Maude Jimenez

List of Publications by Year
in descending order

97 papers	3,055 citations	186265 28 h-index	182427 51 g-index
97 all docs	97 docs citations	97 times ranked	2810 citing authors

#	Article	IF	Citations
1	Deterministic lateral displacement for particle separation: a review. Lab on A Chip, 2014, 14, 4139-4158.	6.0	341
2	Intumescent fire protective coating: Toward a better understanding of their mechanism of action. Thermochimica Acta, 2006, 449, 16-26.	2.7	275
3	Characterization of the performance of an intumescent fire protective coating. Surface and Coatings Technology, 2006, 201, 979-987.	4.8	200
4	Polyallylamineâ€“montmorillonite as super flame retardant coating assemblies byÂlayer-by layer deposition on polyamide. Polymer Degradation and Stability, 2013, 98, 627-634.	5.8	118
5	Multiscale Experimental Approach for Developing High-Performance Intumescent Coatings. Industrial & Engineering Chemistry Research, 2006, 45, 4500-4508.	3.7	108
6	Remediation of Heavy Metals by Biomolecules: A Review. Critical Reviews in Environmental Science and Technology, 2015, 45, 1644-1704.	12.8	85
7	Extreme Heat Shielding of Clay/Chitosan Nanobrick Wall on Flexible Foam. ACS Applied Materials & Interfaces, 2018, 10, 31686-31696.	8.0	81
8	Functionalization of Titanium Surfaces with Polymer Brushes Prepared from a Biomimetic RAFT Agent. Macromolecules, 2011, 44, 5883-5892.	4.8	69
9	Antifouling Biomimetic Liquid-Infused Stainless Steel: Application to Dairy Industrial Processing. ACS Applied Materials & Interfaces, 2017, 9, 26565-26573.	8.0	68
10	Comprehensive Study of the Influence of Different Aging Scenarios on the Fire Protective Behavior of an Epoxy Based Intumescent Coating. Industrial & Engineering Chemistry Research, 2013, 52, 729-743.	3.7	62
11	Intumescent coating of (polyallylamine-polyphosphates) deposited on polyamide fabrics via layer-by-layer technique. Polymer Degradation and Stability, 2014, 106, 158-164.	5.8	56
12	Self-stratifying coatings: A review. Progress in Organic Coatings, 2017, 110, 210-241.	3.9	53
13	High-Throughput Fire Testing for Intumescent Coatings. Industrial & Engineering Chemistry Research, 2006, 45, 7475-7481.	3.7	52
14	Microintumescent mechanism of flameâ€retardant waterâ€based chitosanâ€“ammonium polyphosphate multilayer nanocoating on cotton fabric. Journal of Applied Polymer Science, 2016, 133, .	2.6	51
15	Layer-by-layer deposition of a TiO2-filled intumescent coating and its effect on the flame retardancy of polyamide and polyester fabrics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 469, 1-10.	4.7	50
16	Kinetic analysis of the thermal degradation of an epoxy-based intumescent coating. Polymer Degradation and Stability, 2009, 94, 404-409.	5.8	48
17	Toward the understanding of the interfacial dairy fouling deposition and growth mechanisms at a stainless steel surface: A multiscale approach. Journal of Colloid and Interface Science, 2013, 404, 192-200.	9.4	48
18	A â€œClickableâ€•Titanium Surface Platform. Langmuir, 2010, 26, 15920-15924.	3.5	47

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19	Effect of basalt fibers dispersion on steel fire protection performance of epoxy-based intumescent coatings. Progress in Organic Coatings, 2018, 122, 229-238.	3.9	44
20	Novel flame retardant flexible polyurethane foam: plasma induced graft-polymerization of phosphonates. RSC Advances, 2015, 5, 63853-63865.	3.6	42
21	Chitosan-grafted nonwoven geotextile for heavy metals sorption in sediments. Reactive and Functional Polymers, 2013, 73, 53-59.	4.1	39
22	Effect of Cold Plasma Treatment on Electrospun Nanofibers Properties: A Review. ACS Applied Bio Materials, 2020, 3, 4696-4716.	4.6	37
23	Latest trends for structural steel protection by using intumescent fire protective coatings: a review. Surface Engineering, 2020, 36, 334-363.	2.2	36
24	Fire retardant sol-gel coated polyurethane foam: Mechanism of action. Polymer Degradation and Stability, 2018, 147, 159-167.	5.8	35
25	Intumescent ethylene-vinyl acetate copolymer: Reaction to fire and mechanistic aspects. Polymer Degradation and Stability, 2019, 161, 235-244.	5.8	35
26	Anticoagulant and antimicrobial finishing of non-woven polypropylene textiles. Biomedical Materials (Bristol), 2012, 7, 035001.	3.3	30
27	Hexagonal Boron Nitride Platelet-Based Nanocoating for Fire Protection. ACS Applied Nano Materials, 2019, 2, 5450-5459.	5.0	30
28	Pyrolysis modeling, sensitivity analysis, and optimization techniques for combustible materials: A review. Journal of Fire Sciences, 2019, 37, 377-433.	2.0	30
29	Quantifying the effects of basalt fibers on thermal degradation and fire performance of epoxy-based intumescent coating for fire protection of steel substrate. Progress in Organic Coatings, 2019, 132, 148-158.	3.9	30
30	Thin coatings for fire protection: An overview of the existing strategies, with an emphasis on layer-by-layer surface treatments and promising new solutions. Progress in Organic Coatings, 2021, 154, 106217.	3.9	29
31	Revealing the impact of ageing on a flame retarded PLA. Polymer Degradation and Stability, 2016, 127, 88-97.	5.8	28
32	Recent advances on the ageing of flame retarded PLA: Effect of UV-light and/or relative humidity. Polymer Degradation and Stability, 2017, 139, 143-164.	5.8	28
33	Biomimetic surface modifications of stainless steel targeting dairy fouling mitigation and bacterial adhesion. Food and Bioproducts Processing, 2019, 113, 32-38.	3.6	28
34	New routes to flame retard polyamide 6,6 for electrical applications. Journal of Fire Sciences, 2012, 30, 535-551.	2.0	27
35	Effect of the calcium/protein molar ratio on Î²-lactoglobulin denaturation kinetics and fouling phenomena. International Dairy Journal, 2018, 78, 1-10.	3.0	27
36	Fire protection of polypropylene and polycarbonate by intumescent coatings. Polymers for Advanced Technologies, 2012, 23, 130-135.	3.2	26

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37	Self-stratifying epoxy/silicone coatings. Progress in Organic Coatings, 2017, 103, 101-110.	3.9	26
38	Influence of stainless steel surface properties on whey protein fouling under industrial processing conditions. Journal of Food Engineering, 2018, 228, 38-49.	5.2	25
39	Characterization of a plasma polymer coating from an organophosphorus silane deposited at atmospheric pressure for fire-retardant purposes. Progress in Organic Coatings, 2015, 88, 39-47.	3.9	24
40	Atmospheric pressure plasma spraying of silane-based coatings targeting whey protein fouling and bacterial adhesion management. Applied Surface Science, 2018, 455, 392-402.	6.1	24
41	Intumescent polypropylene: Reaction to fire and mechanistic aspects. Fire Safety Journal, 2019, 105, 261-269.	3.1	23
42	Mechanistic investigation of a flame retardant coating made by layer-by-layer assembly. RSC Advances, 2014, 4, 43326-43334.	3.6	22
43	Pregnancy outcomes of prenatally diagnosed Turner syndrome: a French multicenter retrospective study including a series of 975 cases. Prenatal Diagnosis, 2014, 34, 1133-1138.	2.3	20
44	Aging of the flameâ€retardant properties of polycarbonate and polypropylene protected by an intumescent coating. Journal of Applied Polymer Science, 2014, 131, .	2.6	20
45	Topcoats versus Durability of an Intumescent Coating. Industrial & Engineering Chemistry Research, 2016, 55, 9625-9632.	3.7	20
46	Flame retardant and weathering resistant self-layering epoxy-silicone coatings for plastics. Progress in Organic Coatings, 2019, 136, 105269.	3.9	20
47	Fire retardant solâ€“gel coatings for flexible polyurethane foams. RSC Advances, 2016, 6, 28543-28554.	3.6	19
48	Enhanced fire retardant properties of glass-fiber reinforced Polyamide 6,6 by combining bulk and surface treatments: Toward a better understanding of the fire-retardant mechanism. Polymer Degradation and Stability, 2013, 98, 1378-1388.	5.8	18
49	Cysteine-grafted nonwoven geotextile: A new and efficient material for heavy metals sorption â€“ Part A. Journal of Environmental Management, 2014, 132, 107-112.	7.8	18
50	Improvement of heat resistance of high performance fibers using a cold plasma polymerization process. Surface and Coatings Technology, 2010, 205, 745-758.	4.8	17
51	Getting a better insight into the chemistry of decomposition of complex flame retarded formulation: New insights using solid state NMR. Polymer Degradation and Stability, 2018, 153, 145-154.	5.8	17
52	Additive manufacturing of fireâ€retardant ethyleneâ€vinyl acetate. Polymers for Advanced Technologies, 2019, 30, 1878-1890.	3.2	17
53	Self-stratified bio-based coatings: Formulation and elucidation of critical parameters governing stratification. Applied Surface Science, 2021, 536, 147687.	6.1	17
54	Cysteine-grafted nonwoven geotextile: A new and efficient material for heavy metals sorption â€“ Part B. Journal of Environmental Management, 2014, 143, 99-105.	7.8	16

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55	Fractal conceptualization of intumescent fire barriers, toward simulations of virtual morphologies. Scientific Reports, 2019, 9, 1872.	3.3	16
56	Intumescence as method for providing fire resistance to structural composites: application to poly(ethylene terephtalate) foam sandwichâ€"structured composite. Composite Interfaces, 2013, 20, 269-277.	2.3	15
57	Investigating the Effect of an Antifouling Surface Modification on the Environmental Impact of a Pasteurization Process: An LCA Study. ACS Sustainable Chemistry and Engineering, 2019, 7, 9133-9142.	6.7	15
58	Antifouling amphiphilic silicone coatings for dairy fouling mitigation on stainless steel. Biofouling, 2018, 34, 769-783.	2.2	14
59	Intumescent Polymer Metal Laminates for Fire Protection. Polymers, 2018, 10, 995.	4.5	14
60	3D printed sandwich materials filled with hydrogels for extremely low heat release rate. Polymer Degradation and Stability, 2020, 179, 109269.	5.8	14
61	Innovative 3D printed design to conceive highly fire-retardant multi-material. Polymer Degradation and Stability, 2019, 169, 108992.	5.8	13
62	Selective biological response of human pulmonary microvascular endothelial cells and human pulmonary artery smooth muscle cells on cold-plasma-modified polyester vascular prostheses. Biomedical Materials (Bristol), 2011, 6, 065003.	3.3	12
63	Influence of processing gases on the properties of cold atmospheric plasma SiO x C y coatings. Applied Surface Science, 2014, 315, 531-537.	6.1	11
64	Simultaneous immobilization of heparin and gentamicin on polypropylene textiles: A dual therapeutic activity. Journal of Biomedical Materials Research - Part A, 2014, 102, 3846-3854.	4.0	10
65	One pot flame retardant and weathering resistant coatings for plastics: a novel approach. RSC Advances, 2017, 7, 40682-40694.	3.6	10
66	Ultrasonic Adhesion Measurement of Whey Protein Fouling. Heat Transfer Engineering, 2015, 36, 771-779.	1.9	9
67	A critical review on surface modifications mitigating dairy fouling. Comprehensive Reviews in Food Science and Food Safety, 2021, 20, 4324-4366.	11.7	9
68	Antifouling Stainless Steel Surface: Competition between Roughness and Surface Energy. Materials Science Forum, 0, 706-709, 2523-2528.	0.3	8
69	Tyrosine: an efficient natural molecule for copper remediation. Green Materials, 2015, 3, 1-9.	2.1	8
70	Self-Stratification of Ternary Systems Including a Flame Retardant Liquid Additive. Coatings, 2018, 8, 448.	2.6	8
71	Low-Emissivity Metal/Dielectric Coatings as Radiative Barriers for the Fire Protection of Raw and Formulated Polymers. ACS Applied Polymer Materials, 2020, 2, 2880-2889.	4.4	8
72	Effect of the phosphate/calcium molar ratio on fouling deposits generated by the processing of a whey protein isolate in a plate heat exchanger. Food and Bioproducts Processing, 2020, 121, 154-165.	3.6	8

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73	Calcium Chelation by Phosphate Ions and Its Influence on Fouling Mechanisms of Whey Protein Solutions in a Plate Heat Exchanger. Foods, 2021, 10, 259.	4.3	8
74	A Facile Technique to Extract the Cross-Sectional Structure of Brittle Porous Chars from Intumescent Coatings. Polymers, 2019, 11, 640.	4.5	7
75	Intumescent polypropylene: Interactions between physical and chemical expansion. Fire and Materials, 2021, 45, 387-395.	2.0	7
76	Modeling heat transfers across a silicone-based intumescent coating. Journal of Physics: Conference Series, 2018, 1107, 032012.	0.4	6
77	Synergistic effect of basalt fiber on the thermal properties of intumescent fire retardant coating. Materials Today: Proceedings, 2019, 16, 2030-2038.	1.8	6
78	A new approach to design self stratifying coatings containing nano and micro pigments. Journal of Dispersion Science and Technology, 2020, 41, 902-908.	2.4	6
79	Combining Low-Emissivity Thin Coating and 3D-Printed Original Designs for Superior Fire-Protective Performance. ACS Omega, 2020, 5, 27857-27863.	3.5	5
80	Formulation of eco-friendly solâ€“gel coatings to flame-retard flexible polyurethane foam. Green Materials, 2020, 8, 139-149.	2.1	5
81	Bilayer Intumescent Paint Metal Laminates: A Novel Design for a High-Performance Fire Barrier. Industrial & Engineering Chemistry Research, 2020, 59, 2988-2997.	3.7	5
82	An innovative method to functionalize textiles for the remediation of polluted media. Applied Surface Science, 2015, 330, 111-117.	6.1	4
83	High speed atmospheric plasma deposition of transparent ZnO thin films without post-deposition annealing. Thin Solid Films, 2015, 589, 161-164.	1.8	4
84	Characterization of in-flame soot from balsa composite combustion during mass loss cone calorimeter tests. Polymer Degradation and Stability, 2018, 154, 304-311.	5.8	4
85	PCL covered PP meshes plasma-grafted by sulfonated monomer for the prevention of postoperative abdominal adhesions. Materials Today Communications, 2021, 26, 101968.	1.9	4
86	Innovative fouling-resistant materials for industrial heat exchangers: a review. Reviews in Chemical Engineering, 2023, 39, 71-104.	4.4	4
87	Flame Retardancy of Lightweight Sandwich Composites. Journal of Composites Science, 2021, 5, 274.	3.0	4
88	Fire Testing of Intumescent Coatings: Comparison Between Bench-Scale Furnace and Radiant Panels Experimental Methodologies. Fire Technology, 2022, 58, 1737-1766.	3.0	4
89	Transparent fire protective sol-gel coating for wood panels. Polymer Testing, 2022, 110, 107579.	4.8	4
90	Graphite-based composites for whey protein fouling and bacterial adhesion management. International Dairy Journal, 2018, 86, 69-75.	3.0	3

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91	Life cycle assessment of multi-step versus one-step coating processes using oil or bio-based resins. Journal of Cleaner Production, 2020, 242, 118527.	9.3	3
92	The electron microanalyzer (EPMA): a powerful device for the microanalysis of filled polymeric materials. Polymers for Advanced Technologies, 2015, 26, 1020-1026.	3.2	2
93	Sorption of heavy metals on a chitosan-grafted-polypropylene nonwoven geotextile. E3S Web of Conferences, 2013, 1, 05003.	0.5	1
94	Development anti-dairy fouling surface of 316L 2B stainless steel by atmospheric pressure plasma treatment. , 2014, , .		1
95	Simultaneous antibacterial and anticoagulant properties of polypropylene non-woven textiles. MATEC Web of Conferences, 2013, 7, 04014.	0.2	0
96	Maze running into intumescence: mechanistic aspects in polypropylene. Journal of Physics: Conference Series, 2018, 1107, 032001.	0.4	0
97	An efficient bi-layer intumescent paint metal laminate fire barrier for various substrates: Extension to other application. European Journal of Materials, 2021, 1, 19-33.	2.6	0