

Frédéric Rosu

List of Publications by Year in descending order

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76
papers

4,542
citations

101496

36
h-index

106281

65
g-index

81
all docs

81
docs citations

81
times ranked

4159
citing authors

#	ARTICLE	IF	CITATIONS
1	Recommendations for reporting ion mobility Mass Spectrometry measurements. <i>Mass Spectrometry Reviews</i> , 2019, 38, 291-320.	2.8	315
2	G-Quadruplex DNA Assemblies: Loop Length, Cation Identity, and Multimer Formation. <i>Journal of the American Chemical Society</i> , 2008, 130, 10208-10216.	6.6	246
3	Ligands playing musical chairs with G-quadruplex DNA: A rapid and simple displacement assay for identifying selective G-quadruplex binders. <i>Biochimie</i> , 2008, 90, 1207-1223.	1.3	245
4	Guanines are a quartet's best friend: impact of base substitutions on the kinetics and stability of tetramolecular quadruplexes. <i>Nucleic Acids Research</i> , 2007, 35, 3064-3075.	6.5	174
5	Interaction between antitumor drugs and a double-stranded oligonucleotide studied by electrospray ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1999, 34, 1328-1337.		168
6	Triplex and quadruplex DNA structures studied by electrospray mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2002, 16, 1729-1736.	0.7	154
7	Electrospray mass spectrometry to study drug-nucleic acids interactions. <i>Biochimie</i> , 2008, 90, 1074-1087.	1.3	142
8	Influence of response factors on determining equilibrium association constants of non-covalent complexes by electrospray ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2003, 38, 491-501.	0.7	138
9	Determination of affinity, stoichiometry and sequence selectivity of minor groove binder complexes with double-stranded oligodeoxynucleotides by electrospray ionization mass spectrometry. <i>Nucleic Acids Research</i> , 2002, 30, 82e-82.	6.5	135
10	Interactions of cryptolepine and neocryptolepine with unusual DNA structures. <i>Biochimie</i> , 2003, 85, 535-547.	1.3	133
11	Electrospray Mass Spectrometry of Telomeric RNA (TERRA) Reveals the Formation of Stable Multimeric G-Quadruplex Structures. <i>Journal of the American Chemical Society</i> , 2010, 132, 9328-9334.	6.6	124
12	Selective Interaction of Ethidium Derivatives with Quadruplexes: An Equilibrium Dialysis and Electrospray Ionization Mass Spectrometry Analysis. <i>Biochemistry</i> , 2003, 42, 10361-10371.	1.2	122
13	Shaping quaternary assemblies of water-soluble non-peptide helical foldamers by sequence manipulation. <i>Nature Chemistry</i> , 2015, 7, 871-878.	6.6	115
14	Electron Photodetachment Dissociation of DNA Polyanions in a Quadrupole Ion Trap Mass Spectrometer. <i>Analytical Chemistry</i> , 2006, 78, 6564-6572.	3.2	105
15	Base-Dependent Electron Photodetachment from Negatively Charged DNA Strands upon 260-nm Laser Irradiation. <i>Journal of the American Chemical Society</i> , 2007, 129, 4706-4713.	6.6	97
16	Positive and negative ion mode ESI-MS and MS/MS for studying drug-DNA complexes. <i>International Journal of Mass Spectrometry</i> , 2006, 253, 156-171.	0.7	94
17	Tetramolecular G-quadruplex formation pathways studied by electrospray mass spectrometry. <i>Nucleic Acids Research</i> , 2010, 38, 5217-5225.	6.5	90
18	Assembly of Palladium(II) and Platinum(II) Metallorectangles with a Guanosine-Substituted Terpyridine and Study of Their Interactions with Quadruplex DNA. <i>Chemistry - A European Journal</i> , 2014, 20, 4772-4779.	1.7	83

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19	Telomestatin-induced stabilization of the human telomeric DNA quadruplex monitored by electrospray mass spectrometry. <i>Chemical Communications</i> , 2003, , 2702.	2.2	81
20	Compaction of Duplex Nucleic Acids upon Native Electrospray Mass Spectrometry. <i>ACS Central Science</i> , 2017, 3, 454-461.	5.3	81
21	Tight Binding of the Antitumor Drug Ditercalinium to Quadruplex DNA. <i>ChemBioChem</i> , 2002, 3, 1235-1241.	1.3	80
22	Thermal Denaturation of DNA G-Quadruplexes and Their Complexes with Ligands: Thermodynamic Analysis of the Multiple States Revealed by Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2018, 140, 12553-12565.	6.6	78
23	A Simple Method to Determine Electrospray Response Factors of Noncovalent Complexes. <i>Analytical Chemistry</i> , 2009, 81, 6708-6715.	3.2	75
24	Gas phase thermal denaturation of an oligonucleotide duplex and its complexes with minor groove binders. , 2000, 14, 464-467.		72
25	Linking molecular models with ion mobility experiments. Illustration with a rigid nucleic acid structure. <i>Journal of Mass Spectrometry</i> , 2015, 50, 711-726.	0.7	69
26	Triâ€Gâ€Quadruplex: Controlled Assembly of a Gâ€Quadruplex Structure from Three Gâ€Rich Strands. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 11002-11005.	7.2	65
27	Infrared Signature of DNA G-Quadruplexes in the Gas Phase. <i>Journal of the American Chemical Society</i> , 2008, 130, 1810-1811.	6.6	63
28	Tridentate Nâ€Donor Palladium(II) Complexes as Efficient Coordinating Quadruplex DNA Binders. <i>Chemistry - A European Journal</i> , 2011, 17, 13274-13283.	1.7	63
29	Translation of rod-like template sequences into homochiral assemblies of stacked helical oligomers. <i>Nature Nanotechnology</i> , 2017, 12, 447-452.	15.6	62
30	Ascididemin and meridine stabilise G-quadruplexes and inhibit telomerase in vitro. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2005, 1724, 375-384.	1.1	61
31	Putative DNA G-quadruplex formation within the promoters of <i>Plasmodium falciparum</i> var genes. <i>BMC Genomics</i> , 2009, 10, 362.	1.2	61
32	Specific Stabilization of <i>c-MYC</i> and <i>c-KIT</i> G-Quadruplex DNA Structures by Indolylmethyleneindanone Scaffolds. <i>Biochemistry</i> , 2016, 55, 3571-3585.	1.2	59
33	Influence of the matrix on analyte fragmentation in atmospheric pressure MALDI. <i>Journal of the American Society for Mass Spectrometry</i> , 2006, 17, 1005-1013.	1.2	57
34	Drift Tube Ion Mobility: How to Reconstruct Collision Cross Section Distributions from Arrival Time Distributions?. <i>Analytical Chemistry</i> , 2017, 89, 12674-12681.	3.2	56
35	Optimizing Native Ion Mobility Q-TOF in Helium and Nitrogen for Very Fragile Noncovalent Structures. <i>Journal of the American Society for Mass Spectrometry</i> , 2018, 29, 2189-2198.	1.2	50
36	Mass-resolved electronic circular dichroism ion spectroscopy. <i>Science</i> , 2020, 368, 1465-1468.	6.0	46

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37	UV Spectroscopy of DNA Duplex and Quadruplex Structures in the Gas Phase. <i>Journal of Physical Chemistry A</i> , 2012, 116, 5383-5391.	1.1	41
38	Self-Association of Aromatic Oligoamide Foldamers into Double Helices in Water. <i>Organic Letters</i> , 2014, 16, 4992-4995.	2.4	41
39	Mass Spectrometry of Nucleic Acid Noncovalent Complexes. <i>Chemical Reviews</i> , 2022, 122, 7720-7839.	23.0	40
40	Ligand binding mode to duplex and triplex dna assessed by combining electrospray tandem mass spectrometry and molecular modeling. <i>Journal of the American Society for Mass Spectrometry</i> , 2007, 18, 1052-1062.	1.2	36
41	Electron photodetachment dissociation of DNA anions with covalently or noncovalently bound chromophores. <i>Journal of the American Society for Mass Spectrometry</i> , 2007, 18, 1990-2000.	1.2	34
42	Zwitterionic i-motif structures are preserved in DNA negatively charged ions produced by electrospray mass spectrometry. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 13448.	1.3	34
43	Covalent binding of antitumor benzoacronycines to double-stranded DNA induces helix opening and the formation of single-stranded DNA: unique consequences of a novel DNA-bonding mechanism. <i>Molecular Cancer Therapeutics</i> , 2005, 4, 71-80.	1.9	34
44	Fast gas-phase hydrogen/deuterium exchange observed for a DNA G-quadruplex. <i>Rapid Communications in Mass Spectrometry</i> , 2005, 19, 201-208.	0.7	31
45	Anatomy of an Oligoarea Six-Helix Bundle. <i>Journal of the American Chemical Society</i> , 2016, 138, 10522-10530.	6.6	31
46	Unexpected Position-Dependent Effects of Ribose G-Quartets in G-Quadruplexes. <i>Journal of the American Chemical Society</i> , 2017, 139, 7768-7779.	6.6	30
47	Parallel Guanine Duplex and Cytosine Duplex DNA with Uninterrupted Spines of Ag ⁺ -Mediated Base Pairs. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6605-6610.	2.1	29
48	Mercury ²⁺ -thymine interaction with a chair type G-quadruplex architecture. <i>Chemical Communications</i> , 2012, 48, 11464.	2.2	28
49	Design and Structure Determination of a Composite Zinc Finger Containing a Nonpeptide Foldamer Helical Domain. <i>Journal of the American Chemical Society</i> , 2019, 141, 2516-2525.	6.6	24
50	Dissociation Pathways of Benzylpyridinium α -Thermometer Ions Depend on the Activation Regime: An IRMPD Spectroscopy Study. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 3787-3791.	2.1	22
51	Identification of Trinucleotide Repeat Ligands with a FRET Melting Assay. <i>ChemBioChem</i> , 2008, 9, 1229-1234.	1.3	20
52	d(TGnT) DNA sequences do not necessarily form tetramolecular G-quadruplexes. <i>Chemical Communications</i> , 2012, 48, 8386.	2.2	19
53	Assembly of chemically modified G-rich sequences into tetramolecular DNA G-quadruplexes and higher order structures. <i>Methods</i> , 2014, 67, 159-168.	1.9	19
54	Electronic spectroscopy of isolated DNA polyanions. <i>Faraday Discussions</i> , 2019, 217, 361-382.	1.6	17

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55	A α -sugar-deficient G-quadruplex: incorporation of aTNA in G4 structures. <i>Chemical Science</i> , 2013, 4, 3693.	3.7	15
56	Probing ligand and cation binding sites in G-quadruplex nucleic acids by mass spectrometry and electron photodetachment dissociation sequencing. <i>Analyst</i> , The, 2019, 144, 3518-3524.	1.7	14
57	Cation Involvement in Telomestatin Binding to G-Quadruplex DNA. <i>Journal of Nucleic Acids</i> , 2010, 2010, 1-7.	0.8	13
58	Large Amplitude Conformational Changes in Self-Assembled Multi-Stranded Aromatic Sheets. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2574-2577.	7.2	13
59	Symmetric and dissymmetric carbohydrate-phenyl ditriazole derivatives as DNA G-quadruplex ligands: Synthesis, biophysical studies and antiproliferative activity. <i>Bioorganic Chemistry</i> , 2020, 99, 103786.	2.0	11
60	Proteome alteration induced by hTERT transfection of human fibroblast cells. <i>Proteome Science</i> , 2008, 6, 12.	0.7	10
61	Thiosugar naphthalene diimide conjugates: G-quadruplex ligands with antiparasitic and anticancer activity. <i>European Journal of Medicinal Chemistry</i> , 2022, 232, 114183.	2.6	10
62	Ligand binding to tetra-end-linked (TGGGGT) ₄ G-quadruplexes: an electrospray mass spectroscopy study. <i>Nucleic Acids Symposium Series</i> , 2008, 52, 165-166.	0.3	7
63	Design, synthesis, and antiproliferative effect of 2,9-bis[4-(pyridinylalkylaminomethyl)phenyl]-1,10-phenanthroline derivatives on human leukemic cells by targeting G-quadruplex. <i>Archiv Der Pharmazie</i> , 2021, 354, e2000450.	2.1	7
64	Crystal structures capture multiple stoichiometric states of an aqueous self-assembling oligoureia foldamer. <i>Chemical Communications</i> , 2021, 57, 9514-9517.	2.2	6
65	Cooperative 2:1 Binding of a Bisphenothiazine to Duplex DNA. <i>ChemBioChem</i> , 2008, 9, 849-852.	1.3	5
66	Collision Cross Sections of Phosphoric Acid Cluster Anions in Helium Measured by Drift Tube Ion Mobility Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 969-981.	1.2	5
67	A short C-rich PNA fragment capable to form novel G-quadruplex-PNA complexes. <i>Nucleic Acids Symposium Series</i> , 2008, 52, 167-168.	0.3	4
68	Compaction of RNA Hairpins and Their Kissing Complexes in Native Electrospray Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 2035-2043.	1.2	4
69	Unprecedented hour-long residence time of a cation in a left-handed G-quadruplex. <i>Chemical Science</i> , 2021, 12, 7151-7157.	3.7	4
70	Gas-Phase Spectroscopy of Nucleic Acids. <i>Physical Chemistry in Action</i> , 2014, , 103-130.	0.1	4
71	The Proline-Rich Motif of the proDer p 3 Allergen Propeptide Is Crucial for Protease-Protease Interaction. <i>PLoS ONE</i> , 2013, 8, e68014.	1.1	4
72	Influence of the metals and ligands in dinuclear complexes on phosphopeptide sequencing by electron-transfer dissociation tandem mass spectrometry. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 26597-26607.	1.3	3

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73	Umfangreiche Konformationsänderungen in selbstassemblierten mehrsträngigen aromatischen Faltblättern. <i>Angewandte Chemie</i> , 2021, 133, 2605-2609.	1.6	3
74	Interaction between antitumor drugs and a double-stranded oligonucleotide studied by electrospray ionization mass spectrometry. , 0, .		1
75	Linking molecular models with ion mobility experiments. Illustration with a rigid nucleic acid structure. <i>Journal of Mass Spectrometry</i> , 2015, 50, ii-ii.	0.7	0
76	Lennard-Jones interaction parameters of Mo and W in He and N ₂ from collision cross-sections of Lindqvist and Keggin polyoxometalate anions. <i>Physical Chemistry Chemical Physics</i> , 0, , .	1.3	0