Fernando G Torres

List of Publications by Year in Descending Order

100 papers	2,340 citations	24 h-index	45 g-index
101 ext. papers	2,846 ext. citations	4.5 avg, IF	5.87 L-index

#	Paper	IF	Citations
100	Hydrogel-based triboelectric nanogenerators: Properties, performance, and applications. *International Journal of Energy Research*, **2022**, 46, 5603-5624	4.5	2
99	Synthesis, characteristics, and applications of modified starch nanoparticles: A review. *International Journal of Biological Macromolecules*, **2021**, 194, 289-305	7.9	3
98	Binational survey of personal protective equipment (PPE) pollution driven by the COVID-19 pandemic in coastal environments: Abundance, distribution, and analytical characterization.. *Journal of Hazardous Materials*, **2021**, 426, 128070	12.8	16
97	Analysis and availability of lignocellulosic wastes: Assessments for Indonesia and Peru. *Environmental Quality Management*, **2021**, 30, 71-82	0.8	6
96	Influence of the source of starch and plasticizers on the environmental burden of starch-Brazil nut fiber biocomposite production: A life cycle assessment approach. *Science of the Total Environment*, **2021**, 769, 144869	10.2	18
95	Marine macroinvertebrates inhabiting plastic litter in Peru. *Marine Pollution Bulletin*, **2021**, 167, 112296	6.7	18
94	The effectiveness of coconut coir as tar adsorbent in liquid smoke integrated into the pyrolysis reactor. *Case Studies in Thermal Engineering*, **2021**, 25, 100907	5.6	2
93	Historical microplastic records in marine sediments: Current progress and methodological evaluation. *Regional Studies in Marine Science*, **2021**, 46, 101868	1.5	4
92	Tailoring size and release kinetics of pH-hybrid carrageenan microgels via a surfactant-assisted technique. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2021**, 70, 338-344	3	2
91	Sorption of chemical contaminants on degradable and non-degradable microplastics: Recent progress and research trends. *Science of the Total Environment*, **2021**, 757, 143875	10.2	70
90	Polysaccharide-based triboelectric nanogenerators: A review. *Carbohydrate Polymers*, **2021**, 251, 117055	10.3	27
89	Environmental pollution with antifouling paint particles: Distribution, ecotoxicology, and sustainable alternatives. *Marine Pollution Bulletin*, **2021**, 169, 112529	6.7	12
88	Face mask waste generation and management during the COVID-19 pandemic: An overview and the Peruvian case. *Science of the Total Environment*, **2021**, 786, 147628	10.2	33
87	Sustainable synthesis, reduction and applications of graphene obtained from renewable resources. *Sustainable Materials and Technologies*, **2021**, 29, e00310	5.3	3
86	Algal-based polysaccharides as polymer electrolytes in modern electrochemical energy conversion and storage systems: A review. *Carbohydrate Polymer Technologies and Applications*, **2021**, 2, 100023	1.7	3
85	Bacterial cellulose-based biosensors. *Medical Devices & Sensors*, **2020**, 3, e10102	1.6	8
84	Mechanical properties of calcite- and aragonite-based structures by nanoindentation tests. *Bioinspired, Biomimetic and Nanobiomaterials*, **2020**, 9, 112-121	1.3	0

83	Starch based Polymers for Drug Delivery Applications **2020**, 37-60		1
82	Synthesis of highly stable □-hybrid carrageenan micro- and nanogels via a sonication-assisted microemulsion route. *Polymers From Renewable Resources*, **2020**, 11, 69-82	0.4	2
81	Non-conventional starch nanoparticles for drug delivery applications. *Medical Devices & Sensors*, **2020**, 3, e10111	1.6	11
80	Application of the Spider Silk Standardization Initiative (SI) methodology to the characterization of major ampullate gland silk fibers spun by spiders from Pantanos de Villa wetlands (Lima, Peru). *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 111, 104023	4.1	4
79	Molecular □-relaxation process of exopolysaccharides extracted from Nostoc commune cyanobacteria. *International Journal of Biological Macromolecules*, **2020**, 161, 1516-1525	7.9	1
78	Bacterial Cellulose-Graphene Based Nanocomposites. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	11
77	Bacterial-Polymer-Based Electrolytes: Recent Progress and Applications. *ACS Applied Energy Materials*, **2020**, 3, 11500-11515	6.1	4
76	A comparison between the failure modes observed in biological and synthetic polymer nanocomposites. *Polymer-Plastics Technology and Materials*, **2020**, 59, 241-270	1.5	1
75	Preparation and characterization of a novel starch□chestnut husk biocomposite. *SN Applied Sciences* , **2019**, 1, 1	1.8	9
74	Green Composite Materials from Biopolymers Reinforced with Agroforestry Waste. *Journal of Polymers and the Environment*, **2019**, 27, 2651-2673	4.5	24
73	Enhanced conductivity of bacterial cellulose films reinforced with NH4I-doped graphene oxide. *Polymer-Plastics Technology and Materials*, **2019**, 58, 1585-1595	1.5	4
72	Effect of Chitin Whiskers on the Molecular Dynamics of Carrageenan-Based Nanocomposites. *Polymers*, **2019**, 11,	4.5	10
71	Natural Polysaccharide Nanomaterials: An Overview of Their Immunological Properties. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	96
70	Molecular dynamics of carboxymethyl □-hybrid carrageenan films doped with NH4I. *Polymer-Plastics Technology and Materials*, **2019**, 58, 889-902	1.5	2
69	Carboxymethyl □-hybrid carrageenan doped with NH4I as a template for solid bio-electrolytes development. *Materials Chemistry and Physics*, **2019**, 223, 659-665	4.4	14
68	Bacterial cellulose nanocomposites: An all-nano type of material. *Materials Science and Engineering C*, **2019**, 98, 1277-1293	8.3	98
67	Tailoring the Properties of Native Andean Potato Starch Nanoparticles Using Acid and Alkaline Treatments. *Starch/Staerke*, **2019**, 71, 1800234	2.3	8
66	Monitoring cell substrate interactions in exopolysaccharide-based films reinforced with chitin whiskers and starch nanoparticles used as cell substrates. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2018**, 67, 333-339	3	9

65	Unusual reversible elastomeric gels from Nostoc commune. *International Journal of Biological Macromolecules*, **2017**, 97, 411-417	7.9	2
64	Hydrazine treatment improves conductivity of bacterial cellulose/graphene nanocomposites obtained by a novel processing method. *Carbohydrate Polymers*, **2017**, 171, 68-76	10.3	29
63	Failure of flight feathers under uniaxial compression. *Materials Science and Engineering C*, **2017**, 78, 923-931	8.3	7
62	Ageing and degradation determines failure mode on sea urchin spines. *Materials Science and Engineering C*, **2017**, 78, 1086-1092	8.3	5
61	Mineral and water content of A. gigas scales determine local micromechanical properties and energy dissipation mechanisms. *Mechanics of Time-Dependent Materials*, **2017**, 21, 613-625	1.2	
60	Failure retardation in body armor. *Bioinspired, Biomimetic and Nanobiomaterials*, **2017**, 6, 37-50	1.3	3
59	Modulating antioxidant activity and the controlled release capability of laccase mediated catechin grafting of chitosan. *Process Biochemistry*, **2017**, 59, 65-76	4.8	12
58	Revisiting the role of calcite inSpondylus crassisquamashell. *Bioinspired, Biomimetic and Nanobiomaterials*, **2017**, 6, 151-160	1.3	2
57	Thermal and Rheological Properties of the Mucilage from the Fruit of Cordia lutea. *Polymers From Renewable Resources*, **2017**, 8, 79-90	0.4	4
56	Preparation and Characterization of Polysaccharide Films from the Cyanobacteria Nostoc commune. *Polymers From Renewable Resources*, **2017**, 8, 133-150	0.4	9
55	Molecular dynamics of carrageenan composites reinforced with Cloisite Na montmorillonite nanoclay. *Carbohydrate Polymers*, **2017**, 176, 117-126	10.3	11
54	Monitoring molecular dynamics of bacterial cellulose composites reinforced with graphene oxide by carboxymethyl cellulose addition. *Carbohydrate Polymers*, **2017**, 157, 353-360	10.3	21
53	Development of Biopolymer Nanocomposites Based on Polysaccharides Obtained from Red Algae Chondracanthus chamissoi Reinforced with Chitin Whiskers and Montmorillonite. *Polymer-Plastics Technology and Engineering*, **2016**, 55, 1557-1564		12
52	Exploring the mechanical properties of hard botanical structures of two tropical plants. *Bioinspired, Biomimetic and Nanobiomaterials*, **2016**, 5, 96-105	1.3	4
51	Exploring the shock response of spider webs. *Journal of the Mechanical Behavior of Biomedical Materials*, **2016**, 56, 1-5	4.1	15
50	Human monocyte response to Andean-native starch nanoparticles. *Starch/Staerke*, **2016**, 68, 1016-1023	2.3	9
49	Botanical origin as a determinant for the mechanical properties of starch films with nanoparticle reinforcements. *Starch/Staerke*, **2016**, 68, 935-942	2.3	5
48	Chitin whiskers reinforced carrageenan films as low adhesion cell substrates. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2016**, 65, 574-580	3	12

47	Impact and fracture analysis of fish scales from Arapaima gigas. *Materials Science and Engineering C*, **2015**, 51, 153-7	8.3	26
46	Dynamic mechanical analysis of fish dermal armour fromA. gigasandP. pardalis. *Bioinspired, Biomimetic and Nanobiomaterials*, **2015**, 4, 199-206	1.3	2
45	Influence of Botanic Origin on the Morphology and Size of Starch Nanoparticles from Andean Native Starch Sources. *Polymers From Renewable Resources*, **2015**, 6, 91-103	0.4	6
44	Characterization of dermal plates from armored catfish Pterygoplichthys pardalis reveals sandwich-like nanocomposite structure. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 45, 175-82	4.1	15
43	Immunological properties of Andean starch films are independent of their nanometric roughness and stiffness. *International Journal of Biological Macromolecules*, **2015**, 75, 460-6	7.9	12
42	Optimization of Cell Growth on Bacterial Cellulose by Adsorption of Collagen and Poly-L-Lysine. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2015**, 64, 411-415	3	13
41	Failure analysis of porcupine quills under axial compression reveals their mechanical response during buckling. *Journal of the Mechanical Behavior of Biomedical Materials*, **2014**, 39, 111-8	4.1	14
40	Reversible stress softening of collagen based networks from the jumbo squid mantle (Dosidicus gigas). *Materials Science and Engineering C*, **2014**, 37, 9-13	8.3	6
39	Structure-Property Relationships in Arapaima Gigas Scales Revealed by Nanoindentation Tests. *Polymers and Polymer Composites*, **2014**, 22, 369-374	0.8	11
38	Physical characterization of the liquid adhesive from orb-weaving spiders. *Materials Science and Engineering C*, **2014**, 34, 341-4	8.3	12
37	Starch-based biomaterials for wound-dressing applications. *Starch/Staerke*, **2013**, 65, 543-551	2.3	68
36	Cellulose Based Blends, Composites and Nanocomposites. *Advanced Structured Materials*, **2013**, 21-54	0.6	9
35	The effect of temperature on the mechanical properties of a protein-based biopolymer network. *Journal of Thermal Analysis and Calorimetry*, **2013**, 111, 1921-1925	4.1	15
34	An experimental confirmation of thermal transitions in native and regenerated spider silks. *Materials Science and Engineering C*, **2013**, 33, 1432-7	8.3	4
33	IPNs Derived from Biopolymers **2013**, 211-233		4
32	A thermomechanical study of elastomeric collagen-based fibers in the wet state. *Bioinspired, Biomimetic and Nanobiomaterials*, **2013**, 2, 93-97	1.3	1
31	The effect of water on the thermal transitions of fish scales from Arapaima Gigas. *Materials Science and Engineering C*, **2012**, 32, 2212-2214	8.3	14
30	CHAPTER 14:Mussel Byssus Fibres: A Tough Biopolymer. *RSC Green Chemistry*, **2012**, 305-329	0.9	0

29	Biocompatibility of bacterial cellulose based biomaterials. *Journal of Functional Biomaterials*, **2012**, 3, 864-78	4.8	153
28	Biodegradability and mechanical properties of starch films from Andean crops. *International Journal of Biological Macromolecules*, **2011**, 48, 603-6	7.9	87
27	Biocompatibilty of starch-based films from starch of Andean crops for biomedical applications. *Materials Science and Engineering C*, **2011**, 31, 1737-1740	8.3	26
26	Morphological and thermal characterization of native starches from Andean crops. *Starch/Staerke*, **2011**, 63, 381-389	2.3	22
25	Supercontraction of dragline silk spun by lynx spiders (Oxyopidae). *International Journal of Biological Macromolecules*, **2010**, 46, 555-7	7.9	19
24	Structure-property relationships of a biopolymer network: the eggshell membrane. *Acta Biomaterialia*, **2010**, 6, 3687-93	10.8	51
23	Development of self-assembled bacterial cellulose-starch nanocomposites. *Materials Science and Engineering C*, **2009**, 29, 1098-1104	8.3	144
22	Nanocomposites of bacterial cellulose/hydroxyapatite for biomedical applications. *Acta Biomaterialia*, **2009**, 5, 1605-15	10.8	225
21	Mechanical behavior of silk during the evolution of orb-web spinning spiders. *Biomacromolecules*, **2009**, 10, 1904-10	6.9	46
20	Reversible stress softening and stress recovery of cellulose networks. *Soft Matter*, **2009**, 5, 4185	3.6	42
19	Morphological Characterisation of Bacterial Cellulose-Starch Nanocomposites. *Polymers and Polymer Composites*, **2008**, 16, 181-185	0.8	44
18	Characterization of the mechanical properties of tough biopolymer fibres from the mussel byssus of Aulacomya ater. *Acta Biomaterialia*, **2008**, 4, 1114-7	10.8	13
17	Characterization of the nanocomposite laminate structure occurring in fish scales from Arapaima Gigas. *Materials Science and Engineering C*, **2008**, 28, 1276-1283	8.3	76
16	Influence of the Processing Conditions on the Mechanical Properties of Chitin Whisker Reinforced Poly(caprolactone) Nanocomposites. *Journal of Biobased Materials and Bioenergy*, **2007**, 1, 341-350	1.4	18
15	Microwave processing of starch-based porous structures for tissue engineering scaffolds. *Journal of Applied Polymer Science*, **2007**, 103, 1332-1339	2.9	39
14	Mechanical properties and bioactivity of porous PLGA/TiO2 nanoparticle-filled composites for tissue engineering scaffolds. *Composites Science and Technology*, **2007**, 67, 1139-1147	8.6	102
13	Biocomposites Based on Bacterial Cellulose and Apple and Radish Pulp. *International Polymer Processing*, **2007**, 22, 497-501	1	24
12	Processing and Mechanical Properties of Natural Fiber Reinforced Thermoplastic Starch Biocomposites. *Journal of Thermoplastic Composite Materials*, **2007**, 20, 207-223	1.9	58

11	Bio- and Photo-degradation of Natural Fiber Reinforced Starch-based Biocomposites. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2006**, 55, 1115-1132	3	14
10	Thermal and Structural Analysis of Natural Fiber Reinforced Starch-Based Biocomposites. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2006**, 55, 893-907	3	21
9	Processing and characterization of porous structures from chitosan and starch for tissue engineering scaffolds. *Biomacromolecules*, **2006**, 7, 3345-55	6.9	107
8	Investigation of fiber organization and damage during single screw extrusion of natural fiber reinforced thermoplastics. *Advances in Polymer Technology*, **2005**, 24, 145-156	1.9	31
7	Rotational Moulding and Powder Processing of Natural Fibre Reinforced Thermoplastics. *International Polymer Processing*, **2003**, 18, 204-210	1	21
6	Single Screw Extrusion of Natural Fibre Reinforced Thermoplastics (NFRTP). *International Polymer Processing*, **2003**, 18, 33-40	1	16
5	Some Remarks on the Teaching of Polymer Processing to Mechanical Engineering Students. *International Journal of Mechanical Engineering Education*, **2002**, 30, 155-164	0.6	1
4	Morphological Characterisation of Long Glass Fibre Composites for the Thermoforming Process. *International Polymer Processing*, **2000**, 15, 208-214	1	2
3	Sustainable applications of lignocellulosic residues from the production of Brazil nut in the Peruvian Amazon. *Environmental Quality Management*,	0.8	3
2	Environmental impact of peanut skin-reinforced native starch foams modified by acetylation. *Environmental Quality Management*,	0.8	4
1	Mercury pollution in Peru: geographic distribution, health hazards, and sustainable removal technologies. *Environmental Science and Pollution Research*,	5.1	0