Fabrice Gallou

List of Publications by Year
in descending order

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122 papers	7,011 citations	53794 45 h-index	66911 78 g-index
129 all docs	129 docs citations	129 times ranked	5124 citing authors

#	ARTICLE	IF	CITATIONS
1	Key Green Chemistry research areas from a pharmaceutical manufacturersâ€™ perspective revisited. Green Chemistry, 2018, 20, 5082-5103.	9.0	384
2	Hydrogenation of Esters to Alcohols with a Wellâ€Defined Iron Complex. Angewandte Chemie - International Edition, 2014, 53, 8722-8726.	13.8	269
3	Sustainable Feâ€“ppm Pd nanoparticle catalysis of Suzuki-Miyaura cross-couplings in water. Science, 2015, 349, 1087-1091.	12.6	265
4	Water as the reaction medium in organic chemistry: from our worst enemy to our best friend. Chemical Science, 2021, 12, 4237-4266.	7.4	263
5	Sustainability Challenges in Peptide Synthesis and Purification: From R&D to Production. Journal of Organic Chemistry, 2019, 84, 4615-4628.	3.2	256
6	Evolution of Solvents in Organic Chemistry. ACS Sustainable Chemistry and Engineering, 2016, 4, 5838-5849.	6.7	199
7	Organometallic methods for the synthesis and functionalization of azaindoles. Chemical Society Reviews, 2007, 36, 1120.	38.1	187
8	Activation of TMSCN by N-Heterocyclic Carbenes for Facile Cyanosilylation of Carbonyl Compounds. Journal of Organic Chemistry, 2006, 71, 1273-1276.	3.2	186
9	Efficient Large-Scale Synthesis of BILN 2061, a Potent HCV Protease Inhibitor, by a Convergent Approach Based on Ring-Closing Metathesis. Journal of Organic Chemistry, 2006, 71, 7133-7145.	3.2	161
10	A Convenient Method for Removing All Highly-Colored Byproducts Generated during Olefin Metathesis Reactions. Organic Letters, 2000, 2, 1259-1261.	4.6	156
11	Bridging the gap between transition metal- and bio-catalysis via aqueous micellar catalysis. Nature Communications, 2019, 10, 2169.	12.8	154
12	HandaPhos: A General Ligand Enabling Sustainable ppm Levels of Palladiumâ€Catalyzed Crossâ€Couplings in Water at Room Temperature. Angewandte Chemie - International Edition, 2016, 55, 4914-4918.	13.8	138
13	N-Heterocyclic Carbene Catalyzed Trifluoromethylation of Carbonyl Compounds. Organic Letters, 2005, 7, 2193-2196.	4.6	129
14	Surfactant technology applied toward an active pharmaceutical ingredient: more than a simple green chemistry advance. Green Chemistry, 2016, 18, 14-19.	9.0	126
15	Safe and Selective Nitro Group Reductions Catalyzed by Sustainable and Recyclable Fe/ppm Pd Nanoparticles in Water at Room Temperature. Angewandte Chemie - International Edition, 2016, 55, 8979-8983.	13.8	121
16	Transforming Suzukiâ€“Miyaura Cross-Couplings of MIDA Boronates into a Green Technology: No Organic Solvents. Journal of the American Chemical Society, 2013, 135, 17707-17710.	13.7	119
17	Amide and Peptide Bond Formation in Water at Room Temperature. Organic Letters, 2015, 17, 3968-3971.	4.6	115
18	Nucleophilic Aromatic Substitution Reactions in Water Enabled by Micellar Catalysis. Organic Letters, 2015, 17, 4734-4737.	4.6	109

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19	Total Asymmetric Synthesis of the Putative Structure of the Cytotoxic Diterpenoid (â˜’)-Sclerophytin A and of the Authentic Natural Sclerophytins A and B. Journal of the American Chemical Society, 2001, 123, 9021-9032.	13.7	103
20	Effects of Co-solvents on Reactions Run under Micellar Catalysis Conditions. Organic Letters, 2017, 19, 194-197.	4.6	94
21	Soft and dispersed interface-rich aqueous systems that promote and guide chemical reactions. Nature Reviews Chemistry, 2018, 2, 306-327.	30.2	92
22	A deeper shade of green: inspiring sustainable drug manufacturing. Green Chemistry, 2017, 19, 281-285.	9.0	88
23	Micelle-Enabled Palladium Catalysis for Convenient sp²-sp³ Coupling of Nitroalkanes with Aryl Bromides in Water Under Mild Conditions. ACS Catalysis, 2017, 7, 7245-7250.	11.2	87
24	PQS-enabled visible-light iridium photoredox catalysis in water at room temperature. Green Chemistry, 2018, 20, 1233-1237.	9.0	86
25	<i>N</i>-Butylpyrrolidinone as Alternative Solvent for Solid-Phase Peptide Synthesis. Organic Process Research and Development, 2018, 22, 494-503.	2.7	86
26	Comparative performance evaluation and systematic screening of solvents in a range of Grignard reactions. Green Chemistry, 2013, 15, 1880.	9.0	85
27	Sonogashira Couplings Catalyzed by Fe Nanoparticles Containing ppm Levels of Reusable Pd, under Mild Aqueous Micellar Conditions. ACS Catalysis, 2019, 9, 2423-2431.	11.2	78
28	Structure of Nanoparticles Derived from Designer Surfactant TPGSâ€•750â€•M in Water, As Used in Organic Synthesis. Chemistry - A European Journal, 2018, 24, 6778-6786.	3.3	76
29	A Novel Cathode Material for Cathodic Dehalogenation of 1,1â€•Dibromo Cyclopropane Derivatives. Chemistry - A European Journal, 2015, 21, 13878-13882.	3.3	74
30	Inspiring process innovation <i>via</i> an improved green manufacturing metric: iGAL. Green Chemistry, 2018, 20, 2206-2211.	9.0	69
31	Micelle-enabled clean and selective sulfonylation of polyfluoroarenes in water under mild conditions. Green Chemistry, 2018, 20, 1784-1790.	9.0	65
32	Sustainable HandaPhos-<i>ppm</i> Palladium Technology for Copper-Free Sonogashira Couplings in Water under Mild Conditions. Organic Letters, 2018, 20, 542-545.	4.6	63
33	Synergistic effects in Fe nanoparticles doped with ppm levels of (Pd + Ni). A new catalyst for sustainable nitro group reductions. Green Chemistry, 2018, 20, 130-135.	9.0	63
34	A General and Practical Alternative to Polar Aprotic Solvents Exemplified on an Amide Bond Formation. Organic Process Research and Development, 2016, 20, 1388-1391.	2.7	60
35	Micelle-Enabled Photoassisted Selective Oxyhalogenation of Alkynes in Water under Mild Conditions. Journal of Organic Chemistry, 2018, 83, 7366-7372.	3.2	60
36	Insights on Bimetallic Micellar Nanocatalysis for Buchwaldâ€“Hartwig Aminations. ACS Catalysis, 2019, 9, 10389-10397.	11.2	59

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37	Water-Sculpting of a Heterogeneous Nanoparticle Precatalyst for Mizorokiâ€“Heck Couplings under Aqueous Micellar Catalysis Conditions. Journal of the American Chemical Society, 2021, 143, 3373-3382.	13.7	58
38	A new, <i>substituted</i> palladacycle forÂppm level Pd-catalyzed Suzukiâ€“Miyaura cross couplings in water. Chemical Science, 2019, 10, 8825-8831.	7.4	56
39	Enantioselective Syntheses of Authentic Sclerophytin A, Sclerophytin B, and Cladiell-11-ene-3,6,7-triol. Organic Letters, 2001, 3, 135-137.	4.6	55
40	Carbonyl Iron Powder: A Reagent for Nitro Group Reductions under Aqueous Micellar Catalysis Conditions. Organic Letters, 2017, 19, 6518-6521.	4.6	54
41	The Catalytic Formation of Atropisomers and Stereocenters via Asymmetric Suzukiâ€“Miyaura Couplings. ACS Catalysis, 2022, 12, 4918-4937.	11.2	54
42	A Micellar Catalysis Strategy for Suzukiâ€“Miyaura Cross-Couplings of 2-Pyridyl MIDA Boronates: <i>No Copper</i>, in Water, Very Mild Conditions. ACS Catalysis, 2017, 7, 8331-8337.	11.2	52
43	ppm Pd-catalyzed, Cu-free Sonogashira couplings in water using commercially available catalyst precursors. Chemical Science, 2019, 10, 3481-3485.	7.4	52
44	EvanPhos: a ligand for ppm level Pd-catalyzed Suzukiâ€“Miyaura couplings in either organic solvent or water. Green Chemistry, 2018, 20, 3436-3443.	9.0	51
45	Surfactant Technology: With New Rules, Designing New Sequences Is Required!. Organic Process Research and Development, 2020, 24, 841-849.	2.7	47
46	Sustainable and Scalable Fe/ppm Pd Nanoparticle Nitro Group Reductions in Water at Room Temperature. Organic Process Research and Development, 2017, 21, 247-252.	2.7	46
47	SustainableÂppm level palladium-catalyzed aminations in nanoreactors under mild, aqueous conditions. Chemical Science, 2019, 10, 10556-10561.	7.4	46
48	Micellar catalysis-enabled sustainableÂppm Au-catalyzed reactions in water at room temperature. Chemical Science, 2017, 8, 6354-6358.	7.4	44
49	Strategies to Tackle the Waste Water from Î±-Tocopherol-Derived Surfactant Chemistry. Organic Process Research and Development, 2021, 25, 900-915.	2.7	44
50	Selective Amidation of Unprotected Amino Alcohols Using Surfactant-in-Water Technology: A Highly Desirable Alternative to Reprotoxic Polar Aprotic Solvents. Organic Process Research and Development, 2016, 20, 1104-1107.	2.7	42
51	Ï€â€Allylpalladium Species in Micelles of FIâ€750â€M for Sustainable and General Suzukiâ€Miyaura Couplings of Unactivated Quinoline Systems in Water. ChemCatChem, 2018, 10, 4229-4233.	3.7	42
52	Shielding Effect of Micelle for Highly Effective and Selective Monofluorination of Indoles in Water. ChemSusChem, 2019, 12, 3037-3042.	6.8	42
53	<i>N</i>,<i>C</i>-Disubstituted Biarylpalladacycles as Precatalysts for ppm Pd-Catalyzed Cross Couplings in Water under Mild Conditions. ACS Catalysis, 2019, 9, 11647-11657.	11.2	42
54	A Practical Method for the Removal of Ruthenium Byproducts by Supercritical Fluid Extraction. Organic Process Research and Development, 2006, 10, 937-940.	2.7	41

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55	Fe/ppm Cu nanoparticles as a recyclable catalyst for click reactions in water at room temperature. Green Chemistry, 2017, 19, 2506-2509.	9.0	41
56	Microballs Containing Ni(0)Pd(0) Nanoparticles for Highly Selective Micellar Catalysis in Water. ACS Catalysis, 2019, 9, 7520-7526.	11.2	41
57	Fe-Catalyzed Reductive Couplings of Terminal (Hetero)Aryl Alkenes and Alkyl Halides under Aqueous Micellar Conditions. Journal of the American Chemical Society, 2019, 141, 17117-17124.	13.7	41
58	S_NAr Reactions in Aqueous Nanomicelles: From Milligrams to Grams with No Dipolar Aprotic Solvents Needed. Organic Process Research and Development, 2017, 21, 218-221.	2.7	40
59	A General Kilogram Scale Protocol for Suzukiâ€"Miyaura Cross-Coupling in Water with TPGS-750-M Surfactant. Organic Process Research and Development, 2020, 24, 1536-1542.	2.7	40
60	Practical Stereoselective Synthesis of an Î±-Trifluoromethyl-Î±-alkyl Epoxide via a Diastereoselective Trifluoromethylation Reaction. Journal of Organic Chemistry, 2007, 72, 292-294.	3.2	38
61	The PMI Predictor app to enable green-by-design chemical synthesis. Nature Sustainability, 2019, 2, 1034-1040.	23.7	36
62	Coolade. A Lowâ€Foaming Surfactant for Organic Synthesis in Water. ChemSusChem, 2019, 12, 3159-3165.	6.8	36
63	<i>B</i>-Alkyl sp³â€"sp² Suzukiâ€"Miyaura Couplings under Mild Aqueous Micellar Conditions. Organic Letters, 2018, 20, 2902-2905.	4.6	35
64	Nanomicelle-enhanced, asymmetric ERED-catalyzed reductions of activated olefins. Applications to 1-pot chemo- and bio-catalysis sequences in water. Chemical Communications, 2021, 57, 11847-11850.	4.1	35
65	Copper-Catalyzed Oxidative Cleavage of Electron-Rich Olefins in Water at Room Temperature. Organic Letters, 2018, 20, 5094-5097.	4.6	34
66	A Sustainable 1-Pot, 3-Step Synthesis of Boscalid Using Part per Million Level Pd Catalysis in Water. Organic Process Research and Development, 2020, 24, 101-105.	2.7	33
67	Safe, Scalable, Inexpensive, and Mild Nickelâ€Catalyzed Migitaâ€Like Câˆ'S Crossâ€Couplings in Recyclable Water. Angewandte Chemie - International Edition, 2021, 60, 3708-3713.	13.8	32
68	Lipase-catalyzed esterification in water enabled by nanomicelles. Applications to 1-pot multi-step sequences. Chemical Science, 2022, 13, 1440-1445.	7.4	32
69	Micelle-Enabled Suzukiâ€"Miyaura Cross-Coupling of Heteroaryl Boronate Esters. Journal of Organic Chemistry, 2018, 83, 7523-7527.	3.2	31
70	Mild and Robust Stille Reactions in Water using Parts Per Million Levels of a Triphenylphosphineâ€Based Palladacycle. Angewandte Chemie - International Edition, 2021, 60, 4158-4163.	13.8	31
71	Improved iGAL 2.0 Metric Empowers Pharmaceutical Scientists to Make Meaningful Contributions to United Nations Sustainable Development Goal 12. ACS Sustainable Chemistry and Engineering, 2022, 10, 5148-5162.	6.7	31
72	Reactivity of Carbenes in Aqueous Nanomicelles Containing Palladium Nanoparticles. ACS Catalysis, 2019, 9, 10963-10970.	11.2	30

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73	Environmentally responsible, safe, and chemoselective catalytic hydrogenation of olefins: ppm level Pd catalysis in recyclable water at room temperature. Green Chemistry, 2020, 22, 6055-6061.	9.0	30
74	Direct conversion of primary and secondary carboxylic acids to trifluoromethyl ketones. Tetrahedron Letters, 2007, 48, 189-192.	1.4	29
75	N₂Phos â€“ an easily made, highly effective ligand designed for ppm level Pd-catalyzed Suzukiâ€“Miyaura cross couplings in water. Chemical Science, 2020, 11, 5205-5212.	7.4	29
76	C4â€˜-Spiroalkylated Nucleosides Having Sulfur Incorporated at the Apex Position. Journal of Organic Chemistry, 2003, 68, 8625-8634.	3.2	28
77	Organic synthesis in Aqueous Multiphase Systems â€” Challenges and opportunities ahead of us. Current Opinion in Colloid and Interface Science, 2021, 56, 101506.	7.4	28
78	Switching from organic solvents to water at an industrial scale. Current Opinion in Green and Sustainable Chemistry, 2017, 7, 13-17.	5.9	27
79	Water: An Underestimated Solvent for Amide Bond-Forming Reactions. ACS Sustainable Chemistry and Engineering, 2022, 10, 5299-5306.	6.7	26
80	A practical non-cryogenic process for the selective functionalization of bromoaryls. Tetrahedron Letters, 2008, 49, 5024-5027.	1.4	24
81	Continuous flow Suzukiâ€“Miyaura couplings in water under micellar conditions in a CSTR cascade catalyzed by Fe/ppm Pd nanoparticles. Green Chemistry, 2020, 22, 3441-3444.	9.0	24
82	A consortium-driven framework to guide the implementation of ICH M7 Option 4 control strategies. Regulatory Toxicology and Pharmacology, 2017, 90, 22-28.	2.7	23
83	Environmental Metrics to Drive a Cultural Change: Our Green Eco-Label. Chimia, 2019, 73, 730.	0.6	23
84	Simple Synthesis of Amides via Their Acid Chlorides in Aqueous TPGS-750-M. Organic Process Research and Development, 2020, 24, 1543-1548.	2.7	23
85	Sustainable Palladium-Catalyzed Tsujiâ€“Trost Reactions Enabled by Aqueous Micellar Catalysis. Organic Letters, 2020, 22, 4949-4954.	4.6	23
86	Propensity of 4-Methoxy-4-vinyl-2-cyclopentenones Housed in Tri- and Tetracyclic Frameworks for Deep-Seated Photochemical Rearrangement. Journal of the American Chemical Society, 2000, 122, 9610-9620.	13.7	22
87	Syntheses and properties of some exo,exo-bis(isodicyclopentadienyl)titanium low-valent complexes. Journal of Organometallic Chemistry, 2002, 656, 81-88.	1.8	22
88	Microtiter Plate (MTP) Reaction Screening and Optimization of Surfactant Chemistry: Examples of Suzukiâ€“Miyaura and Buchwaldâ€“Hartwig Cross-Couplings in Water. Organic Process Research and Development, 2018, 22, 1453-1457.	2.7	22
89	Synthesis of Functionalized 1,3-Butadienes via Pd-Catalyzed Cross-Couplings of Substituted Allenic Esters in Water at Room Temperature. Organic Letters, 2018, 20, 4719-4722.	4.6	22
90	Organopolymer with dual chromophores and fast charge-transfer properties for sustainable photocatalysis. Nature Communications, 2019, 10, 1837.	12.8	22

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91	Î±-Arylation of (hetero)aryl ketones in aqueous surfactant media. Green Chemistry, 2021, 23, 4858-4865.	9.0	22
92	Lateâ€•stage Pdâ€•catalyzed Cyanations of Aryl/Heteroaryl Halides in Aqueous Micellar Media. ChemCatChem, 2021, 13, 212-216.	3.7	21
93	A Novel One-Step Synthesis of 2-Substituted 6-Azaindoles from 3-Amino-4-picoline and Carboxylic Esters. Journal of Organic Chemistry, 2005, 70, 6512-6514.	3.2	20
94	HandaPhos: A General Ligand Enabling Sustainable ppm Levels of Palladium-Catalyzed Cross-Couplings in Water at Room Temperature. Angewandte Chemie, 2016, 128, 4998-5002.	2.0	20
95	High Turnover Pd/C Catalyst for Nitro Group Reductions in Water. One-Pot Sequences and Syntheses of Pharmaceutical Intermediates. Organic Letters, 2021, 23, 8114-8118.	4.6	20
96	Continuous slurry plug flow Fe/ppm Pd nanoparticle-catalyzed Suzukiâ€“Miyaura couplings in water utilizing novel solid handling equipment. Green Chemistry, 2021, 23, 7724-7730.	9.0	17
97	â€œTPG-liteâ€• A new, simplified â€œdesignerâ€•surfactant for general use in synthesis under micellar catalysis conditions in recyclable water. Tetrahedron, 2021, 87, 132090.	1.9	17
98	Development of a Robust and Sustainable Process for Nucleoside Formation. Organic Process Research and Development, 2013, 17, 390-396.	2.7	16
99	New Semi-Automated Computer-Based System for Assessing the Purge of Mutagenic Impurities. Organic Process Research and Development, 2019, 23, 2470-2481.	2.7	16
100	Nanochannels in Photoactive Polymeric Cu(I) Compatible for Efficient Micellar Catalysis: Sustainable Aerobic Oxidations of Alcohols in Water. ACS Sustainable Chemistry and Engineering, 2021, 9, 2854-2860.	6.7	14
101	Organometallic Catalysis and Sustainability: From Origin to Date. Johnson Matthey Technology Review, 2017, 61, 231-245.	1.0	13
102	Sustainability as a Trigger for Innovation!. Chimia, 2020, 74, 538.	0.6	13
103	New Photorearrangements of 2-Cyclopentenones. The Genesis and Fate of Cyclopropylcarbinyl Biradical Intermediates. Journal of the American Chemical Society, 2000, 122, 1540-1541.	13.7	12
104	Phosphine Ligand-Free Bimetallic Ni(0)Pd(0) Nanoparticles as a Catalyst for Facile, General, Sustainable, and Highly Selective 1,4-Reductions in Aqueous Micelles. ACS Applied Materials & Interfaces, 2022, 14, 6754-6761.	8.0	12
105	Green Chemistry Articles of Interest to the Pharmaceutical Industry. Organic Process Research and Development, 2013, 17, 615-626.	2.7	11
106	Nickel Nanoparticle Catalyzed Monoâ€•and Diâ€•Reductions of <i>gem</i>â€•Dibromocyclopropanes Under Mild, Aqueous Micellar Conditions. Angewandte Chemie - International Edition, 2020, 59, 17587-17593.	13.8	10
107	Organometallic Processes in Water. Topics in Organometallic Chemistry, 2018, , 199-216.	0.7	8
108	Micelle enabled C(sp²)â€“C(sp³) cross-electrophile coupling in water <i>via</i> synergistic nickel and copper catalysis. Chemical Communications, 2021, 57, 7629-7632.	4.1	7

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109	Optimized Synthesis of 7-Azaindazole by a Dielsâ€“Alder Cascade and Associated Process Safety. Organic Process Research and Development, 2020, 24, 776-786.	2.7	6
110	Sustainable and Benchâ€Stable Photoactive Aqueous Nanoaggregates of Cu(II) for ppm Level Cu(I) Catalysis in Water. Advanced Functional Materials, 2022, 32, .	14.9	6
111	Development of a Practical Process for the Opening of Macrocyclic Cyclosporin A and Amino Acid Deletion. Organic Process Research and Development, 2014, 18, 1763-1770.	2.7	5
112	Photoassisted Charge Transfer Between DMF and Substrate: Facile and Selective <i>N</i>,<i>N</i>â€Dimethylamination of Fluoroarenes. ChemSusChem, 2021, 14, 2704-2709.	6.8	5
113	A rapid and practical entry into cis-1,4-aminocyclohexanols. Tetrahedron Letters, 2010, 51, 1419-1422.	1.4	4
114	Development of a cyclosporin A derivative with excellent anti-hepatitis C virus potency. Bioorganic and Medicinal Chemistry, 2018, 26, 957-969.	3.0	4
115	Nickel Nanoparticle Catalyzed Monoâ€•and Diâ€Reductions of gem â€Dibromocyclopropanes Under Mild, Aqueous Micellar Conditions. Angewandte Chemie, 2020, 132, 17740-17746.	2.0	4
116	Sustainable and Affordable Chemistry. ChemCatChem, 2019, 11, 5660-5661.	3.7	3
117	Allylations of aryl/heteroaryl ketones: neat, clean, and sustainable. Applications to targets in the pharma- and nutraceutical industries. Green Chemistry, 2022, 24, 4909-4914.	9.0	3
118	Mild and Robust Stille Reactions in Water using Parts Per Million Levels of a Triphenylphosphineâ€Based Palladacycle. Angewandte Chemie, 2021, 133, 4204-4209.	2.0	2
119	A Streamlined Synthesis of Androstadiene C-17 Ester Derivatives. Chimia, 2011, 65, 877-882.	0.6	1
120	Development of a Robust Protocol for the Synthesis of 6-Hydroxybenzofuran-3-carboxylic Acid. Organic Process Research and Development, 2020, 24, 861-866.	2.7	1
121	Fostering Research Synergies between Chemists in Swiss Academia and at Novartis. Chimia, 2021, 75, 936.	0.6	1
122	Forewords BMC. Bioorganic and Medicinal Chemistry, 2018, 26, 4329.	3.0	0