Ryszard Szymanski

List of Publications by Year
in descending order

91 papers	1,818 citations	331670 21 h-index	289244 40 g-index
95 all docs	95 docs citations	95 times ranked	1122 citing authors

#	Article	IF	Citations
1	Intermolecular chain transfer to polymer with chain scission: general treatment and determination of kp/ktr in L,L-lactide polymerization. Macromolecular Rapid Communications, 1997, 18, 325-333.	3.9	266
2	Activated monomer propagation in cationic polymerizations. Makromolekulare Chemie Macromolecular Symposia, 1986, 3, 203-220.	0.6	145
3	Activated monomer mechanism in cationic polymerization, 1. Ethylene oxide, formulation of mechanism. Die Makromolekulare Chemie Rapid Communications, 1986, 7, 1-4.	1.1	105
4	On the diagnostic criteria of the livingness of polymerizations. Die Makromolekulare Chemie Rapid Communications, 1991, 12, 77-80.	1.1	103
5	Origin of the Difference between Branching in Acrylates Polymerization under Controlled and Free Radical Conditions: A Computational Study of Competitive Processes. Macromolecules, 2011, 44, 8361-8373.	4.8	84
6	Structure of active species in the cationic polymerization of Î²-propiolactone and Îµ-caprolactone. Die Makromolekulare Chemie, 1984, 185, 655-667.	1.1	72
7	Quantitative comparison of selectivities in the polymerization of cyclic esters. Macromolecular Symposia, 1997, 123, 93-101.	0.7	67
8	Intraâ€•and intermolecular chain transfer to macromolecules with chain scission. The case of cyclic esters. Macromolecular Symposia, 1998, 132, 441-449.	0.7	57
9	Mechanism of cyclic acetal polymerization. End of a controversy?. Macromolecules, 1983, 16, 1000-1008.	4.8	52
10	Monomerâ˜'Linear Macromoleculesâ˜'Cyclic Oligomers Equilibria in the Polymerization of 1,4-Dioxan-2-one. Macromolecules, 2004, 37, 52-59.	4.8	45
11	Transesterification of oligomeric dialkyl phosphonates, leading to the highâ€molecularâ€weight polyâ€Hâ€phosphonates. Journal of Polymer Science Part A, 1999, 37, 1365-1381.	2.3	43
12	Preparation of Poly(alkylene H-phosphonate)s and Their Derivatives by Polycondensation of Diphenyl H-Phosphonate with Diols and Subsequent Transformations. Macromolecules, 1997, 30, 8172-8176.	4.8	39
13	Living polymerization of cyclic estersâ€" a route to(bio)degradable polymers. Influence of chain transfer to polymer on livingness. Macromolecular Symposia, 2003, 201, 261-270.	0.7	39
14	Formation of poly(ethylene phosphates) in polycondensation of H₃PO₄ with ethylene glycol. Kinetic and mechanistic study. Journal of Polymer Science Part A, 2008, 46, 830-843.	2.3	39
15	Kinetics of polymerization by activated monomer mechanism. Makromolekulare Chemie Macromolecular Symposia, 1990, 32, 155-168.	0.6	38
16	Bimodal Molecular Weight Distribution in Carbocationic Systems with Free Ions and Ion Pairs of Equal Reactivities but Different Lifetimes. Macromolecules, 1994, 27, 7565-7574.	4.8	28
17	Thermodynamics and kinetics of ringâ€opening polymerization of cyclic alkylene phosphates. Makromolekulare Chemie Macromolecular Symposia, 1993, 73, 91-101.	0.6	25
18	Reactions of H3PO4 forming polymers. Apparently simple reactions leading to sophisticated structures and applications. Progress in Polymer Science, 2015, 45, 44-70.	24.7	25

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19	The Carbenium Ionâ€“Onium Ion Equilibria in Cationic Polymerization. Polymer Journal, 1980, 12, 617-628.	2.7	24
20	Title is missing!. Die Makromolekulare Chemie, 1992, 193, 285-301.	1.1	23
21	On the Incorrectness of the Factor 2 in the Radical Termination Equation. Macromolecular Theory and Simulations, 2011, 20, 8-12.	1.4	23
22	Molecular weight distribution in living polymerization proceeding with reshuffling of polymer segments due to chain transfer to polymer with chain scission, 1. Determination ofkp/ktr ratio from DPw/DPn data. Ideal reproduction of polymer chain activities. Macromolecular Theory and Simulations, 1998, 7, 27-39.	1.4	21
23	Molecular weight distribution in living polymerization proceeding with reshuffling of polymer segments due to chain transfer to polymer with chain scission, 1. Determination of kp/ktr ratio from DPw/DPn data. Ideal reproduction of polymer chain activities. Macromolecular Theory and Simulations, 1998, 7, 27-39.	1.4	21
24	New synthetic route to trialkyloxonium salts: alkylation of ethers with acyldialkyl cations. Journal of the Chemical Society Chemical Communications, 1976, , 33-34.	2.0	20
25	Distribution of Alternating Sequences in Methyl Methacrylate/<i>n</i>-Butyl Acrylate Copolymers Prepared by Atom Transfer Radical Polymerization. Macromolecules, 2021, 54, 9837-9849.	4.8	20
26	Copolymerization at equilibrium. General treatment. Die Makromolekulare Chemie, 1987, 188, 2605-2619.	1.1	19
27	Anionic Copolymerization of Elemental Sulfur with Propylene Sulfide. Equilibrium Sulfur Concentration. Journal of Macromolecular Science Part A, Chemistry, 1983, 20, 967-978.	0.3	18
28	Thermodynamics of copolymerization. Progress in Polymer Science, 1992, 17, 917-951.	24.7	14
29	H3PO4 in a direct synthesis of oligoâ€“poly(ethylene phosphate)from ethylene glycol. Journal of Polymer Science Part A, 2006, 44, 2358-2362.	2.3	14
30	Thermodynamics of copolymerization of 1,3-dioxolane with 1,3-dioxepane and 1,3-dioxane. Die Makromolekulare Chemie, 1991, 192, 2943-2959.	1.1	13
31	On the Reshuffling of Polymer Segments in Star Polymer Systems. Macromolecules, 2002, 35, 8239-8242.	4.8	13
32	Statistical effects related to low numbers of reacting molecules analyzed for a reversible association reaction A + B = C in ideally dispersed systems: An apparent violation of the law of mass action. Journal of Chemical Physics, 2016, 144, 124112.	3.0	13
33	Kinetic Monte Carlo Studies on the Importance of the Reaction Scheme in Segmental Exchange of Copolymer Chains. Macromolecular Theory and Simulations, 2012, 21, 411-427.	1.4	12
34	On the determination of the ratios of the propagation rate constants on the basis of the MWD of copolymer chains: A new Monte Carlo algorithm. E-Polymers, 2009, 9, .	3.0	11
35	Evolution of Chain Microstructure and Kinetics of Reaching Equilibrium in Living Reversible Copolymerization. Macromolecular Theory and Simulations, 2016, 25, 196-214.	1.4	11
36	Îµ-Caprolactone Polymerization Catalyzed by Heteropolyacid. Derivation of the Kinetic Equation for Activated Monomer Propagation and Determination of the Rate Constants of Propagation. Macromolecules, 2019, 52, 6405-6415.	4.8	11

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37	Reversible copolymerization at equilibrium. Die Makromolekulare Chemie, 1986, 187, 1109-1114.	1.1	10
38	The macrocycle â‡Œ copolymer equilibrium in equilibrium copolymerization. Die Makromolekulare Chemie, 1989, 190, 2903-2908.	1.1	10
39	Complexation of sodium cations by polymeric esters of phosphoric acid. Die Makromolekulare Chemie, 1993, 194, 1645-1651.	1.1	10
40	Polymerizations with contribution of covalent and ionic species. Macromolecular Symposia, 1995, 98, 193-216.	0.7	10
41	A novel efficient hybrid algorithm for Monte Carlo simulation of controlled radical polymerization: The method integrating reactive and deactivated species. Chemical Engineering Journal, 2019, 358, 197-210.	12.7	10
42	Covalent and ionic species in cationic polymerizations: Rates of exchange. Makromolekulare Chemie Macromolecular Symposia, 1988, 13-14, 363-374.	0.6	9
43	The MPEG Monophosphate Ester: Synthesis and Characterization. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 2103-2116.	3.5	8
44	Ringâ€"Chain Equilibria in Ring-Opening Polymerization. , 2012, , 31-49.		8
45	The Molar Mass Distribution of Polymers in Stepâ€<scp>G</scp>rowth Polymerization is Influenced by Cyclization Reactions. The Simplified Case of Irreversible Reactions with Cyclizations is Independent of the Ring Size. Macromolecular Theory and Simulations, 2013, 22, 335-343.	1.4	8
46	Cumulative steady state Monte Carlo method for processes with exchange between reactive species. Case of controlled radical copolymerization. Chemical Engineering Journal, 2019, 370, 432-443.	12.7	8
47	Molecular weight distribution in living polymerization proceeding with reshuffling of polymer segments due to chain transfer to polymer with chain scission. Part IV. Systems with cyclization. Polimery, 2003, 48, 758-764.	0.7	8
48	Ionic and covalent species in the cationic polymerization â€" equilibria and reactivities. Acta Polymerica, 1984, 35, 14-22.	0.9	7
49	Equilibrium copolymerization. Macromolecules, 1986, 19, 3003-3004.	4.8	7
50	Polymerization of ethylene oxide by the activated monomer mechanism. Polymer International, 1995, 36, 23-28.	3.1	7
51	Hydrolysis of Poly(alkylene amidophosphate)s Containing Amino Acid or Peptide Residues in the Side Groups. Kinetics and Selectivity of Hydrolysis. Biomacromolecules, 2004, 5, 1841-1848.	5.4	7
52	On Narrowing Chain-length Distributions in Ideally Dispersed Polymerization Systems. Macromolecular Theory and Simulations, 2014, 23, 550-554.	1.4	7
53	Star polymers formed by MPEG reaction with diepoxides. The course of reaction. Polymer, 2015, 72, 142-153.	3.8	7
54	Equilibrium between 1,3-dioxane and its cyclooligomers. Die Makromolekulare Chemie, 1991, 192, 2961-2968.	1.1	6

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55	The carbenium ion - oxonium ion exchange processes related to vinyl and ring-opening polymerization. Makromolekulare Chemie Macromolecular Symposia, 1992, 60, 65-96.	0.6	6
56	Tuning Polymer Properties through Competitive Processes. ACS Symposium Series, 2012, , 145-169.	0.5	6
57	On the Importance of the Principle of Microscopic Reversibility in Copolymerization Systems. Macromolecular Theory and Simulations, 2013, 22, 221-224.	1.4	6
58	Polymer complexing equilibria. A new general approach based on the copolymerization equilibrium. Die Makromolekulare Chemie, 1991, 192, 757-766.	1.1	5
59	Thermodynamics of homogeneous equilibrium copolymerization from the point of view of the Flory-Huggins theory. Die Makromolekulare Chemie Theory and Simulations, 1992, 1, 129-148.	1.0	5
60	Modeling of Low Concentrations of Reactive Species in Kinetic Monte Carlo Simulations. Macromolecular Theory and Simulations, 2012, 21, 510-515.	1.4	5
61	Simulation of Microstructural Eevolution During Reactive Blending of PET and PEN: Numerical Integration of Kinetic Differential Equations and Monte Carlo Method. Macromolecular Theory and Simulations, 2015, 24, 152-167.	1.4	5
62	Statistical and Block Copolymers of 7-Oxabicyclo[2.2.1]heptane with Tetrahydrofuran. Conditions of Copolymerization and Distribution of the Promesogenic Units. Macromolecules, 1996, 29, 6700-6709.	4.8	4
63	Copolymers of 7-oxabicyclo[2.2.1] heptane with 1,3-dioxane and promesogenic telechelic oligomers thereof. Journal of Polymer Science Part A, 1997, 35, 1733-1742.	2.3	4
64	Molecular Weight Distribution in Living Polymerization Proceeding with Reshuffling of Polymer Segments due to Chain Transfer to Polymer with Chain Scission, 2. Monte Carlo Simulation of Polymer Reshuffling Proceeding with Disproportionation of Chain Functionalities. Macromolecular Theory and Simulations, 2002, 11, 836-844.	1.4	4
65	Peculiarities of complexation of sodium cations by star-shaped polymers with core formed from diepoxides and poly(ethylene oxide) arms. Polymer, 2016, 97, 104-112.	3.8	4
66	Stochasticity of the transfer of reactant molecules between nano-reactors affecting the reversible association A + B â‡† C. Journal of Chemical Physics, 2019, 151, 174113.	3.0	4
67	On the Possibility of Different Reactivity of Growing Radicals in Controlled and Free Radical Polymerizations. The Concept of the Reaction Cage in Controlled Radical Polymerization. Macromolecular Theory and Simulations, 2021, 30, 2000078.	1.4	4
68	Novel cationic and anionic water-soluble polyorthoesters. Journal of Polymer Science, Polymer Letters Edition, 1983, 21, 177-187.	0.4	3
69	The change of sign of Î”Hss0 and Î”Sss0 in passing from bulk to solution in the polymerization of cyclic monomers with low strain: Polymerization of 2-hydro-2-oxo-1,3,2-dioxaphosphorinane. Journal of Polymer Science Part A, 1991, 29, 1825-1827.	2.3	3
70	On the contribution of covalent and ionic species to the chain growth. Macromolecular Chemistry and Physics, 1995, 196, 957-961.	2.2	3
71	COPOLYMERIZATION OF TETRAHYDROFURAN WITH 1,3-DIOXANE AND TELECHELIC OLIGOMERS. Journal of Macromolecular Science - Pure and Applied Chemistry, 2000, 37, 489-512.	2.2	3
72	Effect of the Configuration of a Bulky Aluminum Initiator on the Structure of Copolymers of l,l-Lactide with Symmetric Comonomer Trimethylene Carbonate. Polymers, 2018, 10, 70.	4.5	3

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73	Towards periodic copolymers with flexible and mesogenic units in the main chain. Copolymerization of tetrahydrofuran with 7-oxabicyclo[2.2.1]heptane. Macromolecular Rapid Communications, 1995, 16, 687-695.	3.9	2
74	Computer simulation of the aggregation of ion pairs in the polymerization of styrene initiated by RCl/SnCl4/NR4Cl systems. Macromolecular Theory and Simulations, 1995, 4, 335-345.	1.4	2
75	Polycondensation route leading to poly(alkylene phosphate)s. Macromolecular Symposia, 1997, 122, 269-274.	0.7	2
76	Azeotropic Equilibrium Copolymerization. Macromolecular Theory and Simulations, 2015, 24, 413-418.	1.4	2
77	Steady State and Equilibrium in Reversible Copolymerization at Constant Comonomer Concentrations. Macromolecular Theory and Simulations, 2017, 26, 1700039.	1.4	2
78	Comment on â€œSynthesis of cyclic polymers and flaws of the Jacobsonâ€“Stockmayer theoryâ€•by H. R. Kricheldorf, <i>et al</i>., <i>Polym. Chem</i>., 2020, 11, 2595. Polymer Chemistry, 2020, 11, 6221-6225.	3.9	2
79	On the contribution of covalent and ionic species to the chain growth. Monte Carlo simulations and theoretical considerations. Macromolecular Theory and Simulations, 1995, 4, 935-946.	1.4	1
80	On the contribution of different reaction routes to polymer formation in reversible polymerization. Oxepane and 1,3-dioxolane polymerization cases. Macromolecular Theory and Simulations, 1996, 5, 29-43.	1.4	1
81	Equilibrium Copolymerization in Ring-Opening Polymerization. , 2012, , 51-66.		1
82	On the Statistical Nonliving Nature of the Cationic Ring-Opening Copolymerization of Oxetane with Tetrahydropyran. Macromolecular Theory and Simulations, 2012, 21, 78-82.	1.4	1
83	Importance of Statistical Factors in the Description of Kinetics of a Segmental Exchange in Polyester Systems. Reâ€‹<scp>A</scp>nalysis of Reshuffling in <scp>PET</scp>/<scp>PEN</scp> Blends. Macromolecular Theory and Simulations, 2013, 22, 359-364.	1.4	1
84	Unexpected formation of a significant amount of polymer primary hydroxyl groups in synthesis of star-shaped polymer from linear alcoholate chains and diepoxides. Polymer, 2016, 99, 713-720.	3.8	1
85	Chain length distributions in linear polyaddition proceeding in nano-scale small volumes without mass transfer. Journal of Chemical Physics, 2017, 146, 044113.	3.0	1
86	Evolution of Chain Length Distribution and Microstructure of Macromolecules in Irreversible Copolymerization Proceeding with Segmental Exchange Investigated with a New Monte Carlo Algorithm. Macromolecular Theory and Simulations, 2018, 27, 1800015.	1.4	1
87	Increase of the average reactivity of active species due to a shift to the more reactive species in ionic propagation accompanied by termination. Macromolecular Theory and Simulations, 1994, 3, 795-801.	1.4	0
88	Polycondensation of H3PO4with glycerol: From branched structures to hydrolytically reversible gels. Journal of Polymer Science Part A, 2014, 52, n/a-n/a.	2.3	0
89	Kinetics of Elementary Reactions in Cyclic Ester Polymerization. , 1999, , 283-299.		0
90	Modeling of polymerization kinetics as a tool for investigation of mechanism and predicting progress. Polimery, 2016, 61, 387-396.	0.7	0

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91	Living polymerization in nano-scale volumes. Impact of process conditions on polymerization kinetics and product characteristics. Chemical Engineering Journal, 2022, , 137729.	12.7	0