Frederic Peruch

List of Publications by Year
in descending order

93 papers	2,565 citations	159585 30 h-index	233421 45 g-index
94 all docs	94 docs citations	94 times ranked	2735 citing authors

#	Article	IF	Citations
1	Isopentenyl diphosphate isomerase: A checkpoint to isoprenoid biosynthesis. Biochimie, 2012, 94, 1621-1634.	2.6	136
2	Hevea brasiliensis REF (Hev b 1) and SRPP (Hev b 3): An overview onÂrubber particle proteins. Biochimie, 2014, 106, 1-9.	2.6	100
3	Homopolymerization and copolymerization of styrene and norbornene with Ni-based/MAO catalysts. Macromolecular Chemistry and Physics, 1998, 199, 2221-2227.	2.2	92
4	Rubber Elongation Factor (REF), a Major Allergen Component in Hevea brasiliensis Latex Has Amyloid Properties. PLoS ONE, 2012, 7, e48065.	2.5	80
5	Carbocationic Polymerization of Isoprene Co-initiated by B(C₆F₅)₃: An Alternative Route toward Natural Rubber Polymer Analogues?. Macromolecules, 2011, 44, 1372-1384.	4.8	76
6	Kinetic and UVâˆ'Visible Spectroscopic Studies of Hex-1-ene Polymerization Initiated by an Î±-Diimine-[N,N] Nickel Dibromide/MAO Catalytic System. Macromolecules, 1999, 32, 7977-7983.	4.8	67
7	Ring-Opening Polymerization of <scp>l</scp>-Lactide Catalyzed by an Organocatalytic System Combining Acidic and Basic Sites. Macromolecules, 2010, 43, 8874-8879.	4.8	66
8	Rubber particle proteins, HbREF and HbSRPP, show different interactions with model membranes. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 287-299.	2.6	63
9	Ring-Opening Polymerization of l-Lactide Efficiently Triggered by an Amido-Indole. X-ray Structure of a Complex between l-Lactide and the Hydrogen-Bonding Organocatalyst. Journal of the American Chemical Society, 2009, 131, 15088-15089.	13.7	61
10	Alternating copolymerization of epoxides with anhydrides initiated by organic bases. European Polymer Journal, 2017, 88, 433-447.	5.4	61
11	(Thio)Amidoindoles and (Thio)Amidobenzimidazoles: An Investigation of Their Hydrogenâ€Bonding and Organocatalytic Properties in the Ringâ€Opening Polymerization of Lactide. Chemistry - A European Journal, 2010, 16, 4196-4205.	3.3	60
12	Block and random copolymerization of Îµâ€caprolactone, <i>L</i>â€; and <i>rac</i>â€lactide using titanium complex derived from aminodiol ligand. Journal of Polymer Science Part A, 2012, 50, 2161-2171.	2.3	60
13	Recyclable Telechelic Cross-Linked Polybutadiene Based on Reversible Dielsâ€"Alder Chemistry. Macromolecules, 2018, 51, 651-659.	4.8	55
14	Diphosphines with Expandable Bite Angles: Highly Active Ethylene Dimerisation Catalysts Based on Upper Rim, Distally Diphosphinated Calix[4]arenes. Chemistry - A European Journal, 2004, 10, 5354-5360.	3.3	50
15	Ring-opening polymerization of lactones using supramolecular organocatalysts under simple conditions. RSC Advances, 2012, 2, 12851.	3.6	49
16	Aqueous cationic homo- and co-polymerizations of Î²-myrcene and styrene: a green route toward terpene-based rubbery polymers. Polymer Chemistry, 2018, 9, 5690-5700.	3.9	49
17	Highlights on Hevea brasiliensis (pro)hevein proteins. Biochimie, 2016, 127, 258-270.	2.6	48
18	Ring-opening polymerization of Î³-lactones and copolymerization with other cyclic monomers. Progress in Polymer Science, 2020, 110, 101309.	24.7	45

#	ARTICLE	IF	CITATIONS
19	Polymerization of Norbornene with CoCl2 and Pyridine Bisimine Cobalt(II) Complexes Activated with MAO. Macromolecular Rapid Communications, 2003, 24, 768-771.	3.9	43
20	Polyisoprene synthesized via cationic polymerization: State of the art. Pure and Applied Chemistry, 2012, 84, 2065-2080.	1.9	43
21	Phenols and Tertiary Amines: An Amazingly Simple Hydrogenâ€Bonding Organocatalytic System Promoting Ring Opening Polymerization. Advanced Synthesis and Catalysis, 2011, 353, 1049-1054.	4.3	41
22	Controlled bulk polymerization of l-lactide and lactones by dual activation with organo-catalytic systems. RSC Advances, 2014, 4, 14725.	3.6	41
23	Activation of carbonyl bonds by quaternary ammoniums and a (Na+:crown-ether) complex: investigation of the ring-opening polymerization of cyclic esters. Polymer Chemistry, 2013, 4, 3491.	3.9	40
24	Ring-opening (co)polymerization of Î³-butyrolactone: a review. Polymer Journal, 2020, 52, 3-11.	2.7	40
25	Cyclodextrin-Encapsulated Iron Catalysts for the Polymerization of Ethylene. European Journal of Inorganic Chemistry, 2003, 2003, 805-809.	2.0	39
26	Bioâ€inspired cationic polymerization of isoprene and analogues: stateâ€ofâ€theâ€art. Polymer International, 2012, 61, 149-156.	3.1	38
27	Homo- and Copolymerization of -Functional Polystyrene Macromonomers via Coordination Polymerization. Macromolecular Chemistry and Physics, 2002, 203, 2583-2589.	2.2	35
28	Pyridine bis(imino) iron and cobalt complexes for ethylene polymerization: influence of the aryl imino substituents. European Polymer Journal, 2005, 41, 1288-1295.	5.4	33
29	Iron complexes of terdentate nitrogen ligands: formation and X-ray structure of three new dicationic complexes. Polyhedron, 2004, 23, 3193-3199.	2.2	32
30	A Catalyst Platform for Unique Cationic (Co)Polymerization in Aqueous Emulsion. Angewandte Chemie - International Edition, 2015, 54, 12728-12732.	13.8	31
31	Rubber particle proteins REF1 and SRPP1 interact differently with native lipids extracted from Hevea brasiliensis latex. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 201-210.	2.6	31
32	Modified Pyridine-Bis(imine) Iron and Cobalt Complexes: Synthesis, Structure, and Ethylene Polymerization Study. European Journal of Inorganic Chemistry, 2006, 2006, 4309-4316.	2.0	29
33	Pyridine bis(imine) cobalt or iron complexes for ethylene and 1-hexene (co)polymerisation. Comptes Rendus Chimie, 2002, 5, 43-48.	0.5	28
34	Synthesis of dihydroxy poly(ethylene-co-butadiene) via metathetical depolymerization: Kinetic and mechanistic aspects. Polymer, 2008, 49, 4935-4941.	3.8	27
35	Homologous Hevea brasiliensis REF (Hevb1) and SRPP (Hevb3) present different auto-assembling. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2014, 1844, 473-485.	2.3	27
36	New catalysts for olefin polymerization: from elementary processes to the synthesis of polyolefins. Polymer International, 1999, 48, 257-263.	3.1	26

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37	New insight into the polymerization mechanism of 1,3-dienes cationic polymerization. IV. Mechanism of unsaturation loss in the polymerization of isoprene. Polymer Chemistry, 2017, 8, 926-935.	3.9	26
38	Biomimetic carbocationic polymerizations III: Investigation of isoprene polymerization initiated by dimethyl allyl bromide. Journal of Polymer Science Part A, 2009, 47, 2172-2180.	2.3	24
39	Titanium complexes based on aminodiol ligands for the ring opening polymerization of l- and d,l-lactide. Polymer, 2011, 52, 4686-4693.	3.8	24
40	Comprehensive structural characterization of polyisoprene synthesized via cationic mechanism. Journal of Polymer Science Part A, 2016, 54, 2430-2442.	2.3	24
41	Water-soluble cellulose oligomer production by chemical and enzymatic synthesis: a mini-review. Polymer International, 2017, 66, 1227-1236.	3.1	24
42	Salphen-Co(III) complexes catalyzed copolymerization of epoxides with CO2. Polymer, 2015, 63, 52-61.	3.8	23
43	6-O-glucose palmitate synthesis with lipase: Investigation of some key parameters. Molecular Catalysis, 2018, 460, 63-68.	2.0	23
44	Exploring natural biodiversity to expand access to microbial terpene synthesis. Microbial Cell Factories, 2019, 18, 23.	4.0	22
45	Impact of Fatty Acid Structure on CALBâ€Catalyzed Esterification of Glucose. European Journal of Lipid Science and Technology, 2020, 122, 1900294.	1.5	22
46	Titanium complexes based on aminodiol ligands for the ringâ€opening polymerization of Îµâ€caprolactone, <i>rac</i>â€Î²â€butyrolactone, and trimethylene carbonate. Journal of Polymer Science Part A, 2011, 49, 5176-5185.	2.3	21
47	Cellulose oligomers production and separation for the synthesis of new fully bio-based amphiphilic compounds. Carbohydrate Polymers, 2016, 154, 121-128.	10.2	21
48	Influence of various proton traps on the bifunctional cationic polymerization of chloroethyl vinyl ether mediated by Î±-iodo ether/zinc dichloride. Macromolecular Chemistry and Physics, 1996, 197, 2603-2613.	2.2	20
49	Transition metal-based homopolymerisation of macromonomers. Comptes Rendus Chimie, 2002, 5, 225-234.	0.5	19
50	Biomimetic processes. IV. Carbocationic polymerization of isoprene initiated by dimethyl allyl alcohol. Journal of Polymer Science Part A, 2009, 47, 2181-2189.	2.3	19
51	Cationic polymerization of isoprene initiated by 2-cyclohexylidene ethanolâ€"B(C6F5)3: an insight into initiation and branching reactions. Polymer Chemistry, 2013, 4, 407-413.	3.9	19
52	Protonated Phosphazenes: Structures and Hydrogenâ€Bonding Organocatalysts for Carbonyl Bond Activation. Advanced Synthesis and Catalysis, 2016, 358, 1110-1118.	4.3	19
53	Telechelic Polybutadienes or Polyisoprenes Precursors for Recyclable Elastomeric Networks. Macromolecular Rapid Communications, 2017, 38, 1700475.	3.9	19
54	Metathetic degradation of trans-1,4-polyisoprene with ruthenium catalysts. Polymer Degradation and Stability, 2014, 99, 249-253.	5.8	18

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55	Strained Diphosphines Built upon a Calix[4]arene Skeleton. Synthesis of a Highly Active Norbornene Polymerization Catalyst. Macromolecular Rapid Communications, 2006, 27, 865-870.	3.9	17
56	Copolymerisation of Îµ-caprolactone and trimethylene carbonate catalysed by methanesulfonic acid. European Polymer Journal, 2013, 49, 4025-4034.	5.4	17
57	A New Insight Into the Mechanism of the Ringâ€Opening Polymerization of Trimethylene Carbonate Catalyzed by Methanesulfonic Acid. Macromolecular Chemistry and Physics, 2013, 214, 85-93.	2.2	17
58	Î±â€Halogenoacetanilides as Hydrogenâ€Bonding Organocatalysts that Activate Carbonyl Bonds: Fluorine versus Chlorine and Bromine. Chemistry - A European Journal, 2014, 20, 2849-2859.	3.3	17
59	Engineering of Candida antarctica lipase B for poly(Îµ-caprolactone) synthesis. European Polymer Journal, 2017, 95, 809-819.	5.4	17
60	Macromonomers as well-defined building blocks in macromolecular engineering. Macromolecular Symposia, 2002, 183, 159-164.	0.7	15
61	Design of new styrene enriched polyethylenes via coordination copolymerization of ethylene with mono- or Î±,Ï‰-difunctional polystyrene macromonomers. Polymer, 2006, 47, 1063-1072.	3.8	15
62	The effect of polymerization temperature on the structure and properties of poly(1-hexene) and poly(1-decene) prepared with a Ni(II)â€“diimine catalyst. Catalysis Today, 2008, 133-135, 879-885.	4.4	14
63	From free radical to atom transfer radical polymerization of poly(ethylene oxide) macromonomers in nanostructured media. Designed Monomers and Polymers, 2004, 7, 583-601.	1.6	13
64	Polymerization of norbornene with Co(II) complexes. Macromolecular Symposia, 2004, 213, 265-274.	0.7	12
65	Carbocationic polymerization of isoprene using cumyl initiators: progress in understanding side reactions. RSC Advances, 2015, 5, 59218-59225.	3.6	12
66	Hevea brasiliensis prohevein possesses a conserved C-terminal domain with amyloid-like properties in vitro. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 388-399.	2.3	12
67	Carbocationic polymerization of isoprene initiated by dimethylallyl derivatives associated with B(C6F5)3. Polymer Chemistry, 2013, 4, 1874.	3.9	11
68	Triflate esters as in-situ generated initiating system for carbocationic polymerization of vinyl ethers, isoprene, myrcene and ocimene. European Polymer Journal, 2017, 89, 34-41.	5.4	11
69	Cationic polymerization of isoprene using CF3COOD/TiCl4 initiating system: A new view on the polymerization mechanism. European Polymer Journal, 2018, 103, 11-20.	5.4	11
70	Cationation of dimethylallyl alcohols by B(C₆F₅)₃ as models of the (Re)initiation reaction in the bioâ€inspired cationic polymerization of isoprene. Journal of Polymer Science Part A, 2011, 49, 4948-4954.	2.3	10
71	Graft Copolymers and Comb-Shaped Homopolymers. , 2012, , 511-542.		10
72	Cyclic Monomers: Epoxides, Lactide, Lactones, Lactams, Cyclic Silicon-Containing Monomers, Cyclic Carbonates, and Others. , 2015, , 191-305.		10

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73	Azaphosphatranes as Hydrogenâ€Bonding Organocatalysts for the Activation of Carbonyl Groups: Investigation of Lactide Ringâ€Opening Polymerization. European Journal of Organic Chemistry, 2016, 2016, 1619-1624.	2.4	10
74	Solution and bulk rheological behavior of poly(ethylenes) based on VERSIPOLâ„¢ catalysts. Polymer, 2005, 46, 8913-8925.	3.8	9
75	Controlled degradation of polyisoprene and polybutadiene: AÂcomparative study of two methods. Polymer Degradation and Stability, 2018, 154, 295-303.	5.8	8
76	Homopolymerization ofÏ‰-Styryl-Polystyrene Macromonomers in the Presence of CpTiF3/MAO. Macromolecular Rapid Communications, 2004, 25, 1010-1014.	3.9	7
77	Biomimetic processes II. Carbocationic polymerization of isopentenyl alcohol: A model for the synthesis of natural rubber?. Materials Science and Engineering C, 2009, 29, 357-362.	7.3	7
78	Unexpected dimerization of isoprene in a gas chromatography inlet. A study by gas chromatography/mass spectrometry coupling. Journal of Chromatography A, 2014, 1331, 133-138.	3.7	7
79	N-Heterocyclic carbene/Lewis acid-mediated ring-opening polymerization of propylene oxide. Part 2: Toward dihydroxytelechelic polyethers using triethylborane. European Polymer Journal, 2020, 134, 109839.	5.4	7
80	N-Heterocyclic carbene/Lewis acid-mediated ring-opening polymerization of propylene oxide. Part 1: Triisobutylaluminum as an efficient controlling agent. European Polymer Journal, 2020, 134, 109819.	5.4	7
81	Reprocessable Covalent Elastomeric Networks from Functionalized 1,4-<i>cis</i>-Polyisoprene and -Polybutadiene. Macromolecules, 0, , .	4.8	6
82	Facile synthesis of 1,4-<i>cis</i>-polyisopreneâ€"polypeptide hybrids with different architectures. Polymer Chemistry, 2019, 10, 2456-2468.	3.9	5
83	UNRAVELING THE MYSTERY OF NATURAL RUBBER BIOSYNTHESIS. PART II: COMPOSITION AND GROWTH OF IN VITRO NATURAL RUBBER USING HIGH-RESOLUTION SIZE EXCLUSION CHROMATOGRAPHY. Rubber Chemistry and Technology, 2014, 87, 451-458.	1.2	4
84	Design of new poly(ethylene) based materials by coordination (co)polymerization of macromonomers with ethylene. Polymers for Advanced Technologies, 2006, 17, 621-624.	3.2	3
85	Chemo-enzymatic synthesis of glycolipids, their polymerization and self-assembly. Polymer Chemistry, 2020, 11, 3994-4004.	3.9	3
86	Macromonomers and coordination polymerization. Macromolecular Symposia, 2004, 213, 253-264.	0.7	2
87	New Materials Designed by Coordination Polymerization of Ï‰-undecenyl Macromonomers. Macromolecular Symposia, 2006, 236, 168-176.	0.7	2
88	Coordination Homopolymerization of Ï‰â€"undecenyl Poly(styrene-block-isoprene) Macromonomers in the Presence of CGC-Ti/MAO Complexes. Macromolecular Symposia, 2006, 236, 177-185.	0.7	2
89	HbIDI, SlIDI and EcIDI: A comparative study of isopentenyl diphosphate isomerase activity and structure. Biochimie, 2016, 127, 133-143.	2.6	2
90	Unprecedented coupling of natural rubber and ELP: synthesis, characterization and self-assembly properties. Polymer Chemistry, 2021, 12, 6030-6039.	3.9	1

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91	Transition Metal Based Homopolymerisation of Macromonomers. ChemInform, 2003, 34, no.	0.0	0
92	Controlled Ring-Opening Polymerization of L-Lactide Triggered by Supramolecular Organocatalytic Systems. ACS Symposium Series, 2011, , 153-168.	0.5	0
93	New insight into the cold crystallization of natural rubber: The role of linked and free fatty chains. Polymer Crystallization, 2019, 2, e10075.	0.8	0