Michael Ryckelynck

List of Publications by Year
in descending order

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37 papers	2,768 citations	361413 20 h-index	330143 37 g-index
39 all docs	39 docs citations	39 times ranked	3149 citing authors

#	Article	IF	Citations
1	Growth-Associated Droplet Shrinkage for Bacterial Quantification, Growth Monitoring, and Separation by Ultrahigh-Throughput Microfluidics. ACS Omega, 2022, 7, 12039-12047.	3.5	8
2	Fluorogenic RNA-Based Biosensor to Sense the Glycolytic Flux in Mammalian Cells. ACS Chemical Biology, 2022, 17, 1164-1173.	3.4	7
3	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
4	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
5	Structureâ€Switching RNAs: From Gene Expression Regulation to Small Molecule Detection. Small Structures, 2021, 2, 2000132.	12.0	18
6	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
7	Realâ€time tracking of root hair nucleus morphodynamics using a microfluidic approach. Plant Journal, 2021, 108, 303-313.	5.7	12
8	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
9	A dimerization-based fluorogenic dye-aptamer module for RNA imaging in live cells. Nature Chemical Biology, 2020, 16, 69-76.	8.0	89
10	Dichloromethane Degradation Pathway from Unsequenced Hyphomicrobium sp. MC8b Rapidly Explored by Pan-Proteomics. Microorganisms, 2020, 8, 1876.	3.6	6
11	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
12	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
13	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
14	Development and engineering of artificial RNAs. Methods, 2019, 161, 1-2.	3.8	0
15	Structure and functional reselection of the Mango-III fluorogenic RNA aptamer. Nature Chemical Biology, 2019, 15, 472-479.	8.0	83
16	Optimization of fluorogenic RNA-based biosensors using droplet-based microfluidic ultrahigh-throughput screening. Methods, 2019, 161, 46-53.	3.8	21
17	Fluorogenic RNA Mango aptamers for imaging small non-coding RNAs in mammalian cells. Nature Communications, 2018, 9, 656.	12.8	189
18	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

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19	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
20	Crystal structure and fluorescence properties of the iSpinach aptamer in complex with DFHBI. Rna, 2017, 23, 1788-1795.	3.5	63
21	Ultrahigh-Throughput Improvement and Discovery of Enzymes Using Droplet-Based Microfluidic Screening. Micromachines, 2017, 8, 128.	2.9	47
22	Transient compartmentalization of RNA replicators prevents extinction due to parasites. Science, 2016, 354, 1293-1296.	12.6	116
23	iSpinach: a fluorogenic RNA aptamer optimized for<i>in vitro</i>applications. Nucleic Acids Research, 2016, 44, 2491-2500.	14.5	126
24	Activityâ€Fed Translation (AFT) Assay: A New Highâ€Throughput Screening Strategy for Enzymes in Droplets. ChemBioChem, 2015, 16, 1343-1349.	2.6	9
25	Using droplet-based microfluidics to improve the catalytic properties of RNA under multiple-turnover conditions. Rna, 2015, 21, 458-469.	3.5	62
26	Teaching Single-Cell Digital Analysis Using Droplet-Based Microfluidics. Analytical Chemistry, 2012, 84, 1202-1209.	6.5	58
27	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
28	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
29	Droplet-Based Microfluidic Systems for High-Throughput Single DNA Molecule Isothermal Amplification and Analysis. Analytical Chemistry, 2009, 81, 4813-4821.	6.5	235
30	Multi-step microfluidic droplet processing: kinetic analysis of an in vitro translated enzyme. Lab on A Chip, 2009, 9, 2902.	6.0	182
31	Fluorescence-activated droplet sorting (FADS): efficient microfluidic cell sorting based on enzymatic activity. Lab on A Chip, 2009, 9, 1850.	6.0	784
32	Caveolin-3 Associates with and Affects the Function of Hyperpolarization-Activated Cyclic Nucleotide-Gated Channel 4. Biochemistry, 2008, 47, 12312-12318.	2.5	49
33	Post-Translational Modifications Guard Yeast from Misaspartylation. Biochemistry, 2008, 47, 12476-12482.	2.5	3
34	tRNAâ€balanced expression of a eukaryal aminoacylâ€tRNA synthetase by an mRNAâ€mediated pathway. EMBO Reports, 2005, 6, 860-865.	4.5	22
35	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
36	tRNAs and tRNA mimics as cornerstones of aminoacyl-tRNA synthetase regulations. Biochimie, 2005, 87, 835-845.	2.6	33

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37	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