Amy R Howell

List of Publications by Year
in descending order

109 papers	4,449 citations	94433 37 h-index	118850 62 g-index
135 all docs	135 docs citations	135 times ranked	4429 citing authors

#	Article	IF	Citations
1	Efficient, Catalytic, Aerobic Oxidation of Alcohols with Octahedral Molecular Sieves. Angewandte Chemie - International Edition, 2001, 40, 4280-4283.	13.8	298
2	The Role of Lattice Oxygen in Selective Benzyl Alcohol Oxidation Using OMS-2 Catalyst: A Kinetic and Isotope-Labeling Study. Journal of Catalysis, 2002, 210, 46-52.	6.2	269
3	Recognition of Lyso-Phospholipids by Human Natural Killer T Lymphocytes. PLoS Biology, 2009, 7, e1000228.	5.6	203
4	Kinetics and Cellular Site of Glycolipid Loading Control the Outcome of Natural Killer T Cell Activation. Immunity, 2009, 30, 888-898.	14.3	159
5	T-bet concomitantly controls migration, survival, and effector functions during the development of VÎ±14i NKT cells. Blood, 2006, 107, 2797-2805.	1.4	136
6	Immunomodulatory lysophosphatidylserines are regulated by ABHD16A and ABHD12 interplay. Nature Chemical Biology, 2015, 11, 164-171.	8.0	123
7	A Molecular Basis for the Exquisite CD1d-Restricted Antigen Specificity and Functional Responses of Natural Killer T Cells. Immunity, 2011, 34, 327-339.	14.3	107
8	Recent Applications of Oxetanes in the Synthesis of Heterocyclic Compounds. Journal of Organic Chemistry, 2015, 80, 8489-8495.	3.2	107
9	3-Dimensional Submicron Polymerization of Acrylamide by Multiphoton Excitation of Xanthene Dyes. Macromolecules, 2000, 33, 1511-1513.	4.8	106
10	The T cell antigen receptor expressed by VÂ14i NKT cells has a unique mode of glycosphingolipid antigen recognition. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12254-12259.	7.1	90
11	T Cell Receptor CDR2Î² and CDR3Î² Loops Collaborate Functionally to Shape the iNKT Cell Repertoire. Immunity, 2009, 31, 60-71.	14.3	90
12	Synthesis and Evaluation of Sphinganine Analogues of KRN7000 and OCH. Journal of Organic Chemistry, 2005, 70, 10260-10270.	3.2	87
13	Multiphoton Excited Fabrication of Collagen Matrixes Cross-Linked by a Modified Benzophenone Dimer:Â Bioactivity and Enzymatic Degradation. Biomacromolecules, 2005, 6, 1465-1474.	5.4	86
14	A minimal binding footprint on CD1d-glycolipid is a basis for selection of the unique human NKT TCR. Journal of Experimental Medicine, 2008, 205, 939-949.	8.5	83
15	Improved Outcomes in NOD Mice Treated with a Novel Th2 Cytokine-Biasing NKT Cell Activator. Journal of Immunology, 2007, 178, 1415-1425.	0.8	81
16	The Preparation and Biological Significance of Phytosphingosines. Current Organic Chemistry, 2002, 6, 365-391.	1.6	71
17	Approaches to the preparation of sphinganines. Tetrahedron, 2004, 60, 11327-11347.	1.9	70
18	Production and characterization of monoclonal antibodies against complexes of the NKT cell ligand Î±-galactosylceramide bound to mouse CD1d. Journal of Immunological Methods, 2007, 323, 11-23.	1.4	65

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19	New Photoactivators for Multiphoton Excited Three-dimensional Submicron Cross-linking of Proteins: Bovine Serum Albumin and Type 1 CollagenÂ¶â€. Photochemistry and Photobiology, 2002, 76, 135.	2.5	62
20	Natural Sphingomonas Glycolipids Vary Greatly in Their Ability to Activate Natural Killer T Cells. Chemistry and Biology, 2008, 15, 654-664.	6.0	61
21	Preparation and Properties of 2-Methyleneoxetanes. Journal of Organic Chemistry, 1999, 64, 7074-7080.	3.2	55
22	Rhodiumâ€Catalyzed Transnitrilation of Aryl Boronic Acids with Dimethylmalononitrile. Angewandte Chemie - International Edition, 2016, 55, 326-330.	13.8	54
23	Straightforward Synthesis of Sphinganines via a Serine-derived Weinreb Amide. Journal of Organic Chemistry, 2004, 69, 3233-3235.	3.2	53
24	The molecular bases of Î´/Î±Î² T cellâ€“mediated antigen recognition. Journal of Experimental Medicine, 2014, 211, 2599-2615.	8.5	52
25	Synthesis ofd-erythro-Dihydrosphingosine andd-xylo-Phytosphingosine from a Serine-Derived 1,5-Dioxaspiro[3.2]hexane Template. Organic Letters, 2002, 4, 1719-1722.	4.6	50
26	Cross Metathesis of Î±-Methylene Lactones II:Â Î³- and Î´-Lactones. Organic Letters, 2007, 9, 1699-1701.	4.6	49
27	ABHD17 regulation of plasma membrane palmitoylation and N-Ras-dependent cancer growth. Nature Chemical Biology, 2021, 17, 856-864.	8.0	49
28	An Unanticipated Ring-Opening of 2-Methyleneoxetanes:Â A Fundamentally New Approach to the Preparation of Homopropargylic Alcohols. Journal of Organic Chemistry, 1998, 63, 6782-6783.	3.2	46
29	Adaptability of the semi-invariant natural killer T-cell receptor towards structurally diverse CD1d-restricted ligands. EMBO Journal, 2009, 28, 3579-3590.	7.8	45
30	Synthesis and evaluation of 3â€³- and 4â€³-deoxy and -fluoro analogs of the immunostimulatory glycolipid, KRN7000. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 4122-4125.	2.2	44
31	A Versatile Preparation of 2-Methyleneoxetanes. Journal of Organic Chemistry, 1996, 61, 7248-7249.	3.2	43
32	A CD1d-Dependent Antagonist Inhibits the Activation of Invariant NKT Cells and Prevents Development of Allergen-Induced Airway Hyperreactivity. Journal of Immunology, 2010, 184, 2107-2115.	0.8	43
33	Cross-metathesis of Î±-methylene-Î²-lactams: the first tetrasubstituted alkenes by CM. Tetrahedron Letters, 2009, 50, 1020-1022.	1.4	42
34	Mouse and human iNKT cell agonist Î²-mannosylceramide reveals a distinct mechanism of tumor immunity. Journal of Clinical Investigation, 2011, 121, 683-694.	8.2	41
35	Redox glycosidation: a new strategy for disaccharide synthesis. Journal of the American Chemical Society, 1989, 111, 1392-1396.	13.7	40
36	Unusual, Strained Heterocycles:â€‰ 3-Alkylidene-2-methyleneoxetanes from Moritaâ€“Baylisâ€“Hillman-type Adducts. Organic Letters, 2003, 5, 399-402.	4.6	40

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37	Natural killer T-cell autoreactivity leads to a specialized activation state. Blood, 2008, 112, 4128-4138.	1.4	39
38	Redox glycosidation via thionoester intermediates. Journal of Organic Chemistry, 1989, 54, 2275-2277.	3.2	37
39	Glycolipids that Elicit IFN-Î³-Biased Responses from Natural Killer T Cells. Chemistry and Biology, 2011, 18, 1620-1630.	6.0	37
40	VÎ²2 natural killer T cell antigen receptor-mediated recognition of CD1d-glycolipid antigen. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19007-19012.	7.1	36
41	The First General Synthesis of 1,5-Dioxaspiro[3.2]hexanes. Journal of Organic Chemistry, 1998, 63, 6098-6099.	3.2	34
42	Î±-S-GalCer: Synthesis and evaluation for iNKT cell stimulation. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 6374-6376.	2.2	34
43	Human and Mouse Type I Natural Killer T Cell Antigen Receptors Exhibit Different Fine Specificities for CD1d-Antigen Complex. Journal of Biological Chemistry, 2012, 287, 39139-39148.	3.4	34
44	Atypical natural killer T-cell receptor recognition of CD1dâ€“lipid antigens. Nature Communications, 2016, 7, 10570.	12.8	34
45	A Rapid Fluorescence-Based Assay for Classification of iNKT Cell Activating Glycolipids. Journal of the American Chemical Society, 2011, 133, 5198-5201.	13.7	33
46	Cross Metathesis with Strained Exocyclic Enones:â€‰ Synthesis of 3-Alkylideneoxetan-2-ones from 3-Methyleneoxetan-2-ones. Organic Letters, 2006, 8, 2139-2141.	4.6	32
47	OMSâ€2 for Aerobic, Catalytic, Oneâ€pot Alcohol Oxidationâ€Wittig Reactions: Efficient Access to Î±,Î²â€Unsaturated Esters. ChemCatChem, 2014, 6, 749-752.	3.7	32
48	Î±-Galactosylceramide Analogs with Weak Agonist Activity for Human iNKT Cells Define New Candidate Anti-Inflammatory Agents. PLoS ONE, 2010, 5, e14374.	2.5	31
49	Toward a Formal Synthesis of Laureatin: Unexpected Rearrangements Involving Cyclic Ether Nucleophiles. Journal of Organic Chemistry, 2012, 77, 7883-7890.	3.2	29
50	A 2-methyleneoxetane analog of orlistat demonstrating inhibition of porcine pancreatic lipase. Bioorganic and Medicinal Chemistry Letters, 1998, 8, 977-978.	2.2	28
51	Synthesis of epi-Oxetin via a Serine-Derived 2-Methyleneoxetane. Journal of Organic Chemistry, 2008, 73, 517-521.	3.2	28
52	Hydrocobaltation reactions of 1,3-dienes. Regioselective hydroxylation of myrcene to geraniol and to (Ã±)-linalool via allylcobaloxime intermediates. Journal of the Chemical Society Perkin Transactions 1, 1990, , 2715-2720.	0.9	27
53	Reductive cleavage of 2-methyleneoxetanes with lithium and 4,4â€²-di-tert-butylbiphenyl. Tetrahedron Letters, 2000, 41, 1855-1858.	1.4	27
54	Rhodiumâ€Catalyzed Addition of Aryl Boronic Acids to 2,2â€Disubstituted Malononitriles. Angewandte Chemie - International Edition, 2017, 56, 6999-7002.	13.8	27

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55	Contact sensitizers trigger human CD1â€autoreactive Tâ€cell responses. European Journal of Immunology, 2017, 47, 1171-1180.	2.9	27
56	Dual Modifications of Î±-Galactosylceramide Synergize to Promote Activation of Human Invariant Natural Killer T Cells and Stimulate Anti-tumor Immunity. Cell Chemical Biology, 2018, 25, 571-584.e8.	5.2	27
57	Access to Oxetane-Containing psico-Nucleosides from 2-Methyleneoxetanes: A Role for Neighboring Group Participation?. Journal of Organic Chemistry, 2011, 76, 9962-9974.	3.2	26
58	Regioselective hydroxylations of 1,3-dienes via hydrocobaltation reactions. Facile conversion of myrcene to geraniol and to (Â±)-linalool. Journal of the Chemical Society Chemical Communications, 1990, , 103-104.	2.0	25
59	Preparation of 2-alkylidene oxetanes: An investigation of the Paterno-BÃ¼chi reaction between aliphatic aldehydes and allenes. Tetrahedron Letters, 1996, 37, 8651-8654.	1.4	25
60	Ring Opening of 1,5-Dioxaspiro[3.2]hexanes:â€‰ Selective Preparation of Î±-Heterofunctionalized-Î²â€˜-hydroxy Ketones or 2,2-Disubstituted Oxetanes. Organic Letters, 1999, 1, 825-827.	4.6	25
61	The reaction of dimethyltitanocene with N-substituted-Î²-lactams. Tetrahedron Letters, 2000, 41, 5607-5611.	1.4	25
62	Combining cross-metathesis and activity-based protein profiling: New Î²-lactone motifs for targeting serine hydrolases. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 317-321.	2.2	25
63	Pd-Catalyzed Acyl Câ€“O Bond Activation for Selective Ring-Opening of Î±-Methylene-Î²-lactones with Amines. Organic Letters, 2017, 19, 1966-1969.	4.6	25
64	Selective Conditions Are Required for the Induction of Invariant NKT Cell Hyporesponsiveness by Antigenic Stimulation. Journal of Immunology, 2015, 195, 3838-3848.	0.8	21
65	A single-domain bispecific antibody targeting CD1d and the NKT T-cell receptor induces a potent antitumor response. Nature Cancer, 2020, 1, 1054-1065.	13.2	21
66	Directed Ring-Opening of 1,5-Dioxaspiro[3.2]hexanes:Â Selective Formation of 2,2-Disubstituted Oxetanes. Journal of Organic Chemistry, 2003, 68, 1480-1488.	3.2	20
67	Application of (chloromethyl)aluminum 2-(2-propenyl)anilide in the conversion of .gamma.- and .delta.-lactones into protected hydroxy acids. Journal of Organic Chemistry, 1989, 54, 3321-3324.	3.2	19
68	Pt-Catalyzed Rearrangement of Oxaspirohexanes to 3-Methylenetetrahydrofurans: Scope and Mechanism. Journal of Organic Chemistry, 2015, 80, 5196-5209.	3.2	19
69	1,4-Dicarbofunctionalization of 4-Fluoroaryl Grignard and Lithium Reagents with Disubstituted Malononitriles. Journal of Organic Chemistry, 2017, 82, 4993-4997.	3.2	19
70	Immunomodulatory sphingosine-1-phosphates as plasma biomarkers of Alzheimerâ€™s disease and vascular cognitive impairment. Alzheimer's Research and Therapy, 2020, 12, 122.	6.2	19
71	Synthesis and evaluation of an acyl-chain unsaturated analog of the Th2 biasing, immunostimulatory glycolipid, OCH. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 3386-3388.	2.2	18
72	The Alpha and Omega of Galactosylceramides in T Cell Immune Function. Journal of Biological Chemistry, 2015, 290, 15365-15370.	3.4	18

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73	Nickelâ€•or Cobaltâ€Catalyzed Crossâ€Coupling of Arylsulfonic Acid Salts with Grignard Reagents. Advanced Synthesis and Catalysis, 2015, 357, 2199-2204.	4.3	17
74	Ring opening reactions of 2-methyleneoxetanes. Tetrahedron, 2002, 58, 7101-7107.	1.9	16
75	Heterogeneous Catalytic Oxidation of Amides to Imides by Manganese Oxides. Scientific Reports, 2018, 8, 13649.	3.3	16
76	1-Iodomethyl-3,4-diphenyl-2,6-dioxabicyclo[2.2.0]hexane: the first example of a [2.2.0] fused ketal. Tetrahedron Letters, 1999, 40, 7051-7053.	1.4	15
77	Lipid and Carbohydrate Modifications of Î±-Galactosylceramide Differently Influence Mouse and Human Type I Natural Killer T Cell Activation. Journal of Biological Chemistry, 2015, 290, 17206-17217.	3.4	15
78	Rapid Identification of Immunostimulatory Î±-Galactosylceramides Using Synthetic Combinatorial Libraries. ACS Combinatorial Science, 2007, 9, 1084-1093.	3.3	14
79	Preparation and reactions of 4-oxaspiro[2.3]hexanes. New Journal of Chemistry, 2001, 25, 673-675.	2.8	13
80	Unexpected Cleavage of 2-Azido-2-(hydroxymethyl)oxetanes: Conformation Determines Reaction Pathway?. Journal of Organic Chemistry, 2010, 75, 7565-7572.	3.2	13
81	Regulatory Roles for NKT Cell Ligands in Environmentally Induced Autoimmunity. Journal of Immunology, 2008, 181, 6779-6788.	0.8	12
82	Mrp1 is involved in lipid presentation and iNKT cell activation by Streptococcus pneumoniae. Nature Communications, 2018, 9, 4279.	12.8	11
83	SYNTHESIS AND PROPERTIES OFPSICO-NUCLEOSIDES. Organic Preparations and Procedures International, 2006, 38, 101-176.	1.3	10
84	Stereospecificity of 2-methylpiperidine binding to a nicotinic up-regulatory site in the rat brain P2 preparation. Life Sciences, 1985, 37, 1367-1372.	4.3	9
85	Silicon Acceleration of a Tandem Alkene Isomerization/Electrocyclic Ring-opening of 2-Methyleneoxetanes to Î±,Î²-Unsaturated Methylketones. Journal of Organic Chemistry, 2013, 78, 11213-11220.	3.2	9
86	Rh-Catalyzed Conjugate Addition of Aryl and Alkenyl Boronic Acids to Î±-Methylene-Î²-lactones: Stereoselective Synthesis of trans-3,4-Disubstituted Î²-Lactones. Organic Letters, 2017, 19, 4460-4463.	4.6	9
87	3-Silyloxytetrahydrofurans via sulfoxonium ylide reactions with Î±-silyloxyepoxides. Tetrahedron Letters, 2007, 48, 8356-8359.	1.4	8
88	Unusual Transformations of Strain-Heightened Oxetanes. Accounts of Chemical Research, 2021, 54, 3850-3862.	15.6	8
89	An unusual and efficient reaction of 2-methylene-3-phenyloxetane in the presence of lithium and 4,4â€²-di-tert-butylbiphenyl in THF. Tetrahedron Letters, 2000, 41, 1859-1862.	1.4	7
90	2-Alkylidene oxetanes by stereospecific elimination of mesylates. Tetrahedron Letters, 2007, 48, 8353-8355.	1.4	7

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91	Synthesis of a 2êžŒêžŒ-Deoxy-Î²-GalCer. Molecules, 2014, 19, 10090-10102.	3.8	7
92	A solvent-free approach to glycosyl amides: toward the synthesis of Î±- N -galactosyl ceramides. Tetrahedron Letters, 2015, 56, 3583-3586.	1.4	7
93	Amide-Linked C4â€³-Saccharide Modification of KRN7000 Provides Potent Stimulation of Human Invariant NKT Cells and Anti-Tumor Immunity in a Humanized Mouse Model. ACS Chemical Biology, 2020, 15, 3176-3186.	3.4	6
94	Synthesis and binding activity of 4â€ezanicotine. Journal of Heterocyclic Chemistry, 1991, 28, 1147-1151.	2.6	5
95	Scaling Proteome-Wide Reactions of Activity-Based Probes. Analytical Chemistry, 2017, 89, 6295-6299.	6.5	5
96	Modular Dihydrobenzoazaphosphole Ligands for Suzukiâ€“Miyaura Cross-Coupling. Synthesis, 2018, 50, 4429-4434.	2.3	5
97	New Photoactivators for Multiphoton Excited Three-dimensional Submicron Cross-linking of Proteins: Bovine Serum Albumin and Type 1 CollagenÂ¶â€. Photochemistry and Photobiology, 2002, 76, 135-144.	2.5	3
98	Î±â€Methyleneâ€Î²â€Lactone Scaffold for Developing Chemical Probes at the Two Ends of the Selectivity Spectrum. ChemBioChem, 2021, 22, 505-515.	2.6	2
99	Easily accessible non-aromatic heterocycles with handles: 4-bromo-2,3-dihydrofurans from 1,2-dibromohomoallylic alcohols. Chemical Science, 2021, 12, 10347-10353.	7.4	2
100	Chemical proteomic analysis of palmostatin beta-lactone analogs that affect N-Ras palmitoylation. Bioorganic and Medicinal Chemistry Letters, 2021, 53, 128414.	2.2	2
101	Synthesis and Reactions of 2-Alkylidene Thiiranes and Thietanes. Synthesis, 2007, 2007, 2755-2778.	2.3	1
102	Cloning and Characterization of a Hybridoma Secreting a 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK)-Specific Monoclonal Antibody and Recombinant F(ab). Toxins, 2013, 5, 568-589.	3.4	1
103	Ring Opening Reactions of 2-Methyleneoxetanes.. ChemInform, 2003, 34, no.	0.0	0
104	Unusual, Strained Heterocycles: 3-Alkylidene-2-methyleneoxetanes from Moritaâ€”Baylisâ€”Hillman-Type Adducts.. ChemInform, 2003, 34, no.	0.0	0
105	Directed Ring-Opening of 1,5-Dioxaspiro[3.2]hexanes: Selective Formation of 2,2-Disubstituted Oxetanes.. ChemInform, 2003, 34, no.	0.0	0
106	Straightforward Synthesis of Sphinganines (V) and (XI) via a Serine-Derived Weinreb Amide.. ChemInform, 2004, 35, no.	0.0	0
107	Approaches to the Preparation of Sphinganines. ChemInform, 2005, 36, no.	0.0	0
108	Design and Synthesis of an Activity-Based Probe Template for Protein Kinases. Synlett, 2010, 2010, 1142-1142.	1.8	0

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109	Design and Synthesis of an Activity-Based Probe Template for Protein Kinases. Synlett, 2010, 2010, 521-524.	1.8	0