Hartmuth C Kolb

List of Publications by Year
in descending order

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63	30,314	76326	106344
papers	citations	40	65
		h-index	g-index

70	70	70	26727
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Click Chemistry: Diverse Chemical Function from a Few Good Reactions. Angewandte Chemie - International Edition, 2001, 40, 2004-2021.	13.8	11,576
2	Catalytic Asymmetric Dihydroxylation. Chemical Reviews, 1994, 94, 2483-2547.	47.7	3,603
3	The growing impact of click chemistry on drug discovery. Drug Discovery Today, 2003, 8, 1128-1137.	6.4	2,880
4	Click Chemistry: Diverse Chemical Function from a Few Good Reactions. Angewandte Chemie - International Edition, 2001, 40, 2004-2021.	13.8	2,174
5	â€œOn Waterâ€• Unique Reactivity of Organic Compounds in Aqueous Suspension. Angewandte Chemie - International Edition, 2005, 44, 3275-3279.	13.8	1,477
6	Early Clinical PET Imaging Results with the Novel PHF-Tau Radioligand [F-18]-T807. Journal of Alzheimer's Disease, 2013, 34, 457-468.	2.6	598
7	[¹⁸F]T807, a novel tau positron emission tomography imaging agent forÂAlzheimer's disease. Alzheimer's and Dementia, 2013, 9, 666-676.	0.8	515
8	Multistep Synthesis of a Radiolabeled Imaging Probe Using Integrated Microfluidics. Science, 2005, 310, 1793-1796.	12.6	485
9	Inhibitors of HIV-1 Protease by Using In Situ Click Chemistry. Angewandte Chemie - International Edition, 2006, 45, 1435-1439.	13.8	469
10	Early Clinical PET Imaging Results with the Novel PHF-Tau Radioligand [F18]-T808. Journal of Alzheimer's Disease, 2013, 38, 171-184.	2.6	418
11	In Situ Click Chemistry:Â Enzyme Inhibitors Made to Their Own Specifications. Journal of the American Chemical Society, 2004, 126, 12809-12818.	13.7	395
12	The Clinical Importance of Assessing Tumor Hypoxia: Relationship of Tumor Hypoxia to Prognosis and Therapeutic Opportunities. Antioxidants and Redox Signaling, 2014, 21, 1516-1554.	5.4	323
13	In Situ Selection of Lead Compounds by Click Chemistry:Â Target-Guided Optimization of Acetylcholinesterase Inhibitors. Journal of the American Chemical Society, 2005, 127, 6686-6692.	13.7	318
14	Freeze-frame inhibitor captures acetylcholinesterase in a unique conformation. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1449-1454.	7.1	297
15	Improved enantioselectivity in asymmetric dihydroxylations of terminal olefins using pyrimidine ligands. Journal of Organic Chemistry, 1993, 58, 3785-3786.	3.2	238
16	Toward an Understanding of the High Enantioselectivity in the Osmium-Catalyzed Asymmetric Dihydroxylation (AD). 1. Kinetics. Journal of the American Chemical Society, 1994, 116, 1278-1291.	13.7	220
17	In Situ Click Chemistry: Enzyme-Generated Inhibitors of Carbonic Anhydrase II. Angewandte Chemie - International Edition, 2005, 44, 116-120.	13.8	216
18	A Highly Selective and Specific PET Tracer for Imaging of Tau Pathologies. Journal of Alzheimer's Disease, 2012, 31, 601-612.	2.6	164

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19	Integrated Microfluidics for Parallel Screening of an In Situ Click Chemistry Library. Angewandte Chemie - International Edition, 2006, 45, 5276-5281.	13.8	147
20	Toward an Understanding of the High Enantioselectivity in the Osmium-Catalyzed Asymmetric Dihydroxylation. 4. Electronic Effects in Amine-Accelerated Osmylations. Journal of the American Chemical Society, 1997, 119, 1840-1858.	13.7	128
21	Preclinical evaluation and validation of [18F]HX4, a promising hypoxia marker for PET imaging. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14620-14625.	7.1	121
22	Toward an Understanding of the High Enantioselectivity in the Osmium-Catalyzed Asymmetric Dihydroxylation. 2. A Qualitative Molecular Mechanics Approach. Journal of the American Chemical Society, 1994, 116, 8470-8478.	13.7	115
23	Total synthesis of the anthelmintic macrolide avermectin B1a. Journal of the Chemical Society Perkin Transactions 1, 1991, , 667-692.	0.9	106
24	Development of Tools for the Design of Selectin Antagonists. Chemistry - A European Journal, 1997, 3, 1571-1578.	3.3	96
25	An integrated microfluidic device for large-scale in situ click chemistry screening. Lab on A Chip, 2009, 9, 2281.	6.0	91
26	Biodistribution and Radiation Dosimetry of the Integrin Marker ¹⁸F-RGD-K5 Determined from Whole-Body PET/CT in Monkeys and Humans. Journal of Nuclear Medicine, 2012, 53, 787-795.	5.0	89
27	Tau Positron Emission Tomography (PET) Imaging: Past, Present, and Future. Journal of Medicinal Chemistry, 2015, 58, 4365-4382.	6.4	88
28	Design and Optimization of Coin-Shaped Microreactor Chips for PET Radiopharmaceutical Synthesis. Journal of Nuclear Medicine, 2010, 51, 282-287.	5.0	86
29	18F-HX4 hypoxia imaging with PET/CT in head and neck cancer. Nuclear Medicine Communications, 2012, 33, 1096-1102.	1.1	83
30	Calculations on the reaction of ruthenium tetroxide with olefins using density functional theory (DFT). Implications for the possibility of intermediates in osmium-catalyzed asymmetric dihydroxylation. Organometallics, 1994, 13, 344-347.	2.3	75
31	Batch-reactor microfluidic device: first human use of a microfluidically produced PET radiotracer. Lab on A Chip, 2013, 13, 136-145.	6.0	65
32	Chemistry of insect antifeedants from Azadirachta indica(part 12): use of silicon as a control element in the synthesis of a highly functionalized decalin fragment of azadirachtin. Journal of the Chemical Society Perkin Transactions 1, 1992, , 2735.	0.9	61
33	The Synthesis of Azadirachtin: A Potent Insect Antifeedant. Chemistry - A European Journal, 2008, 14, 10683-10704.	3.3	57
34	On "The origin of high enantioselectivity in the dihydroxylation of olefins using osmium tetraoxide and cinchona alkaloid catalysts". Journal of the American Chemical Society, 1993, 115, 12226-12227.	13.7	54
35	In Situ Click Chemistry: Enzyme-Generated Inhibitors of Carbonic Anhydrase II. Angewandte Chemie, 2005, 117, 118-122.	2.0	48
36	Comparing two models for the selectivity in the asymmetric dihydroxylation reaction (AD). Tetrahedron Letters, 1994, 35, 7315-7318.	1.4	47

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37	Biodistribution and radiation dosimetry of the hypoxia marker 18Fâ€“HX4 in monkeys and humans determined by using whole-body PET/CT. Nuclear Medicine Communications, 2010, 31, 1016-1024.	1.1	45
38	Evaluation of [18F]-CP18 as a PET Imaging Tracer for Apoptosis. Molecular Imaging and Biology, 2013, 15, 739-747.	2.6	44
39	Comparison of the Bioactive Conformations of Sialyl LewisX and a Potent Sialyl LewisX Mimic. Angewandte Chemie International Edition in English, 1997, 36, 2603-2607.	4.4	39
40	Biodistribution and Radiation Dosimetry of ¹⁸F-CP-18, a Potential Apoptosis Imaging Agent, as Determined from PET/CT Scans in Healthy Volunteers. Journal of Nuclear Medicine, 2013, 54, 2087-2092.	5.0	39
41	Noninvasive Molecular Imaging of Apoptosis in a Mouse Model of Anthracycline-Induced Cardiotoxicity. Circulation: Cardiovascular Imaging, 2015, 8, e001952.	2.6	36
42	Applications of Click Chemistry in Radiopharmaceutical Development. Chimia, 2010, 64, 29.	0.6	34
43	Chemistry of insect antifeedants from Azadirachta indica (Part 10): synthesis of a highly functionalised decalin fragment of azadirachtin.. Tetrahedron Letters, 1991, 32, 6187-6190.	1.4	33
44	Atherosclerotic plaque uptake of a novel integrin tracer 18F-Flotegatide in a mouse model of atherosclerosis. Journal of Nuclear Cardiology, 2014, 21, 553-562.	2.1	33
45	Click chemistry connections for functional discovery. , 2022, 1, 8-10.		32
46	Structural insights into conformational flexibility at the peripheral site and within the active center gorge of AChE. Chemico-Biological Interactions, 2005, 157-158, 159-165.	4.0	30
47	In Vitro and In Vivo Evaluation of the Caspase-3 Substrate-Based Radiotracer [18F]-CP18 for PET Imaging of Apoptosis in Tumors. Molecular Imaging and Biology, 2013, 15, 748-757.	2.6	27
48	Synthesis of a C16â€“C28 spiroacetal fragment of avermectin B1a and reassignment of some 1H and 13C resonances of avermectin B1a. Tetrahedron Letters, 1990, 31, 3445-3448.	1.4	25
49	Tau Positron Emission Tomography Imaging. Cold Spring Harbor Perspectives in Biology, 2017, 9, a023721.	5.5	24
50	Design and synthesis of sialyl Lex mimetics based on carbocyclic scaffolds derived from (â˜) quinic acid. Bioorganic and Medicinal Chemistry Letters, 1997, 7, 2729-2734.	2.2	23
51	Novel syntheses of polysubstituted pyrroles and oxazoles by 1,3â€dipolar cycloaddition reactions of benzotriazoleâ€stabilized nitrile ylides. Journal of Heterocyclic Chemistry, 2002, 39, 759-765.	2.6	23
52	Biodistribution and Radiation Dosimetry of the Carbonic Anhydrase IX Imaging Agent [18â€‰F]VM4-037 Determined from PET/CT Scans in Healthy Volunteers. Molecular Imaging and Biology, 2014, 16, 739-746.	2.6	23
53	Exploration of Î²-turn scaffolding motifs as components of sialyl LeX mimetics and their relevance to P-selectin. Bioorganic and Medicinal Chemistry Letters, 1998, 8, 2803-2808.	2.2	18
54	Flow optimization study of a batch microfluidics PET tracer synthesizing device. Biomedical Microdevices, 2011, 13, 231-242.	2.8	18

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55	Diagnostic and prognostic performance to detect Alzheimerâ€™s disease and clinical progression of a novel assay for plasma p-tau217. Alzheimer's Research and Therapy, 2022, 14, 67.	6.2	18
56	Evaluation of [¹⁸F]-JNJ-64326067-AAA tau PET tracer in humans. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 3302-3313.	4.3	15
57	Vergleich der bioaktiven Konformationen von Sialylâ€Lewis^X und einem potenten Sialylâ€Lewis^Xâ€Mimetikum. Angewandte Chemie, 1997, 109, 2715-2719.	2.0	14
58	From Inâ€…Situ to In Vivo: An Inâ€…Situ Clickâ€Chemistryâ€Derived Carbonic Anhydraseâ€…II Imaging Agent for Positron Emission Tomography. ChemMedChem, 2013, 8, 43-48.	3.2	13
59	Design and synthesis of a macrocyclic E-Selectin antagonist. Bioorganic and Medicinal Chemistry Letters, 1997, 7, 2629-2634.	2.2	11
60	Radiolabeled hydroxamate-based matrix metalloproteinase inhibitors: How chemical modifications affect pharmacokinetics and metabolic stability. Nuclear Medicine and Biology, 2016, 43, 424-437.	0.6	9
61	Chemistry of insect antifeedants from Azadirachta indica(part 13): on the use of the intramolecular Dielsâ€“Alder reaction for the construction of trans-fused hydrobenzofuran fragments for azadirachtin synthesis. Journal of the Chemical Society Perkin Transactions 1, 1992, , 2763-2777.	0.9	7
62	Synthesis, radiosynthesis, in vitro and first in vivo evaluation of a new matrix metalloproteinase inhibitor based on Î³-fluorinated Î±-sulfonylaminohydroxamic acid. EJNMMI Radiopharmacy and Chemistry, 2018, 3, 10.	3.9	7
63	Novel Syntheses of Polysubstituted Pyrroles and Oxazoles by 1,3â€Dipolar Cycloaddition Reactions of Benzotriazoleâ€Stabilized Nitrile Ylides.. ChemInform, 2002, 33, 103-103.	0.0	0