

**IVAN GITSOV**  
**List of publications 1981-2023**

**Total Citations (Web of Science, Research Gate, Scopus, Google Scholar): >5000**  
**Average Citation Impact Factor per Publication: >45; h-Index: 30**

112. Improving the Protection Performance of Waterborne Coatings with a Corrosion Inhibitor Encapsulated in Polyaniline-Modified Halloysite Nanotubes. *Coatings* **13(10)**, 1677 (2023); X. Liu, Z. Gao, D. Wang, F. Yu, B. Du\*, I. Gitsov\*

Journal Impact Factor: 3.400; <https://doi.org/10.3390/coatings13101677>

Times cited: 1

111. Synthesis and Applications of Hybrid Polymer Networks Based on Renewable Natural Macromolecules. *Molecules* **28(16)**, 6030 (2023); D. Getya, I. Gitsov\*

Journal Impact Factor: 4.600; <https://doi.org/10.3390/molecules28166030>

Times cited: 0

110. Printing Double-Network Tough Hydrogels Using Temperature-Controlled Projection Stereolithography (TOPS). *ACS Appl. Mater. Interf.* **15(25)**, 30780-30792 (2023); P. Kunwar, B.L. Andrada, A. Poudel, Zh. Xiong, U. Aryal, Z.J. Geffert, S. Poudel, D. Fougner, I. Gitsov, and P. Soman\*  
Journal Impact Factor: 9.500; <https://doi.org/10.1021/acsmami.3c04661>

Times cited: 1

109. Composite Hydrogels Based on Poly(Ethylene Glycol) and Cellulose Macromonomers as Fortified Materials for Environmental Cleanup and Clean Water Safeguarding. *Int. J. Mol. Sci.* **24(8)**, 7558 (2023); D. Getya, A. Lucas, I. Gitsov\*

Journal Impact Factor: 5.600; <https://doi.org/10.3390/ijms24087558>

Times cited: 0

108. Supramolecular Linear-Dendritic Nanoreactors: Synthesis and Catalytic Activity in “Green” Suzuki-Miyaura Reactions. *Polymers* **15(7)**, 1671 (2023); X. Liu, F.M. Yavitt, I. Gitsov\*

Journal Impact Factor: 5.000; <https://doi.org/10.3390/polym15071671>

Times cited: 1

107. Stronger Together. Poly(styrene) Gels Reinforced by Soft Gellan Gum. *Gels* **8(10)**, 607 (2022); D. Getya, I. Gitsov\*

Journal Impact Factor: 4.600; <https://doi.org/10.3390/gels8100607>

Times cited: 2

106. Polymerization Initiated by Graphite Intercalation Compounds Revisited: One-Pot Synthesis of Amphiphilic Pentablock Copolymers. *Macromol* **2(2)**, 184-193 (2022); N.G. Vladimirov, I. Gitsov\*

Journal Impact Factor: 4.600; <https://doi.org/10.3390/macromol2020012>

Times cited: 2

105. Reactive Cellu-mers – A Novel Approach to Improved Cellulose/Polymer Composites. *Polymers* **14(9)**, 1670 (2022); D. Getya, I. Gitsov\*

Journal Impact Factor: 5.000; <https://doi.org/10.3390/polym14091670>

Times cited: 1

104. Nano-Filamented Textile Sensor Platform with High Structure Sensitivity. *ACS Appl. Mater. Interf.* **14(13)**, 15391-15400 (2022); Sh. Yan, D. K Dinh, G. Shang, Sh. Wang, W. Zhao, X. Liu, R. Robinson, J.P. Lombardi III, N. He, S. Lu, M. Poliks, B.S. Hsiao, I. Gitsov, C.-J. Zhong\*  
Journal Impact Factor: 9.500; <https://doi.org/10.1021/acsmami.2c00021>

Times cited: 4

103. Enzymatic synthesis and antimicrobial activity of oligomer analogues of medicinal biopolymers from comfrey and other species of Boraginaceae family. *Pharmaceutics* **14(1)**, 115 (2022); M. Merlani, D. Scheibel, V. Barbakadze, L. Gogilashvili, L. Amiranashvili, A. Geronikaki, V. Catania, D. Schillaci, G. Gallo, I. Gitsov\*

Journal Impact Factor: 5.400; <https://doi.org/10.3390/pharmaceutics14010115>

**Times cited: 3**

**102.** Biofilm Removal by Reversible Shape Recovery of the Substrate. *ACS Appl. Mater. Interf.* **13(15)**, 17174-17182 (2021); S.W. Lee, J. Carnicelli, D. Getya, I. Gitsov, K. Phillips, D. Ren\*  
Journal Impact Factor: 9.500; <https://doi.org/10.1021/acsami.0c20697>

**Times cited: 4**

**101.** Novel Amphiphilic Dendronized Copolymers Formed by Enzyme-Mediated “Green” Polymerization. *Biomacromolecules* **22(4)**, 1706-1720 (2021); X. Liu, L. Wang, I. Gitsov\*  
Journal Impact Factor: 6.200; <https://doi.org/10.1021/acs.biomac.1c00124>

**Times cited: 7**

**100.** Conversion and Removal Strategies for Microplastics in Wastewater Treatment Plants and Landfills. *Chem. Eng. J.* **406**, 126715 (2021); L. Hou, D. Kumar, C.G. Yoo, I. Gitsov, E.L.W. Majumder\*  
Journal Impact Factor: 15.100; <https://doi.org/10.1016/j.cej.2020.126715>

**Times cited: 144**

**99.** Magnetically Responsive PA6 Microparticles with Immobilized Laccase Show High Catalytic Efficiency in the Enzymatic Treatment of Catechol. *Catalysts* **11**, 239 (2021); N. Dencheva, S. Oliveira, J. Braz, D. Getya, M. Malfois, Z. Denchev,\* I. Gitsov\*  
Journal Impact Factor: 3.900; <https://doi.org/10.3390/catal11020239>

**Times cited: 6**

**98.** Hydroxyapatite-poly(D,L-lactide) Nanografts. Synthesis and Characterization as Bone Cement Additives. *Molecules* **26(2)**, 424 (2021); K.L. Goranova, A.K. Kattenhøj Sloth Overgaard, I. Gitsov\*  
Journal Impact Factor: 4.600; <https://doi.org/10.3390/molecules26020424>

**Times cited: 8**

**97.** Polymer-Assisted Biocatalysis: Polyamide 4 Microparticles as Promising Carriers of Enzymatic Function. *Catalysts* **10**, 767 (2020); N. Dencheva, J. Braz, D. Scheibel, M. Malfois, Z. Denchev,\* I. Gitsov\*  
Journal Impact Factor: 3.900; <https://doi.org/10.3390/catal10070767>

**Times cited: 10**

**96.** A Single Enzyme Mediates the “Quasi-Living” Formation of Multiblock Copolymers with a Broad Biomedical Potential. *Biomacromolecules* **21(6)**, 2132-2146 (2020); D.M. Scheibel, D. Guo, J. Luo, I. Gitsov\*  
Journal Impact Factor: 6.200; <https://doi.org/10.1021/acs.biomac.0c00126>

**Times cited: 3**

**95.** Synthesis and Characterization of Zwitterionic Polymer Brush Functionalized Hydrogels with Ionic Responsive Coefficient of Friction. *Langmuir* **36(14)**, 3932-3940 (2020); A. O. Osaheni, A. A. Shakoor, I. Gitsov, P. T. Mather, M. M. Blum\*  
Journal Impact Factor: 3.900; <https://doi.org/10.1021/acs.langmuir.9b03566>

**Times cited: 16**

**94.** Nonionic Amphiphilic Linear Dendritic Copolymers. Morphology Tuning by Solvent-Induced Self-Assembly. *Macromolecules* **52(15)**, 5563-5573 (2019); X. Liu, I. Gitsov\*  
Journal Impact Factor: 5.500; <https://doi.org/10.1021/acs.macromol.9b01023>

**Times cited: 17**

**93.** Controlled ATRP Synthesis of Novel Linear-Dendritic Block Copolymers and Their Directed Self-Assembly in Breath Figure Arrays. *Polymers* **11(3)**, 539 (2019); X. Liu, I. Gitsov\*  
Journal Impact Factor: 5.000; <https://doi.org/10.3390/polym11030539>

**Times cited: 14**

**92.** Unprecedented Enzymatic Synthesis of Perfectly Structured Alternating Copolymers via “Green” Reaction Cocatalyzed by Laccase and Lipase Compartmentalized Within Supramolecular Complexes. *Biomacromolecules*, **20(2)**, 927-936 (2019); D.M. Scheibel, I. Gitsov\*  
Journal Impact Factor: 6.200; <https://doi.org/10.1021/acs.biomac.8b01567>

**Times cited: 13**

**91.** Thermosensitive Amphiphilic Janus Dendrimers with Embedded Metal Binding Sites. Synthesis and Self-Assembly. *Macromolecules* **51**(14), 5085-5100 (2018); X. Liu, I. Gitsov\* Journal Impact Factor: 5.500; <https://doi.org/10.1021/acs.macromol.8b00700>

**Times cited:** 15

**90.** 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* **3**(2), 1700-1709 (2018); D.M. Scheibel, I. Gitsov\* Journal Impact Factor: 4.132; <https://doi.org/10.1021/acsomega.7b01721>

**Times cited:** 17

**89.** Decoration of Nanofibrous Paper Chemiresistors with Dendronized Nanoparticles Toward Structurally Tunable Negative-Going Response Characteristics to Human Breathing and Sweating. *Adv. Mater. Interfaces* **4**(22), Article # 1700380 (2017); S. Yan, X. Liu, Z. Skeete, N. He, Z.-H. Xi, W. Zhao, J. P. Lombardi, K. Liu, N. Kang, J. Luo, B. S. Hsiao, M. Poliks, I. Gitsov,\* C.-J. Zhong\* Journal Impact Factor: 5.400; <https://doi.org/10.1002/admi.201700380>

**Times cited:** 18

**88.** Synthesis and Characterization of Novel Amphiphilic Super-H Copolymers with Linear-Dendritic Architecture. *J. Polym. Sci., Part A: Polym. Chem.* **53**(2), 178-182 (2015); I. Gitsov,\* I.V. Berlinova, N.G. Vladimirov Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.27318>

**Times cited:** 5

**87.** “Green” Synthesis of Unnatural Poly(Amino Acid)s with Zwitterionic Character and pH-responsive Solution Behavior, Mediated by Linear-Dendritic Laccase Complexes. *Biomacromolecules* **15**(11), 4082-4095 (2014); I. Gitsov,\* L. Wang, N. Vladimirov, A. Simonyan, D. J. Kiemle, A. Schütz Journal Impact Factor: 6.200; <https://doi.org/10.1021/bm501126a>

**Times cited:** 13

**86.** “Click” Synthesis of Intrinsically Hydrophilic Dendrons and Dendrimers Containing Metal Binding Moieties at Each Branching Unit. *Macromolecules* **47**(6), 2199-2213 (2014); L. Wang, D.J. Kiemle, C.J. Boyle, E.L. Connors, I. Gitsov\* Journal Impact Factor: 5.500; <https://doi.org/10.1021/ma500126f>

**Times cited:** 19

**85.** Synthesis and Self-Assembly of Linear-Dendritic Hybrid Polymers. *Encyclopedia of Polymeric Nanomaterials*, S. Kobayashi, K. Müllen, Eds., Springer Verlag, Berlin-Heidelberg, 2013, pp. 2436-2446; I. Gitsov\* Journal Impact Factor: encyclopedia; [https://doi.org/10.1007/978-3-642-29648-2\\_19](https://doi.org/10.1007/978-3-642-29648-2_19)

**Times cited:** 3

**84.** “Green” Synthesis of Bisphenol Polymers and Copolymers, Mediated by Supramolecular Complexes of Laccase and Linear-Dendritic Block Copolymers. *Green Polymer Chemistry: Biocatalysis and Materials II*, H.N. Cheng, R.A. Gross, Eds., ACS Symposium Series Vol. 1144, American Chemical Society, Washington DC, 2013, pp. 121-139; I. Gitsov,\* A. Simonyan Journal Impact Factor: book; <https://doi.org/10.1021/bk-2013-1144.ch010>

**Times cited:** 2

**83.** Preparation of aqueous polyaniline–vesicle suspensions with class III peroxidases. Comparison between horseradish peroxidase isoenzyme C and soybean peroxidase. *Chem. Papers* **67**(8), 1028-1047 (2013); K. Junker, I. Gitsov, N. Quade, P. Walde\* Journal Impact Factor: 2.200; <https://doi.org/10.2478/s11696-013-0307-y>

**Times cited:** 13

**82.** Polymer-Assisted Biocatalysis: Approach to “Green” Synthesis of Functional Materials; *Polym. Prepr.* **53**(2), 300-301 (2012); I. Gitsov,\* L. Wang, A. Simonyan, N.G. Vladimirov Journal Impact Factor: book of extended abstracts

**81.** Polymer-Assisted Biocatalysis: Unprecedented Enzymatic Oxidation of Fullerene in Aqueous Medium. *J. Polym. Sci., Part A: Polym. Chem.* **50**(1), 119-126 (2012); I. Gitsov,\* A. Simonyan, L. Wang, A. Krastanov, S.W. Tanenbaum, D. Kiemle  
Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.24995>

**Times cited:** 25

**80.** Preparation and Characterization of Novel Amphiphilic Hydrogels with Covalently Attached Drugs and Fluorescent Markers, *Macromolecules* **43**(23), 10017-10030 (2010); C. Lin, I. Gitsov\*  
Journal Impact Factor: 5.500; <https://doi.org/10.1021/ma102044n>

**Times cited:** 66

**79.** Synthesis and Physical Properties of Reactive Amphiphilic Hydrogels Based on Poly(p-chloromethylstyrene) and Poly(ethylene glycol): Effects of Composition and Molecular Architecture, *Macromolecules* **43**(7), 3256-3267 (2010); C. Lin, I. Gitsov\*  
Journal Impact Factor: 5.500; <https://doi.org/10.1021/ma9026564>

**Times cited:** 45

**78.** Hybrid Enzymatic Catalysts for Environmentally Benign Biotransformations and Polymerizations, *Polym. Prepr.* **50**(2), 40-41 (2009); I. Gitsov,\* A. Simonyan, S.W. Tanenbaum  
Journal Impact Factor: book of extended abstracts

**Times cited:** 5

**77.** Linear-Dendritic Supramolecular Complexes as Nano-Scale Reaction Vessels for “Green” Chemistry. Diels Alder Reactions between Fullerene C<sub>60</sub> and Polycyclic Aromatic Hydrocarbons in Aqueous Medium, *Langmuir* **24**(20) 11431-11441 (2008); A. Simonyan, I. Gitsov\*  
Journal Impact Factor: 3.900; <https://doi.org/10.1021/la801593y>

**Times cited:** 56

**76.** Green Oxidation of Steroids in Nano-Reactors Assembled from Laccase and Linear-Dendritic Copolymers, *Polymer Biocatalysis and Biomaterials*, H.N. Cheng, R.A. Gross, Eds., ACS Symposium Series Vol. 999, American Chemical Society, Washington DC, 2008, pp. 110-128; I. Gitsov,\* A. Simonyan, A. Krastanov, S. Tanenbaum  
Journal Impact Factor: book; <https://doi.org/10.1021/bk-2008-0999.ch007>

**Times cited:** 7

**75.** Hybrid Linear Dendritic Macromolecules: From Synthesis to Applications, *J. Polym. Sci., Part A: Polym. Chem.* **46**(16) 5295-5314 (2008); I. Gitsov\*  
Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.22828>

**Times cited:** 162

**74.** Synthesis and Hydrolytic Stability of Poly(oxyethylene H-Phosphonates), *J. Polym. Sci., Part A: Polym. Chem.* **46**(12) 4130-4139 (2008); I. Gitsov,\* F.E. Johnson  
Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.22759>

**Times cited:** 23

**73.** Enzymatic Nano-reactors for Environmentally Benign Biotransformations. 1. Formation and Catalytic Activity of Supramolecular Complexes of Laccase and Linear Dendritic Block Copolymers, *Biomacromolecules* **9**(3), 804-811 (2008), I. Gitsov,\* J. Hamzik, J. Ryan, A. Simonyan, J. P. Nakas, Sh. Omori, A. Krastanov, T. Cohen, S.W. Tanenbaum  
Journal Impact Factor: 6.200; <https://doi.org/10.1021/bm701081m>

**Times cited:** 53

**72.** Synthesis of Novel Asymmetric Dendritic-Linear-Dendritic Block Copolymers via “Living” Anionic Polymerization of Ethylene Oxide Initiated by Dendritic Macroinitiators, *J. Polym. Sci., Part A: Polym. Chem.* **45**(22) 5136-5148 (2007); I. Gitsov,\* A. Simonyan and N.G. Vladimirov  
Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.22258>

**Times cited:** 37

**71.** Smart Polymer Recycling: Synthesis of Novel Rigid Polyurethanes Using Phosphorus-Containing Oligomers Formed by Controlled Degradation of Microporous Polyurethane Elastomer, *J.*

*Appl. Polym. Sci.* **105**(2), 302-308 (2007); K. Troev,\* G. Grancharov, V. Mitova, St. Shenkov, A. Topliyska, I. Gitsov\*

Journal Impact Factor: 3.000; <https://doi.org/10.1002/app.25676>

Times cited: 24

**70.** Immobilization of Aminothiols on Poly(oxyethylene H-phosphonates) and Poly(oxyethylene phosphate)s – an Approach to Polymeric Protective Agents for Radiotherapy of Cancer, *J. Polym. Sci., Part A: Polym. Chem.* **45**(7) 1349-1363 (2007); K. Troev,\* I. Tsatcheva, N. Koseva, R. Georgieva, I. Gitsov\*

Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.21906>

Times cited: 20

**69.** Surface-Supported Bilayers with Transmembrane Helices: The Role of the Polymer Cushion Revisited, *Langmuir* **22**(24), 10145-10151 (2006); M. Merzlyakov, E. Li, I. Gitsov and K. Hristova\*

Journal Impact Factor: 3.900; <https://doi.org/10.1021/la061976d>

Times cited: 40

**68.** Phosphorus-Containing Oligoamides Obtained by a Novel One-Pot Degradation of Polyamide-6, *Polym. Degrad. Stab.* **91**(4), 778-788 (2006); K. Troev,\* N. Todorova, V. Mitova, St. Vassileva, I. Gitsov\*

Journal Impact Factor: 5.900; <https://doi.org/10.1016/j.polymdegradstab.2005.06.005>

Times cited: 3

**67.** Novel Materials for Bioanalytical and Biomedical Applications: Environmental Response and Binding/Release Capabilities of Amphiphilic Hydrogels with Shape-Persistent Dendritic Junctions, *J. Polym. Sci., Part A: Polym. Chem.* **43**(18), 4017-4029 (2005); C. Zhu, C. Hard, C. Lin, I. Gitsov\*

Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.20898>

Times cited: 50

**66.** Dendrimers – Nanoparticles with Precisely Engineered Surfaces, *Curr. Org. Chem.* **9**(11), 1025-1051 (2005); I. Gitsov,\* C. Lin

Journal Impact Factor: 2.600; <https://doi.org/10.2174/1385272054368448>

Times cited: 56

**65.** Nondestructive Regioselective Modification of Laccase by Linear-Dendritic Copolymers. Enhanced Oxidation of Benzo- $\alpha$ -Pyrene in Water, *Polymer Biocatalysis and Biomaterials*, H.N. Cheng, R.A. Gross, Eds., ACS Symposium Series Vol. 900, American Chemical Society, Washington DC, 2005, pp. 80-94; I. Gitsov,\* K. Lambrych, P. Lu, J. Nakas, J. Ryan and S. W. Tanenbaum

Journal Impact Factor: book; <https://doi.org/10.1021/bk-2005-0900.ch006>

Times cited: 7

**64.** Amphiphilic Super-H Copolymers with Linear-Dendritic Architecture, *Polym. Mater. Sci. Eng.* **91**, 860-861 (2004); I. Gitsov,\* I.V. Berlinova, J.M.J. Fréchet

Journal Impact Factor: book of extended abstracts

**63.** Synthesis of Asymmetric Triblock Copolymers with Linear-Dendritic Architecture, *Polym. Mater. Sci. Eng.* **91**, 14-15 (2004); I. Gitsov, C. Zhu, J.M.J. Fréchet, N.G. Vladimirov, D.Yu

Journal Impact Factor: book of extended abstracts

**62.** Nondestructive Regioselective Modification of Laccase by Linear-Dendritic Copolymers. Enhanced Oxidation of Polyaromatic Hydrocarbons in Water, *Polym. Prepr.* **44**(2) 143-144 (2003); I. Gitsov, K.R. Lambrych, J. Nakas, P. Lu, J. Ryan, Sh. Omori and S. W. Tanenbaum

Journal Impact Factor: book of extended abstracts

**61.** Novel Functionally Grafted Pseudo Semi-Interpenetrating Networks Constructed by Reactive Linear-Dendritic Copolymers, *J. Am. Chem. Soc.* **125**(37), 11228-11234 (2003); I. Gitsov, C. Zhu

Journal Impact Factor: 15.000; <https://doi.org/10.1021/ja0345625>

**Times cited: 66**

60. A Novel Catalyst for the Glycolysis of Poly(ethylene terephthalate), *J. Appl. Polym. Sci.* **90**(4), 1148-1152 (2003); K. Troev, G. Grancharov, R. Tsevi, I. Gitsov  
Journal Impact Factor: 3.000; <https://doi.org/10.1002/app.12711>

**Times cited: 132**

59. Linear-Dendritic Poly(Ester)-block-Poly(ether)-block-Poly(Ester) ABA copolymers Constructed by a Divergent Growth Method, *Macromolecules* **36**(4), 1068-1074 (2003); K.R. Lambrych, I. Gitsov  
Journal Impact Factor: 5.500; <https://doi.org/10.1021/ma021232g>

**Times cited: 48**

58. Immobilization of Aminothiols on Poly(oxyalkylene phosphates). Formation of Poly(oxyethylene phosphates)/Cysteamine Complexes and their Radioprotective Efficiency, *J. Med. Chem.* **45**(26) 5797-5801 (2002); R. Georgieva, R. Tsevi, K. Kossev, R. Kusheva, M. Balgjiska, R. Petrova, V. Tenchova, I. Gitsov, K. Troev  
Journal Impact Factor: 7.300; <https://doi.org/10.1021/jm020309o>

**Times cited: 31**

57. Amphiphilic Hydrogels Constructed by Poly(ethylene Glycol) and Shape-Persistent Dendritic Fragments, *Macromolecules* **35**(22) 8418-8427 (2002); I. Gitsov, C. Zhu  
Journal Impact Factor: 5.500; <https://doi.org/10.1021/ma020935v>

**Times cited: 54**

56. Amphiphilic Hydrogels with Highly Ordered Hydrophobic Dendritic Domains, *Polymer Gels. Fundamentals and Applications*, H.B. Bohidar, P. Dubin, Y. Osada, Eds., ACS Symposium Series Vol. 833, American Chemical Society, Washington DC, 2002, pp. 218-232; I. Gitsov, T. Lys, C. Zhu  
Journal Impact Factor: book; <https://doi.org/10.1021/bk-2002-0833.ch015>

**Times cited: 7**

55. Dendrimers. Synthesis and Applications, *Microspheres, Microcapsules & Liposomes*, R. Arshady, Ed., Citus Books, London, 2002, Vol. 5, Chapter 2, pp. 31-68; I. Gitsov, K.R. Lambrych  
Journal Impact Factor: book;

**Times cited: 16**

54. Linear-Dendritic Block Copolymers. Synthesis and Characterization, *Advances in Dendritic Macromolecules*, G.R. Newkome, Ed., Elsevier Science, Amsterdam, 2002, Vol. 5, Chapter 2, pp. 45-87; I. Gitsov  
Journal Impact Factor: book

**Times cited: 49**

53. GPC-SEC Analysis of Nonionic Surfactants, *Encyclopedia of Chromatography*, J. Cazes, Ed., Marcel Dekker, New York, 2001, Vol. 3, Chapter 183, 376-378; I. Gitsov  
Journal Impact Factor: encyclopedia

**Times cited: 1**

52. Linear-Dendritic Poly(ether)-block-Poly(ester) Copolymers Constructed by Divergent and Convergent Growth Methods, *Polym. Mater. Sci. Eng.* **84**, 925-926 (2001); I. Gitsov, K.L. Lambrych, P.T. Ivanova, S. Lewis  
Journal Impact Factor: book of extended abstracts

**Times cited: 4**

51. Semi-Interpenetrating Networks Obtained from Linear-Dendritic Copolymers, *Polym. Mater. Sci. Eng.* **84**, 70-71 (2001); I. Gitsov, C. Zhu  
Journal Impact Factor: book of extended abstracts

**Times cited: 1**

50. Dendritic-polymer drug delivery structures characterized by a novel triple detection method, *Drug Disc. Today* **6**(2), 108-109 (2001); I. Gitsov, P. Clarke  
Journal Impact Factor: 7.400; [https://doi.org/10.1016/S1359-6446\(00\)01603-2](https://doi.org/10.1016/S1359-6446(00)01603-2)

**Times cited: 4**

**49.** A Novel Depolymerization Route to Phosphorus-containing Oligocarbonates, *Polymer* **42(1)**, 39-42 (2001); K. Troev, R. Tsevi, I. Gitsov  
Journal Impact Factor: 4.600; [https://doi.org/10.1016/S0032-3861\(00\)00320-7](https://doi.org/10.1016/S0032-3861(00)00320-7)

**Times cited:** 10

**48.** Hybrid Dendritic Capsules. Properties and Binding Capabilities of Amphiphilic Copolymers with Linear Dendritic Architecture, *Associative Polymers in Aqueous Solutions*, J.E. Glass, Ed., ACS Symposium Series Vol. 765, American Chemical Society, Washington DC, 2000, pp. 72-92; I. Gitsov  
Journal Impact Factor: book; <https://doi.org/10.1021/bk-2000-0765.ch005>

**Times cited:** 6

**47.** Micelles with Highly Branched Nanoporous Interior. Solution Properties and Binding Capabilities of Amphiphilic Copolymers with Linear Dendritic Architecture, *J. Polym. Sci., Part A: Polym. Chem.* **38(15)**, 2711-2727 (2000); I. Gitsov, K.R. Lambrych, V.A. Remnant, R. Pracitto  
Journal Impact Factor: 3.400; [https://doi.org/10.1002/1099-0518\(20000801\)38:15%3C2711::AID-POLA110%3E3.0.CO;2-1](https://doi.org/10.1002/1099-0518(20000801)38:15%3C2711::AID-POLA110%3E3.0.CO;2-1)

**Times cited:** 103

**46.** Amphiphilic Hydrogels with Highly Ordered Hydrophobic Domains, *Polym. Mater. Sci. Eng.* **82**, 328-329 (2000); I. Gitsov, T. Lys, C. Zhu  
Journal Impact Factor: book of extended abstracts

**Times cited:** 3

**45.** Synthesis of new hybrid macromolecules with cyclo-dendritic architecture, *Chem. Commun.* **2000(4)**, 269-270; I. Gitsov, P.T. Ivanova  
Journal Impact Factor: 6.065; <https://doi.org/10.1039/A907914I>

**Times cited:** 17

**44.** Hydrolysis of Biodegradable Polymers by Superoxide Ions, *J. Polym. Sci., Part A: Polym. Chem.* **37(18)**, 3558-3567 (1999); K.H. Lee, C.Y. Won, C.C. Chu, I. Gitsov  
Journal Impact Factor: 3.400; [https://doi.org/10.1002/\(SICI\)1099-0518\(19990915\)37:18%3C3558::AID-POLA2%3E3.0.CO;2-4](https://doi.org/10.1002/(SICI)1099-0518(19990915)37:18%3C3558::AID-POLA2%3E3.0.CO;2-4)

**Times cited:** 24

**43.** Modification of Surfaces and Interfaces by Non-covalent Assembly of Hybrid Linear-Dendritic Block Copolymers: Poly(benzyl ether) Dendrons as Anchors for Poly(ethylene glycol) Chains on Cellulose or Polyester, *Chem. Mater.* **11(5)**, 1267-1274 (1999); J.M.J. Fréchet, I. Gitsov, Th. Monteil, S. Rochat, J.F. Sassi, C. Vergelati, D. Yu  
Journal Impact Factor: 8.600; <https://doi.org/10.1021/cm981021j>

**Times cited:** 55

**42.** Properties and Binding Capabilities of Water-Soluble/Water-Swellable Polymers with Linear-Dendritic Architecture, *Polym. Mat. Sci. Eng.* **79**, 447-448 (1998); I. Gitsov, R. Pracitto, K.R. Lambrych  
Journal Impact Factor: book of extended abstracts

**Times cited:** 3

**41.** Double-Stage Convergent Approach for the Synthesis of Functionalized Dendritic Aliphatic Polyesters Based on 2,2-Bis(hydroxymethyl)propionic Acid, *Macromolecules*, **31(13)**, 4061-4068 (1998); H. Ihre, A. Hult, J.M.J. Fréchet, I. Gitsov  
Journal Impact Factor: 5.500; <https://doi.org/10.1021/ma9718762>

**Times cited:** 293

**40.** Study on the Synthesis of p-Tert-butylcalixarenes and p-Isopropenylcalixarenes, *Angew. Makromol. Chem. (Macromol. Mater. Eng.)* **255**, 23-28 (1998); P. Novakov, S. Miloshev, P. Tuleshkov, I. Gitsov, M. Georgieva  
Journal Impact Factor: 4.402; [https://doi.org/10.1002/\(SICI\)1522-9505\(19980301\)255:1%3C23::AID-APMC23%3E3.0.CO;2-V](https://doi.org/10.1002/(SICI)1522-9505(19980301)255:1%3C23::AID-APMC23%3E3.0.CO;2-V)

**Times cited:** 4

**39.** 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 "Living" Radical Polymerization, *J. Polym. Sci.: Part A: Polym. Chem.* **36**(6), 955-970 (1998); M.W. Weimer, J.M.J. Fréchet, I. Gitsov  
Journal Impact Factor: 3.400; [https://doi.org/10.1002/\(SICI\)1099-0518\(19980430\)36:6%3C955::AID-POLA11%3E3.0.CO;2-K](https://doi.org/10.1002/(SICI)1099-0518(19980430)36:6%3C955::AID-POLA11%3E3.0.CO;2-K)

**Times cited:** 278

**38.** Modular Building Blocks for Combinatorial Construction of Polyether Dendrimers and Their Hybrids, *Polym. Mater. Sci. Eng.* **77**, 214-215 (1997); I. Gitsov, Sh. Wu, P.T. Ivanova  
Journal Impact Factor: book of extended abstracts

**Times cited:** 9

**37.** Star-graft Copolymers. Synthesis of Amphiphilic Graft Copolymers with Star-branched Poly(oxyethylene) Side Chains, *J. Polym. Sci., Part A: Polym. Chem.* **35**(4), 673-679 (1997); I.V. Berlinova, I.V. Dimitrov, I. Gitsov  
Journal Impact Factor: 3.400; [https://doi.org/10.1002/\(SICI\)1099-0518\(199703\)35:4%3C673::AID-POLA9%3E3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1099-0518(199703)35:4%3C673::AID-POLA9%3E3.0.CO;2-Q)

**Times cited:** 13

**36.** Dendrimers and Hyperbranched Polymers: Two Families of Three-dimensional Macromolecules with Similar, but Clearly Distinct Properties, *J. Macromol. Sci.- Pure & Appl. Chem.* **A33**(10), 1399-1425 (1996); J.M.J. Fréchet, C.J. Hawker, I. Gitsov, J.W. Leon  
Journal Impact Factor: 2.500; <https://doi.org/10.1080/10601329608014916>

**Times cited:** 356

**35.** Stimuli Responsive Hybrid Macromolecules. Novel Amphiphilic Star Copolymers with Dendritic Groups at the Periphery, *J. Am. Chem. Soc.* **118**(15), 3785-3786 (1996); I. Gitsov and J.M.J. Fréchet  
Journal Impact Factor: 15.000; <https://doi.org/10.1021/ja9542348>

**Times cited:** 222

**34.** Molded Monolithic Rod of Macroporous Poly(styrene-co-divinylbenzene) as a Separation Medium for HPLC of Synthetic Polymers: "On-Column" Precipitation – Redissolution Chromatography as an Alternative to Size Exclusion Chromatography of Styrene Oligomers and Polymers, *Anal. Chem.* **68**(2), 315-321 (1996); M. Petro, F. Svec, I. Gitsov, J.M.J. Fréchet  
Journal Impact Factor: 7.400; <https://doi.org/10.1021/ac950726r>

**Times cited:** 101

**33.** Nanoscopic Supermolecules with Linear-dendritic Architecture: Preparation and Properties, *Makromol. Symp.* **98**, 441-465 (1995); J.M.J. Fréchet and I. Gitsov  
Journal Impact Factor: book; <https://doi.org/10.1002/masy.19950980135>

**Times cited:** 77

**32.** New Approaches to Dendritic Macromolecules, *Polym. Mat. Sci. Eng.* **73**, 271-272 (1995); J.M.J. Fréchet, I. Gitsov, R.B. Grubbs, C.J. Hawker, M. Leduc, E. Sanford, K. Yui  
Journal Impact Factor: book of extended abstracts

**Times cited:** 9

**31.** Stimuli Responsive Hybrid Macromolecules. Novel Amphiphilic Star Copolymers with Dendritic Groups at the Periphery, *Polym. Mat. Sci. Eng.* **73**, 129-130 (1995); I. Gitsov and J.M.J. Fréchet  
Journal Impact Factor: book of extended abstracts

**Times cited:** 8

**30.** Self Condensing Vinyl Polymerization: An Approach to Dendritic Materials, *Science* **269**, 1080-1084 (1995); J.M.J. Fréchet, M. Henmi, I. Gitsov, S. Aoshima, M. Leduc, R.B. Grubbs  
Journal Impact Factor: 56.900; <https://doi.org/10.1126/science.269.5227.1080>

**Times cited:** 939

**29.** Novel Nanoscopic Architectures. Linear-Globular ABA Copolymers with Polyether Dendrimers as A Blocks and Polystyrene as B Block, *Macromolecules*, **27**(25) 7309-7315 (1994); I. Gitsov and J.M.J. Fréchet  
Journal Impact Factor: 5.500; <https://doi.org/10.1021/ma00103a012>

**Times cited: 118**

**28.** Dendrimers as macroinitiators for anionic ring-opening polymerization. Polymerization of  $\epsilon$ -caprolactone, *Macromol. Rapid Commun.* **15(5)**, 387-393 (1994); I. Gitsov, P.T. Ivanova and J.M.J. Fréchet

Journal Impact Factor: 4.600; <https://doi.org/10.1002/marc.1994.030150501>

**Times cited: 110**

**27.** Solution and Solid State Properties of Hybrid Linear-Dendritic Copolymers, *Macromolecules* **26(24)**, 6536-6546 (1993); I. Gitsov and J.M.J. Fréchet

Journal Impact Factor: 5.500; <https://doi.org/10.1021/ma00076a035>

**Times cited: 219**

**26.** Synthesis and Properties of Novel Linear-Dendritic Block Copolymers. Reactivity of Dendritic Macromolecules toward Linear Polymers, *Macromolecules* **26(21)**, 5621-5627 (1993); I. Gitsov, K.L. Wooley, C.J. Hawker, P.T. Ivanova and J.M.J. Fréchet

Journal Impact Factor: 5.500; <http://dx.doi.org/10.1021/ma00073a014>

**Times cited: 216**

**25.** Poly(ethylene oxide) Gel as a Novel Polymerization Medium. Anionic Polymerization of Methyl Methacrylate, *Makromol. Chem., Makromol. Symp.* **67**, 157-173 (1993); Ch.B. Tsvetanov, Ch.P. Novakov, D.T. Dotcheva and I. Gitsov

Journal Impact Factor: book; <https://doi.org/10.1002/masy.19930670113>

**Times cited: 5**

**24.** Synthesis and Evaluation of Methyl Methacrylate Copolymers and Terpolymers as Electron-Beam Resists. II. Methyl Methacrylate Copolymers and Terpolymers Containing Aromatic Rings, *J. Appl. Polym. Sci.* **46(9)**, 1631-1638 (1992); I. Gitsov and O.G. Todorova

Journal Impact Factor: 3.000; <https://doi.org/10.1002/app.1992.070460911>

**Times cited: 10**

**23.** Novel Polyether Copolymers Consisting of Linear and Dendritic Blocks, *Angew. Chem. Int. Ed. Engl.* **31(9)**, 1200-1202 (1992); I. Gitsov, K.L. Wooley and J.M.J. Fréchet

Journal Impact Factor: 16.600; <https://doi.org/10.1002/anie.199212001>

**Times cited: 252**

**22.** Synthesis of novolac resins: 2. Influence of the reaction medium on the properties of the novolac oligomers, *Polymer* **32**, 3067 (1991); St. Miloshev, P. Novakov, Vl. Dimitrov and I. Gitsov

Journal Impact Factor: 4.600; [https://doi.org/10.1016/0032-3861\(91\)90211-Z](https://doi.org/10.1016/0032-3861(91)90211-Z)

**Times cited: 9**

**21.** Synthesis and Solution Properties of Polystyrenes with Dendritic End Groups, *Polym. Prepr.* **32(3)**, 631 (1991); I. Gitsov, K.L. Wooley, C.J. Hawker and J.M.J. Fréchet

Journal Impact Factor: book of extended abstracts

**Times cited: 22**

**20.** Copolymerization of New Pyrazolone-Containing Monomers with Certain Vinyl Comonomers, *J. Polym. Sci.: Part A: Polym. Chem.* **29(6)**, 889-895 (1991); O.G. Todorova, I. Gitsov, G. Borissov and A. Terebenina

Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.1991.080290614>

**Times cited: 2**

**19.** Synthesis and Evaluation of Methyl Methacrylate Copolymers and Terpolymers as Electron-Beam Resists. I. Poly(methyl Methacrylate-Methacrylic Acid-Methacryloyl Chloride), *J. Appl. Polym. Sci.* **41(11-12)**, 2705-2710 (1990); I. Gitsov and N.A Madjarova

Journal Impact Factor: 3.000; <https://doi.org/10.1002/app.1990.070411117>

**Times cited: 1**

**18.** Anionic Polymerization of Lactones Initiated by Alkali Graphitides. V. Initiation Mechanism and Nature of the Active Centers, *J. Polym. Sci.: Part A: Polym. Chem.* **28**, 2115 (1990); I. Gitsov, I.B. Rashkov and I.M. Panayotov

Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.1990.080280809>

**Times cited: 9**

17. Investigation of some physico-chemical properties of vinyl acetate-itaconic acid copolymers, *Acta Polym.* **41**, 243 (1990); R. Mateva, L. Kotzeva and I. Gitsov

Journal Impact Factor: not available

**Times cited: 0**

16. Application of gel permeation chromatography with photodiode array detection for monitoring of microlithographic processes, *International GPC Symposium*, Newton MA, USA, p.300-318 (1989); I. Gitsov

Journal Impact Factor: book of extended abstracts

15. Influence of the Chemical Composition and Molecular Weight of Novolac Resins on Their Thermal- and Plasma Durability, *International Symposium "Photoresists for the Electronics"*, Brno, Czechoslovakia, p.51-54 (1989), in German; I. Gitsov, Vl. Dimitrov, P. Novakov, St. Miloshev, Ts. Pirinova, G. Grozev

Journal Impact Factor: book of extended abstracts

14. Influence of the Chemical Composition of Certain Photoresists on Their Behavior in The Optical Microlithography, *International Symposium "Photoresists for the Electronics"*, Brno, Czechoslovakia, p.165-166 (1989), in German; I. Gitsov, C. Tsvetkov, N. Madjarova

Journal Impact Factor: book of extended abstracts

13. Synthesis of novolac resins. I. Influence of the chemical structure of the monomers and the reaction conditions on some properties of novolac oligomers, *Chemtronics* **4**, 251 (1989); P. Novakov, St. Miloshev, Vl. Dimitrov and I. Gitsov

Journal Impact Factor: not available

**Times cited: 5**

12. Anionic Polymerization of Lactones Initiated by Alkali Graphitides. IV. Copolymerization of  $\epsilon$ -Caprolactone Initiated by KC<sub>24</sub>, *J. Polym. Sci.: Part A: Polym. Chem.* **27(2)**, 639-646 (1989); I. Gitsov, I.B. Rashkov, I.M. Panayotov, A. Golub'

Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.1989.080270222>

**Times cited: 1**

11. Polymerization in Poly(ethylene Oxide) Gels. Anionic Polymerization of Methyl Methacrylate Initiated by t-BuOK, *Polym. Prepr.* **29(2)**, 98 (1988); Ch. Tsvetanov, D. Dotcheva, I. Gitsov and Ch. Novakov

Journal Impact Factor: book of extended abstracts

**Times cited: 2**

10. Molecular Weight Characteristics of 2-Naphthyl Methacrylate Copolymers Obtained by Radical Polymerization in Different Solvents, *Polym. Bull.* **15**, 511 (1986); O.G. Todorova, I. Gitsov and V.A. Sinigersky

Journal Impact Factor: 3.200; <https://doi.org/10.1007/BF00281761>

**Times cited: 1**

9. Copolymerization of Styrene with Some Oxyranes Initiated by KC<sub>24</sub>, *Eur. Polym. J.* **22**, 407 (1986); I.B. Rashkov, N.G. Vladimirov, Ts. Kakuliya and I. Gitsov

Journal Impact Factor: 6.000; [https://doi.org/10.1016/0014-3057\(86\)90137-0](https://doi.org/10.1016/0014-3057(86)90137-0)

**Times cited: 3**

8. Cationic Polymerization Initiated by Intercalation Compounds of Lewis Acids. II. Initiating Ability and Mechanism of Action of the Initiators, *J. Polym. Sci., Polym. Chem. Ed.* **24(1)**, 155-165 (1986); I.B. Rashkov and I. Gitsov

Journal Impact Factor: 3.400; <https://doi.org/10.1002/pola.1986.080240114>

**Times cited: 23**

7. Separation and Characterization of  $\epsilon$ -Caprolactone Oligomers by Gel-Permeation Chromatography, *Polym. Bull.* **13**(, 285 (1985); N.E. Manolova, I. Gitsov, R.S. Velitchkova and I.B. Rashkov

Journal Impact Factor: 3.200; <https://doi.org/10.1007/BF00254664>

**Times cited: 18**

6. Anionic Polymerization of Lactones Initiated by Alkali Graphitides. III. Polymerization of  $\delta$ -Valerolactone Initiated by KC<sub>24</sub>, *J. Polym. Sci., Polym. Chem. Ed.* **22**(4), 905 (1984); I.B. Rashkov and I. Gitsov

Journal Impact Factor: 3.400; <https://doi.org/10.1002/pol.1984.170220402>

**Times cited: 13**

5. Polymerization of Styrene Initiated by Ternary Compounds Graphite/ Potassium/Aromatic Hydrocarbon, *Balkan Chemistry Days*, Varna, Bulgaria, Abstracts, p.3.31 (1983); Y. Isaev, Il. Rashkov, I. Gitsov, I. Panayotov

Journal Impact Factor: book of extended abstracts

4. Cationic Polymerization Initiated by Intercalation Compounds of Lewis Acids. Polymerization of Cyclosiloxanes, *Polym. Bull.* **10**(11-12), 487-490 (1983); I.B. Rashkov, I. Gitsov and I.M. Panayotov

Journal Impact Factor: 3.200; <https://doi.org/10.1007/BF00285365>

**Times cited: 16**

3. Anionic Polymerization of Lactones Initiated by Alkali Graphitides. II. Changes in the KC<sub>24</sub> Structure During the Polymerization of Lactones, *J. Polym. Sci., Polym. Chem. Ed.* **21**(4), 937-941 (1983); I.B. Rashkov, I. Gitsov and I.M. Panayotov

Journal Impact Factor: 3.400; <https://doi.org/10.1002/pol.1983.170210402>

**Times cited: 8**

2. Anionic Polymerization of Lactones Initiated by Alkali Graphitides. I. Polymerization of  $\epsilon$ -Caprolactone Initiated by KC<sub>24</sub>, *J. Polym. Sci., Polym. Chem. Ed.* **21**(4), 923-936 (1983); I.B. Rashkov, I. Gitsov, I.M. Panayotov and J.P. Pascault

Journal Impact Factor: 3.400; <https://doi.org/10.1002/pol.1983.170210401>

**Times cited: 19**

1. Mechanism of the Anionic Polymerization of Lactones Initiated by Graphite Intercalation Compounds, *Polym. Bull.* **4**(1-2), 97-103 (1981); I.B. Rashkov, I.M. Panayotov and I. Gitsov

Journal Impact Factor: 3.200; <https://doi.org/10.1007/BF01045246>

**Times cited: 11**