

John F Valliant

List of Publications by Year in descending order

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91
papers

3,805
citations

159585

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94
all docs

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docs citations

94
times ranked

3551
citing authors

#	ARTICLE	IF	CITATIONS
1	The medicinal chemistry of carboranes. <i>Coordination Chemistry Reviews</i> , 2002, 232, 173-230.	18.8	594
2	Technetium and Gallium Derived Radiopharmaceuticals: Comparing and Contrasting the Chemistry of Two Important Radiometals for the Molecular Imaging Era. <i>Chemical Reviews</i> , 2010, 110, 2903-2920.	47.7	279
3	Bridging the Gap between in Vitro and in Vivo Imaging: Isostructural Re and ^{99m} Tc Complexes for Correlating Fluorescence and Radioimaging Studies. <i>Journal of the American Chemical Society</i> , 2004, 126, 8598-8599.	13.7	200
4	New directions in the coordination chemistry of ^{99m} Tc: a reflection on technetium core structures and a strategy for new chelate design. <i>Nuclear Medicine and Biology</i> , 2005, 32, 1-20.	0.6	183
5	Single amino acid chelates (SAAC): a strategy for the design of technetium and rhenium radiopharmaceuticals. <i>Chemical Communications</i> , 2009, , 493-512.	4.1	177
6	Bifunctional Single Amino Acid Chelates for Labeling of Biomolecules with the {Tc(CO) ₃ }+ and {Re(CO) ₃ }+ Cores. Crystal and Molecular Structures of [ReBr(CO) ₃ (H ₂ NCH ₂ C ₅ H ₄ N)], [Re(CO) ₃ {(C ₅ H ₄ NCH ₂) ₂ NH}]Br, [Re(CO) ₃ {(C ₅ H ₄ NCH ₂) ₂ NCH ₂ CO ₂ H}]Br, [Re(CO) ₃ {X(Y)NCH ₂ CO ₂ CH ₂ CH ₃ }]Br (X = Y = 2-pyridylmethyl; X = 2-pyridylmethyl, Y =) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 532 Td (2</i>	4.0	171
7	A New Strategy for the Preparation of Peptide-Targeted Radiopharmaceuticals Based on a (CH ₂ CO ₂)]. Inorganic Fmoc-Lysine-Derived Single Amino Acid Chelate (SAAC). Automated Solid-Phase Synthesis, NMR Characterization, and in Vitro Screening of fMLF(SAAC)G and fMLF[(SAACâRe(CO) ₃)+]G. <i>Bioconjugate Chemistry</i> , 2004, 15, 128-136.	3.6	112
8	Synthesis, Radiolabeling, and Bio-imaging of High-Generation Polyester Dendrimers. <i>Journal of the American Chemical Society</i> , 2009, 131, 2906-2916.	13.7	108
9	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
10	Synthesis of Boroxifen, ANido-Carborane Analogue of Tamoxifen. <i>Journal of Organic Chemistry</i> , 2002, 67, 383-387.	3.2	68
11	Carboranes as Ligands for the Preparation of Organometallic Tc and Re Radiopharmaceuticals. Synthesis of [M(CO) ₃ (i-5-2,3-C ₂ B ₉ H ₁₁)]- and rac-[M(CO) ₃ (i-5-2-R-2,3-C ₂ B ₉ H ₁₀)]-(M = Re, ^{99m} Tc; R = CH ₂ CH ₂ CO ₂ H). from [M(CO) ₃ Br ₃] ²⁻ . <i>Inorganic Chemistry</i> , 2002, 41, 628-630.	4.0	56
12	Synthesis and Screening of Mono- and Di-Aryl Technetium and Rhenium Metallocarboranes. A New Class of Probes for the Estrogen Receptor. <i>Journal of Medicinal Chemistry</i> , 2008, 51, 2833-2844.	6.4	55
13	Microwave-Assisted Synthesis of 3,1,2- and 2,1,8-Re(I) and ^{99m} Tc(I)âMetallocarborane Complexes. <i>Inorganic Chemistry</i> , 2006, 45, 5727-5729.	4.0	51
14	Isostructural fluorescent and radioactive probes for monitoring neural stem and progenitor cell transplants. <i>Nuclear Medicine and Biology</i> , 2008, 35, 159-169.	0.6	50
15	Preparation of Re(I)â and ^{99m} Tc(I)âMetallocarboranes in Water under Weakly Basic Reaction Conditions. <i>Inorganic Chemistry</i> , 2004, 43, 3032-3034.	4.0	48
16	Microwave-Assisted Synthesis of Tricarbonyl Rhenacarboranes: Steric and Electronic Effects on the 1,2 â 1,7 Carborane Cage Isomerization. <i>Inorganic Chemistry</i> , 2007, 46, 2148-2158.	4.0	47
17	A new approach for the synthesis of isonitrile carborane derivatives.. <i>Journal of Inorganic Biochemistry</i> , 2001, 85, 43-51.	3.5	45
18	Extension of the Single Amino Acid Chelate Concept (SAAC) to Bifunctional Biotin Analogues for Complexation of the M(CO) ₃ +1 Core (M = Tc and Re): Syntheses, Characterization, Biotinidase Stability, and Avidin Binding. <i>Bioconjugate Chemistry</i> , 2006, 17, 579-589.	3.6	45

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19	A New Strategy for Preparing Molecular Imaging and Therapy Agents Using Fluorine-Rich (Fluorous) Soluble Supports. <i>Journal of the American Chemical Society</i> , 2006, 128, 3536-3537.	13.7	44
20	Comprehensive Radiolabeling, Stability, and Tissue Distribution Studies of Technetium-99m Single Amino Acid Chelates (SAAC). <i>Bioconjugate Chemistry</i> , 2009, 20, 1625-1633.	3.6	43
21	High Yielding Preparation of Dicarba-closo-dodecaboranes Using a Silver(I) Mediated Dehydrogenative Alkyne-Insertion Reaction. <i>Inorganic Chemistry</i> , 2013, 52, 8743-8749.	4.0	43
22	Single amino acid chelate complexes of the $M(CO)_3$ core for correlating fluorescence and radioimaging studies ($M = {}^{99m}\text{Tc}$ or Re). <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2014, 57, 255-261.	1.0	42
23	A Bone-Seeking <i>trans</i> -Cyclooctene for Pretargeting and Bioorthogonal Chemistry: A Proof of Concept Study Using ${}^{99m}\text{Tc}$ - and ${}^{177}\text{Lu}$ -Labeled Tetrazines. <i>Journal of Medicinal Chemistry</i> , 2016, 59, 9381-9389.	6.4	41
24	Preparation of an ${}^{18}\text{F}$ -Labeled Hydrocyanine Dye as a Multimodal Probe for Reactive Oxygen Species. <i>Chemistry - A European Journal</i> , 2017, 23, 254-258.	3.3	41
25	A Convenient Method for the Preparation of Fluorous Tin Derivatives for the Fluorous Labeling Strategy. <i>Journal of Organic Chemistry</i> , 2008, 73, 8236-8243.	3.2	39
26	Synthesis of <i>Ortho</i> - and <i>Meta</i> - Re(I) -Metallocarboranes in Water. <i>Inorganic Chemistry</i> , 2005, 44, 9574-9584.	4.0	38
27	Expedient Multi-Step Synthesis of Organometallic Complexes of Tc and Re in High Effective Specific Activity. A New Platform for the Production of Molecular Imaging and Therapy Agents. <i>Inorganic Chemistry</i> , 2008, 47, 8213-8221.	4.0	37
28	Preparation and evaluation of carborane-derived inhibitors of prostate specific membrane antigen (PSMA). <i>Dalton Transactions</i> , 2014, 43, 4950-4961.	3.3	37
29	Imidazole-Based $[2 + 1]$ $\text{Re(I)}/{}^{99m}\text{Tc(I)}$ Complexes as Isostructural Nuclear and Optical Probes. <i>Inorganic Chemistry</i> , 2015, 54, 1728-1736.	4.0	35
30	Synthesis and in Vitro Evaluation of ${}^{18}\text{F}$ - and ${}^{19}\text{F}$ -Labeled Insulin: A New Radiotracer for PET-based Molecular Imaging Studies. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 1466-1474.	6.4	32
31	${}^{67}\text{Ga}$ -labeled deferoxamine derivatives for imaging bacterial infection: Preparation and screening of functionalized siderophore complexes. <i>Nuclear Medicine and Biology</i> , 2017, 52, 32-41.	0.6	32
32	Imaging Biomarkers in Immunotherapy. <i>Biomarkers in Cancer</i> , 2016, 8s2, BIC.S31805.	3.6	31
33	${}^{125}\text{I}$ -Tetrazines and Inverse-Electron-Demand Diels-Alder Chemistry: A Convenient Radioiodination Strategy for Biomolecule Labeling, Screening, and Biodistribution Studies. <i>Bioconjugate Chemistry</i> , 2016, 27, 207-216.	3.6	31
34	High Yielding Synthesis of Carboranes Under Mild Reaction Conditions Using a Homogeneous Silver(I) Catalyst: Direct Evidence of a Bimetallic Intermediate. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5156-5160.	13.8	30
35	Catching Bubbles: Targeting Ultrasound Microbubbles Using Bioorthogonal Inverse-Electron-Demand Diels-Alder Reactions. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6459-6463.	13.8	28
36	Synthesis, NMR, and X-ray Crystallographic Analysis of $\text{C-Hydrazino-C-Carboxycarboranes}$: Versatile Ligands for the Preparation of BNCT and BNCS Agents and ${}^{99m}\text{Tc}$ Radiopharmaceuticals. <i>Inorganic Chemistry</i> , 2002, 41, 2731-2737.	4.0	27

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37	Isostructural Nuclear and Luminescent Probes Derived From Stabilized [2 + 1] Rhenium(I)/Technetium(I) Organometallic Complexes. <i>Inorganic Chemistry</i> , 2013, 52, 13521-13528.	4.0	25
38	Synthesis and screening of bifunctional radiolabelled carborane-carbohydrate derivatives. <i>Journal of Organometallic Chemistry</i> , 2009, 694, 1736-1746.	1.8	24
39	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
40	Evaluation of the inverse electron demand Diels-Alder reaction in rats using a scandium-44-labelled tetrazine for pretargeted PET imaging. <i>EJNMMI Research</i> , 2019, 9, 49.	2.5	24
41	Prospective, Single-Arm Trial Evaluating Changes in Uptake Patterns on Prostate-Specific Membrane Antigen-Targeted ¹⁸ F-DCFPyL PET/CT in Patients with Castration-Resistant Prostate Cancer Starting Abiraterone or Enzalutamide. <i>Journal of Nuclear Medicine</i> , 2021, 62, 1430-1437.	5.0	24
42	Synthesis, Radiolabeling, and In Vivo Imaging of PEGylated High-Generation Polyester Dendrimers. <i>Biomacromolecules</i> , 2015, 16, 3033-3041.	5.4	23
43	Aqueous Fluoride and the Preparation of [99mTc(CO) ₃ (OH ₂) ₃] ⁺ and 99mTc-Carborane Complexes. <i>Inorganic Chemistry</i> , 2005, 44, 9585-9591.	4.0	22
44	A Solid-Phase Labeling Strategy for the Preparation of Technetium and Rhenium Bifunctional Chelate Complexes and Associated Peptide Conjugates. <i>Bioconjugate Chemistry</i> , 2006, 17, 226-235.	3.6	22
45	Preparation and Evaluation of Radiolabeled Antibody Recruiting Small Molecules That Target Prostate-Specific Membrane Antigen for Combined Radiotherapy and Immunotherapy. <i>Journal of Medicinal Chemistry</i> , 2016, 59, 2660-2673.	6.4	21
46	[18F]-DCFPyL Positron Emission Tomography/Magnetic Resonance Imaging for Localization of Dominant Intraprostatic Foci: First Experience. <i>European Urology Focus</i> , 2018, 4, 702-706.	3.1	21
47	Evaluation of a 68Ga-Labeled DOTA-Tetrazine as a PET Alternative to 111In-SPECT Pretargeted Imaging. <i>Molecules</i> , 2020, 25, 463.	3.8	21
48	Synthesis of homoleptic Re(I) complexes of isocyano-carboranes and the X-ray structure of hexakis(p-carboran-1-yl-isonitrile)Re(I). <i>Journal of Organometallic Chemistry</i> , 2003, 680, 323-328.	1.8	20
49	A robust strategy for the preparation of libraries of metallopeptides. A new paradigm for the discovery of targeted molecular imaging and therapy agents. <i>Chemical Communications</i> , 2008, , 5532.	4.1	20
50	Carborane-carbohydrate derivatives – Versatile platforms for developing targeted radiopharmaceuticals. <i>Canadian Journal of Chemistry</i> , 2008, 86, 1063-1069.	1.1	20
51	Preparation, Characterization, and Screening of a High Affinity Organometallic Probe for α_1 -Adrenergic Receptors. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 3360-3367.	6.4	20
52	Triazole Appending Agent (TAAG): A New Synthon for Preparing Iodine-Based Molecular Imaging and Radiotherapy Agents. <i>ACS Medicinal Chemistry Letters</i> , 2012, 3, 313-316.	2.8	20
53	Synthesis and Evaluation of Radioiodinated Acyloxymethyl Ketones as Activity-Based Probes for Cathepsin B. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 9564-9577.	6.4	20
54	Synthesis, characterization and radiolabeling of carborane-functionalized tetrazines for use in inverse electron demand Diels-Alder ligation reactions. <i>Journal of Organometallic Chemistry</i> , 2015, 791, 204-213.	1.8	20

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55	Synthesis, Characterisation, and Biodistribution of Radioiodinated C ⁶ -Hydroxy ¹²⁵ I-Carboranes. Chemistry - A European Journal, 2012, 18, 11071-11078.	3.3	19
56	A ^{99m} Tc-Labelled Tetrazine for Bioorthogonal Chemistry. Synthesis and Biodistribution Studies with Small Molecule trans-Cyclooctene Derivatives. PLoS ONE, 2016, 11, e0167425.	2.5	19
57	A convenient solution-phase method for the preparation of meta-iodobenzylguanidine in high effective specific activity. Nuclear Medicine and Biology, 2008, 35, 741-746.	0.6	18
58	Preparation of tetrazine-containing [2 + 1] complexes of ^{99m} Tc and in vivo targeting using bioorthogonal inverse electron demand Diels-Alder chemistry. Dalton Transactions, 2017, 46, 14691-14699.	3.3	18
59	In vivo Biodistribution of Radiolabeled Acoustic Protein Nanostructures. Molecular Imaging and Biology, 2018, 20, 230-239.	2.6	17
60	Preparation of synthons for carborane containing macromolecules. Macromolecular Symposia, 2003, 196, 201-211.	0.7	16
61	Preparation of technetium- ^{99m} bifunctional chelate complexes using a microfluidic reactor: a comparative study with conventional and microwave labeling methods. Journal of Labelled Compounds and Radiopharmaceuticals, 2012, 55, 18-22.	1.0	16
62	A Bridge <i>Not</i> Too Far: Linking Disciplines Through Molecular Imaging Probes. Journal of Nuclear Medicine Technology, 2016, 44, 173-183.	0.8	16
63	Technetium(I) Complexes of Bathophenanthrolinedisulfonic Acid. Inorganic Chemistry, 2017, 56, 2958-2965.	4.0	16
64	Improved radiosynthesis and preliminary in vivo evaluation of the ¹¹ C-labeled tetrazine [¹¹ C]AE-1 for pretargeted PET imaging. Bioorganic and Medicinal Chemistry Letters, 2019, 29, 986-990.	2.2	16
65	The synthesis, magnetic purification and evaluation of ^{99m} Tc-labeled microbubbles. Nuclear Medicine and Biology, 2011, 38, 1111-1118.	0.6	15
66	Unexpected Formation of an Azetidine ¹⁰ -Carborane Derivative by Dehydration of N-(1,12-Dicarba-closo-dodecaboran-1-yl)formamide. The First X-ray Structure of a 2,3-Bis(imino)azetidine. Inorganic Chemistry, 2002, 41, 6493-6499.	4.0	14
67	The synthesis and X-ray crystallographic structure determination of 3-isocyano-1,2-dicarba-closo-dodecaborane-Re(I) complexes. Journal of Organometallic Chemistry, 2003, 668, 25-30.	1.8	14
68	Development of prostate specific membrane antigen targeted ultrasound microbubbles using bioorthogonal chemistry. PLoS ONE, 2017, 12, e0176958.	2.5	14
69	Fluorous Analogue of Chloramine-T: Preparation, X-ray Structure Determination, and Use as an Oxidant for Radioiodination and s-Tetrazine Synthesis. Journal of Organic Chemistry, 2015, 80, 7117-7125.	3.2	13
70	^{99m} Tc-Functionalized Single-Walled Carbon Nanotubes for Bone Targeting. ACS Applied Nano Materials, 2020, 3, 11819-11824.	5.0	13
71	Evaluation of single amino acid chelate derivatives and regioselective radiolabelling of a cyclic peptide for the urokinase plasminogen activator receptor. Nuclear Medicine and Biology, 2009, 36, 907-917.	0.6	12
72	¹⁸ F-Labelled perfluorocarbon droplets for positron emission tomography imaging. Nuclear Medicine and Biology, 2017, 54, 27-33.	0.6	12

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73	The Radiopharmaceutical Chemistry of Technetium-99m. , 2019, , 311-333.		12
74	Pretargeted PET of Osteodestructive Lesions in Dogs. Molecular Pharmaceutics, 2022, 19, 3153-3162.	4.6	10
75	A hybrid solidâ€fluorous phase radioiodination and purification platform. Journal of Labelled Compounds and Radiopharmaceuticals, 2014, 57, 551-557.	1.0	8
76	Imidazole fused phenanthroline (PIP) ligands for the preparation of multimodal Re(<scp>i</scp>) and ^{99m}Tc(<scp>i</scp>) probes. Dalton Transactions, 2020, 49, 14826-14836.	3.3	8
77	Combined Radionuclide Therapy and Immunotherapy for Treatment of Triple Negative Breast Cancer. International Journal of Molecular Sciences, 2021, 22, 4843.	4.1	8
78	125I-Labelled 2-Iodoestrone-3-sulfate: synthesis, characterization and OATP mediated transport studies in hormone dependent and independent breast cancer cells. Nuclear Medicine and Biology, 2015, 42, 274-282.	0.6	7
79	Synthesis of Polyester Dendritic Scaffolds for Biomedical Applications. Macromolecular Bioscience, 2016, 16, 1475-1484.	4.1	7
80	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
81	Emulsion Reactors: A New Technique for the Preparation of Molecular Imaging Probes. Chemistry - A European Journal, 2012, 18, 6746-6749.	3.3	6
82	Preparation and Evaluation of Fluorine-18-Labeled Insulin as a Molecular Imaging Probe for Studying Insulin Receptor Expression in Tumors. Journal of Medicinal Chemistry, 2014, 57, 3678-3686.	6.4	6
83	Reprint of: Synthesis, characterization and radiolabeling of carborane-functionalized tetrazines for use in inverse electron demand Dielsâ€Alder ligation reactions. Journal of Organometallic Chemistry, 2015, 798, 278-288.	1.8	6
84	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
85	Preparation and evaluation of reagents for tagging amino and thiol groups with fluorous stannanes. A convenient method for producing radioiodinated compounds in high effective specific activity. Journal of Labelled Compounds and Radiopharmaceuticals, 2011, 54, 65-71.	1.0	4
86	Tetrazine-Derived Near-Infrared Dye as a Facile Reagent for Developing Targeted Photoacoustic Imaging Agents. Molecular Pharmaceutics, 2020, 17, 3369-3377.	4.6	4
87	A Versatile Platform for the Development of Radiolabeled Antibody-Recruiting Small Molecules. Molecular Pharmaceutics, 2021, 18, 2647-2656.	4.6	3
88	Preparation and Evaluation of ^{99m}Tc-labeled Tridentate Chelates for Pre-targeting Using Bioorthogonal Chemistry. Journal of Visualized Experiments, 2017, , .	0.3	2
89	Primary analysis of a phase II study of metastasis-directed ablative therapy to PSMA (¹⁸F-DCFpyL) PET-MR/CT defined oligorecurrent prostate cancer.. Journal of Clinical Oncology, 2020, 38, 5553-5553.	1.6	1
90	A Bioorthogonal Methylene Blue Derived Probe for Targeted Photoacoustic Imaging. European Journal of Medicinal Chemistry Reports, 2021, 4, 100021.	1.4	1

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91	43Tc Technetium in Medicine. , 2005, , 333-358.		0