Gerd-Volker Röschenthaler

List of Publications by Year in descending order

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94 papers 2,999 citations

30 h-index 52 g-index

99 all docs 99 docs citations 99 times ranked 2679 citing authors

#	Article	IF	CITATIONS
1	Copperâ€Catalyzed Trifluoromethylation of Aryl Iodides with Potassium (Trifluoromethyl)trimethoxyborate. Chemistry - A European Journal, 2011, 17, 2689-2697.	3.3	254
2	Investigations on novel electrolytes, solvents and SEI additives for use in lithium-ion batteries: Systematic electrochemical characterization and detailed analysis by spectroscopic methods. Progress in Solid State Chemistry, 2014, 42, 65-84.	7.2	176
3	Diphosphates and diphosphonates in polyoxometalate chemistry. Chemical Society Reviews, 2012, 41, 7590.	38.1	152
4	Recent advances in the synthesis of fluorinated aminophosphonates and aminophosphonic acids. RSC Advances, 2013, 3, 6693.	3.6	146
5	Pentakis(trifluoromethyl)phenyl, a Sterically Crowded and Electron-withdrawing Group:  Synthesis and Acidity of Pentakis(trifluoromethyl)benzene, -toluene, -phenol, and -aniline. Journal of Organic Chemistry, 2008, 73, 2607-2620.	3.2	123
6	Guanidinophosphazenes:  Design, Synthesis, and Basicity in THF and in the Gas Phase. Journal of the American Chemical Society, 2005, 127, 17656-17666.	13.7	116
7	Asymmetric synthesis of phosphonotrifluoroalanine and its derivatives using N-tert-butanesulfinyl imine derived from fluoral. Tetrahedron Letters, 2012, 53, 539-542.	1.4	86
8	Perfluoroalkyl borates and boronic esters: new promising partners for Suzuki and Petasis reactions. Tetrahedron Letters, 2003, 44, 8273-8277.	1.4	83
9	Regioselective Nucleophilic 1,4-Trifluoromethylation of 2-Polyfluoroalkylchromones with (Trifluoromethyl)trimethylsilane. Synthesis of Fluorinated Analogs of Natural 2,2-Dimethylchroman-4-ones and 2,2-Dimethylchromenes. Journal of Organic Chemistry, 2003, 68, 7747-7754.	3.2	78
10	Recent Progress in the in situ DetrifluoroÂacetylative Generation of Fluoro Enolates and Their Reactions with Electrophiles. European Journal of Organic Chemistry, 2015, 2015, 6401-6412.	2.4	66
11	An effective synthetic route to ortho-difluoromethyl arylphosphosphonates: studies on the reactivity of phosphorus- and fluorine-containing functions. Tetrahedron, 2011, 67, 3887-3903.	1.9	61
12	Regioselective 1,4-trifluoromethylation of α,β-enones using â€~protect-in-situ' methodology. Tetrahedron Letters, 2003, 44, 7623-7627.	1.4	60
13	(NHC ^{Me})SiCl ₄ : a versatile carbene transfer reagent – synthesis from silicochloroform. Chemical Science, 2013, 4, 77-83.	7.4	59
14	New method of preparation of C2F5Li and its reactions with cyclic imines and lactims: Synthesis of α-pentafluoroethyl proline. Journal of Fluorine Chemistry, 2008, 129, 390-396.	1.7	55
15	Phosphorus additives for improving high voltage stability and safety of lithium ion batteries. Journal of Fluorine Chemistry, 2017, 198, 24-33.	1.7	54
16	Synthesis of functionalized bisphosphonates via click chemistry. Organic and Biomolecular Chemistry, 2007, 5, 2361-2367.	2.8	53
17	Synthesis, structure and reactivity of a trifluoromethyl sulfide anionic salt stabilized with tetrakis(dimethylamino)ethylene dication (TDAE2+). Journal of the Chemical Society, Perkin Transactions 1, 2000, , 2183-2185.	1.3	51
18	The Ugi reaction with CF3-carbonyl compounds: effective synthesis of \hat{l}_{\pm} -trifluoromethyl amino acid derivatives. Tetrahedron, 2008, 64, 11706-11712.	1.9	51

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19	Influence of the Fluorination Degree of Organophosphates on Flammability and Electrochemical Performance in Lithium Ion Batteries: Studies on Fluorinated Compounds Deriving from Triethyl Phosphate. Journal of the Electrochemical Society, 2016, 163, A751-A757.	2.9	49
20	Carbamoylphosphonates, a New Class of in Vivo Active Matrix Metalloproteinase Inhibitors. 1. Alkyland Cycloalkylcarbamoylphosphonic Acids. Journal of Medicinal Chemistry, 2004, 47, 2826-2832.	6.4	47
21	Carbamoylphosphonate-based matrix metalloproteinase inhibitor metal complexes: solution studies and stability constants. Towards a zinc-selective binding group. Journal of Biological Inorganic Chemistry, 2004, 9, 307-315.	2.6	45
22	Design, cytotoxic and fluorescent properties of novel N-phosphorylalkyl substituted E,E-3,5-bis(arylidene)piperid-4-ones. European Journal of Medicinal Chemistry, 2009, 44, 2135-2144.	5.5	43
23	Synthesis of $(2S,3S)$ - \hat{l}^2 -(trifluoromethyl)- $\hat{l}\pm$, \hat{l}^2 -diamino acid by Mannich addition of glycine Schiff base Ni(II) complexes to N-tert-butylsulfinyl-3,3,3-trifluoroacetaldimine. Journal of Fluorine Chemistry, 2015, 171, 67-72.	1.7	43
24	The reaction of cyclic imines with the Ruppert–Prakash reagent. Facile approach to α-trifluoromethylated nornicotine, anabazine, and homoanabazine. Tetrahedron, 2011, 67, 69-74.	1.9	42
25	Recent Advances in Synthesis of Difluoromethylene Phosphonates for Biological Applications. Advanced Synthesis and Catalysis, 2021, 363, 2912-2968.	4.3	42
26	Simple preparation of difluorophosphoranes using anhydrous zinc and tetramethylammonium fluorides. Journal of Fluorine Chemistry, 1995, 71, 47-49.	1.7	40
27	Facile synthesis of phosphorylated azides in ionic liquids and their use in the preparation of 1,2,3â€triazoles. Heteroatom Chemistry, 2008, 19, 293-300.	0.7	36
28	Carbene Complexes of Phosphorus(V) Fluorides by Oxidative Addition of 2,2-Difluorobis(dialkylamines) to Phosphorus(III) Halides. Organometallics, 2012, 31, 1278-1280.	2.3	34
29	New asymmetric approach to \hat{l}^2 -trifluoromethyl isoserines. RSC Advances, 2013, 3, 6479.	3 . 6	33
30	Diastereoselective addition of diethyl difluoromethylphosphonate to enantiopure sulfinimines: synthesis of $\hat{l}_{\pm},\hat{l}_{\pm}$ -difluoro- \hat{l}^2 -aminophosphonates, phosphonic acids, and phosphonamidic acids. Tetrahedron, 2006, 62, 9902-9910.	1.9	30
31	Fluorinated Electrolyte Compound as a Bi-Functional Interphase Additive for Both, Anodes and Cathodes in Lithium-Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A3525-A3530.	2.9	29
32	A Facile New Method for the Two-step Substitution of Hydroxy Groups in Primary Alcohols for Trifluoromethyl and Pentafluoroethyl Moieties. Synlett, 2001, 2001, 0379-0381.	1.8	28
33	Nucleophilic trifluoromethylation of RF-containing 4-quinolones, 8-aza- and 1-thiochromones with (trifluoromethyl)trimethylsilane. Journal of Fluorine Chemistry, 2005, 126, 779-784.	1.7	27
34	Highly βâ€Regioselective Friedel–Crafts Aminoalkylation of Pyrroles with Cyclic Perfluoroalkylated Imines. European Journal of Organic Chemistry, 2013, 2013, 3049-3058.	2.4	27
35	Fluorinated Cyclic Phosphorus(III)-Based Electrolyte Additives for High Voltage Application in Lithium-Ion Batteries: Impact of Structure–Reactivity Relationships on CEI Formation and Cell Performance. ACS Applied Materials & Diterfaces, 2019, 11, 16605-16618.	8.0	27
36	Friedelâ€"Crafts alkylation of natural amino acid-derived pyrroles with CF3-substituted cyclic imines. Mendeleev Communications, 2013, 23, 92-93.	1.6	26

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37	Methyl tetrafluoro-2-(methoxy) propionate as co-solvent for propylene carbonate-based electrolytes for lithium-ion batteries. Journal of Power Sources, 2012, 205, 408-413.	7.8	25
38	New Chiral Reagent for Installation of Pharmacophoric (<i>S</i>)â€or (<i>R</i>)â€2â€(Alkoxyphosphono)â€1â€aminoâ€2,2â€difluoroethyl Groups. Chemistry - A European Journal, 20 7036-7040.	1 6,2 2,	24
39	2-Polyfluoroacylcycloalkanones in reactions with selected phosphorus(III) compounds. Heteroatom Chemistry, 2002, 13, 97-107.	0.7	23
40	Facile synthesis of cyclic α-perfluoroalkyl-α-aminophosphonates. Journal of Fluorine Chemistry, 2009, 130, 662-666.	1.7	23
41	Synthesis of 2-Perfluoroalkyl $4 < i > H < i> - and 2 < i > H < i> - Chromenylphosphonates Mediated by Amines and Phosphines. Journal of Organic Chemistry, 2011, 76, 71-79.$	3.2	22
42	Convenient synthesis of fluoroalkyl \hat{l}_{\pm} - and \hat{l}^2 -aminophosphonates. Journal of Fluorine Chemistry, 2011, 132, 834-837.	1.7	22
43	Functional Compounds Based on Hypervalent Sulfur Fluorides. ACS Symposium Series, 2007, , 221-243.	0.5	21
44	Baseâ€Promoted Heterocyclization of Fluorinated Alkynylphosphonates with Select <i>ortho</i> â€Aminobenzonitriles. European Journal of Organic Chemistry, 2012, 2012, 3684-3690.	2.4	21
45	Aminoalkylation of Indoles with αâ€Polyfluoroalkylated Cyclic Imines. European Journal of Organic Chemistry, 2013, 2013, 2237-2245.	2.4	21
46	Methylenebisphosphonates with Dienone Pharmacophore: Synthesis, Structure, Antitumor and Fluorescent Properties. Archiv Der Pharmazie, 2012, 345, 349-359.	4.1	19
47	Bis(trifluoroacetyl)phenols and their derivatives in reactions with selected phosphorus(III) compounds. Heteroatom Chemistry, 2008, 19, 474-482.	0.7	18
48	Fluorine Tagging of Polyoxometalates: The Cyclic [{MoV2O4(H2O)}4{O3PC(CF3)(O)PO3}4]12 European Journal of Inorganic Chemistry, 2010, 2010, 3915-3919.	2.0	17
49	Control of Regio―and Enantioselectivity in the Asymmetric Organocatalytic Addition of Acetone to 4â€(Trifluoromethyl)pyrimidinâ€2(1 <i>H</i>)â€ones. European Journal of Organic Chemistry, 2014, 2014, 1452-1460.	2.4	17
50	Interaction of Some Methylenediphosphanes with Hexafluoroacetone and Hexafluorothioacetone Dimer. European Journal of Inorganic Chemistry, 2001, 2001, 2377-2383.	2.0	16
51	Synthesis of highly substituted quinolines via heterocyclization ofÂfluorinated acetylenephosphonates with ortho-aminoaryl ketones. Tetrahedron, 2014, 70, 8084-8096.	1.9	16
52	Asymmetric Synthesis of 4,4â€(Difluoro)glutamic Acid via Chiral Ni(II)â€Complexes of Dehydroalanine Schiff Bases. Effect of the Chiral Ligands Structure on the Stereochemical Outcome. ChemistryOpen, 2020, 9, 93-96.	1.9	16
53	Influence of the Fluorination Degree of Organophosphates on Flammability and Electrochemical Performance in Lithium Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A1935-A1942.	2.9	15
54	A Novel and Simple Synthesis of 2-(Trifluoromethyl)-4H-thiochromen-4-ones. Phosphorus, Sulfur and Silicon and the Related Elements, 2005, 180, 1315-1319.	1.6	14

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55	Metal and Boron Derivatives of Fluorinated Cyclic 1,3-Dicarbonyl Compounds. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2009, 64, 541-550.	0.7	14
56	CF2-Containing acetylenephosphonates in heterocyclization reactions: the first synthesis of 2-difluoromethyl azaxanth-3-ylphosphonates. Organic and Biomolecular Chemistry, 2011, 9, 8228.	2.8	14
57	Shutdown potential adjustment of modified carbene adducts as additives for lithium ion battery electrolytes. Journal of Power Sources, 2017, 367, 72-79.	7.8	14
58	HEXAFLUOROACETONE ADDITION TO AMIDOPHOSPHITES. Phosphorus, Sulfur and Silicon and the Related Elements, 1997, 127, 15-25.	1.6	13
59	Novel Î ² -hydroxy-Î ² -bis(trifluoromethyl) imines. Journal of Fluorine Chemistry, 2004, 125, 1039-1049.	1.7	13
60	TiCl4 and Grignard reagent-promoted ring-opening reactions of various epoxides: synthesis of \hat{l}^3 -hydroxy- $\hat{l}_{\pm},\hat{l}_{\pm}$ -difluoromethylenephosphonates. Tetrahedron Letters, 2008, 49, 6046-6049.	1.4	13
61	The self-disproportionation of enantiomers (SDE) via column chromatography of β-amino-α,α-difluorophosphonic acid derivatives. Amino Acids, 2019, 51, 1377-1385.	2.7	13
62	Nonâ€Flammable Fluorinated Phosphorus(III)â€Based Electrolytes for Advanced Lithiumâ€Ion Battery Performance. ChemElectroChem, 2020, 7, 1499-1508.	3.4	13
63	Molecular structures and reactivity of trifluoromethyltris(dialkylamino)phosphonium bromides. Journal of Fluorine Chemistry, 1995, 70, 271-275.	1.7	12
64	Janus Face Allâ€ <i>cis</i> 1,2,4,5â€ŧetrakis(trifluoromethyl)―and Allâ€ <i>cis</i> 1,2,3,4,5,6â€hexakis(trifluoromethyl)―Cyclohexanes. Angewandte Chemie - International Edition, 2020, 59, 19905-19909.	13.8	11
65	Synthesis of Trifluoromethylated Analogues of 4,5â€Dihydroorotic Acid. European Journal of Organic Chemistry, 2015, 2015, 1290-1301.	2.4	10
66	βâ€Aminoâ€Î³,γâ€difluoroâ€Ï‰â€phosphonoglutamic Acid Derivatives: An Unexplored, Multifaceted Structural Tailorâ€Made αâ€Amino Acids. European Journal of Organic Chemistry, 2017, 2017, 3451-3456.	Type of	10
67	Dissociation of the P=C Ylidic Bond. European Journal of Inorganic Chemistry, 2007, 2007, 254-258.	2.0	9
68	Alkynes XF2CCCP(O)(OR)2: Synthesis and reactivity. Journal of Fluorine Chemistry, 2013, 152, 29-37.	1.7	9
69	The Unexpected Formation of a Novel Fluorinated Triene. European Journal of Inorganic Chemistry, 2003, 2003, 54-56.	2.0	8
70	The conformational analysis of push–pull enaminones using Fourier transform IR and NMR spectroscopy, and quantum chemical calculations. V. α-Methyl-, fluorine-β-N,N-dimethylaminovinyl trifluoromethyl ketones. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 131, 94-101.	3.9	8
71	Bis[bis(dialkylamino)phosphanyl]methanes and Bis(trifluoromethyl)acrylonitrile — Reactions and Derivatives. European Journal of Inorganic Chemistry, 2002, 2002, 2985-2990.	2.0	7
72	Synthesis and Properties of \hat{l}_{\pm} -Bromomethyl-Substituted \hat{l}_{\pm} -Ethoxyvinyl Polyfluoroalkyl Ketones. Synthesis, 2013, 45, 3157-3163.	2.3	7

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73	Modification of 3,5-bis(arylidene)-4-piperidone pharmacophore by phosphonate group using 1,2,3-triazole cycle as a linker for the synthesis of new cytostatics. Medicinal Chemistry Research, 2015, 24, 1753-1762.	2.4	7
74	Convenient synthesis of racemic 4,4-difluoro glutamic acid derivatives via Michael-type additions of Ni(II)-complex of dehydroalanine Schiff bases. Journal of Fluorine Chemistry, 2019, 227, 109376.	1.7	7
75	Reaction of 2-(Polyfluoroacyl)cycloalkanones with Hydroxylamine. Helvetica Chimica Acta, 2002, 85, 1960.	1.6	6
76	Fluor, Element für (fast) alle FÇe. Nachrichten Aus Der Chemie, 2005, 53, 743-746.	0.0	6
77	Polytrifluoromethylation versus Polyfluorination of the Isomers of Kekulé Benzene and Phenol: A Theoretical Study. Journal of Organic Chemistry, 2010, 75, 6436-6444.	3.2	6
78	î±-Pentafluoroethylated amines: a new synthetic approach. Mendeleev Communications, 2006, 16, 141-143.	1.6	5
79	The first synthesis of 3â€hydroxyâ€2â€(polyfluoroalkyl)chromones and their ammonium salts. 3â€hydroxychromone in the Mannich reaction. Journal of Heterocyclic Chemistry, 2010, 47, 944-948.	2.6	5
80	Synthetic Approaches to Cytotoxic Amidophosphates, Aminophosphonates, and Aminobisphosphonates with 3,5-Bis(arylidene)piperid-4-one Framework. Phosphorus, Sulfur and Silicon and the Related Elements, 2011, 186, 908-917.	1.6	5
81	Fluorinated Alkynylphosphonates in <i>C</i> , <i>C</i> ,â€Cyclizations: Regioselective Formation of Polysubstituted Fluorinated Arylphosphonates. European Journal of Organic Chemistry, 2014, 2014, 3757-3761.	2.4	5
82	Synthesis and Reactions of the Novel Diphosphine, $iPrN = C[CH2P(NiPr2)2]2$. Phosphorus, Sulfur and Silicon and the Related Elements, 1996, 111, 193-193.	1.6	3
83	Synthesis and Structure of O-silylated 2-Polyfluoroacyl-cycloalkanones. Monatshefte F $\tilde{A}^{1}\!\!/\!4$ r Chemie, 2001, 132, 911-918.	1.8	3
84	Halogenation of Fluorinated 1,3,5-Triketones. Helvetica Chimica Acta, 2007, 90, 369-384.	1.6	3
85	Oxidation of Phosphanes with Orthoquinones: An Unusual Decomposition of an Unexpectedly Stable Zwitterion. European Journal of Inorganic Chemistry, 2007, 2007, 259-262.	2.0	3
86	Mono, Spiro and Tricyclic Ring Systems Containing Phosphorus. Phosphorus, Sulfur and Silicon and the Related Elements, 1994, 93, 289-292.	1.6	2
87	Reactions of fluorinated hydroxy and epoxy ketones with tris(trimethylsilyl) phosphite. Heteroatom Chemistry, 1999, 10, 632-637.	0.7	2
88	The Synthesis and Structure of Pâ^'Câ^'P Bridged Ferrocene. European Journal of Inorganic Chemistry, 2003, 2003, 1169-1174.	2.0	2
89	Dimer of trifluoropyruvic acid: synthesis and molecular structure. Journal of Chemical Research, 2003, 2003, 804-805.	1.3	2
90	2,3-Dihydro-1H-naphtho[1,8-de][1,3]diphosphinines. Phosphorus, Sulfur and Silicon and the Related Elements, 2011, 186, 841-844.	1.6	2

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91	Structural Report for 2,5-Bis(trifluoroacetyl)cyclohexane-1,4-dione and o,o′-bis(trifluoroacetyl)-p-cresol. Journal of Chemical Crystallography, 2011, 41, 1795-1799.	1.1	1
92	An Unusual Intramolecular P-P Cyclization of The P-C-P System in Phosphaphenalenes. Phosphorus, Sulfur and Silicon and the Related Elements, 2011, 186, 758-760.	1.6	1
93	Imides of 2-Trifluoroacetylphenol and other Trifluoracetic acid Esters: Novel Reactions with Phosphorus(III) Derivates. Phosphorus, Sulfur and Silicon and the Related Elements, 1996, 111, 139-139.	1.6	O
94	Diastereoselective Synthesis of Phosphines and Phosphoranes using Fluorinated Acetylacetones. Phosphorus, Sulfur and Silicon and the Related Elements, 1999, 147, 359-359.	1.6	0