Jean-Marc Chenal

List of Publications by Year
in descending order

44 papers	1,453 citations	257450 24 h-index	315739 38 g-index
45 all docs	45 docs citations	45 times ranked	1434 citing authors

#	Article	IF	Citations
1	Enhanced ductility in high performance polyamides due to strain-induced phase transitions. Polymer, 2022, 238, 124424.	3.8	3
2	Macromolecular Additives to Turn a Thermoplastic Elastomer into a Self-Healing Material. Macromolecules, 2021, 54, 888-895.	4.8	25
3	Combining bioresorbable polyesters and bioactive glasses: Orthopedic applications of composite implants and bone tissue engineering scaffolds. Applied Materials Today, 2021, 22, 100923.	4.3	18
4	Model Composites Based on Poly(lactic acid) and Bioactive Glass Fillers for Bone Regeneration. Polymers, 2021, 13, 2991.	4.5	5
5	High-performance polyamides with engineered disorder. Polymer Chemistry, 2021, 12, 6426-6435.	3.9	6
6	Linear and nonlinear viscoelastic properties of segmented silicone-urea copolymers: Influence of the hard segment structure. Polymer, 2020, 186, 122041.	3.8	10
7	Elastocaloric properties of thermoplastic polyurethane. Applied Physics Letters, 2020, 117, .	3.3	13
8	Coarse-Grained Lattice Modeling and Monte Carlo Simulations of Stress Relaxation in Strain-Induced Crystallization of Rubbers. Polymers, 2020, 12, 1267.	4.5	1
9	About thermo-oxidative ageing at moderate temperature of conventionally vulcanized natural rubber. Polymer Degradation and Stability, 2019, 161, 74-84.	5.8	45
10	About the elongation at break of unfilled natural rubber elastomers. Polymer, 2019, 169, 195-206.	3.8	16
11	Monte Carlo Study of Rubber Elasticity on the Basis of Finsler Geometry Modeling. Symmetry, 2019, 11, 1124.	2.2	2
12	Nanostructured silica used in super-insulation materials (SIM), hygrothermal ageing followed by sorption characterizations. Energy and Buildings, 2019, 183, 626-638.	6.7	12
13	Tailored microstructure and mechanical properties of nanocomposite films made from polyacrylic/LDH hybrid latexes synthesized by RAFT-mediated emulsion polymerization. Polymer Chemistry, 2018, 9, 2590-2600.	3.9	13
14	Mathematical Modeling of Rubber Elasticity. Journal of Physics: Conference Series, 2018, 1141, 012081.	0.4	2
15	Durability of silica aerogels dedicated to superinsulation measured under hygrothermal conditions. Microporous and Mesoporous Materials, 2018, 272, 61-69.	4.4	19
16	Effect of nanoclay addition on physical, chemical, optical and biological properties of experimental dental resin composites. Dental Materials, 2017, 33, 271-279.	3.5	27
17	PEOâ€Silsesquioxane Flexible Membranes: Organicâ€Inorganic Solid Electrolytes with Controlled Homogeneity and Nanostructure. ChemistrySelect, 2017, 2, 2088-2093.	1.5	9
18	Critical stress and thermal activation of crystal plasticity in polyethylene: Influence of crystal microstructure and chain topology. Polymer, 2017, 118, 192-200.	3.8	30

#	Article	IF	Citations
19	Mechanical properties of nanostructured films with an ultralow volume fraction of hard phase. Polymer, 2017, 109, 187-196.	3.8	29
20	Physical explanations about the improvement of PolyHydroxyButyrate ductility: Hidden effect of plasticizer on physical ageing. Polymer, 2016, 102, 176-182.	3.8	22
21	In vitro and in vivo evaluation of a polylactic acidâ€bioactive glass composite for bone fixation devices. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 180-191.	3.4	60
22	Complex dependence on the elastically active chains density of the strain induced crystallization of vulcanized natural rubbers, from low to high strain rate. Polymer, 2016, 97, 158-166.	3.8	26
23	A comparison of the abilities of natural rubber (NR) and synthetic polyisoprene cis-1,4 rubber (IR) to crystallize under strain at high strain rates. Physical Chemistry Chemical Physics, 2016, 18, 3472-3481.	2.8	38
24	Amorphous Phase Modulus and Microâ€“Macro Scale Relationship in Polyethylene via in Situ SAXS and WAXS. Macromolecules, 2015, 48, 2149-2160.	4.8	73
25	Temperature dependence of strain-induced crystallization in natural rubber: On the presence of different crystallite populations. Polymer, 2015, 60, 115-124.	3.8	28
26	Incorporation of plasticizers in sugarcane-based poly(3-hydroxybutyrate)(PHB): Changes in microstructure and properties through ageing and annealing. Industrial Crops and Products, 2015, 72, 166-174.	5.2	38
27	Influence of strain rate and temperature on the onset of strain induced crystallization in natural rubber. European Polymer Journal, 2015, 64, 244-252.	5.4	52
28	Compared abilities of filled and unfilled natural rubbers to crystallize in a large strain rate domain. Composites Science and Technology, 2015, 108, 9-15.	7.8	21
29	Strain induced crystallization and melting of natural rubber during dynamic cycles. Physical Chemistry Chemical Physics, 2015, 17, 15331-15338.	2.8	29
30	Effect of ageing and annealing on the mechanical behaviour and biodegradability of a poly(3-hydroxybutyrate) and poly(ethylene-co -methyl-acrylate-co) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 297 Td [(2,3-glycidyl-n		
31	In-situ SAXS study of the mesoscale deformation of polyethylene in the pre-yield strain domain: Influence of microstructure and temperature. Polymer, 2014, 55, 1223-1227.	3.8	45
32	Strain-Induced Crystallization of Natural Rubber and Cross-Link Densities Heterogeneities. Macromolecules, 2014, 47, 5815-5824.	4.8	121
33	Electrical and mechanical percolation in graphene-latex nanocomposites. Polymer, 2014, 55, 5140-5145.	3.8	40
34	Single-ion conductor nanocomposite organicâ€“inorganic hybrid membranes for lithium batteries. Journal of Materials Chemistry A, 2014, 2, 12162-12165.	10.3	29
35	Soft Nanostructured Films with an Ultraâ€Low Volume Fraction of Percolating Hard Phase. Macromolecular Rapid Communications, 2013, 34, 1524-1529.	3.9	45
36	Physical modeling of the electromechanical behavior of polar heterogeneous polymers. Journal of Applied Physics, 2012, 112, .	2.5	10

#	Article	IF	Citations
37	Characteristic time of strain induced crystallization of crosslinked natural rubber. Polymer, 2012, 53, 2540-2543.	3.8	60
38	Understanding the mechanical and biodegradation behaviour of poly(hydroxybutyrate)/rubber blends in relation to their morphology. Polymer International, 2012, 61, 434-441.	3.1	25
39	Bioactivity modulation of BioglassÂ® powder by thermal treatment. Journal of the European Ceramic Society, 2012, 32, 2765-2775.	5.7	29
40	Crystallization processes at the surface of polylactic acidâ€"bioactive glass composites during immersion in simulated body fluid. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2011, 99B, 412-419.	3.4	15
41	Small strain behavior of polyethylene: In situ SAXS measurements. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1535-1542.	2.1	54
42	Influence of the rubbery phase on the crystallinity and thermomechanical properties of poly(3â€hydroxybutyrate)/elastomer blends. Polymer International, 2010, 59, 851-858.	3.1	16
43	Molecular weight between physical entanglements in natural rubber: A critical parameter during strain-induced crystallization. Polymer, 2007, 48, 1042-1046.	3.8	114
44	Parameters governing strain induced crystallization in filled natural rubber. Polymer, 2007, 48, 6893-6901.	3.8	153