

Eric Peyrin

List of Publications by Year in descending order

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times ranked

2421
citing authors

#	ARTICLE	IF	CITATIONS
1	A DNA Aptamer as a New Target-Specific Chiral Selector for HPLC. <i>Journal of the American Chemical Society</i> , 2003, 125, 8672-8679.	13.7	189
2	Immobilized DNA Aptamers as Target-Specific Chiral Stationary Phases for Resolution of Nucleoside and Amino Acid Derivative Enantiomers. <i>Analytical Chemistry</i> , 2004, 76, 1015-1020.	6.5	119
3	Noncompetitive Fluorescence Polarization Aptamer-based Assay for Small Molecule Detection. <i>Analytical Chemistry</i> , 2009, 81, 7468-7473.	6.5	106
4	Microfluidic channel with embedded SERS 2D platform for the aptamer detection of ochratoxin A. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 1613-1621.	3.7	98
5	Single-Stranded DNA Binding Protein-Assisted Fluorescence Polarization Aptamer Assay for Detection of Small Molecules. <i>Analytical Chemistry</i> , 2012, 84, 7203-7211.	6.5	84
6	Liquid chromatography, electrochromatography and capillary electrophoresis applications of DNA and RNA aptamers. <i>Journal of Chromatography A</i> , 2006, 1117, 1-10.	3.7	82
7	Determination of Cocaine in Human Plasma by Selective Solid-Phase Extraction Using an Aptamer-Based Sorbent. <i>Analytical Chemistry</i> , 2009, 81, 7081-7086.	6.5	81
8	Rationally designed aptamer-based fluorescence polarization sensor dedicated to the small target analysis. <i>Biosensors and Bioelectronics</i> , 2010, 25, 1652-1657.	10.1	75
9	Interactions between Dansyl Amino Acids and Human Serum Albumin Using High-Performance Liquid Chromatography: A Mobile-Phase pH and Temperature Considerations. <i>Analytical Chemistry</i> , 1997, 69, 4979-4984.	6.5	70
10	Toward sensitive immuno-based detection of tau protein by surface plasmon resonance coupled to carbon nanostructures as signal amplifiers. <i>Biosensors and Bioelectronics</i> , 2017, 93, 289-292.	10.1	63
11	Chiral Stationary Phase Based on a Biostable I-RNA Aptamer. <i>Analytical Chemistry</i> , 2005, 77, 1993-1998.	6.5	56
12	Nucleic acid aptamer molecular recognition principles and application in liquid chromatography and capillary electrophoresis. <i>Journal of Separation Science</i> , 2009, 32, 1531-1536.	2.5	55
13	Chiral resolution of histidine using an anti-d-histidine I-RNA aptamer microbore column. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2007, 845, 186-190.	2.3	51
14	Optimization of the structure-switching aptamer-based fluorescence polarization assay for the sensitive tyrosinamide sensing. <i>Analytica Chimica Acta</i> , 2011, 707, 191-196.	5.4	49
15	Detecting Alzheimer's disease biomarkers: From antibodies to new bio-mimetic receptors and their application to established and emerging bioanalytical platforms – A critical review. <i>Analytica Chimica Acta</i> , 2016, 940, 21-37.	5.4	47
16	Retention Mechanism Study of Imidazole Derivatives on a β -Cyclodextrin-Bonded Stationary Phase. <i>Thermal Analysis Contributions. Analytical Chemistry</i> , 1998, 70, 2819-2826.	6.5	46
17	Simple and Highly Enantioselective Electrochemical Aptamer-Based Binding Assay for Trace Detection of Chiral Compounds. <i>Analytical Chemistry</i> , 2012, 84, 5415-5420.	6.5	46
18	Peculiarities of Dansyl Amino Acid Enantioselectivity Using Human Serum Albumin as a Chiral Selector. <i>Journal of Chromatographic Science</i> , 1998, 36, 97-103.	1.4	45

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19	Enantiomeric Separation Using an I-RNA Aptamer as Chiral Additive in Partial-Filling Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2006, 78, 3032-3039.	6.5	44
20	Non-SELEX isolation of DNA aptamers for the homogeneous-phase fluorescence anisotropy sensing of tau Proteins. <i>Analytica Chimica Acta</i> , 2018, 1038, 173-181.	5.4	44
21	A I-RNA aptamer chiral stationary phase for the resolution of target and related compounds. <i>Journal of Chromatography A</i> , 2005, 1076, 62-70.	3.7	43
22	Covalently bonded DNA aptamer chiral stationary phase for the chromatographic resolution of adenosine. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 390, 1051-1057.	3.7	43
23	Riboswitches Based on Kissing Complexes for the Detection of Small Ligands. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6942-6945.	13.8	43
24	Characterization of Solute Binding at Human Serum Albumin Site II and its Geometry Using a Biochromatographic Approach. <i>Biophysical Journal</i> , 1999, 77, 1206-1212.	0.5	42
25	Chiral Resolution Capabilities of DNA Oligonucleotides. <i>Analytical Chemistry</i> , 2015, 87, 5491-5495.	6.5	42
26	Panoply of Fluorescence Polarization/Anisotropy Signaling Mechanisms for Functional Nucleic Acid-Based Sensing Platforms. <i>Analytical Chemistry</i> , 2018, 90, 4236-4248.	6.5	38
27	Symmetry Breaking during the Formation of β -Cyclodextrin~Imidazole Inclusion Compounds: Capillary Electrophoresis Study. <i>Analytical Chemistry</i> , 1999, 71, 2046-2052.	6.5	36
28	Aptamer-Based Enantioselective Competitive Binding Assay for the Trace Enantiomer Detection. <i>Analytical Chemistry</i> , 2007, 79, 4716-4719.	6.5	35
29	Aptamer-Modified Micellar Electrokinetic Chromatography for the Enantioseparation of Nucleotides. <i>Analytical Chemistry</i> , 2009, 81, 1169-1176.	6.5	34
30	Retention behavior of d,l-dansyl-amino acids on a human serum albumin chiral stationary phase: effect of a mobile phase modifier. <i>Journal of Chromatography A</i> , 1998, 808, 113-120.	3.7	33
31	Recent developments in the HPLC enantiomeric separation using chiral selectors identified by a combinatorial strategy. <i>Journal of Separation Science</i> , 2006, 29, 1322-1331.	2.5	33
32	Dansyl amino acid enantiomer separation on a teicoplanin chiral stationary phase: effect of eluent pH. <i>Journal of Chromatography A</i> , 2001, 923, 37-43.	3.7	32
33	Chromatographic determination of the association constants between nimesulide and native and modified β -cyclodextrins. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2002, 29, 425-430.	2.8	32
34	Macrocyclic Host-Dye Reporter for Sensitive Sandwich-Type Fluorescent Aptamer Sensor. <i>Analytical Chemistry</i> , 2015, 87, 3139-3143.	6.5	32
35	HSA~Solute Interactions, Enantioselectivity, and Binding Site Geometrical Characteristics. <i>Analytical Chemistry</i> , 1998, 70, 4235-4240.	6.5	31
36	Multianalytical Study of the Binding between a Small Chiral Molecule and a DNA Aptamer: Evidence for Asymmetric Steric Effect upon 3'- versus 5'-End Sequence Modification. <i>Analytical Chemistry</i> , 2016, 88, 11963-11971.	6.5	31

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37	Vancomycin Dimerization and Chiral Recognition Studied by High-Performance Liquid Chromatography. <i>Analytical Chemistry</i> , 2002, 74, 5205-5211.	6.5	30
38	Study of tryptophan enantiomer binding to a teicoplanin-based stationary phase using the perturbation technique. <i>Journal of Chromatography A</i> , 2003, 986, 45-53.	3.7	29
39	Multiplexed Detection of Small Analytes by Structure-Switching Aptamer-Based Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2010, 82, 4613-4620.	6.5	29
40	Aptamer enzymatic cleavage protection assay for the gold nanoparticle-based colorimetric sensing of small molecules. <i>Analytica Chimica Acta</i> , 2011, 706, 349-353.	5.4	29
41	A combinatorial approach to the repertoire of RNA kissing motifs; towards multiplex detection by switching hairpin aptamers. <i>Nucleic Acids Research</i> , 2016, 44, 4450-4459.	14.5	29
42	Peculiarities of an imidazole derivative retention mechanism in reversed-phase liquid chromatography: β -cyclodextrin concentration and temperature considerations. <i>Journal of Chromatography A</i> , 1998, 808, 51-60.	3.7	28
43	Chiral discrimination of N-(dansyl)-dl-amino acids on human serum albumin stationary phase: Effect of a mobile phase modifier. <i>Chromatographia</i> , 1998, 48, 431-435.	1.3	28
44	Geometrical Model for the Retention of Fullerenes in High-Performance Liquid Chromatography. <i>Analytical Chemistry</i> , 1999, 71, 1326-1331.	6.5	26
45	Fluorescence polarization biosensor based on an aptamer enzymatic cleavage protection strategy. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 401, 3229-3234.	3.7	26
46	Chromatographic study of magnesium and calcium binding to immobilized human serum albumin. <i>Biomedical Applications</i> , 1999, 728, 167-174.	1.7	25
47	ELAKCA: Enzyme-Linked Aptamer Kissing Complex Assay as a Small Molecule Sensing Platform. <i>Analytical Chemistry</i> , 2016, 88, 2570-2575.	6.5	25
48	Mechanism of DNA Hydrodynamic Separation in Chromatography. <i>Analytical Chemistry</i> , 2000, 72, 853-857.	6.5	24
49	Efficient functional neutralization of lethal peptide toxins in vivo by oligonucleotides. <i>Scientific Reports</i> , 2017, 7, 7202.	3.3	22
50	Chemometric approach to the treatment of benzodiazepine separation and peak broadening in capillary electrophoresis. <i>Journal of Chromatography A</i> , 1999, 849, 563-573.	3.7	21
51	A New Approach to Study Benzodiazepine Separation and the Differences Between a Methanol/Water and Acetonitrile/Water Mixture on Column Efficiency in Liquid Chromatography. <i>Journal of Liquid Chromatography and Related Technologies</i> , 1997, 20, 1741-1756.	1.0	20
52	Sucrose Dependence of Solute Retention on Human Serum Albumin Stationary Phase: β -Cyclodextrin Hydrophobic Effect and Surface Tension Considerations. <i>Analytical Chemistry</i> , 1998, 70, 2812-2818.	6.5	20
53	Rapid determination of sulbactam and tazobactam in human serum by high-performance liquid chromatography. <i>Biomedical Applications</i> , 1995, 665, 363-371.	1.7	19
54	Peculiarities of the mechanism of retention of imidazole derivatives when using hydroxypropyl- β -cyclodextrin as mobile phase additive. <i>Chromatographia</i> , 1999, 49, 691-698.	1.3	19

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55	Aptamer Switches Regulated by Post-Transition/Transition Metal Ions. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 12346-12350.	13.8	19
56	Mobile-phase-viscosity dependence on DNA separation in slalom chromatography. <i>Journal of Chromatography A</i> , 2000, 886, 1-7.	3.7	18
57	Reanalysis of Solute Retention on Immobilized Human Serum Albumin Using Fractal Geometry. <i>Analytical Chemistry</i> , 1999, 71, 1496-1499.	6.5	17
58	Inline Coupling of Electrokinetic Preconcentration Method to Taylor Dispersion Analysis for Size-Based Characterization of Low-UV-Absorbing Nanoparticles. <i>Analytical Chemistry</i> , 2018, 90, 2493-2500.	6.5	17
59	Optimising mobile phase composition, its flow-rate and column temperature in HPLC using taboo search. <i>Talanta</i> , 2000, 51, 579-586.	5.5	16
60	DNA migration regimes in hydrodynamic chromatography and slalom chromatography: evidence for a transition. <i>Talanta</i> , 2001, 55, 291-296.	5.5	16
61	Reversal of the enantiomeric elution order of some aromatic amino acids using reversed-phase chromatographic supports coated with the teicoplanin chiral selector. <i>Talanta</i> , 2006, 68, 1032-1036.	5.5	16
62	Copper(II) complexes of lipophilic aminoglycoside derivatives for the amino acid enantiomeric separation by ligand-exchange liquid chromatography. <i>Journal of Chromatography A</i> , 2008, 1185, 291-295.	3.7	16
63	Fluorescence anisotropy-based structure-switching aptamer assay using a peptide nucleic acid (PNA) probe. <i>Methods</i> , 2016, 97, 69-74.	3.8	16
64	Interactions between D,L dansyl amino acids and immobilized teicoplanin: Study of the dual effect of sodium citrate on chiral recognition. <i>Chromatographia</i> , 2001, 53, 645-650.	1.3	15
65	Streptavidin chiral stationary phase for the separation of adenosine enantiomers. <i>Journal of Chromatography A</i> , 2004, 1036, 155-160.	3.7	15
66	Effect of tetrabutylammonium chloride as eluent modifier on the retention and enantioselectivity of α -dansyl amino acids using immobilized human serum albumin. <i>Talanta</i> , 1999, 49, 415-423.	5.5	14
67	Displacement Study on a Vancomycin-Based Stationary Phase Using N-acetyl-D-Alanine as a Competing Agent. <i>Journal of Chromatographic Science</i> , 2002, 40, 83-86.	1.4	14
68	Thermodynamic origin of the chiral recognition of tryptophan on teicoplanin and teicoplanin aglycone stationary phases. <i>Journal of Separation Science</i> , 2005, 28, 409-420.	2.5	14
69	Investigation of Low-Energy Proton Effects on Aptamer Performance for Astrobiological Applications. <i>Astrobiology</i> , 2011, 11, 207-211.	3.0	14
70	Sequence requirements of oligonucleotide chiral selectors for the capillary electrophoresis resolution of low-affinity DNA binders. <i>Electrophoresis</i> , 2017, 38, 1383-1390.	2.4	14
71	A lifetime-sensitive fluorescence anisotropy probe for DNA-based bioassays: The case of SYBR Green. <i>Biosensors and Bioelectronics</i> , 2017, 90, 140-145.	10.1	14
72	Chemometric method to optimize chiral separation of imidazole derivatives by capillary electrophoresis. <i>Talanta</i> , 1999, 50, 533-540.	5.5	13

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73	Retention Behavior Modelization of Monoprotic and Diprotic Species in a Hydroorganic Acetonitrile/Water Mixture. <i>Analytical Chemistry</i> , 1999, 71, 2708-2713.	6.5	13
74	A Framework Based on the Extended Wyman Concept for Analyzing the Salt Effects on the Solute Retention in High-Performance Affinity Chromatography. <i>Analytical Chemistry</i> , 2002, 74, 282-287.	6.5	13
75	Catalytic DNA-based fluorescence polarization chiral sensing platform for l-histidine detection at trace level. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 1173-1179.	3.7	13
76	An improved design of the kissing complex-based aptasensor for the detection of adenosine. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 6515-6524.	3.7	13
77	STOICHIOMETRY AND FORMATION CONSTANTS OF SIX PAHs WITH β -CYCLODEXTRIN, DETERMINED BY HPLC USING A CYANO STATIONARY PHASE. <i>Journal of Liquid Chromatography and Related Technologies</i> , 2002, 25, 421-432.	1.0	12
78	Major increases of the reactivity and selectivity in aminoglycoside O-alkylation due to the presence of fluoride ions. <i>Tetrahedron</i> , 2012, 68, 737-746.	1.9	12
79	Capillary Gel Electrophoresis-Coupled Aptamer Enzymatic Cleavage Protection Strategy for the Simultaneous Detection of Multiple Small Analytes. <i>Analytical Chemistry</i> , 2014, 86, 4233-4240.	6.5	12
80	Small molecule aptamer assays based on fluorescence anisotropy signal-enhancer oligonucleotides. <i>Biosensors and Bioelectronics</i> , 2016, 82, 155-161.	10.1	12
81	Chiral ligand-exchange chromatography of amino acids using porous graphitic carbon coated with a dinaphthyl derivative of neamine. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 393, 655-660.	3.7	11
82	A colorimetric nanosensor based on a selective target-responsive aptamer kissing complex. <i>Nanoscale</i> , 2017, 9, 4048-4052.	5.6	11
83	Anti-pesticide DNA aptamers fail to recognize their targets with asserted micromolar dissociation constants. <i>Analytica Chimica Acta</i> , 2021, 1159, 338382.	5.4	11
84	Column Efficiency and Separation of DNA Fragments Using Slalom Chromatography: Hydrodynamic Study and Fractal Considerations. <i>Analytical Chemistry</i> , 2000, 72, 4846-4852.	6.5	10
85	Enantioseparation by MEKC using a ligand exchange-based chiral pseudostationary phase. <i>Electrophoresis</i> , 2009, 30, 2869-2873.	2.4	10
86	Ultrafast capillary electrophoresis isolation of DNA aptamer for the PCR amplification-based small analyte sensing. <i>Frontiers in Chemistry</i> , 2015, 3, 49.	3.6	10
87	High-performance liquid chromatographic determination of tazobactam by precolumn derivatization. <i>Biomedical Applications</i> , 1995, 672, 160-164.	1.7	9
88	Effect of temperature on DNA fractionation in slalom chromatography. <i>Talanta</i> , 2000, 52, 1105-1110.	5.5	9
89	FLOW RATE DEPENDENCE ON THE BIOPOLYMER RETENTION IN HYDRODYNAMIC CHROMATOGRAPHY. COMPARISON BETWEEN THE BEHAVIORS OF PROTEINS AND PLASMIDS. <i>Journal of Liquid Chromatography and Related Technologies</i> , 2001, 24, 1245-1252.	1.0	9
90	Chromatographic study of PAH- β CD inclusion complexes using a binary mixture and cyano-stationary phase. <i>Chromatographia</i> , 2001, 53, 624-628.	1.3	9

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91	Use of the Na ⁺ ion as an RPLC retention marker to investigate the association of dansyl amino acids with permethylated β -CD. <i>Chromatographia</i> , 2000, 52, 753-757.	1.3	8
92	MIGRATION BEHAVIOR MODELING OF ANIONIC SPECIES IN A HYDROORGANIC BACKGROUND ELECTROLYTE. <i>Journal of Liquid Chromatography and Related Technologies</i> , 2000, 23, 2789-2806.	1.0	8
93	Role of the vancomycin-ristocetin heterodimerization on the enantioselectivity of d,l-tryptophan and d,l-dansyl tryptophan. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2003, 795, 115-121.	2.3	8
94	Linear Chain Formation of Split-Aptamer Dimers on Surfaces Triggered by Adenosine. <i>Langmuir</i> , 2017, 33, 12785-12792.	3.5	8
95	Mirror-image aptamer kissing complex for arginine-vasopressin sensing. <i>Analytica Chimica Acta</i> , 2018, 1001, 143-150.	5.4	8
96	Kissing interactions for the design of a multicolour fluorescence anisotropy chiral aptasensor. <i>Talanta</i> , 2019, 205, 120098.	5.5	8
97	Aptamer Efficacies for In Vitro and In Vivo Modulation of β -Conotoxin PrXA Pharmacology. <i>Molecules</i> , 2019, 24, 229.	3.8	8
98	Aptamer Switches Regulated by Post-Transition/Transition Metal Ions. <i>Angewandte Chemie</i> , 2021, 133, 12454-12458.	2.0	8
99	A novel approach to study the inclusion mechanism of imidazole derivatives in micellar chromatography. <i>Talanta</i> , 2000, 52, 233-240.	5.5	6
100	Degree of Solute Inclusion in Native β -Cyclodextrin: A Chromatographic Approach. <i>Analytical Chemistry</i> , 2000, 72, 1263-1267.	6.5	6
101	Salt effects on the interaction of an amphiphilic model molecule with immobilized phosphatidylcholine monolayers. <i>Journal of Chromatography A</i> , 2002, 977, 185-192.	3.7	6
102	Competitive affinity capillary electrophoresis assay based on a "hybrid" pre-incubation/on-line capillary mixing format using an enantioselective aptamer as affinity ligand. <i>Journal of Separation Science</i> , 2008, 31, 2239-2243.	2.5	6
103	Optimization of Experimental Parameters to Explore Small-Ligand/Aptamer Interactions through Use of ¹ H-NMR Spectroscopy and Molecular Modeling. <i>Chemistry - A European Journal</i> , 2015, 21, 15740-15748.	3.3	6
104	Photochemistry on the Space Station "Aptamer Resistance to Space Conditions: Particles Exposure from Irradiation Facilities and Real Exposure Outside the International Space Station. <i>Astrobiology</i> , 2019, 19, 1063-1074.	3.0	6
105	Detection of small molecules by fluorescence intensity using single dye labeled aptamers and quencher transition metal ions. <i>Biosensors and Bioelectronics</i> , 2022, 205, 114091.	10.1	6
106	C60 and C70 HPLC Retention Reversal Study Using Organic Modifiers. <i>Analytical Chemistry</i> , 2000, 72, 1301-1306.	6.5	5
107	Sucrose effect on reversed-phase liquid chromatography solute retention. <i>Analytica Chimica Acta</i> , 2001, 428, 83-88.	5.4	4
108	Enantiomeric sensing and separation by nucleic acids. <i>TrAC - Trends in Analytical Chemistry</i> , 2020, 122, 115733.	11.4	4

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109	Melting Curve Analysis of Aptachains: Adenosine Detection with Internal Calibration. Biosensors, 2021, 11, 112.	4.7	4
110	18-crown-6-aminophenol isomer complexes studied by RPLC. Chromatographia, 2000, 52, 584-588.	1.3	3
111	Use of an Amino Stationary Phase to Study the Vancomycin Dimerization Dependence on Solute Enantioselectivity. Journal of Liquid Chromatography and Related Technologies, 2003, 26, 1027-1039.	1.0	3
112	Nucleic acid aptamers. Methods, 2016, 97, 1-2.	3.8	3
113	Viscosityâ€Temperature Dependence on DNA Stretching: Slalom Chromatography Study. Journal of Liquid Chromatography and Related Technologies, 2003, 26, 883-893.	1.0	2
114	Aptamers in Affinity Separations: Stationary Separation. , 2009, , 271-286.		2
115	Enantioselective Properties of Nucleic Acid Aptamer Molecular Recognition Elements. , 2010, , 275-288.		2
116	Fractal Considerations in Chromatography:Â Column Efficiency and the Multimicrocolumn System. Journal of Physical Chemistry A, 2000, 104, 8951-8954.	2.5	1
117	Aptamers for Separation of Enantiomers. , 0, , 213-228.		1
118	Capillary electrophoretic apparatus for the endpoint detection in microtitration methods. Journal of Chromatography A, 2019, 1597, 220-224.	3.7	1
119	Chromatographic approach to study Î²-cyclodextrin as a promoter of the penetration of bifonazole into keratinic tissue. Biomedical Applications, 1999, 735, 289-291.	1.7	0
120	Combination of Fractal Geometry and Hydrodynamics:â€ A Novel Approach to the Study of a Multicapillary Electrophoresis System. Journal of Physical Chemistry B, 1999, 103, 5608-5611.	2.6	0
121	Aptamers as Ligands for Affinity Chromatography and Capillary Electrophoresis Applications. , 2006, , 324-342.		0