

# Kevin W Plaxco

## List of Publications by Year in descending order

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238  
papers

24,835  
citations

5268

83  
h-index

7518

151  
g-index

275  
all docs

275  
docs citations

275  
times ranked

15888  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemical Aptamer-Based Sensors: A Platform Approach to High-Frequency Molecular Monitoring In Situ in the Living Body. <i>Methods in Molecular Biology</i> , 2022, 2393, 479-492.	0.9	13
2	Continuous monitoring of molecular biomarkers in microfluidic devices. <i>Progress in Molecular Biology and Translational Science</i> , 2022, 187, 295-333.	1.7	0
3	Protein-Protein Communication Mediated by an Antibody-Responsive DNA Nanodevice**. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	2
4	Protein-Protein Communication Mediated by an Antibody-Responsive DNA Nanodevice**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	9
5	Protein-Protein Communication Mediated by an Antibody-Responsive DNA Nanodevice (Angew. Chem. 12/2022). <i>Angewandte Chemie</i> , 2022, 134, .	2.0	0
6	On the Disinfection of Electrochemical Aptamer-Based Sensors. , 2022, 1, 011604.		61
7	Improved calibration of electrochemical aptamer-based sensors. <i>Scientific Reports</i> , 2022, 12, 5535.	3.3	14
8	(Digital Presentation) Catalytic Interruption Mitigates Edge Effects in the Characterization of Heterogeneous, Insulating Nanoparticles. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2111-2111.	0.0	0
9	A wrinkled structure of gold film greatly improves the signaling of electrochemical aptamer-based biosensors. <i>RSC Advances</i> , 2021, 11, 671-677.	3.6	18
10	Seconds-Resolved, In Situ Measurements of Plasma Phenylalanine Disposition Kinetics in Living Rats. <i>Analytical Chemistry</i> , 2021, 93, 4023-4032.	6.5	35
11	Signal transduction with a swing. <i>Nature Chemistry</i> , 2021, 13, 392-393.	13.6	6
12	Vein-to-Brain: Simultaneous, seconds-resolved measurements of intracranial and intravenous drug levels provide a highly time-resolved picture of drug transport. <i>FASEB Journal</i> , 2021, 35, .	0.5	1
13	Nanoporous Gold for the Miniaturization of In Vivo Electrochemical Aptamer-Based Sensors. <i>ACS Sensors</i> , 2021, 6, 2299-2306.	7.8	48
14	Programmable, Multiplexed DNA Circuits Supporting Clinically Relevant, Electrochemical Antibody Detection. <i>ACS Sensors</i> , 2021, 6, 2442-2448.	7.8	32
15	Elucidating the Mechanisms Underlying the Signal Drift of Electrochemical Aptamer-Based Sensors in Whole Blood. <i>ACS Sensors</i> , 2021, 6, 3340-3347.	7.8	48
16	Switching the aptamer attachment geometry can dramatically alter the signalling and performance of electrochemical aptamer-based sensors. <i>Chemical Communications</i> , 2021, 57, 11693-11696.	4.1	12
17	The effect of charged residue substitutions on the thermodynamics of protein-surface interactions. <i>Protein Science</i> , 2021, 30, 2408-2417.	7.6	3
18	Catalytic Interruption Mitigates Edge Effects in the Characterization of Heterogeneous, Insulating Nanoparticles. <i>Journal of the American Chemical Society</i> , 2021, 143, 18888-18898.	13.7	7

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19	Nanometer-Scale Force Profiles of Short Single- and Double-Stranded DNA Molecules on a Gold Surface Measured Using a Surface Forces Apparatus. <i>Langmuir</i> , 2021, 37, 13346-13352.	3.5	4
20	Optimal experiment design with applications to Pharmacokinetic modeling. , 2021, , .		0
21	An Electrochemical Biosensor Architecture Based on Protein Folding Supports Direct Real-Time Measurements in Whole Blood. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18442-18445.	13.8	29
22	An Electrochemical Biosensor Architecture Based on Protein Folding Supports Direct Real-Time Measurements in Whole Blood. <i>Angewandte Chemie</i> , 2020, 132, 18600-18603.	2.0	4
23	Attachment of Proteins to a Hydroxyl-Terminated Surface Eliminates the Stabilizing Effects of Polyls. <i>Journal of the American Chemical Society</i> , 2020, 142, 15349-15354.	13.7	5
24	Rational design to control the trade-off between receptor affinity and cooperativity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 19136-19140.	7.1	17
25	Subsecond-Resolved Molecular Measurements Using Electrochemical Phase Interrogation of Aptamer-Based Sensors. <i>Analytical Chemistry</i> , 2020, 92, 14063-14068.	6.5	38
26	An electrochemical biosensor exploiting binding-induced changes in electron transfer of electrode-attached DNA origami to detect hundred nanometer-scale targets. <i>Nanoscale</i> , 2020, 12, 13907-13911.	5.6	16
27	Water as a Good Solvent for Unfolded Proteins: Folding and Collapse are Fundamentally Different. <i>Journal of Molecular Biology</i> , 2020, 432, 2882-2889.	4.2	26
28	Real-Time Monitoring of a Protein Biomarker. <i>ACS Sensors</i> , 2020, 5, 1877-1881.	7.8	60
29	E-DNA scaffold sensors and the reagentless, single-step, measurement of HIV-diagnostic antibodies in human serum. <i>Microsystems and Nanoengineering</i> , 2020, 6, 13.	7.0	27
30	Optimizing the Specificity Window of Biomolecular Receptors Using Structure-Switching and Allostery. <i>ACS Sensors</i> , 2020, 5, 1937-1942.	7.8	14
31	High frequency, real-time neurochemical and neuropharmacological measurements in situ in the living body. <i>Translational Research</i> , 2019, 213, 50-66.	5.0	7
32	Seconds-resolved pharmacokinetic measurements of the chemotherapeutic irinotecan <i>in situ</i> in the living body. <i>Chemical Science</i> , 2019, 10, 8164-8170.	7.4	74
33	Open Source Software for the Real-Time Control, Processing, and Visualization of High-Volume Electrochemical Data. <i>Analytical Chemistry</i> , 2019, 91, 12321-12328.	6.5	33
34	Ultra-High-Precision, in-vivo Pharmacokinetic Measurements Highlight the Need for and a Route Toward More Highly Personalized Medicine. <i>Frontiers in Molecular Biosciences</i> , 2019, 6, 69.	3.5	28
35	Electrochemical Aptamer-Based Sensors for Improved Therapeutic Drug Monitoring and High-Precision, Feedback-Controlled Drug Delivery. <i>ACS Sensors</i> , 2019, 4, 2832-2837.	7.8	142
36	Surface Attachment Enhances the Thermodynamic Stability of Protein...L. <i>Angewandte Chemie</i> , 2019, 131, 1728-1732.	2.0	1

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37	An electrochemical scaffold sensor for rapid syphilis diagnosis. <i>Analyst, The</i> , 2019, 144, 5277-5283.	3.5	26
38	Commonly used FRET fluorophores promote collapse of an otherwise disordered protein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 8889-8894.	7.1	43
39	An electrochemical aptamer-based sensor for the rapid and convenient measurement of l-tryptophan. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 4629-4635.	3.7	35
40	Calibration-Free Measurement of Phenylalanine Levels in the Blood Using an Electrochemical Aptamer-Based Sensor Suitable for Point-of-Care Applications. <i>ACS Sensors</i> , 2019, 4, 3227-3233.	7.8	78
41	High frequency, calibration-free molecular measurements <i>in situ</i> in the living body. <i>Chemical Science</i> , 2019, 10, 10843-10848.	7.4	52
42	High-Precision Electrochemical Measurements of the Guanine-, Mismatch-, and Length-Dependence of Electron Transfer from Electrode-Bound DNA Are Consistent with a Contact-Mediated Mechanism. <i>Journal of the American Chemical Society</i> , 2019, 141, 1304-1311.	13.7	42
43	Surface Attachment Enhances the Thermodynamic Stability of Protein...L. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1714-1718.	13.8	8
44	Exploiting the conformational-selection mechanism to control the response kinetics of a smart DNA hydrogel. <i>Analyst, The</i> , 2018, 143, 2531-2538.	3.5	17
45	Subsecond-Resolved Molecular Measurements in the Living Body Using Chronoamperometrically Interrogated Aptamer-Based Sensors. <i>ACS Sensors</i> , 2018, 3, 360-366.	7.8	98
46	Prolonged-access to cocaine induces distinct Homer2 DNA methylation, hydroxymethylation, and transcriptional profiles in the dorsomedial prefrontal cortex of Male Sprague-Dawley rats. <i>Neuropharmacology</i> , 2018, 143, 299-305.	4.1	9
47	High-Precision Control of Plasma Drug Levels Using Feedback-Controlled Dosing. <i>ACS Pharmacology and Translational Science</i> , 2018, 1, 110-118.	4.9	62
48	Chain Dynamics Limit Electron Transfer from Electrode-Bound, Single-Stranded Oligonucleotides. <i>Journal of Physical Chemistry C</i> , 2018, 122, 21441-21448.	3.1	25
49	Experimental Measurement of Surface Charge Effects on the Stability of a Surface-Bound Biopolymer. <i>Langmuir</i> , 2018, 34, 14993-14999.	3.5	14
50	Quantitative measurements of protein-surface interaction thermodynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8352-8357.	7.1	17
51	Electrochemical Aptamer-Based Sensors for Rapid Point-of-Use Monitoring of the Mycotoxin Ochratoxin A Directly in a Food Stream. <i>Molecules</i> , 2018, 23, 912.	3.8	34
52	Electrochemical DNA-Based Sensors for Molecular Quality Control: Continuous, Real-Time Melamine Detection in Flowing Whole Milk. <i>Analytical Chemistry</i> , 2018, 90, 10641-10645.	6.5	60
53	Expanding the Scope of Protein-Detecting Electrochemical DNA Scaffold-Sensors. <i>ACS Sensors</i> , 2018, 3, 1271-1275.	7.8	37
54	Real-time measurement of small molecules directly in awake, ambulatory animals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 645-650.	7.1	302

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55	Simulation-Based Approach to Determining Electron Transfer Rates Using Square-Wave Voltammetry. <i>Langmuir</i> , 2017, 33, 4407-4413.	3.5	50
56	A DNA Nanodevice That Loads and Releases a Cargo with Hemoglobin-Like Allosteric Control and Cooperativity. <i>Nano Letters</i> , 2017, 17, 3225-3230.	9.1	25
57	A Biomimetic Phosphatidylcholine-Terminated Monolayer Greatly Improves the In Vivo Performance of Electrochemical Aptamer-Based Sensors. <i>Angewandte Chemie</i> , 2017, 129, 7600-7603.	2.0	17
58	A Biomimetic Phosphatidylcholine-Terminated Monolayer Greatly Improves the In Vivo Performance of Electrochemical Aptamer-Based Sensors. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7492-7495.	13.8	112
59	High Surface Area Electrodes Generated via Electrochemical Roughening Improve the Signaling of Electrochemical Aptamer-Based Biosensors. <i>Analytical Chemistry</i> , 2017, 89, 12185-12191.	6.5	92
60	Calibration-Free Electrochemical Biosensors Supporting Accurate Molecular Measurements Directly in Undiluted Whole Blood. <i>Journal of the American Chemical Society</i> , 2017, 139, 11207-11213.	13.7	161
61	New Architecture for Reagentless, Protein-Based Electrochemical Biosensors. <i>Journal of the American Chemical Society</i> , 2017, 139, 12113-12116.	13.7	37
62	Experimental Measurement of the Thermodynamics Underlying the Surface-Induced Structural Changes of Nucleic Acids and Proteins. <i>Biophysical Journal</i> , 2016, 110, 211a.	0.5	0
63	Survey of Redox-Active Moieties for Application in Multiplexed Electrochemical Biosensors. <i>Analytical Chemistry</i> , 2016, 88, 10452-10458.	6.5	66
64	Using Nature's "Tricks" To Rationally Tune the Binding Properties of Biomolecular Receptors. <i>Accounts of Chemical Research</i> , 2016, 49, 1884-1892.	15.6	123
65	Dual-Reporter Drift Correction To Enhance the Performance of Electrochemical Aptamer-Based Sensors in Whole Blood. <i>Journal of the American Chemical Society</i> , 2016, 138, 15809-15812.	13.7	115
66	Maximizing the Signal Gain of Electrochemical-DNA Sensors. <i>Analytical Chemistry</i> , 2016, 88, 11654-11662.	6.5	90
67	Activity modulation and allosteric control of a scaffolded DNAzyme using a dynamic DNA nanostructure. <i>Chemical Science</i> , 2016, 7, 1200-1204.	7.4	56
68	A Modular, DNA-Based Beacon for Single-Step Fluorescence Detection of Antibodies and Other Proteins. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 13214-13218.	13.8	93
69	High-precision gigahertz-to-terahertz spectroscopy of aqueous salt solutions as a probe of the femtosecond-to-picosecond dynamics of liquid water. <i>Journal of Chemical Physics</i> , 2015, 142, 164502.	3.0	94
70	Random coil negative control reproduces the discrepancy between scattering and FRET measurements of denatured protein dimensions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6631-6636.	7.1	48
71	Integrated Electrochemical Microsystems for Genetic Detection of Pathogens at the Point of Care. <i>Accounts of Chemical Research</i> , 2015, 48, 911-920.	15.6	135
72	A comparison of the folding kinetics of a small, artificially selected DNA aptamer with those of equivalently simple naturally occurring proteins. <i>Protein Science</i> , 2014, 23, 56-66.	7.6	12

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73	Intrinsic disorder as a generalizable strategy for the rational design of highly responsive, allosterically cooperative receptors. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15048-15053.	7.1	69
74	Using the Populationâ€šift Mechanism to Rationally Introduce â€šillâ€štypeâ€š Cooperativity into a Normally Nonâ€šCooperative Receptor. Angewandte Chemie - International Edition, 2014, 53, 9471-9475.	13.8	41
75	Effects of Crowding on the Stability of a Surface-Tethered Biopolymer: An Experimental Study of Folding in a Highly Crowded Regime. Journal of the American Chemical Society, 2014, 136, 8923-8927.	13.7	44
76	Principles for the Rational Design of Allosterically Cooperative Biomolecular Receptors. Biophysical Journal, 2014, 106, 614a.	0.5	0
77	Accurate Zygoteâ€špecific Discrimination of Singleâ€šNucleotide Polymorphisms Using Microfluidic Electrochemical DNA Melting Curves. Angewandte Chemie - International Edition, 2014, 53, 3163-3167.	13.8	29
78	Detection of IP-10 protein marker in undiluted blood serum via an electrochemical E-DNA scaffold sensor. Analyst, The, 2013, 138, 5580.	3.5	25
79	Thermodynamic Basis for Engineering High-Affinity, High-Specificity Binding-Induced DNA Clamp Nanoswitches. ACS Nano, 2013, 7, 10863-10869.	14.6	58
80	Real-Time, Aptamer-Based Tracking of Circulating Therapeutic Agents in Living Animals. Science Translational Medicine, 2013, 5, 213ra165.	12.4	291
81	Sequence and Temperature Dependence of the End-to-End Collision Dynamics of Single-Stranded DNA. Biophysical Journal, 2013, 104, 2485-2492.	0.5	20
82	Determinants of the Detection Limit and Specificity of Surface-Based Biosensors. Analytical Chemistry, 2013, 85, 6593-6597.	6.5	77
83	Allosterically Tunable, DNA-Based Switches Triggered by Heavy Metals. Journal of the American Chemical Society, 2013, 135, 13238-13241.	13.7	99
84	Electrochemical real-time nucleic acid amplification: towards point-of-care quantification of pathogens. Trends in Biotechnology, 2013, 31, 704-712.	9.3	63
85	Microfluidic Chip-Based Detection and Intraspecies Strain Discrimination of Salmonella Serovars Derived from Whole Blood of Septic Mice. Applied and Environmental Microbiology, 2013, 79, 2302-2311.	3.1	40
86	DNA biomolecular-electronic encoder and decoder devices constructed by multiplex biosensors. NPG Asia Materials, 2012, 4, e1-e1.	7.9	138
87	Biosensing with integrated CMOS nanopores. Proceedings of SPIE, 2012, , .	0.8	4
88	Engineering Biosensors with Extended, Narrowed, or Arbitrarily Edited Dynamic Range. Journal of the American Chemical Society, 2012, 134, 2876-2879.	13.7	135
89	Employing the Metabolic â€šBranch Point Effectâ€š to Generate an All-or-None, Digital-like Response in Enzymatic Outputs and Enzyme-Based Sensors. Analytical Chemistry, 2012, 84, 1076-1082.	6.5	41
90	Entropic and Electrostatic Effects on the Folding Free Energy of a Surface-Attached Biomolecule: An Experimental and Theoretical Study. Journal of the American Chemical Society, 2012, 134, 2120-2126.	13.7	47

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91	Rational Design of Allosteric Inhibitors and Activators Using the Population-Shift Model: In Vitro Validation and Application to an Artificial Biosensor. <i>Journal of the American Chemical Society</i> , 2012, 134, 15177-15180.	13.7	80
92	Small-Angle X-ray Scattering and Single-Molecule FRET Spectroscopy Produce Highly Divergent Views of the Low-Denaturant Unfolded State. <i>Journal of Molecular Biology</i> , 2012, 418, 226-236.	4.2	92
93	Wash-free, Electrochemical Platform for the Quantitative, Multiplexed Detection of Specific Antibodies. <i>Analytical Chemistry</i> , 2012, 84, 1098-1103.	6.5	64
94	Using Distal-Site Mutations and Allosteric Inhibition To Tune, Extend, and Narrow the Useful Dynamic Range of Aptamer-Based Sensors. <i>Journal of the American Chemical Society</i> , 2012, 134, 20601-20604.	13.7	132
95	Bioelectrochemical Switches for the Quantitative Detection of Antibodies Directly in Whole Blood. <i>Journal of the American Chemical Society</i> , 2012, 134, 15197-15200.	13.7	103
96	Quantification of Transcription Factor Binding in Cell Extracts Using an Electrochemical, Structure-Switching Biosensor. <i>Journal of the American Chemical Society</i> , 2012, 134, 3346-3348.	13.7	81
97	Rapid, Sensitive, and Quantitative Detection of Pathogenic DNA at the Point of Care through Microfluidic Electrochemical Quantitative Loop-Mediated Isothermal Amplification. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4896-4900.	13.8	230
98	Re-Engineering Electrochemical Biosensors To Narrow or Extend Their Useful Dynamic Range. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6717-6721.	13.8	80
99	Probe accessibility effects on the performance of electrochemical biosensors employing DNA monolayers. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 413-421.	3.7	40
100	Dielectric Spectroscopy of Proteins as a Quantitative Experimental Test of Computational Models of Their Low-Frequency Harmonic Motions. <i>Journal of the American Chemical Society</i> , 2011, 133, 8942-8947.	13.7	96
101	CheapStat: An Open-Source, "Do-It-Yourself" Potentiostat for Analytical and Educational Applications. <i>PLoS ONE</i> , 2011, 6, e23783.	2.5	223
102	Electrochemical Biosensors Employing an Internal Electrode Attachment Site and Achieving Reversible, High Gain Detection of Specific Nucleic Acid Sequences. <i>Analytical Chemistry</i> , 2011, 83, 9462-9466.	6.5	60
103	Transcription Factor Beacons for the Quantitative Detection of DNA Binding Activity. <i>Journal of the American Chemical Society</i> , 2011, 133, 13836-13839.	13.7	79
104	Fabrication of Electrochemical-DNA Biosensors for the Reagentless Detection of Nucleic Acids, Proteins and Small Molecules. <i>Journal of Visualized Experiments</i> , 2011, , .	0.3	11
105	Switch-based biosensors: a new approach towards real-time, in vivo molecular detection. <i>Trends in Biotechnology</i> , 2011, 29, 1-5.	9.3	149
106	Polarity-Switching Electrochemical Sensor for Specific Detection of Single-Nucleotide Mismatches. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11176-11180.	13.8	51
107	Two-Step, PCR-Free Telomerase Detection by Using Exonuclease III-Aided Target Recycling. <i>ChemBioChem</i> , 2011, 12, 2745-2747.	2.6	48
108	Nanoporous silica colloidal films with molecular transport gated by aptamers responsive to small molecules. <i>Collection of Czechoslovak Chemical Communications</i> , 2011, 76, 683-694.	1.0	7

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109	High-Precision, In Vitro Validation of the Sequestration Mechanism for Generating Ultrasensitive Dose-Response Curves in Regulatory Networks. <i>PLoS Computational Biology</i> , 2011, 7, e1002171.	3.2	44
110	Principles of Biomolecular Recognition. , 2010, , 3-45.		13
111	Structure-switching biosensors: inspired by Nature. <i>Current Opinion in Structural Biology</i> , 2010, 20, 518-526.	5.7	163
112	The art of writing science. <i>Protein Science</i> , 2010, 19, 2261-2266.	7.6	25
113	Re-engineering aptamers to support reagentless, self-reporting electrochemical sensors. <i>Analyst</i> , The, 2010, 135, 589.	3.5	92
114	Detection of Telomerase Activity in High Concentration of Cell Lysates Using Primer-Modified Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , 2010, 132, 15299-15307.	13.7	105
115	A Mechanistic Study of Electron Transfer from the Distal Termini of Electrode-Bound, Single-Stranded DNAs. <i>Journal of the American Chemical Society</i> , 2010, 132, 16120-16126.	13.7	56
116	An Electrochemical Supersandwich Assay for Sensitive and Selective DNA Detection in Complex Matrices. <i>Journal of the American Chemical Society</i> , 2010, 132, 14346-14348.	13.7	214
117	Universality in the Timescales of Internal Loop Formation in Unfolded Proteins and Single-Stranded Oligonucleotides. <i>Biophysical Journal</i> , 2010, 99, 3959-3968.	0.5	22
118	Sensitive and Selective Amplified Fluorescence DNA Detection Based on Exonuclease III-Aided Target Recycling. <i>Journal of the American Chemical Society</i> , 2010, 132, 1816-1818.	13.7	477
119	Colorimetric detection of DNA, small molecules, proteins, and ions using unmodified gold nanoparticles and conjugated polyelectrolytes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 10837-10841.	7.1	505
120	Tracking a Molecular Motor with a Nanoscale Optical Encoder. <i>Nano Letters</i> , 2010, 10, 1022-1027.	9.1	11
121	Label-Free, Dual-Analyte Electrochemical Biosensors: A New Class of Molecular-Electronic Logic Gates. <i>Journal of the American Chemical Society</i> , 2010, 132, 8557-8559.	13.7	117
122	On the Binding of Cationic, Water-Soluble Conjugated Polymers to DNA: Electrostatic and Hydrophobic Interactions. <i>Journal of the American Chemical Society</i> , 2010, 132, 1252-1254.	13.7	82
123	Investigation of an Anomalously Accelerating Substitution in the Folding of a Prototypical Two-State Protein. <i>Journal of Molecular Biology</i> , 2010, 403, 446-458.	4.2	17
124	Reagentless Measurement of Aminoglycoside Antibiotics in Blood Serum via an Electrochemical, Ribonucleic Acid Aptamer-Based Biosensor. <i>Analytical Chemistry</i> , 2010, 82, 7090-7095.	6.5	160
125	Exploiting Binding-Induced Changes in Probe Flexibility for the Optimization of Electrochemical Biosensors. <i>Analytical Chemistry</i> , 2010, 82, 73-76.	6.5	125
126	Folding-Based Electrochemical Biosensors: The Case for Responsive Nucleic Acid Architectures. <i>Accounts of Chemical Research</i> , 2010, 43, 496-505.	15.6	452



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127	Quantitative, reagentless, single-step electrochemical detection of anti-DNA antibodies directly in blood serum. <i>Chemical Communications</i> , 2010, 46, 1742.	4.1	32
128	Synthesis of Extended Single-Molecule Optical Encoders. <i>Biophysical Journal</i> , 2010, 98, 623a.	0.5	0
129	Using Triplex-Forming Oligonucleotide Probes for the Reagentless, Electrochemical Detection of Double-Stranded DNA. <i>Analytical Chemistry</i> , 2010, 82, 9109-9115.	6.5	87
130	Biomimetic glass nanopores employing aptamer gates responsive to a small molecule. <i>Chemical Communications</i> , 2010, 46, 7984.	4.1	50
131	Measuring distances within unfolded biopolymers using fluorescence resonance energy transfer: The effect of polymer chain dynamics on the observed fluorescence resonance energy transfer efficiency. <i>Journal of Chemical Physics</i> , 2009, 131, 085105.	3.0	25
132	Engineering new aptamer geometries for electrochemical aptamer-based sensors. <i>Proceedings of SPIE</i> , 2009, 7321, 732105.	0.8	13
133	Protein Complexes: The Evolution of Symmetry. <i>Current Biology</i> , 2009, 19, R25-R26.	3.9	22
134	Beyond Molecular Beacons: Optical Sensors Based on the Binding-Induced Folding of Proteins and Polypeptides. <i>Chemistry - A European Journal</i> , 2009, 15, 2244-2251.	3.3	39
135	On the Signaling of Electrochemical Aptamer-Based Sensors: Collision- and Folding-Based Mechanisms. <i>Electroanalysis</i> , 2009, 21, 1267-1271.	2.9	71
136	Fluorescence Detection of Single-Nucleotide Polymorphisms with a Single, Self-Complementary, Triple-Stem DNA Probe. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4354-4358.	13.8	118
137	Surface chemistry effects on the performance of an electrochemical DNA sensor. <i>Bioelectrochemistry</i> , 2009, 76, 208-213.	4.6	86
138	Some recommendations for the practitioner to improve the precision of experimentally determined protein folding rates and $\Delta G$ values. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009, 74, 461-474.	2.6	2
139	Optimization of a Reusable, DNA Pseudoknot-Based Electrochemical Sensor for Sequence-Specific DNA Detection in Blood Serum. <i>Analytical Chemistry</i> , 2009, 81, 656-661.	6.5	94
140	The Rate of Intramolecular Loop Formation in DNA and Polypeptides: The Absence of the Diffusion-Controlled Limit and Fractional Power-Law Viscosity Dependence. <i>Journal of Physical Chemistry B</i> , 2009, 113, 14026-14034.	2.6	25
141	An Electrochemical Sensor for the Detection of Protein-Small Molecule Interactions Directly in Serum and Other Complex Matrices. <i>Journal of the American Chemical Society</i> , 2009, 131, 6955-6957.	13.7	137
142	An Electrochemical Sensor for Single Nucleotide Polymorphism Detection in Serum Based on a Triple-Stem DNA Probe. <i>Journal of the American Chemical Society</i> , 2009, 131, 15311-15316.	13.7	171
143	Improving the Stability and Sensing of Electrochemical Biosensors by Employing Trithiol-Anchoring Groups in a Six-Carbon Self-Assembled Monolayer. <i>Analytical Chemistry</i> , 2009, 81, 1095-1100.	6.5	86
144	Thermodynamic basis for the optimization of binding-induced biomolecular switches and structure-switching biosensors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 13802-13807.	7.1	146

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145	Non-Sequence-Specific Interactions Can Account for the Compaction of Proteins Unfolded under Native Conditions. <i>Journal of Molecular Biology</i> , 2009, 394, 343-350.	4.2	14
146	The Length and Viscosity Dependence of End-to-End Collision Rates in Single-Stranded DNA. <i>Biophysical Journal</i> , 2009, 97, 205-210.	0.5	34
147	Continuous, Real-Time Monitoring of Cocaine in Undiluted Blood Serum via a Microfluidic, Electrochemical Aptamer-Based Sensor. <i>Journal of the American Chemical Society</i> , 2009, 131, 4262-4266.	13.7	333
148	Comparing the Properties of Electrochemical-Based DNA Sensors Employing Different Redox Tags. <i>Analytical Chemistry</i> , 2009, 81, 9109-9113.	6.5	152
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