William R Roush

List of Publications by Year
in descending order

64 papers	3,493 citations	159585 30 h-index	144013 57 g-index
68 all docs	68 docs citations	68 times ranked	5081 citing authors

#	Article	IF	Citations
1	Systems analysis of intracellular pH vulnerabilities for cancer therapy. Nature Communications, 2018, 9, 2997.	12.8	277
2	Vinyl Sulfonate Esters and Vinyl Sulfonamides:Â Potent, Irreversible Inhibitors of Cysteine Proteases. Journal of the American Chemical Society, 1998, 120, 10994-10995.	13.7	196
3	Restricting Glycolysis Preserves T Cell Effector Functions and Augments Checkpoint Therapy. Cell Reports, 2019, 29, 135-150.e9.	6.4	189
4	Therapeutic Targeting of CDK12/CDK13 in Triple-Negative Breast Cancer. Cancer Cell, 2019, 36, 545-558.e7.	16.8	176
5	Enantioselective Synthesis of 1,5-anti- and 1,5-syn-Diols Using a Highly Diastereoselective One-Pot Double Allylboration Reaction Sequence. Journal of the American Chemical Society, 2002, 124, 13644-13645.	13.7	166
6	Structure-Activity Relationships for Inhibition of Cysteine Protease Activity and Development of Plasmodium falciparum by Peptidyl Vinyl Sulfones. Antimicrobial Agents and Chemotherapy, 2003, 47, 154-160.	3.2	157
7	Active site mapping, biochemical properties and subcellular localization of rhodesain, the major cysteine protease of Trypanosoma brucei rhodesiense. Molecular and Biochemical Parasitology, 2001, 118, 61-73.	1.1	155
8	Advancing Biological Understanding and Therapeutics Discovery with Small-Molecule Probes. Cell, 2015, 161, 1252-1265.	28.9	135
9	Relative Rates of Michael Reactions of 2â€˜-(Phenethyl)thiol with Vinyl Sulfones, Vinyl Sulfonate Esters, and Vinyl Sulfonamides Relevant to Vinyl Sulfonyl Cysteine Protease Inhibitors. Organic Letters, 2003, 5, 1967-1970.	4.6	103
10	A target within the target: probing cruzainâ€™s P1â€² site to define structural determinants for the Chagasâ€™ disease protease. Structure, 2000, 8, 831-840.	3.3	100
11	Targeting Ergosterol Biosynthesis in Leishmania donovani: Essentiality of Sterol 14alpha-demethylase. PLoS Neglected Tropical Diseases, 2015, 9, e0003588.	3.0	90
12	Stereoselective Synthesis of Î³-Substituted (Z)-Allylic Boranes via Kinetically Controlled Hydroboration of Allenes with 10-TMS-9-borabicyclo[3.3.2]decane. Journal of the American Chemical Society, 2009, 131, 14174-14175.	13.7	87
13	Endogenous and Synthetic ABHD5 Ligands Regulate ABHD5-Perilipin Interactions and Lipolysis in Fat and Muscle. Cell Metabolism, 2015, 22, 851-860.	16.2	87
14	Potent second generation vinyl sulfonamide inhibitors of the trypanosomal cysteine protease cruzain. Bioorganic and Medicinal Chemistry Letters, 2001, 11, 2759-2762.	2.2	82
15	Identification of Histone Deacetylase Inhibitors with Benzoylhydrazide Scaffold that Selectively Inhibit Class I Histone Deacetylases. Chemistry and Biology, 2015, 22, 273-284.	6.0	80
16	Drug Strategies Targeting CYP51 in Neglected Tropical Diseases. Chemical Reviews, 2014, 114, 11242-11271.	47.7	74
17	Synthesis of the C(1)â€“C(25) Fragment of Amphidinol 3:â€‰ Application of the Double-Allylboration Reaction for Synthesis of 1,5-Diols. Organic Letters, 2005, 7, 1411-1414.	4.6	71
18	Hrr25/CK1Î´-directed release of Ltv1 from pre-40S ribosomes is necessary for ribosome assembly and cell growth. Journal of Cell Biology, 2015, 208, 745-759.	5.2	71

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19	Harnessing a catalytic lysine residue for the one-step preparation of homogeneous antibody-drug conjugates. Nature Communications, 2017, 8, 1112.	12.8	71
20	Development of highly selective casein kinase 1Î´/1Îµ (CK1Î´/Îµ) inhibitors with potent antiproliferative properties. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 4374-4380.	2.2	65
21	Therapeutic targeting of casein kinase 1Î´ in breast cancer. Science Translational Medicine, 2015, 7, 318ra202.	12.4	61
22	Stereoselective Synthesis of the C(1)â^'C(11) Fragment of Peloruside A. Organic Letters, 2005, 7, 3941-3944.	4.6	59
23	Synthesis of the C(43)â^'C(67) Fragment of Amphidinol 3. Organic Letters, 2005, 7, 5509-5512.	4.6	55
24	Enantioselective Synthesis of (Z)- and (E)-2-Methyl-1,5-anti-Pentenediols via an Allene Hydroborationâ€“Double-Allylboration Reaction Sequence. Journal of the American Chemical Society, 2013, 135, 9512-9517.	13.7	55
25	The dual PI3KÎ´/CK1Îµ inhibitor umbralisib exhibits unique immunomodulatory effects on CLL T cells. Blood Advances, 2020, 4, 3072-3084.	5.2	52
26	Rational Development of 4-Aminopyridyl-Based Inhibitors Targeting Trypanosoma cruzi CYP51 as Anti-Chagas Agents. Journal of Medicinal Chemistry, 2013, 56, 7651-7668.	6.4	43
27	4-Aminopyridyl-Based CYP51 Inhibitors as Anti-Trypanosoma cruzi Drug Leads with Improved Pharmacokinetic Profile and in Vivo Potency. Journal of Medicinal Chemistry, 2014, 57, 6989-7005.	6.4	43
28	Antiproliferation Activity of a Small Molecule Repressor of Liver Receptor Homolog 1. Molecular Pharmacology, 2015, 87, 296-304.	2.3	42
29	Enantio- and Diastereoselective Synthesis of (E)-1,5-syn-Diols: Application to the Synthesis of the C(23)â^'C(40) Fragment of Tetrafibricin. Organic Letters, 2011, 13, 1868-1871.	4.6	37
30	Structure-Based Design and Synthesis of Potent and Selective Matrix Metalloproteinase 13 Inhibitors. Journal of Medicinal Chemistry, 2017, 60, 5816-5825.	6.4	35
31	Functional Roles of Acetylated Histone Marks at Mouse Meiotic Recombination Hot Spots. Molecular and Cellular Biology, 2017, 37, .	2.3	35
32	Dual-mechanistic antibody-drug conjugate via site-specific selenocysteine/cysteine conjugation. Antibody Therapeutics, 2019, 2, 71-78.	1.9	35
33	Identification of novel, exosite-binding matrix metalloproteinase-13 inhibitor scaffolds. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 7180-7184.	2.2	30
34	Casein Kinase 1Î´ Is an APC/CCdh1 Substrate that Regulates Cerebellar Granule Cell Neurogenesis. Cell Reports, 2015, 11, 249-260.	6.4	30
35	Characterization of Selective Exosite-Binding Inhibitors of Matrix Metalloproteinase 13 That Prevent Articular Cartilage Degradation in Vitro. Journal of Medicinal Chemistry, 2014, 57, 9598-9611.	6.4	29
36	Synthesis and Evaluation of Oxyguanidine Analogues of the Cysteine Protease Inhibitor WRR-483 against Cruzain. ACS Medicinal Chemistry Letters, 2016, 7, 77-82.	2.8	26

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37	Development of a double allylboration reagent targeting 1,5-syn-(E)-diols: application to the synthesis of the C(23)â€“C(40) fragment of tetrafibricin. Tetrahedron, 2011, 67, 6497-6512.	1.9	25
38	Site-Selective Antibody Functionalization via Orthogonally Reactive Arginine and Lysine Residues. Cell Chemical Biology, 2019, 26, 1229-1239.e9.	5.2	25
39	Second Generation Triple-Helical Peptide Inhibitors of Matrix Metalloproteinases. Journal of Medicinal Chemistry, 2017, 60, 3814-3827.	6.4	24
40	4-aminopyridyl-based lead compounds targeting CYP51 prevent spontaneous parasite relapse in a chronic model and improve cardiac pathology in an acute model of Trypanosoma cruzi infection. PLoS Neglected Tropical Diseases, 2017, 11, e0006132.	3.0	24
41	Novel Pharmacological Probes Reveal ABHD5 as a Locus of Lipolysis Control in White and Brown Adipocytes. Journal of Pharmacology and Experimental Therapeutics, 2017, 363, 367-376.	2.5	23
42	Development of dual casein kinase 1Î´/1Îµ (CK1Î´/Îµ) inhibitors for treatment of breast cancer. Bioorganic and Medicinal Chemistry, 2018, 26, 590-602.	3.0	23
43	Casein Kinase 1Î´-dependent Wee1 Protein Degradation. Journal of Biological Chemistry, 2014, 289, 18893-18903.	3.4	22
44	Binding Mode and Potency of N-Indolyloxopyridinyl-4-aminopropanyl-Based Inhibitors Targeting Trypanosoma cruzi CYP51. Journal of Medicinal Chemistry, 2014, 57, 10162-10175.	6.4	22
45	In Silico HTS and Structure Based Optimization of Indazole-Derived ULK1 Inhibitors. ACS Medicinal Chemistry Letters, 2017, 8, 1258-1263.	2.8	22
46	Enantio- and Diastereoselective Synthesis ofN-Acetyl Dihydrotetrafibricin Methyl Ester. Journal of the American Chemical Society, 2013, 135, 5340-5343.	13.7	20
47	R-Configuration of 4-Aminopyridyl-Based Inhibitors of CYP51 Confers Superior Efficacy Against Trypanosoma cruzi. ACS Medicinal Chemistry Letters, 2014, 5, 434-439.	2.8	18
48	Expanding the Binding Envelope of CYP51 Inhibitors Targeting Trypanosoma cruzi with 4â€Aminopyridylâ€Based Sulfonamide Derivatives. ChemBioChem, 2014, 15, 1111-1120.	2.6	18
49	Enantio- and Diastereoselective Synthesis of 1,5-syn-(Z)-Amino Alcohols via Imine Double Allylboration: Synthesis of trans-1,2,3,6-Tetrahydropyridines and Total Synthesis of Andrachcine. Organic Letters, 2017, 19, 2646-2649.	4.6	17
50	Human Serum Albumin Domain I Fusion Protein for Antibody Conjugation. Bioconjugate Chemistry, 2016, 27, 2271-2275.	3.6	15
51	Stolonidiol: Synthesis, Target Identification, and Mechanism for Choline Acetyltransferase Activation. Journal of the American Chemical Society, 2017, 139, 5865-5869.	13.7	15
52	Development of matrix metalloproteinase-13 inhibitors â€“ A structure-activity/structure-property relationship study. Bioorganic and Medicinal Chemistry, 2018, 26, 4984-4995.	3.0	14
53	Host-Derived Matrix Metalloproteinase-13 Activity Promotes Multiple Myelomaâ€Induced Osteolysis and Reduces Overall Survival. Cancer Research, 2021, 81, 2415-2428.	0.9	13
54	Discovery of 2-arylquinazoline derivatives as a new class of ASK1 inhibitors. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 400-404.	2.2	10

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55	Targeting Casein Kinase 1 Delta Sensitizes Pancreatic and Bladder Cancer Cells to Gemcitabine Treatment by Upregulating Deoxycytidine Kinase. Molecular Cancer Therapeutics, 2020, 19, 1623-1635.	4.1	9
56	Druggable Hot Spots in the Schistosomiasis Cathepsin B1 Target Identified by Functional and Binding Mode Analysis of Potent Vinyl Sulfone Inhibitors. ACS Infectious Diseases, 2021, 7, 1077-1088.	3.8	9
57	An Engineered Arginine Residue of Unusual pH-Sensitive Reactivity Facilitates Site-Selective Antibody Conjugation. Biochemistry, 2021, 60, 1080-1087.	2.5	5
58	Exploiting the co-reliance of tumours upon transport of amino acids and lactate: Gln and Tyr conjugates of MCT1 inhibitors. MedChemComm, 2016, 7, 900-905.	3.4	4
59	Fluorometric High-Throughput Screening Assay for Secreted Phospholipases A2 Using Phospholipid Vesicles. Journal of Biomolecular Screening, 2016, 21, 713-721.	2.6	3
60	Sculpting a Uniquely Reactive Cysteine Residue for Site-Specific Antibody Conjugation. Bioconjugate Chemistry, 2022, 33, 1192-1200.	3.6	3
61	Discovery and Optimization of a Series of Sulfonamide Inverse Agonists for the Retinoic Acid Receptor-Related Orphan Receptor-Î±. Medicinal Chemistry, 2019, 15, 676-684.	1.5	2
62	CK1Î´: an exploitable vulnerability in breast cancer. Annals of Translational Medicine, 2016, 4, 474-474.	1.7	1
63	A CK1Î´/CK1Îµ-to-Wnt/Î²-Catenin Circuit Is a Therapeutic Vulnerability in Primary and Drug Resistant Multiple Myeloma. Blood, 2016, 128, 2094-2094.	1.4	0
64	Identification of Target Pathways Induced By the Multiple Myeloma Tumor Microenvironment Using Activity-Based Protein Profiling and Ex Vivo Protein Kinase Inhibitor Screening. Blood, 2016, 128, 3288-3288.	1.4	0