

# Frank Wuest

## List of Publications by Year in descending order

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Version: 2024-02-01

90  
papers

12,623  
citations

249298

26  
h-index

51423

90  
g-index

93  
all docs

93  
docs citations

93  
times ranked

33830  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | First In Vivo and Phantom Imaging of Cyclotron-Produced <sup>133</sup> La as a Theranostic Radionuclide for <sup>225</sup> Ac and <sup>135</sup> La. <i>Journal of Nuclear Medicine</i> , 2022, 63, 584-590.                 | 2.8 | 16        |
| 2  | Dual Probes for Positron Emission Tomography (PET) and Fluorescence Imaging (FI) of Cancer. <i>Pharmaceutics</i> , 2022, 14, 645.  | 2.0 | 5         |
| 3  | Radiolanthanum: Promising theranostic radionuclides for PET, alpha, and Auger-Meitner therapy. <i>Nuclear Medicine and Biology</i> , 2022, 110-111, 59-66.   | 0.3 | 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. <i>Pharmaceutics</i> , 2022, 14, 828.                        | 2.0 | 4         |
| 5  | Fluorine-18 Labelled Radioligands for PET Imaging of Cyclooxygenase-2. <i>Molecules</i> , 2022, 27, 3722.  | 1.7 | 1         |
| 6  | In Cellulo Generation of Fluorescent Probes for Live Cell Imaging of Cyclooxygenase-2. <i>Chemistry - A European Journal</i> , 2021, 27, 3326-3337.  | 1.7 | 4         |
| 7  | Intranasal anti-caspase-1 therapy preserves myelin and glucose metabolism in a model of progressive multiple sclerosis. <i>Glia</i> , 2021, 69, 216-229.   | 2.5 | 10        |
| 8  | 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. | 1.5 | 7         |
| 9  | 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.                      | 1.0 | 4         |
| 10 | 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.           | 6.6 | 35        |
| 11 | Development of Fluorescence Imaging Probes for Labeling COX-1 in Live Ovarian Cancer Cells. <i>ACS Medicinal Chemistry Letters</i> , 2021, 12, 798-804.  | 1.3 | 5         |
| 12 | Identify. Quantify. Predict. Why Immunologists Should Widely Use Molecular Imaging for Coronavirus Disease 2019. <i>Frontiers in Immunology</i> , 2021, 12, 568959.  | 2.2 | 5         |
| 13 | Positron Emission Tomography Imaging of Autotaxin in Thyroid and Breast Cancer Models Using [ <sup>18</sup> F]PRIMATX. <i>Molecular Pharmaceutics</i> , 2021, 18, 3352-3364.   | 2.3 | 2         |
| 14 | 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.                            | 1.6 | 3         |
| 15 | On the Viability of Tadalafil-Based <sup>18</sup> F-Radiotracers for In Vivo Phosphodiesterase 5 (PDE5) PET Imaging. <i>ACS Omega</i> , 2021, 6, 21741-21754.  | 1.6 | 1         |
| 16 | Synthesis, binding affinity analysis, and <sup>18</sup> F-radiosynthesis of small molecular weight HIF-1 $\alpha$ binding compounds. <i>ChemMedChem</i> , 2021, , .  | 1.6 | 0         |
| 17 | Targeted Alpha Therapy: Progress in Radionuclide Production, Radiochemistry, and Applications. <i>Pharmaceutics</i> , 2021, 13, 49.  | 2.0 | 83        |
| 18 | Synthesis and Preclinical Evaluation of [ <sup>18</sup> F]SiFA-PSMA Inhibitors in a Prostate Cancer Model. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 15671-15689.  | 2.9 | 6         |

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|----|--|-----|-----------|
| 19 | Advances in [ <sup>18</sup> F]Trifluoromethylation Chemistry for PET Imaging. <i>Molecules</i> , 2021, 26, 6478.   | 1.7 | 17        |
| 20 | Radiosynthesis and Biological Evaluation of [ <sup>18</sup> F]Triacoxib: A New Radiotracer for PET Imaging of COX-2. <i>Molecular Pharmaceutics</i> , 2020, 17, 251-261.   | 2.3 | 15        |
| 21 | PET Imaging of I-Type Amino Acid Transporter (LAT1) and Cystine-Glutamate Antiporter (xc <sup>-</sup> ) with [ <sup>18</sup> F]FDOPA and [ <sup>18</sup> F]FSPG in Breast Cancer Models. <i>Molecular Imaging and Biology</i> , 2020, 22, 1562-1571. | 1.3 | 6         |
| 22 | A comparative PET imaging study of <sup>44</sup> Ga- and <sup>68</sup> Ga-labeled bombesin antagonist BBN2 derivatives in breast and prostate cancer models. <i>Nuclear Medicine and Biology</i> , 2020, 90-91, 74-83.                               | 0.3 | 12        |
| 23 | Synthesis and Analysis of <sup>64</sup> 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.                            | 2.3 | 27        |
| 24 | Taking cyclotron <sup>68</sup> Ga production to the next level: Expeditious solid target production of <sup>68</sup> Ga for preparation of radiotracers. <i>Nuclear Medicine and Biology</i> , 2020, 80-81, 24-31.                                   | 0.3 | 42        |
| 25 | Synthesis and <i>in vivo</i> evaluation of a radiofluorinated ketone body derivative. <i>RSC Medicinal Chemistry</i> , 2020, 11, 297-306.  | 1.7 | 2         |
| 26 | <sup>18</sup> F-Labeling of Radiotracers Functionalized with a Silicon Fluoride Acceptor (SiFA) for Positron Emission Tomography. <i>Journal of Visualized Experiments</i> , 2020, , .   | 0.2 | 2         |
| 27 | High yield cyclotron production of a novel <sup>133</sup> / <sup>135</sup> La theranostic pair for nuclear medicine. <i>Scientific Reports</i> , 2020, 10, 22203.  | 1.6 | 21        |
| 28 | Tyrosine kinase inhibitor therapy and metabolic remodelling in papillary thyroid cancer. <i>Endocrine-Related Cancer</i> , 2020, 27, 495-507.  | 1.6 | 4         |
| 29 | Effect of hypoxia on human equilibrative nucleoside transporters hENT1 and hENT2 in breast cancer. <i>FASEB Journal</i> , 2019, 33, 13837-13851.   | 0.2 | 5         |
| 30 | Sulfo-click chemistry with <sup>18</sup> F-labeled thio acids. <i>Chemical Communications</i> , 2019, 55, 1310-1313.   | 2.2 | 4         |
| 31 | Targeting phosphatidylserine for radionuclide-based molecular imaging of apoptosis. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2019, 24, 221-244.   | 2.2 | 32        |
| 32 | Synthesis of 2-Fluoroacetoacetic Acid and 4-Fluoro-3-hydroxybutyric Acid. <i>Synthesis</i> , 2019, 51, 2351-2358.  | 1.2 | 2         |
| 33 | Radiometal-Containing Aryl Diazonium Salts for Chemoselective Bioconjugation of Tyrosine Residues. <i>ACS Omega</i> , 2019, 4, 22101-22107.  | 1.6 | 20        |
| 34 | Comparison of scandium-44 with other PET radionuclides in pre-clinical PET phantom imaging. <i>EJNMMI Physics</i> , 2019, 6, 23.   | 1.3 | 19        |
| 35 | <sup>18</sup> F-Radiolabeling and <i>In Vivo</i> Analysis of SiFA-Derivatized Polymeric Core-Shell Nanoparticles. <i>Bioconjugate Chemistry</i> , 2018, 29, 89-95.   | 1.8 | 18        |
| 36 | Molecular imaging of platelet-derived growth factor receptor-alpha (PDGFR $\alpha$ ) in papillary thyroid cancer using immuno-PET. <i>Nuclear Medicine and Biology</i> , 2018, 58, 51-58.  | 0.3 | 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. <i>Journal of Molecular Structure</i> , 2018, 1164, 317-327. | 1.8 | 3         |
| 38 | 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.   | 1.0 | 33        |
| 39 | Impact of structural alterations on the radiopharmacological profile of 18F-labeled pyrimidines as cyclooxygenase-2 (COX-2) imaging agents. <i>Nuclear Medicine and Biology</i> , 2018, 62-63, 9-17.  | 0.3 | 7         |
| 40 | Expression and function of hexose transporters GLUT1, GLUT2, and GLUT5 in breast cancer—effects of hypoxia. <i>FASEB Journal</i> , 2018, 32, 5104-5118.   | 0.2 | 56        |
| 41 | Fluorescent Hexose Conjugates Establish Stringent Stereochemical Requirement by GLUT5 for Recognition and Transport of Monosaccharides. <i>ACS Chemical Biology</i> , 2017, 12, 1087-1094.  | 1.6 | 16        |
| 42 | Implications for breast cancer treatment from increased autotaxin production in adipose tissue after radiotherapy. <i>FASEB Journal</i> , 2017, 31, 4064-4077.  | 0.2 | 35        |
| 43 | In situ click chemistry generation of cyclooxygenase-2 inhibitors. <i>Nature Communications</i> , 2017, 8, 1.   | 5.8 | 10,736    |
| 44 | Technetium-99m based small molecule radiopharmaceuticals and radiotracers targeting inflammation and infection. <i>Dalton Transactions</i> , 2017, 46, 14435-14451.   | 1.6 | 23        |
| 45 | 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.  | 1.3 | 24        |
| 46 | Automated synthesis of [18F]DCFPyL via direct radiofluorination and validation in preclinical prostate cancer models. <i>EJNMMI Research</i> , 2016, 6, 40.   | 1.1 | 71        |
| 47 | Targeting Phosphatidylserine with a <sup>64</sup> Cu-Labeled Peptide for Molecular Imaging of Apoptosis. <i>Molecular Pharmaceutics</i> , 2016, 13, 3564-3577.  | 2.3 | 21        |
| 48 | 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.   | 1.0 | 19        |
| 49 | PET imaging of cyclooxygenase-2 (COX-2) in a pre-clinical colorectal cancer model. <i>EJNMMI Research</i> , 2016, 6, 37.  | 1.1 | 33        |
| 50 | Metabolically Stabilized <sup>68</sup> Ga-NOTA-Bombesin for PET Imaging of Prostate Cancer and Influence of Protease Inhibitor Phosphoramidon. <i>Molecular Pharmaceutics</i> , 2016, 13, 1347-1357.  | 2.3 | 21        |
| 51 | Design and synthesis of [ <sup>125</sup> I]Pyricoxib: A novel <sup>125</sup> I-labeled cyclooxygenase-2 (COX-2) inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 1516-1520.  | 1.0 | 7         |
| 52 | <sup>18</sup> F-Labeled wild-type annexin V: comparison of random and site-selective radiolabeling methods. <i>Amino Acids</i> , 2016, 48, 65-74.   | 1.2 | 11        |
| 53 | Synthesis and structural identification of fluorine-18 labeled parathyroid hormone. <i>Journal of Labeled Compounds and Radiopharmaceuticals</i> , 2015, 58, 453-457.   | 0.5 | 1         |
| 54 | Targeting lysyl oxidase for molecular imaging in breast cancer. <i>Breast Cancer Research</i> , 2015, 17, 107.  | 2.2 | 36        |

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|----|--|-----|-----------|
| 55 | Design, Synthesis, and Evaluation of an <sup>18</sup> 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.   | 1.6 | 27        |
| 56 | 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.  | 3.5 | 19        |
| 57 | Sonogashira cross-coupling reaction with 4-[ <sup>18</sup> F]fluoroiodobenzene for rapid <sup>18</sup> F-labelling of peptides. <i>Chemical Communications</i> , 2015, 51, 3838-3841.  | 2.2 | 22        |
| 58 | Radiopharmacological evaluation of <sup>18</sup> F-labeled phosphatidylserine-binding peptides for molecular imaging of apoptosis. <i>Nuclear Medicine and Biology</i> , 2015, 42, 864-874.  | 0.3 | 20        |
| 59 | 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.  | 1.7 | 27        |
| 60 | 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.   | 1.1 | 17        |
| 61 | Automated radiosynthesis of no-carrier-added [ <sup>18</sup> F]fluoroiodobenzene: a versatile building block in <sup>18</sup> F radiochemistry. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2014, 57, 104-109.   | 0.5 | 14        |
| 62 | 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.   | 1.6 | 36        |
| 63 | Immuno-PET of epithelial ovarian cancer: harnessing the potential of CA125 for non-invasive imaging. <i>EJNMMI Research</i> , 2014, 4, 60.   | 1.1 | 19        |
| 64 | Synthesis, complex stability and small animal PET imaging of a novel <sup>64</sup> Cu-labelled cryptand molecule. <i>MedChemComm</i> , 2014, 5, 958-962.   | 3.5 | 3         |
| 65 | 2,3-Diaryl-substituted indole based COX-2 inhibitors as leads for imaging tracer development. <i>RSC Advances</i> , 2014, 4, 38726-38742.  | 1.7 | 24        |
| 66 | Synthesis and evaluation of 2-amino-5-(4-[ <sup>18</sup> F]fluorophenyl)pent-4-ynoic acid ([ <sup>18</sup> F]FPhPA): A novel <sup>18</sup> F-labeled amino acid for oncologic PET imaging. <i>Nuclear Medicine and Biology</i> , 2014, 41, 660-669.                                    | 0.3 | 10        |
| 67 | <sup>18</sup> F-Labeled Peptides: The Future Is Bright. <i>Molecules</i> , 2014, 19, 20536-20556.  | 1.7 | 108       |
| 68 | Automated synthesis and dosimetry of 6-deoxy-6-[( <sup>18</sup> F]fluoro-D-fructose (6-[( <sup>18</sup> 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         |
| 69 | 4-[ <sup>18</sup> F]Fluoro-N-methyl-N-(propyl-2-yn-1-yl)benzenesulfonamide ([ <sup>18</sup> 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. | 1.2 | 21        |
| 70 | 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.   | 1.0 | 37        |
| 71 | Fully automated synthesis of 4-[ <sup>18</sup> F]fluorobenzylamine based on borohydride/NiCl <sub>2</sub> reduction. <i>Nuclear Medicine and Biology</i> , 2013, 40, 430-436.  | 0.3 | 16        |
| 72 | Application of [ <sup>18</sup> F]FDG in radiolabeling reactions using microfluidic technology. <i>Lab on A Chip</i> , 2013, 13, 4290.  | 3.1 | 8         |

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|----|---|-----|-----------|
| 73 | Synthesis of three <sup>18</sup> F-labelled cyclooxygenase-2 (COX-2) inhibitors based on a pyrimidine scaffold. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 8052.   | 1.5 | 28        |
| 74 | Synthesis and radiopharmacological evaluation of a high-affinity and metabolically stabilized <sup>18</sup> 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.                          | 0.3 | 32        |
| 75 | Positron emission tomography radiotracers for imaging hypoxia. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2013, 56, 244-250.   | 0.5 | 21        |
| 76 | Synthesis and evaluation of an <sup>18</sup> F-labelled norbornene derivative for copper-free click chemistry reactions. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 3817.  | 1.5 | 28        |
| 77 | 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.  | 1.4 | 14        |
| 78 | 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.   | 1.5 | 12        |
| 79 | 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.   | 1.4 | 15        |
| 80 | Microfluidic technology: An economical and versatile approach for the synthesis of O-(2-[ <sup>18</sup> F]fluoroethyl)-l-tyrosine ([ <sup>18</sup> F]FET). <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 2291-2295.   | 1.0 | 26        |
| 81 | Copper-free click chemistry with the short-lived positron emitter fluorine-18. <i>Organic and Biomolecular Chemistry</i> , 2011, 9, 7393.   | 1.5 | 61        |
| 82 | 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.   | 1.0 | 5         |
| 83 | Synthesis of an <sup>18</sup> F-labeled cyclin-dependent kinase inhibitor. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2011, 54, 769-774.   | 0.5 | 2         |
| 84 | 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.  | 1.0 | 76        |
| 85 | Radiolabeling of phosphatidylserine-binding peptides with prosthetic groups N-[6-(4-[ <sup>18</sup> F]fluorobenzylidene)aminoxyhexyl]maleimide ([ <sup>18</sup> F]FBAM) and N-succinimidyl-4-[ <sup>18</sup> F]fluorobenzoate ([ <sup>18</sup> F]SFB). <i>Applied Radiation and Isotopes</i> , 2011, 69, 1218-1225. | 0.7 | 26        |
| 86 | 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.   | 0.7 | 46        |
| 87 | 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.   | 1.4 | 48        |
| 88 | Direct labelling of peptides with 2-[ <sup>18</sup> F]fluoro-2-deoxy-d-glucose ([ <sup>18</sup> F]FDG). <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 5426-5428.  | 1.0 | 42        |
| 89 | Radiolabelling of proteins with fluorine-18 via click chemistry. <i>Chemical Communications</i> , 2009, , 7521.   | 2.2 | 46        |
| 90 | Synthesis and evaluation in vitro and in vivo of a <sup>11</sup> C-labeled cyclooxygenase-2 (COX-2) inhibitor. <i>Bioorganic and Medicinal Chemistry</i> , 2008, 16, 7662-7670.   | 1.4 | 47        |