparative study of Eucalyptus and Pinus radiata pulp fibres as raw materials for production of cellulose nanofibrils. <i>Carbohydrate Polymers</i> , <b>2011</b> , 84, 1033-1038	10.3	119
14	Structure of nanofibrillated cellulose layers at the o/w interface. <i>Journal of Colloid and Interface Science</i> , <b>2011</b> , 356, 58-62	9.3	69
13	Structural quantification of wood fibre surfaces--morphological effects of pulping and enzymatic treatment. <i>Micron</i> , <b>2010</b> , 41, 648-59	2.3	12
12	Computer-assisted quantification of the multi-scale structure of films made of nanofibrillated cellulose. <i>Journal of Nanoparticle Research</i> , <b>2010</b> , 12, 841-851	2.3	44
11	Aerodynamic and comfort characteristics of a double layer knitted fabric assembly for high speed winter sports. <i>Procedia Engineering</i> , <b>2010</b> , 2, 2837-2843		10
10	Classification of Wood Pulp Fibre Cross-Sectional Shapes. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 144-154		
9	Computer-assisted scanning electron microscopy of wood pulp fibres: dimensions and spatial distributions in a polypropylene composite. <i>Micron</i> , <b>2009</b> , 40, 761-8	2.3	17
8	Assessing the combined benefits of clay and nanofibrillated cellulose in layered TMP-based sheets. <i>Cellulose</i> , <b>2009</b> , 16, 795-806	5.5	69
7	Exploring the multi-scale structure of printing paper--a review of modern technology. <i>Journal of Microscopy</i> , <b>2009</b> , 234, 211-42	1.9	29

6	New advances in the 3D characterization of mineral coating layers on paper. <i>Journal of Microscopy</i> , <b>2008</b> , 232, 212-24	1.9	19
5	Quantification of paper mass distributions within local picking areas. <i>Nordic Pulp and Paper Research Journal</i> , <b>2007</b> , 22, 441-446	1.1	55
4	On surface details affecting the quality of commercial SC paper for gravure printing. <i>Nordic Pulp and Paper Research Journal</i> , <b>2007</b> , 22, 331-335	1.1	3
3	Cross-sectional dimensions of fiber and pore networks based on Euclidean distance maps. <i>Nordic Pulp and Paper Research Journal</i> , <b>2007</b> , 22, 500-507	1.1	8
2	A quadtree decomposition approach for surface assessment. <i>Pattern Analysis and Applications</i> , <b>2006</b> , 9, 94-101	2.3	10
1	Structure characterisation of pigment coating layer on paper by scanning electron microscopy and image analysis. <i>Nordic Pulp and Paper Research Journal</i> , <b>2002</b> , 17, 307-312	1.1	25