

Frank Wuest

List of Publications by Year in descending order

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90
papers

12,623
citations

218677

26
h-index

45317

90
g-index

93
all docs

93
docs citations

93
times ranked

30014
citing authors

#	ARTICLE	IF	CITATIONS
1	In situ click chemistry generation of cyclooxygenase-2 inhibitors. <i>Nature Communications</i> , 2017, 8, 1.	12.8	10,736
2	18F-Labeled Peptides: The Future Is Bright. <i>Molecules</i> , 2014, 19, 20536-20556.	3.8	108
3	Targeted Alpha Therapy: Progress in Radionuclide Production, Radiochemistry, and Applications. <i>Pharmaceutics</i> , 2021, 13, 49.	4.5	83
4	Synthesis and evaluation of 1,5-diaryl-substituted tetrazoles as novel selective cyclooxygenase-2 (COX-2) inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 1823-1826.	2.2	76
5	Automated synthesis of [18F]DCFPyL via direct radiofluorination and validation in preclinical prostate cancer models. <i>EJNMMI Research</i> , 2016, 6, 40.	2.5	71
6	Copper-free click chemistry with the short-lived positron emitter fluorine-18. <i>Organic and Biomolecular Chemistry</i> , 2011, 9, 7393.	2.8	61
7	Expression and function of hexose transporters GLUT1, GLUT2, and GLUT5 in breast cancer—effects of hypoxia. <i>FASEB Journal</i> , 2018, 32, 5104-5118.	0.5	56
8	Synthesis and cyclooxygenase inhibition of various (aryl-1,2,3-triazole-1-yl)-methanesulfonylphenyl derivatives. <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 1146-1151.	3.0	48
9	Synthesis and evaluation in vitro and in vivo of a 11C-labeled cyclooxygenase-2 (COX-2) inhibitor. <i>Bioorganic and Medicinal Chemistry</i> , 2008, 16, 7662-7670.	3.0	47
10	Radiolabelling of proteins with fluorine-18 via click chemistry. <i>Chemical Communications</i> , 2009, , 7521.	4.1	46
11	The traceless Staudinger ligation with fluorine-18: a novel and versatile labeling technique for the synthesis of PET-radiotracers. <i>Tetrahedron Letters</i> , 2010, 51, 6410-6414.	1.4	46
12	Direct labelling of peptides with 2-[18F]fluoro-2-deoxy-d-glucose ([18F]FDG). <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 5426-5428.	2.2	42
13	Taking cyclotron 68Ga production to the next level: Expeditious solid target production of 68Ga for preparation of radiotracers. <i>Nuclear Medicine and Biology</i> , 2020, 80-81, 24-31.	0.6	42
14	Hybrid fluorescent conjugates of COX-2 inhibitors: Search for a COX-2 isozyme imaging cancer biomarker. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 163-168.	2.2	37
15	Fluorophore-Labeled Cyclooxygenase-2 Inhibitors for the Imaging of Cyclooxygenase-2 Overexpression in Cancer: Synthesis and Biological Studies. <i>ChemMedChem</i> , 2014, 9, 109-116.	3.2	36
16	Targeting lysyl oxidase for molecular imaging in breast cancer. <i>Breast Cancer Research</i> , 2015, 17, 107.	5.0	36
17	Implications for breast cancer treatment from increased autotaxin production in adipose tissue after radiotherapy. <i>FASEB Journal</i> , 2017, 31, 4064-4077.	0.5	35
18	Genetically Encoded Fragment-Based Discovery from Phage-Displayed Macrocyclic Libraries with Genetically Encoded Unnatural Pharmacophores. <i>Journal of the American Chemical Society</i> , 2021, 143, 5497-5507.	13.7	35

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19	PET imaging of cyclooxygenase-2 (COX-2) in a pre-clinical colorectal cancer model. <i>EJNMMI Research</i> , 2016, 6, 37.	2.5	33
20	Molecular Imaging of GLUT1 and GLUT5 in Breast Cancer: A Multitracer Positron Emission Tomography Imaging Study in Mice. <i>Molecular Pharmacology</i> , 2018, 93, 79-89.	2.3	33
21	Synthesis and radiopharmacological evaluation of a high-affinity and metabolically stabilized ¹⁸ F-labeled bombesin analogue for molecular imaging of gastrin-releasing peptide receptor-expressing prostate cancer. <i>Nuclear Medicine and Biology</i> , 2013, 40, 1025-1034.	0.6	32
22	Targeting phosphatidylserine for radionuclide-based molecular imaging of apoptosis. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2019, 24, 221-244.	4.9	32
23	Synthesis of three ¹⁸ F-labelled cyclooxygenase-2 (COX-2) inhibitors based on a pyrimidine scaffold. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 8052.	2.8	28
24	Synthesis and evaluation of an ¹⁸ F-labelled norbornene derivative for copper-free click chemistry reactions. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 3817.	2.8	28
25	Design, Synthesis, and Evaluation of an ¹⁸ F-labeled Radiotracer Based on Celecoxib-NBD for Positron Emission Tomography (PET) Imaging of Cyclooxygenase-2 (COX-2). <i>ChemMedChem</i> , 2015, 10, 1635-1640.	3.2	27
26	Diaryl-Substituted (Dihydro)pyrrolo[3,2,1- <i>hi</i>]indoles, a Class of Potent COX-2 Inhibitors with Tricyclic Core Structure. <i>Journal of Organic Chemistry</i> , 2015, 80, 5611-5624.	3.2	27
27	Synthesis and Analysis of ⁶⁴ Cu-Labeled GE11-Modified Polymeric Micellar Nanoparticles for EGFR-Targeted Molecular Imaging in a Colorectal Cancer Model. <i>Molecular Pharmaceutics</i> , 2020, 17, 1470-1481.	4.6	27
28	Radiolabeling of phosphatidylserine-binding peptides with prosthetic groups N-[6-(4-[¹⁸ F]fluorobenzylidene)aminoxyhexyl]maleimide ([¹⁸ F]FBAM) and N-succinimidyl-4-[¹⁸ F]fluorobenzoate ([¹⁸ F]SFB). <i>Applied Radiation and Isotopes</i> , 2011, 69, 1218-1225.	1.5	26
29	Microfluidic technology: An economical and versatile approach for the synthesis of O-(2-[¹⁸ F]fluoroethyl)-l-tyrosine ([¹⁸ F]FET). <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 2291-2295.	2.2	26
30	2,3-Diaryl-substituted indole based COX-2 inhibitors as leads for imaging tracer development. <i>RSC Advances</i> , 2014, 4, 38726-38742.	3.6	24
31	Targeting Prostate-Specific Membrane Antigen (PSMA) with F-18-Labeled Compounds: the Influence of Prosthetic Groups on Tumor Uptake and Clearance Profile. <i>Molecular Imaging and Biology</i> , 2017, 19, 923-932.	2.6	24
32	Technetium-99m based small molecule radiopharmaceuticals and radiotracers targeting inflammation and infection. <i>Dalton Transactions</i> , 2017, 46, 14435-14451.	3.3	23
33	Sonogashira cross-coupling reaction with 4-[¹⁸ F]fluoriodobenzene for rapid ¹⁸ F-labelling of peptides. <i>Chemical Communications</i> , 2015, 51, 3838-3841.	4.1	22
34	4-[¹⁸ F]Fluoro-N-methyl-N-(propyl-2-yn-1-yl)benzenesulfonamide ([¹⁸ F]F-SA): a versatile building block for labeling of peptides, proteins and oligonucleotides with fluorine-18 via Cu(I)-mediated click chemistry. <i>Amino Acids</i> , 2013, 44, 1167-1180.	2.7	21
35	Positron emission tomography radiotracers for imaging hypoxia. <i>Journal of Labelled Compounds and Radiopharmaceutics</i> , 2013, 56, 244-250.	1.0	21
36	Targeting Phosphatidylserine with a ⁶⁴ Cu-Labeled Peptide for Molecular Imaging of Apoptosis. <i>Molecular Pharmaceutics</i> , 2016, 13, 3564-3577.	4.6	21

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37	Metabolically Stabilized ⁶⁸ Ga-NOTA-Bombesin for PET Imaging of Prostate Cancer and Influence of Protease Inhibitor Phosphoramidon. <i>Molecular Pharmaceutics</i> , 2016, 13, 1347-1357.	4.6	21
38	High yield cyclotron production of a novel ¹³³ / ¹³⁵ La theranostic pair for nuclear medicine. <i>Scientific Reports</i> , 2020, 10, 22203.	3.3	21
39	Radiopharmacological evaluation of ¹⁸ F-labeled phosphatidylserine-binding peptides for molecular imaging of apoptosis. <i>Nuclear Medicine and Biology</i> , 2015, 42, 864-874.	0.6	20
40	Radiometal-Containing Aryl Diazonium Salts for Chemoselective Bioconjugation of Tyrosine Residues. <i>ACS Omega</i> , 2019, 4, 22101-22107.	3.5	20
41	Immuno-PET of epithelial ovarian cancer: harnessing the potential of CA125 for non-invasive imaging. <i>EJNMMI Research</i> , 2014, 4, 60.	2.5	19
42	Development of subnanomolar radiofluorinated (2-pyrrolidin-1-yl)imidazo[1,2-b]pyridazine pan-Trk inhibitors as candidate PET imaging probes. <i>MedChemComm</i> , 2015, 6, 2184-2193.	3.4	19
43	Structure-activity relationship of novel series of 1,5-disubstituted tetrazoles as cyclooxygenase-2 inhibitors: Design, synthesis, bioassay screening and molecular docking studies. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 4757-4762.	2.2	19
44	Comparison of scandium-44 with other PET radionuclides in pre-clinical PET phantom imaging. <i>EJNMMI Physics</i> , 2019, 6, 23.	2.7	19
45	¹⁸ F-Radiolabeling and <i>In Vivo</i> Analysis of SIFA-Derivatized Polymeric Core-Shell Nanoparticles. <i>Bioconjugate Chemistry</i> , 2018, 29, 89-95.	3.6	18
46	Synthesis, bioassay studies, and molecular docking of novel 5-substituted 1H tetrazoles as cyclooxygenase-2 (COX-2) inhibitors. <i>Medicinal Chemistry Research</i> , 2015, 24, 78-85.	2.4	17
47	Advances in [¹⁸ F]Trifluoromethylation Chemistry for PET Imaging. <i>Molecules</i> , 2021, 26, 6478.	3.8	17
48	Fully automated synthesis of 4-[¹⁸ F]fluorobenzylamine based on borohydride/NiCl ₂ reduction. <i>Nuclear Medicine and Biology</i> , 2013, 40, 430-436.	0.6	16
49	Fluorescent Hexose Conjugates Establish Stringent Stereochemical Requirement by GLUT5 for Recognition and Transport of Monosaccharides. <i>ACS Chemical Biology</i> , 2017, 12, 1087-1094.	3.4	16
50	First <i>In Vivo</i> and Phantom Imaging of Cyclotron-Produced ¹³³ La as a Theranostic Radionuclide for ²²⁵ Ac and ¹³⁵ La. <i>Journal of Nuclear Medicine</i> , 2022, 63, 584-590.	5.0	16
51	Synthesis and evaluation of fluorobenzoylated di- and tripeptides as inhibitors of cyclooxygenase-2 (COX-2). <i>Bioorganic and Medicinal Chemistry</i> , 2012, 20, 2221-2226.	3.0	15
52	Radiosynthesis and Biological Evaluation of [¹⁸ F]Triacoxib: A New Radiotracer for PET Imaging of COX-2. <i>Molecular Pharmaceutics</i> , 2020, 17, 251-261.	4.6	15
53	1,4-Diaryl-substituted triazoles as cyclooxygenase-2 inhibitors: Synthesis, biological evaluation and molecular modeling studies. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 4288-4295.	3.0	14
54	Automated radiosynthesis of no-carrier-added [¹⁸ F]fluoroiodobenzene: a versatile building block in ¹⁸ F radiochemistry. <i>Journal of Labelled Compounds and Radiopharmaceutics</i> , 2014, 57, 104-109.	1.0	14

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55	Fluorine- and rhenium-containing geldanamycin derivatives as leads for the development of molecular probes for imaging Hsp90. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 6724.	2.8	12
56	Molecular imaging of platelet-derived growth factor receptor-alpha (PDGFR α) in papillary thyroid cancer using immuno-PET. <i>Nuclear Medicine and Biology</i> , 2018, 58, 51-58.	0.6	12
57	A comparative PET imaging study of ⁴⁴ Ga- and ⁶⁸ Ga-labeled bombesin antagonist BBN2 derivatives in breast and prostate cancer models. <i>Nuclear Medicine and Biology</i> , 2020, 90-91, 74-83.	0.6	12
58	¹⁸ F-Labeled wild-type annexin V: comparison of random and site-selective radiolabeling methods. <i>Amino Acids</i> , 2016, 48, 65-74.	2.7	11
59	Synthesis and evaluation of 2-amino-5-(4-[¹⁸ F]fluorophenyl)pent-4-ynoic acid ([¹⁸ F]FPhPA): A novel ¹⁸ F-labeled amino acid for oncologic PET imaging. <i>Nuclear Medicine and Biology</i> , 2014, 41, 660-669.	0.6	10
60	Intranasal anti-caspase-1 therapy preserves myelin and glucose metabolism in a model of progressive multiple sclerosis. <i>Glia</i> , 2021, 69, 216-229.	4.9	10
61	Radiolanthanum: Promising theranostic radionuclides for PET, alpha, and Auger-Meitner therapy. <i>Nuclear Medicine and Biology</i> , 2022, 110-111, 59-66.	0.6	10
62	Application of [¹⁸ F]FDG in radiolabeling reactions using microfluidic technology. <i>Lab on A Chip</i> , 2013, 13, 4290.	6.0	8
63	Design and synthesis of [¹²⁵ I]Pyrcoxib: A novel ¹²⁵ I-labeled cyclooxygenase-2 (COX-2) inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 1516-1520.	2.2	7
64	Impact of structural alterations on the radiopharmacological profile of ¹⁸ F-labeled pyrimidines as cyclooxygenase-2 (COX-2) imaging agents. <i>Nuclear Medicine and Biology</i> , 2018, 62-63, 9-17.	0.6	7
65	Design, synthesis, and evaluation of positron emission tomography/fluorescence dual imaging probes for targeting facilitated glucose transporter 1 (GLUT1). <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 3241-3254.	2.8	7
66	PET Imaging of L-Type Amino Acid Transporter (LAT1) and Cystine-Glutamate Antiporter (xc ⁻) with [¹⁸ F]FDOPA and [¹⁸ F]FSPG in Breast Cancer Models. <i>Molecular Imaging and Biology</i> , 2020, 22, 1562-1571.	2.6	6
67	Synthesis and Preclinical Evaluation of [¹⁸ F]SiFA-PSMA Inhibitors in a Prostate Cancer Model. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 15671-15689.	6.4	6
68	Phosphopeptides with improved cellular uptake properties as ligands for the polo-box domain of polo-like kinase 1. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 4686-4689.	2.2	5
69	Effect of hypoxia on human equilibrative nucleoside transporters hENT1 and hENT2 in breast cancer. <i>FASEB Journal</i> , 2019, 33, 13837-13851.	0.5	5
70	Development of Fluorescence Imaging Probes for Labeling COX-1 in Live Ovarian Cancer Cells. <i>ACS Medicinal Chemistry Letters</i> , 2021, 12, 798-804.	2.8	5
71	Identify. Quantify. Predict. Why Immunologists Should Widely Use Molecular Imaging for Coronavirus Disease 2019. <i>Frontiers in Immunology</i> , 2021, 12, 568959.	4.8	5
72	Automated synthesis and dosimetry of 6-deoxy-6-[(¹⁸ F]fluoro-D-fructose (6-[(¹⁸ F]FDF): a radiotracer for imaging of GLUT5 in breast cancer. <i>American Journal of Nuclear Medicine and Molecular Imaging</i> , 2014, 4, 248-59.	1.0	5

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73	Dual Probes for Positron Emission Tomography (PET) and Fluorescence Imaging (FI) of Cancer. <i>Pharmaceutics</i> , 2022, 14, 645.	4.5	5
74	Sulfo-click chemistry with ¹⁸ F-labeled thio acids. <i>Chemical Communications</i> , 2019, 55, 1310-1313.	4.1	4
75	In Cellulo Generation of Fluorescent Probes for Live-Cell Imaging of Cyclooxygenase-2. <i>Chemistry - A European Journal</i> , 2021, 27, 3326-3337.	3.3	4
76	Synthesis and Biological Evaluation of 1,3,5-Trisubstituted 2-Pyrazolines as Novel Cyclooxygenase-2 Inhibitors with Antiproliferative Activity. <i>Chemistry and Biodiversity</i> , 2021, 18, e2000832.	2.1	4
77	Tyrosine kinase inhibitor therapy and metabolic remodelling in papillary thyroid cancer. <i>Endocrine-Related Cancer</i> , 2020, 27, 495-507.	3.1	4
78	Towards Selective Binding to the GLUT5 Transporter: Synthesis, Molecular Dynamics and In Vitro Evaluation of Novel C-3-Modified 2,5-Anhydro-D-mannitol Analogs. <i>Pharmaceutics</i> , 2022, 14, 828.	4.5	4
79	Synthesis, complex stability and small animal PET imaging of a novel ⁶⁴ Cu-labelled cryptand molecule. <i>MedChemComm</i> , 2014, 5, 958-962.	3.4	3
80	Unexpected formation of 1-[4-chloromethylphenyl]-5-[4-(methylsulfonyl)benzyl]-1 H -tetrazole and 1-[4-chloromethylphenyl]-5-[4-(aminosulfonyl)phenyl]-1 H -tetrazole: Crystal structure, bioassay screening and molecular docking studies. <i>Journal of Molecular Structure</i> , 2018, 1164, 317-327.	3.6	3
81	FOXM1 inhibitors as potential diagnostic agents: 1st generation of a PET probe targeting FOXM1 to detect triple negative breast cancer in vitro and in vivo. <i>ChemMedChem</i> , 2021, 16, 3720.	3.2	3
82	Synthesis of an ¹⁸ F-labeled cyclin-dependent kinase-2 inhibitor. <i>Journal of Labelled Compounds and Radiopharmaceutics</i> , 2011, 54, 769-774.	1.0	2
83	Synthesis of 2-Fluoroacetoacetic Acid and 4-Fluoro-3-hydroxybutyric Acid. <i>Synthesis</i> , 2019, 51, 2351-2358.	2.3	2
84	Synthesis and in vivo evaluation of a radiofluorinated ketone body derivative. <i>RSC Medicinal Chemistry</i> , 2020, 11, 297-306.	3.9	2
85	¹⁸ F-Labeling of Radiotracers Functionalized with a Silicon Fluoride Acceptor (SiFA) for Positron Emission Tomography. <i>Journal of Visualized Experiments</i> , 2020, , .	0.3	2
86	Positron Emission Tomography Imaging of Autotaxin in Thyroid and Breast Cancer Models Using [¹⁸ F]PRIMATX. <i>Molecular Pharmaceutics</i> , 2021, 18, 3352-3364.	4.6	2
87	Synthesis and structural identification of fluorine-18 labeled parathyroid hormone. <i>Journal of Labelled Compounds and Radiopharmaceutics</i> , 2015, 58, 453-457.	1.0	1
88	On the Viability of Tadalafil-Based ¹⁸ F-Radiotracers for In Vivo Phosphodiesterase 5 (PDE5) PET Imaging. <i>ACS Omega</i> , 2021, 6, 21741-21754.	3.5	1
89	Fluorine-18 Labeled Radioligands for PET Imaging of Cyclooxygenase-2. <i>Molecules</i> , 2022, 27, 3722.	3.8	1
90	Synthesis, binding affinity analysis, and ¹⁸ F-radiosynthesis of small molecular weight HIF-1 α binding compounds.. <i>ChemMedChem</i> , 2021, , .	3.2	0