Shana O Kelley

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8789419/publications.pdf

Version: 2024-02-01

285 papers	27,759 citations	4120 87 h-index	6454 157 g-index
304 all docs	304 docs citations	304 times ranked	29262 citing authors

#	Article	IF	Citations
1	Enhanced electrocatalytic CO2 reduction via field-induced reagent concentration. Nature, 2016, 537, 382-386.	13.7	1,429
2	What Should We Make with CO2 and How Can We Make It?. Joule, 2018, 2, 825-832.	11.7	975
3	Electron Transfer Between Bases in Double Helical DNA. Science, 1999, 283, 375-381.	6.0	858
4	Catalyst electro-redeposition controls morphology and oxidation state for selective carbon dioxide reduction. Nature Catalysis, 2018, 1, 103-110.	16.1	737
5	Electrochemical Methods for the Analysis of Clinically Relevant Biomolecules. Chemical Reviews, 2016, 116, 9001-9090.	23.0	702
6	Recent advances in the use of cell-penetrating peptides for medical and biological applicationsâ˜†. Advanced Drug Delivery Reviews, 2009, 61, 953-964.	6.6	508
7	Single-base mismatch detection based on charge transduction through DNA. Nucleic Acids Research, 1999, 27, 4830-4837.	6.5	472
8	Electronâ€“phonon interaction in efficient perovskite blue emitters. Nature Materials, 2018, 17, 550-556.	13.3	472
9	Electrochemistry of Methylene Blue Bound to a DNA-Modified Electrode. Bioconjugate Chemistry, 1997, 8, 31-37.	1.8	457
10	Long-Range Electron Transfer through DNA Films. Angewandte Chemie - International Edition, 1999, 38, 941-945.	7.2	406
11	Programming the detection limits of biosensors through controlled nanostructuring. Nature Nanotechnology, 2009, 4, 844-848.	15.6	370
12	Mitochondria-Penetrating Peptides. Chemistry and Biology, 2008, 15, 375-382.	6.2	367
13	Cell-penetrating peptides as delivery vehicles for biology and medicine. Organic and Biomolecular Chemistry, 2008, 6, 2242.	1.5	363
14	Efficient electrically powered CO2-to-ethanol via suppression of deoxygenation. Nature Energy, 2020, 5, 478-486.	19.8	363
15	Copper nanocavities confine intermediates for efficient electrosynthesis of C3 alcohol fuels from carbon monoxide. Nature Catalysis, 2018, 1, 946-951.	16.1	354
16	Femtosecond dynamics of DNA-mediated electron transfer. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 6014-6019.	3.3	352
17	Compositional and orientational control in metal halide perovskites of reduced dimensionality. Nature Materials, 2018, 17, 900-907.	13.3	351
18	Advancing the speed, sensitivity and accuracy of biomolecular detection using multi-length-scale engineering. Nature Nanotechnology, 2014, 9, 969-980.	15.6	349

#	Article	IF	Citations
19	Regulating strain in perovskite thin films through charge-transport layers. Nature Communications, 2020, 11, 1514.	5.8	346
20	A general phase-transfer protocol for metal ions and its application in nanocrystal synthesis. Nature Materials, 2009, 8, 683-689.	13.3	345
21	Metalâ€"Organic Frameworks Mediate Cu Coordination for Selective CO₂ Electroreduction. Journal of the American Chemical Society, 2018, 140, 11378-11386.	6.6	326
22	Catalyst synthesis under CO2 electroreduction favours faceting and promotes renewable fuels electrosynthesis. Nature Catalysis, 2020, 3, 98-106.	16.1	325
23	Synthesis of Colloidal CuGaSe₂, CuInSe₂, and Cu(InGa)Se₂ Nanoparticles. Chemistry of Materials, 2008, 20, 6906-6910.	3.2	298
24	Orienting DNA Helices on Gold Using Applied Electric Fields. Langmuir, 1998, 14, 6781-6784.	1.6	291
25	Targeting Mitochondria with Organelleâ€Specific Compounds: Strategies and Applications. ChemBioChem, 2009, 10, 1939-1950.	1.3	289
26	Synthetic Control over Quantum Well Width Distribution and Carrier Migration in Low-Dimensional Perovskite Photovoltaics. Journal of the American Chemical Society, 2018, 140, 2890-2896.	6.6	288
27	2D matrix engineering for homogeneous quantum dot coupling in photovoltaic solids. Nature Nanotechnology, 2018, 13, 456-462.	15.6	252
28	Photoinduced Electron Transfer in Ethidium-Modified DNA Duplexes:Â Dependence on Distance and Base Stacking. Journal of the American Chemical Society, 1997, 119, 9861-9870.	6.6	239
29	DNA-based programming of quantum dot valency, self-assembly and luminescence. Nature Nanotechnology, 2011, 6, 485-490.	15.6	237
30	An electrochemical clamp assay for direct, rapid analysis of circulating nucleic acids in serum. Nature Chemistry, 2015, 7, 569-575.	6.6	234
31	Comparison of the Quality of Aqueous Dispersions of Single Wall Carbon Nanotubes Using Surfactants and Biomolecules. Langmuir, 2008, 24, 5070-5078.	1.6	225
32	Cellular Uptake of Substrate-Initiated Cell-Penetrating Poly(disulfide)s. Journal of the American Chemical Society, 2014, 136, 6069-6074.	6.6	219
33	Lattice anchoring stabilizes solution-processed semiconductors. Nature, 2019, 570, 96-101.	13.7	208
34	One-step DNA-programmed growth of luminescent and biofunctionalized nanocrystals. Nature Nanotechnology, 2009, 4, 121-125.	15.6	203
35	2D Metal Oxyhalideâ€Derived Catalysts for Efficient CO₂ Electroreduction. Advanced Materials, 2018, 30, e1802858.	11.1	200
36	Tracking the dynamics of circulating tumour cell phenotypes using nanoparticle-mediated magnetic ranking. Nature Nanotechnology, 2017, 12, 274-281.	15.6	198

#	Article	IF	Citations
37	Peptide-Mediated Delivery of Chemical Probes and Therapeutics to Mitochondria. Accounts of Chemical Research, 2016, 49, 1893-1902.	7.6	188
38	Profiling circulating tumour cells and other biomarkers of invasive cancers. Nature Biomedical Engineering, 2018, 2, 72-84.	11.6	187
39	Cascade surface modification of colloidal quantum dot inks enables efficient bulk homojunction photovoltaics. Nature Communications, 2020, 11, 103.	5.8	181
40	Ultrasensitive Electrocatalytic DNA Detection at Two- and Three-Dimensional Nanoelectrodes. Journal of the American Chemical Society, 2004, 126, 12270-12271.	6.6	180
41	An ultrasensitive universal detector based on neutralizer displacement. Nature Chemistry, 2012, 4, 642-648.	6.6	180
42	Targeted Delivery of Doxorubicin to Mitochondria. ACS Chemical Biology, 2013, 8, 1389-1395.	1.6	170
43	DNA Clutch Probes for Circulating Tumor DNA Analysis. Journal of the American Chemical Society, 2016, 138, 11009-11016.	6.6	169
44	Targeting Mitochondrial DNA with a Platinum-Based Anticancer Agent. Chemistry and Biology, 2013, 20, 1323-1328.	6.2	159
45	High-Density Nanosharp Microstructures Enable Efficient CO₂ Electroreduction. Nano Letters, 2016, 16, 7224-7228.	4.5	158
46	Single-cell analysis targeting the proteome. Nature Reviews Chemistry, 2020, 4, 143-158.	13.8	157
47	Detection of SARS-CoV-2 Viral Particles Using Direct, Reagent-Free Electrochemical Sensing. Journal of the American Chemical Society, 2021, 143, 1722-1727.	6.6	156
48	Mixed-quantum-dot solar cells. Nature Communications, 2017, 8, 1325.	5.8	148
49	Combining Efficiency and Stability in Mixed Tinâ€“Lead Perovskite Solar Cells by Capping Grains with an Ultrathin 2D Layer. Advanced Materials, 2020, 32, e1907058.	11.1	148
50	Interrogating Circulating Microsomes and Exosomes Using Metal Nanoparticles. Small, 2016, 12, 727-732.	5.2	144
51	Beyond the Capture of Circulating Tumor Cells: Nextâ€Generation Devices and Materials. Angewandte Chemie - International Edition, 2016, 55, 1252-1265.	7.2	144
52	Hydronium-Induced Switching between CO₂ Electroreduction Pathways. Journal of the American Chemical Society, 2018, 140, 3833-3837.	6.6	144
53	Mitochondriaâ€Penetrating Peptides: Sequence Effects and Model Cargo Transport. ChemBioChem, 2009, 10, 2081-2088.	1.3	136
54	Bioinspiration in light harvesting and catalysis. Nature Reviews Materials, 2020, 5, 828-846.	23.3	136

#	Article	IF	Citations
55	Efficient near-infrared light-emitting diodes based on quantum dots in layered perovskite. Nature Photonics, 2020, 14, 227-233.	15.6	136
56	Direct, Electronic MicroRNA Detection for the Rapid Determination of Differential Expression Profiles. Angewandte Chemie - International Edition, 2009, 48, 8461-8464.	7.2	135
57	A Multifunctional Chemical Probe for the Measurement of Local Micropolarity and Microviscosity in Mitochondria. Angewandte Chemie - International Edition, 2018, 57, 8891-8895.	7.2	134
58	DNA-mediated electron transfer from a modified base to ethidium: Ï€-stacking as a modulator of reactivity. Chemistry and Biology, 1998, 5, 413-425.	6.2	131
59	Suppressed Ion Migration in Reduced-Dimensional Perovskites Improves Operating Stability. ACS Energy Letters, 2019, 4, 1521-1527.	8.8	130
60	Molecular Vehicles for Mitochondrial Chemical Biology and Drug Delivery. ACS Chemical Biology, 2014, 9, 323-333.	1.6	128
61	Efficient upgrading of CO to C3 fuel using asymmetric C-C coupling active sites. Nature Communications, 2019, 10, 5186.	5.8	127
62	Nanostructuring of Sensors Determines the Efficiency of Biomolecular Capture. Analytical Chemistry, 2010, 82, 5928-5931.	3.2	126
63	Nanoparticleâ€Mediated Binning and Profiling of Heterogeneous Circulating Tumor Cell Subpopulations. Angewandte Chemie - International Edition, 2015, 54, 139-143.	7.2	123
64	Efficient hybrid colloidal quantum dot/organic solar cells mediated by near-infrared sensitizing small molecules. Nature Energy, 2019, 4, 969-976.	19.8	120
65	Aptamer and Antisense-Mediated Two-Dimensional Isolation of Specific Cancer Cell Subpopulations. Journal of the American Chemical Society, 2016, 138, 2476-2479.	6.6	119
66	What Are Clinically Relevant Levels of Cellular and Biomolecular Analytes?. ACS Sensors, 2017, 2, 193-197.	4.0	119
67	Hierarchical Nanotextured Microelectrodes Overcome the Molecular Transport Barrier To Achieve Rapid, Direct Bacterial Detection. ACS Nano, 2011, 5, 3360-3366.	7.3	116
68	Amplified Electrocatalysis at DNA-Modified Nanowires. Nano Letters, 2005, 5, 1051-1055.	4.5	115
69	Electrocatalytic Detection of Pathogenic DNA Sequences and Antibiotic Resistance Markers. Analytical Chemistry, 2003, 75, 6327-6333.	3.2	114
70	Protein Detection Using Arrayed Microsensor Chips: Tuning Sensor Footprint to Achieve Ultrasensitive Readout of CA-125 in Serum and Whole Blood. Analytical Chemistry, 2011, 83, 1167-1172.	3.2	111
71	Ultrasensitive Electrochemical Biomolecular Detection Using Nanostructured Microelectrodes. Accounts of Chemical Research, 2014, 47, 2417-2425.	7.6	110
72	Potential Use of Cetrimonium Bromide as an Apoptosis-Promoting Anticancer Agent for Head and Neck Cancer. Molecular Pharmacology, 2009, 76, 969-983.	1.0	109

#	Article	IF	Citations
73	Photochemically Cross-Linked Quantum Well Ligands for 2D/3D Perovskite Photovoltaics with Improved Photovoltage and Stability. Journal of the American Chemical Society, 2019, 141, 14180-14189.	6.6	107
74	Solution-based circuits enable rapid and multiplexed pathogen detection. Nature Communications, 2013, 4, 2001.	5.8	106
75	Multifunctional quantum dot DNA hydrogels. Nature Communications, 2017, 8, 381.	5.8	104
76	Multifunctional 3D-Printed Wound Dressings. ACS Nano, 2021, 15, 12375-12387.	7.3	104
77	The antiparasitic agent ivermectin induces chloride-dependent membrane hyperpolarization and cell death in leukemia cells. Blood, 2010, 116, 3593-3603.	0.6	101
78	Rerouting Chlorambucil to Mitochondria Combats Drug Deactivation and Resistance in Cancer Cells. Chemistry and Biology, 2011, 18, 445-453.	6.2	100
79	Multi-cation perovskites prevent carrier reflection from grain surfaces. Nature Materials, 2020, 19, 412-418.	13.3	100
80	Intercalative Stacking:Â A Critical Feature of DNA Charge-Transport Electrochemistry. Journal of Physical Chemistry B, 2003, 107, 11805-11812.	1.2	99
81	Highly Specific Electrochemical Analysis of Cancer Cells using Multiâ€Nanoparticle Labeling. Angewandte Chemie - International Edition, 2014, 53, 13145-13149.	7.2	99
82	Impact of disease-related mitochondrial mutations on tRNA structure and function. Trends in Biochemical Sciences, 2003, 28, 605-611.	3.7	98
83	A multiplexed, electrochemical interface for gene-circuit-based sensors. Nature Chemistry, 2020, 12, 48-55.	6.6	98
84	DNA-Passivated CdS Nanocrystals:â€‰ Luminescence, Bioimaging, and Toxicity Profiles. Langmuir, 2007, 23, 12783-12787.	1.6	96
85	Chemistry-Driven Approaches for Ultrasensitive Nucleic Acid Detection. Journal of the American Chemical Society, 2017, 139, 1020-1028.	6.6	95
86	Bright and Stable Light-Emitting Diodes Based on Perovskite Quantum Dots in Perovskite Matrix. Journal of the American Chemical Society, 2021, 143, 15606-15615.	6.6	94
87	Site-Specific Assembly of DNA and Appended Cargo on Arrayed Carbon Nanotubes. Journal of the American Chemical Society, 2004, 126, 12750-12751.	6.6	93
88	NIR-Emitting Colloidal Quantum Dots Having 26% Luminescence Quantum Yield in Buffer Solution. Journal of the American Chemical Society, 2007, 129, 7218-7219.	6.6	91
89	Nanostructuring of Patterned Microelectrodes To Enhance the Sensitivity of Electrochemical Nucleic Acids Detection. Angewandte Chemie - International Edition, 2009, 48, 8457-8460.	7.2	90
90	Rapid electrochemical phenotypic profiling of antibiotic-resistant bacteria. Lab on A Chip, 2015, 15, 2799-2807.	3.1	90

#	Article	IF	Citations
91	Multication perovskite 2D/3D interfaces form via progressive dimensional reduction. Nature Communications, 2021, 12, 3472.	5.8	89
92	Profiling Functional and Biochemical Phenotypes of Circulating Tumor Cells Using a Twoâ€Dimensional Sorting Device. Angewandte Chemie - International Edition, 2017, 56, 163-168.	7.2	85
93	Nucleotide-Directed Growth of Semiconductor Nanocrystals. Journal of the American Chemical Society, 2006, 128, 64-65.	6.6	84
94	RNA-Templated Semiconductor Nanocrystals. Journal of the American Chemical Society, 2006, 128, 12598-12599.	6.6	84
95	Femtosecond dynamics of the DNA intercalator ethidium and electron transfer with mononucleotides in water. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 1187-1192.	3.3	83
96	Direct Profiling of Cancer Biomarkers in Tumor Tissue Using a Multiplexed Nanostructured Microelectrode Integrated Circuit. ACS Nano, 2009, 3, 3207-3213.	7.3	82
97	Mitochondria-Targeted Doxorubicin: A New Therapeutic Strategy against Doxorubicin-Resistant Osteosarcoma. Molecular Cancer Therapeutics, 2016, 15, 2640-2652.	1.9	82
98	Long-Range and Short-Range Oxidative Damage to DNA:Â Photoinduced Damage to Guanines in Ethidiumâ^'DNA Assembliesâ€. Biochemistry, 1998, 37, 15933-15940.	1.2	81
99	Mitochondrial DNA repair and replication proteins revealed by targeted chemical probes. Nature Chemical Biology, 2016, 12, 567-573.	3.9	80
100	Direct Electrocatalytic mRNA Detection Using PNA-Nanowire Sensors. Analytical Chemistry, 2009, 81, 612-617.	3.2	79
101	Mitochondrial ATP fuels ABC transporter-mediated drug efflux in cancer chemoresistance. Nature Communications, 2021, 12, 2804.	5.8	77
102	Electrochemical Enzyme-Linked Immunosorbent Assay Featuring Proximal Reagent Generation: Detection of Human Immunodeficiency Virus Antibodies in Clinical Samples. Analytical Chemistry, 2013, 85, 6813-6819.	3.2	76
103	Cyanine dye conjugates as probes for live cell imaging. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 5182-5185.	1.0	74
104	Spectrally Resolved Ultrafast Exciton Transfer in Mixed Perovskite Quantum Wells. Journal of Physical Chemistry Letters, 2019, 10, 419-426.	2.1	74
105	Biotemplated nanostructures: directed assembly of electronic and optical materials using nanoscale complementarity. Journal of Materials Chemistry, 2008, 18, 954-964.	6.7	72
106	Mitochondrial Chemical Biology: New Probes Elucidate the Secrets of the Powerhouse of the Cell. Cell Chemical Biology, 2016, 23, 917-927.	2.5	72
107	An Aminoacyl-tRNA Synthetase with a Defunct Editing Siteâ€. Biochemistry, 2005, 44, 3010-3016.	1.2	71
108	Nucleic Acid-Passivated Semiconductor Nanocrystals: Biomolecular Templating of Form and Function. Accounts of Chemical Research, 2010, 43, 173-180.	7.6	71

#	Article	IF	Citations
109	Reagentless biomolecular analysis using a molecular pendulum. Nature Chemistry, 2021, 13, 428-434.	6.6	70
110	Single-cell mRNA cytometry via sequence-specific nanoparticle clustering and trapping. Nature Chemistry, 2018, 10, 489-495.	6.6	68
111	Direct Genetic Analysis of Ten Cancer Cells: Tuning Sensor Structure and Molecular Probe Design for Efficient mRNA Capture. Angewandte Chemie - International Edition, 2011, 50, 4137-4141.	7.2	67
112	Heterogeneous deposition of noble metals on semiconductor nanoparticles in organic or aqueous solvents. Journal of Materials Chemistry, 2006, 16, 4025.	6.7	65
113	Mitochondrial Targeting of Doxorubicin Eliminates Nuclear Effects Associated with Cardiotoxicity. ACS Chemical Biology, 2015, 10, 2007-2015.	1.6	64
114	High-Curvature Nanostructuring Enhances Probe Display for Biomolecular Detection. Nano Letters, 2017, 17, 1289-1295.	4.5	64
115	Ligand-Induced Surface Charge Density Modulation Generates Local Type-II Band Alignment in Reduced-Dimensional Perovskites. Journal of the American Chemical Society, 2019, 141, 13459-13467.	6.6	62
116	Highâ€Performance Nucleic Acid Sensors for Liquid Biopsy Applications. Angewandte Chemie - International Edition, 2020, 59, 2554-2564.	7.2	61
117	Polymerase Chain Reaction-Free, Sample-to-Answer Bacterial Detection in 30 Minutes with Integrated Cell Lysis. Analytical Chemistry, 2012, 84, 21-25.	3.2	60
118	Three-Dimensional Nanostructured Architectures Enable Efficient Neural Differentiation of Mesenchymal Stem Cells via Mechanotransduction. Nano Letters, 2018, 18, 7188-7193.	4.5	60
119	Nanoparticle-Mediated Capture and Electrochemical Detection of Methicillin-Resistant <i>Staphylococcus aureus</i>. Analytical Chemistry, 2019, 91, 2847-2853.	3.2	60
120	Functional defects of pathogenic human mitochondrial tRNAs related to structural fragility. Nature Structural Biology, 2000, 7, 862-865.	9.7	59
121	Combinatorial Probes for Highâ€Throughput Electrochemical Analysis of Circulating Nucleic Acids in Clinical Samples. Angewandte Chemie - International Edition, 2018, 57, 3711-3716.	7.2	59
122	Synthesis and Spectroelectrochemistry of Ir(bpy)(phen)(phi)3+, a Tris(heteroleptic) Metallointercalator. Inorganic Chemistry, 2001, 40, 5245-5250.	1.9	58
123	A digital microfluidic device with integrated nanostructured microelectrodes for electrochemical immunoassays. Lab on A Chip, 2015, 15, 3776-3784.	3.1	58
124	In Situ Electrochemical ELISA for Specific Identification of Captured Cancer Cells. ACS Applied Materials & Interfaces, 2015, 7, 14165-14169.	4.0	58
125	Thiazole Orangeâ^'Peptide Conjugates:â€‰ Sensitivity of DNA Binding to Chemical Structure. Organic Letters, 2004, 6, 517-519.	2.4	57
126	Activated Electronâ€Transport Layers for Infrared Quantum Dot Optoelectronics. Advanced Materials, 2018, 30, e1801720.	11.1	57

#	Article	IF	Citations
127	Metalâ€"Organic Framework Thin Films on High-Curvature Nanostructures Toward Tandem Electrocatalysis. ACS Applied Materials & Interfaces, 2018, 10, 31225-31232.	4.0	57
128	Acid-Assisted Ligand Exchange Enhances Coupling in Colloidal Quantum Dot Solids. Nano Letters, 2018, 18, 4417-4423.	4.5	57
129	Tuning the Bacterial Detection Sensitivity of Nanostructured Microelectrodes. Analytical Chemistry, 2013, 85, 7333-7338.	3.2	56
130	Multibandgap quantum dot ensembles for solar-matched infrared energy harvesting. Nature Communications, 2018, 9, 4003.	5.8	56
131	Dimerization of a pathogenic human mitochondrial tRNA. , 2002, 9, 586-90.		55
132	Contactless measurements of photocarrier transport properties in perovskite single crystals. Nature Communications, 2019, 10, 1591.	5.8	55
133	Ultrasensitive Detection of Enzymatic Activity with Nanowire Electrodes. Journal of the American Chemical Society, 2007, 129, 11356-11357.	6.6	54
134	Controlled Steric Hindrance Enables Efficient Ligand Exchange for Stable, Infrared-Bandgap Quantum Dot Inks. ACS Energy Letters, 2019, 4, 1225-1230.	8.8	54
135	Highâ€Performance Nucleic Acid Sensors for Liquid Biopsy Applications. Angewandte Chemie, 2020, 132, 2574-2584.	1.6	54
136	Strategies for Biomolecular Analysis and Continuous Physiological Monitoring. Journal of the American Chemical Society, 2021, 143, 5281-5294.	6.6	54
137	Maximizing the Therapeutic Window of an Antimicrobial Drug by Imparting Mitochondrial Sequestration in Human Cells. Journal of the American Chemical Society, 2011, 133, 3260-3263.	6.6	53
138	Rapid and specific electrochemical detection of prostate cancer cells using an aperture sensor array. Lab on A Chip, 2013, 13, 940.	3.1	53
139	High-throughput genome-wide phenotypic screening via immunomagnetic cell sorting. Nature Biomedical Engineering, 2019, 3, 796-805.	11.6	53
140	Anchored Ligands Facilitate Efficient B-Site Doping in Metal Halide Perovskites. Journal of the American Chemical Society, 2019, 141, 8296-8305.	6.6	53
141	Nanomaterials for ultrasensitive electrochemical nucleic acids biosensing. Journal of Materials Chemistry, 2009, 19, 3127.	6.7	52
142	Picosecond Charge Transfer and Long Carrier Diffusion Lengths in Colloidal Quantum Dot Solids. Nano Letters, 2018, 18, 7052-7059.	4.5	51
143	Regioselective magnetization in semiconducting nanorods. Nature Nanotechnology, 2020, 15, 192-197.	15.6	51
144	Tuning the Activity of Mitochondriaâ€Penetrating Peptides for Delivery or Disruption. ChemBioChem, 2012, 13, 476-485.	1.3	50

#	Article	IF	Citations
145	Deconvolution of the Cellular Oxidative Stress Response with Organelle-Specific Peptide Conjugates. Chemistry and Biology, 2007, 14, 923-930.	6.2	48
146	Chip-Based Nanostructured Sensors Enable Accurate Identification and Classification of Circulating Tumor Cells in Prostate Cancer Patient Blood Samples. Analytical Chemistry, 2013, 85, 398-403.	3.2	47
147	Delivery and Release of Small-Molecule Probes in Mitochondria Using Traceless Linkers. Journal of the American Chemical Society, 2017, 139, 9455-9458.	6.6	47
148	Nanostructured CMOS Wireless Ultra-Wideband Label-Free PCR-Free DNA Analysis SoC. IEEE Journal of Solid-State Circuits, 2014, 49, 1223-1241.	3.5	46
149	Disease Detector. Scientific American, 2015, 313, 48-51.	1.0	46
150	Mechanistic Control of the Growth of Three-Dimensional Gold Sensors. Journal of Physical Chemistry C, 2016, 120, 21123-21132.	1.5	46
151	Ligand-Assisted Reconstruction of Colloidal Quantum Dots Decreases Trap State Density. Nano Letters, 2020, 20, 3694-3702.	4.5	46
152	Tuning the Intracellular Bacterial Targeting of Peptidic Vectors. Angewandte Chemie - International Edition, 2013, 52, 9660-9663.	7.2	45
153	Electrochemical DNA-Based Immunoassay That Employs Steric Hindrance To Detect Small Molecules Directly in Whole Blood. ACS Sensors, 2017, 2, 718-723.	4.0	45
154	Energy Level Tuning at the MAPbI₃ Perovskite/Contact Interface Using Chemical Treatment. ACS Energy Letters, 2019, 4, 2181-2184.	8.8	45
155	Biexciton Resonances Reveal Exciton Localization in Stacked Perovskite Quantum Wells. Journal of Physical Chemistry Letters, 2017, 8, 3895-3901.	2.1	41
156	Development of Novel Peptides for Mitochondrial Drug Delivery: Amino Acids Featuring Delocalized Lipophilic Cations. Pharmaceutical Research, 2011, 28, 2808-2819.	1.7	40
157	Potentialâ€Responsive Surfaces for Manipulation of Cell Adhesion, Release, and Differentiation. Angewandte Chemie - International Edition, 2019, 58, 14519-14523.	7.2	40
158	Tracking the expression of therapeutic protein targets in rare cells by antibody-mediated nanoparticle labelling and magnetic sorting. Nature Biomedical Engineering, 2021, 5, 41-52.	11.6	40
159	Biomolecular Steric Hindrance Effects Are Enhanced on Nanostructured Microelectrodes. Analytical Chemistry, 2017, 89, 9751-9757.	3.2	39
160	Isolation of Phenotypically Distinct Cancer Cells Using Nanoparticle-Mediated Sorting. ACS Applied Materials & Interfaces, 2017, 9, 20435-20443.	4.0	38
161	Fragile T-stem in Disease-associated Human Mitochondrial tRNA Sensitizes Structure to Local and Distant Mutations. Journal of Biological Chemistry, 2001, 276, 10607-10611.	1.6	37
162	Solvatochromic Reagents for Multicomponent Reactions and their Utility in the Development of Cellâ€Permeable Macrocyclic Peptide Vectors. Chemistry - A European Journal, 2011, 17, 12257-12261.	1.7	37

#	Article	IF	Citations
163	Programmable Metal/Semiconductor Nanostructures for mRNA-Modulated Molecular Delivery. Nano Letters, 2018, 18, 6222-6228.	4.5	36
164	Re-Directing an Alkylating Agent to Mitochondria Alters Drug Target and Cell Death Mechanism. PLoS ONE, 2013, 8, e60253.	1.1	36
165	Proximal Bacterial Lysis and Detection in Nanoliter Wells Using Electrochemistry. ACS Nano, 2013, 7, 8183-8189.	7.3	35
166	Sample-to-Answer Isolation and mRNA Profiling of Circulating Tumor Cells. Analytical Chemistry, 2015, 87, 6258-6264.	3.2	35
167	Peptide-Mediated Electrochemical Steric Hindrance Assay for One-Step Detection of HIV Antibodies. Analytical Chemistry, 2019, 91, 4943-4947.	3.2	35
168	Engineered Apoptosis-Inducing Peptides with Enhanced Mitochondrial Localization and Potency. Journal of Medicinal Chemistry, 2009, 52, 3293-3299.	2.9	34
169	Advancing Ultrasensitive Molecular and Cellular Analysis Methods to Speed and Simplify the Diagnosis of Disease. Accounts of Chemical Research, 2017, 50, 503-507.	7.6	34
170	Dimensional Mixing Increases the Efficiency of 2D/3D Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2020, 11, 5115-5119.	2.1	34
171	Nanostructured biomolecular detectors: pushing performance at the nanoscale. Current Opinion in Chemical Biology, 2012, 16, 415-421.	2.8	33
172	New Technologies for Rapid Bacterial Identification and Antibiotic Resistance Profiling. SLAS Technology, 2017, 22, 113-121.	1.0	33
173	Circulating tumor cell profiling for precision oncology. Molecular Oncology, 2021, 15, 1622-1646.	2.1	33
174	Nucleotide-stabilized cadmium sulfide nanoparticles. Journal of Materials Chemistry, 2007, 17, 1687.	6.7	32
175	Velocity valleys enable efficient capture and spatial sorting of nanoparticle-bound cancer cells. Nanoscale, 2015, 7, 6278-6285.	2.8	32
176	Efficient recovery of potent tumour-infiltrating lymphocytes through quantitative immunomagnetic cell sorting. Nature Biomedical Engineering, 2022, 6, 108-117.	11.6	31
177	Photosensitized DNA cleavage promoted by amino acids. Chemical Communications, 2003, , 1956-1957.	2.2	30
178	Structural probing of a pathogenic tRNA dimer. Rna, 2005, 11, 254-260.	1.6	30
179	Phototoxicity of Peptidoconjugates Modulated by a Single Amino Acid. Angewandte Chemie - International Edition, 2005, 44, 2542-2546.	7.2	29
180	Fractal circuit sensors enable rapid quantification of biomarkers for donor lung assessment for transplantation. Science Advances, 2015, 1, e1500417.	4.7	29

#	Article	IF	Citations
181	Peptide Targeting of an Antibiotic Prodrug toward Phagosome-Entrapped Mycobacteria. ACS Infectious Diseases, 2015, 1, 586-592.	1.8	29
182	Phenotypic Profiling of Circulating Tumor Cells in Metastatic Prostate Cancer Patients Using Nanoparticle-Mediated Ranking. Analytical Chemistry, 2019, 91, 9348-9355.	3.2	29
183	Dynamic CTC phenotypes in metastatic prostate cancer models visualized using magnetic ranking cytometry. Lab on A Chip, 2018, 18, 2055-2064.	3.1	28
184	Ultrasensitive and rapid quantification of rare tumorigenic stem cells in hPSC-derived cardiomyocyte populations. Science Advances, 2020, 6, eaay7629.	4.7	28
185	DNA-directed synthesis of zinc oxide nanowires on carbon nanotube tips. Nanotechnology, 2006, 17, 2661-2664.	1.3	27
186	A New Era in Liquid Biopsy: From Genotype to Phenotype. Clinical Chemistry, 2020, 66, 89-96.	1.5	27
187	Mitochondrial Targeting of Probes and Therapeutics to the Powerhouse of the Cell. Bioconjugate Chemistry, 2020, 31, 2650-2667.	1.8	27
188	An electrochemical immunosensor based on antibodyâ€"nanowire conjugates. Analyst, The, 2009, 134, 447.	1.7	26
189	Three-dimensional, sharp-tipped electrodes concentrate applied fields to enable direct electrical release of intact biomarkers from cells. Lab on A Chip, 2014, 14, 1785.	3.1	26
190	DNA Polymerase Î¸ Increases Mutational Rates in Mitochondrial DNA. ACS Chemical Biology, 2018, 13, 900-908.	1.6	26
191	Oxidative DNA Strand Scission Induced by Peptides. Chemistry and Biology, 2005, 12, 695-701.	6.2	25
192	Ultrasensitive visual read-out of nucleic acids using electrocatalytic fluid displacement. Nature Communications, 2015, 6, 6978.	5.8	25
193	Broadband Epsilon-near-Zero Reflectors Enhance the Quantum Efficiency of Thin Solar Cells at Visible and Infrared Wavelengths. ACS Applied Materials & Interfaces, 2017, 9, 5556-5565.	4.0	25
194	Prismatic Deflection of Live Tumor Cells and Cell Clusters. ACS Nano, 2018, 12, 12692-12700.	7.3	25
195	A fully-integrated and automated testing device for PCR-free viral nucleic acid detection in whole blood. Lab on A Chip, 2018, 18, 1928-1935.	3.1	25
196	Engineering DNA-electrode connectivities: manipulation of linker length and structure. Analytica Chimica Acta, 2003, 496, 81-91.	2.6	24
197	Microfluidic Three-Electrode Cell Array for Low-Current Electrochemical Detection. IEEE Sensors Journal, 2006, 6, 1395-1402.	2.4	24
198	Mitochondria-penetrating peptides conjugated to desferrioxamine as chelators for mitochondrial labile iron. PLoS ONE, 2017, 12, e0171729.	1.1	24

#	Article	IF	Citations
199	Examining Structureâ€"Propertyâ€"Function Relationships in Thiophene, Selenophene, and Tellurophene Homopolymers. ACS Applied Energy Materials, 2018, 1, 5033-5042.	2.5	24
200	Transition Dipole Moments of n = 1, 2, and 3 Perovskite Quantum Wells from the Optical Stark Effect and Many-Body Perturbation Theory. Journal of Physical Chemistry Letters, 2020, 11, 716-723.	2.1	24
201	Nanoparticle-based sorting of circulating tumor cells by epithelial antigen expression during disease progression in an animal model. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 1613-1620.	1.7	23
202	Bacterial classification and antibiotic susceptibility testing on an integrated microfluidic platform. Lab on A Chip, 2021, 21, 4208-4222.	3.1	23
203	The pathogenic U3271C human mitochondrial tRNALeu(UUR) mutation disrupts a fragile anticodon stem. Nucleic Acids Research, 2003, 31, 596-601.	6.5	22
204	Exiting an RNA world. , 2000, 7, 5-7.		21
205	Peptide-Chlorambucil Conjugates Combat Pgp-Dependent Drug Efflux. ACS Medicinal Chemistry Letters, 2011, 2, 419-423.	1.3	21
206	Structural Modifications of Mitochondria-Targeted Chlorambucil Alter Cell Death Mechanism but Preserve MDR Evasion. Molecular Pharmaceutics, 2014, 11, 2675-2682.	2.3	21
207	Synthesis, Characterization, and Cellular Uptake of DNA-Binding Rose Bengal Peptidoconjugates. Organic Letters, 2005, 7, 99-102.	2.4	20
208	A Multifunctional Chemical Probe for the Measurement of Local Micropolarity and Microviscosity in Mitochondria. Angewandte Chemie, 2018, 130, 9029-9033.	1.6	20
209	Mitochondrial tyrosylâ€•<scp>DNA</scp> phosphodiesterase 2 and its <scp>TDP</scp> 2 ^S short isoform. EMBO Reports, 2018, 19, .	2.0	19
210	Nanostructured Architectures for Biomolecular Detection inside and outside the Cell. Advanced Functional Materials, 2020, 30, 1907701.	7.8	19
211	Integrated nanostructures for direct detection of DNA at attomolar concentrations. Applied Physics Letters, 2009, 95, .	1.5	18
212	Programmable definition of nanogap electronic devices using self-inhibited reagent depletion. Nature Communications, 2015, 6, 6940.	5.8	18
213	Magnetic Ranking Cytometry: Profiling Rare Cells at the Single-Cell Level. Accounts of Chemical Research, 2020, 53, 1445-1457.	7.6	18
214	Stable, Bromine-Free, Tetragonal Perovskites with 1.7 eV Bandgaps via A-Site Cation Substitution. , 2020, 2, 869-872.		18
215	Tunable DNA Cleavage by Intercalating Peptidoconjugates. ChemBioChem, 2006, 7, 766-773.	1.3	17
216	Optimized templates for bottom-up growth of high-performance integrated biomolecular detectors. Lab on A Chip, 2013, 13, 2569.	3.1	17

#	Article	IF	Citations
217	Effect of Microelectrode Structure on Electrocatalysis at Nucleic Acid-Modified Sensors. Langmuir, 2014, 30, 14322-14328.	1.6	17
218	Enhancing the Potency of Nalidixic Acid toward a Bacterial DNA Gyrase with Conjugated Peptides. ACS Chemical Biology, 2017, 12, 2563-2569.	1.6	17
219	Naphthalenediimide Cations Inhibit 2D Perovskite Formation and Facilitate Subpicosecond Electron Transfer. Journal of Physical Chemistry C, 2020, 124, 24379-24390.	1.5	17
220	Nanostructured Architectures Promote the Mesenchymalâ€"Epithelial Transition for Invasive Cells. ACS Nano, 2020, 14, 5324-5336.	7.3	17
221	PillarX: A Microfluidic Device to Profile Circulating Tumor Cell Clusters Based on Geometry, Deformability, and Epithelial State. Small, 2022, 18, e2106097.	5.2	17
222	Pore Shape Defines Paths of Metastatic Cell Migration. Nano Letters, 2018, 18, 2140-2147.	4.5	16
223	DNAâ€based programing of quantum dot properties. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2013, 5, 86-95.	3.3	15
224	Fluorescent Droplet Cytometry for On-Cell Phenotype Tracking. Journal of the American Chemical Society, 2020, 142, 14805-14809.	6.6	15
225	Steric Hindrance Assay for Secreted Factors in Stem Cell Culture. ACS Sensors, 2017, 2, 495-500.	4.0	14
226	Combinatorial Probes for Highâ€Throughput Electrochemical Analysis of Circulating Nucleic Acids in Clinical Samples. Angewandte Chemie, 2018, 130, 3773-3778.	1.6	14
227	Curvature-Mediated Surface Accessibility Enables Ultrasensitive Electrochemical Human Methyltransferase Analysis. ACS Sensors, 2018, 3, 1765-1772.	4.0	14
228	Phage-Based Profiling of Rare Single Cells Using Nanoparticle-Directed Capture. ACS Nano, 2021, 15, 19202-19210.	7.3	14
229	Heterogeneous Supersaturation in Mixed Perovskites. Advanced Science, 2020, 7, 1903166.	5.6	13
230	Nanoparticle Amplification Labeling for High-Performance Magnetic Cell Sorting. Nano Letters, 2022, 22, 4774-4783.	4.5	13
231	Profilierung zirkulierender Tumorzellen mit Apparaturen und Materialien der nÃchsten Generation. Angewandte Chemie, 2016, 128, 1270-1284.	1.6	12
232	Amplified Micromagnetic Field Gradients Enable High-Resolution Profiling of Rare Cell Subpopulations. ACS Applied Materials & Interfaces, 2017, 9, 25683-25690.	4.0	12
233	Luminescence quenching by DNA-bound viologens: effect of reactant identity on efficiency and dynamics of electron transfer in DNA. Journal of Photochemistry and Photobiology B: Biology, 2000, 58, 72-79.	1.7	10
234	Optoelectrical characteristics of individual zinc oxide nanorods grown by DNA directed assembly on vertically aligned carbon nanotube tips. Applied Physics Letters, 2006, 89, 103109.	1.5	10

#	Article	IF	Citations
235	A Single Residue in Leucyl-tRNA Synthetase Affecting Amino Acid Specificity and tRNA Aminoacylation. Biochemistry, 2007, 46, 4466-4472.	1.2	10
236	Single-Cell Tumbling Enables High-Resolution Size Profiling of Retinal Stem Cells. ACS Applied Materials & Interfaces, 2018, 10, 34811-34816.	4.0	10
237	Peptide-Functionalized Nanostructured Microarchitectures Enable Rapid Mechanotransductive Differentiation. ACS Applied Materials & Interfaces, 2019, 11, 41030-41037.	4.0	10
238	Ultrasensitive Detection and Depletion of Rare Leukemic B Cells in T Cell Populations via Immunomagnetic Cell Ranking. Analytical Chemistry, 2021, 93, 2327-2335.	3.2	10
239	Cell-free DNA and circulating tumor cell kinetics in a pre-clinical head and neck Cancer model undergoing radiation therapy. BMC Cancer, 2021, 21, 1075.	1.1	10
240	Interdomain Communication between Weak Structural Elements within a Disease-Related Human tRNA. Biochemistry, 2004, 43, 384-392.	1.2	9
241	An intercalator film as a DNAâ€"electrode interface. Chemical Communications, 2006, , 962.	2.2	9
242	Using the inherent chemistry of the endothelin-1 peptide to develop a rapid assay for pre-transplant donor lung assessment. Analyst, The, 2015, 140, 8092-8096.	1.7	9
243	Profiling Functional and Biochemical Phenotypes of Circulating Tumor Cells Using a Twoâ€Dimensional Sorting Device. Angewandte Chemie, 2017, 129, 169-174.	1.6	8
244	Combining Desmopressin and Docetaxel for the Treatment of Castration-Resistant Prostate Cancer in an Orthotopic Model. Anticancer Research, 2019, 39, 113-118.	0.5	8
245	Excellence in Radiation Research for the 21st Century (EIRR21): Description of an Innovative Research Training Program. International Journal of Radiation Oncology Biology Physics, 2012, 83, e563-e570.	0.4	7
246	Power-free, digital and programmable dispensing of picoliter droplets using a Digit Chip. Lab on A Chip, 2017, 17, 1505-1514.	3.1	7
247	A liquid biopsy for detecting circulating mesothelial precursor cells: A new biomarker for diagnosis and prognosis in mesothelioma. EBioMedicine, 2020, 61, 103031.	2.7	7
248	Imageâ€Reversal Soft Lithography: Fabrication of Ultrasensitive Biomolecular Detectors. Advanced Healthcare Materials, 2016, 5, 893-899.	3.9	6
249	Characterization of Trypanosoma cruzi MutY DNA glycosylase ortholog and its role in oxidative stress response. Infection, Genetics and Evolution, 2017, 55, 332-342.	1.0	6
250	Potentialâ€Responsive Surfaces for Manipulation of Cell Adhesion, Release, and Differentiation. Angewandte Chemie, 2019, 131, 14661-14665.	1.6	6
251	Rapid On-Cell Selection of High-Performance Human Antibodies. ACS Central Science, 2022, 8, 102-109.	5.3	6
252	Electrochemistry At The Dna/Electrode Interface. , 2008, , 129-160.		4

#	Article	IF	Citations
253	Targeting Mitochondria with Organelle-Specific Compounds: Strategies and Applications. ChemBioChem, 2009, 10, 2131-2131.	1.3	4
254	Challenges and Opportunities for Wearable Sensing Systems. ACS Sensors, 2022, 7, 345-346.	4.0	4
255	Should There Be Minimum Information Reporting Standards for Sensors?. ACS Sensors, 2017, 2, 1377-1379.	4.0	3
256	A microfluidic platform enables comprehensive gene expression profiling of mouse retinal stem cells. Lab on A Chip, 2021, 21, 4464-4476.	3.1	3
257	Combinatorial Analysis of Loop Nucleotides in Human Mitochondrial tRNALeu(UUR)Ââ€. Biochemistry, 2005, 44, 233-242.	1.2	2
258	Biomolecular Sensors: Benchmarking Basics. ACS Sensors, 2016, 1, 1380-1380.	4.0	2
259	Should <i>ACS Sensors</i> Publish Papers on Fluorescent Sensors for Metal Ions at All?. ACS Sensors, 2016, 1, 324-325.	4.0	2
260	COVID-19: A Crisis Creating New Opportunities for Sensing. ACS Sensors, 2021, 6, 1407-1407.	4.0	2
261	AbCellera's success is unprecedented: what have we learned?. Lab on A Chip, 2021, 21, 2330-2332.	3.1	2
262	Quantifying EpCAM heterogeneity of circulating-tumor-cells (CTCs) from small cell lung cancer (SCLC) patients.. Journal of Clinical Oncology, 2019, 37, e20091-e20091.	0.8	2
263	Bioassays: Universal sensitivity booster. Nature Biomedical Engineering, 2017, 1, .	11.6	1
264	An Exciting Year Ahead for ACS Sensors. ACS Sensors, 2018, 3, 1-2.	4.0	1
265	Sensing: The Pervasive Science. ACS Sensors, 2019, 4, 2846-2846.	4.0	1
266	Detection of encephalic and hemorrhagic viruses: integration of micro- and nano-fabrication with computational tools. , 2005, , .		0
267	Amplified electrocatalysis at DNA-modified nanowires for ultrasensitive biosensing. , 2005, 6007, 20.		0
268	Measurement science: the engine of chemical biology. Current Opinion in Chemical Biology, 2008, 12, 473-474.	2.8	0
269	Parallel detection of nucleic acids using an electronic chip. , 2008, , .		0
270	Editorial overview. Current Opinion in Chemical Biology, 2012, 16, 379-380.	2.8	0

#	Article	IF	Citations
271	Welcome to <i>ACS Sensors</i>. ACS Sensors, 2016, 1, 1-2.	4.0	0
272	What Should an <i>ACS Sensors</i> Paper Look Like?. ACS Sensors, 2016, 1, 102-103.	4.0	0
273	Welcome to the First Anniversary Issue of <i>ACS Sensors</i>. ACS Sensors, 2017, 2, 1-2.	4.0	0
274	Reflecting on How <i>ACS Sensors</i> Can Help Advance the Field of Sensing. ACS Sensors, 2017, 2, 455-456.	4.0	0
275	August 2017: Two Years of Submissions. ACS Sensors, 2017, 2, 1068-1069.	4.0	0
276	Dispersed Sensor Networks. ACS Sensors, 2017, 2, 1255-1255.	4.0	0
277	Microscale profiling of circulating tumor cells. , 2017, , .		0
278	Analyte Acumen. ACS Sensors, 2018, 3, 1892-1892.	4.0	0
279	First Impact Factor for ACS Sensors â€" 5.711. ACS Sensors, 2018, 3, 1218-1219.	4.0	0
280	Celebrating Rising Stars in Sensing. ACS Sensors, 2020, 5, 2263-2263.	4.0	0
281	Happy 5th Anniversary for ACS Sensors. ACS Sensors, 2020, 5, 1-2.	4.0	0
282	Remembering NJ. ACS Sensors, 2020, 5, 887-888.	4.0	0
283	2021: A Year Starting Full of Hope. ACS Sensors, 2021, 6, 1-2.	4.0	0
284	Ultrafast photophysics of metal halide perovskite multiple quantum wells: device implications and reconciling band alignment. , 2019, , .		0
285	Abstract P4-01-12: The association of circulating tumor cells with tumor response in breast cancer patients undergoing neoadjuvant chemotherapy. , 2020, , .		0