Pau Turon Dols

List of Publications by Year
in descending order

71 papers	977 citations	471061 17 h-index	525886 27 g-index
74 all docs	74 docs citations	74 times ranked	1400 citing authors

#	ARTICLE	IF	CITATIONS
1	Nanostructured medical sutures with antibacterial properties. Biomaterials, 2015, 52, 291-300.	5.7	103
2	Biodegradable and Biocompatible Systems Based on Hydroxyapatite Nanoparticles. Applied Sciences (Switzerland), 2017, 7, 60.	1.3	81
3	Plasmon-Based Biofilm Inhibition on Surgical Implants. Nano Letters, 2019, 19, 2524-2529.	4.5	49
4	DNA adsorbed on hydroxyapatite surfaces. Journal of Materials Chemistry B, 2014, 2, 6953-6966.	2.9	41
5	Mineralization of DNA into nanoparticles of hydroxyapatite. Dalton Transactions, 2014, 43, 317-327.	1.6	39
6	Polypropylene mesh for hernia repair with controllable cell adhesion/de-adhesion properties. Journal of Materials Chemistry B, 2020, 8, 1049-1059.	2.9	29
7	Modeling biominerals formed by apatites and DNA. Biointerphases, 2013, 8, 10.	0.6	28
8	Sustainable synthesis of amino acids by catalytic fixation of molecular dinitrogen and carbon dioxide. Green Chemistry, 2018, 20, 685-693.	4.6	26
9	Synergistic Approach to Elucidate the Incorporation of Magnesium Ions into Hydroxyapatite. Chemistry - A European Journal, 2015, 21, 2537-2546.	1.7	24
10	The mechanism of adhesion and graft polymerization of a PNIPAAm thermoresponsive hydrogel to polypropylene meshes. Soft Matter, 2019, 15, 3432-3442.	1.2	24
11	Loading of Antibiotic into Biocoated Hydroxyapatite Nanoparticles: Smart Antitumor Platforms with Regulated Release. ACS Biomaterials Science and Engineering, 2018, 4, 3234-3245.	2.6	22
12	Toward the New Generation of Surgical Meshes with 4D Response: Soft, Dynamic, and Adaptable. Advanced Functional Materials, 2020, 30, 2004145.	7.8	22
13	Hydroxyapatite with Permanent Electrical Polarization: Preparation, Characterization, and Response against Inorganic Adsorbates. ChemPhysChem, 2018, 19, 1746-1755.	1.0	21
14	<i>In vivo</i> soft tissue reinforcement with bacterial nanocellulose. Biomaterials Science, 2021, 9, 3040-3050.	2.6	20
15	Study of Non-Isothermal Crystallization of Polydioxanone and Analysis of Morphological Changes Occurring during Heating and Cooling Processes. Polymers, 2016, 8, 351.	2.0	18
16	Electrically Polarized Hydroxyapatite: Influence of the Polarization Process on the Microstructure and Properties. Langmuir, 2019, 35, 14782-14790.	1.6	18
17	Controlled Anisotropic Growth of Hydroxyapatite by Additive-Free Hydrothermal Synthesis. Crystal Growth and Design, 2021, 21, 748-756.	1.4	18
18	A low memory cost model based reconstruction algorithm exploiting translational symmetry for photoacustic microscopy. Biomedical Optics Express, 2013, 4, 2813.	1.5	16

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19	Electrochemical Sensor for Bacterial Metabolism Based on the Detection of NADH by Polythiophene Nanoparticles. Journal of Physical Chemistry C, 2019, 123, 22181-22190.	1.5	16
20	Temperature effect on the SARS-CoV-2: A molecular dynamics study of the spike homotrimeric glycoprotein. Computational and Structural Biotechnology Journal, 2021, 19, 1848-1862.	1.9	16
21	Regulating the Superficial Vacancies and OH^{â^’} Orientations on Polarized Hydroxyapatite Electrocatalysts. Advanced Materials Interfaces, 2021, 8, 2100163.	1.9	16
22	An experimental-computer modeling study of inorganic phosphates surface adsorption on hydroxyapatite particles. Dalton Transactions, 2015, 44, 9980-9991.	1.6	15
23	Isothermal and non-isothermal crystallization kinetics of a polyglycolide copolymer having a tricomponent middle soft segment. Thermochimica Acta, 2014, 585, 71-80.	1.2	14
24	Non-Isothermal Crystallization Kinetics of Poly(4-Hydroxybutyrate) Biopolymer. Molecules, 2019, 24, 2840.	1.7	14
25	Smart design for a flexible, functionalized and electroresponsive hybrid platform based on poly(3,4-ethylenedioxythiophene) derivatives to improve cell viability. Journal of Materials Chemistry B, 2020, 8, 8864-8877.	2.9	14
26	Permanently polarized hydroxyapatite for selective electrothermal catalytic conversion of carbon dioxide into ethanol. Chemical Communications, 2021, 57, 5163-5166.	2.2	14
27	Dissolving Hydroxyolite: A DNA Molecule into Its Hydroxyapatite Mold. Chemistry - A European Journal, 2016, 22, 6631-6636.	1.7	13
28	Poly(Îµ-caprolactone) films reinforced with chlorhexidine loaded electrospun polylactide microfibers. EXPRESS Polymer Letters, 2017, 11, 674-689.	1.1	13
29	Breaking-down the catalyst used for the electrophotosynthesis of amino acids by nitrogen and carbon fixation. Journal of Catalysis, 2020, 389, 646-656.	3.1	12
30	Enhanced CO₂ Conversion into Ethanol by Permanently Polarized Hydroxyapatite through Câ^’C Coupling. ChemCatChem, 2021, 13, 5025-5033.	1.8	12
31	Incorporation of Chloramphenicol Loaded Hydroxyapatite Nanoparticles into Polylactide. International Journal of Molecular Sciences, 2019, 20, 5056.	1.8	11
32	Hydrolytic and enzymatic degradation of biobased poly(4-hydroxybutyrate) films. Selective etching of spherulites. Polymer Degradation and Stability, 2021, 183, 109451.	2.7	11
33	Incorporation of biguanide compounds into poly(GL)-b-poly(GL-co-TMC-co-CL)-b-poly(GL) monofilament surgical sutures. Materials Science and Engineering C, 2017, 71, 629-640.	3.8	10
34	Isothermal Crystallization Kinetics of Poly(4-hydroxybutyrate) Biopolymer. Materials, 2019, 12, 2488.	1.3	10
35	Nanotheranostic Interface Based on Antibioticâ€Loaded Conducting Polymer Nanoparticles for Realâ€Time Monitoring of Bacterial Growth Inhibition. Advanced Healthcare Materials, 2021, 10, e2001636.	3.9	10
36	Optimization of permanently polarized hydroxyapatite catalyst. Implications for the electrophotosynthesis of amino acids by nitrogen and carbon fixation. Journal of Catalysis, 2021, 397, 98-107.	3.1	10

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37	Scaffolds with Tunable Properties Constituted by Electrospun Nanofibers of Polyglycolide and Poly(Îµâ€caprolactone). Macromolecular Materials and Engineering, 2018, 303, 1800100.	1.7	9
38	Analysis of nitrogen fixation by a catalyst capable of transforming N2, CO2 and CH4 into amino acids under mild reactions conditions. Applied Catalysis A: General, 2020, 596, 117526.	2.2	9
39	Influence of pH on Morphology and Structure during Hydrolytic Degradation of the Segmented GL-b-[GL-co-TMC-co-CL]-b-GL Copolymer. Fibers, 2015, 3, 348-372.	1.8	8
40	Grafting of Hydroxyapatite for Biomedical Applications. , 2018, , 45-80.		8
41	Influence of the atmosphere conditions in the structure, properties and solubility of fluorine-substituted hydroxyapatites. Materials Chemistry and Physics, 2019, 226, 279-289.	2.0	8
42	Hydroxyapatite-based biphasic catalysts with plasticity properties and its potential in carbon dioxide fixation. Chemical Engineering Journal, 2022, 433, 133512.	6.6	8
43	Polarized Hydroxyapatite: New Insights and Future Perspectives Through Systematic Electrical Characterization at the Interface. Advanced Materials Interfaces, 2022, 9, .	1.9	8
44	Study on the hydrolytic degradation of the segmented GL-b-[GL-co-TMC-co-CL]-b-GL copolymer with application as monofilar surgical suture. Polymer Degradation and Stability, 2013, 98, 2709-2721.	2.7	7
45	Plasmaâ€Functionalized Isotactic Polypropylene Assembled with Conducting Polymers for Bacterial Quantification by NADH Sensing. Advanced Healthcare Materials, 2021, 10, e2100425.	3.9	7
46	Unravelling the Encapsulation of DNA and Other Biomolecules in HAp Microcalcifications of Human Breast Cancer Tissues by Raman Imaging. Cancers, 2021, 13, 2658.	1.7	7
47	Permanently polarized hydroxyapatite, an outstanding catalytic material for carbon and nitrogen fixation. Materials Horizons, 2022, 9, 1566-1576.	6.4	7
48	The potential of photoacoustic microscopy as a tool to characterize the in vivo degradation of surgical sutures. Biomedical Optics Express, 2014, 5, 2856.	1.5	6
49	Surviving Mass Extinctions through Biomineralized DNA. Chemistry - A European Journal, 2015, 21, 18892-18898.	1.7	6
50	Unravelling the molecular interactions between the SARS-CoV-2 RBD spike protein and various specific monoclonal antibodies. Biochimie, 2022, 193, 90-102.	1.3	6
51	Fine-tuning of polarized hydroxyapatite for the catalytic conversion of dinitrogen to ammonium under mild conditions. Chemical Engineering Journal, 2022, 446, 137440.	6.6	6
52	Restricted Puckering of Mineralized RNA-Like Riboses. Journal of Physical Chemistry B, 2014, 118, 5075-5081.	1.2	5
53	Spherulitic morphologies of the triblock Poly(GL)-b-poly(GL-co-TMC-co-CL)-b-poly(GL) copolymer: Isothermal and non-isothermal crystallization studies. European Polymer Journal, 2015, 73, 222-236.	2.6	4
54	Biominerals Formed by DNA and Calcium Oxalate or Hydroxyapatite: A Comparative Study. Langmuir, 2019, 35, 11912-11922.	1.6	4

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55	Introduction of Flexible Cyanoacrylates in Sutureless Gastric Closure. Surgical Innovation, 2016, 23, 490-497.	0.4	3
56	Effects of hydroxyapatite (0001) Ca²⁺/Mg²⁺substitution on adsorbed<scp>d</scp>-ribose ring puckering. RSC Advances, 2016, 6, 69634-69640.	1.7	3
57	Tunable Drug Loading and Reinforcement of Polycaprolactone Films by Means of Electrospun Nanofibers of Glycolide Segmented Copolymers. Macromolecular Materials and Engineering, 2018, 303, 1700401.	1.7	3
58	Electrospun scaffolds for wound healing applications from poly(4â€hydroxybutyrate): A biobased and biodegradable linear polymer with high elastomeric properties. Journal of Applied Polymer Science, 2022, 139, 51447.	1.3	3
59	Incorporation of Functionalized Calcium Phosphate Nanoparticles in Living Cells. Journal of Cluster Science, 2022, 33, 2781-2795.	1.7	3
60	Microstructural Changes during Degradation of Biobased Poly(4-hydroxybutyrate) Sutures. Polymers, 2020, 12, 2024.	2.0	2
61	In silico antibody engineering for SARS-CoV-2 detection. Computational and Structural Biotechnology Journal, 2021, 19, 5525-5534.	1.9	2
62	Tailorable Nanoporous Hydroxyapatite Scaffolds for Electrothermal Catalysis. ACS Applied Nano Materials, 2022, 5, 8526-8536.	2.4	2
63	On the feasibility of the computational modelling of the endoluminal vacuum-assisted closure of an oesophageal anastomotic leakage. Royal Society Open Science, 2018, 5, 171289.	1.1	1
64	Close contacts at the interface: Experimental-computational synergies for solving complexity problems. ChemistrySelect, 2018, 3, .	0.7	1
65	In silico study of substrate chemistry effect on the tethering of engineered antibodies for SARS-CoV-2 detection: Amorphous silica vs gold. Colloids and Surfaces B: Biointerfaces, 2022, 213, 112400.	2.5	1
66	Towards non-invasive imaging of surgical suture degradation with photoacoustic microscopy. Proceedings of SPIE, 2015, , .	0.8	0
67	Incorporation of chloramphenicol and captopril into poly(GL)â€<i>b</i>â€poly(GLâ€<i>co</i>â€TMCâ€<i>co</i>â€CL)â€<i>b</i>â€poly(GL) monofilar surgical sutures. Journal of Applied Polymer Science, 2017, 134, .	1.3	0
68	Macromol. Mater. Eng. 2/2018. Macromolecular Materials and Engineering, 2018, 303, 1870007.	1.7	0
69	2. Close Contacts at the interface: Experimental-computational synergies for solving complexity problems. , 2018, , 53-80.		0
70	Towards non-invasive imaging of surgical suture degradation with photoacoustic microscopy. , 2015, , .		0
71	Computer simulations on oxidative stress-induced reactions in SARS-CoV-2 spike glycoprotein: a multi-scale approach. Molecular Diversity, 2022, , 1.	2.1	0