Jeffrey Smaill

List of Publications by Citations

58 papers	1,521 citations	20 h-index	38 g-index
66 ext. papers	1,823 ext. citations	5.7 avg, IF	4.67 L-index

#	Paper	IF	Citations
58	Tyrosine kinase inhibitors. 17. Irreversible inhibitors of the epidermal growth factor receptor: 4-(phenylamino)quinazoline- and 4-(phenylamino)pyrido[3,2-d]pyrimidine-6-acrylamides bearing additional solubilizing functions. *Journal of Medicinal Chemistry*, **2000**, 43, 1380-97	8.3	243
57	Tyrosine kinase inhibitors. 15. 4-(Phenylamino)quinazoline and 4-(phenylamino)pyrido[d]pyrimidine acrylamides as irreversible inhibitors of the ATP binding site of the epidermal growth factor receptor. *Journal of Medicinal Chemistry*, **1999**, 42, 1803-15	8.3	166
56	Bioreductive prodrugs as cancer therapeutics: targeting tumor hypoxia. *Chinese Journal of Cancer*, **2014**, 33, 80-6		109
55	Nitroreductase gene-directed enzyme prodrug therapy: insights and advances toward clinical utility. *Biochemical Journal*, **2015**, 471, 131-53	3.8	85
54	Binding mode of the breakthrough inhibitor AZD9291 to epidermal growth factor receptor revealed. *Journal of Structural Biology*, **2015**, 192, 539-544	3.4	73
53	Targeting EGFR and EGFR resistance mutations in NSCLC: Current developments in medicinal chemistry. *Medicinal Research Reviews*, **2018**, 38, 1550-1581	14.4	66
52	The synthesis and biological evaluation of novel series of nitrile-containing fluoroquinolones as antibacterial agents. *Bioorganic and Medicinal Chemistry Letters*, **2007**, 17, 2150-5	2.9	60
51	TAS-120 Cancer Target Binding: Defining Reactivity and Revealing the First Fibroblast Growth Factor Receptor 1 (FGFR1) Irreversible Structure. *ChemMedChem*, **2019**, 14, 494-500	3.7	53
50	New Promise and Opportunities for Allosteric Kinase Inhibitors. *Angewandte Chemie - International Edition*, **2020**, 59, 13764-13776	16.4	45
49	Creation and screening of a multi-family bacterial oxidoreductase library to discover novel nitroreductases that efficiently activate the bioreductive prodrugs CB1954 and PR-104A. *Biochemical Pharmacology*, **2013**, 85, 1091-103	6	44
48	Engineering a Multifunctional Nitroreductase for Improved Activation of Prodrugs and PET Probes for Cancer Gene Therapy. *Cell Chemical Biology*, **2017**, 24, 391-403	8.2	41
47	Tyrosine Kinase Inhibitors. 20. Optimization of Substituted Quinazoline and Pyrido[3,4-d]pyrimidine Derivatives as Orally Active, Irreversible Inhibitors of the Epidermal Growth Factor Receptor Family. *Journal of Medicinal Chemistry*, **2016**, 59, 8103-24	8.3	40
46	Fibroblast Growth Factor Receptor 4 (FGFR4) Selective Inhibitors as Hepatocellular Carcinoma Therapy: Advances and Prospects. *Journal of Medicinal Chemistry*, **2019**, 62, 2905-2915	8.3	36
45	Discovery and optimization of 1-(1H-indol-1-yl)ethanone derivatives as CBP/EP300 bromodomain inhibitors for the treatment of castration-resistant prostate cancer. *European Journal of Medicinal Chemistry*, **2018**, 147, 238-252	6.8	34
44	2-Aminopyrimidine Derivatives as New Selective Fibroblast Growth Factor Receptor 4 (FGFR4) Inhibitors. *ACS Medicinal Chemistry Letters*, **2017**, 8, 543-548	4.3	26
43	Tarloxotinib Is a Hypoxia-Activated Pan-HER Kinase Inhibitor Active Against a Broad Range of HER-Family Oncogenes. *Clinical Cancer Research*, **2021**, 27, 1463-1475	12.9	26
42	Small-Molecule Inhibitors Directly Targeting KRAS as Anticancer Therapeutics. *Journal of Medicinal Chemistry*, **2020**, 63, 14404-14424	8.3	26

41	Synthesis and structure-activity relationships of soluble 8-substituted 4-(2-chlorophenyl)-9-hydroxypyrrolo[3,4-c]carbazole-1,3(2H,6H)-diones as inhibitors of the Wee1 and Chk1 checkpoint kinases. *Bioorganic and Medicinal Chemistry Letters*, **2008**, 18, 929-33	2.9	24
40	N-(3-Ethynyl-2,4-difluorophenyl)sulfonamide Derivatives as Selective Raf Inhibitors. *ACS Medicinal Chemistry Letters*, **2015**, 6, 543-7	4.3	21
39	Zinc finger nuclease knock-out of NADPH:cytochrome P450 oxidoreductase (POR) in human tumor cell lines demonstrates that hypoxia-activated prodrugs differ in POR dependence. *Journal of Biological Chemistry*, **2013**, 288, 37138-53	5.4	20
38	The Flavin Reductase MsuE Is a Novel Nitroreductase that Can Efficiently Activate Two Promising Next-Generation Prodrugs for Gene-Directed Enzyme Prodrug Therapy. *Cancers*, **2013**, 5, 985-97	6.6	19
37	The 1.65 Å resolution structure of the complex of AZD4547 with the kinase domain of FGFR1 displays exquisite molecular recognition. *Acta Crystallographica Section D: Biological Crystallography* , **2015**, 71, 525-33		18
36	Synthesis and structure-activity relationships of N-6 substituted analogues of 9-hydroxy-4-phenylpyrrolo[3,4-c]carbazole-1,3(2H,6H)-diones as inhibitors of Wee1 and Chk1 checkpoint kinases. *European Journal of Medicinal Chemistry*, **2008**, 43, 1276-96	6.8	18
35	2,4-Diarylamino-pyrimidines as kinase inhibitors co-targeting IGF1R and EGFR(L858R/T790M). *Bioorganic and Medicinal Chemistry Letters*, **2015**, 25, 4277-81	2.9	16
34	Synthesis and cytotoxicity of pyranonaphthoquinone natural product analogues under bioreductive conditions. *Bioorganic and Medicinal Chemistry*, **2013**, 21, 7971-80	3.4	16
33	Advancing Clostridia to Clinical Trial: Past Lessons and Recent Progress. *Cancers*, **2016**, 8,	6.6	16
32	2-Oxo-3, 4-dihydropyrimido[4, 5-d]pyrimidinyl derivatives as new irreversible pan fibroblast growth factor receptor (FGFR) inhibitors. *European Journal of Medicinal Chemistry*, **2017**, 135, 531-543	6.8	14
31	Tumour Hypoxia-Mediated Immunosuppression: Mechanisms and Therapeutic Approaches to Improve Cancer Immunotherapy. *Cells*, **2021**, 10,	7.9	14
30	Rotational Freedom, Steric Hindrance, and Protein Dynamics Explain BLU554 Selectivity for the Hinge Cysteine of FGFR4. *ACS Medicinal Chemistry Letters*, **2019**, 10, 1180-1186	4.3	12
29	Improved Strategy for the Synthesis of the Anticancer Agent Culicinin D. *European Journal of Organic Chemistry*, **2015**, 2015, 6341-6350	3.2	12
28	Rational design of an AKR1C3-resistant analog of PR-104 for enzyme-prodrug therapy. *Biochemical Pharmacology*, **2016**, 116, 176-87	6	12
27	Evaluating the abilities of diverse nitroaromatic prodrug metabolites to exit a model Gram negative vector for bacterial-directed enzyme-prodrug therapy. *Biochemical Pharmacology*, **2018**, 158, 192-200	6	12
26	Medicinal Chemistry Strategies for the Development of Kinase Inhibitors Targeting Point Mutations. *Journal of Medicinal Chemistry*, **2020**, 63, 10726-10741	8.3	11
25	Discovery of Cysteine-targeting Covalent Protein Kinase Inhibitors.. *Journal of Medicinal Chemistry*, **2021**,	8.3	10
24	Engineering NfsB To Activate a Hypoxia-Resistant Analogue of the PET Probe EF5 To Enable Non-Invasive Imaging during Enzyme Prodrug Therapy. *Biochemistry*, **2019**, 58, 3700-3710	3.2	8

23	nitroreductase NfsA is a reporter gene for non-invasive PET imaging in cancer gene therapy applications. *Theranostics*, **2020**, 10, 10548-10562	12.1	8
22	Abstract A157: Antitumor activity of tarloxotinib, a hypoxia-activated EGFR TKI, in patient-derived lung cancer cell lines harboring EGFR exon 20 insertions **2018**,		7
21	Synthesis and antiproliferative activity of culicinin D analogues containing simplified AHMOD-based residues. *European Journal of Medicinal Chemistry*, **2019**, 177, 235-246	6.8	6
20	Synthesis of substituted 5-bromomethyl-4-nitroimidazoles and use for the preparation of the hypoxia-selective multikinase inhibitor SN29966. *Tetrahedron*, **2013**, 69, 9130-9138	2.4	6
19	Prototyping kinase inhibitor-cytotoxin anticancer mutual prodrugs activated by tumour hypoxia: A chemical proof of concept study. *Bioorganic and Medicinal Chemistry Letters*, **2019**, 29, 1215-1219	2.9	5
18	Abstract 5358: The hypoxia-activated EGFR-TKI TH-4000 overcomes erlotinib-resistance in preclinical NSCLC models at plasma levels achieved in a Phase 1 clinical trial **2015**,		5
17	Abstract A67: Preclinical efficacy of tarloxotinib bromide (TH-4000), a hypoxia-activated EGFR/HER2 inhibitor: rationale for clinical evaluation in EGFR mutant, T790M-negative NSCLC following progression on EGFR-TKI therapy **2015**,		4
16	Selectively Targeting Tumor Hypoxia With the Hypoxia-Activated Prodrug CP-506. *Molecular Cancer Therapeutics*, **2021**, 20, 2372-2383	6.1	4
15	Subcellular Location of Tirapazamine Reduction Dramatically Affects Aerobic but Not Anoxic Cytotoxicity. *Molecules*, **2020**, 25,	4.8	4
14	TANK-binding kinase 1 (TBK1): An emerging therapeutic target for drug discovery. *Drug Discovery Today*, **2021**, 26, 2445-2455	8.8	4
13	Alanine scan-guided synthesis and biological evaluation of analogues of culicinin D, a potent anticancer peptaibol. *Bioorganic and Medicinal Chemistry Letters*, **2020**, 30, 127135	2.9	4
12	Abstract A247: Mechanism of action of the hypoxia-activated irreversible pan-HER inhibitor SN29966. **2011**,		3
11	Abstract C46: Design and identification of the novel hypoxia-activated irreversible pan-HER inhibitor SN29966 **2009**,		2
10	Bioreductive prodrug PR-104 improves the tumour distribution and titre of the nitroreductase-armed oncolytic adenovirus ONYX-411 leading to therapeutic benefit. *Cancer Gene Therapy*, **2021**,	5.4	2
9	Use of an optimised enzyme/prodrug combination for Clostridia directed enzyme prodrug therapy induces a significant growth delay in necrotic tumours. *Cancer Gene Therapy*, **2021**,	5.4	2
8	Synthesis and antiproliferative activity of C- and N-terminal analogues of culicinin D. *Bioorganic and Medicinal Chemistry Letters*, **2020**, 30, 127331	2.9	1
7	Development of biomarkers to guide the clinical development of tarloxotinib bromide, a hypoxia-activated irreversible EGFR/HER2 inhibitor.. *Journal of Clinical Oncology*, **2016**, 34, e17521-e17521	2.2	1
6	Pre-Clinical Activity of Novel Hypoxia-Activated FLT3 Inhibitors in FLT3-Mutated AML. *Blood*, **2016**, 128, 5210-5210	2.2	1

List of Publications

5	Investigation of Covalent Warheads in the Design of 2-Aminopyrimidine-based FGFR4 Inhibitors. *ACS Medicinal Chemistry Letters*, **2021**, 12, 647-652	4.3	1
4	Design, Synthesis and In-Vitro Biological Evaluation of Antofine and Tylophorine Prodrugs as Hypoxia-Targeted Anticancer Agents. *Molecules*, **2021**, 26,	4.8	1
3	Allosterische Kinaseinhibitoren Erwartungen und Chancen. *Angewandte Chemie*, **2020**, 132, 13868-13883	3.6	0
2	Tissue Pharmacokinetic Properties and Bystander Potential of Hypoxia-Activated Prodrug CP-506 by Agent-Based Modelling.. *Frontiers in Pharmacology*, **2022**, 13, 803602	5.6	0
1	Directed evolution of the B. subtilis nitroreductase YfkO improves activation of the PET-capable probe SN33623 and CB1954 prodrug. *Biotechnology Letters*, **2021**, 43, 203-211	3	