Francois Mathey

List of Publications by Year
in descending order

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106 papers	3,192 citations	218381 26 h-index	174990 52 g-index
111 all docs	111 docs citations	111 times ranked	1561 citing authors

#	Article	IF	Citations
1	Phospha-Organic Chemistry: Panorama and Perspectives. Angewandte Chemie - International Edition, 2003, 42, 1578-1604.	7.2	575
2	Developing the chemistry of monovalent phosphorus. Dalton Transactions, 2007, , 1861.	1.6	167
3	The carbene-like behavior of terminal phosphinidene complexes toward olefins. A new access to the phosphirane ring. Organometallics, 1984, 3, 456-461.	1.1	141
4	Dicoordinated 2H-phospholes as transient intermediates in the reactions of tervalent phospholes at high temperature. One-step syntheses of 1-phosphanorbornadienes and phosphorins from phospholes. Journal of the American Chemical Society, 1981, 103, 4595-4597.	6.6	120
5	Expanding the analogy between phosphorus-carbon and carbon-carbon double bonds. Accounts of Chemical Research, 1992, 25, 90-96.	7.6	115
6	Transient 2H-Phospholes as Powerful Synthetic Intermediates in Organophosphorus Chemistry. Accounts of Chemical Research, 2004, 37, 954-960.	7.6	110
7	Benzofuran-fused Phosphole: Synthesis, Electronic, and Electroluminescence Properties. Organic Letters, 2013, 15, 330-333.	2.4	94
8	Introducing new phosphorus substituents in terminal phosphinidene complexes. An illustration with [(ethoxycarbonyl)phosphinidene]-, (tert-butoxyphosphinidene)-, and (fluorenylphosphinidene)pentacarbonyltungsten complexes. Organometallics, 1988, 7, 1796-1801.	1.1	77
9	Phosphole [2 + 2] and [4 + 2] dimerizations around metal carbonyl moieties. Structure and chemistry of a new type of exo [4 + 2] dimers. Journal of the American Chemical Society, 1980, 102, 5809-5815.	6.6	66
10	Carbonylation of a strained phosphorus-carbon bond. Conversion of phosphirene into 2-keto-1,2-dihydrophosphete complexes: an entry into the chemistry of the phosphorus analogs of unsaturated .beta.-lactams. Journal of the American Chemical Society, 1985, 107, 5001-5002.	6.6	65
11	Synthesis and X-ray crystal structure of 1,2,3-triphenylphosphirene. Journal of the Chemical Society Chemical Communications, 1984, , 45.	2.0	64
12	Thermal tetramerization of 1-phenyl-3,4-dimethylphosphole. An access to 2,2'-biphospholes and to 2,2'-diphosphafulvalene complexes. Journal of the American Chemical Society, 1982, 104, 2077-2079.	6.6	61
13	Versatile Synthesis of Phospholides from Open-Chain Precursors. Application to Annelated Pyrroleâ€“ and Siloleâ€“Phosphole Rings. Organic Letters, 2015, 17, 1732-1734.	2.4	58
14	Intramolecular, Pd/Cu-Co-catalyzed Pâ€“C Bond Cleavage and Addition onto an Alkyne: A Route to Benzophospholes. Organic Letters, 2015, 17, 5722-5724.	2.4	54
15	P-Stereogenic Phosphines Directed Copper(I)-Catalyzed Enantioselective 1,3-Dipolar Cycloadditions. Organic Letters, 2019, 21, 2782-2785.	2.4	53
16	2,2â€²â€Biphospholes: Building Blocks for Tuning the HOMOâ€“LUMO Gap of Ï€â€Systems Using Covalent Bonding and Metal Coordination. Angewandte Chemie - International Edition, 2012, 51, 214-217.	7.2	51
17	Phosphanorbornadienephosphonates as a New Type of Water-Soluble Phosphines for Biphasic Catalysis. Journal of Organic Chemistry, 1996, 61, 3531-3533.	1.7	46
18	Use of 2,2'-Biphosphinines for the Stabilization of Reduced Transition Metal Species: Electrochemical Reduction of Bis(2,2'-biphosphinine)nickel(0). Inorganic Chemistry, 1995, 34, 11-12.	1.9	39

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19	The Conversion of Furans into Phosphinines. Chemistry - A European Journal, 2011, 17, 10745-10751.	1.7	38
20	The Original Coordination Chemistry of 2-Phosphaphenol with Copper(I) and Gold(I) Halides. Organometallics, 2013, 32, 3562-3565.	1.1	35
21	Synthesis of Annelated Phospholes through Intramolecular Cï£¿H Activation by Monovalent Phosphorus. Angewandte Chemie - International Edition, 2015, 54, 1583-1586.	7.2	35
22	Ag/P-Stereogenic Phosphine-Catalyzed Enantioselective 1,3-Dipolar Cycloadditions: A Method to Optically Active Pyrrolidines. Organic Letters, 2019, 21, 3210-3213.	2.4	35
23	Access to Chiral 2,5-Pyrrolidinyl Dispirooxindoles via Dinuclear Zinc-Catalyzed Asymmetric Cascade Reactions. Journal of Organic Chemistry, 2019, 84, 7762-7775.	1.7	34
24	Activation of Aâ€“H bonds (A = B, C, N, O, Si) by using monovalent phosphorus complexes [RPâ†’M]. Dalton Transactions, 2016, 45, 1804-1809.	1.6	32
25	2,2'-Biphosphinines and 1,4-Diphosphadienes as 8-Electron Donors toward Manganese Carbonyl. Inorganic Chemistry, 1995, 34, 5070-5072.	1.9	29
26	New method for building carbon-phosphorus heterocycles. Journal of Organic Chemistry, 1981, 46, 4386-4389.	1.7	26
27	Synthesis of 1,3-Azaphospholes with Pyrrolo[1,2-a]quinoline Skeleton and Their Optical Applications. Organic Letters, 2018, 20, 4103-4106.	2.4	24
28	Zwitterionic nido-Carborane-Fused Phospholes. Organic Letters, 2019, 21, 2273-2276.	2.4	22
29	A New Type of Phosphaferroceneâ€“Pyroleâ€“Phosphaferrocene P-N-P Pincer Ligand. Organometallics, 2012, 31, 2486-2488.	1.1	21
30	1-Phosphanorbornadiene-imines and amines in enantioselective allylic C- and N-alkylation. Tetrahedron: Asymmetry, 2003, 14, 3137-3140.	1.8	20
31	1,2â€Dihydrophosphete: A Platform for the Molecular Engineering of Electroluminescent Phosphorus Materials for Lightâ€Emitting Devices. Chemistry - A European Journal, 2014, 20, 9784-9793.	1.7	20
32	Isomerization of Secondary Phosphirane into Terminal Phosphinidene Complexes: An Analogy between Monovalent Phosphorus and Transition Metals. Angewandte Chemie - International Edition, 2015, 54, 12891-12893.	7.2	20
33	The Chemistry of ortho-(Diarylphosphino)aryl Isocyanides. Organometallics, 2015, 34, 5697-5702.	1.1	20
34	Phosphorus and silicon-bridged stilbenes: synthesis and optoelectronic properties. Dalton Transactions, 2016, 45, 18308-18312.	1.6	20
35	Copper(<scp>i</scp>)/Ganphos catalysis: enantioselective synthesis of diverse spirooxindoles using iminoesters and alkyl substituted methyleneindolinones. Organic and Biomolecular Chemistry, 2020, 18, 3740-3746.	1.5	20
36	Design of 1-Phosphanorbornene Derivatives as Chiral Organocatalysts for Enantioselective (4 + 2) Annulation Reactions of Î³-Benzyl Allenoates. Organic Letters, 2021, 23, 3337-3342.	2.4	20

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37	A New Approach to 1-Chlorophosphirenes. Synthesis, 1995, 1995, 941-943.	1.2	19
38	Enantiopure 1-phosphanorbornadiene-2-carboxaldehydes. Tetrahedron: Asymmetry, 2000, 11, 4601-4608.	1.8	18
39	Oneâ€Pot Conversion of Phospholide Ions into Î²â€Functional Phosphinines. Angewandte Chemie - International Edition, 2005, 44, 1082-1084.	7.2	18
40	2,3-Benzo-7-phosphanorbornadiene Complexes: Synthesis and Chemistry. Organometallics, 2005, 24, 1762-1765.	1.1	18
41	Planar Polycyclic Oxaphosphoranes Incorporating a Benzophosphole Unit. Organic Letters, 2017, 19, 5814-5817.	2.4	18
42	Synthesis and X-ray Crystal Structure of a P-Confused Carbaporphyrinoid. Organometallics, 2007, 26, 3617-3620.	1.1	17
43	A New Versatile Route for the Conversion of Phospholes into Phosphinines. Chemistry - A European Journal, 2010, 16, 10659-10661.	1.7	17
44	Dithienophosphinine. Organometallics, 2007, 26, 6497-6500.	1.1	16
45	Phosphindole fused pyrrolo[3,2-b]pyrroles: a new single-molecule junction for charge transport. Dalton Transactions, 2019, 48, 6347-6352.	1.6	16
46	Hetero-Dielsâ€"Alder Reactions of 2H-Phospholes with Aldehydes. Journal of Organic Chemistry, 2003, 68, 2803-2806.	1.7	15
47	Reaction of Phospholes with Aldimines: A One-Step Synthesis of Chelating, Alpha-C2-Bridged Biphospholes. Organic Letters, 2015, 17, 3518-3520.	2.4	15
48	The chemistry of parent phosphiranide in the coordination sphere of tungsten. Dalton Transactions, 2016, 45, 8284-8290.	1.6	15
49	Blocking Intramolecular Cycloadditions between Câ‰¡C Triple Bonds and Electrophilic Phosphinidene Complexes: Generation of Intermediates Able To React with Arenes. Organometallics, 2016, 35, 3440-3443.	1.1	15
50	Regioselective Synthesis of 2- or 2,7-Functionalized Pyrenes via Migration. Organic Letters, 2018, 20, 7821-7824.	2.4	15
51	Iodocarbocyclization to Access Sixâ€and Sevenâ€Membered Phosphacycles from Phosphorylâ€Linked Alkynes. European Journal of Organic Chemistry, 2019, 2019, 6369-6376.	1.2	15
52	The Chemistry of 1â€Acylphosphirane Complexes: A Phosphorus Analogue of the Cloke–Wilson Rearrangement. Chemistry - A European Journal, 2017, 23, 13006-13009.	1.7	14
53	Divergent intramolecular reactions between phosphines and alkynes. Chinese Chemical Letters, 2020, 31, 329-332.	4.8	14
54	New Access to Sixâ€Membered Phosphacycle Annulated Polyaromatic Ring System. European Journal of Organic Chemistry, 2020, 2020, 697-701.	1.2	14

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55	Revisiting the Chemistry of Phosphinidene Sulfides. Organometallics, 2014, 33, 5614-5617.	1.1	13
56	A Very Simple Synthesis of Annelated Î»3 - and Î»5 -Phosphanaphthalenes. European Journal of Inorganic Chemistry, 2017, 2017, 2355-2362.	1.0	13
57	Enantioselective synthesis of indanone spiro-isochromanone derivatives via a dinuclear zinc-catalyzed Michael/transesterification tandem reaction. Organic and Biomolecular Chemistry, 2020, 18, 3917-3926.	1.5	13
58	Combining phosphinidene units with malonate anion: Synthesis of highly functional phosphine complexes. Heteroatom Chemistry, 2004, 15, 258-262.	0.4	12
59	Synthesis of 2,5-Difunctional Phosphaferrocenes. Organometallics, 2010, 29, 1053-1056.	1.1	12
60	An approach to 7-aza-1-phosphanorbornane complexes: strain promoted rearrangement of 1-iminylphosphirane complexes and cycloaddition with olefins. Dalton Transactions, 2019, 48, 5523-5526.	1.6	12
61	Enantiopure phosphacymantrene-2-carboxaldehyde and some of its derivatives. Heteroatom Chemistry, 2005, 16, 458-460.	0.4	11
62	Generation and Reactivity of Methylphosphaketene in the Coordination Sphere of Tungsten. Organometallics, 2012, 31, 4786-4790.	1.1	11
63	Intermolecular spinâ€“spin coupling constants between 31P atoms. Comptes Rendus Chimie, 2013, 16, 937-944.	0.2	11
64	Using the 1,2-dihydro-1,2-diphosphinine ring as a template for the synthesis of new bicyclic structures and new trans-chelating bis-phosphines. Heteroatom Chemistry, 2005, 16, 44-48.	0.4	10
65	The Abnormal Hydrolysis of 7-Phosphanorbornenium Salts: A Case of Phosphoniumâ^'Phosphenium Equivalence. Journal of the American Chemical Society, 2009, 131, 16008-16009.	6.6	10
66	Dimethyl Acetylenedicarboxylate and Phospholes: A Variety of Reaction Pathways. European Journal of Organic Chemistry, 2010, 2010, 5498-5502.	1.2	10
67	Synthesis and Chemistry of 2-Phosphafurans. Organometallics, 2010, 29, 5757-5758.	1.1	10
68	6-Methoxy-5-phosphaphenanthrene: a molecule with an unreactive Pî€€ double bond. Dalton Transactions, 2015, 44, 3717-3719.	1.6	10
69	Insertion of phosphinidene complexes into the Pâ€“H bond of secondary phosphine oxides: a new version of the phospha-Wittig synthesis of Pî€€ double bonds. Dalton Transactions, 2016, 45, 891-893.	1.6	10
70	Selective Synthesis of (Z)-Diazadiphosphafulvalene from 2,2â€²-bis-Azaphosphindole. Organic Letters, 2018, 20, 1027-1030.	2.4	10
71	An Approach to Peri-Fused Heterocycles: A Metal-Mediated Cascade Carbonylative Cyclization/Dearomatic Dielsâ€“Alder Reaction. Organic Letters, 2019, 21, 9512-9515.	2.4	10
72	Tetraphosphafulvalene. Angewandte Chemie, 1988, 100, 997-998.	1.6	9

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73	A Phospha-Wittig Route to 5-Phosphaphenanthrene. European Journal of Inorganic Chemistry, 2011, 2011, 4585-4589.	1.0	9
74	Transitionâ€Metalâ€Like Reversible Cycloadditions of [t BuSPâ€W(CO) 5] with Alkenes and Alkynes. Chemistry - A European Journal, 2019, 25, 15036-15039.	1.7	9
75	The chemistry of phosphirane-substituted phosphinidene complexes. Chemical Communications, 2020, 56, 9707-9710.	2.2	9
76	Synthesis of phosphanaphthalenes and nido-carborane fused six-membered phosphacycles. Chinese Chemical Letters, 2021, 32, 194-197.	4.8	9
77	Preliminary Investigation of the [3+2] Cycloaddition Reactions of 2-Alkylidenephosphiranes. Organometallics, 2007, 26, 3614-3616.	1.1	8
78	Simple Access to Tungsten-Stabilized Disecondary Diphosphines. Organometallics, 2013, 32, 5615-5618.	1.1	8
79	Reactivity of sp² Nitrogen and Phosphorus in a Stable Imidazolophosphinine. Organometallics, 2018, 37, 464-468.	1.1	8
80	Intramolecular [4+2] versus [2+2] cycloadditions in Pâ€“Xâ€“P-linked biphospholes (X = O, S). New Journal of Chemistry, 2011, 35, 2001.	1.4	7
81	A Straightforward Synthesis of 1,2-Azaphosphindoles. European Journal of Inorganic Chemistry, 2017, 2017, 2504-2509.	1.0	7
82	Generation and Trapping of a 1-Phosphafulvene: An Illustration of the Pâ•C/Câ•C Analogy. Organic Letters, 2017, 19, 5004-5006.	2.4	7
83	Phosphole-N-phenylmaleimide [4+2] cycloadducts as synthetic equivalents of nucleophilic phosphinidenes. Chemical Communications, 2009, , 2589.	2.2	6
84	Investigating the Phospholylcarbene to Phosphinine Conversion. European Journal of Inorganic Chemistry, 2011, 2011, 1540-1543.	1.0	6
85	A Phosphorus Analogue of Acenaphthylene. European Journal of Organic Chemistry, 2017, 2017, 5724-5728.	1.2	6
86	Cyclization of ortho-alkynylphenylphosphine P-ylides; dependence on ylide nucleophilicity. Journal of Organometallic Chemistry, 2019, 879, 158-161.	0.8	6
87	7-Phosphanorbornenium Borohydrides: A Powerful Route to Functional Secondary Phosphineâ^'Borane Complexes. Organometallics, 2010, 29, 1873-1874.	1.1	5
88	Annelation of Phosphole-Substituted Fischer Carbene Complexes by Alkynes. Organometallics, 2013, 32, 7482-7486.	1.1	5
89	Activation of a 1-Chlorophosphirane Complex by Aluminum Trichloride: Generation and Trapping of [Fc-P-W(CO)5] (Fc = Ferrocenyl). European Journal of Inorganic Chemistry, 2014, 2014, 4726-4729.	1.0	5
90	Concise Synthesis of Phospholene and Its P-Stereogenic Derivatives. Journal of Organic Chemistry, 2020, 85, 14772-14778.	1.7	5

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91	A Theoretical Study of the Formation of Phosphaacetylene by Thermolysis of Triallylphosphine. Journal of Organic Chemistry, 2004, 69, 5100-5103.	1.7	4
92	The Unexpected Reactions of Boron Trihalides with 7-Phosphanorbornadiene Complexes. European Journal of Inorganic Chemistry, 2014, 2014, 6254-6260.	1.0	4
93	A Contribution to the Direct Observation of Transient Phosphanylidene Complexes [RP=W(CO)₅] (R: Me, Ph): A Revisited Approach to Their Electronic Structure by UVâ€Photoelectron Spectroscopy. European Journal of Inorganic Chemistry, 2014, 2014, 1694-1705.	1.0	4
94	Î»³â€Pyrroloazaphosphinines with Relatively Stable P=C Double Bonds. European Journal of Organic Chemistry, 2018, 2018, 2863-2869.	1.2	4
95	The coordination chemistry of phosphinidene sulfides. Synthesis and catalytic properties of Pd₄ and Pt₄ clusters. Dalton Transactions, 2018, 47, 13342-13344.	1.6	4
96	1,1-Addition of Î±-C₂-Bridged Biphospholes with Alkynes. Organic Letters, 2020, 22, 6972-6976.	2.4	4
97	Cycloadditions of 1-iminylphosphirane complexes with allenes. Chinese Chemical Letters, 2021, 32, 449-452.	4.8	4
98	Nonbenzenoid aromaticity of 1-phosphafulvenes: synthesis of phosphacymantrenes. Dalton Transactions, 2021, 50, 476-479.	1.6	4
99	Recent Advances of [1,5]-Sigmatropic Shift of Phospholes. Chinese Journal of Organic Chemistry, 2013, 33, 36.	0.6	4
100	The Reaction of Terminal Phosphinidene Complexes [RP-W(CO)5] with VinylborÂonic Acids: Cycloaddition vs. P-C Bond Formation. European Journal of Inorganic Chemistry, 2016, 2016, 616-619.	1.0	3
101	Mn₂(CO)₁₀-Catalyzed Intramolecular Dimerization of Diphosphirane Complexes. Organometallics, 2021, 40, 306-309.	1.1	3
102	The unexpected chemistry of a bis(phospholyl)acetylene. Heteroatom Chemistry, 2008, 19, 537-541.	0.4	2
103	Generation and Trapping of Terminal Phosphinidene Complex [CF3 P-W(CO)5]. ChemistrySelect, 2017, 2, 9838-9841.	0.7	2
104	An Unconventional Synthesis of Dibromophosphines. Synlett, 2013, 24, 2006-2008.	1.0	1
105	The Evolution of Terminal Allylphosphinidene Pentacarbonyltungsten Complex. Phosphorus, Sulfur and Silicon and the Related Elements, 2014, 189, 908-913.	0.8	1
106	Front Cover: A Phosphorus Analogue of Acenaphthylene (Eur. J. Org. Chem. 38/2017). European Journal of Organic Chemistry, 2017, 2017, 5708-5708.	1.2	0