Pedro L Almeida

List of Publications by Year
in descending order

73 papers	1,885 citations	361045 20 h-index	276539 41 g-index
77 all docs	77 docs citations	77 times ranked	2539 citing authors

#	Article	IF	Citations
1	Bacterial cellulose: a versatile biopolymer for wound dressing applications. Microbial Biotechnology, 2019, 12, 586-610.	2.0	341
2	Mind the Microgap in Iridescent Cellulose Nanocrystal Films. Advanced Materials, 2017, 29, 1603560.	11.1	163
3	Celluloseâ€Based Biomimetics and Their Applications. Advanced Materials, 2018, 30, e1703655.	11.1	143
4	Structural Color and Iridescence in Transparent Sheared Cellulosic Films. Macromolecular Chemistry and Physics, 2013, 214, 25-32.	1.1	89
5	Marine Environmental Plastic Pollution: Mitigation by Microorganism Degradation and Recycling Valorization. Frontiers in Marine Science, 2020, 7, .	1.2	86
6	Transparent, conductive ZnO:Al thin film deposited on polymer substrates by RF magnetron sputtering. Surface and Coatings Technology, 2002, 151-152, 247-251.	2.2	67
7	Oxidative desulfurization strategies using Keggin-type polyoxometalate catalysts: Biphasic versus solvent-free systems. Catalysis Today, 2019, 333, 226-236.	2.2	53
8	A cellulose liquid crystal motor: a steam engine of the second kind. Scientific Reports, 2013, 3, 1028.	1.6	48
9	Dielectric studies of the nematic mixture E7 on a hydroxypropylcellulose substrate. Liquid Crystals, 2002, 29, 429-441.	0.9	47
10	Mesoporous nanosilica-supported polyoxomolybdate as catalysts for sustainable desulfurization. Microporous and Mesoporous Materials, 2019, 275, 163-171.	2.2	39
11	Desulfurization process conciliating heterogeneous oxidation and liquid extraction: Organic solvent or centrifugation/water?. Applied Catalysis A: General, 2017, 542, 359-367.	2.2	37
12	Large-pore silica spheres as support for samarium-coordinated undecamolybdophosphate: Oxidative desulfurization of diesels. Fuel, 2020, 259, 116213.	3.4	37
13	Extraction of Cellulose Nanocrystals with Structure I and II and Their Applications for Reduction of Graphene Oxide and Nanocomposite Elaboration. Waste and Biomass Valorization, 2019, 10, 1913-1927.	1.8	35
14	Sensing surface morphology of biofibers by decorating spider silk and cellulosic filaments with nematic microdroplets. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1174-1179.	3.3	31
15	Molecular mobility, composition and structure analysis in glycerol plasticised chitosan films. Food Chemistry, 2014, 144, 2-8.	4.2	29
16	Electro-optical light scattering shutter using electrospun cellulose-based nano- and microfibers. Applied Physics Letters, 2009, 95, .	1.5	27
17	A cellulosic liquid crystal pool for cellulose nanocrystals: Structure and molecular dynamics at high shear rates. European Polymer Journal, 2015, 72, 72-81.	2.6	26
18	Liquid crystal necklaces: cholesteric drops threaded by thin cellulose fibres. Soft Matter, 2013, 9, 7928.	1.2	24

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19	Influence of the Strain on the Electrical Resistance of Zinc Oxide Doped Thin Film Deposited on Polymer Substrates. Advanced Engineering Materials, 2002, 4, 610-612.	1.6	23
20	Bactericidal efficacy of molybdenum oxide nanoparticles against antimicrobial-resistant pathogens. Journal of Medical Microbiology, 2018, 67, 1042-1046.	0.7	23
21	Perspectives on the electrically induced properties of electrospun cellulose/liquid crystal devices. Journal of Electrostatics, 2011, 69, 623-630.	1.0	21
22	A novel red emitting material based on polyoxometalate@periodic mesoporous organosilica. Microporous and Mesoporous Materials, 2016, 234, 248-256.	2.2	21
23	Cross-linked hydroxypropylcellulose films: mechanical behaviour and electro-optical properties of PDLC type cells. Optical Materials, 2002, 20, 97-100.	1.7	20
24	High ionicity ionic liquids (HIILs): comparing the effect of ethylsulfonate and ethylsulfate anions. Physical Chemistry Chemical Physics, 2013, 15, 18138.	1.3	20
25	Water-Based Cellulose Liquid Crystal System Investigated by Rheo-NMR. Macromolecules, 2013, 46, 4296-4302.	2.2	20
26	Carbon Nanotubes as Reinforcement of Cellulose Liquid Crystalline Responsive Networks. ACS Applied Materials & Interfaces, 2015, 7, 21005-21009.	4.0	20
27	Electrical properties of a liquid crystal dispersed in an electrospun cellulose acetate network. Beilstein Journal of Nanotechnology, 2018, 9, 155-163.	1.5	19
28	Filling in the voids of electrospun hydroxypropyl cellulose network: Dielectric investigations. European Physical Journal Plus, 2018, 133, 1.	1.2	18
29	The ferroelectric properties of piezoelectric ceramic/polymer composites for acoustic emission sensors. Polymer Engineering and Science, 1999, 39, 483-492.	1.5	17
30	Thermally Stimulated Depolarization Currents and Optical Transmissionon Liquid Crystal/Cellulose Derivative Composite Devices. Molecular Crystals and Liquid Crystals, 2003, 391, 1-11.	0.4	16
31	Two negative minima of the first normal stress difference in a celluloseâ€based cholesteric liquid crystal: Helix uncoiling. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 821-830.	2.4	16
32	Enhancement of CO2/N2 selectivity and CO2 uptake by tuning concentration and chemical structure of imidazolium-based ILs immobilized in mesoporous silica. Journal of Environmental Chemical Engineering, 2020, 8, 103740.	3.3	16
33	Light shutters from nanocrystalline cellulose rods in a nematic liquid crystal. Liquid Crystals, 2013, 40, 769-773.	0.9	15
34	Reversible water driven chirality inversion in cellulose-based helices isolated from<i>Erodium</i>awns. Soft Matter, 2019, 15, 2838-2847.	1.2	15
35	Polyoxometalate@Periodic mesoporous organosilicas as active materials for oxidative desulfurization of diesels. Microporous and Mesoporous Materials, 2020, 302, 110193.	2.2	15
36	From Cellulosic Based Liquid Crystalline Sheared Solutions to 1D and 2D Soft Materials. Materials, 2014, 7, 4601-4627.	1.3	14

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37	Waterborne polyurethane/Fe3O4-synthetic talc composites: synthesis, characterization, and magnetic properties. Polymer Bulletin, 2018, 75, 1915-1930.	1.7	14
38	Living bacteria rheology: Population growth, aggregation patterns, and collective behavior under different shear flows. Physical Review E, 2014, 90, 022720.	0.8	13
39	Rheo-NMR study of water-based cellulose liquid crystal system at high shear rates. Polymer, 2015, 65, 18-25.	1.8	13
40	Real-time rheology of actively growing bacteria. Physical Review E, 2013, 87, .	0.8	12
41	Effective Zinc-Substituted Keggin Composite To Catalyze the Removal of Sulfur from Real Diesels under a Solvent-Free System. Industrial & Engineering Chemistry Research, 2019, 58, 18540-18549.	1.8	12
42	Liquid crystal beads constrained on thin cellulosic fibers: electric field induced microrotors and Nâ€“I transition. Soft Matter, 2012, 8, 3634.	1.2	11
43	Designing silica xerogels containing RTIL for CO2 capture and CO2/CH4 separation: Influence of ILs anion, cation and cation side alkyl chain length and ramification. Journal of Environmental Management, 2020, 268, 110340.	3.8	11
44	Electro-Optical Properties of Cellulose Based PDLC Type Cells: Dependence on the Type of Diisocyanate Cross-Linking Agent Used. Molecular Crystals and Liquid Crystals, 2001, 368, 121-128.	0.3	9
45	Deuterium NMR Study of Orientational Order in Cellulosic Network Microfibers. Macromolecules, 2010, 43, 5749-5755.	2.2	9
46	Sensing and tuning microfiber chirality with nematic chirogyral effect. Physical Review E, 2016, 93, 032703.	0.8	9
47	¹H NMR Relaxometry and Diffusometry Study of Magnetic and Nonmagnetic Ionic Liquid-Based Solutions: Cosolvent and Temperature Effects. Journal of Physical Chemistry B, 2017, 121, 11472-11484.	1.2	9
48	On the influence of imidazolium ionic liquids on cellulose derived polymers. European Polymer Journal, 2019, 114, 353-360.	2.6	9
49	Flexible cellulose derivative PDLC type cells. Liquid Crystals, 2002, 29, 475-477.	0.9	8
50	Tunable topographical cellulose matrices for electro-optical liquid crystal cells. Opto-electronics Review, 2006, 14, .	2.4	8
51	Electroâ€optical cells using a cellulose derivative and cholesteric liquid crystals. Liquid Crystals, 2008, 35, 1345-1350.	0.9	8
52	Deformation of isotropic and anisotropic liquid droplets dispersed in a cellulose liquid crystalline derivative. Cellulose, 2009, 16, 427-434.	2.4	8
53	Effect of cellulose nanocrystals in a cellulosic liquid crystal behaviour under low shear (regime I): Structure and molecular dynamics. European Polymer Journal, 2016, 84, 675-684.	2.6	7
54	Novel coating containing molybdenum oxide nanoparticles to reduce Staphylococcus aureus contamination on inanimate surfaces. PLoS ONE, 2019, 14, e0213151.	1.1	7

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55	Rotational tumbling of Escherichia coli aggregates under shear. Physical Review E, 2016, 94, 062402.	0.8	6
56	Celluloseâ€Based Materials: Celluloseâ€Based Biomimetics and Their Applications (Adv. Mater. 19/2018). Advanced Materials, 2018, 30, 1870131.	11.1	6
57	Motility and cell shape roles in the rheology of growing bacteria cultures. European Physical Journal E, 2019, 42, 26.	0.7	6
58	Cholesteric-type cellulosic structures: from plants to applications. Liquid Crystals, 2019, 46, 1937-1949.	0.9	5
59	Spotting plantsâ€™ microfilament morphologies and nanostructures. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13188-13193.	3.3	5
60	Tuning the 1H NMR Paramagnetic Relaxation Enhancement and Local Order of [Aliquat]+-Based Systems Mixed with DMSO. International Journal of Molecular Sciences, 2021, 22, 706.	1.8	5
61	Light Scattering Studies in Cellulose Derivative Based PDLC Type Cells. Molecular Crystals and Liquid Crystals, 2001, 359, 79-88.	0.3	3
62	Composite systems for flexible display applications from cellulose derivatives. Synthetic Metals, 2002, 127, 111-114.	2.1	3
63	Molecular order and dynamics of water in hybrid cellulose acetateâ€“silica asymmetric membranes. Molecular Physics, 2019, 117, 975-982.	0.8	3
64	Mechanically activated cholesteric polymer dispersed liquid crystals. Liquid Crystals, 2007, 34, 1269-1273.	0.9	2
65	Micro- and nanofibers and liquid crystals for light-scattering shutters: Simulation of electro-optical properties. Physical Review E, 2014, 89, 012507.	0.8	2
66	Understanding the influence of carbon nanotubes on the flow behavior of liquid crystalline hydroxypropylcellulose: A Rheo-NMR study. Polymer, 2019, 180, 121675.	1.8	2
67	Influence of chain length of prepolymers in permanent memory effect of PDLC assessed by solid-state NMR. Liquid Crystals, 2020, 47, 522-530.	0.9	2
68	InOx thin films deposited by plasma assisted evaporation: Application in light shutters. Vacuum, 2014, 107, 116-119.	1.6	1
69	Antibiotic Activity Screened by the Rheology of S. aureus Cultures. Fluids, 2020, 5, 76.	0.8	1
70	Preliminary Results on UV and High Temperature Exposure Effects on the Electro-Optical Properties of Cellulose Derivatives Based PDLC Type Cells. Molecular Crystals and Liquid Crystals, 2000, 351, 61-68.	0.3	0
71	Rheology of living cells. , 2019, , .		0
72	Impedance spectroscopy and electro-optic switching times of a liquid crystal hydroxypropyl cellulose network composite. , 2018, , .		0

#	Article	IF	Citations
73	S. aureus and E. coli Co-culture Growth Under Shear. Springer Proceedings in Materials, 2020, , 108-112.	0.1	0