Andrew M Riley

List of Publications by Year
in descending order

90 papers	2,857 citations	178989 28 h-index	197947 49 g-index
101 all docs	101 docs citations	101 times ranked	2591 citing authors

#	Article	IF	Citations
1	Substrate promiscuity of inositol 1,4,5-trisphosphate kinase driven by structurally-modified ligands and active site plasticity. Nature Communications, 2024, 15, .	13.2	2
2	Diversification in the inositol tris/tetrakisphosphate kinase (ITPK) family: crystal structure and enzymology of the outlier<i>At</i>ITPK4. Biochemical Journal, 2023, 480, 433-453.	3.8	4
3	Expedient synthesis and luminescence sensing of the inositol pyrophosphate cellular messenger 5-PP-InsP₅. Chemical Science, 2023, 14, 4979-4985.	7.8	2
4	A structural exposÃ© of noncanonical molecular reactivity within the protein tyrosine phosphatase WPD loop. Nature Communications, 2022, 13, 2231.	13.2	9
5	Allosteric Site on SHIP2 Identified Through Fluorescent Ligand Screening and Crystallography: A Potential New Target for Intervention. Journal of Medicinal Chemistry, 2021, 64, 3813-3826.	6.6	5
6	Multiple substrate recognition by yeast diadenosine and diphosphoinositol polyphosphate phosphohydrolase through phosphate clamping. Science Advances, 2021, 7, .	10.9	15
7	Quantal Ca2+ release mediated by very few IP3 receptors that rapidly inactivate allows graded responses to IP3. Cell Reports, 2021, 37, 109932.	6.3	7
8	Regioisomeric Family of Novel Fluorescent Substrates for SHIP2. ACS Medicinal Chemistry Letters, 2020, 11, 309-315.	3.1	1
9	The inositol pyrophosphate 5-InsP ₇ drives sodium-potassium pump degradation by relieving an autoinhibitory domain of PI3K p85Î±. Science Advances, 2020, 6, .	10.9	20
10	Both <scp>d</scp>- and <scp>l</scp>-Glucose Polyphosphates Mimic <scp>d</scp>-<i>myo</i>-Inositol 1,4,5-Trisphosphate: New Synthetic Agonists and Partial Agonists at the Ins(1,4,5)P₃ Receptor. Journal of Medicinal Chemistry, 2020, 63, 5442-5457.	6.6	9
11	An ATP-responsive metabolic cassette comprised of inositol tris/tetrakisphosphate kinase 1 (ITPK1) and inositol pentakisphosphate 2-kinase (IPK1) buffers diphosphosphoinositol phosphate levels. Biochemical Journal, 2020, 477, 2621-2638.	3.8	42
12	Synthesis of an Î±-phosphono-Î±,Î±-difluoroacetamide analogue of the diphosphoinositol pentakisphosphate 5-InsP₇. MedChemComm, 2019, 10, 1165-1172.	3.4	10
13	Inositol hexakisphosphate increases the size of platelet aggregates. Biochemical Pharmacology, 2019, 161, 14-25.	4.6	9
14	Simple synthesis of 32P-labelled inositol hexakisphosphates for study of phosphate transformations. Plant and Soil, 2018, 427, 149-161.	3.7	10
15	A Fluorescent Probe Identifies Active Site Ligands of Inositol Pentakisphosphate 2-Kinase. Journal of Medicinal Chemistry, 2018, 61, 8838-8846.	6.6	6
16	A synthetic diphosphoinositol phosphate analogue of inositol trisphosphate. MedChemComm, 2018, 9, 1105-1113.	3.4	7
17	Insights into the activation mechanism of class I HDAC complexes by inositol phosphates. Nature Communications, 2016, 7, 11262.	13.2	185
18	A Small Molecule Inhibitor of PDK1/PLCÎ³1 Interaction Blocks Breast and Melanoma Cancer Cell Invasion. Scientific Reports, 2016, 6, 26142.	3.4	27

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19	Designer small molecules to target calcium signalling. Biochemical Society Transactions, 2015, 43, 417-425.	3.4	8
20	Synthetic tools for studying the chemical biology of InsP₈. Chemical Communications, 2015, 51, 12605-12608.	4.2	18
21	Human Genome-Wide RNAi Screen Identifies an Essential Role for Inositol Pyrophosphates in Type-I Interferon Response. PLoS Pathogens, 2014, 10, e1003981.	4.1	70
22	Cellular Internalisation of an Inositol Phosphate Visualised by Using Fluorescent InsP₅. ChemBioChem, 2014, 15, 57-67.	2.8	16
23	Synthetic Inositol Phosphate Analogs Reveal that PPIP5K2 Has a Surface-Mounted Substrate Capture Site that Is a Target for Drug Discovery. Chemistry and Biology, 2014, 21, 689-699.	6.2	58
24	Inframolecular acidâ€“base and coordination properties towards Na⁺and Mg²⁺of myo-inositol 1,3,4,5,6-pentakisphosphate: a structural approach to biologically relevant species. Dalton Transactions, 2013, 42, 6021-6032.	3.4	9
25	Regioselective Opening of <i>myo</i>-Inositol Orthoesters: Mechanism and Synthetic Utility. Journal of Organic Chemistry, 2013, 78, 2275-2288.	3.3	14
26	Subtype-selective regulation of IP3 receptors by thimerosal via cysteine residues within the IP3-binding core and suppressor domain. Biochemical Journal, 2013, 451, 177-184.	3.8	22
27	Stimulation of Inositol 1,4,5-Trisphosphate (IP3) Receptor Subtypes by Analogues of IP3. PLoS ONE, 2013, 8, e54877.	2.5	25
28	Stimulation of Inositol 1,4,5-Trisphosphate (IP3) Receptor Subtypes by Adenophostin A and Its Analogues. PLoS ONE, 2013, 8, e58027.	2.5	16
29	Fibrinogenâ€"A Possible Extracellular Target for Inositol Phosphates. Messenger (Los Angeles, Calif.:) Tj ETQq1 1 0.784314 rgBT /Overlo	0.1	3
30	First synthetic analogues of diphosphoinositol polyphosphates: interaction with PP-InsP5 kinase. Chemical Communications, 2012, 48, 11292.	4.2	30
31	A Synthetic Polyphosphoinositide Headgroup Surrogate in Complex with SHIP2 Provides a Rationale for Drug Discovery. ACS Chemical Biology, 2012, 7, 822-828.	3.6	35
32	Contribution of Phosphates and Adenine to the Potency of Adenophostins at the IP₃ Receptor: Synthesis of All Possible Bisphosphates of Adenophostin A. Journal of Medicinal Chemistry, 2012, 55, 1706-1720.	6.6	22
33	Determination of <i>neo</i>- and <scp>d</scp>-<i>chiro</i>-Inositol Hexakisphosphate in Soils by Solution ³¹P NMR Spectroscopy. Environmental Science & Technology, 2012, 46, 4994-5002.	10.5	124
34	Response to Comment on â€œDetermination of neo- and d-chiro-Inositol Hexakisphosphate in Soils by Solution 31P NMR Spectroscopyâ€• Environmental Science & Technology, 2012, 46, 11480-11481.	10.5	1
35	Binding of Inositol 1,4,5-trisphosphate (IP₃) and Adenophostin A to the N-Terminal region of the IP₃Receptor: Thermodynamic Analysis Using Fluorescence Polarization with a Novel IP₃Receptor Ligand. Molecular Pharmacology, 2010, 77, 995-1004.	2.3	37
36	Adenophostins. Current Topics in Membranes, 2010, 66, 209-233.	2.0	25

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37	The behaviour of inositol 1,3,4,5,6-pentakisphosphate in the presence of the major biological metal cations. Journal of Biological Inorganic Chemistry, 2009, 14, 1001-1013.	2.8	15
38	Synthetic partial agonists reveal key steps in IP3 receptor activation. Nature Chemical Biology, 2009, 5, 631-639.	8.0	69
39	Activation of IP3 receptors by synthetic bisphosphate ligands. Chemical Communications, 2009, , 1204.	4.2	27
40	Rapid and efficient routes to phosphatidylinositol 3,4,5-trisphosphates via myo-inositol orthobenzoate. Tetrahedron Letters, 2007, 48, 1923-1926.	1.4	12
41	Regioselective hydrolysis of myo-inositol 1,3,5-orthobenzoate via a 1,2-bridged 2â€²-phenyl-1â€²,3â€²-dioxolan-2â€²-ylium ion provides a rapid route to the anticancer agent Ins(1,3,4,5,6)P5. Chemical Communications, 2006, , 2989-2991.	4.2	28
42	Chiral desymmetrisation of myo-inositol 1,3,5-orthobenzoate gives rapid access to precursors for second messenger analogues. Tetrahedron: Asymmetry, 2006, 17, 171-174.	1.7	22
43	scyllo â€Inositol Pentakisphosphate as an Analogue of myo â€Inositol 1,3,4,5,6â€Pentakisphosphate: Chemical Synthesis, Physicochemistry and Biological Applications. ChemBioChem, 2006, 7, 1114-1122.	2.8	23
44	Interaction of the Catalytic Domain of Inositol 1,4,5-Trisphosphate 3-Kinase A with Inositol Phosphate Analogues. ChemBioChem, 2005, 6, 1449-1457.	2.8	13
45	Regulation of Casein Kinase-2 (CK2) Activity by Inositol Phosphates. Journal of Biological Chemistry, 2004, 279, 43403-43410.	3.5	45
46	Inositol pentakisphosphate promotes apoptosis through the PI 3-K/Akt pathway. Oncogene, 2004, 23, 1754-1765.	5.9	91
47	Dimers of d-myo-Inositol 1,4,5-Trisphosphate:â€‰ Design, Synthesis, and Interaction with Ins(1,4,5)P3 Receptors. Bioconjugate Chemistry, 2004, 15, 278-289.	3.8	28
48	2-O-(2-Aminoethyl)-myo-inositol 1,4,5-trisphosphate as a novel ligand for conjugation: physicochemical properties and synthesis of a new Ins(1,4,5)P3 affinity matrix. Biochemical and Biophysical Research Communications, 2004, 318, 444-452.	2.2	6
49	Inositol trisphosphate analogues selective for types I and II inositol trisphosphate receptors exert differential effects on vasopressin-stimulated Ca2+ inflow and Ca2+ release from intracellular stores in rat hepatocytes. Biochemical Journal, 2004, 381, 519-526.	3.8	12
50	A Definitive Synthesis ofD-myo-Inositol 1,4,5,6-Tetrakisphosphate and Its EnantiomerD-myo-Inositol 3,4,5,6-Tetrakisphosphate from a Novel Butane-2,3-diacetal-Protected Inositol. Chemistry - A European Journal, 2003, 9, 6207-6214.	3.9	12
51	Synthesis and Ca2+-Mobilizing Activity of Purine-Modified Mimics of Adenophostin A:Â A Model for the Adenophostinâˆ'Ins(1,4,5)P3Receptor Interaction. Journal of Medicinal Chemistry, 2003, 46, 4860-4871.	6.6	40
52	Identification of Mammalian Vps24p as an Effector of Phosphatidylinositol 3,5-Bisphosphate-dependent Endosome Compartmentalization. Journal of Biological Chemistry, 2003, 278, 38786-38795.	3.5	154
53	Interactions of Inositol 1,4,5-Trisphosphate (IP3) Receptors with Synthetic Poly(ethylene glycol)-linked Dimers of IP3 Suggest Close Spacing of the IP3-binding Sites. Journal of Biological Chemistry, 2002, 277, 40290-40295.	3.5	27
54	Adenophostin A and ribophostin, but not inositol 1,4,5-trisphosphate or manno-adenophostin, activate the Ca2+ release-activated Ca2+ current, ICRAC, in weak intracellular Ca2+ buffer. Biochemical Journal, 2002, 361, 133.	3.8	10

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55	Determinants of adenophostin A binding to inositol trisphosphate receptors. Biochemical Journal, 2002, 367, 113-120.	3.8	29
56	Adenophostin A and ribophostin, but not inositol 1,4,5-trisphosphate or manno-adenophostin, activate the Ca2+ release-activated Ca2+ current, ICRAC, in weak intracellular Ca2+ buffer. Biochemical Journal, 2002, 361, 133-141.	3.8	11
57	Regulation of Ins(3,4,5,6)P4 Signaling by a Reversible Kinase/Phosphatase. Current Biology, 2002, 12, 477-482.	4.0	60
58	Synthesis of glucopyranoside-based ligands for d-myo-inositol 1,4,5-trisphosphate receptors. Carbohydrate Research, 2002, 337, 1067-1082.	2.4	8
59	Synthesis and Biological Activity of d- and l-chiro-Inositol 2,3,4,5-Tetrakisphosphate:â€‰ Design of a Novel and Potent Inhibitor of Ins(3,4,5,6)P4 1-Kinase/Ins(1,3,4)P3 5/6-Kinase. Journal of Medicinal Chemistry, 2001, 44, 2984-2989.	6.6	17
60	Bicyclic Analogues ofd-myo-Inositol 1,4,5-Trisphosphate Related to Adenophostin A:Â Synthesis and Biological Activity. Journal of Medicinal Chemistry, 2001, 44, 2108-2117.	6.6	22
61	Structural Determinants of Adenophostin A Activity at Inositol Trisphosphate Receptors. Molecular Pharmacology, 2001, 59, 1206-1215.	2.3	55
62	Selective recognition of inositol phosphates by subtypes of the inositol trisphosphate receptor. Biochemical Journal, 2001, 355, 59.	3.8	39
63	Selective recognition of inositol phosphates by subtypes of the inositol trisphosphate receptor. Biochemical Journal, 2001, 355, 59-69.	3.8	46
64	Xylopyranoside-based agonists of d-myo-inositol 1,4,5-trisphosphate receptors: synthesis and effect of stereochemistry on biological activity. Carbohydrate Research, 2001, 332, 53-66.	2.4	21
65	C-Glycoside based mimics of d-myo-inositol 1,4,5-trisphosphate. Carbohydrate Research, 2000, 329, 7-16.	2.4	18
66	InsP4 facilitates store-operated calcium influx by inhibition of InsP3 5-phosphatase. Nature, 2000, 408, 735-740.	36.2	99
67	<i>myo</i>-Inositol 1,4,6-Trisphosphorothioate and<i>myo</i>-Inositol 1,3,6-Trisphosphorothioate: Partial Agonists with Very Low Intrinsic Activity at the Platelet<i>myo</i>-Inositol 1,4,5-Trisphosphate Receptor. Molecular Pharmacology, 2000, 57, 595-601.	2.3	9
68	Synthesis of adenophostin A and congeners modified at glucose. Journal of the Chemical Society, Perkin Transactions 1, 2000, , 1935-1947.	1.2	17
69	Poly(ethylene glycol)-linked dimers of d-myo-inositol 1,4,5-trisphosphate. Chemical Communications, 2000, , 983-984.	4.2	6
70	Acyclophostin: A Ribose-Modified Analog of Adenophostin A with High Affinity for Inositol 1,4,5-Trisphosphate Receptors and pH-Dependent Efficacy. Molecular Pharmacology, 1999, 55, 109-117.	2.3	26
71	Structural and Biochemical Evaluation of the Interaction of the Phosphatidylinositol 3-Kinase p85Î± Src Homology 2 Domains with Phosphoinositides and Inositol Polyphosphates. Journal of Biological Chemistry, 1999, 274, 15678-15685.	3.5	18
72	Inositol 1,3,4-Trisphosphate Acts in Vivo as a Specific Regulator of Cellular Signaling by Inositol 3,4,5,6-Tetrakisphosphate. Journal of Biological Chemistry, 1999, 274, 18973-18980.	3.5	49

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73	Bicyclic analogues of inositol 1,4,5-trisphosphate based upon adenophostin A. Tetrahedron Letters, 1999, 40, 2213-2216.	1.4	18
74	Simplification of adenophostin A defines a minimal structure for potent glucopyranoside-based mimics of 1,4,5-trisphosphate. Bioorganic and Medicinal Chemistry Letters, 1999, 9, 453-458.	2.3	31
75	Structure of the PH domain from Bruton's tyrosine kinase in complex with inositol 1,3,4,5-tetrakisphosphate. Structure, 1999, 7, 449-460.	3.4	204
76	A concise synthesis of neo-inositol. Carbohydrate Research, 1998, 314, 277-281.	2.4	39
77	l-Î±-Phosphatidyl-d-myo-inositol 3,5-bisphosphate: total synthesis of a new inositol phospholipid via myo-inositol orthoacetate. Tetrahedron Letters, 1998, 39, 6769-6772.	1.4	21
78	Rapid and practical synthesis of D-myo-inositol 1,4,5-trisphosphate. Journal of the Chemical Society Perkin Transactions 1, 1998, , 1367-1368.	0.9	28
79	Investigation of the inframolecular acidâ€“base properties of d-myo-inositol 1,3,4,5-tetrakisphosphate and dl-myo-inositol 1,2,4,5-tetrakisphosphate. Chemical Communications, 1997, , 625-626.	4.2	16
80	Disaccharide Polyphosphates Based upon Adenophostin A Activate Hepatic d-myo-Inositol 1,4,5-Trisphosphate Receptors. Biochemistry, 1997, 36, 12780-12790.	2.6	71
81	Rapid Synthesis of the Enantiomers ofmyo-Inositol-1,3,4,5-tetrakisphosphate by Direct Chiral Desymmetrization ofmyo-Inositol Orthoformate. Angewandte Chemie International Edition in English, 1997, 36, 1472-1474.	4.9	39
82	Einfache Synthese der Enantiomere von <i>myo</i>â€‐inositâ€‐1,3,4,5â€‐tetrakisphosphat durch direkte chirale Desymmetrisierung von <i>myo</i>â€‐inositorthoformiat. Angewandte Chemie, 1997, 109, 1583-1585.	2.1	3
83	Chiral Cyclopentane-Based Mimics ofd-myo-Inositol 1,4,5-Trisphosphate fromd-Glucose. Journal of Organic Chemistry, 1996, 61, 7719-7726.	3.3	40
84	6-Deoxy-6-hydroxymethyl scyllo-inositol 1,2,4-trisphosphate: A potent agonist at the inositol 1,4,5-trisphosphate receptor. Bioorganic and Medicinal Chemistry Letters, 1996, 6, 2197-2200.	2.3	21
85	Synthesis of Novel Polyphosphate Analogues of Inositol 1,4,5-Trisphosphate. Phosphorus, Sulfur and Silicon and the Related Elements, 1996, 111, 73-73.	1.6	0
86	Myo-inositol 1,4,6-trisphosphorothioate and myo-inositol 1,3,4-trisphosphorothioate: New synthetic Ca2+-mobilising partial agonists at the inositol 1,4,5-trisphosphate receptor. Bioorganic and Medicinal Chemistry Letters, 1995, 5, 203-208.	2.3	14
87	Synthesis of a Conformationally Restricted Cyclic Phosphate Analog of Inositol Triphosphate. Journal of Organic Chemistry, 1995, 60, 4970-4971.	3.3	13
88	Pentagon IP3: Synthesis of a Ring-Contracted Mimic of a Second Messenger. Journal of the American Chemical Society, 1995, 117, 3300-3301.	14.6	10
89	Unambiguous Total Synthesis of the Enantiomers of myo-Inositol 1,3,4-Trisphosphate: 1L-myo-Inositol 1,3,4-Trisphosphate Mobilizes Intracellular Ca2+ in Limulus Photoreceptors. Journal of Medicinal Chemistry, 1994, 37, 3918-3927.	6.6	28
90	Crystal Structure and Enzymology of <i>Solanum tuberosum</i> Inositol Tris/Tetrakisphosphate Kinase 1 (<i>St</i>ITPK1). Biochemistry, 0, , .	2.6	0