

Matt Trau

List of Publications by Year in descending order

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246
papers

11,614
citations

25034

57
h-index

37204

96
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252
all docs

252
docs citations

252
times ranked

13678
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomimetic Pathways for Assembling Inorganic Thin Films. <i>Science</i> , 1996, 273, 892-898.	12.6	740
2	Field-Induced Layering of Colloidal Crystals. <i>Science</i> , 1996, 272, 706-709.	12.6	620
3	Microscopic patterning of orientated mesoscopic silica through guided growth. <i>Nature</i> , 1997, 390, 674-676.	27.8	393
4	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.	9.4	298
5	Quantitative Sizing of Nano/Microparticles with a Tunable Elastomeric Pore Sensor. <i>Analytical Chemistry</i> , 2011, 83, 3499-3506.	6.5	256
6	Analysis of exosome purification methods using a model liposome system and tunable-resistive pulse sensing. <i>Scientific Reports</i> , 2015, 5, 7639.	3.3	226
7	Detecting Exosomes Specifically: A Multiplexed Device Based on Alternating Current Electrohydrodynamic Induced Nanoshearing. <i>Analytical Chemistry</i> , 2014, 86, 11125-11132.	6.5	220
8	Nucleic acid purification from plants, animals and microbes in under 30 seconds. <i>PLoS Biology</i> , 2017, 15, e2003916.	5.6	190
9	PARTICLE, a Triplex-Forming Long ncRNA, Regulates Locus-Specific Methylation in Response to Low-Dose Irradiation. <i>Cell Reports</i> , 2015, 11, 474-485.	6.4	189
10	Simultaneous Size and ζ -Potential Measurements of Individual Nanoparticles in Dispersion Using Size-Tunable Pore Sensors. <i>ACS Nano</i> , 2012, 6, 6990-6997.	14.6	172
11	Methylome sequencing in triple-negative breast cancer reveals distinct methylation clusters with prognostic value. <i>Nature Communications</i> , 2015, 6, 5899.	12.8	162
12	Advances in resistive pulse sensors: Devices bridging the void between molecular and microscopic detection. <i>Nano Today</i> , 2011, 6, 531-545.	11.9	154
13	Isothermal Detection of DNA by Beacon-Assisted Detection Amplification. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 2720-2723.	13.8	145
14	Toward Larger Chemical Libraries: Encoding with Fluorescent Colloids in Combinatorial Chemistry. <i>Journal of the American Chemical Society</i> , 2000, 122, 2138-2139.	13.7	143
15	Epigenetically reprogrammed methylation landscape drives the DNA self-assembly and serves as a universal cancer biomarker. <i>Nature Communications</i> , 2018, 9, 4915.	12.8	135
16	DNA-bare gold affinity interactions: mechanism and applications in biosensing. <i>Analytical Methods</i> , 2015, 7, 7042-7054.	2.7	131
17	Poly(A) Extensions of miRNAs for Amplification-Free Electrochemical Detection on Screen-Printed Gold Electrodes. <i>Analytical Chemistry</i> , 2016, 88, 2000-2005.	6.5	128
18	Real time and label free profiling of clinically relevant exosomes. <i>Scientific Reports</i> , 2016, 6, 30460.	3.3	124

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19	Specific and Sensitive Isothermal Electrochemical Biosensor for Plant Pathogen DNA Detection with Colloidal Gold Nanoparticles as Probes. <i>Scientific Reports</i> , 2017, 7, 38896.	3.3	121
20	Engineering State-of-the-Art Plasmonic Nanomaterials for SERS-Based Clinical Liquid Biopsy Applications. <i>Advanced Science</i> , 2019, 6, 1900730.	11.2	112
21	Tunable Nano/Micropores for Particle Detection and Discrimination: Scanning Ion Occlusion Spectroscopy. <i>Small</i> , 2010, 6, 2653-2658.	10.0	110
22	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.	10.0	106
23	DNA methylation of oestrogen-regulated enhancers defines endocrine sensitivity in breast cancer. <i>Nature Communications</i> , 2015, 6, 7758.	12.8	105
24	Polymeric Grafting of Acrylic Acid onto Poly(3-hydroxybutyrate-co-3-hydroxyvalerate): A Surface Functionalization for Tissue Engineering Applications. <i>Biomacromolecules</i> , 2005, 6, 2197-2203.	5.4	103
25	Electric-field-induced pattern formation in colloidal dispersions. <i>Nature</i> , 1995, 374, 437-439.	27.8	100
26	The fabrication and characterization of biodegradable HA/PHBV nanoparticle-polymer composite scaffolds. <i>Acta Biomaterialia</i> , 2009, 5, 2657-2667.	8.3	99
27	Tracking extracellular vesicle phenotypic changes enables treatment monitoring in melanoma. <i>Science Advances</i> , 2020, 6, eaax3223.	10.3	97
28	Observations of Tunable Resistive Pulse Sensing for Exosome Analysis: Improving System Sensitivity and Stability. <i>Langmuir</i> , 2015, 31, 6577-6587.	3.5	96
29	Enabling Rapid and Specific Surface-Enhanced Raman Scattering Immunoassay Using Nanoscaled Surface Shear Forces. <i>ACS Nano</i> , 2015, 9, 6354-6362.	14.6	93
30	Functionalized Organosilica Microspheres via a Novel Emulsion-Based Route. <i>Langmuir</i> , 2005, 21, 9733-9740.	3.5	92
31	Use of tunable nanopore blockade rates to investigate colloidal dispersions. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 454116.	1.8	88
32	Field Demonstration of a Multiplexed Point-of-Care Diagnostic Platform for Plant Pathogens. <i>Analytical Chemistry</i> , 2016, 88, 8074-8081.	6.5	87
33	Characterising the phenotypic evolution of circulating tumour cells during treatment. <i>Nature Communications</i> , 2018, 9, 1482.	12.8	86
34	Merging new-age biomarkers and nanodiagnostics for precision prostate cancer management. <i>Nature Reviews Urology</i> , 2019, 16, 302-317.	3.8	86
35	Novel miniaturized systems in high-throughput screening. <i>Trends in Biotechnology</i> , 2002, 20, 167-173.	9.3	85
36	Mesostructured Dye-Doped Titanium Dioxide for Micro-Optoelectronic Applications. <i>ChemPhysChem</i> , 2003, 4, 595-603.	2.1	85

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37	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.	1.6	84
38	Electrohydrodynamic-Induced SERS Immunoassay for Extensive Multiplexed Biomarker Sensing. <i>Small</i> , 2017, 13, 1602902.	10.0	79
39	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.	4.1	78
40	An ellipsometric study of thin films on silica plates formed by alkylchlorosilylation reagents. <i>Journal of Colloid and Interface Science</i> , 1992, 148, 182-189.	9.4	77
41	Purification Protocols for Extracellular Vesicles. <i>Methods in Molecular Biology</i> , 2017, 1660, 111-130.	0.9	77
42	Optical barcoding of colloidal suspensions: applications in genomics, proteomics and drug discovery. <i>Chemical Communications</i> , 2002, , 1435-1441.	4.1	74
43	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.	5.6	74
44	Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) composite biomaterials for bone tissue regeneration: In vitro performance assessed by osteoblast proliferation, osteoclast adhesion and resorption, and macrophage proinflammatory response. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 82A, 599-610.	4.0	73
45	Graphene/quantum dot bionanoconjugates as signal amplifiers in stripping voltammetric detection of EpCAM biomarkers. <i>Biosensors and Bioelectronics</i> , 2012, 35, 251-257.	10.1	73
46	Label-free detection of exosomes using a surface plasmon resonance biosensor. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 1311-1318.	3.7	70
47	Introducing Amine Functionalities on a Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Surface: Comparing the Use of Ammonia Plasma Treatment and Ethylenediamine Aminolysis. <i>Biomacromolecules</i> , 2006, 7, 427-434.	5.4	68
48	eMethylorb: electrochemical quantification of DNA methylation at CpG resolution using DNA-gold affinity interactions. <i>Chemical Communications</i> , 2014, 50, 13153-13156.	4.1	68
49	Design and Clinical Verification of Surface-Enhanced Raman Spectroscopy Diagnostic Technology for Individual Cancer Risk Prediction. <i>ACS Nano</i> , 2018, 12, 8362-8371.	14.6	66
50	Amplification-Free Detection of Gene Fusions in Prostate Cancer Urinary Samples Using mRNA-Gold Affinity Interactions. <i>Analytical Chemistry</i> , 2016, 88, 6781-6788.	6.5	65
51	Quantitative Analysis and Characterization of Biofunctionalized Fluorescent Silica Particles. <i>Langmuir</i> , 2006, 22, 2731-2737.	3.5	64
52	Mesoporous Silicate Film Growth at the Air-Water Interface Direct Observation by X-ray Reflectivity. <i>Langmuir</i> , 1997, 13, 6363-6365.	3.5	63
53	Characterization and Surface Properties of Amino-Acid-Modified Carbonate-Containing Hydroxyapatite Particles. <i>Langmuir</i> , 2007, 23, 12233-12242.	3.5	62
54	A digital single-molecule nanopillar SERS platform for predicting and monitoring immune toxicities in immunotherapy. <i>Nature Communications</i> , 2021, 12, 1087.	12.8	62

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55	Duplex Microfluidic SERS Detection of Pathogen Antigens with Nanoyeast Single-Chain Variable Fragments. <i>Analytical Chemistry</i> , 2014, 86, 9930-9938.	6.5	60
56	Methylsorb: A Simple Method for Quantifying DNA Methylation Using DNA-Gold Affinity Interactions. <i>Analytical Chemistry</i> , 2014, 86, 10179-10185.	6.5	59
57	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.	6.5	59
58	Poly(β -hydroxybutyrate-co- β -hydroxyvalerate) Supports in Vitro Osteogenesis. <i>Tissue Engineering</i> , 2005, 11, 1281-1295.	4.6	55
59	Label-free electrochemical detection of an <i>Entamoeba histolytica</i> antigen using cell-free yeast-scFv probes. <i>Chemical Communications</i> , 2013, 49, 1551.	4.1	55
60	Enabling miniaturised personalised diagnostics: from lab-on-a-chip to lab-in-a-drop. <i>Lab on A Chip</i> , 2017, 17, 3200-3220.	6.0	55
61	A material odyssey for 3D nano/microstructures: two photon polymerization based nanolithography in bioapplications. <i>Applied Materials Today</i> , 2020, 19, 100635.	4.3	55
62	Porous functionalised silica particles: a potential platform for biomolecular screening. <i>Chemical Communications</i> , 2005, , 848.	4.1	54
63	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.	4.1	53
64	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.	10.0	53
65	Simple Isothermal Strategy for Multiplexed, Rapid, Sensitive, and Accurate miRNA Detection. <i>ACS Sensors</i> , 2016, 1, 670-675.	7.8	52
66	Toward Precision Medicine: A Cancer Molecular Subtyping Nano-Strategy for RNA Biomarkers in Tumor and Urine. <i>Small</i> , 2016, 12, 6233-6242.	10.0	52
67	Optimizing Size Exclusion Chromatography for Extracellular Vesicle Enrichment and Proteomic Analysis from Clinically Relevant Samples. <i>Proteomics</i> , 2019, 19, e1800156.	2.2	52
68	eMethylsorb: rapid quantification of DNA methylation in cancer cells on screen-printed gold electrodes. <i>Analyst</i> , 2014, 139, 6178-6184.	3.5	51
69	Encoding Combinatorial Libraries: A Novel Application of Fluorescent Silica Colloids. <i>Langmuir</i> , 2000, 16, 9709-9715.	3.5	50
70	Re-purposing bridging flocculation for on-site, rapid, qualitative DNA detection in resource-poor settings. <i>Chemical Communications</i> , 2015, 51, 5828-5831.	4.1	50
71	Optical encoding of microbeads for gene screening: alternatives to microarrays. <i>Drug Discovery Today</i> , 2001, 6, 19-26.	6.4	49
72	Dimer-to-Monomer Transformation of Rhodamine 6G in Aqueous PEO-PPO-PEO Block Copolymer Solutions. <i>Macromolecules</i> , 2002, 35, 2063-2070.	4.8	49

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73	Rapid, Single-Cell Electrochemical Detection of <i>Mycobacterium tuberculosis</i> Using Colloidal Gold Nanoparticles. <i>Analytical Chemistry</i> , 2015, 87, 10613-10618.	6.5	49
74	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.	7.8	49
75	Watching SERS glow for multiplex biomolecular analysis in the clinic: A review. <i>Applied Materials Today</i> , 2019, 15, 431-444.	4.3	49
76	Fluorescent organosilica micro- and nanoparticles with controllable size. <i>Journal of Colloid and Interface Science</i> , 2007, 310, 144-150.	9.4	48
77	A SERS microfluidic platform for targeting multiple soluble immune checkpoints. <i>Biosensors and Bioelectronics</i> , 2019, 126, 178-186.	10.1	48
78	Nanostructured mesoporous gold biosensor for microRNA detection at attomolar level. <i>Biosensors and Bioelectronics</i> , 2020, 168, 112429.	10.1	48
79	Simple and rapid colorimetric detection of melanoma circulating tumor cells using bifunctional magnetic nanoparticles. <i>Analyst</i> , 2017, 142, 4788-4793.	3.5	47
80	<i>In Situ</i> Single Cell Proteomics Reveals Circulating Tumor Cell Heterogeneity during Treatment. <i>ACS Nano</i> , 2021, 15, 11231-11243.	14.6	47
81	Synthesis of Optically Complex Core-Shell Colloidal Suspensions: Pathways to Multiplexed Biological Screening. <i>Advanced Functional Materials</i> , 2003, 13, 887-896.	14.9	46
82	Facile One-Pot Synthesis of Nanodot-Decorated Gold-Silver Alloy Nanoboxes for Single-Particle Surface-Enhanced Raman Scattering Activity. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 32526-32535.	8.0	45
83	Comprehensive evaluation of molecular enhancers of the isothermal exponential amplification reaction. <i>Scientific Reports</i> , 2016, 6, 37837.	3.3	44
84	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.	7.8	44
85	Microdevices for detecting locus-specific DNA methylation at CpG resolution. <i>Biosensors and Bioelectronics</i> , 2014, 56, 278-285.	10.1	41
86	Colorimetric detection of both total genomic and loci-specific DNA methylation from limited DNA inputs. <i>Clinical Epigenetics</i> , 2015, 7, 65.	4.1	41
87	An electrochemical immunosensor to minimize the nonspecific adsorption and to improve sensitivity of protein assays in human serum. <i>Biosensors and Bioelectronics</i> , 2012, 38, 132-137.	10.1	40
88	Modeling Elastic Pore Sensors for Quantitative Single Particle Sizing. <i>Journal of Physical Chemistry C</i> , 2012, 116, 8554-8561.	3.1	39
89	eLCR: electrochemical detection of single DNA base changes via Ligase Chain Reaction. <i>Chemical Communications</i> , 2012, 48, 12014.	4.1	38
90	Colorimetric <i>TMPRSS2-ERG</i> Gene Fusion Detection in Prostate Cancer Urinary Samples via Recombinase Polymerase Amplification. <i>Theranostics</i> , 2016, 6, 1415-1424.	10.0	38

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91	Bionanohydroxyapatite/Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Composites with Improved Particle Dispersion and Superior Mechanical Properties. <i>Chemistry of Materials</i> , 2008, 20, 2802-2808.	6.7	37
92	Pattern Formation in Nonaqueous Colloidal Dispersions via Electrohydrodynamic Flow. <i>Langmuir</i> , 1995, 11, 4665-4672.	3.5	36
93	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.	10.1	36
94	Accurate and sensitive total genomic DNA methylation analysis from sub-nanogram input with embedded SERS nanotags. <i>Chemical Communications</i> , 2016, 52, 3560-3563.	4.1	36
95	PrimerSuite: A High-Throughput Web-Based Primer Design Program for Multiplex Bisulfite PCR. <i>Scientific Reports</i> , 2017, 7, 41328.	3.3	36
96	Effect of Poly(ethylene glycol) (PEG) Spacers on the Conformational Properties of Small Peptides: A Molecular Dynamics Study. <i>Langmuir</i> , 2011, 27, 296-303.	3.5	35
97	Rapid DNA detection of <i>Mycobacterium tuberculosis</i> -towards single cell sensitivity in point-of-care diagnosis. <i>Scientific Reports</i> , 2015, 5, .	3.3	35
98	Rapid DNA detection by beacon-assisted detection amplification. <i>Nature Protocols</i> , 2011, 6, 772-778.	12.0	34
99	Tracking Drug-Induced Epithelial-Mesenchymal Transition in Breast Cancer by a Microfluidic Surface-Enhanced Raman Spectroscopy Immunoassay. <i>Small</i> , 2020, 16, e1905614.	10.0	33
100	The Entry of Free Radicals Into Polystyrene Latex Particles. <i>Australian Journal of Chemistry</i> , 1988, 41, 1799.	0.9	32
101	Reduction of the in vitro pro-inflammatory response by macrophages to poly(3-hydroxybutyrate-co-3-hydroxyvalerate). <i>Biomaterials</i> , 2006, 27, 4715-4725.	11.4	32
102	A simple bridging flocculation assay for rapid, sensitive and stringent detection of gene specific DNA methylation. <i>Scientific Reports</i> , 2015, 5, 15028.	3.3	32
103	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.	10.4	32
104	Toward Personalized Cancer Treatment: From Diagnostics to Therapy Monitoring in Miniaturized Electrohydrodynamic Systems. <i>Accounts of Chemical Research</i> , 2019, 52, 2113-2123.	15.6	32
105	Understanding the roles of nanoparticle dispersion and polymer crystallinity in controlling the mechanical properties of HA/PHBV nanocomposites. <i>Biomedical Materials (Bristol)</i> , 2009, 4, 015003.	3.3	31
106	Molecular Nanoshearing: An Innovative Approach to Shear off Molecules with AC-Induced Nanoscopic Fluid Flow. <i>Scientific Reports</i> , 2014, 4, 3716.	3.3	31
107	Biomolecular screening with novel organosilica microspheres. <i>Chemical Communications</i> , 2005, , 4783.	4.1	30
108	Tissue transplantation by stealth-coherent alginate microcapsules for immunoisolation. <i>Biochemical Engineering Journal</i> , 2010, 48, 337-347.	3.6	30

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109	Biomimetic synthesis and tensile properties of nanostructured high volume fraction hydroxyapatite and chitosan biocomposite films. <i>Journal of Materials Chemistry</i> , 2010, 20, 381-389.	6.7	30
110	Improvement of the wet tensile properties of nanostructured hydroxyapatite and chitosan biocomposite films through hydrophobic modification. <i>Journal of Materials Chemistry</i> , 2011, 21, 2330-2337.	6.7	30
111	DNA Methylation-Based Point-of-Care Cancer Detection: Challenges and Possibilities. <i>Trends in Molecular Medicine</i> , 2019, 25, 955-966.	6.7	30
112	An Integrated Microfluidic SERS Platform Enables Sensitive Phenotyping of Serum Extracellular Vesicles in Early Stage Melanomas. <i>Advanced Functional Materials</i> , 2022, 32, 2010296.	14.9	30
113	Emulsion strategies in the microencapsulation of cells: Pathways to thin coherent membranes. <i>Biotechnology and Bioengineering</i> , 2005, 92, 45-53.	3.3	29
114	Parallel profiling of cancer cells and proteins using a graphene oxide functionalized ac-EHD SERS immunoassay. <i>Nanoscale</i> , 2018, 10, 18482-18491.	5.6	29
115	Considerations of Solid-Phase DNA Amplification. <i>Bioconjugate Chemistry</i> , 2010, 21, 690-695.	3.6	28
116	Characterisation of amine functionalised poly(3-hydroxybuturate-co-3-hydroxyvalerate) surfaces. <i>Polymer</i> , 2011, 52, 3251-3258.	3.8	28
117	Maskless 3D Ablation of Precise Microhole Structures in Plastics Using Femtosecond Laser Pulses. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 4315-4323.	8.0	28
118	Two-Photon Nanolithography of Tailored Hollow three-dimensional Microdevices for Biosystems. <i>ACS Omega</i> , 2019, 4, 1401-1409.	3.5	28
119	Synthesis and characterization of alginate/poly-L-ornithine/alginate microcapsules for local immunosuppression. <i>Journal of Microencapsulation</i> , 2008, 25, 387-398.	2.8	27
120	Isothermal Point Mutation Detection: Toward a First-Pass Screening Strategy for Multidrug-Resistant Tuberculosis. <i>Analytical Chemistry</i> , 2017, 89, 9017-9022.	6.5	27
121	PARTICLE triplexes cluster in the tumor suppressor WWOX and may extend throughout the human genome. <i>Scientific Reports</i> , 2017, 7, 7163.	3.3	27
122	Multiplex bisulfite PCR resequencing of clinical FFPE DNA. <i>Clinical Epigenetics</i> , 2015, 7, 28.	4.1	26
123	Tailoring Surface Properties To Build Colloidal Diagnostic Devices: Controlling Interparticle Associations. <i>Langmuir</i> , 2006, 22, 497-505.	3.5	25
124	Alternating current electrohydrodynamics in microsystems: Pushing biomolecules and cells around on surfaces. <i>Biomicrofluidics</i> , 2015, 9, 061501.	2.4	25
125	The Growing Impact of Micro/Nanomaterial-Based Systems in Precision Oncology: Translating Multiomics Technologies. <i>Advanced Functional Materials</i> , 2020, 30, 1909306.	14.9	25
126	Femtomolar detection of a cancer biomarker protein in serum with ultralow background current by anodic stripping voltammetry. <i>Chemical Communications</i> , 2012, 48, 6411.	4.1	24

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127	DNA Ligase-Based Strategy for Quantifying Heterogeneous DNA Methylation without Sequencing. <i>Clinical Chemistry</i> , 2015, 61, 163-171.	3.2	24
128	A structural study of hybrid organosilica materials for colloid-based DNA biosensors. <i>Journal of Materials Chemistry</i> , 2008, 18, 523-529.	6.7	23
129	Antifouling Surface Layers for Improved Signal-to-Noise of Particle-Based Immunoassays. <i>Langmuir</i> , 2009, 25, 13510-13515.	3.5	23
130	Tunable "Nano-Shearing": A Physical Mechanism to Displace Nonspecific Cell Adhesion During Rare Cell Detection. <i>Analytical Chemistry</i> , 2014, 86, 2042-2049.	6.5	22
131	A Multiplexed Device Based on Tunable Nanoshearing for Specific Detection of Multiple Protein Biomarkers in Serum. <i>Scientific Reports</i> , 2015, 5, 9756.	3.3	22
132	MethPat: a tool for the analysis and visualisation of complex methylation patterns obtained by massively parallel sequencing. <i>BMC Bioinformatics</i> , 2016, 17, 98.	2.6	22
133	Amplification-Free Multi-RNA Type Profiling for Cancer Risk Stratification via Alternating Current Electrohydrodynamic Nanomixing. <i>Small</i> , 2018, 14, e1704025.	10.0	22
134	Characterizing the Heterogeneity of Small Extracellular Vesicle Populations in Multiple Cancer Types via an Ultrasensitive Chip. <i>ACS Sensors</i> , 2021, 6, 3182-3194.	7.8	22
135	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.	3.3	21
136	Direct Enhanced Detection of Multiple Circulating Tumor DNA Variants in Unprocessed Plasma by Magnetic-Assisted Bioelectrocatalytic Cycling. <i>ACS Sensors</i> , 2020, 5, 3217-3225.	7.8	21
137	Surface-Enhanced Raman Spectroscopy for Cancer Immunotherapy Applications: Opportunities, Challenges, and Current Progress in Nanomaterial Strategies. <i>Nanomaterials</i> , 2020, 10, 1145.	4.1	21
138	Investigations into poly(3-hydroxybutyrate-co-3-hydroxyvalerate) surface properties causing delayed osteoblast growth. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2007, 18, 1101-1123.	3.5	20
139	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.	9.4	20
140	"On-the-fly" optical encoding of combinatorial peptide libraries for profiling of protease specificity. <i>Molecular BioSystems</i> , 2010, 6, 225-233.	2.9	19
141	Amplification-Free SARS-CoV-2 Detection Using Nanoyeast-scFv and Ultrasensitive Plasmonic Nanobox-Integrated Nanomixing Microassay. <i>Analytical Chemistry</i> , 2021, 93, 10251-10260.	6.5	19
142	Toward precision oncology: SERS microfluidic systems for multiplex biomarker analysis in liquid biopsy. <i>Materials Advances</i> , 2022, 3, 1459-1471.	5.4	19
143	Current Chemistry: Nanostructured Biomaterials: a Novel Approach to Artificial Bone Implants. <i>Australian Journal of Chemistry</i> , 2001, 54, 621.	0.9	18
144	Micropatterned lead zirconium titanate thin films. <i>Journal of Materials Research</i> , 2003, 18, 1259-1265.	2.6	18

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145	A Mechanism for Forming Large Fluorescent Organo-Silica Particles: Potential Supports for Combinatorial Synthesis. <i>Chemistry of Materials</i> , 2006, 18, 6163-6169.	6.7	18
146	Optically Encoded Particles and Their Applications in Multiplexed Biomedical Assays. <i>Australian Journal of Chemistry</i> , 2007, 60, 343.	0.9	18
147	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.	2.8	18
148	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.	5.6	18
149	Single droplet detection of immune checkpoints on a multiplexed electrohydrodynamic biosensor. <i>Analyst</i> , 2019, 144, 6914-6921.	3.5	18
150	Combining Chemistry and Biology To Create Colloidally Stable Bionanohydroxyapatite Particles: Toward Load-Bearing Bone Applications. <i>Langmuir</i> , 2008, 24, 7744-7749.	3.5	17
151	Tuning Particle Velocity and Measurement Sensitivity by Changing Pore Sensor Dimensions. <i>Chemistry Letters</i> , 2012, 41, 1134-1136.	1.3	17
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