Ivan Gitsov

List of Publications by Year
in descending order

87 papers	4,631 citations	136740 32 h-index	98622 67 g-index
90 all docs	90 docs citations	90 times ranked	3221 citing authors

#	Article	IF	Citations
1	Enzymatic Synthesis and Antimicrobial Activity of Oligomer Analogues of Medicinal Biopolymers from Comfrey and Other Species of the Boraginaceae Family. Pharmaceutics, 2022, 14, 115.	2.0	9
2	Nano-Filamented Textile Sensor Platform with High Structure Sensitivity. ACS Applied Materials & Interfaces, 2022, 14, 15391-15400.	4.0	6
3	Reactive Cellu-mersâ€"A Novel Approach to Improved Cellulose/Polymer Composites. Polymers, 2022, 14, 1670.	2.0	3
4	Polymerization Initiated by Graphite Intercalation Compounds Revisited: One-Pot Synthesis of Amphiphilic Pentablock Copolymers. Macromol, 2022, 2, 184-193.	2.4	2
5	Conversion and removal strategies for microplastics in wastewater treatment plants and landfills. Chemical Engineering Journal, 2021, 406, 126715.	6.6	147
6	Magnetically Responsive PA6 Microparticles with Immobilized Laccase Show High Catalytic Efficiency in the Enzymatic Treatment of Catechol. Catalysts, 2021, 11, 239.	1.6	10
7	Novel Amphiphilic Dendronized Copolymers Formed by Enzyme-Mediated â€œGreenâ€•Polymerization. Biomacromolecules, 2021, 22, 1706-1720.	2.6	8
8	Biofilm Removal by Reversible Shape Recovery of the Substrate. ACS Applied Materials & Interfaces, 2021, 13, 17174-17182.	4.0	7
9	Hydroxyapatite-poly(d,l-lactide) Nanografts. Synthesis and Characterization as Bone Cement Additives. Molecules, 2021, 26, 424.	1.7	7
10	Polymer-Assisted Biocatalysis: Polyamide 4 Microparticles as Promising Carriers of Enzymatic Function. Catalysts, 2020, 10, 767.	1.6	13
11	Synthesis and Characterization of Zwitterionic Polymer Brush Functionalized Hydrogels with Ionic Responsive Coefficient of Friction. Langmuir, 2020, 36, 3932-3940.	1.6	14
12	A Single Enzyme Mediates the â€œQuasi-Livingâ€•Formation of Multiblock Copolymers with a Broad Biomedical Potential. Biomacromolecules, 2020, 21, 2132-2146.	2.6	8
13	Nonionic Amphiphilic Linear Dendritic Block Copolymers. Solvent-Induced Self-Assembly and Morphology Tuning. Macromolecules, 2019, 52, 5563-5573.	2.2	19
14	Controlled ATRP Synthesis of Novel Linear-Dendritic Block Copolymers and Their Directed Self-Assembly in Breath Figure Arrays. Polymers, 2019, 11, 539.	2.0	14
15	Unprecedented Enzymatic Synthesis of Perfectly Structured Alternating Copolymers via â€œGreenâ€• Reaction Cocatalyzed by Laccase and Lipase Compartmentalized within Supramolecular Complexes. Biomacromolecules, 2019, 20, 927-936.	2.6	16
16	Polymer-Assisted Biocatalysis: Effects of Macromolecular Architectures on the Stability and Catalytic Activity of Immobilized Enzymes toward Water-Soluble and Water-Insoluble Substrates. ACS Omega, 2018, 3, 1700-1709.	1.6	22
17	Thermosensitive Amphiphilic Janus Dendrimers with Embedded Metal Binding Sites. Synthesis and Self-Assembly. Macromolecules, 2018, 51, 5085-5100.	2.2	15
18	Decoration of Nanofibrous Paper Chemiresistors with Dendronized Nanoparticles toward Structurally Tunable Negativeâ€Going Response Characteristics to Human Breathing and Sweating. Advanced Materials Interfaces, 2017, 4, 1700380.	1.9	15

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19	Meet Our Regional Editor:. Current Organic Chemistry, 2015, 20, 119-119.	0.9	0
20	Synthesis and characterization of novel amphiphilic superâ€H copolymers with linearâ€"dendritic architecture. Journal of Polymer Science Part A, 2015, 53, 178-182.	2.5	6
21	“Synthesis of unnatural poly(amino acid)s and their dendritic derivatives by polymer-enhanced laccase complexes”. , 2015, , .		0
22	â€œGreenâ€•Synthesis of Unnatural Poly(Amino Acid)s with Zwitterionic Character and pH-Responsive Solution Behavior, Mediated by Linearâ€"Dendritic Laccase Complexes. Biomacromolecules, 2014, 15, 4082-4095.	2.6	21
23	â€œClickâ€•Synthesis of Intrinsically Hydrophilic Dendrons and Dendrimers Containing Metal Binding Moieties at Each Branching Unit. Macromolecules, 2014, 47, 2199-2213.	2.2	24
24	Preparation of aqueous polyaniline-vesicle suspensions with class III peroxidases. Comparison between horseradish peroxidase isoenzyme C and soybean peroxidase. Chemical Papers, 2013, 67, .	1.0	24
25	â€œGreenâ€•Synthesis of Bisphenol Polymers and Copolymers, Mediated by Supramolecular Complexes of Laccase and Linear-Dendritic Block Copolymers. ACS Symposium Series, 2013, , 121-139.	0.5	5
26	Synthesis and Self-Assembly of Linear-Dendritic Hybrid Polymers. , 2013, , 1-11.		0
27	Polymerâ€assisted biocatalysis: Unprecedented enzymatic oxidation of fullerene in aqueous medium. Journal of Polymer Science Part A, 2012, 50, 119-126.	2.5	33
28	Preparation and Characterization of Novel Amphiphilic Hydrogels with Covalently Attached Drugs and Fluorescent Markers. Macromolecules, 2010, 43, 10017-10030.	2.2	65
29	Synthesis and Physical Properties of Reactive Amphiphilic Hydrogels Based on Poly(<i>p</i>-chloromethylstyrene) and Poly(ethylene glycol): Effects of Composition and Molecular Architecture. Macromolecules, 2010, 43, 3256-3267.	2.2	41
30	Synthesis and hydrolytic stability of poly(oxyethyleneâ€Hâ€phosphonate)s. Journal of Polymer Science Part A, 2008, 46, 4130-4139.	2.5	23
31	Hybrid linear dendritic macromolecules: From synthesis to applications. Journal of Polymer Science Part A, 2008, 46, 5295-5314.	2.5	160
32	Enzymatic Nanoreactors for Environmentally Benign Biotransformations. 1. Formation and Catalytic Activity of Supramolecular Complexes of Laccase and Linearâ^'Dendritic Block Copolymers. Biomacromolecules, 2008, 9, 804-811.	2.6	70
33	Linear-Dendritic Supramolecular Complexes as Nanoscale Reaction Vessels for â€œGreenâ€•Chemistry. Dielsâ^'Alder Reactions between Fullerene C₆₀ and Polycyclic Aromatic Hydrocarbons in Aqueous Medium. Langmuir, 2008, 24, 11431-11441.	1.6	60
34	Green Oxidation of Steroids in Nanoreactors Assembled from Laccase and Linear-Dendritic Copolymers. ACS Symposium Series, 2008, , 110-128.	0.5	6
35	Smart polymer recycling: Synthesis of novel rigid polyurethanes using phosphorus-containing oligomers formed by controlled degradation of microporous polyurethane elastomer. Journal of Applied Polymer Science, 2007, 105, 302-308.	1.3	22
36	Immobilization of aminothiols on poly(oxyethyleneH-phosphonate)s and poly(oxyethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (Polymer Science Part A, 2007, 45, 1349-1363.	2.5	38

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37	Synthesis of novel asymmetric dendriticâ€linearâ€dendritic block copolymers via â€œlivingâ€• anionic polymerization of ethylene oxide initiated by dendritic macroinitiators. Journal of Polymer Science Part A, 2007, 45, 5136-5148.	2.5	47
38	Surface-Supported Bilayers with Transmembrane Proteins:Â Role of the Polymer Cushion Revisited. Langmuir, 2006, 22, 10145-10151.	1.6	45
39	Phosphorus-containing oligoamides obtained by a novel one-pot degradation of polyamide-6. Polymer Degradation and Stability, 2006, 91, 778-788.	2.7	7
40	Novel materials for bioanalytical and biomedical applications: Environmental response and binding/release capabilities of amphiphilic hydrogels with shape-persistent dendritic junctions. Journal of Polymer Science Part A, 2005, 43, 4017-4029.	2.5	47
41	Dendrimers - Nanoparticles with Precisely Engineered Surfaces. Current Organic Chemistry, 2005, 9, 1025-1051.	0.9	49
42	Nondestructive Regioselective Modification of Laccase by Linear-Dendritic Copolymers: Enhanced Oxidation of Benzo-Î±-Pyrene in Water. ACS Symposium Series, 2005, , 80-94.	0.5	12
43	A novel catalyst for the glycolysis of poly(ethylene terephthalate). Journal of Applied Polymer Science, 2003, 90, 2301-2301.	1.3	69
44	Novel Functionally Grafted Pseudo-Semi-interpenetrating Networks Constructed by Reactive Linearâˆ'Dendritic Copolymers1. Journal of the American Chemical Society, 2003, 125, 11228-11234.	6.6	65
45	Linearâˆ'Dendritic Poly(ester)-block-poly(ether)-block-poly(ester) ABA Copolymers Constructed by a Divergent Growth Method1. Macromolecules, 2003, 36, 1068-1074.	2.2	46
46	Amphiphilic Hydrogels with Highly Ordered Hydrophobic Dendritic Domains. ACS Symposium Series, 2002, , 218-232.	0.5	7
47	Amphiphilic Hydrogels Constructed by Poly(ethylene glycol) and Shape-Persistent Dendritic Fragments1. Macromolecules, 2002, 35, 8418-8427.	2.2	59
48	Immobilization of Aminothiols on Poly(oxyalkylene phosphates). Formation of Poly(oxyethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 Chemistry, 2002, 45, 5797-5801.	2.9	45
49	Linearâ€"dendritic block copolymers. Advances in Dendritic Macromolecules, 2002, , 45-87.	0.6	21
50	A novel depolymerization route to phosphorus-containing oligocarbonates. Polymer, 2001, 42, 39-42.	1.8	18
51	Profiles. Drug Discovery Today, 2001, 6, 108-109.	3.2	3
52	Micelles with highly branched nanoporous interior: Solution properties and binding capabilities of amphiphilic copolymers with linear dendritic architecture. Journal of Polymer Science Part A, 2000, 38, 2711-2727.	2.5	93
53	Hybrid Dendritic Capsules: Properties and Binding Capabilities of Amphiphilic Copolymers with Linear Dendritic Architecture. ACS Symposium Series, 2000, , 72-92.	0.5	7
54	Synthesis of new hybrid macromolecules with cyclo-dendritic architecture. Chemical Communications, 2000, , 269-270.	2.2	14

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55	Hydrolysis of biodegradable polymers by superoxide ions. Journal of Polymer Science Part A, 1999, 37, 3558-3567.	2.5	27
56	Modification of Surfaces and Interfaces by Non-covalent Assembly of Hybrid Linearâ˘Dendritic Block Copolymers:Â Poly(benzyl ether) Dendrons as Anchors for Poly(ethylene glycol) Chains on Cellulose or Polyester. Chemistry of Materials, 1999, 11, 1267-1274.	3.2	60
57	Importance of active-site reactivity and reaction conditions in the preparation of hyperbranched polymers by self-condensing vinyl polymerization: Highly branchedvs. linear poly[4-(chloromethyl)styrene] by metal-catalyzed ?living? radical polymerization. Journal of Polymer Science Part A, 1998, 36, 955-970.	2.5	225
58	Double-Stage Convergent Approach for the Synthesis of Functionalized Dendritic Aliphatic Polyesters Based on 2,2-Bis(hydroxymethyl)propionic Acid. Macromolecules, 1998, 31, 4061-4068.	2.2	313
59	Importance of active-site reactivity and reaction conditions in the preparation of hyperbranched polymers by self-condensing vinyl polymerization: Highly branched vs. linear poly[4-(chloromethyl)styrene] by metal-catalyzed â€œlivingâ€•radical polymerization. , 1998, 36, 955.		2
60	Star-graft copolymers. Synthesis of amphiphilic graft copolymers with star-branched poly(oxyethylene) side chains. Journal of Polymer Science Part A, 1997, 35, 673-679.	2.5	11
61	Stimuli-Responsive Hybrid Macromolecules:Â Novel Amphiphilic Star Copolymers With Dendritic Groups at the Periphery. Journal of the American Chemical Society, 1996, 118, 3785-3786.	6.6	200
62	Dendrimers and Hyperbranched Polymers: Two Families of Three-Dimensional Macromolecules with Similar but Clearly Distinct Properties. Journal of Macromolecular Science - Pure and Applied Chemistry, 1996, 33, 1399-1425.	1.2	260
63	Molded Monolithic Rod of Macroporous Poly(styrene-co-divinylbenzene) as a Separation Medium for HPLC of Synthetic Polymers:â€‰ â€œOn-Columnâ€•Precipitationâ˘Redissolution Chromatography as an Alternative to Size Exclusion Chromatography of Styrene Oligomers and Polymers. Analytical Chemistry, 1996, 68, 315-321.	3.2	126
64	Nanoscopic supermolecules with linear-dendritic architecture: Their preparation and their supramolecular behavior. Macromolecular Symposia, 1995, 98, 441-465.	0.4	50
65	Self-Condensing Vinyl Polymerization: An Approach to Dendritic Materials. Science, 1995, 269, 1080-1083.	6.0	820
66	Dendrimers as macroinitiators for anionic ring-opening polymerization. Polymerization of É›-caprolactone. Macromolecular Rapid Communications, 1994, 15, 387-393.	2.0	107
67	Novel Nanoscopic Architectures. Linear-Globular ABA Copolymers with Polyether Dendrimers as A Blocks and Polystyrene as B Block. Macromolecules, 1994, 27, 7309-7315.	2.2	108
68	Solution and solid-state properties of hybrid linear-dendritic block copolymers. Macromolecules, 1993, 26, 6536-6546.	2.2	172
69	Synthesis and properties of novel linear-dendritic block copolymers. Reactivity of dendritic macromolecules toward linear polymers. Macromolecules, 1993, 26, 5621-5627.	2.2	171
70	Poly(ethylene oxide) gel as a novel polymerization medium anionic polymerization of methyl methacrylate. Makromolekulare Chemie Macromolecular Symposia, 1993, 67, 157-173.	0.6	5
71	Novel Polyether Copolymers Consisting of Linear and Dendritic Blocks. Angewandte Chemie International Edition in English, 1992, 31, 1200-1202.	4.4	221
72	Synthesis and evaluation of methyl methacrylate copolymers and terpolymers as electron beam resists. II. Methyl methacrylate copolymers and terpolymers containing aromatic rings. Journal of Applied Polymer Science, 1992, 46, 1631-1638.	1.3	9

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73	Neuartige Polyethercopolymere mit einer linearen Zentraleinheit und dendritischen Endgruppen. Angewandte Chemie, 1992, 104, 1282-1285.	1.6	51
74	Synthesis of novolac resins: 2. Influence of the reaction medium on the properties of the novolac oligomers. Polymer, 1991, 32, 3067-3070.	1.8	8
75	Copolymerization of new pyrazolone-containing monomers with certain vinyl comonomers. Journal of Polymer Science Part A, 1991, 29, 889-895.	2.5	0
76	Anionic polymerization of lactones initiated by alkali graphitides. V. Initiation mechanism and nature of the active centers. Journal of Polymer Science Part A, 1990, 28, 2115-2126.	2.5	11
77	Synthesis and evaluation of methyl methacrylate copolymers and terpolymers as electron-beam resists. I. Poly(methyl methacrylateâ€"methacrylic acidâ€"methacryloyl chloride). Journal of Applied Polymer Science, 1990, 41, 2705-2710.	1.3	2
78	Anionic polymerization of lactones initiated by alkali graphitides. IV. Copolymerization of É›-caprolactone initiated by KC24. Journal of Polymer Science Part A, 1989, 27, 639-646.	2.5	3
79	Copolymerization of styrene with some oxiranes initiated by KC24. European Polymer Journal, 1986, 22, 407-412.	2.6	3
80	Cationic polymerization initiated by intercalation compounds of lewis acids. II. Initiating ability and mechanism of action of the initiators. Journal of Polymer Science Part A, 1986, 24, 155-165.	2.5	7
81	Cationic polymerization initiated by intercalation compounds of lewis acids. II. Initiating ability and mechanism of action of the initiators. Journal of Polymer Science: Polymer Chemistry Edition, 1986, 24, 155-165.	0.8	3
82	Separation and characterization of ?-caprolactone oligomers by gel permeation chromatography. Polymer Bulletin, 1985, 13, 285.	1.7	14
83	Anionic polymerization of lactones initiated by alkali graphitides. III. Polymerization of Î´-valerolactone initiated by KC24. Journal of Polymer Science: Polymer Chemistry Edition, 1984, 22, 905-910.	0.8	9
84	Anionic polymerization of lactones initiated by alkali graphitides. I. Polymerization of Îµ-caprolactone initiated by KC24. Journal of Polymer Science: Polymer Chemistry Edition, 1983, 21, 923-936.	0.8	18
85	Anionic polymerization of lactones initiated by alkali graphitides. II. Changes in the KC24 structure during polymerization of lactones. Journal of Polymer Science: Polymer Chemistry Edition, 1983, 21, 937-941.	0.8	7
86	Cationic polymerization initiated by intercalation compounds of Lewis acids. Polymer Bulletin, 1983, 10, 487-490.	1.7	8
87	Mechanism of the anionic polymerization of lactones, initiated by intercalation graphite compounds. Polymer Bulletin, 1981, 4, 97-103.	1.7	13