

Laurent Fontaine

List of Publications by Year in descending order

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103
papers

2,429
citations

185998

28
h-index

264894

42
g-index

110
all docs

110
docs citations

110
times ranked

2563
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical recycling: Compatibilization of mixed thermoplastic wastes. <i>Polymer Degradation and Stability</i> , 2018, 147, 245-266.	2.7	206
2	Functional Iron Oxide Magnetic Nanoparticles with Hyperthermia-Induced Drug Release Ability by Using a Combination of Orthogonal Click Reactions. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 14152-14156.	7.2	133
3	Synthesis of Well-Defined β -Oxanorbornenyl Poly(ethylene oxide) Macromonomers via Click Chemistry and Their Ring-Opening Metathesis Polymerization. <i>Macromolecules</i> , 2010, 43, 5611-5617.	2.2	72
4	Well-Defined Graft Copolymers Issued from Cyclobutenyl Macromonomers by Combination of ATRP and ROMP. <i>Macromolecules</i> , 2006, 39, 2732-2735.	2.2	61
5	Synthesis and Ring-Opening Metathesis Polymerization (ROMP) Reactivity of endo-exo-Norbornenylazlactone Using Ruthenium Catalysts. <i>Macromolecular Chemistry and Physics</i> , 2004, 205, 824-833.	1.1	55
6	Sono-RAFT Polymerization-Induced Self-Assembly in Aqueous Dispersion: Synthesis of LCST-type Thermosensitive Nanogels. <i>Macromolecules</i> , 2018, 51, 8862-8869.	2.2	53
7	Introducing the Azlactone Functionality into Polymers through Controlled Radical Polymerization: Strategies and Recent Developments. <i>Australian Journal of Chemistry</i> , 2012, 65, 970.	0.5	50
8	Copper-Mediated Living Radical Polymerization of 2-Vinyl-4,4-dimethyl-5-oxazolone. <i>Macromolecules</i> , 2004, 37, 330-335.	2.2	49
9	Stable azlactone-functionalized nanoparticles prepared from thermoresponsive copolymers synthesized by RAFT polymerization. <i>Polymer Chemistry</i> , 2011, 2, 2878.	1.9	48
10	Well-Defined Azlactone-Functionalized (Co)polymers on a Solid Support: Synthesis via Supported Living Radical Polymerization and Application as Nucleophile Scavengers. <i>ACS Combinatorial Science</i> , 2006, 8, 522-530.	3.3	47
11	Synthesis and structural analyses of poly (1, 2-cyclohexene oxide) over solid acid catalyst. <i>Materials Letters</i> , 2005, 59, 759-767.	1.3	45
12	Synthesis of Brush Copolymers Based on a Poly(1,4-butadiene) Backbone via the "Grafting From" Approach by ROMP and ATRP. <i>Macromolecules</i> , 2009, 42, 6927-6931.	2.2	44
13	Core Cross-Linking of Dynamic Diblock Copolymer Micelles: Quantitative Study of Photopolymerization Efficiency and Micelle Structure.. <i>Macromolecules</i> , 2011, 44, 594-603.	2.2	43
14	Synthesis and Nonlinear Optical Properties of a Peripherally Functionalized Hyperbranched Polymer by DR1 Chromophores. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 1799-1806.	4.0	42
15	New Cross-Linkable Polymers with Huisgen Reaction Incorporating High λ_{max} Chromophores for Second-Order Nonlinear Optical Applications. <i>Chemistry of Materials</i> , 2012, 24, 1143-1157.	3.2	41
16	Self-Assembling Properties of Well-Defined Poly(ethylene oxide)- <i>b</i> -poly(ethyl acrylate) Diblock Copolymers. <i>Macromolecules</i> , 2009, 42, 4262-4272.	2.2	39
17	Thermoresponsive block copolymers containing reactive azlactone groups and their bioconjugation with lysozyme. <i>Polymer Chemistry</i> , 2013, 4, 675-685.	1.9	39
18	Grafting of 2-vinyl-4,4-dimethylazlactone onto electron-beam activated poly(propylene) films and fabrics. Application to the immobilization of sericin. <i>Macromolecular Chemistry and Physics</i> , 2002, 203, 1377-1384.	1.1	35

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19	New functionalized polyHIPE materials used as amine scavengers in batch and flow-through processes. <i>Reactive and Functional Polymers</i> , 2008, 68, 97-102.	2.0	34
20	A new crosslinkable system based on thermal Huisgen reaction to enhance the stability of electro-optic polymers. <i>Chemical Communications</i> , 2009, , 1825.	2.2	34
21	Ring-opening metathesis polymerization (ROMP) of isomerically pure functional monomers and acyclic diene metathesis depolymerization (retro-ADMET) of functionalized polyalkenamers. <i>Journal of Molecular Catalysis A</i> , 2002, 190, 117-129.	4.8	33
22	Synthesis of graft copolymers from $\hat{I}\pm$ -oxanorbornenyl macromonomers. <i>New Journal of Chemistry</i> , 2007, 31, 1826.	1.4	33
23	Elaboration of well-defined Rasta resins and their use as supported catalytic systems for atom transfer radical polymerization. <i>Journal of Polymer Science Part A</i> , 2006, 44, 5316-5328.	2.5	32
24	Title is missing!. <i>Die Makromolekulare Chemie</i> , 1989, 190, 2339-2345.	1.1	31
25	Preparation and characterization of azlactone functionalized polymer supports and their application as scavengers. <i>European Polymer Journal</i> , 2004, 40, 2343-2348.	2.6	31
26	Synthesis and characterization of novel poly(\hat{I}^3 -benzyl-L-glutamate) derivatives tailored for the preparation of nanoparticles of pharmaceutical interest. <i>Polymer International</i> , 2007, 56, 317-324.	1.6	31
27	One-Pot Synthesis of Natural Rubber-Based Telechelic <i>cis</i> -1,4-Polyisoprenes and Their Use To Prepare Block Copolymers by RAFT Polymerization. <i>Macromolecules</i> , 2011, 44, 784-794.	2.2	30
28	Azlactone functionalization of magnetic nanoparticles using ATRP and their bioconjugation. <i>Polymer</i> , 2012, 53, 113-120.	1.8	30
29	Ruthenium \hat{I}^2 -indenylidene complexes in ring opening metathesis polymerization (ROMP) reactions. <i>Journal of Molecular Catalysis A</i> , 2008, 283, 108-113.	4.8	29
30	Synthesis of thermoresponsive oxazolone end-functional polymers for reactions with amines using thiol-Michael addition \hat{I}^2 -chemistry. <i>Polymer Chemistry</i> , 2011, 2, 1258.	1.9	29
31	Ring Opening Metathesis Polymerization(ROMP) of <i>cis</i> - and <i>trans</i> -3,4-Bis(acetyloxymethyl)cyclobut-1-enes and Synthesis of Block Copolymers. <i>Macromolecular Chemistry and Physics</i> , 2004, 205, 1238-1245.	1.1	28
32	Synthesis of new crosslinkable co-polymers containing a push \hat{I}^2 -pull zinc porphyrin for non-linear optical applications. <i>Tetrahedron</i> , 2005, 61, 10113-10121.	1.0	27
33	Cyclobutenyl macromonomers: Synthetic strategies and ring-opening metathesis polymerization. <i>European Polymer Journal</i> , 2013, 49, 972-983.	2.6	27
34	Block copolymers based on 2 \hat{I}^2 -vinyl \hat{I}^2 -4,4 \hat{I}^2 -dimethyl \hat{I}^2 -5 \hat{I}^2 -oxazolone by RAFT polymerization: Experimental and computational studies. <i>Journal of Polymer Science Part A</i> , 2010, 48, 5053-5062.	2.5	26
35	1,8-Diazabicyclo[5.4.0]undec-7-ene (DBU) as ligand for atom transfer radical polymerization (ATRP). <i>European Polymer Journal</i> , 2005, 41, 1576-1581.	2.6	25
36	Free radical copolymerization of 2,2,2 \hat{I}^2 -trifluoroethyl \hat{I}^2 -fluoroacrylate and <i>tert</i> -butyl \hat{I}^2 -trifluoromethylacrylate: Thermal and optical properties of the copolymers. <i>Journal of Polymer Science Part A</i> , 2008, 46, 4383-4391.	2.5	25

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37	Synthesis and polymerization of cyclobutenyl-functionalized polylactide and polycaprolactone: a consecutive ROP/ROMP route towards poly(1,4-butadiene)-g-polyesters. <i>Polymer Chemistry</i> , 2014, 5, 3476.	1.9	25
38	Postfunctionalization of poly(propargyl methacrylate) using copper catalyzed 1,3-dipolar Huisgen cycloaddition: An easy route to electro-optic materials. <i>Journal of Polymer Science Part A</i> , 2009, 47, 5652-5660.	2.5	23
39	Synthesis and characterization of functionalized poly(β -benzyl-L-glutamate) derivatives and corresponding nanoparticles preparation and characterization. <i>International Journal of Pharmaceutics</i> , 2010, 387, 244-252.	2.6	23
40	Amine-Responsive Polymers Synthesized by RAFT Polymerization Using an Azlactone Functional Trithiocarbonate RAFT Agent. <i>Macromolecular Rapid Communications</i> , 2012, 33, 1753-1758.	2.0	23
41	Synthesis and ITC characterization of novel nanoparticles constituted by poly(β -benzyl-L-glutamate) grafted to poly(1,4-butadiene). <i>Polymer Chemistry</i> , 2011, 2, 157-167.	1.1	21
42	Sol-gel reversible metallo-supramolecular hydrogels based on a thermoresponsive double hydrophilic block copolymer. <i>Polymer Chemistry</i> , 2016, 7, 6834-6842.	1.9	21
43	Synthesis and characterization of high grafting density bottle-brush poly(oxa)norbornene-g-poly(μ -caprolactone). <i>Polymer Chemistry</i> , 2016, 7, 1730-1738.	1.9	21
44	Hydrogen Bonding UCST Thermosensitive Nanogels by Direct Photo-RAFT Polymerization-Induced Self-Assembly in Aqueous Dispersion. <i>Macromolecular Rapid Communications</i> , 2020, 41, e2000203.	2.0	21
45	Scope and limitation of the copper free thermal Huisgen cross-linking reaction to stabilize the chromophores orientation in electro-optic polymers. <i>Polymer Chemistry</i> , 2011, 2, 157-167.	1.9	20
46	Azlactone-based heterobifunctional linkers with orthogonal clickable groups: efficient tools for bioconjugation with complete atom economy. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 7124-7128.	1.5	20
47	Synthesis of 1,4-polybutadiene-g-poly(ethylene oxide) via the macromonomer approach by ROMP. <i>Polymer Chemistry</i> , 2013, 4, 2168.	1.9	19
48	Synthesis and second-order nonlinear optical properties of a crosslinkable functionalized hyperbranched polymer. <i>European Polymer Journal</i> , 2012, 48, 116-126.	2.6	18
49	Free radical copolymerization of β -fluoroacrylates for optical materials: Synthesis and characterization. <i>Journal of Polymer Science Part A</i> , 2009, 47, 1403-1411.	2.5	17
50	ATRP and ROMP: Modular chemical tools for advanced macromolecular engineering. <i>Materials Science and Engineering C</i> , 2009, 29, 367-371.	3.8	17
51	Synthesis and characterization of poly(fluorinated vinyl ether- <i>tert</i> -butyl) copolymers. <i>Polymer Chemistry</i> , 2011, 2, 157-167.	2.5	16
52	Phosphites as alternative coreagents for the one-pot aminolysis/thiolane synthesis of maleimide-functionalized RAFT polymers. <i>Journal of Polymer Science Part A</i> , 2012, 50, 1657-1661.	2.5	16
53	1,4-Polybutadienes with Pendant Hydroxyl Functionalities by ROMP: Synthetic and Mechanistic Insights. <i>Macromolecules</i> , 2015, 48, 3843-3852.	2.2	16
54	One-Step Synthesis of Azlactone-Functionalized SG1-Based Alkoxyamine for Nitroxide-Mediated Polymerization and Bioconjugation. <i>Macromolecules</i> , 2015, 48, 2087-2097.	2.2	16

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55	Synthesis and preliminary evaluation of chelating resins containing β -aminoalkylphosphonic groups. <i>Reactive & Functional Polymers</i> , 1994, 23, 201-212.	0.8	15
56	An Orthogonal Modular Approach to Macromonomers Using Clickable Cyclobutenyl Derivatives and RAFT Polymerization. <i>Macromolecules</i> , 2012, 45, 7758-7769.	2.2	15
57	Alkyl phosphonic acid-based ligands as tools for converting hydrophobic iron nanoparticles into water soluble iron-iron oxide core-shell nanoparticles. <i>New Journal of Chemistry</i> , 2017, 41, 11898-11905.	1.4	15
58	New polyurethanes derived from amino acids. <i>Reactive and Functional Polymers</i> , 2001, 47, 11-21.	2.0	14
59	A new strategy for the synthesis of methacrylate end-functionalized macromonomers by ATRP. <i>Journal of Polymer Science Part A</i> , 2010, 48, 1526-1537.	2.5	14
60	Poly(2-isopropenyl-2-oxazoline) as a structural analogue to poly(vinyl azlactone) with Orthogonal Reactivity. <i>Polymer Chemistry</i> , 2020, 11, 5681-5692.	1.9	14
61	Title is missing!. <i>Die Makromolekulare Chemie</i> , 1989, 190, 2329-2338.	1.1	13
62	Surface initiated ring-opening metathesis polymerization of norbornene onto Wang and Merrifield resins. <i>Journal of Molecular Catalysis A</i> , 2007, 276, 219-225.	4.8	13
63	Ring-opening bulk polymerization of five- and six-membered cyclic phosphonates using maghnite, a nontoxic proton exchanged montmorillonite clay. <i>Journal of Applied Polymer Science</i> , 2011, 122, 891-897.	1.3	13
64	Simpler and more efficient strategy to stabilize the chromophore orientation in electro-optic polymers with copper-free thermal Huisgen reaction. <i>Polymer</i> , 2011, 52, 2286-2294.	1.8	13
65	High Molar Mass Poly(1,4-butadiene)- <i>graft</i> -poly(μ -caprolactone) Copolymers by ROMP: Synthesis via the Grafting-From Route and Self-Assembling Properties. <i>Macromolecules</i> , 2016, 49, 4739-4745.	2.2	13
66	Synthesis of natural rubber-based telechelic cis-1,4-polyisoprenes and their use to prepare block copolymers via RAFT polymerization. <i>European Polymer Journal</i> , 2011, 47, 1151-1159.	2.6	11
67	Synthesis and characterization of innovative well-defined difluorophosphonylated-(co)polymers by RAFT polymerization. <i>Polymer Chemistry</i> , 2015, 6, 4597-4604.	1.9	11
68	An optimised Cu(0)-RDRP approach for the synthesis of lipidated oligomeric vinyl azlactone: toward a versatile antimicrobial materials screening platform. <i>Journal of Materials Chemistry B</i> , 2019, 7, 6796-6809.	2.9	11
69	Cyclobutenyl Inimers as Versatile Initiators for Macromonomers Synthesis by Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2008, 41, 9595-9601.	2.2	10
70	Synthesis of phosphonated poly(ethylene oxide)s through the combination of Kabachnik fields reaction and click chemistry. <i>Journal of Polymer Science Part A</i> , 2013, 51, 415-423.	2.5	10
71	Innovative well-defined primary amine-based polyacrylates for plasmid DNA complexation. <i>Polymer Chemistry</i> , 2014, 5, 5542.	1.9	10
72	Tuning the Molar Composition of Charge-Shifting Cationic Copolymers Based on 2-(<i>N,N</i> -dimethylamino)Ethyl Acrylate and 2-(<i>tert</i> -Boc-Amino)Ethyl Acrylate. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1600641.		10

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73	Norbornene- ϵ -functionalized PEO- ϵ -PCL: A versatile platform for mikto- ϵ -arm star, umbrella-like, and comb-like graft copolymers. <i>Journal of Polymer Science Part A</i> , 2017, 55, 4051-4061.	2.5	10
74	Blue LED light-activated RAFT polymerization of PEG acrylate with high chain-end fidelity for efficient PEGylation. <i>Polymer Chemistry</i> , 2020, 11, 5238-5248.	1.9	10
75	Tuning the parameters of the suspension polymerization of styrene, divinylbenzene, and ϵ -N-(ϵ -vinylbenzyl)- ϵ -4,4-dimethylazlactone. <i>Journal of Polymer Science Part A</i> , 2007, 45, 3677-3686.	2.5	9
76	Synthesis of poly(oxyethylene phosphate)- ϵ -poly(ethylene oxide) via the ϵ -grafting onto- ϵ -approach by ϵ -click-chemistry. <i>Journal of Polymer Science Part A</i> , 2011, 49, 5124-5128.	2.5	9
77	Thermoresponsive hybrid double-crosslinked networks using magnetic iron oxide nanoparticles as crossing points. <i>Polymer Chemistry</i> , 2018, 9, 4642-4650.	1.9	9
78	Nitroxide radical-containing polynorbornenes by ring-opening metathesis polymerization as stabilizing agents for polyolefins. <i>Polymer Chemistry</i> , 2019, 10, 5487-5497.	1.9	9
79	Solid-phase de novo synthesis of a (\pm)-2-deoxy-glycoside. <i>Carbohydrate Research</i> , 2010, 345, 844-849.	1.1	8
80	Preparation of a New Electro-optic Polymer Cross-Linkable via Copper-Free Thermal Huisgen Cyclo-Addition and Fabrication of Optical Waveguides by Reactive Ion Etching. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 2092-2098.	4.0	8
81	Recyclable magnetic nanocluster crosslinked with poly(ethylene oxide)- block -poly(2-vinyl-4,4-dimethylazlactone) copolymer for adsorption with antibody. <i>Materials Science and Engineering C</i> , 2016, 67, 285-293.	3.8	8
82	Polyvalent Transition- ϵ -State Analogues of Sialyl Substrates Strongly Inhibit Bacterial Sialidases**. <i>Chemistry - A European Journal</i> , 2021, 27, 3142-3150.	1.7	8
83	Fixation of chelating molecules on polyphosphonates through chemical modification Part I. Synthesis and characterization. <i>Reactive & Functional Polymers</i> , 1993, 19, 47-54.	0.8	7
84	Heterofunctional RAFT- ϵ -derived PNIPAM via cascade trithiocarbonate removal and thiol- ϵ -yne coupling click reaction. <i>Journal of Polymer Science Part A</i> , 2017, 55, 3597-3606.	2.5	7
85	Toward recycling ϵ -unsortable- ϵ post-consumer WEEE stream: Characterization and impact of electron beam irradiation on mechanical properties. <i>Journal of Cleaner Production</i> , 2021, 294, 126300.	4.6	7
86	Synthesis and characterization of a novel nonlinear optical hyperbranched polymer containing a highly performing chromophore. <i>Polymers for Advanced Technologies</i> , 2013, 24, 473-477.	1.6	6
87	Structure-pDNA complexation and structure- ϵ -cytotoxicity relationships of PEGylated, cationic aminoethyl-based polyacrylates with tunable topologies. <i>Polymer Chemistry</i> , 2019, 10, 1968-1977.	1.9	6
88	Fixation of pharmacologically active amines on polyphosphonates, 3. Synthesis and preliminary in vitro cytotoxic studies of bis(2-chloroethyl)amino group containing polyphosphonates. <i>Macromolecular Chemistry and Physics</i> , 1996, 197, 3613-3621.	1.1	5
89	Synthesis of 3,6-Divinyl-1,2,4,5-Tetrazine, the First Member of the Elusive Vinyltetrazine Family. <i>Synlett</i> , 2009, 2009, 731-734.	1.0	5
90	Heteromultifunctional Oxazolones as Versatile Linkers for Click Chemistry Reactions. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 7359-7366.	1.2	5

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91	ROMP of novel hindered phenol-functionalized norbornenes and preliminary evaluation as stabilizing agents. <i>Polymer Degradation and Stability</i> , 2021, 186, 109522.	2.7	5
92	Nouveaux matériaux de polyuréthanes dérivés d'acides aminés. <i>Macromolecular Symposia</i> , 1997, 122, 287-290.	0.4	4
93	Phosphonated furan-functionalized poly(ethylene oxide)s using orthogonal click chemistries: synthesis and Diels-Alder reactivity. <i>Polymer Chemistry</i> , 2015, 6, 3024-3030.	1.9	4
94	Poly(1,4-butadiene)-graft-poly(L-lactide) via the grafting-from strategy. <i>Polymer Bulletin</i> , 2017, 74, 4415-4422.	1.7	4
95	Poly(norbornenyl azlactone) as a versatile platform for sequential double click postpolymerization modification. <i>European Polymer Journal</i> , 2020, 141, 110081.	2.6	4
96	Synthesis of Amphiphilic Block Copolymers Based on SKA by RAFT Polymerization. <i>Macromolecular Chemistry and Physics</i> , 2018, 219, 1700506.	1.1	3
97	Polynorbornene- <i>g</i> -poly(ethylene oxide) Through the Combination of ROMP and Nitroxide Radical Coupling Reactions. <i>Journal of Polymer Science</i> , 2020, 58, 645-653.	2.0	3
98	Radical ring-opening polymerization of novel azlactone-functionalized vinyl cyclopropanes. <i>Polymer Chemistry</i> , 2020, 11, 4013-4021.	1.9	3
99	The effect of metal ions on the viscoelastic properties of thermosensitive sol-to-gel reversible metallo-supramolecular hydrogels. <i>Polymer Chemistry</i> , 2018, 9, 2494-2504.	1.9	2
100	A straightforward synthesis of well-defined difluorophosphonylated terminated poly(ϵ -caprolactone) for grafting onto iron oxide magnetic nanoparticles. <i>Journal of Polymer Science Part A</i> , 2016, 54, 2453-2458.	2.5	1
101	Synthesis of a dual UCST-type thermosensitive and acid-degradable nanogel based on poly(N-acryloyl) Tj ETQq1 1 0,784314 rgBT /Overl	2.6	1
102	Modelling irradiation by EM waves of multifunctionalized iron oxide nanoparticles and subsequent drug release. <i>Journal of Physics: Conference Series</i> , 2015, 633, 012003.	0.3	0
103	Enhanced thermo-oxidative stability of polydicyclopentadiene containing covalently bound nitroxide groups. <i>Polymer Degradation and Stability</i> , 2021, 195, 109765.	2.7	0