# Umesh R Desai

List of Publications by Year
in descending order

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| 185 | 5,113 | 87888 | 133252 |
|---|---|---|---|
| papers | citations | 38 h-index | 59 g-index |

| 192 | 192 | 192 | 4015 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Specificity studies on the heparin lyases from Flavobacterium heparinum. Biochemistry, 1993, 32, 8140-8145. | 2.5 | 167 |
| 2 | Mechanism of Heparin Activation of Antithrombin. Journal of Biological Chemistry, 1998, 273, 7478-7487. | 3.4 | 167 |
| 3 | Chemical sulfation of small moleculesâ€"advances and challenges. Tetrahedron, 2010, 66, 2907-2918. | 1.9 | 145 |
| 4 | Substrate Specificity of the Heparin Lyases from Flavobacterium heparinum. Archives of Biochemistry and Biophysics, 1993, 306, 461-468. | 3.0 | 142 |
| 5 | New antithrombin-based anticoagulants. Medicinal Research Reviews, 2004, 24, 151-181. | 10.5 | 125 |
| 6 | Oligosaccharide Composition of Heparin and Low-Molecular-Weight Heparins by Capillary Electrophoresis. Analytical Biochemistry, 1993, 213, 120-127. | 2.4 | 95 |
| 7 | Cytotoxic Cell Granule-mediated Apoptosis. Journal of Biological Chemistry, 2002, 277, 49523-49530. | 3.4 | 93 |
| 8 | Solution NMR characterization of chemokine CXCL8/IL-8 monomer and dimer binding to glycosaminoglycans: structural plasticity mediates differential binding interactions. Biochemical Journal, 2015, 472, 121-133. | 3.7 | 91 |
| 9 | Assessing the Structural Integrity of a Lyophilized Protein in Organic Solvents. Journal of the American Chemical Society, 1995, 117, 3940-3945. | 13.7 | 89 |
| 10 | 1,2-Dithiole-3-Ones as Potent Inhibitors of the Bacterial 3-Ketoacyl Acyl Carrier Protein Synthase III (FabH). Antimicrobial Agents and Chemotherapy, 2004, 48, 3093-3102. | 3.2 | 88 |
| 11 | Discovering small-molecule therapeutics against SARS-CoV-2. Drug Discovery Today, 2020, 25, 1535-1544. | 6.4 | 85 |
| 12 | Sulfated Pentagalloylglucoside Is a Potent, Allosteric, and Selective Inhibitor of Factor XIa. Journal of Medicinal Chemistry, 2013, 56, 867-878. | 6.4 | 81 |
| 13 | Mechanism of Heparin Activation of Antithrombin:Â Evidence for an Induced-Fit Model of Allosteric Activation Involving Two Interaction Subsitesâ€. Biochemistry, 1998, 37, 13033-13041. | 2.5 | 73 |
| 14 | A Novel Allosteric Pathway of Thrombin Inhibition. Journal of Biological Chemistry, 2007, 282, 31891-31899. | 3.4 | 70 |
| 15 | Rapid and efficient microwave-assisted synthesis of highly sulfated organic scaffolds. Tetrahedron Letters, 2007, 48, 6754-6758. | 1.4 | 69 |
| 16 | Finding a Needle in a Haystack:Â Development of a Combinatorial Virtual Screening Approach for Identifying High Specificity Heparin/Heparan Sulfate Sequence(s). Journal of Medicinal Chemistry, 2006, 49, 3553-3562. | 6.4 | 68 |
| 17 | So you think computational approaches to understanding glycosaminoglycanâ€"protein interactions are too dry and too rigid? Think again!. Current Opinion in Structural Biology, 2018, 50, 91-100. | 5.7 | 68 |
| 18 | Recent Advances on Plasmin Inhibitors for the Treatment of Fibrinolysisâ€Related Disorders. Medicinal Research Reviews, 2014, 34, 1168-1216. | 10.5 | 65 |

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|---|---|---|---|
| 19 | Protein Structure in the Lyophilized State: A Hydrogen Isotope Exchange/NMR Study with Bovine Pancreatic Trypsin Inhibitor. Journal of the American Chemical Society, 1994, 116, 9420-9422. | 13.7 | 61 |
| 20 | Novel chemo-enzymatic oligomers of cinnamic acids as direct and indirect inhibitors of coagulation proteinases. Bioorganic and Medicinal Chemistry, 2006, 14, 7988-7998. | 3.0 | 59 |
| 21 | Factor XIa inhibitors: A review of the patent literature. Expert Opinion on Therapeutic Patents, 2016, 26, 323-345. | 5.0 | 58 |
| 22 | Synthesis of Biologically Relevant Biflavanoids â€“ A Review. Chemistry and Biodiversity, 2007, 4, 2495-2527. | 2.1 | 54 |
| 23 | A Hexasaccharide Containing Rare 2â€Oâ€Sulfateâ€Glucuronic Acid Residues Selectively Activates Heparin Cofactor II. Angewandte Chemie - International Edition, 2017, 56, 2312-2317. | 13.8 | 54 |
| 24 | Antithrombin III Phenylalanines 122 and 121 Contribute to Its High Affinity for Heparin and Its Conformational Activation. Journal of Biological Chemistry, 2003, 278, 15941-15950. | 3.4 | 52 |
| 25 | A Nanosensor for Ultrasensitive Detection of Oversulfated Chondroitin Sulfate Contaminant in Heparin. Journal of the American Chemical Society, 2014, 136, 554-557. | 13.7 | 51 |
| 26 | Viral Inhibition Studies on Sulfated Lignin, a Chemically Modified Biopolymer and a Potential Mimic of Heparan Sulfate. Biomacromolecules, 2007, 8, 1759-1763. | 5.4 | 49 |
| 27 | Designing Allosteric Inhibitors of Factor XIa. Lessons from the Interactions of Sulfated Pentagalloylglucopyranosides. Journal of Medicinal Chemistry, 2014, 57, 4805-4818. | 6.4 | 49 |
| 28 | Interaction of Designed Sulfated Flavanoids with Antithrombin:Â Lessons on the Design of Organic Activators. Journal of Medicinal Chemistry, 2002, 45, 4460-4470. | 6.4 | 48 |
| 29 | Rational Design of Potent, Small, Synthetic Allosteric Inhibitors of Thrombin. Journal of Medicinal Chemistry, 2011, 54, 5522-5531. | 6.4 | 48 |
| 30 | Designing Allosteric Regulators of Thrombin. Exosite 2 Features Multiple Subsites That Can Be Targeted by Sulfated Small Molecules for Inducing Inhibition. Journal of Medicinal Chemistry, 2013, 56, 5059-5070. | 6.4 | 48 |
| 31 | Molecular Basis of Chemokine CXCL5-Glycosaminoglycan Interactions. Journal of Biological Chemistry, 2016, 291, 20539-20550. | 3.4 | 47 |
| 32 | Designing Small, Nonsugar Activators of Antithrombin Using Hydropathic Interaction Analyses. Journal of Medicinal Chemistry, 2002, 45, 1233-1243. | 6.4 | 46 |
| 33 | Low molecular weight dermatan sulfate as an antithrombotic agent Structure-activity relationship studies. Biochemical Pharmacology, 1994, 47, 1241-1252. | 4.4 | 45 |
| 34 | On the Specificity of Heparin/Heparan Sulfate Binding to Proteins. Anion-Binding Sites on Antithrombin and Thrombin Are Fundamentally Different. PLoS ONE, 2012, 7, e48632. | 2.5 | 45 |
| 35 | Importance of Lysine 125 for Heparin Binding and Activation of Antithrombin. Biochemistry, 2002, 41, 4779-4788. | 2.5 | 44 |
| 36 | Role of Arginine 129 in Heparin Binding and Activation of Antithrombin. Journal of Biological Chemistry, 2000, 275, 18976-18984. | 3.4 | 42 |

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| 37 | A Simple Method for Discovering Druggable, Specific Glycosaminoglycan-Protein Systems. Elucidation of Key Principles from Heparin/Heparan Sulfate-Binding Proteins. PLoS ONE, 2015, 10, e0141127. | 2.5 | 40 |
| 38 | A Unique Nonsaccharide Mimetic of Heparin Hexasaccharide Inhibits Colon Cancer Stem Cells via p38 MAP Kinase Activation. Molecular Cancer Therapeutics, 2019, 18, 51-61. | 4.1 | 39 |
| 39 | Strategy for the sequence analysis of heparin. Glycobiology, 1995, 5, 765-774. | 2.5 | 38 |
| 40 | Interaction of Antithrombin with Sulfated, Low Molecular Weight Lignins. Journal of Biological Chemistry, 2009, 284, 20897-20908. | 3.4 | 38 |
| 41 | Understanding Dermatan Sulfateâ^'Heparin Cofactor II Interaction through Virtual Library Screening. ACS Medicinal Chemistry Letters, 2010, 1, 281-285. | 2.8 | 38 |
| 42 | Discovery of Allosteric Modulators of Factor XIa by Targeting Hydrophobic Domains Adjacent to Its Heparin-Binding Site. Journal of Medicinal Chemistry, 2013, 56, 2415-2428. | 6.4 | 38 |
| 43 | Toward a robust computational screening strategy for identifying glycosaminoglycan sequences that display high specificity for target proteins. Glycobiology, 2014, 24, 1323-1333. | 2.5 | 38 |
| 44 | Allosteric inhibition of factor XIa. Sulfated non-saccharide glycosaminoglycan mimetics as promising anticoagulants. Thrombosis Research, 2015, 136, 379-387. | 1.7 | 38 |
| 45 | Nonsulfated, Cinnamic Acid-Based Lignins are Potent Antagonists of HSV-1 Entry into Cells. Biomacromolecules, 2010, 11, 1412-1416. | 5.4 | 37 |
| 46 | Designing Allosteric Regulators of Thrombin. Monosulfated Benzofuran Dimers Selectively Interact With Arg173 of Exosite 2 to Induce Inhibition. Journal of Medicinal Chemistry, 2012, 55, 6888-6897. | 6.4 | 37 |
| 47 | Synthetic, Non-saccharide, Glycosaminoglycan Mimetics Selectively Target Colon Cancer Stem Cells. ACS Chemical Biology, 2014, 9, 1826-1833. | 3.4 | 37 |
| 48 | First steps in the direction of synthetic, allosteric, direct inhibitors of thrombin and factor Xa. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 4126-4129. | 2.2 | 36 |
| 49 | Serpinâ€"Glycosaminoglycan Interactions. Methods in Enzymology, 2011, 501, 105-137. | 1.0 | 36 |
| 50 | Sulfation Patterns Determine Cellular Internalization of Heparin-Like Polysaccharides. Molecular Pharmaceutics, 2013, 10, 1442-1449. | 4.6 | 36 |
| 51 | Exploring new non-sugar sulfated molecules as activators of antithrombin. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 679-683. | 2.2 | 34 |
| 52 | Molecular principles for heparin oligosaccharideâ€"based inhibition of neutrophil elastase in cystic fibrosis. Journal of Biological Chemistry, 2018, 293, 12480-12490. | 3.4 | 34 |
| 53 | Heparan sulfate hexasaccharide selectively inhibits cancer stem cells self-renewal by activating p38 MAP kinase. Oncotarget, 2016, 7, 84608-84622. | 1.8 | 34 |
| 54 | Designing Nonsaccharide, Allosteric Activators of Antithrombin for Accelerated Inhibition of Factor Xa. Journal of Medicinal Chemistry, 2011, 54, 6125-6138. | 6.4 | 33 |

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| 55 | Solution structure of CXCL13 and heparan sulfate binding show that GAG binding site and cellular signalling rely on distinct domains. Open Biology, 2017, 7, 170133. | 3.6 | 33 |
| 56 | Novel low molecular weight lignins as potential anti-emphysema agents: InÂvitro triple inhibitory activity against elastase, oxidation andÂinflammation. Pulmonary Pharmacology and Therapeutics, 2013, 26, 296-304. | 2.6 | 32 |
| 57 | Allosteric Partial Inhibition of Monomeric Proteases. Sulfated Coumarins Induce Regulation, not just Inhibition, of Thrombin. Scientific Reports, 2016, 6, 24043. | 3.3 | 32 |
| 58 | Structural Insights Into How Proteoglycans Determine Chemokine-CXCR1/CXCR2 Interactions: Progress and Challenges. Frontiers in Immunology, 2020, 11, 660. | 4.8 | 32 |
| 59 | Training the next generation of biomedical investigators in glycosciences. Journal of Clinical Investigation, 2016, 126, 405-408. | 8.2 | 32 |
| 60 | Crystal Structures of Influenza A Virus Matrix Protein M1: Variations on a Theme. PLoS ONE, 2014, 9, e109510. | 2.5 | 32 |
| 61 | Structure elucidation of a novel acidic tetrasaccharide and hexasaccharide derived from a chemically modified heparin. Carbohydrate Research, 1993, 241, 249-259. | 2.3 | 31 |
| 62 | Molecular Weight of Heparin Using 13C Nuclear Magnetic Resonance Spectroscopy. Journal of Pharmaceutical Sciences, 1995, 84, 212-215. | 3.3 | 31 |
| 63 | Synthesis of per-sulfated flavonoids using 2,2,2-trichloro ethyl protecting group and their factor Xa inhibition potential. Bioorganic and Medicinal Chemistry, 2005, 13, 1783-1789. | 3.0 | 31 |
| 64 | Sulfated, low-molecular-weight lignins are potent inhibitors of plasmin, in addition to thrombin and factor Xa: Novel opportunity for controlling complex pathologies. Thrombosis and Haemostasis, 2010, 103, 507-515. | 3.4 | 30 |
| 65 | Sulfated low molecular weight lignins, allosteric inhibitors of coagulation proteinases via the heparin binding site, significantly alter the active site of thrombin and factor xa compared to heparin. Thrombosis Research, 2014, 134, 1123-1129. | 1.7 | 30 |
| 66 | Mucoadhesive role of tamarind xyloglucan on inflammation attenuates ulcerative colitis. Journal of Functional Foods, 2018, 47, 1-10. | 3.4 | 30 |
| 67 | Antithrombin Activation by Nonsulfated, Non-Polysaccharide Organic Polymer. Journal of Medicinal Chemistry, 2005, 48, 1269-1273. | 6.4 | 29 |
| 68 | The promise of sulfated synthetic small molecules as modulators of glycosaminoglycan function. Future Medicinal Chemistry, 2013, 5, 1363-1366. | 2.3 | 28 |
| 69 | Potent, Selective, Allosteric Inhibition of Human Plasmin by Sulfated Non-Saccharide Glycosaminoglycan Mimetics. Journal of Medicinal Chemistry, 2017, 60, 641-657. | 6.4 | 28 |
| 70 | On designing non-saccharide, allosteric activators of antithrombin. European Journal of Medicinal Chemistry, 2009, 44, 2626-2631. | 5.5 | 27 |
| 71 | Inhibition of Herpes Simplex Virus-1 Entry into Human Cells by Nonsaccharide Glycosaminoglycan Mimetics. ACS Medicinal Chemistry Letters, 2018, 9, 797-802. | 2.8 | 27 |
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| 73 | Structural Characterization of a Serendipitously Discovered Bioactive Macromolecule, Lignin Sulfate. Biomacromolecules, 2005, 6, 2822-2832. | 5.4 | 25 |
| 74 | Sulfated, low molecular weight lignins inhibit a select group of heparin-binding serine proteases. Biochemical and Biophysical Research Communications, 2012, 417, 382-386. | 2.1 | 25 |
| 75 | Roles of N-Terminal Region Residues Lys11, Arg13, and Arg24 of Antithrombin in Heparin Recognition and in Promotion and Stabilization of the Heparin-Induced Conformational Changeâ€. Biochemistry, 2004, 43, 675-683. | 2.5 | 24 |
| 76 | Mechanism of Poly(acrylic acid) Acceleration of Antithrombin Inhibition of Thrombin:Â Implications for the Design of Novel Heparin Mimics. Journal of Medicinal Chemistry, 2005, 48, 5360-5368. | 6.4 | 24 |
| 77 | Allosteric Inhibition of Human Factor XIa: Discovery of Monosulfated Benzofurans as a Class of Promising Inhibitors. Journal of Medicinal Chemistry, 2014, 57, 3559-3569. | 6.4 | 24 |
| 78 | Molecular dynamics simulations to understand glycosaminoglycan interactions in the free- and protein-bound states. Current Opinion in Structural Biology, 2022, 74, 102356. | 5.7 | 23 |
| 79 | Characterization of the plasma and blood anticoagulant potential of structurally and mechanistically novel oligomers of 4-hydroxycinnamic acids. Blood Coagulation and Fibrinolysis, 2009, 20, 27-34. | 1.0 | 22 |
| 80 | Targeting the GPIbÎ± Binding Site of Thrombin To Simultaneously Induce Dual Anticoagulant and Antiplatelet Effects. Journal of Medicinal Chemistry, 2014, 57, 3030-3039. | 6.4 | 22 |
| 81 | Plasmin Regulation through Allosteric, Sulfated, Small Molecules. Molecules, 2015, 20, 608-624. | 3.8 | 22 |
| 82 | 6-Hydroxyflavone and Derivatives Exhibit Potent Anti-Inflammatory Activity among Mono-, Di- and Polyhydroxylated Flavones in Kidney Mesangial Cells. PLoS ONE, 2015, 10, e0116409. | 2.5 | 22 |
| 83 | A molecular dynamics-based algorithm for evaluating the glycosaminoglycan mimicking potential of synthetic, homogenous, sulfated small molecules. PLoS ONE, 2017, 12, e0171619. | 2.5 | 22 |
| 84 | A synthetic heparin mimetic that allosterically inhibits factor XIaÂand reduces thrombosis in vivo without enhanced risk of bleeding. Journal of Thrombosis and Haemostasis, 2019, 17, 2110-2122. | 3.8 | 22 |
| 85 | On the Selectivity of Heparan Sulfate Recognition by SARS-CoV-2 Spike Glycoprotein. ACS Medicinal Chemistry Letters, 2021, 12, 1710-1717. | 2.8 | 22 |
| 86 | Identification of the site of binding of sulfated, low molecular weight lignins on thrombin. Biochemical and Biophysical Research Communications, 2011, 413, 348-352. | 2.1 | 21 |
| 87 | Perspective on computational simulations of glycosaminoglycans. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2019, 9, e1388. | 14.6 | 21 |
| 88 | Polymeric fluorescent heparin as one-step FRET substrate of human heparanase. Carbohydrate Polymers, 2019, 205, 385-391. | 10.2 | 21 |
| 89 | Study of physico-chemical properties of novel highly sulfated, aromatic, mimetics of heparin and heparan sulfate. Journal of Pharmaceutical Sciences, 2010, 99, 1207-1216. | 3.3 | 20 |
| 90 | Transforming growth factor-Î²<sub>2</sub>is sequestered in preterm human milk by chondroitin sulfate proteoglycans. American Journal of Physiology - Renal Physiology, 2015, 309, G171-G180. | 3.4 | 20 |

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| 91 | 2-O, 3-O Desulfated Heparin Blocks High Mobility Group Box 1 Release by Inhibition of p300 Acetyltransferase Activity. American Journal of Respiratory Cell and Molecular Biology, 2017, 56, 90-98. | 2.9 | 20 |
| 92 | Importance of Tryptophan 49 of Antithrombin in Heparin Binding and Conformational Activation. Biochemistry, 2005, 44, 11660-11668. | 2.5 | 19 |
| 93 | A capillary electrophoretic method for fingerprinting low molecular weight heparins. Analytical Biochemistry, 2008, 380, 229-234. | 2.4 | 19 |
| 94 | Interaction of Thrombin with Sucrose Octasulfate. Biochemistry, 2011, 50, 6973-6982. | 2.5 | 19 |
| 95 | Potent direct inhibitors of factor Xa based on the tetrahydroisoquinoline scaffold. European Journal of Medicinal Chemistry, 2012, 54, 771-783. | 5.5 | 19 |
| 96 | Electronically rich N-substituted tetrahydroisoquinoline 3-carboxylic acid esters:Âconcise synthesis and conformational studies. Tetrahedron, 2012, 68, 2027-2040. | 1.9 | 19 |
| 97 | Estimating glycosaminoglycanâ€“protein interaction affinity: water dominates the specific antithrombinâ€“heparin interaction. Glycobiology, 2016, 26, 1041-1047. | 2.5 | 19 |
| 98 | Sulfotransferase and Heparanase: Remodeling Engines in Promoting Virus Infection and Disease Development. Frontiers in Pharmacology, 2018, 9, 1315. | 3.5 | 19 |
| 99 | Molecular weight of low molecular weight heparins by 13C nuclear magnetic resonance spectroscopy. Carbohydrate Research, 1994, 255, 193-212. | 2.3 | 18 |
| 100 | Discovery of novel sulfonated small molecules that inhibit vascular tube formation. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 4467-4470. | 2.2 | 18 |
| 101 | Allosteric Inhibition of Factor XIIIa. Non-Saccharide Glycosaminoglycan Mimetics, but Not Glycosaminoglycans, Exhibit Promising Inhibition Profile. PLoS ONE, 2016, 11, e0160189. | 2.5 | 18 |
| 102 | Lysines and Arginines play non-redundant roles in mediating chemokine-glycosaminoglycan interactions. Scientific Reports, 2018, 8, 12289. | 3.3 | 18 |
| 103 | Highly stereoselective synthesis of spiro-Î±-methylene-Î³-butyrolactones: the role of Î±-hydroxy substitution. Journal of the Chemical Society Perkin Transactions 1, 1998, , 843-846. | 0.9 | 17 |
| 104 | Hydropathic interaction analyses of small organic activators binding to antithrombin. Bioorganic and Medicinal Chemistry, 2004, 12, 633-640. | 3.0 | 17 |
| 105 | Heparin interaction with a receptor on hyperglycemic dividing cells prevents intracellular hyaluronan synthesis and autophagy responses in models of type 1 diabetes. Matrix Biology, 2015, 48, 36-41. | 3.6 | 17 |
| 106 | Heparin depolymerization by immobilized heparinase: A review. International Journal of Biological Macromolecules, 2017, 99, 721-730. | 7.5 | 17 |
| 107 | A small group of sulfated benzofurans induces steady-state submaximal inhibition of thrombin. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 1101-1105. | 2.2 | 17 |
| 108 | Chemoenzymatically Prepared Heparan Sulfate Containing Rare 2-O-Sulfonated Glucuronic Acid Residues. ACS Chemical Biology, 2015, 10, 1485-1494. | 3.4 | 16 |

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| 109 | Designing â€œHigh-Affinity, High-Specificityâ€•Glycosaminoglycan Sequences Through Computerized Modeling. Methods in Molecular Biology, 2015, 1229, 289-314. | 0.9 | 16 |
| 110 | On scaffold hopping: Challenges in the discovery of sulfated small molecules as mimetics of glycosaminoglycans. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 355-359. | 2.2 | 15 |
| 111 | Tamarind xyloglucan attenuates dextran sodium sulfate induced ulcerative colitis: Role of antioxidation. Journal of Functional Foods, 2018, 42, 327-338. | 3.4 | 15 |
| 112 | Synthesis of 2'-(3Î±-benzyloxy-24-norcholan-23-yl)-2',4',4'-trimethyl- 4',5'-dihydrooxazoline-n-oxyl - a new potential spin probe for biomembranes. Tetrahedron, 1992, 48, 133-148. | 1.9 | 14 |
| 113 | An update on recent patents on thrombin inhibitors (2010 â€“ 2013). Expert Opinion on Therapeutic Patents, 2014, 24, 47-67. | 5.0 | 14 |
| 114 | On the Process of Discovering Leads That Target the Heparin-Binding Site of Neutrophil Elastase in the Sputum of Cystic Fibrosis Patients. Journal of Medicinal Chemistry, 2019, 62, 5501-5511. | 6.4 | 14 |
| 115 | A synthetic glycosaminoglycan mimetic blocks HSV-1 infection in human iris stromal cells. Antiviral Research, 2019, 161, 154-162. | 4.1 | 14 |
| 116 | Combinatorial virtual library screening analysis of antithrombin binding oligosaccharide motif generation by heparan sulfate 3-O-Sulfotransferase 1. Computational and Structural Biotechnology Journal, 2020, 18, 933-941. | 4.1 | 13 |
| 117 | Capillary electrophoresis of highly sulfated flavanoids and flavonoids. Analytical Biochemistry, 2005, 336, 316-322. | 2.4 | 12 |
| 118 | Glycosaminoglycanâ€“Protein Interaction Studies Using Fluorescence Spectroscopy. Methods in Molecular Biology, 2015, 1229, 335-353. | 0.9 | 12 |
| 119 | Recent Research Developments in the Direct Inhibition of Coagulation Proteinases â€“ Inhibitors of the Initiation Phase. Cardiovascular and Hematological Agents in Medicinal Chemistry, 2008, 6, 323-336. | 1.0 | 12 |
| 120 | Capillary electrophoretic study of small, highly sulfated, nonâ€sugar molecules interacting with antithrombin. Electrophoresis, 2009, 30, 1544-1551. | 2.4 | 11 |
| 121 | Maintaining pH-dependent conformational flexibility of M1 is critical for efficient influenza A virus replication. Emerging Microbes and Infections, 2017, 6, 1-11. | 6.5 | 11 |
| 122 | Synthesis of Glycosaminoglycan Mimetics Through Sulfation of Polyphenols. Methods in Molecular Biology, 2015, 1229, 49-67. | 0.9 | 11 |
| 123 | New Approaches for the Preparation of Hydrophobic Heparin Derivatives. Journal of Pharmaceutical Sciences, 1994, 83, 1034-1039. | 3.3 | 10 |
| 124 | Conformational analysis of sucrose octasulfate by high resolution nuclear magnetic resonance spectroscopy. Carbohydrate Research, 1995, 275, 391-401. | 2.3 | 10 |
| 125 | Differential behavior of (25R)-5,6-epoxyspirostan-22Î±-O-3Î²-ol and (25R)-5,6-epoxyspirostan-22Î±-O-3Î²,4Î²-diol toward Dowex. Steroids, 1996, 61, 290-295. | 1.8 | 10 |
| 126 | Sulfated Caffeic Acid Dehydropolymer Attenuates Elastase and Cigarette Smoke Extractâ€“induced Emphysema in Rats: Sustained Activity and a Need of Pulmonary Delivery. Lung, 2014, 192, 481-492. | 3.3 | 10 |

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| 127 | Broad Spectrum Anti-Influenza Agents by Inhibiting Self-Association of Matrix Protein 1. Scientific Reports, 2016, 6, 32340. | 3.3 | 10 |
| 128 | Rigorous analysis of free solution glycosaminoglycan dynamics using simple, new tools. Glycobiology, 2020, 30, 516-527. | 2.5 | 10 |
| 129 | Metabolic engineering of non-pathogenic Escherichia coli strains for the controlled production of low molecular weight heparosan and size-specific heparosan oligosaccharides. Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129765. | 2.4 | 10 |
| 130 | On The Protection of 3Î±-Hydroxy Group of A/BcisSteroids. Synthetic Communications, 1991, 21, 757-770. | 2.1 | 9 |
| 131 | Investigation of the heparinâ€“thrombin interaction by dynamic force spectroscopy. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 1099-1106. | 2.4 | 9 |
| 132 | A Hexasaccharide Containing Rare 2â€Oâ€Sulfateâ€Glucuronic Acid Residues Selectively Activates Heparin Cofactor II. Angewandte Chemie, 2017, 129, 2352-2357. | 2.0 | 9 |
| 133 | Sulfated dehydropolymer of caffeic acid: InÂvitro anti-lung cell death activity and inÂvivo intervention in emphysema induced by VEGF receptor blockade. Pulmonary Pharmacology and Therapeutics, 2017, 45, 181-190. | 2.6 | 9 |
| 134 | A Synthetic, Small, Sulfated Agent Is a Promising Inhibitor of Chlamydia spp. Infection in vivo. Frontiers in Microbiology, 2019, 9, 3269. | 3.5 | 9 |
| 135 | High dose acetaminophen inhibits STAT3 and has free radical independent anti-cancer stem cell activity. Neoplasia, 2021, 23, 348-359. | 5.3 | 9 |
| 136 | Combinatorial Virtual Library Screening Study of Transforming Growth Factor-Î²2â€“Chondroitin Sulfate System. International Journal of Molecular Sciences, 2021, 22, 7542. | 4.1 | 9 |
| 137 | The Compensatory G88R Change Is Essential in Restoring the Normal Functions of Influenza A/WSN/33 Virus Matrix Protein 1 with a Disrupted Nuclear Localization Signal. Journal of Virology, 2013, 87, 345-353. | 3.4 | 8 |
| 138 | Substantial non-electrostatic forces are needed to induce allosteric disruption of thrombinâ€™s active site through exosite 2. Biochemical and Biophysical Research Communications, 2014, 452, 813-816. | 2.1 | 8 |
| 139 | Comparative analysis of INLIGHTâ„¢-labeled enzymatically depolymerized heparin by reverse-phase chromatography and high-performance mass spectrometry. Analytical and Bioanalytical Chemistry, 2017, 409, 499-509. | 3.7 | 8 |
| 140 | Novel heparin mimetics reveal cooperativity between exosite 2 and sodium-binding site of thrombin. Thrombosis Research, 2018, 165, 61-67. | 1.7 | 8 |
| 141 | Discovery of Sulfated Small Molecule Inhibitors of Matrix Metalloproteinase-8. Biomolecules, 2020, 10, 1166. | 4.0 | 8 |
| 142 | A simple high-yielding synthesis of spiro[cyclopropane-1,2â€²-steroids]. Liebigs Annalen Der Chemie, 1990, 1990, 711-712. | 0.8 | 7 |
| 143 | Reductive Alkylation of Nitrochromenes. Synthesis of Spiro-[N-hydroxy]-lactams. Synthetic Communications, 1990, 20, 1733-1742. | 2.1 | 7 |
| 144 | Conformational analysis of A and B rings in 2-, 4-, and 6-bromosubstituted steroidal 4-en-3-ones by nuclear magnetic resonance. Steroids, 1993, 58, 170-177. | 1.8 | 7 |

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| 145 | Visualizing antithrombin-binding 3-‹i›O‹/i›-sulfated heparan sulfate motifs on cell surfaces. Chemical Communications, 2020, 56, 14423-14426. | 4.1 | 7 |
| 146 | Inhibition of Human Cytomegalovirus Entry into Host Cells through A Pleiotropic Small Molecule. International Journal of Molecular Sciences, 2020, 21, 1676. | 4.1 | 7 |
| 147 | Immobilization alters heparin cleaving properties of heparinase I. Glycobiology, 2017, 27, 994-998. | 2.5 | 6 |
| 148 | Studies on fragment-based design of allosteric inhibitors of human factor XIa. Bioorganic and Medicinal Chemistry, 2020, 28, 115762. | 3.0 | 6 |
| 149 | In-Depth Molecular Dynamics Study of All Possible Chondroitin Sulfate Disaccharides Reveals Key Insight into Structural Heterogeneity and Dynamism. Biomolecules, 2022, 12, 77. | 4.0 | 6 |
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