Juan F Vega

List of Publications by Year
in descending order

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72 papers	1,921 citations	279798 23 h-index	276875 41 g-index
73 all docs	73 docs citations	73 times ranked	1629 citing authors

#	Article	IF	Citations
1	Small-Amplitude Oscillatory Shear Flow Measurements as a Tool To Detect Very Low Amounts of Long Chain Branching in Polyethylenes. Macromolecules, 1998, 31, 3639-3647.	4.8	222
2	Rheology, Processing, Tensile Properties, and Crystallization of Polyethylene/Carbon Nanotube Nanocomposites. Macromolecules, 2009, 42, 4719-4727.	4.8	153
3	Comparison of the Rheological Properties of Metallocene-Catalyzed and Conventional High-Density Polyethylenes. Macromolecules, 1996, 29, 960-965.	4.8	139
4	Rheology and reptation of linear polymers. Ultrahigh molecular weight chain dynamics in the melt. Journal of Rheology, 2004, 48, 663-678.	2.6	129
5	Rheological criteria to characterize metallocene catalyzed polyethylenes. Macromolecular Chemistry and Physics, 1999, 200, 2257-2268.	2.2	80
6	Molecular Dynamics Simulations for the Description of Experimental Molecular Conformation, Melt Dynamics, and Phase Transitions in Polyethylene. Macromolecules, 2015, 48, 5016-5027.	4.8	76
7	New aspects on the rheological behaviour of metallocene catalysed polyethylenes. Polymer, 2001, 42, 9713-9721.	3.8	56
8	Structural Insights on the Plant Salt-Overly-Sensitive 1 (SOS1) Na+/H+ Antiporter. Journal of Molecular Biology, 2012, 424, 283-294.	4.2	49
9	Influence of Chain Branching and Molecular Weight on Melt Rheology and Crystallization of Polyethylene/Carbon Nanotube Nanocomposites. Macromolecules, 2014, 47, 5668-5681.	4.8	49
10	Flow-induced crystallization regimes and rheology of isotactic polypropylene. Journal of Thermal Analysis and Calorimetry, 2009, 98, 655-666.	3.6	47
11	Predicting experimental results for polyethylene by computer simulation. European Polymer Journal, 2018, 99, 298-331.	5.4	47
12	Entanglement Relaxation Time in Polyethylene: Simulation versus Experimental Data. Macromolecules, 2008, 41, 2959-2962.	4.8	46
13	Rheological behaviour of metallocene catalysed high density polytheylene blends. Polymer, 1997, 38, 589-594.	3.8	45
14	Phase morphology and melt viscoelastic properties in blends of ethylene/vinyl acetate copolymer and metallocene-catalysed linear polyethylene. Polymer, 2003, 44, 2911-2918.	3.8	44
15	Rheology of metallocene-catalyzed monomodal and bimodal polyethylenes. Polymer Engineering and Science, 1999, 39, 2292-2303.	3.1	33
16	Processability of a metallocene-catalyzed linear PE improved by blending with a small amount of UHMWPE. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2963-2971.	2.1	29
17	PET-ran-PLA Partially Degradable Random Copolymers Prepared by Organocatalysis: Effect of Poly(<scp>l</scp>-lactic acid) Incorporation on Crystallization and Morphology. ACS Sustainable Chemistry and Engineering, 2019, 7, 8647-8659.	6.7	28
18	The effect of chain architecture on â€œsharkskinâ€•of metallocene polyethylenes. Macromolecular Rapid Communications, 2000, 21, 973-978.	3.9	26

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19	Rheological behaviour of LDPE/EVA-c blends. I. On the effect of vinyl acetate comonomer in EVA copolymers. Polymer, 2001, 42, 8093-8101.	3.8	25
20	Effect of long chain branching on linear-viscoelastic melt properties of polyolefins. E-Polymers, 2002, 2, .	3.0	24
21	Three-dimensional modelling of flow curves in co-rotating twin-screw extruder elements. Journal of Materials Processing Technology, 2008, 197, 221-224.	6.3	24
22	A three-phase microstructural model to explain the mechanical relaxations of branched polyethylene: a DSC, WAXD and DMTA combined study. Colloid and Polymer Science, 2011, 289, 257-268.	2.1	24
23	The unit cell expansion of branched polyethylene as detected by Raman spectroscopy: an experimental and simulation approach. Journal of Materials Science, 2007, 42, 1046-1049.	3.7	23
24	Effect of molecular weight distribution on Newtonian viscosity of linear polyethylene. Rheologica Acta, 2012, 51, 81-87.	2.4	23
25	Strong influence of branching on the early stage of nucleation and crystal formation of fast cooled ultralong n-alkanes as revealed by computer simulation. European Polymer Journal, 2014, 50, 190-199.	5.4	22
26	Model linear metallocene-catalyzed polyolefins: Melt rheological behavior and molecular dynamics. Journal of Rheology, 2003, 47, 1505-1521.	2.6	21
27	meso-[Norbornane-7,7-bis(indenyl)]titanium Dichloride:Â A Highly Active Catalyst for Ethyleneâ^'Styrene Copolymerization. Macromolecules, 2006, 39, 7479-7482.	4.8	21
28	Novel features of the rheological behaviour of metallocene catalysed atactic polypropylene. Polymer, 2003, 44, 1401-1407.	3.8	19
29	On the processability of metallocene-catalysed polyethylene: effects of blending with ethyleneâ€“vinyl acetate copolymer. Polymer, 2003, 44, 1589-1594.	3.8	17
30	Assessment of entanglement features and dynamics from atomistic simulations and experiments in linear and short chain branched polyolefins. Soft Matter, 2012, 8, 6256.	2.7	17
31	Effect of short chain branching in molecular dimensions and Newtonian viscosity of ethylene/1-hexene copolymers: matching conformational and rheological experimental properties and atomistic simulations. Rheologica Acta, 2014, 53, 1-13.	2.4	17
32	Computer simulations of the early stages of crystal nucleation of linear and short chain branched polyethylene on carbon nanotubes. European Polymer Journal, 2014, 56, 194-204.	5.4	15
33	Competition between supernucleation and plasticization in the crystallization and rheological behavior of PCL/CNT-based nanocomposites and nanohybrids. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 1310-1325.	2.1	15
34	Organocatalyzed Polymerization of PET-mb-poly(oxyhexane) Copolymers and Their Self-Assembly into Double Crystalline Superstructures. Macromolecules, 2019, 52, 6834-6848.	4.8	15
35	Title is missing!. Journal of Materials Science, 2003, 38, 4757-4764.	3.7	14
36	Coarse-grained simulations on the crystallization, melting and annealing processes of short chain branched polyolefins. European Polymer Journal, 2016, 85, 478-488.	5.4	14

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37	Melt flow index on high molecular weight polyethylene: A comparative study of experiments and simulation. Journal of Materials Processing Technology, 2006, 174, 171-177.	6.3	13
38	Entanglement network and relaxation temperature dependence of singleâ€site catalyzed ethylene/1â€hexene copolymers. Journal of Applied Polymer Science, 2008, 109, 1564-1569.	2.6	13
39	The role of the interface in melt linear viscoelastic properties of LLDPE/LDPE blends: Effect of the molecular architecture of the matrix. Journal of Applied Polymer Science, 2009, 114, 420-429.	2.6	12
40	Microstructure and properties of branched polyethylene: Application of a threeâ€phase structural model. Journal of Applied Polymer Science, 2013, 128, 1871-1878.	2.6	12
41	Rheological features and molecular architecture of polyethylenes. Polymer Bulletin, 2003, 50, 197-204.	3.3	11
42	Elimination of Extrudate Distortions in Metallocene-Catalyzed Polyethylene. Macromolecules, 2004, 37, 681-683.	4.8	11
43	Eliminating sharkskin distortion in polyethylene extrusion via a molecular route. Journal of Rheology, 2011, 55, 855-873.	2.6	11
44	Size and conformational features of ErbB2 and ErbB3 receptors: a TEM and DLS comparative study. European Biophysics Journal, 2011, 40, 835-842.	2.2	11
45	The influence of short-chain branching on the morphology and structure of polyethylene single crystals. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1751-1762.	2.1	11
46	Heterobimetallic aluminate derivatives with bulky phenoxide ligands: a catalyst for selective vinyl polymerization. Dalton Transactions, 2019, 48, 6435-6444.	3.3	11
47	Title is missing!. Journal of Materials Science, 2002, 37, 3415-3421.	3.7	10
48	Synthesis and properties of ethylene/styrene copolymers produced by metallocene catalysts. Journal of Applied Polymer Science, 2006, 102, 3420-3429.	2.6	10
49	Highly active ethylene/hydroxyl comonomers copolymerization using metallocene catalysts. Journal of Applied Polymer Science, 2008, 109, 1529-1534.	2.6	10
50	Non-linear changes in the specific volume of the amorphous phase of poly(4-methyl-1-pentene); Kauzmann curves, inverse melting, fragility. Polymer, 2006, 47, 5555-5565.	3.8	9
51	Structure and Physical Properties of Polyethylenes obtained from Dual Catalysis Process. Polymer Bulletin, 2008, 60, 331-342.	3.3	9
52	Role of the interface in the meltâ€rheology properties of linear lowâ€density polyethylene/lowâ€density polyethylene blends: Effect of the molecular architecture of the dispersed phase. Journal of Applied Polymer Science, 2011, 119, 3217-3226.	2.6	8
53	Effect of high molar mass species on linear viscoelastic properties of polyethylene melts. European Polymer Journal, 2013, 49, 2748-2758.	5.4	8
54	A new insight into the conformation and melt dynamics of hydrogenated polybutadiene as revealed by computer simulations. Soft Matter, 2016, 12, 3929-3936.	2.7	8

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55	Molecular architecture and linear viscoelasticity of homogeneous ethylene/styrene copolymers. Rheologica Acta, 2011, 50, 207-220.	2.4	7
56	Molecular and hydrodynamic properties of human epidermal growth factor receptor HER2 extracellular domain and its homodimer: Experiments and multi-scale simulations. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 2406-2416.	2.4	7
57	Rheological behaviour of LDPE/EVAc blends. II. Linear viscoelasticity and extrusion properties. Journal of Materials Science, 2006, 41, 4814-4822.	3.7	6
58	Mapping the Mechanical Properties of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Banded Spherulites by Nanoindentation. Polymers, 2016, 8, 358.	4.5	6
59	Revisiting Polymerâ€“Particle Interaction in PEO Solutions. Langmuir, 2021, 37, 3808-3816.	3.5	6
60	Viscoelastic behaviour during the crystallisation of isotactic polypropylene. Journal of Materials Science, 2006, 41, 3899-3905.	3.7	5
61	Molecular structure and properties of ethyleneâ€coâ€styrene polymers obtained from [norbornaneâ€7,7â€bis(1â€indenyl)]titanium dichloride catalyst system. Journal of Applied Polymer Science, 2007, 106, 1421-1430.	2.6	5
62	Viscoelasticity and macromolecular topology in single-site catalyzed polyethylene. Journal of Materials Science, 2008, 43, 1745-1748.	3.7	5
63	Study of the effect of the molecular architecture of the components on the melt rheological properties of polyethylene blends. Journal of Polymer Research, 2015, 22, 1.	2.4	5
64	New habits in branched polyethylene single crystals. European Polymer Journal, 2016, 80, 169-174.	5.4	5
65	Hydrodynamic and Electrophoretic Properties of Trastuzumab/HER2 Extracellular Domain Complexes as Revealed by Experimental Techniques and Computational Simulations. International Journal of Molecular Sciences, 2019, 20, 1076.	4.1	5
66	Biofilm mechanics in an extremely acidic environment: microbiological significance. Soft Matter, 2021, 17, 3672-3680.	2.7	5
67	Poly(glycidyl methacrylate) macromolecular assemblies as biocompatible nanocarrier for the antimicrobial lysozyme. International Journal of Pharmaceutics, 2021, 603, 120695.	5.2	5
68	Evidences of Changes in Surface Electrostatic Charge Distribution during Stabilization of HPV16 Virus-Like Particles. PLoS ONE, 2016, 11, e0149009.	2.5	5
69	Rheology of Poly(glycidyl methacrylate) Macromolecular Nano Assemblies. Polymers, 2022, 14, 455.	4.5	3
70	Rheology of metallocene catalysed polyethylenes: Energy consumption perspective. Macromolecular Symposia, 2000, 152, 15-27.	0.7	2
71	Melting Temperature Depression of Polymer Single Crystals: Application to the Eco-Design of Tie-Layers in Polyolefinic-Based Multilayered Films. Polymers, 2022, 14, 1622.	4.5	2
72	A computer simulation of the effect of temperature on melt chain dimensions of random short chain branched polyethylene. Polymer, 2021, 225, 123772.	3.8	1