Frank Wuest

List of Publications by Year
in descending order

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	First InÂVivo and Phantom Imaging of Cyclotron-Produced ¹³³La as a Theranostic Radionuclide for ²²⁵Ac and ¹³⁵La. Journal of Nuclear Medicine, 2022, 63, 584-590.	5.0	16
2	Dual Probes for Positron Emission Tomography (PET) and Fluorescence Imaging (FI) of Cancer. Pharmaceutics, 2022, 14, 645.	4.5	5
3	Radiolanthanum: Promising theranostic radionuclides for PET, alpha, and Auger-Meitner therapy. Nuclear Medicine and Biology, 2022, 110-111, 59-66.	0.6	10
4	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. Pharmaceutics, 2022, 14, 828.	4.5	4
5	Fluorine-18 Labelled Radioligands for PET Imaging of Cyclooxygenase-2. Molecules, 2022, 27, 3722.	3.8	1
6	In Cellulo Generation of Fluorescent Probes for Liveâ€Cell Imaging of Cylooxygenaseâ€2. Chemistry - A European Journal, 2021, 27, 3326-3337.	3.3	4
7	Intranasal antiâ€caspaseâ€1 therapy preserves myelin and glucose metabolism in a model of progressive multiple sclerosis. Glia, 2021, 69, 216-229.	4.9	10
8	Design, synthesis, and evaluation of positron emission tomography/fluorescence dual imaging probes for targeting facilitated glucose transporter 1 (GLUT1). Organic and Biomolecular Chemistry, 2021, 19, 3241-3254.	2.8	7
9	Synthesis and Biological Evaluation of 1,3,5â€Trisubstituted 2â€Pyrazolines as Novel Cyclooxygenaseâ€2 Inhibitors with Antiproliferative Activity. Chemistry and Biodiversity, 2021, 18, e2000832.	2.1	4
10	Genetically Encoded Fragment-Based Discovery from Phage-Displayed Macrocyclic Libraries with Genetically Encoded Unnatural Pharmacophores. Journal of the American Chemical Society, 2021, 143, 5497-5507.	13.7	35
11	Development of Fluorescence Imaging Probes for Labeling COX-1 in Live Ovarian Cancer Cells. ACS Medicinal Chemistry Letters, 2021, 12, 798-804.	2.8	5
12	Identify. Quantify. Predict. Why Immunologists Should Widely Use Molecular Imaging for Coronavirus Disease 2019. Frontiers in Immunology, 2021, 12, 568959.	4.8	5
13	Positron Emission Tomography Imaging of Autotaxin in Thyroid and Breast Cancer Models Using [¹⁸F]PRIMATX. Molecular Pharmaceutics, 2021, 18, 3352-3364.	4.6	2
14	FOXM1 inhibitors as potential diagnostic agents: 1st generation of a PET probe targeting FOXM1 to detect triple negativeâ€breast cancer in vitro and in vivo. ChemMedChem, 2021, 16, 3720.	3.2	3
15	On the Viability of Tadalafil-Based 18F-Radiotracers for In Vivo Phosphodiesterase 5 (PDE5) PET Imaging. ACS Omega, 2021, 6, 21741-21754.	3.5	1
16	Synthesis, binding affinity analysis, and 18Fâ€radiosynthesis of small molecular weight HIFâ€1Î± binding compounds.. ChemMedChem, 2021, , .	3.2	0
17	Targeted Alpha Therapy: Progress in Radionuclide Production, Radiochemistry, and Applications. Pharmaceutics, 2021, 13, 49.	4.5	83
18	Synthesis and Preclinical Evaluation of [¹⁸F]SiFA-PSMA Inhibitors in a Prostate Cancer Model. Journal of Medicinal Chemistry, 2021, 64, 15671-15689.	6.4	6

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19	Advances in [18F]Trifluoromethylation Chemistry for PET Imaging. Molecules, 2021, 26, 6478.	3.8	17
20	Radiosynthesis and Biological Evaluation of [¹⁸F]Triacoxib: A New Radiotracer for PET Imaging of COX-2. Molecular Pharmaceutics, 2020, 17, 251-261.	4.6	15
21	PET Imaging of l-Type Amino Acid Transporter (LAT1) and Cystine-Glutamate Antiporter (xcâ^') with [18F]FDOPA and [18F]FSPG in Breast Cancer Models. Molecular Imaging and Biology, 2020, 22, 1562-1571.	2.6	6
22	A comparative PET imaging study of 44gSc- and 68Ga-labeled bombesin antagonist BBN2 derivatives in breast and prostate cancer models. Nuclear Medicine and Biology, 2020, 90-91, 74-83.	0.6	12
23	Synthesis and Analysis of ⁶⁴Cu-Labeled GE11-Modified Polymeric Micellar Nanoparticles for EGFR-Targeted Molecular Imaging in a Colorectal Cancer Model. Molecular Pharmaceutics, 2020, 17, 1470-1481.	4.6	27
24	Taking cyclotron 68Ga production to the next level: Expeditious solid target production of 68Ga for preparation of radiotracers. Nuclear Medicine and Biology, 2020, 80-81, 24-31.	0.6	42
25	Synthesis andin vivoevaluation of a radiofluorinated ketone body derivative. RSC Medicinal Chemistry, 2020, 11, 297-306.	3.9	2
26	¹⁸F-Labeling of Radiotracers Functionalized with a Silicon Fluoride Acceptor (SiFA) for Positron Emission Tomography. Journal of Visualized Experiments, 2020, , .	0.3	2
27	High yield cyclotron production of a novel 133/135La theranostic pair for nuclear medicine. Scientific Reports, 2020, 10, 22203.	3.3	21
28	Tyrosine kinase inhibitor therapy and metabolic remodelling in papillary thyroid cancer. Endocrine-Related Cancer, 2020, 27, 495-507.	3.1	4
29	Effect of hypoxia on human equilibrative nucleoside transporters hENT1 and hENT2 in breast cancer. FASEB Journal, 2019, 33, 13837-13851.	0.5	5
30	Sulfo-click chemistry with ¹⁸F-labeled thio acids. Chemical Communications, 2019, 55, 1310-1313.	4.1	4
31	Targeting phosphatidylserine for radionuclide-based molecular imaging of apoptosis. Apoptosis: an International Journal on Programmed Cell Death, 2019, 24, 221-244.	4.9	32
32	Synthesis of 2-Fluoroacetoacetic Acid and 4-Fluoro-3-hydroxyÂbutyric Acid. Synthesis, 2019, 51, 2351-2358.	2.3	2
33	Radiometal-Containing Aryl Diazonium Salts for Chemoselective Bioconjugation of Tyrosine Residues. ACS Omega, 2019, 4, 22101-22107.	3.5	20
34	Comparison of scandium-44â€‰g with other PET radionuclides in pre-clinical PET phantom imaging. EJNMMI Physics, 2019, 6, 23.	2.7	19
35	¹⁸F-Radiolabeling and In Vivo Analysis of SiFA-Derivatized Polymeric Coreâ€“Shell Nanoparticles. Bioconjugate Chemistry, 2018, 29, 89-95.	3.6	18
36	Molecular imaging of platelet-derived growth factor receptor-alpha (PDGFRÎ±) in papillary thyroid cancer using immuno-PET. Nuclear Medicine and Biology, 2018, 58, 51-58.	0.6	12

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37	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. Journal of Molecular Structure, 2018, 1164, 317-327.	3.6	3
38	Molecular Imaging of GLUT1 and GLUT5 in Breast Cancer: A Multitracer Positron Emission Tomography Imaging Study in Mice. Molecular Pharmacology, 2018, 93, 79-89.	2.3	33
39	Impact of structural alterations on the radiopharmacological profile of 18F-labeled pyrimidines as cyclooxygenase-2 (COX-2) imaging agents. Nuclear Medicine and Biology, 2018, 62-63, 9-17.	0.6	7
40	Expression and function of hexose transporters GLUT1, GLUT2, and GLUT5 in breast cancerâ€"effects of hypoxia. FASEB Journal, 2018, 32, 5104-5118.	0.5	56
41	Fluorescent Hexose Conjugates Establish Stringent Stereochemical Requirement by GLUT5 for Recognition and Transport of Monosaccharides. ACS Chemical Biology, 2017, 12, 1087-1094.	3.4	16
42	Implications for breast cancer treatment from increased autotaxin production in adipose tissue after radiotherapy. FASEB Journal, 2017, 31, 4064-4077.	0.5	35
43	In situ click chemistry generation of cyclooxygenase-2 inhibitors. Nature Communications, 2017, 8, 1.	12.8	10,736
44	Technetium-99m based small molecule radiopharmaceuticals and radiotracers targeting inflammation and infection. Dalton Transactions, 2017, 46, 14435-14451.	3.3	23
45	Targeting Prostate-Specific Membrane Antigen (PSMA) with F-18-Labeled Compounds: the Influence of Prosthetic Groups on Tumor Uptake and Clearance Profile. Molecular Imaging and Biology, 2017, 19, 923-932.	2.6	24
46	Automated synthesis of [18F]DCFPyL via direct radiofluorination and validation in preclinical prostate cancer models. EJNMMI Research, 2016, 6, 40.	2.5	71
47	Targeting Phosphatidylserine with a ⁶⁴Cu-Labeled Peptide for Molecular Imaging of Apoptosis. Molecular Pharmaceutics, 2016, 13, 3564-3577.	4.6	21
48	Structureâ€"activity relationship of novel series of 1,5-disubstituted tetrazoles as cyclooxygenase-2 inhibitors: Design, synthesis, bioassay screening and molecular docking studies. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 4757-4762.	2.2	19
49	PET imaging of cyclooxygenase-2 (COX-2) in a pre-clinical colorectal cancer model. EJNMMI Research, 2016, 6, 37.	2.5	33
50	Metabolically Stabilized ⁶⁸Ga-NOTA-Bombesin for PET Imaging of Prostate Cancer and Influence of Protease Inhibitor Phosphoramidon. Molecular Pharmaceutics, 2016, 13, 1347-1357.	4.6	21
51	Design and synthesis of [125 I]Pyricoxib: A novel 125 I-labeled cyclooxygenase-2 (COX-2) inhibitors. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 1516-1520.	2.2	7
52	18F-Labeled wild-type annexin V: comparison of random and site-selective radiolabeling methods. Amino Acids, 2016, 48, 65-74.	2.7	11
53	Synthesis and structural identification of fluorine-18 labeled parathyroid hormone. Journal of Labelled Compounds and Radiopharmaceuticals, 2015, 58, 453-457.	1.0	1
54	Targeting lysyl oxidase for molecular imaging in breast cancer. Breast Cancer Research, 2015, 17, 107.	5.0	36

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55	Design, Synthesis, and Evaluation of an ¹⁸Fâ€Labeled Radiotracer Based on Celecoxibâ€“NBD for Positron Emission Tomography (PET) Imaging of Cyclooxygenaseâ€2 (COXâ€2). ChemMedChem, 2015, 10, 1635-1640.	3.2	27
56	Development of subnanomolar radiofluorinated (2-pyrrolidin-1-yl)imidazo[1,2-b]pyridazine pan-Trk inhibitors as candidate PET imaging probes. MedChemComm, 2015, 6, 2184-2193.	3.4	19
57	Sonogashira cross-coupling reaction with 4-[¹⁸F]fluoroiodobenzene for rapid ¹⁸F-labelling of peptides. Chemical Communications, 2015, 51, 3838-3841.	4.1	22
58	Radiopharmacological evaluation of 18F-labeled phosphatidylserine-binding peptides for molecular imaging of apoptosis. Nuclear Medicine and Biology, 2015, 42, 864-874.	0.6	20
59	Diaryl-Substituted (Dihydro)pyrrolo[3,2,1-hi]indoles, a Class of Potent COX-2 Inhibitors with Tricyclic Core Structure. Journal of Organic Chemistry, 2015, 80, 5611-5624.	3.2	27
60	Synthesis, bioassay studies, and molecular docking of novel 5-substituted 1H tetrazoles as cyclooxygenase-2 (COX-2) inhibitors. Medicinal Chemistry Research, 2015, 24, 78-85.	2.4	17
61	Automated radiosynthesis of noâ€carrierâ€added 4â€[¹⁸F]fluoroiodobenzene: a versatile building block in ¹⁸F radiochemistry. Journal of Labelled Compounds and Radiopharmaceuticals, 2014, 57, 104-109.	1.0	14
62	Fluorophoreâ€Labeled Cyclooxygenaseâ€2 Inhibitors for the Imaging of Cyclooxygenaseâ€2 Overexpression in Cancer: Synthesis and Biological Studies. ChemMedChem, 2014, 9, 109-116.	3.2	36
63	Immuno-PET of epithelial ovarian cancer: harnessing the potential of CA125 for non-invasive imaging. EJNMMI Research, 2014, 4, 60.	2.5	19
64	Synthesis, complex stability and small animal PET imaging of a novel 64Cu-labelled cryptand molecule. MedChemComm, 2014, 5, 958-962.	3.4	3
65	2,3-Diaryl-substituted indole based COX-2 inhibitors as leads for imaging tracer development. RSC Advances, 2014, 4, 38726-38742.	3.6	24
66	Synthesis and evaluation of 2-amino-5-(4-[18F]fluorophenyl)pent-4-ynoic acid ([18F]FPhPA): A novel 18F-labeled amino acid for oncologic PET imaging. Nuclear Medicine and Biology, 2014, 41, 660-669.	0.6	10
67	18F-Labeled Peptides: The Future Is Bright. Molecules, 2014, 19, 20536-20556.	3.8	108
68	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. American Journal of Nuclear Medicine and Molecular Imaging, 2014, 4, 248-59.	1.0	5
69	4-[18F]Fluoro-N-methyl-N-(propyl-2-yn-1-yl)benzenesulfonamide ([18F]F-SA): a versatile building block for labeling of peptides, proteins and oligonucleotides with fluorine-18 via Cu(I)-mediated click chemistry. Amino Acids, 2013, 44, 1167-1180.	2.7	21
70	Hybrid fluorescent conjugates of COX-2 inhibitors: Search for a COX-2 isozyme imaging cancer biomarker. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 163-168.	2.2	37
71	Fully automated synthesis of 4-[18F]fluorobenzylamine based on borohydride/NiCl2 reduction. Nuclear Medicine and Biology, 2013, 40, 430-436.	0.6	16
72	Application of [18F]FDG in radiolabeling reactions using microfluidic technology. Lab on A Chip, 2013, 13, 4290.	6.0	8

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73	Synthesis of three 18F-labelled cyclooxygenase-2 (COX-2) inhibitors based on a pyrimidine scaffold. Organic and Biomolecular Chemistry, 2013, 11, 8052.	2.8	28
74	Synthesis and radiopharmacological evaluation of a high-affinity and metabolically stabilized 18F-labeled bombesin analogue for molecular imaging of gastrin-releasing peptide receptor-expressing prostate cancer. Nuclear Medicine and Biology, 2013, 40, 1025-1034.	0.6	32
75	Positron emission tomography radiotracers for imaging hypoxia. Journal of Labelled Compounds and Radiopharmaceuticals, 2013, 56, 244-250.	1.0	21
76	Synthesis and evaluation of an 18F-labelled norbornene derivative for copper-free click chemistry reactions. Organic and Biomolecular Chemistry, 2013, 11, 3817.	2.8	28
77	1,4-Diaryl-substituted triazoles as cyclooxygenase-2 inhibitors: Synthesis, biological evaluation and molecular modeling studies. Bioorganic and Medicinal Chemistry, 2013, 21, 4288-4295.	3.0	14
78	Fluorine- and rhenium-containing geldanamycin derivatives as leads for the development of molecular probes for imaging Hsp90. Organic and Biomolecular Chemistry, 2012, 10, 6724.	2.8	12
79	Synthesis and evaluation of fluorobenzoylated di- and tripeptides as inhibitors of cyclooxygenase-2 (COX-2). Bioorganic and Medicinal Chemistry, 2012, 20, 2221-2226.	3.0	15
80	Microfluidic technology: An economical and versatile approach for the synthesis of O-(2-[18F]fluoroethyl)-l-tyrosine ([18F]FET). Bioorganic and Medicinal Chemistry Letters, 2012, 22, 2291-2295.	2.2	26
81	Copper-free click chemistry with the short-lived positron emitter fluorine-18. Organic and Biomolecular Chemistry, 2011, 9, 7393.	2.8	61
82	Phosphopeptides with improved cellular uptake properties as ligands for the polo-box domain of polo-like kinase 1. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 4686-4689.	2.2	5
83	Synthesis of an ‹sup›18‹/sup›Fâ€labeled cyclinâ€dependent kinaseâ€2 inhibitor. Journal of Labelled Compounds and Radiopharmaceuticals, 2011, 54, 769-774.	1.0	2
84	Synthesis and evaluation of 1,5-diaryl-substituted tetrazoles as novel selective cyclooxygenase-2 (COX-2) inhibitors. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 1823-1826.	2.2	76
85	Radiolabeling of phosphatidylserine-binding peptides with prosthetic groups N-[6-(4-[18F]fluorobenzylidene)aminooxyhexyl]maleimide ([18F]FBAM) and N-succinimidyl-4-[18F]fluorobenzoate ([18F]SFB). Applied Radiation and Isotopes, 2011, 69, 1218-1225.	1.5	26
86	The traceless Staudinger ligation with fluorine-18: a novel and versatile labeling technique for the synthesis of PET-radiotracers. Tetrahedron Letters, 2010, 51, 6410-6414.	1.4	46
87	Synthesis and cyclooxygenase inhibition of various (aryl-1,2,3-triazole-1-yl)-methanesulfonylphenyl derivatives. Bioorganic and Medicinal Chemistry, 2009, 17, 1146-1151.	3.0	48
88	Direct labelling of peptides with 2-[18F]fluoro-2-deoxy-d-glucose ([18F]FDG). Bioorganic and Medicinal Chemistry Letters, 2009, 19, 5426-5428.	2.2	42
89	Radiolabelling of proteins with fluorine-18 via click chemistry. Chemical Communications, 2009, , 7521.	4.1	46
90	Synthesis and evaluation in vitro and in vivo of a 11C-labeled cyclooxygenase-2 (COX-2) inhibitor. Bioorganic and Medicinal Chemistry, 2008, 16, 7662-7670.	3.0	47