

# Matt Trau

## List of Publications by Year in descending order

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246  
papers

11,614  
citations

25014

57  
h-index

37183

96  
g-index

252  
all docs

252  
docs citations

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times ranked

13678  
citing authors

#	ARTICLE	IF	CITATIONS
1	An Integrated Microfluidic SERS Platform Enables Sensitive Phenotyping of Serum Extracellular Vesicles in Early Stage Melanomas. <i>Advanced Functional Materials</i> , 2022, 32, 2010296.	7.8	30
2	Multiplex PCR Design for Scalable Resequencing. <i>Methods in Molecular Biology</i> , 2022, 2392, 143-158.	0.4	2
3	Toward precision oncology: SERS microfluidic systems for multiplex biomarker analysis in liquid biopsy. <i>Materials Advances</i> , 2022, 3, 1459-1471.	2.6	19
4	Opportunities for Early Cancer Detection: The Rise of ctDNA Methylation-Based Pan-Cancer Screening Technologies. <i>Epigenomes</i> , 2022, 6, 6.	0.8	14
5	Molecular locker probe enrichment of gene fusion variants from matched patient liquid biopsy specimens for magneto-bioelectrocatalytic nanosensing. <i>Nanoscale</i> , 2022, 14, 4225-4233.	2.8	4
6	Engineering eukaryote-like regulatory circuits to expand artificial control mechanisms for metabolic engineering in <i>Saccharomyces cerevisiae</i> . <i>Communications Biology</i> , 2022, 5, 135.	2.0	12
7	An Electrochemical and Raman Scattering Dual Detection Biosensor for Rapid Screening and Biomolecular Profiling of Cancer Biomarkers. <i>Chemosensors</i> , 2022, 10, 93.	1.8	5
8	C5b-9 Membrane Attack Complex Formation and Extracellular Vesicle Shedding in Barrett's Esophagus and Esophageal Adenocarcinoma. <i>Frontiers in Immunology</i> , 2022, 13, 842023.	2.2	4
9	Next-Generation Molecular Discovery: From Bottom-Up In Vivo and In Vitro Approaches to In Silico Top-Down Approaches for Therapeutics Neogenesis. <i>Life</i> , 2022, 12, 363.	1.1	1
10	An in vivo gene amplification system for high level expression in <i>Saccharomyces cerevisiae</i> . <i>Nature Communications</i> , 2022, 13, .	5.8	16
11	Nucleic Acid Hybridization-Based Noise Suppression for Ultrasensitive Multiplexed Amplification of Mutant Variants. <i>Small</i> , 2021, 17, e2006370.	5.2	13
12	Simultaneous BRAFV600E Protein and DNA Aberration Detection in Circulating Melanoma Cells Using an Integrated Multimolecular Sensor. <i>Methods in Molecular Biology</i> , 2021, 2265, 265-276.	0.4	0
13	A digital single-molecule nanopillar SERS platform for predicting and monitoring immune toxicities in immunotherapy. <i>Nature Communications</i> , 2021, 12, 1087.	5.8	62
14	Network mapping of primary CD34+ cells by Ampliseq based whole transcriptome targeted resequencing identifies unexplored differentiation regulatory relationships. <i>PLoS ONE</i> , 2021, 16, e0246107.	1.1	0
15	On the Behavior of Nanoparticles beyond the Nanopore Interface. <i>Langmuir</i> , 2021, 37, 4772-4782.	1.6	2
16	Development of EndoScreen Chip, a Microfluidic Pre-Endoscopy Triage Test for Esophageal Adenocarcinoma. <i>Cancers</i> , 2021, 13, 2865.	1.7	4
17	Characterizing the Heterogeneity of Small Extracellular Vesicle Populations in Multiple Cancer Types via an Ultrasensitive Chip. <i>ACS Sensors</i> , 2021, 6, 3182-3194.	4.0	22
18	Amplification-Free SARS-CoV-2 Detection Using Nanoyeast-scFv and Ultrasensitive Plasmonic Nanobox-Integrated Nanomixing Microassay. <i>Analytical Chemistry</i> , 2021, 93, 10251-10260.	3.2	19

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19	<i>In Situ</i> Single Cell Proteomics Reveals Circulating Tumor Cell Heterogeneity during Treatment. ACS Nano, 2021, 15, 11231-11243.	7.3	47
20	Generation of Nanoyeast Single-Chain Variable Fragments as High-Avidity Biomaterials for Dengue Virus Detection. ACS Biomaterials Science and Engineering, 2021, 7, 5850-5860.	2.6	3
21	Progressing Antimicrobial Resistance Sensing Technologies across Human, Animal, and Environmental Health Domains. ACS Sensors, 2021, 6, 4283-4296.	4.0	5
22	Dynamic Monitoring of EMT in CTCs as an Indicator of Cancer Metastasis. Analytical Chemistry, 2021, 93, 16787-16795.	3.2	15
23	Phosphoprotein Biosensors for Monitoring Pathological Protein Structural Changes. Trends in Biotechnology, 2020, 38, 519-531.	4.9	8
24	Stacked Dual-Pore Architecture for Deciphering and Manipulating Dynamics of Individual Nanoparticles. Advanced Materials Technologies, 2020, 5, 2000701.	3.0	8
25	Ultrasensitive melanoma biomarker detection using a microchip SERS immunoassay with anisotropic Au-Ag alloy nanoboxes. RSC Advances, 2020, 10, 28778-28785.	1.7	6
26	Nanostructured mesoporous gold electrodes detect protein phosphorylation in cancer with electrochemical signal amplification. Analyst, The, 2020, 145, 6639-6648.	1.7	6
27	Nanostructured mesoporous gold biosensor for microRNA detection at attomolar level. Biosensors and Bioelectronics, 2020, 168, 112429.	5.3	48
28	Multiomics: The Growing Impact of Micro/Nanomaterial-Based Systems in Precision Oncology: Translating Multiomics Technologies (Adv. Funct. Mater. 37/2020). Advanced Functional Materials, 2020, 30, 2070248.	7.8	1
29	Direct Enhanced Detection of Multiple Circulating Tumor DNA Variants in Unprocessed Plasma by Magnetic-Assisted Bioelectrocatalytic Cycling. ACS Sensors, 2020, 5, 3217-3225.	4.0	21
30	Configurable Miniaturized 3D Pores for Robust Single-Nanoparticle Analysis. Small Structures, 2020, 1, 2000011.	6.9	6
31	Configurable Miniaturized 3D Pores for Robust Single-Nanoparticle Analysis. Small Structures, 2020, 1, 2070006.	6.9	6
32	Regulation of Canonical Oncogenic Signaling Pathways in Cancer via DNA Methylation. Cancers, 2020, 12, 3199.	1.7	13
33	Methylation dependent gold adsorption behaviour identifies cancer derived extracellular vesicular DNA. Nanoscale Horizons, 2020, 5, 1317-1323.	4.1	8
34	Comprehensive evaluation of targeted multiplex bisulphite PCR sequencing for validation of DNA methylation biomarker panels. Clinical Epigenetics, 2020, 12, 90.	1.8	16
35	Surface-Enhanced Raman Spectroscopy for Cancer Immunotherapy Applications: Opportunities, Challenges, and Current Progress in Nanomaterial Strategies. Nanomaterials, 2020, 10, 1145.	1.9	21
36	Tracking Drug-Induced Epithelial-Mesenchymal Transition in Breast Cancer by a Microfluidic Surface-Enhanced Raman Spectroscopy Immunoassay. Small, 2020, 16, e1905614.	5.2	33

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37	The Growing Impact of Micro/Nanomaterial-Based Systems in Precision Oncology: Translating Multiomics Technologies. <i>Advanced Functional Materials</i> , 2020, 30, 1909306.	7.8	25
38	Tracking extracellular vesicle phenotypic changes enables treatment monitoring in melanoma. <i>Science Advances</i> , 2020, 6, eaax3223.	4.7	97
39	A material odyssey for 3D nano/microstructures: two photon polymerization based nanolithography in bioapplications. <i>Applied Materials Today</i> , 2020, 19, 100635.	2.3	55
40	Toward Personalized Cancer Treatment: From Diagnostics to Therapy Monitoring in Miniaturized Electrohydrodynamic Systems. <i>Accounts of Chemical Research</i> , 2019, 52, 2113-2123.	7.6	32
41	Native MicroRNA Targets Trigger Self-Assembly of Nanozyme-Patterned Hollowed Nanocuboids with Optimal Interparticle Gaps for Plasmonic-Activated Cancer Detection. <i>Small</i> , 2019, 15, e1904689.	5.2	53
42	Engineering State-of-the-Art Plasmonic Nanomaterials for SERS-Based Clinical Liquid Biopsy Applications. <i>Advanced Science</i> , 2019, 6, 1900730.	5.6	112
43	An integrated multi-molecular sensor for simultaneous BRAFV600E protein and DNA single point mutation detection in circulating tumour cells. <i>Lab on A Chip</i> , 2019, 19, 738-748.	3.1	16
44	PrimerROC: accurate condition-independent dimer prediction using ROC analysis. <i>Scientific Reports</i> , 2019, 9, 209.	1.6	17
45	DNA Methylation-Based Point-of-Care Cancer Detection: Challenges and Possibilities. <i>Trends in Molecular Medicine</i> , 2019, 25, 955-966.	3.5	30
46	Watching SERS glow for multiplex biomolecular analysis in the clinic: A review. <i>Applied Materials Today</i> , 2019, 15, 431-444.	2.3	49
47	Merging new-age biomarkers and nanodiagnostics for precision prostate cancer management. <i>Nature Reviews Urology</i> , 2019, 16, 302-317.	1.9	86
48	Label-free detection of exosomes using a surface plasmon resonance biosensor. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 1311-1318.	1.9	70
49	Reading Conformational Changes in Proteins with a New Colloidal-Based Interfacial Biosensing System. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 11125-11135.	4.0	3
50	Single droplet detection of immune checkpoints on a multiplexed electrohydrodynamic biosensor. <i>Analyst</i> , 2019, 144, 6914-6921.	1.7	18
51	Retooling phage display with electrohydrodynamic nanomixing and nanopore sequencing. <i>Lab on A Chip</i> , 2019, 19, 4083-4092.	3.1	8
52	A microfluidic-SERS platform for isolation and immuno-phenotyping of antigen specific T-cells. <i>Sensors and Actuators B: Chemical</i> , 2019, 284, 281-288.	4.0	10
53	A high-resolution study of in situ surface-enhanced Raman scattering nanotag behavior in biological systems. <i>Journal of Colloid and Interface Science</i> , 2019, 537, 536-546.	5.0	20
54	Two-Photon Nanolithography of Tailored Hollow three-dimensional Microdevices for Biosystems. <i>ACS Omega</i> , 2019, 4, 1401-1409.	1.6	28

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55	Optimizing Size Exclusion Chromatography for Extracellular Vesicle Enrichment and Proteomic Analysis from Clinically Relevant Samples. <i>Proteomics</i> , 2019, 19, e1800156.	1.3	52
56	A SERS microfluidic platform for targeting multiple soluble immune checkpoints. <i>Biosensors and Bioelectronics</i> , 2019, 126, 178-186.	5.3	48
57	Tracking antigen specific T-cells: Technological advancement and limitations. <i>Biotechnology Advances</i> , 2019, 37, 145-153.	6.0	7
58	Interfacial nano-mixing in a miniaturised platform enables signal enhancement and <i>in situ</i> detection of cancer biomarkers. <i>Nanoscale</i> , 2018, 10, 10884-10890.	2.8	18
59	Characterising the phenotypic evolution of circulating tumour cells during treatment. <i>Nature Communications</i> , 2018, 9, 1482.	5.8	86
60	Maskless 3D Ablation of Precise Microhole Structures in Plastics Using Femtosecond Laser Pulses. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 4315-4323.	4.0	28
61	Amplification-free Multi-RNA-type Profiling for Cancer Risk Stratification via Alternating Current Electrohydrodynamic Nanomixing. <i>Small</i> , 2018, 14, e1704025.	5.2	22
62	DNA-directed assembly of copper nanoblocks with inbuilt fluorescent and electrochemical properties: Application in simultaneous amplification-free analysis of multiple RNA species. <i>Nano Research</i> , 2018, 11, 940-952.	5.8	32
63	Geometric optimisation of electrohydrodynamic fluid flows for enhanced biosensing. <i>Microchemical Journal</i> , 2018, 137, 231-237.	2.3	11
64	A Sample-to-Targeted Gene Analysis Biochip for Nanofluidic Manipulation of Solid-Phase Circulating Tumor Nucleic Acid Amplification in Liquid Biopsies. <i>ACS Sensors</i> , 2018, 3, 2597-2603.	4.0	44
65	Epigenetically reprogrammed methylation landscape drives the DNA self-assembly and serves as a universal cancer biomarker. <i>Nature Communications</i> , 2018, 9, 4915.	5.8	135
66	Mix-to-Go-Silver Colloidal Strategy for Prostate Cancer Molecular Profiling and Risk Prediction. <i>Analytical Chemistry</i> , 2018, 90, 12698-12705.	3.2	13
67	Facile One-Pot Synthesis of Nanodot-Decorated Gold-Silver Alloy Nanoboxes for Single-Particle Surface-Enhanced Raman Scattering Activity. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 32526-32535.	4.0	45
68	Parallel profiling of cancer cells and proteins using a graphene oxide functionalized ac-EHD SERS immunoassay. <i>Nanoscale</i> , 2018, 10, 18482-18491.	2.8	29
69	An exosomal- and interfacial-biosensing based strategy for remote monitoring of aberrantly phosphorylated proteins in lung cancer cells. <i>Biomaterials Science</i> , 2018, 6, 2336-2341.	2.6	17
70	Design and Clinical Verification of Surface-Enhanced Raman Spectroscopy Diagnostic Technology for Individual Cancer Risk Prediction. <i>ACS Nano</i> , 2018, 12, 8362-8371.	7.3	66
71	Adjustable Fluidic Nanomixing: Amplification-free Multi-RNA-type Profiling for Cancer Risk Stratification via Alternating Current Electrohydrodynamic Nanomixing ( <i>Small</i> 17/2018). <i>Small</i> , 2018, 14, 1870075.	5.2	2
72	Multiplexed SERS Detection of Soluble Cancer Protein Biomarkers with Gold-Silver Alloy Nanoboxes and Nanoyeast Single-Chain Variable Fragments. <i>Analytical Chemistry</i> , 2018, 90, 10377-10384.	3.2	59

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73	PrimerSuite: A High-Throughput Web-Based Primer Design Program for Multiplex Bisulfite PCR. <i>Scientific Reports</i> , 2017, 7, 41328.	1.6	36
74	A nanoplasmonic label-free surface-enhanced Raman scattering strategy for non-invasive cancer genetic subtyping in patient samples. <i>Nanoscale</i> , 2017, 9, 3496-3503.	2.8	74
75	Specific and Sensitive Isothermal Electrochemical Biosensor for Plant Pathogen DNA Detection with Colloidal Gold Nanoparticles as Probes. <i>Scientific Reports</i> , 2017, 7, 38896.	1.6	121
76	Evaluation of Different Oligonucleotide Base Substitutions at CpG Binding sites in Multiplex Bisulfite-PCR sequencing. <i>Scientific Reports</i> , 2017, 7, 45096.	1.6	0
77	Electrohydrodynamic-Induced SERS Immunoassay for Extensive Multiplexed Biomarker Sensing. <i>Small</i> , 2017, 13, 1602902.	5.2	79
78	Detection of aberrant protein phosphorylation in cancer using direct gold-protein affinity interactions. <i>Biosensors and Bioelectronics</i> , 2017, 91, 8-14.	5.3	15
79	Simple and rapid colorimetric detection of melanoma circulating tumor cells using bifunctional magnetic nanoparticles. <i>Analyst</i> , The, 2017, 142, 4788-4793.	1.7	47
80	Purification Protocols for Extracellular Vesicles. <i>Methods in Molecular Biology</i> , 2017, 1660, 111-130.	0.4	77
81	Isothermal Point Mutation Detection: Toward a First-Pass Screening Strategy for Multidrug-Resistant Tuberculosis. <i>Analytical Chemistry</i> , 2017, 89, 9017-9022.	3.2	27
82	PARTICLE triplexes cluster in the tumor suppressor WWOX and may extend throughout the human genome. <i>Scientific Reports</i> , 2017, 7, 7163.	1.6	27
83	A multiplex microplatform for the detection of multiple DNA methylation events using gold-DNA affinity. <i>Analyst</i> , The, 2017, 142, 3573-3578.	1.7	10
84	Enabling miniaturised personalised diagnostics: from lab-on-a-chip to lab-in-a-drop. <i>Lab on A Chip</i> , 2017, 17, 3200-3220.	3.1	55
85	High-speed biosensing strategy for non-invasive profiling of multiple cancer fusion genes in urine. <i>Biosensors and Bioelectronics</i> , 2017, 89, 715-720.	5.3	16
86	Nucleic acid purification from plants, animals and microbes in under 30 seconds. <i>PLoS Biology</i> , 2017, 15, e2003916.	2.6	190
87	Colorimetric <i>TMPRSS2-ERG</i> Gene Fusion Detection in Prostate Cancer Urinary Samples via Recombinase Polymerase Amplification. <i>Theranostics</i> , 2016, 6, 1415-1424.	4.6	38
88	Simple, Sensitive and Accurate Multiplex Detection of Clinically Important Melanoma DNA Mutations in Circulating Tumour DNA with SERS Nanotags. <i>Theranostics</i> , 2016, 6, 1506-1513.	4.6	106
89	Cancer Therapy: Toward Precision Medicine: A Cancer Molecular Subtyping Nano-Strategy for RNA Biomarkers in Tumor and Urine ( <i>Small</i> 45/2016). <i>Small</i> , 2016, 12, 6302-6302.	5.2	0
90	Comprehensive evaluation of molecular enhancers of the isothermal exponential amplification reaction. <i>Scientific Reports</i> , 2016, 6, 37837.	1.6	44

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91	A simple, rapid, low-cost technique for naked-eye detection of urine-isolated TMPRSS2:ERG gene fusion RNA. <i>Scientific Reports</i> , 2016, 6, 30722.	1.6	21
92	Biosensing made easy with PEG-targeted bi-specific antibodies. <i>Chemical Communications</i> , 2016, 52, 5730-5733.	2.2	11
93	Simple Isothermal Strategy for Multiplexed, Rapid, Sensitive, and Accurate miRNA Detection. <i>ACS Sensors</i> , 2016, 1, 670-675.	4.0	52
94	Toward Precision Medicine: A Cancer Molecular Subtyping Nanostrategy for RNA Biomarkers in Tumor and Urine. <i>Small</i> , 2016, 12, 6233-6242.	5.2	52
95	Rapid Molecular Profiling of Myeloproliferative Neoplasms Using Targeted Exon Resequencing of 86 Genes Involved in JAK-STAT Signaling and Epigenetic Regulation. <i>Journal of Molecular Diagnostics</i> , 2016, 18, 707-718.	1.2	18
96	Rapid and Sensitive Fusion Gene Detection in Prostate Cancer Urinary Specimens by Label-Free Surface-Enhanced Raman Scattering. <i>Journal of Biomedical Nanotechnology</i> , 2016, 12, 1798-1805.	0.5	15
97	A DNA Circuit for IsomiR Detection. <i>ChemBioChem</i> , 2016, 17, 2172-2178.	1.3	1
98	Field Demonstration of a Multiplexed Point-of-Care Diagnostic Platform for Plant Pathogens. <i>Analytical Chemistry</i> , 2016, 88, 8074-8081.	3.2	87
99	Capture and On-chip analysis of Melanoma Cells Using Tunable Surface Shear forces. <i>Scientific Reports</i> , 2016, 6, 19709.	1.6	8
100	Nanoyeast and Other Cell Envelope Compositions for Protein Studies and Biosensor Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 30649-30664.	4.0	16
101	Real time and label free profiling of clinically relevant exosomes. <i>Scientific Reports</i> , 2016, 6, 30460.	1.6	124
102	Amplification-Free Detection of Gene Fusions in Prostate Cancer Urinary Samples Using mRNA-Gold Affinity Interactions. <i>Analytical Chemistry</i> , 2016, 88, 6781-6788.	3.2	65
103	Accurate and sensitive total genomic DNA methylation analysis from sub-nanogram input with embedded SERS nanotags. <i>Chemical Communications</i> , 2016, 52, 3560-3563.	2.2	36
104	Naked-Eye Colorimetric and Electrochemical Detection of <i>Mycobacterium tuberculosis</i> toward Rapid Screening for Active Case Finding. <i>ACS Sensors</i> , 2016, 1, 173-178.	4.0	49
105	MethPat: a tool for the analysis and visualisation of complex methylation patterns obtained by massively parallel sequencing. <i>BMC Bioinformatics</i> , 2016, 17, 98.	1.2	22
106	Poly(A) Extensions of miRNAs for Amplification-Free Electrochemical Detection on Screen-Printed Gold Electrodes. <i>Analytical Chemistry</i> , 2016, 88, 2000-2005.	3.2	128
107	Electric Field Induced Isolation, Release, and Recapture of Tumor Cells. <i>ACS Sensors</i> , 2016, 1, 399-405.	4.0	14
108	Phase II Randomized Preoperative Window-of-Opportunity Study of the PI3K Inhibitor Pictilisib Plus Anastrozole Compared With Anastrozole Alone in Patients With Estrogen Receptor-Positive Breast Cancer. <i>Journal of Clinical Oncology</i> , 2016, 34, 1987-1994.	0.8	84



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109	Electrochemical detection of protein glycosylation using lectin and proteinâ€“gold affinity interactions. <i>Analyst, The</i> , 2016, 141, 2356-2361.	1.7	13
110	Rapid DNA detection of Mycobacterium tuberculosis-towards single cell sensitivity in point-of-care diagnosis. <i>Scientific Reports</i> , 2015, 5, .	1.6	35
111	Alternating current electrohydrodynamics in microsystems: Pushing biomolecules and cells around on surfaces. <i>Biomicrofluidics</i> , 2015, 9, 061501.	1.2	25
112	A simple bridging flocculation assay for rapid, sensitive and stringent detection of gene specific DNA methylation. <i>Scientific Reports</i> , 2015, 5, 15028.	1.6	32
113	Enhancing Protein Capture Using a Combination of Nanoyeast Single-Chain Fragment Affinity Reagents and Alternating Current Electrohydrodynamic Forces. <i>Analytical Chemistry</i> , 2015, 87, 11673-11681.	3.2	12
114	Exemplary multiplex bisulfite amplicon data used to demonstrate the utility of Methpat. <i>GigaScience</i> , 2015, 4, 55.	3.3	3
115	Highly sensitive DNA methylation analysis at CpG resolution by surface-enhanced Raman scattering via ligase chain reaction. <i>Chemical Communications</i> , 2015, 51, 10953-10956.	2.2	53
116	Enabling Rapid and Specific Surface-Enhanced Raman Scattering Immunoassay Using Nanoscaled Surface Shear Forces. <i>ACS Nano</i> , 2015, 9, 6354-6362.	7.3	93
117	Methylome sequencing in triple-negative breast cancer reveals distinct methylation clusters with prognostic value. <i>Nature Communications</i> , 2015, 6, 5899.	5.8	162
118	Analysis of exosome purification methods using a model liposome system and tunable-resistive pulse sensing. <i>Scientific Reports</i> , 2015, 5, 7639.	1.6	226
119	Re-purposing bridging flocculation for on-site, rapid, qualitative DNA detection in resource-poor settings. <i>Chemical Communications</i> , 2015, 51, 5828-5831.	2.2	50
120	Observations of Tunable Resistive Pulse Sensing for Exosome Analysis: Improving System Sensitivity and Stability. <i>Langmuir</i> , 2015, 31, 6577-6587.	1.6	96
121	DNAâ€“bare gold affinity interactions: mechanism and applications in biosensing. <i>Analytical Methods</i> , 2015, 7, 7042-7054.	1.3	131
122	DNA methylation of oestrogen-regulated enhancers defines endocrine sensitivity in breast cancer. <i>Nature Communications</i> , 2015, 6, 7758.	5.8	105
123	PARTICLE, a Triplex-Forming Long ncRNA, Regulates Locus-Specific Methylation in Response to Low-Dose Irradiation. <i>Cell Reports</i> , 2015, 11, 474-485.	2.9	189
124	Multiplex bisulfite PCR resequencing of clinical FFPE DNA. <i>Clinical Epigenetics</i> , 2015, 7, 28.	1.8	26
125	Structural Characterization of Nanoyeast Single-Chain Fragment Variable Affinity Reagents. <i>Journal of Physical Chemistry C</i> , 2015, 119, 12674-12680.	1.5	6
126	A Multiplexed Device Based on Tunable Nanoshearing for Specific Detection of Multiple Protein Biomarkers in Serum. <i>Scientific Reports</i> , 2015, 5, 9756.	1.6	22



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127	Rapid, Single-Cell Electrochemical Detection of <i>Mycobacterium tuberculosis</i> Using Colloidal Gold Nanoparticles. <i>Analytical Chemistry</i> , 2015, 87, 10613-10618.	3.2	49
128	Colorimetric detection of both total genomic and loci-specific DNA methylation from limited DNA inputs. <i>Clinical Epigenetics</i> , 2015, 7, 65.	1.8	41
129	DNA Ligase-Based Strategy for Quantifying Heterogeneous DNA Methylation without Sequencing. <i>Clinical Chemistry</i> , 2015, 61, 163-171.	1.5	24
130	Alternating Current Electrohydrodynamics Induced Nanoshearing and Fluid Micromixing for Specific Capture of Cancer Cells. <i>Chemistry - A European Journal</i> , 2014, 20, 3724-3729.	1.7	11
131	Detecting Exosomes Specifically: A Multiplexed Device Based on Alternating Current Electrohydrodynamic Induced Nanoshearing. <i>Analytical Chemistry</i> , 2014, 86, 11125-11132.	3.2	220
132	Nano-yeast scFv probes on screen-printed gold electrodes for detection of <i>Entamoeba histolytica</i> antigens in a biological matrix. <i>Biosensors and Bioelectronics</i> , 2014, 55, 417-422.	5.3	36
133	Molecular inversion probe-based SPR biosensing for specific, label-free and real-time detection of regional DNA methylation. <i>Chemical Communications</i> , 2014, 50, 3585-3588.	2.2	78
134	Tuneable surface shear forces to physically displace nonspecific molecules in protein biomarker detection. <i>Biosensors and Bioelectronics</i> , 2014, 61, 184-191.	5.3	11
135	Measuring whole genome methylation via oxygen channelling chemistry. <i>Chemical Communications</i> , 2014, 50, 10894-10896.	2.2	4
136	Electrohydrodynamic removal of non-specific colloidal adsorption at electrode interfaces. <i>Chemical Communications</i> , 2014, 50, 4813-4815.	2.2	8
137	eMethylsorb: electrochemical quantification of DNA methylation at CpG resolution using DNA-gold affinity interactions. <i>Chemical Communications</i> , 2014, 50, 13153-13156.	2.2	68
138	Tunable Nano-Shearing: A Physical Mechanism to Displace Nonspecific Cell Adhesion During Rare Cell Detection. <i>Analytical Chemistry</i> , 2014, 86, 2042-2049.	3.2	22
139	Evolution made easy. <i>Nature Chemistry</i> , 2014, 6, 756-757.	6.6	3
140	eMethylsorb: rapid quantification of DNA methylation in cancer cells on screen-printed gold electrodes. <i>Analyst, The</i> , 2014, 139, 6178-6184.	1.7	51
141	Methylsorb: A Simple Method for Quantifying DNA Methylation Using DNA-Gold Affinity Interactions. <i>Analytical Chemistry</i> , 2014, 86, 10179-10185.	3.2	59
142	Duplex Microfluidic SERS Detection of Pathogen Antigens with Nanoyeast Single-Chain Variable Fragments. <i>Analytical Chemistry</i> , 2014, 86, 9930-9938.	3.2	60
143	Electrochemical detection of glycan and protein epitopes of glycoproteins in serum. <i>Analyst, The</i> , 2014, 139, 5970-5976.	1.7	11
144	Microdevices for detecting locus-specific DNA methylation at CpG resolution. <i>Biosensors and Bioelectronics</i> , 2014, 56, 278-285.	5.3	41

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145	Molecular Nanoshearing: An Innovative Approach to Shear off Molecules with AC-Induced Nanoscopic Fluid Flow. <i>Scientific Reports</i> , 2014, 4, 3716.	1.6	31
146	Molecular Inversion Probe: A New Tool for Highly Specific Detection of Plant Pathogens. <i>PLoS ONE</i> , 2014, 9, e111182.	1.1	9
147	µ-eLCR: a microfabricated device for electrochemical detection of DNA base changes in breast cancer cell lines. <i>Lab on A Chip</i> , 2013, 13, 4385.	3.1	17
148	Drill and fill lithography for controlled fabrication of 3D platinum electrodes. <i>Sensors and Actuators B: Chemical</i> , 2013, 185, 543-547.	4.0	4
149	Label-free electrochemical detection of an <i>Entamoeba histolytica</i> antigen using cell-free yeast-scFv probes. <i>Chemical Communications</i> , 2013, 49, 1551.	2.2	55
150	A comparative study of submicron particle sizing platforms: Accuracy, precision and resolution analysis of polydisperse particle size distributions. <i>Journal of Colloid and Interface Science</i> , 2013, 405, 322-330.	5.0	298
151	Accurate Detection of Methylated Cytosine in Complex Methylation Landscapes. <i>Analytical Chemistry</i> , 2013, 85, 6575-6579.	3.2	2
152	"Drill and fill" lithography: fabrication of platinum electrodes and their use in label-free immunosensing. <i>RSC Advances</i> , 2013, 3, 4189.	1.7	5
153	Tuning Particle Velocity and Measurement Sensitivity by Changing Pore Sensor Dimensions. <i>Chemistry Letters</i> , 2012, 41, 1134-1136.	0.7	17
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