Alberto Frache

List of Publications by Year in Descending Order

135 papers	4,697 citations	37 h-index	63 g-index
147 ext. papers	5,167 ext. citations	4.3 avg, IF	5.78 L-index

#	Paper	IF	Citations
135	Development of disposable filtering mask recycled materials: Impact of blending with recycled mixed polyolefin and their aging stability. *Resources, Conservation and Recycling*, **2022**, 177, 105974	11.9	0
134	Anaerobic digestion and aerobic composting of rigid biopolymers in bio-waste treatment: fate and effects on the final compost.. *Bioresource Technology*, **2022**, 351, 126934	11	1
133	Flame retardant potential of Tetra Pak -derived biochar for ethylene-vinyl-acetate copolymers. *Composites Part C: Open Access*, **2022**, 8, 100252	1.6	1
132	Investigation of Different Types of Biochar on the Thermal Stability and Fire Retardance of Ethylene-Vinyl Acetate Copolymers. *Polymers*, **2021**, 13,	4.5	5
131	Designing 3D printable polypropylene: Material and process optimisation through rheology. *Additive Manufacturing*, **2021**, 40, 101944	6.1	8
130	Effect of Filler Morphology on the Electrical and Thermal Conductivity of PP/Carbon-Based Nanocomposites. *Journal of Composites Science*, **2021**, 5, 196	3	2
129	Rheological behavior and morphology of poly(lactic acid)/low-density polyethylene blends based on virgin and recycled polymers: Compatibilization with natural surfactants. *Journal of Applied Polymer Science*, **2021**, 138, 50590	2.9	3
128	Dielectric Spectroscopy of PP/MWCNT Nanocomposites: Relationship with Crystalline Structure and Injection Molding Condition. *Nanomaterials*, **2021**, 11,	5.4	6
127	Improving Fire Performances of PEAL: More Second-Life Options for Recycled Tetra Pak. *Polymers*, **2020**, 12,	4.5	3
126	Fate of Biodegradable Polymers Under Industrial Conditions for Anaerobic Digestion and Aerobic Composting of Food Waste. *Journal of Polymers and the Environment*, **2020**, 28, 2539-2550	4.5	20
125	Development of Pressure-Responsive PolyPropylene and Biochar-Based Materials. *Micromachines*, **2020**, 11,	3.3	14
124	Mechanical recycling of an end-of-life automotive composite component. *Sustainable Materials and Technologies*, **2020**, 23, e00143	5.3	16
123	Is it Possible to Mechanical Recycle the Materials of the Disposable Filtering Masks?. *Polymers*, **2020** , 12,	4.5	31
122	Layer-by-Layer nanostructured interphase produces mechanically strong and flame retardant bio-composites. *Composites Part B: Engineering*, **2020**, 200, 108310	10	20
121	Effect of Injection Molding Conditions on Crystalline Structure and Electrical Resistivity of PP/MWCNT Nanocomposites. *Polymers*, **2020**, 12,	4.5	7
120	PLA/PHB Blends: Biocompatibilizer Effects. *Polymers*, **2019**, 11,	4.5	21
119	Selective bacterial colonization processes on polyethylene waste samples in an abandoned landfill site. *Scientific Reports*, **2019**, 9, 14138	4.9	40

118	Thermal and UV aging of polypropylene stabilized by wine seeds wastes and their extracts. *Polymer Degradation and Stability*, **2019**, 165, 49-59	4.7	19
117	Natural wastes as particle filler for poly(lactic acid)-based composites. *Journal of Composite Materials*, **2019**, 53, 783-797	2.7	31
116	Evaluation of nanocomposites containing graphene nanoplatelets: Mechanical properties and combustion behavior. *Polymer Engineering and Science*, **2019**, 59, 2062-2071	2.3	8
115	Reactive extrusion of sol-gel silica as fire retardant synergistic additive in ethylene-vinyl acetate copolymer (EVA) composites. *Polymer Degradation and Stability*, **2019**, 167, 259-268	4.7	9
114	Bio-based PA5.10 for Industrial Applications: Improvement of Barrier and Thermo-mechanical Properties with Rice Husk Ash and Nanoclay. *Journal of Polymers and the Environment*, **2019**, 27, 2213-2223	4.5	4
113	Mechanical and Barrier Properties Enhancement in Film Extruded Bio-Polyamides With Modified Nanoclay. *Polymer Composites*, **2019**, 40, 2617-2628	3	8
112	Hemp hurd and alfalfa as particle filler to improve the thermo-mechanical and fire retardant properties of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate). *Polymer Composites*, **2019**, 40, 3429-3437	3	21
111	Multilayer cotton fabric bio-composites based on PLA and PHB copolymer for industrial load carrying applications. *Composites Part B: Engineering*, **2019**, 163, 761-768	10	26
110	Epoxy coupling agent for PLA and PHB copolymer-based cotton fabric bio-composites. *Composites Part B: Engineering*, **2018**, 148, 188-197	10	33
109	All Natural High-Density Fiber- and Particleboards from Hemp Fibers or Rice Husk Particles. *Journal of Polymers and the Environment*, **2018**, 26, 1652-1660	4.5	21
108	Interdigitated crystalline MMT-MCA: Preparation and characterization. *Polymers for Advanced Technologies*, **2018**, 29, 22-29	3.2	7
107	Sustainable and High Performing Biocomposites with Chitosan/Sepiolite Layer-by-Layer Nanoengineered Interphases. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 9601-9605	8.3	33
106	Flame Retardant Effect of Nano Fillers on Polydimethylsiloxane Composites. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1468-1473	1.3	4
105	Reuse and Valorisation of Hemp Fibres and Rice Husk Particles for Fire Resistant Fibreboards and Particleboards. *Journal of Polymers and the Environment*, **2018**, 26, 3731-3744	4.5	13
104	Thermal and fire retardancy studies of clay-modified unsaturated polyester/glass fiber composites. *Polymer Composites*, **2017**, 38, 2743-2752	3	7
103	Thermal behavior of thermoplastic polymer nanocomposites containing graphene nanoplatelets. *Journal of Applied Polymer Science*, **2017**, 134,	2.9	14
102	A novel, low surface charge density, anionically modified montmorillonite for polymer nanocomposites. *RSC Advances*, **2017**, 7, 5980-5988	3.7	20
101	Interdigitated crystalline MMT-MCA in polyamide 6. *RSC Advances*, **2017**, 7, 861-869	3.7	21

100	Layer by Layer-functionalized rice husk particles: A novel and sustainable solution for particleboard production. *Materials Today Communications*, **2017**, 13, 92-101	2.5	19
99	Improving the Flame Retardant Efficiency of Layer by Layer Coatings Containing Deoxyribonucleic Acid by Post-Diffusion of Hydrotalcite Nanoparticles. *Materials*, **2017**, 10,	3.5	14
98	Morphology and electrical properties of injection-molded PP carbon-based nanocomposites **2017**,		3
97	Thermomechanical improvement of glycerol plasticized maize starch with high loading of cellulose, flax and talc fillers. *Polymer International*, **2016**, 65, 955-962	3.3	9
96	Thermo-mechanical properties enhancement of bio-polyamides (PA10.10 and PA6.10) by using rice husk ash and nanoclay. *Composites Part A: Applied Science and Manufacturing*, **2016**, 81, 193-201	8.4	31
95	Advanced biobased and rigid foams, based on urethane-modified isocyanurate from oxypropylated gambier tannin polyol. *Polymer Degradation and Stability*, **2016**, 132, 62-68	4.7	25
94	On revealing the effect of alkaline lignin and ammonium polyphosphate additives on fire retardant properties of sustainable zein-based composites. *Polymer Degradation and Stability*, **2016**, 134, 115-125	4.7	23
93	Effect of clay silylation on curing and mechanical and thermal properties of unsaturated polyester/montmorillonite nanocomposites. *Journal of Physics and Chemistry of Solids*, **2015**, 87, 9-15	3.9	25
92	Sodium montmorillonite modified with methacryloxy and vinylsilanes: Influence of silylation on the morphology of clay/unsaturated polyester nanocomposites. *Applied Clay Science*, **2015**, 114, 550-557	5.2	46
91	Formation and oxygen diffusion barrier properties of fish gelatin/natural sodium montmorillonite clay self-assembled multilayers onto the biopolyester surface. *RSC Advances*, **2015**, 5, 61465-61480	3.7	3
90	A Comparative Analysis of Nanoparticle Adsorption as Fire-Protection Approach for Fabrics. *Polymers*, **2015**, 7, 47-68	4.5	37
89	Isosorbide, a green plasticizer for thermoplastic starch that does not retrogradate. *Carbohydrate Polymers*, **2015**, 119, 78-84	10.3	32
88	The effect of mechanical recycling on the microstructure and properties of PA66 composites reinforced with carbon fibers. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a	2.9	21
87	Bulk vs. surface flame retardancy of fully bio-based polyamide 10,10. *RSC Advances*, **2015**, 5, 39424-39433	3.7	24
86	Cellulose extracted from rice husk as filler for poly(lactic acid): preparation and characterization. *Cellulose*, **2014**, 21, 1813-1821	5.5	50
85	Materials engineering for surface-confined flame retardancy. *Materials Science and Engineering Reports*, **2014**, 84, 1-20	30.9	110
84	Rice husk as bio-source of silica: preparation and characterization of PLA-silica bio-composites. *RSC Advances*, **2014**, 4, 54703-54712	3.7	64
83	Plasticizers, antioxidants and reinforcement fillers from hazelnut skin and cocoa by-products: Extraction and use in PLA and PP. *Polymer Degradation and Stability*, **2014**, 108, 297-306	4.7	36

82	Aging of EVA/organically modified clay: Effect on dispersion, distribution and combustion behavior. *Polymer Degradation and Stability*, **2014**, 107, 184-187	4.7	9
81	Poly(lactic acid)-Based Composites Containing Natural Fillers: Thermal, Mechanical and Barrier Properties. *Journal of Polymers and the Environment*, **2014**, 22, 88-98	4.5	52
80	Combustion characteristics of cellulosic loose fibres. *Fire and Materials*, **2013**, 37, 482-490	1.8	18
79	Layer by Layer coatings assembled through dipping, vertical or horizontal spray for cotton flame retardancy. *Carbohydrate Polymers*, **2013**, 92, 114-9	10.3	76
78	Thermo-oxidative ageing of an organo-modified clay and effects on the properties of PA6 based nanocomposites. *Thermochimica Acta*, **2013**, 552, 37-45	2.9	18
77	Flame Retardancy of Polyester Fabrics Treated by Spray-Assisted Layer-by-Layer Silica Architectures. *Industrial & Engineering Chemistry Research*, **2013**, 52, 9544-9550	3.9	63
76	Combustion behavior of polypropylene-based composites used in industrial plasticollar. *Composite Interfaces*, **2013**, 20, 241-253	2.3	1
75	Novel phosphorous□nitrogen intumescent flame retardant system. Its effects on flame retardancy and thermal properties of polypropylene. *Polymer Degradation and Stability*, **2013**, 98, 297-305	4.7	105
74	One-pot synthesis of hexadecyl modified layered magnesium silicate and polyethylene based nanocomposite preparation. *Applied Clay Science*, **2013**, 80-81, 320-325	5.2	4
73	Comparative study of filler influence on polylactide photooxidation. *EXPRESS Polymer Letters*, **2013**, 7, 431-442	3.4	30
72	Multi-component flame resistant coating techniques for textiles **2013**, 68-93		5
71	Evaluation of nonconventional additives as fire retardants on polyamide 6,6: Phosphorous-based master batch, □zirconium dihydrogen phosphate, and □cyclodextrin based nanosponges. *Journal of Applied Polymer Science*, **2012**, 123, 3545-3555	2.9	20
70	Thermal stability of high density polyethylene□umed silica nanocomposites. *Journal of Thermal Analysis and Calorimetry*, **2012**, 109, 863-873	4.1	41
69	Textile Flame Retardancy Through Surface-Assembled Nanoarchitectures. *ACS Symposium Series*, **2012**, 327-341	0.4	1
68	Optimization of the procedure to burn textile fabrics by cone calorimeter: part II. Results on nanoparticle-finished polyester. *Fire and Materials*, **2012**, 36, 527-536	1.8	31
67	Cyclodextrin nanosponges as novel green flame retardants for PP, LLDPE and PA6. *Carbohydrate Polymers*, **2012**, 88, 1387-1394	10.3	65
66	Simple Method for the Preparation of Composites Based on PA6 and Partially Exfoliated Graphite. *Journal of Nanomaterials*, **2012**, 2012, 1-5	3.2	7
65	Hydrotalcite and nanometric silica as finishing additives to enhance the thermal stability and flame retardancy of cotton. *Cellulose*, **2011**, 18, 179-190	5.5	38

64	Thermal properties of epoxy resin nanocomposites based on hydrotalcites. *Polymer Degradation and Stability*, **2011**, 96, 164-169	4.7	24
63	A novel use of Ti-POSS as initiator of L-lactide ring-opening polymerization. *Journal of Polymer Science Part A*, **2011**, 49, 4794-4799	2.5	26
62	Fire-retardant poly(ethylene terephthalate) by combination of expandable graphite and layered clays for plastics and textiles. *Fire and Materials*, **2011**, 35, 383-396	1.8	34
61	Optimization of the procedure to burn textile fabrics by cone calorimeter: Part I. Combustion behavior of polyester. *Fire and Materials*, **2011**, 35, 397-409	1.8	85
60	Role of Ecyclodextrin nanosponges in polypropylene photooxidation. *Carbohydrate Polymers*, **2011**, 86, 127-135	10.3	39
59	Influence of surface activation by plasma and nanoparticle adsorption on the morphology, thermal stability and combustion behavior of PET fabrics. *European Polymer Journal*, **2011**, 47, 893-902	5.2	60
58	Influence of MWNT on Polypropylene and Polyethylene Photooxidation. *Macromolecular Symposia*, **2011**, 301, 16-22	0.8	14
57	Crystallization kinetics of poly(lactic acid)-talc composites. *EXPRESS Polymer Letters*, **2011**, 5, 849-858	3.4	236
56	iPP Crystallization: Micro and Nano Fillers Effects **2010**,		1
55	Polylactic acid and polylactic acid-based nanocomposite photooxidation. *Biomacromolecules*, **2010**, 11, 2919-26	6.9	110
54	Platinum nanoparticle intercalated montmorillonite to enhance the char formation of polyamide 6 nanocomposites. *Journal of Materials Chemistry*, **2010**, 20, 9550		9
53	Poly (butylensuccinate co-adipate)-thermoplastic starch nanocomposite blends. *Carbohydrate Polymers*, **2010**, 82, 802-808	10.3	34
52	Flame retardancy properties of Ezirconium phosphate based composites. *Polymer Degradation and Stability*, **2010**, 95, 1928-1933	4.7	65
51	Clay based polymeric composites: Preparation and quality characterization. *Materials Chemistry and Physics*, **2010**, 123, 372-377	4.4	24
50	Novel flame retardants containing cyclodextrin nanosponges and phosphorus compounds to enhance EVA combustion properties. *Polymer Degradation and Stability*, **2010**, 95, 2093-2100	4.7	103
49	The effect of annealing conditions on the intercalation and exfoliation of layered silicates in polymer nanocomposites. *Journal of Polymer Science, Part B: Polymer Physics*, **2010**, 48, 2476-2483	2.6	7
48	Effect of heating of organo-montmorillonites under different atmospheres. *Applied Clay Science*, **2009**, 45, 185-193	5.2	22
47	Synergistic effects of zinc borate and aluminium trihydroxide on flammability behaviour of aerospace epoxy system. *EXPRESS Polymer Letters*, **2009**, 3, 376-384	3.4	38

46	MWNT Surface Self-Assembling in Fire Retardant Polyethylene-Carbon nanotubes nanocomposites. *E-Polymers*, **2008**, 8,	2.7	5
45	Bentonite-based organoclays as innovative flame retardants agents for SBS copolymer. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 6316-24	1.3	4
44	Intercalation degree in PP/organoclay nanocomposites: role of surfactant structure. *Polymers for Advanced Technologies*, **2008**, 19, 547-555	3.2	21
43	Preparation of nanocomposites based on PP and PA6 by direct injection molding. *Polymer Engineering and Science*, **2008**, 48, 2373-2381	2.3	16
42	Preparation and characterisation of hydrotalcite/carboxyadamantane intercalation compounds as fillers of polymeric nanocomposites. *Journal of Materials Chemistry*, **2007**, 17, 1079-1086		41
41	Polyethylene thermal oxidative stabilisation in carbon nanotubes based nanocomposites. *European Polymer Journal*, **2007**, 43, 3222-3235	5.2	100
40	Catalytic charring□volatilization competition in organoclay nanocomposites. *Polymer Degradation and Stability*, **2007**, 92, 425-436	4.7	110
39	Influence of compatibilizer degradation on formation and properties of PA6/organoclay nanocomposites. *Polymer Degradation and Stability*, **2007**, 92, 370-378	4.7	49
38	The influence of carbon nanotubes, organically modified montmorillonites and layered double hydroxides on the thermal degradation and fire retardancy of polyethylene, ethylene□vinyl acetate copolymer and polystyrene. *Polymer*, **2007**, 48, 6532-6545	3.9	130
37	Comprehensive spectral and instrumental approaches for the easy monitoring of features and purity of different carbon nanostructures for nanocomposite applications. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2006**, 131, 72-82	3.1	26
36	Effect of organoclay impurities on mechanical properties of EVA-layered silicate nanocomposites. *E-Polymers*, **2006**, 6,	2.7	14
35	Polypropylene-POSS Nanocomposites: Morphology and Crystallization Behaviour. *Macromolecular Symposia*, **2006**, 234, 59-67	0.8	76
34	Poly-1-butene/clay nanocomposite effect of compatibilizers on thermal and fire retardant properties. *Polymers for Advanced Technologies*, **2006**, 17, 246-254	3.2	8
33	Polypropylene metal functionalised POSS nanocomposites: A study by thermogravimetric analysis. *Polymer Degradation and Stability*, **2006**, 91, 1064-1070	4.7	96
32	Preparation and spectroscopic characterisation of intercalation products of clay and of clay□polypropylene composites with rhodamine B. *Journal of Physics and Chemistry of Solids*, **2006**, 67, 909-914	3.9	17
31	Polyhedral oligomeric silsesquioxanes (POSS) thermal degradation. *Thermochimica Acta*, **2006**, 440, 36-42	2.9	303
30	Temperature-induced transformations in CoAPO-34 molecular sieve: a combined in situ X-ray diffraction and FTIR study. *Journal of Physical Chemistry B*, **2005**, 109, 13483-92	3.4	7
29	Combined Fire Retardant Action of Phosphonated Structures and Clay Dispersion in Epoxy Resin. *ACS Symposium Series*, **2005**, 21-35	0.4	3

28	Cu-MCM-22 zeolite: A combined X-ray powder diffraction and computational study of the local structure of extra-framework copper ions. *Studies in Surface Science and Catalysis*, **2005**, 415-426	1.8	4
27	Thermal and combustion behaviour of layered silicate–epoxy nanocomposites. *Polymer Degradation and Stability*, **2005**, 90, 354-362	4.7	151
26	New nanocomposites constituted of polyethylene and organically modified ZnAl-hydrotalcites. *Polymer Degradation and Stability*, **2005**, 90, 586-590	4.7	108
25	Polypropylene–polyhedral oligomeric silsesquioxanes (POSS) nanocomposites. *Polymer*, **2005**, 46, 7855-7866	3.9	285
24	The transformation of lamellar AlPO-kanemite into chabazite-type CAL-1 3D molecular sieve: a structural study. *Studies in Surface Science and Catalysis*, **2005**, 158, 311-318	1.8	1
23	The stability of H-MCM-22 under severe thermal conditions. *Studies in Surface Science and Catalysis*, **2004**, 1426-1430	1.8	1
22	Heat Induced Structure Modifications in Polymer-Layered Silicate Nanocomposites. *Macromolecular Materials and Engineering*, **2004**, 289, 783-786	3.9	47
21	A comparison of the processes involved in the direct synthesis of GdSr2RuCu2Ox and NdSr2RuCu2Oy perovskites. *Physica C: Superconductivity and Its Applications*, **2004**, 408-410, 193-194	1.3	8
20	On the activity and hydrothermal stability of CuMCM-22 in the decomposition of nitrogen oxides: a comparison with CuZSM-5. *Catalysis Communications*, **2004**, 5, 191-194	3.2	14
19	Structural characterization of siliceous spicules from marine sponges. *Biophysical Journal*, **2004**, 86, 526-34	2.9	72
18	SYNTHESIS, MORPHOLOGY AND STRUCTURAL PROPERTIES OF (GD,ND)SR2RUCU2O8 SAMPLES. *International Journal of Modern Physics B*, **2003**, 17, 899-904	1.1	5
17	CuAPSO-34 Catalysts for N2O Decomposition in the Presence of H2O. A Study of Zeolitic Structure Stability in Comparison to Cu-SAPO-34 and Cu-ZSM-5. *Topics in Catalysis*, **2003**, 22, 53-57	2.3	26
16	Evaluating the Catalytic Performances of SAPO-34 Catalysts for the Oxidative Dehydrogenation of Ethane. *Topics in Catalysis*, **2003**, 22, 95-99	2.3	17
15	On the hydrothermal stability of CuAPSO-34 microporous catalysts for N2O decomposition: a comparison with CuZSM-5. *Journal of Catalysis*, **2003**, 217, 100-106	7.3	39
14	Fiber diffraction study of spicules from marine sponges. *Microscopy Research and Technique*, **2003**, 62, 378-81	2.8	26
13	The identity of titanium centres in microporous aluminophosphates compared with Ti-MCM-41 mesoporous catalyst and titanosilsesquioxane dimer molecular complex: a spectroscopy study. *Journal of Molecular Catalysis A*, **2003**, 204-205, 483-489		44
12	Spectroscopic characterisation of microporous aluminophosphate materials with potential application in environmental catalysis. *Catalysis Today*, **2003**, 77, 371-384	5.3	29
11	Combined Single-Crystal X-ray Diffraction and FTIR Study of Morpholinium–Water Molecular Complexes Embedded in a Chabasite Network. *Journal of Physical Chemistry B*, **2003**, 107, 9655-9661	3.4	23

10	Catalytic DeNOx activity of cobalt and copper ions in microporous MeALPO-34 and MeAPSO-34. *Catalysis Today*, **2002**, 75, 359-365	5.3	28
9	Acid SAPO-34 Catalysts for Oxidative Dehydrogenation of Ethane. *Journal of Catalysis*, **2002**, 208, 479-484	7.3	33
8	Structure and Morphology of NdSr2RuCu2Oy and GdSr2RuCu2Oz. *Lecture Notes in Physics*, **2002**, 205-221	0.8	2
7	Structural characterization of Co- and Si-substituted AlPO-34 synthesized in the presence of morpholine. *Studies in Surface Science and Catalysis*, **2002**, 142, 151-157	1.8	2
6	Spectroscopic and catalytic studies on Cu-MCM-22: Effect of copper loading. *Studies in Surface Science and Catalysis*, **2002**, 142, 343-350	1.8	5
5	NO and CO Adsorption on Over-Exchanged Cu-MCM-22: A FTIR Study. *Langmuir*, **2002**, 18, 6875-6880	4	23
4	30-P-31-NOx reactivity on microporous MeAPOs. spectroscopic and catalytic studies. *Studies in Surface Science and Catalysis*, **2001**, 328	1.8	3
3	Synthesis, Spectroscopic and Catalytic Properties of Cobalt and Copper Ions in Aluminophosphates with Chabasite-Like Structure. Studies of the NO Reactivity. *Studies in Surface Science and Catalysis*, **2001**, 269-277	1.8	5
2	ALPO-34 and SAPO-34 synthesized by using morpholine as templating agent. FTIR and FT-Raman studies of the host□guest and guest□guest interactions within the zeolitic framework. *Microporous and Mesoporous Materials*, **1999**, 30, 145-153	5.3	78
1	Rheology, Morphology and Thermal Properties of a PLA/PHB/Clay Blend Nanocomposite: The Influence of Process Parameters. *Journal of Polymers and the Environment*,1	4.5	4