

# Matthieu Fonvielle

## List of Publications by Year in descending order

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38  
papers

813  
citations

471371

17  
h-index

526166

27  
g-index

42  
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42  
docs citations

42  
times ranked

907  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cyclodipeptide synthases, a family of class-I aminoacyl-tRNA synthetase-like enzymes involved in non-ribosomal peptide synthesis. <i>Nucleic Acids Research</i> , 2011, 39, 4475-4489.	6.5	83
2	Nonribosomal Peptide Synthesis in Animals: The Cyclodipeptide Synthase of <i>Nematostella</i> . <i>Chemistry and Biology</i> , 2011, 18, 1362-1368.	6.2	50
3	Synthesis of Stable Aminoacyl-tRNA Analogues Containing Triazole as a Bioisoster of Esters. <i>Chemistry - A European Journal</i> , 2009, 15, 1929-1938.	1.7	46
4	Substrate and Reaction Specificity of <i>Mycobacterium tuberculosis</i> Cytochrome P450 CYP121. <i>Journal of Biological Chemistry</i> , 2013, 288, 17347-17359.	1.6	45
5	Critical Impact of Peptidoglycan Precursor Amidation on the Activity of <i>Transpeptidases</i> from <i>Enterococcus faecium</i> and <i>Mycobacterium tuberculosis</i> . <i>Chemistry - A European Journal</i> , 2018, 24, 5743-5747.	1.7	44
6	Idiosyncratic features in tRNAs participating in bacterial cell wall synthesis. <i>Nucleic Acids Research</i> , 2007, 35, 6870-6883.	6.5	42
7	Specificity determinants for the two tRNA substrates of the cyclodipeptide synthase AlbC from <i>Streptomyces noursei</i> . <i>Nucleic Acids Research</i> , 2014, 42, 7247-7258.	6.5	40
8	The Structure of FemX <sub>Wv</sub> in Complex with a Peptidyl-tRNA Conjugate: Mechanism of Aminoacyl Transfer from Ala-tRNA <sup>Ala</sup> to Peptidoglycan Precursors. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7278-7281.	7.2	36
9	Aminoacyl-tRNA recognition by the FemX <sub>Wv</sub> transferase for bacterial cell wall synthesis. <i>Nucleic Acids Research</i> , 2009, 37, 1589-1601.	6.5	35
10	Rational Design, Synthesis, and Evaluation of New Selective Inhibitors of Microbial Class II (Zinc) β-Lactamase. <i>Journal of Medicinal Chemistry</i> , 2010, 53, 1000-1010.	2.9	31
11	Synthesis of Avibactam Derivatives and Activity on β-Lactamases and Peptidoglycan Biosynthesis Enzymes of <i>Mycobacteria</i> . <i>Chemistry - A European Journal</i> , 2018, 24, 8081-8086.	1.7	30
12	Structural insight into YcbB-mediated beta-lactam resistance in <i>Escherichia coli</i> . <i>Nature Communications</i> , 2019, 10, 1849.	5.8	29
13	Stable Analogues of Aminoacyl-tRNA for Inhibition of an Essential Step of Bacterial Cell-Wall Synthesis. <i>Journal of the American Chemical Society</i> , 2007, 129, 12642-12643.	6.6	28
14	Synthesis and Biochemical Evaluation of Selective Inhibitors of Class II Fructose Bisphosphate Aldolases: Towards New Synthetic Antibiotics. <i>Chemistry - A European Journal</i> , 2008, 14, 8521-8529.	1.7	28
15	Decoding the Logic of the tRNA Regiospecificity of Nonribosomal FemX <sub>Wv</sub> Aminoacyl Transferase. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 5115-5119.	7.2	26
16	Routes of Synthesis of Carbapenems for Optimizing Both the Inactivation of <i>Transpeptidase</i> Ldt <sub>Mt1</sub> of <i>Mycobacterium tuberculosis</i> and the Stability toward Hydrolysis by β-Lactamase BlaC. <i>Journal of Medicinal Chemistry</i> , 2016, 59, 3427-3438.	2.9	23
17	Recognition of Peptidoglycan Fragments by the <i>Transpeptidase</i> PBP4 From <i>Staphylococcus aureus</i> . <i>Frontiers in Microbiology</i> , 2018, 9, 3223.	1.5	23
18	Efficient Access to Peptidyl-tRNA Conjugates for Picomolar Inhibition of Non-ribosomal FemX <sub>Wv</sub> Aminoacyl Transferase. <i>Chemistry - A European Journal</i> , 2013, 19, 1357-1363.	1.7	22

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19	Diazabicyclooctane Functionalization for Inhibition of $\beta$ -Lactamases from Enterobacteria. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 5257-5273.	2.9	17
20	New highly selective inhibitors of class II fructose-1,6-bisphosphate aldolases. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2004, 14, 2923-2926.	1.0	15
21	New inhibitors of rabbit muscle triose-phosphate isomerase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005, 15, 2906-2909.	1.0	15
22	New facile synthesis of phosphoglycolohydroxamic acid and other phosphoglycolic acid derivatives. <i>Tetrahedron Letters</i> , 2003, 44, 9047-9049.	0.7	13
23	Electrophilic RNA for Peptidyl-RNA Synthesis and Site-Specific Cross-Linking with tRNA-Binding Enzymes. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13553-13557.	7.2	11
24	Electrophilic RNA for Peptidyl-RNA Synthesis and Site-Specific Cross-Linking with tRNA-Binding Enzymes. <i>Angewandte Chemie</i> , 2016, 128, 13751-13755.	1.6	8
25	Synthesis of Carbapenems Containing Peptidoglycan Mimetics and Inhibition of the Cross-Linking Activity of a Transpeptidase of I,d Specificity. <i>Chemistry - A European Journal</i> , 2021, 27, 3542-3551.	1.7	6
26	Phosphine-Mediated Bioconjugation of the 3'-End of RNA. <i>Organic Letters</i> , 2020, 22, 8034-8038.	2.4	6
27	Partition of tRNA <sup>Gly</sup> isoacceptors between protein and cell-wall peptidoglycan synthesis in <i>Staphylococcus aureus</i> . <i>Nucleic Acids Research</i> , 2021, 49, 684-699.	6.5	6
28	Synthesis of 3'-Fluoro-tRNA Analogues for Exploring Non-Ribosomal Peptide Synthesis in Bacteria. <i>ChemBioChem</i> , 2015, 16, 477-486.	1.3	5
29	Synthesis of Lipid-Carbohydrate-Peptidyl-RNA Conjugates to Explore the Limits Imposed by the Substrate Specificity of Cell Wall Enzymes on the Acquisition of Drug Resistance. <i>Chemistry - A European Journal</i> , 2018, 24, 14911-14915.	1.7	5
30	Negative Impact of Carbapenem Methylation on the Reactivity of $\beta$ -Lactams for Cysteine Acylation as Revealed by Quantum Calculations and Kinetic Analyses. <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	1.4	5
31	Synthesis and biological evaluation of non-isomerizable analogues of Ala-tRNA <sup>Ala</sup> . <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 6161.	1.5	4
32	Synthesis of tRNA analogues containing a terminal ribose locked in the South conformation to study tRNA-dependent enzymes. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 1903-1911.	1.5	4
33	Traceless Staudinger Ligation for Bioconjugation of RNA. <i>Current Protocols</i> , 2021, 1, e42.	1.3	4
34	Synthesis of RNA-cofactor conjugates and structural exploration of RNA recognition by an m6A RNA methyltransferase. <i>Nucleic Acids Research</i> , 2022, 50, 5793-5806.	6.5	4
35	Click and Release Chemistry for Activity-Based Purification of $\beta$ -Lactam Targets. <i>Chemistry - A European Journal</i> , 2021, 27, 7687-7695.	1.7	3
36	New competitive inhibitors of cytosolic (NADH-dependent) rabbit muscle glycerophosphate dehydrogenase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007, 17, 410-413.	1.0	2

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37	Synthesis of Stable Aminoacyl-tRNA Analogs. , 2011, Chapter 4, 4.44.1-4.44.33.		2
38	Synthesis of 3- $\epsilon$ -triazoyl-dinucleotides as precursors of stable Phe-tRNA <sup>Phe</sup> and Leu-tRNA <sup>Leu</sup> analogues. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 3231-3233.	1.0	1