

Luiz Henrique Catalani

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8947188/publications.pdf>

Version: 2024-02-01

115
papers

3,248
citations

147801

31
h-index

168389

53
g-index

119
all docs

119
docs citations

119
times ranked

4300
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and swelling behavior of xanthan-based hydrogels. Carbohydrate Polymers, 2013, 92, 1091-1099.	10.2	247
2	Graphene Oxideâ€”A Tool for the Preparation of Chemically Crosslinking Free Alginateâ€”Chitosanâ€”Collagen Scaffolds for Bone Tissue Engineering. ACS Applied Materials & Interfaces, 2018, 10, 12441-12452.	8.0	152
3	Charge generation, charge transport, and residual charge in the electrospinning of polymers: A review of issues and complications. Journal of Applied Physics, 2012, 111, .	2.5	141
4	Electron transfer and chemiluminescence. Two inefficient systems: 1,4-dimethoxy-9,10-diphenylanthracene peroxide and diphenoyl peroxide. Journal of the American Chemical Society, 1989, 111, 2633-2639.	13.7	137
5	Surface characterization of photodegraded poly(ethylene terephthalate). The effect of ultraviolet absorbers. Polymer, 2004, 45, 2303-2308.	3.8	124
6	Direct UV photocrosslinking of poly(N-vinyl-2-pyrrolidone) (PVP) to produce hydrogels. Polymer, 2003, 44, 6217-6222.	3.8	119
7	Modular Design of Programmable Mechanofluorescent DNA Hydrogels. Nature Communications, 2019, 10, 528.	12.8	111
8	Oxidation of melatonin and its catabolites, N ¹ -acetyl-N ² -formyl-5-methoxykynuramine and N ¹ -acetyl-5-methoxykynuramine, by activated leukocytes. Journal of Pineal Research, 2004, 37, 171-175.	7.4	97
9	Isosorbide Polyesters from Enzymatic Catalysis. Macromolecules, 2010, 43, 10315-10319.	4.8	90
10	Evidence for Molecular Orientation and Residual Charge in the Electrospinning of Poly(butylene) Terephthalate. Journal of Applied Physics, 2004, 96, 044301.	4.8	80
11	Supramolecular Cationic Tetra-ruthenated Porphyrin Induces Single-Strand Breaks and 8-hydroxy-2'-deoxyguanosine Formation in DNA in the Presence of Light. Photochemistry and Photobiology, 1996, 63, 272-277.	2.5	69
12	Superoxide-dependent Oxidation of Melatonin by Myeloperoxidase. Journal of Biological Chemistry, 2005, 280, 38160-38169.	3.4	67
13	Poly(N-vinyl-2-pyrrolidone) hydrogel production by ultraviolet radiation: new methodologies to accelerate crosslinking. Polymer, 2004, 45, 4705-4709.	3.8	66
14	Myeloperoxidase-Catalyzed Oxidation of Melatonin by Activated Neutrophils. Biochemical and Biophysical Research Communications, 2000, 279, 657-662.	2.1	57
15	Biocompatible xanthan/polypyrrole scaffolds for tissue engineering. Materials Science and Engineering C, 2015, 52, 121-128.	7.3	56
16	Synthesis and characterization of xanthanâ€”hydroxyapatite nanocomposites for cellular uptake. Materials Science and Engineering C, 2014, 37, 195-203.	7.3	53
17	High concentrations of the melatonin metabolite, N ¹ -acetyl-N ² -formyl-5-methoxykynuramine, in cerebrospinal fluid of patients with meningitis: a possible immunomodulatory mechanism. Journal of Pineal Research, 2005, 39, 302-306.	7.4	51
18	Peridinin as the Major Biological Carotenoid Quencher of Singlet Oxygen in Marine Algae Gonyaulax polyedra. Biochemical and Biophysical Research Communications, 2000, 268, 496-500.	2.1	50

#	ARTICLE	IF	CITATIONS
19	Oxidation of Melatonin and Tryptophan by an HRP Cycle Involving Compound III. <i>Biochemical and Biophysical Research Communications</i> , 2001, 287, 130-134.	2.1	50
20	Poly(N-vinyl-2-pyrrolidone) hydrogels produced by Fenton reaction. <i>Polymer</i> , 2006, 47, 8414-8419.	3.8	48
21	Lipid Peroxidation-Dependent Chemiluminescence from the Cyclization of Alkylperoxyl Radicals to Dioxetane Radical Intermediates. <i>Chemical Research in Toxicology</i> , 1997, 10, 1090-1096.	3.3	45
22	Fluoride-triggered decomposition of m-siloxylphenyl -substituted dioxetanes by an intramolecular electron transfer (CIEEL) mechanism. <i>Tetrahedron Letters</i> , 1999, 40, 2443-2446.	1.4	44
23	N1-acetyl-N2-formyl-5-methoxykynuramine modulates the cell cycle of malaria parasites. <i>Journal of Pineal Research</i> , 2007, 42, 261-266.	7.4	44
24	Optimization of photocrosslinkable resin components and 3D printing process parameters. <i>Acta Biomaterialia</i> , 2019, 97, 154-161.	8.3	43
25	Zinc tetraruthenated porphyrin binding and photoinduced oxidation of calf-thymus DNA. <i>Journal of Inorganic Biochemistry</i> , 2000, 78, 269-273.	3.5	42
26	Studies on the Intramolecular Electron Transfer Catalyzed Thermolysis of 1,2-Dioxetanes. <i>Tetrahedron</i> , 2000, 56, 5317-5327.	1.9	41
27	Enzymatic syntheses of unsaturated polyesters based on isosorbide and isomannide. <i>Journal of Polymer Science Part A</i> , 2013, 51, 3881-3891.	2.3	40
28	Filtration efficiency of a large set of COVID-19 face masks commonly used in Brazil. <i>Aerosol Science and Technology</i> , 2021, 55, 1028-1041.	3.1	37
29	TWO WATER-SOLUBLE FLUORESCENCE PROBES FOR CHEMIEXCITATION STUDIES: SODIUM 9,10-DIBROMO- AND 9,10-DIPHENYLANTHRACENE-SULFONATE. SYNTHESIS, PROPERTIES AND APPLICATION TO TRIPLET ACETONE AND TETRAMETHYLDIOXETANE. <i>Photochemistry and Photobiology</i> , 1987, 45, 273-281.		36
30	The Oxidation of Indole Derivatives Catalyzed by Horseradish Peroxidase Is Highly Chemiluminescent. <i>Archives of Biochemistry and Biophysics</i> , 2001, 387, 173-179.	3.0	35
31	Synthesis of a hydrophilic and non-ionic anthracene derivative, the N,N'-di-(2,3-dihydroxypropyl)-9,10-anthracenedipropanamide as a chemical trap for singlet molecular oxygen detection in biological systems. <i>Tetrahedron</i> , 2006, 62, 10762-10770.	1.9	34
32	Bromelain immobilization in cellulose triacetate nanofiber membranes from sugarcane bagasse by electrospinning technique. <i>Enzyme and Microbial Technology</i> , 2020, 132, 109384.	3.2	33
33	Development of novel dental restorative composites with dibasic calcium phosphate loaded chitosan fillers. <i>Dental Materials</i> , 2020, 36, 551-559.	3.5	32
34	Facile chemiluminescent method for alkaline phosphatase determination. <i>Analytica Chimica Acta</i> , 1999, 402, 99-104.	5.4	31
35	Are dioxetanes chemiluminescent intermediates in lipoperoxidation?. <i>Free Radical Biology and Medicine</i> , 1992, 12, 471-478.	2.9	29
36	Hybrid Scaffolds Built From PET and Collagen as a Model For Vascular Graft Architecture. <i>Macromolecular Bioscience</i> , 2012, 12, 1660-1670.	4.1	26

#	ARTICLE	IF	CITATIONS
37	Diastereoselective ene reaction in the photooxygenation of the silyl cyanohydrins of .alpha.,.beta.-unsaturated aldehydes: necessity for a common symmetrical intermediate of the peroxide type. <i>Journal of Organic Chemistry</i> , 1986, 51, 5494-5496.	3.2	25
38	Fluorescence polarization and rheological studies of the poly(N-vinyl-2-pyrrolidone) hydrogels produced by UV radiation. <i>Polymer</i> , 2006, 47, 2629-2633.	3.8	25
39	The effect of pH on horseradish peroxidase-catalyzed oxidation of melatonin: production of N1-acetyl-N2-formyl-5-methoxykynuramine versus radical-mediated degradation. <i>Journal of Pineal Research</i> , 2007, 42, 291-296.	7.4	25
40	Development of reinforced hydrogels " I. Radiation induced graft copolymerization of methylmethacrylate on non-woven polypropylene fabric. <i>Radiation Physics and Chemistry</i> , 2000, 57, 451-454.	2.8	23
41	Hybrid composites of xanthan and magnetic nanoparticles for cellular uptake. <i>Chemical Communications</i> , 2013, 49, 9911.	4.1	23
42	Enhanced fibroblast adhesion and proliferation on electrospun fibers obtained from poly(isosorbide) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	8.8	22
43	Hybrid Membranes of PLLA/Collagen for Bone Tissue Engineering: A Comparative Study of Scaffold Production Techniques for Optimal Mechanical Properties and Osteoinduction Ability. <i>Materials</i> , 2015, 8, 408-423.	2.9	22
44	Green synthesis of Si-incorporated hydroxyapatite using sodium metasilicate as silicon precursor and in vitro antibiotic release studies. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2017, 175, 163-172.	3.8	22
45	Physical and Biological Properties of a Chitosan Hydrogel Scaffold Associated to Photobiomodulation Therapy for Dental Pulp Regeneration: An In Vitro and In Vivo Study. <i>BioMed Research International</i> , 2021, 2021, 1-10.	1.9	22
46	Spectroelectrochemical and photophysical properties of a (3,4-pyridyl) porphyrazine supermolecule containing four [Ru(bipy)2Cl]+ groups. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1998, 118, 11-17.	3.9	21
47	Interferon-gamma independent oxidation of melatonin by macrophages. <i>Journal of Pineal Research</i> , 2003, 34, 69-74.	7.4	21
48	Evaluation of cellulose nanocrystal addition on morphology, compression modulus and cytotoxicity of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) scaffolds. <i>Journal of Materials Science</i> , 2019, 54, 7198-7210.	3.7	21
49	Energy transfer from triplet acetophenones to 9,10-dibromoanthracene (S1): role of its Tn state. <i>Journal of the American Chemical Society</i> , 1987, 109, 7458-7462.	13.7	20
50	Poly(anhydride"ester) and Poly(N"vinyl"2"pyrrolidone) Blends: Salicylic Acid"Releasing Blends with Hydrogel"Like Properties that Reduce Inflammation. <i>Macromolecular Bioscience</i> , 2015, 15, 342-350.	4.1	20
51	Layer-by-Layer assembled growth factor reservoirs for steering the response of 3T3-cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 139, 79-86.	5.0	20
52	Improved tympanic membrane regeneration after myringoplasty using an artificial biograft. <i>Materials Science and Engineering C</i> , 2017, 73, 48-58.	7.3	20
53	QUENCHING OF CHEMIEXCITED TRIPLET ACETONE BY BIOLOGICALLY IMPORTANT COMPOUNDS IN AQUEOUS MEDIUM. <i>Photochemistry and Photobiology</i> , 1984, 39, 823-830.	2.5	19
54	PVP Hydrogel Membranes Produced by Electrospinning for Protein Release Devices. <i>Soft Materials</i> , 2013, 11, 61-68.	1.7	19

#	ARTICLE	IF	CITATIONS
55	Hybrid magnetic scaffolds: The role of scaffolds charge on the cell proliferation and Ca ²⁺ ions permeation. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 156, 388-396.	5.0	19
56	Combination of Bioactive Polymeric Membranes and Stem Cells for Periodontal Regeneration: In Vitro and In Vivo Analyses. <i>PLoS ONE</i> , 2016, 11, e0152412.	2.5	19
57	Thermally Modified Iron-Inserted Calcium Phosphate for Magnetic Hyperthermia in an Acceptable Alternating Magnetic Field. <i>Journal of Physical Chemistry B</i> , 2019, 123, 5506-5513.	2.6	18
58	Encapsulation of metalloporphyrins improves their capacity to block the viability of the human malaria parasite <i>Plasmodium falciparum</i> . <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2015, 11, 351-358.	3.3	17
59	Photocrosslinking-based 3D printing of unsaturated polyesters from isosorbide: A new material for resorbable medical devices. <i>Bioprinting</i> , 2020, 18, e00062.	5.8	17
60	PVP superabsorbent nanogels. <i>Colloid and Polymer Science</i> , 2009, 287, 705-713.	2.1	16
61	A fast degrading PLLA composite with a high content of functionalized octacalcium phosphate mineral phase induces stem cells differentiation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 93, 93-104.	3.1	15
62	Biosynthesis of N,N-dimethyltryptamine (DMT) in a melanoma cell line and its metabolization by peroxidases. <i>Biochemical Pharmacology</i> , 2014, 88, 393-401.	4.4	14
63	In vivouptake of a haem analogue Zn protoporphyrin IX by the human malaria parasite <i>P. falciparum</i> -infected red blood cells. <i>Cell Biology International</i> , 2010, 34, 859-865.	3.0	13
64	Biliverdin targets enolase and eukaryotic initiation factor 2 (eIF2 β) to reduce the growth of intraerythrocytic development of the malaria parasite <i>Plasmodium falciparum</i> . <i>Scientific Reports</i> , 2016, 6, 22093.	3.3	12
65	Tuning protein delivery from different architectures of layer-by-layer assemblies on polymer films. <i>Materials Advances</i> , 2020, 1, 2043-2056.	5.4	12
66	Crosslinking of poly(N-vinyl-2-pyrrolidone) in the coating of cotton yarn. <i>Polymer Engineering and Science</i> , 2011, 51, 445-453.	3.1	11
67	QUENCHING OF CHEMICALLY and ENZYMICALLY-GENERATED TRIPLET ACETONE BY TYROSINE and 3,5-DIHALOGENODERIVATIVES. <i>Photochemistry and Photobiology</i> , 1983, 37, 93-97.	2.5	10
68	Studies on PVP hydrogel-supported luminol chemiluminescence: 1. Kinetic and mechanistic aspects using multivariate factorial analysis. <i>Luminescence</i> , 2007, 22, 113-125.	2.9	10
69	Synthesis and structural characterization of block and random low molecular weight copolymers composed of L-lactic acid and isosorbide succinate moieties. <i>Journal of the Brazilian Chemical Society</i> , 2009, 20, 1414-1424.	0.6	10
70	Electrochemical quartz crystal microbalance with dissipation investigation of fibronectin adsorption dynamics driven by electrical stimulation onto a conducting and partially biodegradable copolymer. <i>Biointerphases</i> , 2020, 15, 021003.	1.6	10
71	Oxidation of lysergic acid diethylamide (LSD) by peroxidases: a new metabolic pathway. <i>Forensic Toxicology</i> , 2012, 30, 87-97.	2.4	9
72	Cytotoxicity of PVPAC β -treated bovine pericardium: A potential replacement for glutaraldehyde in biological heart valves. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2014, 102, 574-582.	3.4	9

#	ARTICLE	IF	CITATIONS
73	Effect of ozone therapy on wound healing in the buccal mucosa of rats. Archives of Oral Biology, 2020, 119, 104889.	1.8	9
74	Does the Photochemical Conversion of Colchicine into Lumicolchicines Involve Triplet Transients? A Solvent Dependence Study. Photochemistry and Photobiology, 2001, 73, 213.	2.5	9
75	Polymerization Stress and Gap Formation of Self-adhesive, Bulk-fill and Flowable Composite Resins. Operative Dentistry, 2020, 45, E308-E316.	1.2	9
76	Studies on PVP hydrogel-supported luminol chemiluminescence: 2. Luminometer calibration and potential analytical applications. Luminescence, 2007, 22, 126-133.	2.9	8
77	Thermolysis of 3-methyl-3-alkyl-1,2-dioxetanes: steric effects on the activation parameters. Journal of Organic Chemistry, 1983, 48, 3713-3716.	3.2	7
78	Esterase Coupled with the H ₂ O ₂ /Horseradish Peroxidase System Triggers Chemiluminescence from 2-Methyl-1-propenylbenzoate: A Potential Analytical Tool for Esterase Analysis. Analytical Biochemistry, 1996, 234, 215-220.	2.4	7
79	Real-Time Determination of Ultraviolet Degradation Kinetics of Polymers in Solution. International Journal of Polymer Analysis and Characterization, 1997, 3, 231-247.	1.9	7
80	Quenching of triplet acetone by mesitylene and durene: exciplex formation or energy transfer?. The Journal of Physical Chemistry, 1992, 96, 8967-8973.	2.9	6
81	Photolysis of a series of $\hat{1}\pm$ -brominated ortho-xylenes in apolar solvents. Journal of the Chemical Society Perkin Transactions II, 1995, , 1857-1862.	0.9	6
82	Chemiluminescent determination of esterases in monocytes. , 1998, 13, 195-200.		6
83	Block Copolymers Containing (R)-3-Hydroxybutyrate and Isosorbide Succinate or (S)-Lactic Acid Mers. Journal of Polymers and the Environment, 2010, 18, 33-44.	5.0	6
84	Development of Epidermal Equivalent from Electrospun Synthetic Polymers for In Vitro Irritation/Corrosion Testing. Nanomaterials, 2020, 10, 2528.	4.1	6
85	Laser-flash photolysis of $\hat{1}\pm$ -brominated o-xylenes. Journal of Photochemistry and Photobiology A: Chemistry, 2001, 140, 1-5.	3.9	5
86	Hydrogels from Chitosan and a Novel Copolymer Poly($\hat{1}\pm$ -Vinyl-2-Pyrrolidone- $\hat{1}\pm$ -Co $\hat{1}\pm$ -Acrolein). Materials Sciences and Applications, 2011, 02, 1058-1069.	0.4	5
87	Coating of cotton yarn with poly(vinyl alcohol) and poly($\hat{1}\pm$ -vinyl-2-pyrrolidone) crosslinked via ultraviolet radiation. Journal of Applied Polymer Science, 2011, 119, 2560-2567.	2.6	5
88	ENERGY TRANSFER FROM CHEMIEXCITED ACETONE TO SUBSTANCES THAT DISPLAY ANOMALOUS FLUORESCENCE. Photochemistry and Photobiology, 1985, 42, 587-589.	2.5	4
89	Photophysics of enediones. Journal of the Chemical Society Perkin Transactions II, 1995, , 1863.	0.9	4
90	Selective activity of butyrylcholinesterase in serum by a chemiluminescent assay. Luminescence, 2001, 16, 299-304.	2.9	4

#	ARTICLE	IF	CITATIONS
91	Production of lifetime controlled plastics: copolymers of styrene and substituted butadienes. <i>Polymer Degradation and Stability</i> , 2003, 82, 207-210.	5.8	4
92	Assessment of monocytic component in acute myelomonocytic and monocytic/monoblastic leukemias by a chemiluminescent assay. <i>The Hematology Journal</i> , 2003, 4, 26-30.	1.4	4
93	Chemiluminescence Triggered by Hydrolase Activity in a Horseradish Peroxidase/H ₂ O ₂ -Coupled Assay. <i>Photochemistry and Photobiology</i> , 1996, 63, 742-745.	2.5	3
94	Preparation of PVP hydrogel nanoparticles using lecithin vesicles. <i>Quimica Nova</i> , 2010, 33, 2083-2087.	0.3	3
95	In vitro analysis of a local polymeric device as an alternative for systemic antibiotics in Dentistry. <i>Brazilian Oral Research</i> , 2017, 31, e92.	1.4	3
96	Disinfection of 3D-printed protective face shield during COVID-19 pandemic. <i>American Journal of Infection Control</i> , 2021, 49, 512-515.	2.3	3
97	Histidine-based hydrogels <i>via</i> singlet-oxygen photooxidation. <i>Soft Matter</i> , 2021, 17, 10926-10934.	2.7	3
98	Effects of the crosslinking of chitosan/DCPA particles in the antimicrobial and mechanical properties of dental restorative composites. <i>Dental Materials</i> , 2022, 38, 1482-1491.	3.5	3
99	Crystalline particles from self-assembled divinyl oligomers. <i>Materials Science and Engineering C</i> , 2009, 29, 564-570.	7.3	2
100	Drug Release from Electrospun Poly(Lactic Acid) Membranes and Their Cell Viability in Vitro Test. <i>Procedia Engineering</i> , 2012, 44, 866-868.	1.2	2
101	Vacancy-Induced Visible Light-Driven Fluorescence in Toxic Ion-Free Resorbable Magnetic Calcium Phosphates for Cell Imaging Applications. <i>ACS Applied Bio Materials</i> , 2021, 4, 3256-3263.	4.6	2
102	Temporary tensile strength for cotton yarn via polymeric coating and crosslinking. <i>Progress in Organic Coatings</i> , 2021, 159, 106397.	3.9	2
103	Photolysis of α -xylyl chlorides: An efficient deep-UV photoinitiating system for radical and cationic polymerization. <i>Photochemical and Photobiological Sciences</i> , 2004, 3, 700-705.	2.9	1
104	Bioactive-Based Poly(anhydride-esters) and Blends for Controlled Drug Delivery. <i>ACS Symposium Series</i> , 2013, , 27-37.	0.5	1
105	Upconversion 3D Printed Composite with Multifunctional Applications for Tissue Engineering and Photodynamic Therapy. <i>Journal of the Brazilian Chemical Society</i> , 2020, , .	0.6	1
106	33 ^ª Reunião Anual da Sociedade Brasileira de Química. <i>Quimica Nova</i> , 2010, 33, 775-775.	0.3	1
107	The mechanical reliability of vat photopolymerization 3D printing of isosorbide-derived polyester porous tissue engineering scaffolds.. <i>Procedia CIRP</i> , 2022, 110, 117-121.	1.9	1
108	The oxidation of cyclic sulfides by tetramethyldioxetane and the isobutanal/O ₂ /peroxidase system: Oxygen transfer versus electron transfer. <i>Free Radical Biology and Medicine</i> , 1995, 18, 731-738.	2.9	0

#	ARTICLE	IF	CITATIONS
109	Characterization studies of 1-(4-cyano-2-oxo-1,2-dihydro-1-pyridyl)-3-(4-cyano-1,2-dihydro-1-pyridyl)propane formed from the reaction of hydroxide Ion with 1,3-Bis-(4-cyano pyridinium)propane. Journal of the Brazilian Chemical Society, 2011,...	0.6	0
110	REPLY to Nanomedicine: NMB, 2015; 11:1035. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 1036-1037.	3.3	0
111	Sustainability & Diversity Through Chemistry. Journal of the Brazilian Chemical Society, 2016, , .	0.6	0
112	Editorial: Brasil, uma potência emergida. Journal of the Brazilian Chemical Society, 2009, 20, III-IV.	0.6	0
113	32ª Reunião Anual da SBQ. Quimica Nova, 2009, 32, 831-831.	0.3	0
114	Balanço da gestão 2008-2010. Quimica Nova, 2010, 33, 1229-1230.	0.3	0
115	Química sem fronteiras. Quimica Nova, 2013, 36, 1481-1481.	0.3	0