JosÃ© Af Gamelas

List of Publications by Year
in descending order

89 papers	2,334 citations	185998 28 h-index	264894 42 g-index
91 all docs	91 docs citations	91 times ranked	2774 citing authors

#	Article	IF	Citations
1	High-performance delignification of invasive tree species wood with ionic liquid and deep eutectic solvent for the production of cellulose-based polyelectrolytes. RSC Advances, 2022, 12, 3979-3989.	1.7	7
2	Composite Films of Nanofibrillated Cellulose with Sepiolite: Effect of Preparation Strategy. Coatings, 2022, 12, 303.	1.2	8
3	Comparison of Surface Properties of Sepiolite and Palygorskite: Surface Energy and Nanoroughness. Nanomaterials, 2021, 11, 1579.	1.9	7
4	Valorisation of invasive plant species in the production of polyelectrolytes. Industrial Crops and Products, 2021, 167, 113476.	2.5	5
5	Production of nanocellulose gels and films from invasive tree species. International Journal of Biological Macromolecules, 2021, 188, 1003-1011.	3.6	16
6	Stabilization of Palygorskite Aqueous Suspensions Using Bio-Based and Synthetic Polyelectrolytes. Polymers, 2021, 13, 129.	2.0	8
7	Evaluation of Anionic Eco-Friendly Flocculants Prepared from Eucalyptus Pulps with Diverse Lignin Contents for Application in Effluent Treatment. Polymers, 2021, 13, 25.	2.0	3
8	Up-scaling of tannin-based coagulants for wastewater treatment: performance in a water treatment plant. Environmental Science and Pollution Research, 2020, 27, 1202-1213.	2.7	25
9	Flocculation of silica nanoparticles by natural, wood-based polyelectrolytes. Separation and Purification Technology, 2020, 231, 115888.	3.9	25
10	Characterization of Two Cactus Formulation-Based Flocculants and Investigation on Their Flocculating Ability for Cationic and Anionic Dyes Removal. Polymers, 2020, 12, 1964.	2.0	8
11	Improving Colloidal Stability of Sepiolite Suspensions: Effect of the Mechanical Disperser and Chemical Dispersant. Minerals (Basel, Switzerland), 2020, 10, 779.	0.8	15
12	Cellulose micro and nanofibrils as coating agent for improved printability in office papers. Cellulose, 2020, 27, 6001-6010.	2.4	24
13	Tuning rheology and aggregation behaviour of TEMPO-oxidised cellulose nanofibrils aqueous suspensions by addition of different acids. Carbohydrate Polymers, 2020, 237, 116109.	5.1	39
14	A comprehensive study on nanocelluloses in papermaking: the influence of common additives on filler retention and paper strength. Cellulose, 2020, 27, 5297-5309.	2.4	16
15	A new formaldehyde optical sensor: Detecting milk adulteration. Food Chemistry, 2020, 318, 126461.	4.2	34
16	Evaluation of Anionic and Cationic Pulp-Based Flocculants With Diverse Lignin Contents for Application in Effluent Treatment From the Textile Industry: Flocculation Monitoring. Frontiers in Chemistry, 2020, 8, 5.	1.8	23
17	Exploring the potential of cuttlebone waste to produce building lime. Materiales De Construccion, 2020, 70, 225.	0.2	3
18	Enzymatic nanocellulose in papermaking â€“ The key role as filler flocculant and strengthening agent. Carbohydrate Polymers, 2019, 224, 115200.	5.1	34

#	Article	IF	Citations
19	Composites of nanofibrillated cellulose with clay minerals: A review. Advances in Colloid and Interface Science, 2019, 272, 101994.	7.0	61
20	Surface characterization of polysaccharide scaffolds by inverse gas chromatography regarding application in tissue engineering. Surface and Interface Analysis, 2019, 51, 1070-1077.	0.8	1
21	Carboxymethylated cellulose nanofibrils in papermaking: influence on filler retention and paper properties. Cellulose, 2019, 26, 3489-3502.	2.4	29
22	Cationization of Eucalyptus wood waste pulps with diverse lignin contents for potential application in colored wastewater treatment. RSC Advances, 2019, 9, 34814-34826.	1.7	13
23	Purification of pulp mill condensates by an adsorptive process on activated carbon. Holzforschung, 2019, 73, 589-597.	0.9	3
24	Recycling Waste Seashells to Produce Calcitic Lime: Characterization and Wet Slaking Reactivity. Waste and Biomass Valorization, 2019, 10, 2397-2414.	1.8	30
25	Quantifying acetaldehyde in cider using a Mn(III)-substituted polyoxotungstate coated acoustic wave sensor. Sensors and Actuators B: Chemical, 2018, 255, 2608-2613.	4.0	9
26	Anionic Polyelectrolytes Synthesized in an Aromatic-Free-Oils Process for Application as Flocculants in Dairy-Industry-Effluent Treatment. Industrial & Engineering Chemistry Research, 2018, 57, 16884-16896.	1.8	5
27	Tannin-based Coagulants from Laboratory to Pilot Plant Scales for Coloured Wastewater Treatment. BioResources, 2018, 13, 2727-2747.	0.5	26
28	Eggshell waste to produce building lime: calcium oxide reactivity, industrial, environmental and economic implications. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	1.3	44
29	Surface Energy and Lewis Acid-base Characteristics of Lignocellulosic Fibers upon Modification by Chemical Vapor Deposition of Trichloromethylsilane: An Inverse Gas Chromatography Study. Journal of Wood Chemistry and Technology, 2018, 38, 264-275.	0.9	5
30	Unique Combination of Surface Energy and Lewis Acidâ€“Base Characteristics of Superhydrophobic Cellulose Fibers. Langmuir, 2017, 33, 927-935.	1.6	14
31	Functionalized xylans in the production of xylan-coated paper laminates. Reactive and Functional Polymers, 2017, 117, 89-96.	2.0	31
32	Environmentally friendly cellulose-based polyelectrolytes in wastewater treatment. Water Science and Technology, 2017, 76, 1490-1499.	1.2	26
33	A more eco-friendly synthesis of flocculants to treat wastewaters using health-friendly solvents. Colloid and Polymer Science, 2017, 295, 2123-2131.	1.0	7
34	Pre-treatment of industrial olive oil mill effluent using low dosage health-friendly cationic polyelectrolytes. Journal of Environmental Chemical Engineering, 2017, 5, 6053-6060.	3.3	6
35	Catalytic homogeneous oxidation of monoterpenes and cyclooctene with hydrogen peroxide in the presence of sandwich-type tungstophosphates [M4(H2O)2(PW9O34)2]nâ», M = CoII, MnII and FeIII. Journal of Molecular Catalysis A, 2017, 426, 593-599.	4.8	18
36	Determination of 5-hydroxymethylfurfural in honey, using headspace-solid-phase microextraction coupled with a polyoxometalate-coated piezoelectric quartz crystal. Food Chemistry, 2017, 220, 420-426.	4.2	34

#	Article	IF	Citations
37	Influence of TEMPO-oxidised cellulose nanofibrils on the properties of filler-containing papers. Cellulose, 2017, 24, 349-362.	2.4	49
38	Engineering microfluidic papers: determination of fibre source and paper sheet properties and their influence on capillary-driven fluid flow. Cellulose, 2017, 24, 295-309.	2.4	17
39	Papermaking trials in a pilot paper machine with a new silica coated PCC filler. Nordic Pulp and Paper Research Journal, 2016, 31, 341-346.	0.3	2
40	Xylan and xylan derivativesâ€"Their performance in bio-based films and effect of glycerol addition. Industrial Crops and Products, 2016, 94, 682-689.	2.5	34
41	Surface properties of xylan and xylan derivatives measured by inverse gas chromatography. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 506, 600-606.	2.3	7
42	Surface properties of calcium carbonate modified with silica by sol-gel method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 497, 1-7.	2.3	9
43	Catalytic oxidation of formaldehyde by ruthenium multisubstituted tungstosilicic polyoxometalate supported on cellulose/silica hybrid. Applied Catalysis A: General, 2016, 509, 8-16.	2.2	22
44	Improving Paper Mechanical Properties Using Silica-modified Ground Calcium Carbonate as Filler. BioResources, 2015, 10, .	0.5	17
45	Composite Films Based on Nanocellulose and Nanoclay Minerals as High Strength Materials with Gas Barrier Capabilities: Key Points and Challenges. BioResources, 2015, 10, 6310-6313.	0.5	16
46	Surface properties of distinct nanofibrillated celluloses assessed by inverse gas chromatography. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 469, 36-41.	2.3	19
47	On the morphology of cellulose nanofibrils obtained by TEMPO-mediated oxidation and mechanical treatment. Micron, 2015, 72, 28-33.	1.1	72
48	Surface properties of carbonated and non-carbonated hydroxyapatites obtained after bone calcination at different temperatures. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 478, 62-70.	2.3	16
49	Precipitated calcium carbonate modified by the layer-by-layer deposition methodâ€"Its potential as papermaking filler. Chemical Engineering Research and Design, 2015, 104, 807-813.	2.7	8
50	Modification of precipitated calcium carbonate with cellulose esters and use as filler in papermaking. Chemical Engineering Research and Design, 2014, 92, 2425-2430.	2.7	30
51	Nanostructured Bacterial Celluloseâ€“Poly(4-styrene sulfonic acid) Composite Membranes with High Storage Modulus and Protonic Conductivity. ACS Applied Materials & Interfaces, 2014, 6, 7864-7875.	4.0	81
52	An insight into the surface properties of calcined kaolinitic clays: The grinding effect. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 455, 49-57.	2.3	45
53	Increase of the filler content in papermaking by using a silica-coated PCC filler. Nordic Pulp and Paper Research Journal, 2014, 29, 240-245.	0.3	25
54	The surface properties of cellulose and lignocellulosic materials assessed by inverse gas chromatography: a review. Cellulose, 2013, 20, 2675-2693.	2.4	70

#	Article	IF	Citations
55	Evaluation of Silica-Coated PCC as New Modified Filler for Papermaking. Industrial & Engineering Chemistry Research, 2013, 52, 5095-5099.	1.8	30
56	Interactions of ink colourants with chemically modified paper surfaces concerning inkjet print improvement. Materials Chemistry and Physics, 2013, 139, 877-884.	2.0	10
57	Evaluation of the papermaking potential of Ailanthus altissima. Industrial Crops and Products, 2013, 42, 538-542.	2.5	23
58	Spent Brewery Grains for Improvement of Thermal Insulation of Ceramic Bricks. Journal of Materials in Civil Engineering, 2013, 25, 1638-1646.	1.3	21
59	Inverse gas chromatography and XPS of extracted kraft pulps. Holzforschung, 2013, 67, 273-276.	0.9	4
60	New polyoxometalate-functionalized cellulosic fibre/silica hybrids for environmental applications. RSC Advances, 2012, 2, 831-839.	1.7	27
61	Studies on the redox turnover of polyoxometalates using potentiometric chemical sensors. New Journal of Chemistry, 2012, 36, 1036.	1.4	20
62	Properties of extracted Eucalyptus globulus kraft pulps. Tappi Journal, 2012, 11, 47-55.	0.2	2
63	New modified filler obtained by silica formed by solâ€“gel method on calcium carbonate. Journal of Sol-Gel Science and Technology, 2011, 59, 25-31.	1.1	25
64	Polyoxometalate/laccase-mediated oxidative polymerization of catechol for textile dyeing. Applied Microbiology and Biotechnology, 2011, 89, 981-987.	1.7	44
65	Synthesis and characterisation of novel ruthenium multi-substituted polyoxometalates: Î±,Î²-[SiW9O37Ru4(H2O)3Cl3]7â^'. Polyhedron, 2010, 29, 3066-3073.	1.0	20
66	Delignification of eucalypt kraft pulp with manganese-substituted polyoxometalate assisted by fungal versatile peroxidase. Bioresource Technology, 2010, 101, 5935-5940.	4.8	19
67	A New Approach for the Modification of Paper Surface Properties Using Polyoxometalates. Materials, 2010, 3, 201-215.	1.3	24
68	POLYOXOMETALATE-CATALYZED OXYGEN DELIGNIFICATION PROCESS: KINETIC STUDIES, DELIGNIFICATION SEQUENCES AND REUSE OF HPA-5-MnIIAQUEOUS SOLUTION. Chemical Engineering Communications, 2009, 196, 801-811.	1.5	9
69	Sequential decolourization of reactive textile dyes by laccase mediator system. Journal of Chemical Technology and Biotechnology, 2009, 84, 442-446.	1.6	25
70	Influence of physicalâ€“chemical interactions on the thermal stability and surface properties of poly(vinyl chloride)-b-poly(hydroxypropyl acrylate)-b-poly(vinyl chloride) block copolymers. European Polymer Journal, 2009, 45, 3389-3398.	2.6	17
71	Application of FT-IR-ATR Spectroscopy to Evaluate the Penetration of Surface Sizing Agents into the Paper Structure. Industrial & Engineering Chemistry Research, 2009, 48, 3867-3872.	1.8	25
72	Multisensor system for determination of polyoxometalates containing vanadium at its different oxidation states. Talanta, 2007, 72, 497-505.	2.9	15

#	Article	IF	Citations
73	Alternatives for lignocellulosic pulp delignification using polyoxometalates and oxygen: a review. Green Chemistry, 2007, 9, 717.	4.6	123
74	Oxidation of phenols employing polyoxometalates as biomimetic models of the activity of phenoloxidase enzymes. New Journal of Chemistry, 2007, 31, 1461.	1.4	20
75	Structural Studies of Keggin-Type Polyoxotungstates by Extended X-ray Absorption Fine Structure Spectroscopy. European Journal of Inorganic Chemistry, 2007, 2007, 1027-1038.	1.0	31
76	New polyoxometalateâ€“laccase integrated system for kraft pulp delignification. Biochemical Engineering Journal, 2007, 33, 141-147.	1.8	28
77	Transition metal substituted polyoxometalates supported on amine-functionalized silica. Transition Metal Chemistry, 2007, 32, 1061-1067.	0.7	25
78	Sandwich-type tungstophosphates in the catalytic oxidation of cycloalkanes with hydrogen peroxide. Journal of Molecular Catalysis A, 2007, 262, 41-47.	4.8	35
79	Novel charge transfer supramolecular assemblies with Keggin anions and 2-amino-5-nitropyridine. Dalton Transactions, 2006, , 1197-1203.	1.6	28
80	Oxygen bleaching of kraft pulp with polyoxometalates and laccase applying a novel multi-stage process. Journal of Molecular Catalysis B: Enzymatic, 2005, 33, 57-64.	1.8	64
81	Transition metal substituted polyoxotungstates for the oxygen delignification of kraft pulp. Applied Catalysis A: General, 2005, 295, 134-141.	2.2	24
82	Oxidation of cycloalkanes with hydrogen peroxide in the presence of Keggin-type polyoxotungstates. Catalysis Today, 2004, 91-92, 211-214.	2.2	26
83	Electrochemical Behaviour of First Row Transition Metal Substituted Polyoxotungstates: A Comparative Study in Acetonitrile. European Journal of Inorganic Chemistry, 2004, 2004, 619-628.	1.0	66
84	A novel approach for the oxidative catalysis employing polyoxometalateâ€“laccase system: application to the oxygen bleaching of kraft pulp. Catalysis Communications, 2004, 5, 485-489.	1.6	40
85	Polymorphism in tetra-butylammonium salts of Keggin-type polyoxotungstates. Inorganica Chimica Acta, 2003, 342, 16-22.	1.2	36
86	Unusual electrochemical reduction of copper(II) to copper(I) in polyoxotungstates. Electrochemistry Communications, 2003, 5, 378-382.	2.3	16
87	Synthesis, properties and photochromism of novel charge transfer compounds with Keggin anions and protonated 2,2â€²-biquinoline. Polyhedron, 2002, 21, 2537-2545.	1.0	64
88	Keggin-type polyoxotungstates as catalysts in the oxidation of cyclohexane by dilute aqueous hydrogen peroxide. Journal of Molecular Catalysis A, 1999, 144, 461-468.	4.8	105
89	Characterization of Bone and Bone-Based Graft Materials Using FTIR Spectroscopy. , 0, , .		42