Michael Ryckelynck

List of Publications by Year
in descending order

37	2,768	361413 20	330143 37
papers	citations	h-index	g-index

39	39	39	3149
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fluorescence-activated droplet sorting (FADS): efficient microfluidic cell sorting based on enzymatic activity. Lab on A Chip, 2009, 9, 1850.	6.0	784
2	Droplet-Based Microfluidic Systems for High-Throughput Single DNA Molecule Isothermal Amplification and Analysis. Analytical Chemistry, 2009, 81, 4813-4821.	6.5	235
3	A completely in vitro ultrahigh-throughput droplet-based microfluidic screening system for protein engineering and directed evolution. Lab on A Chip, 2012, 12, 882.	6.0	221
4	Fluorogenic RNA Mango aptamers for imaging small non-coding RNAs in mammalian cells. Nature Communications, 2018, 9, 656.	12.8	189
5	Multi-step microfluidic droplet processing: kinetic analysis of an in vitro translated enzyme. Lab on A Chip, 2009, 9, 2902.	6.0	182
6	iSpinach: a fluorogenic RNA aptamer optimized for<i>in vitro</i>applications. Nucleic Acids Research, 2016, 44, 2491-2500.	14.5	126
7	Transient compartmentalization of RNA replicators prevents extinction due to parasites. Science, 2016, 354, 1293-1296.	12.6	116
8	A dimerization-based fluorogenic dye-aptamer module for RNA imaging in live cells. Nature Chemical Biology, 2020, 16, 69-76.	8.0	89
9	Light-Up RNA Aptamers and Their Cognate Fluorogens: From Their Development to Their Applications. International Journal of Molecular Sciences, 2018, 19, 44.	4.1	85
10	Structure and functional reselection of the Mango-III fluorogenic RNA aptamer. Nature Chemical Biology, 2019, 15, 472-479.	8.0	83
11	New Generation of Amino Coumarin Methyl Sulfonate-Based Fluorogenic Substrates for Amidase Assays in Droplet-Based Microfluidic Applications. Analytical Chemistry, 2011, 83, 2852-2857.	6.5	77
12	Crystal structure and fluorescence properties of the iSpinach aptamer in complex with DFHBI. Rna, 2017, 23, 1788-1795.	3.5	63
13	Using droplet-based microfluidics to improve the catalytic properties of RNA under multiple-turnover conditions. Rna, 2015, 21, 458-469.	3.5	62
14	Teaching Single-Cell Digital Analysis Using Droplet-Based Microfluidics. Analytical Chemistry, 2012, 84, 1202-1209.	6.5	58
15	Caveolin-3 Associates with and Affects the Function of Hyperpolarization-Activated Cyclic Nucleotide-Gated Channel 4. Biochemistry, 2008, 47, 12312-12318.	2.5	49
16	Crystal Structures of the Mango-II RNA Aptamer Reveal Heterogeneous Fluorophore Binding and Guide Engineering of Variants with Improved Selectivity and Brightness. Biochemistry, 2018, 57, 3544-3548.	2.5	49
17	Ultrahigh-Throughput Improvement and Discovery of Enzymes Using Droplet-Based Microfluidic Screening. Micromachines, 2017, 8, 128.	2.9	47
18	tRNAs and tRNA mimics as cornerstones of aminoacyl-tRNA synthetase regulations. Biochimie, 2005, 87, 835-845.	2.6	33

#	Article	IF	Citations
19	Yeast tRNAAsp Charging Accuracy Is Threatened by the N-terminal Extension of Aspartyl-tRNA Synthetase. Journal of Biological Chemistry, 2003, 278, 9683-9690.	3.4	27
20	tRNAâ€balanced expression of a eukaryal aminoacylâ€tRNA synthetase by an mRNAâ€mediated pathway. EMBO Reports, 2005, 6, 860-865.	4.5	22
21	Optimization of fluorogenic RNA-based biosensors using droplet-based microfluidic ultrahigh-throughput screening. Methods, 2019, 161, 46-53.	3.8	21
22	Structure-Guided Engineering of the Homodimeric Mango-IV Fluorescence Turn-on Aptamer Yields an RNA FRET Pair. Structure, 2020, 28, 776-785.e3.	3.3	20
23	An Intricate RNA Structure with two tRNA-derived Motifs Directs Complex Formation between Yeast Aspartyl-tRNA Synthetase and its mRNA. Journal of Molecular Biology, 2005, 354, 614-629.	4.2	19
24	Structureâ€Switching RNAs: From Gene Expression Regulation to Small Molecule Detection. Small Structures, 2021, 2, 2000132.	12.0	18
25	The nature of the purine at position 34 in tRNAs of 4-codon boxes is correlated with nucleotides at positions 32 and 38 to maintain decoding fidelity. Nucleic Acids Research, 2020, 48, 6170-6183.	14.5	17
26	Realâ€time tracking of root hair nucleus morphodynamics using a microfluidic approach. Plant Journal, 2021, 108, 303-313.	5.7	12
27	Activityâ€Fed Translation (AFT) Assay: A New Highâ€Throughput Screening Strategy for Enzymes in Droplets. ChemBioChem, 2015, 16, 1343-1349.	2.6	9
28	Growth-Associated Droplet Shrinkage for Bacterial Quantification, Growth Monitoring, and Separation by Ultrahigh-Throughput Microfluidics. ACS Omega, 2022, 7, 12039-12047.	3.5	8
29	Fluorogenic RNA-Based Biosensor to Sense the Glycolytic Flux in Mammalian Cells. ACS Chemical Biology, 2022, 17, 1164-1173.	3.4	7
30	Dichloromethane Degradation Pathway from Unsequenced Hyphomicrobium sp. MC8b Rapidly Explored by Pan-Proteomics. Microorganisms, 2020, 8, 1876.	3.6	6
31	Development and Applications of Fluorogen/Light-Up RNA Aptamer Pairs for RNA Detection and More. Methods in Molecular Biology, 2020, 2166, 73-102.	0.9	6
32	Rational Design of Self-Quenched Rhodamine Dimers as Fluorogenic Aptamer Probes for Live-Cell RNA Imaging. Analytical Chemistry, 2022, 94, 6657-6664.	6.5	6
33	Î¼IVC-Seq: A Method for Ultrahigh-Throughput Development and Functional Characterization of Small RNAs. Methods in Molecular Biology, 2021, 2300, 203-237.	0.9	4
34	Post-Translational Modifications Guard Yeast from Misaspartylation. Biochemistry, 2008, 47, 12476-12482.	2.5	3
35	ÂµIVC-Useq: a microfluidic-assisted high-throughput functional screening in tandem with next-generation sequencing and artificial neural network to rapidly characterize RNA molecules. Rna, 2021, 27, 841-853.	3.5	2
36	Droplet-Based Microfluidic Chip Design, Fabrication, and Use for Ultrahigh-Throughput DNA Analysis and Quantification. Advances in Experimental Medicine and Biology, 2022, , 445-460.	1.6	1

#	Article	IF	Citations
37	Development and engineering of artificial RNAs. Methods, 2019, 161, 1-2.	3.8	0