Chris J Schofield

List of Publications by Year in descending order

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460 papers 41,564 citations

91 h-index

3334

186 g-index

511 all docs

511 docs citations

511 times ranked

34101 citing authors

| # | Article | IF | CITATIONS |
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| 1 | Targeting of HIF-α to the von Hippel-Lindau Ubiquitylation Complex by O ₂ -Regulated Prolyl Hydroxylation. Science, 2001, 292, 468-472. | 12.6 | 4,966 |
| 2 | C. elegans EGL-9 and Mammalian Homologs Define a Family of Dioxygenases that Regulate HIF by Prolyl Hydroxylation. Cell, 2001, 107, 43-54. | 28.9 | 3,293 |
| 3 | Oxygen sensing by HIF hydroxylases. Nature Reviews Molecular Cell Biology, 2004, 5, 343-354. | 37.0 | 1,810 |
| 4 | The Obesity-Associated <i>FTO </i> Gene Encodes a 2-Oxoglutarate-Dependent Nucleic Acid Demethylase. Science, 2007, 318, 1469-1472. | 12.6 | 1,305 |
| 5 | The oncometabolite 2â€hydroxyglutarate inhibits histone lysine demethylases. EMBO Reports, 2011, 12, 463-469. | 4.5 | 851 |
| 6 | A selective jumonji H3K27 demethylase inhibitor modulates the proinflammatory macrophage response. Nature, 2012, 488, 404-408. | 27.8 | 822 |
| 7 | Structural basis for the recognition of hydroxyproline in HIF-1α by pVHL. Nature, 2002, 417, 975-978. | 27.8 | 651 |
| 8 | Hypoxia-inducible Factor (HIF) Asparagine Hydroxylase Is Identical to Factor Inhibiting HIF (FIH) and Is Related to the Cupin Structural Family. Journal of Biological Chemistry, 2002, 277, 26351-26355. | 3.4 | 624 |
| 9 | Structure of isopenicillinN synthase complexed with substrate and the mechanism ofpenicillin formation. Nature, 1997, 387, 827-830. | 27.8 | 456 |
| 10 | Expanding chemical biology of 2-oxoglutarate oxygenases. Nature Chemical Biology, 2008, 4, 152-156. | 8.0 | 438 |
| 11 | Crystal structure of isopenicillin N synthase is the first from a new structural family of enzymes. Nature, 1995, 375, 700-704. | 27.8 | 434 |
| 12 | Structural studies on 2-oxoglutarate oxygenases and related double-stranded \hat{l}^2 -helix fold proteins. Journal of Inorganic Biochemistry, 2006, 100, 644-669. | 3.5 | 390 |
| 13 | Structural and mechanistic studies on 2-oxoglutarate-dependent oxygenases and related enzymes. Current Opinion in Structural Biology, 1999, 9, 722-731. | 5.7 | 370 |
| 14 | Jmjd6 Catalyses Lysyl-Hydroxylation of U2AF65, a Protein Associated with RNA Splicing. Science, 2009, 325, 90-93. | 12.6 | 356 |
| 15 | Structure of a cephalosporin synthase. Nature, 1998, 394, 805-809. | 27.8 | 344 |
| 16 | Structure of Factor-inhibiting Hypoxia-inducible Factor (HIF) Reveals Mechanism of Oxidative Modification of HIF- $1\hat{l}\pm$. Journal of Biological Chemistry, 2003, 278, 1802-1806. | 3.4 | 342 |
| 17 | Inhibition of 2-oxoglutarate dependent oxygenases. Chemical Society Reviews, 2011, 40, 4364. | 38.1 | 336 |
| 18 | Structure and Mechanism of Anthocyanidin Synthase from Arabidopsis thaliana. Structure, 2002, 10, 93-103. | 3.3 | 321 |

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| 19 | Cellular oxygen sensing: Crystal structure of hypoxia-inducible factor prolyl hydroxylase (PHD2). Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9814-9819. | 7.1 | 310 |
| 20 | Signalling hypoxia by HIF hydroxylases. Biochemical and Biophysical Research Communications, 2005, 338, 617-626. | 2.1 | 305 |
| 21 | Crystal structures of histone demethylase JMJD2A reveal basis for substrate specificity. Nature, 2007, 448, 87-91. | 27.8 | 297 |
| 22 | Methods for converting cysteine to dehydroalanine on peptides and proteins. Chemical Science, 2011, 2, 1666. | 7.4 | 296 |
| 23 | Regulation of Jumonji-domain-containing histone demethylases by hypoxia-inducible factor (HIF)-1α. Biochemical Journal, 2008, 416, 387-394. | 3.7 | 278 |
| 24 | 2-Oxoglutarate-Dependent Oxygenases. Annual Review of Biochemistry, 2018, 87, 585-620. | 11.1 | 276 |
| 25 | Physiological and biochemical aspects of hydroxylations and demethylations catalyzed by human 2-oxoglutarate oxygenases. Trends in Biochemical Sciences, 2011, 36, 7-18. | 7. 5 | 260 |
| 26 | Posttranslational hydroxylation of ankyrin repeats in IÂB proteins by the hypoxia-inducible factor (HIF) asparaginyl hydroxylase, factor inhibiting HIF (FIH). Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14767-14772. | 7.1 | 258 |
| 27 | Discovery and Optimization of Small-Molecule Ligands for the CBP/p300 Bromodomains. Journal of the American Chemical Society, 2014, 136, 9308-9319. | 13.7 | 244 |
| 28 | Structural origins of the selectivity of the trifunctional oxygenase clavaminic acid synthase. Nature Structural Biology, 2000, 7, 127-133. | 9.7 | 239 |
| 29 | Structural studies on human 2-oxoglutarate dependent oxygenases. Current Opinion in Structural Biology, 2010, 20, 659-672. | 5.7 | 238 |
| 30 | Inhibitor Scaffolds for 2-Oxoglutarate-Dependent Histone Lysine Demethylases. Journal of Medicinal Chemistry, 2008, 51, 7053-7056. | 6.4 | 221 |
| 31 | The hypoxiaâ€inducible transcription factor pathway regulates oxygen sensing in the simplest animal, <i>Trichoplax adhaerens</i> . EMBO Reports, 2011, 12, 63-70. | 4.5 | 210 |
| 32 | The enzymes of \hat{I}^2 -lactam biosynthesis. Natural Product Reports, 2013, 30, 21-107. | 10.3 | 208 |
| 33 | Structural Basis for Binding of Hypoxia-Inducible Factor to the Oxygen-Sensing Prolyl Hydroxylases. Structure, 2009, 17, 981-989. | 3.3 | 205 |
| 34 | Structural basis of metallo-l²-lactamase, serine-l²-lactamase and penicillin-binding protein inhibition by cyclic boronates. Nature Communications, 2016, 7, 12406. | 12.8 | 202 |
| 35 | Studies on the activity of the hypoxia-inducible-factor hydroxylases using an oxygen consumption assay. Biochemical Journal, 2007, 401, 227-234. | 3.7 | 196 |
| 36 | Hypoxia-inducible factor asparaginyl hydroxylase (FIH-1) catalyses hydroxylation at the \hat{l}^2 -carbon of asparagine-803. Biochemical Journal, 2002, 367, 571-575. | 3.7 | 194 |

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| 37 | Structural and Mechanistic Studies on the Inhibition of the Hypoxia-inducible Transcription Factor Hydroxylases by Tricarboxylic Acid Cycle Intermediates. Journal of Biological Chemistry, 2007, 282, 3293-3301. | 3.4 | 194 |
| 38 | Quantitative High-Throughput Screening Identifies 8-Hydroxyquinolines as Cell-Active Histone Demethylase Inhibitors. PLoS ONE, 2010, 5, e15535. | 2.5 | 194 |
| 39 | Asparaginyl Hydroxylation of the Notch Ankyrin Repeat Domain by Factor Inhibiting Hypoxia-inducible Factor. Journal of Biological Chemistry, 2007, 282, 24027-24038. | 3.4 | 189 |
| 40 | Mechanistic Studies on Three 2-Oxoglutarate-dependent Oxygenases of Flavonoid Biosynthesis. Journal of Biological Chemistry, 2004, 279, 1206-1216. | 3.4 | 183 |
| 41 | Molecular and cellular mechanisms of HIF prolyl hydroxylase inhibitors in clinical trials. Chemical Science, 2017, 8, 7651-7668. | 7.4 | 174 |
| 42 | Role of the jelly-roll fold in substrate binding by 2-oxoglutarate oxygenases. Current Opinion in Structural Biology, 2012, 22, 691-700. | 5.7 | 171 |
| 43 | Targeting histone lysine demethylases â€" Progress, challenges, and the future. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2014, 1839, 1416-1432. | 1.9 | 170 |
| 44 | Arginine demethylation is catalysed by a subset of JmjC histone lysine demethylases. Nature Communications, 2016, 7, 11974. | 12.8 | 168 |
| 45 | Human UTY(KDM6C) Is a Male-specific Nϊμ-Methyl Lysyl Demethylase. Journal of Biological Chemistry, 2014, 289, 18302-18313. | 3.4 | 166 |
| 46 | Recent Progress in Histone Demethylase Inhibitors. Journal of Medicinal Chemistry, 2016, 59, 1308-1329. | 6.4 | 165 |
| 47 | Mechanisms of human histone and nucleic acid demethylases. Current Opinion in Chemical Biology, 2012, 16, 525-534. | 6.1 | 163 |
| 48 | Structure of human RNA <i>N</i> 6-methyladenine demethylase ALKBH5 provides insights into its mechanisms of nucleic acid recognition and demethylation. Nucleic Acids Research, 2014, 42, 4741-4754. | 14.5 | 162 |
| 49 | PHF8, a gene associated with cleft lip/palate and mental retardation, encodes for an NÎμ-dimethyl lysine demethylase. Human Molecular Genetics, 2010, 19, 217-222. | 2.9 | 153 |
| 50 | Epidithiodiketopiperazines Block the Interaction between Hypoxia-inducible Factor- $1\hat{1}\pm$ (HIF- $1\hat{1}\pm$) and p300 by a Zinc Ejection Mechanism. Journal of Biological Chemistry, 2009, 284, 26831-26838. | 3.4 | 148 |
| 51 | Differential Sensitivity of Hypoxia Inducible Factor Hydroxylation Sites to Hypoxia and Hydroxylase Inhibitors. Journal of Biological Chemistry, 2011, 286, 13041-13051. | 3.4 | 148 |
| 52 | Selective Inhibitors of the JMJD2 Histone Demethylases: Combined Nondenaturing Mass Spectrometric Screening and Crystallographic Approaches. Journal of Medicinal Chemistry, 2010, 53, 1810-1818. | 6.4 | 146 |
| 53 | 2-Oxoglutarate analogue inhibitors of hif prolyl hydroxylase. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 2677-2680. | 2.2 | 144 |
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| 55 | Structural and Evolutionary Basis for the Dual Substrate Selectivity of Human KDM4 Histone Demethylase Family. Journal of Biological Chemistry, 2011, 286, 41616-41625. | 3.4 | 143 |
| 56 | Crystal structure of a clavaminate synthase-Fe(II)-2-oxoglutarate-substrate-NO complex: evidence for metal centred rearrangements. FEBS Letters, 2002, 517, 7-12. | 2.8 | 142 |
| 57 | 5-Carboxy-8-hydroxyquinoline is a broad spectrum 2-oxoglutarate oxygenase inhibitor which causes iron translocation. Chemical Science, 2013, 4, 3110. | 7.4 | 142 |
| 58 | Bicyclic Boronate VNRX-5133 Inhibits Metallo- and Serine-Î ² -Lactamases. Journal of Medicinal Chemistry, 2019, 62, 8544-8556. | 6.4 | 139 |
| 59 | Structures of Human ALKBH5 Demethylase Reveal a Unique Binding Mode for Specific Single-stranded N6-Methyladenosine RNA Demethylation. Journal of Biological Chemistry, 2014, 289, 17299-17311. | 3.4 | 138 |
| 60 | Oxygenase-catalyzed ribosome hydroxylation occurs in prokaryotes and humans. Nature Chemical Biology, 2012, 8, 960-962. | 8.0 | 135 |
| 61 | Structural Basis of Metallo- \hat{l}^2 -Lactamase Inhibition by Captopril Stereoisomers. Antimicrobial Agents and Chemotherapy, 2016, 60, 142-150. | 3.2 | 134 |
| 62 | Selective Inhibition of Factor Inhibiting Hypoxia-Inducible Factor. Journal of the American Chemical Society, 2005, 127, 7680-7681. | 13.7 | 128 |
| 63 | Structural Basis for Inhibition of the Fat Mass and Obesity Associated Protein (FTO). Journal of Medicinal Chemistry, 2013, 56, 3680-3688. | 6.4 | 128 |
| 64 | Plant Growth Regulator Daminozide Is a Selective Inhibitor of Human KDM2/7 Histone Demethylases. Journal of Medicinal Chemistry, 2012, 55, 6639-6643. | 6.4 | 125 |
| 65 | Protein Hydroxylation Catalyzed by 2-Oxoglutarate-dependent Oxygenases. Journal of Biological Chemistry, 2015, 290, 20712-20722. | 3.4 | 124 |
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| 70 | Structural basis for the broad-spectrum inhibition of metallo- \hat{l}^2 -lactamases by thiols. Organic and Biomolecular Chemistry, 2008, 6, 2282. | 2.8 | 118 |
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| 81 | Therapeutic targeting of oxygen-sensing prolyl hydroxylases abrogates ATF4-dependent neuronal death and improves outcomes after brain hemorrhage in several rodent models. Science Translational Medicine, 2016, 8, 328ra29. | 12.4 | 106 |
| 82 | Selective Small Molecule Probes for the Hypoxia Inducible Factor (HIF) Prolyl Hydroxylases. ACS Chemical Biology, 2013, 8, 1488-1496. | 3.4 | 105 |
| 83 | OGFOD1 catalyzes prolyl hydroxylation of RPS23 and is involved in translation control and stress granule formation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4031-4036. | 7.1 | 105 |
| 84 | Pan-Histone Demethylase Inhibitors Simultaneously Targeting Jumonji C and Lysine-Specific Demethylases Display High Anticancer Activities. Journal of Medicinal Chemistry, 2014, 57, 42-55. | 6.4 | 105 |
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| 92 | Hypoxia-inducible factor prolyl hydroxylase 2 has a high affinity for ferrous iron and 2-oxoglutarate. Molecular BioSystems, 2005, 1, 321. | 2.9 | 98 |
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| 94 | Cyclic Boronates Inhibit All Classes of \hat{l}^2 -Lactamases. Antimicrobial Agents and Chemotherapy, 2017, 61, . | 3.2 | 94 |
| 95 | Allosteric Inhibition of the SARSâ€CoVâ€⊋ Main Protease: Insights from Mass Spectrometry Based Assays**. Angewandte Chemie - International Edition, 2020, 59, 23544-23548. | 13.8 | 92 |
| 96 | Tuning the Transcriptional Response to Hypoxia by Inhibiting Hypoxia-inducible Factor (HIF) Prolyl and Asparaginyl Hydroxylases. Journal of Biological Chemistry, 2016, 291, 20661-20673. | 3.4 | 91 |
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| 98 | Crystal Structure of Carbapenem Synthase (CarC). Journal of Biological Chemistry, 2003, 278, 20843-20850. | 3.4 | 90 |
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| 101 | The Chemical Biology of Human Metallo- \hat{l}^2 -Lactamase Fold Proteins. Trends in Biochemical Sciences, 2016, 41, 338-355. | 7.5 | 87 |
| 102 | Crystal Structure of the 2-Oxoglutarate- and Fe(II)-Dependent Lysyl Hydroxylase JMJD6. Journal of Molecular Biology, 2010, 401, 211-222. | 4.2 | 85 |
| 103 | X-ray absorption studies of the ferrous active site of isopenicillin N synthase and related model complexes. Biochemistry, 1993, 32, 6664-6673. | 2.5 | 84 |
| 104 | A miniaturized screen for inhibitors of Jumonji histone demethylases. Molecular BioSystems, 2010, 6, 357-364. | 2.9 | 84 |
| 105 | Structure–function relationships of human JmjC oxygenases—demethylases versus hydroxylases. Current Opinion in Structural Biology, 2016, 41, 62-72. | 5.7 | 84 |
| 106 | 8-Substituted Pyrido[3,4- <i>d</i>)]pyrimidin-4(3 <i>H</i>)-one Derivatives As Potent, Cell Permeable, KDM4 (JMJD2) and KDM5 (JARID1) Histone Lysine Demethylase Inhibitors. Journal of Medicinal Chemistry, 2016, 59, 1388-1409. | 6.4 | 83 |
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| 108 | Interaction of Avibactam with Class B Metallo-β-Lactamases. Antimicrobial Agents and Chemotherapy, 2016, 60, 5655-5662. | 3.2 | 82 |

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| 110 | Structural and Mechanistic Studies on \hat{I}^3 -Butyrobetaine Hydroxylase. Chemistry and Biology, 2010, 17, 1316-1324. | 6.0 | 78 |
| 111 | Inhibition of the histone lysine demethylase JMJD2A by ejection of structural Zn(ii). Chemical Communications, 2009, , 6376. | 4.1 | 77 |
| 112 | Inhibition of Histone Demethylases by 4 arboxyâ€⊋,2′â€Bipyridyl Compounds. ChemMedChem, 2011, 6, 7 | 5937264. | 76 |
| 113 | The oxygenase Jmjd6–a case study in conflicting assignments. Biochemical Journal, 2015, 468, 191-202. | 3.7 | 76 |
| 114 | Therapeutic Manipulation of the HIF Hydroxylases. Antioxidants and Redox Signaling, 2010, 12, 481-501. | 5.4 | 75 |
| 115 | Evidence for the slow reaction of hypoxiaâ€inducible factor prolyl hydroxylase 2 with oxygen. FEBS Journal, 2010, 277, 4089-4099. | 4.7 | 75 |
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| 117 | Kinetic Rationale for Selectivity toward N- and C-terminal Oxygen-dependent Degradation Domain Substrates Mediated by a Loop Region of Hypoxia-Inducible Factor Prolyl Hydroxylases. Journal of Biological Chemistry, 2008, 283, 3808-3815. | 3.4 | 72 |
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| 121 | Lack of activity of recombinant HIF prolyl hydroxylases (PHDs) on reported non-HIF substrates. ELife, 2019, 8, . | 6.0 | 70 |
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| 127 | Factorâ€inhibiting hypoxiaâ€inducible factor (FIH) catalyses the postâ€translational hydroxylation of histidinyl residues within ankyrin repeat domains. FEBS Journal, 2011, 278, 1086-1097. | 4.7 | 68 |
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| 135 | The enzymology of clavam and carbapenem biosynthesis. Chemical Communications, 2005, , 4251. | 4.1 | 63 |
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| 145 | Evidence for a Stereoelectronic Effect in Human Oxygen Sensing. Angewandte Chemie - International Edition, 2009, 48, 1784-1787. | 13.8 | 58 |
| 146 | Monitoring Conformational Changes in the NDMâ€1 Metalloâ€Î²â€lactamase by ¹⁹ Fâ€NMR Spectroscopy. Angewandte Chemie - International Edition, 2014, 53, 3129-3133. | 13.8 | 58 |
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| 149 | Potent and Selective Triazole-Based Inhibitors of the Hypoxia-Inducible Factor Prolyl-Hydroxylases with Activity in the Murine Brain. PLoS ONE, 2015, 10, e0132004. | 2.5 | 57 |
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