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1182	Single-Molecule Covalent Chemistry with Spatially Separated Reactants. 2003 , 115, 3896-3901		13
1181	Single-molecule covalent chemistry with spatially separated reactants. 2003 , 42, 3766-71		89
1180	Analysis of protein interactions using fluorescence technologies. 2003 , 7, 635-40		183
1179	Ultrafast DNA sequencing. 2003 , 21, 1425-7		13
1178	Toward fluorescence nanoscopy. 2003 , 21, 1347-55		766
1177	FRET imaging. 2003 , 21, 1387-95		1546
1176	Near-field optics: from subwavelength illumination to nanometric shadowing. 2003 , 21, 1378-86		136
1175	DNA molecules and configurations in a solid-state nanopore microscope. 2003 , 2, 611-5		767
1174	A simple quenching method for fluorescence background reduction and its application to the direct, quantitative detection of specific mRNA. <i>Analytical Chemistry</i> , 2003 , 75, 6236-43	7.8	25
1173	TIR-FCS: staying on the surface can sometimes be better. <i>Biophysical Journal</i> , 2003 , 85, 2783-4	2.9	16
1172	Harold Craighead. 2003 , 3, 56N-59N		
1171	Analytical chemistry. How to detect weak pairs. <i>Science</i> , 2003 , 299, 667-8	33.3	50
1170	Nanostructure science and technology: Impact and prospects for biology. 2003 , 21, S216-S221		16
1169	Literature Search and Reviews. 2003 , 1, 385-390		
1168	The structural basis for giant enhancement enabling single-molecule Raman scattering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 8638-43	11.5	188

1167	Enzyme screening with synthetic multifunctional pores: focus on biopolymers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 11964-9	11.5	55
1166	Single-molecule fluorescence spectroscopy of biomolecular folding. 2003 , 15, R1291-R1317		58
1165	A look into life sciences: more than a side step from industrial inspection?. 2003 , 5144, 504		
1164	Single-molecule spectroscopy for nucleic acid analysis: a new approach for disease detection and genomic analysis. 2004 , 5, 271-8		5
1163	Nanopore detection using channel current cheminformatics. 2004 ,		5
1162	Diffusion in Laser Gradient Field Studied by Fluorescence Correlation Spectroscopy. 2004 , 21, 760-763		1
1161	Nanofluidics. <i>Nanostructure Science and Technology</i> , 2004 , 575-597	0.9	2
1160	Fluorescence-aided molecule sorting: analysis of structure and interactions by alternating-laser excitation of single molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 8936-41	11.5	494
1159	Principles of a nanoscale DNA scanner. 2004 , 151, 183-7		1
1158	Optical Trapping with Integrated Near-Field Apertures. 2004 , 108, 13607-13612		64
1157	Biosensing based upon molecular confinement in metallic nanocavity arrays. <i>Nanotechnology</i> , 2004 , 15, 1368-1374	3.4	61
1156	Advanced sequencing technologies: methods and goals. 2004 , 5, 335-44		440
1155	. 2004 , 51, 2004-2012		4
1154	Concepts for nanoscale resolution in fluorescence microscopy. 2004 , 14, 599-609		226
1153	Real-time detection of polymerase activity using supercritical angle fluorescence. 2004 , 14, 75-8		4
1152	Single-nucleotide polymorphism detection using nanomolar nucleotides and single-molecule fluorescence. 2004 , 327, 35-44		25
1151	Field intensity distributions and polarization orientations in a vacuum-clad subwavelength-diameter optical fiber. 2004 , 242, 445-455		137
1150	Accurate delivery of single biomolecules by polyethylene glycol coated submicrometer pipettes. 2004 , 301, 105-110		6

1149	Biosensing based upon molecular confinement in metallic nanocavity arrays.		0
1148	Biomimetic nanoscale reactors and networks. 2004 , 55, 613-49		133
1147	Photon Arrival-Time Interval Distribution (PAID): A Novel Tool for Analyzing Molecular Interactions. 2004 , 108, 3051-3067		60
1146	An addressable antibody nanoarray produced on a nanostructured surface. <i>Journal of the American Chemical Society</i> , 2004 , 126, 6508-9	16.4	88
1145	A Simple Voltage Controlled Enzymatic Nanoreactor Produced in the Tip of a Nanopipet. <i>Nano Letters</i> , 2004 , 4, 1859-1862	11.5	11
1144	Focal volume confinement by submicrometer-sized fluidic channels. <i>Analytical Chemistry</i> , 2004 , 76, 1618-26		127
1143	Direct Laser Writing on Electrolessly Deposited Thin Metal Films for Applications in Micro- and Nanofluidics. 2004 , 20, 1833-1837		21
1142	Measurement of enzyme kinetics using microscale steady-state kinetic analysis. 2004 , 20, 6374-81		37
1141	Unambiguous detection of target DNAs by excimer-monomer switching molecular beacons. 2004 , 69, 3271-5		164
1140	Fabrication of Size-Controllable Nanofluidic Channels by Nanoimprinting and Its Application for DNA Stretching. <i>Nano Letters</i> , 2004 , 4, 69-73	11.5	262
1139	Recent progress in nanoimprint technology and its applications. 2004 , 37, R123-R141		565
1138	Near-field scanning fluorescence microscopy study of ion channel clusters in cardiac myocyte membranes. <i>Biophysical Journal</i> , 2004 , 87, 3525-35	2.9	65
1137	Integrated optical waveguides with liquid cores. 2004 , 85, 3477-3479		77
1136	Polarization dependence of light intensity distribution near a nanometric aluminum slit. 2004 , 21, 1005		10
1135	Single-mode guiding properties of subwavelength-diameter silica and silicon wire waveguides. 2004 , 12, 1025-35		544
1134	Supercritical angle fluorescence (SAF) microscopy. 2004 , 12, 4246-54		83
1133	Attoliter detection volumes by confocal total-internal-reflection fluorescence microscopy. <i>Optics Letters</i> , 2004 , 29, 569-71	3	62
1132	Atom trap and waveguide using a two-color evanescent light field around a subwavelength-diameter optical fiber. 2004 , 70,		174

1131	Reducing and shaping the fluorescence detection volume for single bio-molecules analysis: the assets of nanophotonic structures. 2004,	
1130	Biosensing based upon molecular confinement in metallic nanocavities. 2004,	
1129	Optical thin films serving biotechnology: fluorescence enhancement of DNA-chip. 2004,	2
1128	Enabling high-precision nonlinear three-dimensional photoprocessing of premeditated designs on a conventional multiphoton imaging system. 2004,	1
1127	Biosensing based upon molecular confinement in metallic nanocavity arrays. 2005, 5703, 99	
1126	Optical properties of zero mode waveguides. 2005, 5969, 197	
1125	Mask fabrication towards sub-10 nm imprint lithography. 2005,	
1124	Enhancement of molecular fluorescence by metallic nanocavities. 2005,	
1123	Fluorescence Labeling of RNA for Single Molecule Studies. 453-474	
1122	Single-molecule observation of the catalytic subunit of cAMP-dependent protein kinase binding to an inhibitor peptide. 2005, 12, 109-20	64
1121	Surface plasmon standing waves in large-area subwavelength hole arrays. <i>Nano Letters</i> , 2005, 5, 1963-7	11.5 91
1120	Microfabricated arrays of femtoliter chambers allow single molecule enzymology. 2005, 23, 361-5	288
1119	The nanopore connection to cell membrane unitary permeability. 2005, 6, 199-204	7
1118	Advances in sequencing technology. 2005, 573, 13-40	104
1117	Hollow-core waveguides and 2-D waveguide arrays for integrated optics of gases and liquids. 2005, 11, 519-527	56
1116	Enhanced fluorescence transduction properties of metallic nanocavity arrays. 2005, 11, 778-784	16
1115	Statistical evaluation of single nano-object fluorescence. 2005, 6, 770-89	119
1114	Branching out of single-molecule fluorescence spectroscopy: challenges for chemistry and influence on biology. 2005, 44, 2642-2671	218

1113	Neue Wege in der Einzelmolekül-Fluoreszenzspektroskopie: Herausforderungen für die Chemie und Einfluss auf die Biologie. 2005 , 117, 2698-2728	44
1112	Single-molecule fluorescence detection in microfluidic channels--the Holy Grail in muTAS?. 2005 , 382, 1771-82	141
1111	Nanofluidics: what is it and what can we expect from it?. 2005 , 1, 249-267	525
1110	Application of continuum mechanics to fluid flow in nanochannels. 2005 , 1, 356-363	15
1109	Simple, robust methods for high-throughput nanoliter-scale DNA sequencing. 2005 , 15, 1447-50	12
1108	Single-molecule detection and probe strategies for rapid and ultrasensitive genomic detection. 2005 , 6, 453-61	26
1107	Temporally resolved interactions between antigen-stimulated IgE receptors and Lyn kinase on living cells. 2005 , 171, 527-36	111
1106	Comparison of fabrication methods of sub-100nm nano-optical structures and devices. 2005 ,	12
1105	Single nucleotide polymorphisms: discovery, detection and analysis. 2005 , 2, 111-125	3
1104	Hybridization of Deoxyribonucleic Acid and Immobilization of Green Fluorescent Protein on Nanostructured Organosilane Templates. 2005 , 44, 5851-5855	12
1103	Detection and identification of nucleic acid engineered fluorescent labels in submicrometre fluidic channels. <i>Nanotechnology</i> , 2005 , 16, S314-23	3-4 29
1102	Nanoscale optical waveguides with negative dielectric claddings. 2005 , 71,	11
1101	Fluorescence fluctuation spectroscopy in subdiffraction focal volumes. 2005 , 94, 178104	169
1100	Detecting microdomains in intact cell membranes. 2005 , 56, 309-36	194
1099	Fluorescence Spectroscopy in Biology. 2005 ,	29
1098	Total Internal Reflection Fluorescence Microscopy: Applications in Biophysics. 2005 , 79-103	7
1097	Surface plasmon field-enhanced fluorescence spectroscopy studies of primer extension reactions. 2005 , 33, e69	28
1096	FCS for characterizing nano-optical systems.	

1095	Accurate multiplex polony sequencing of an evolved bacterial genome. <i>Science</i> , 2005 , 309, 1728-32	33.3	1011
1094	Comparative quantification of nucleic acids using single-molecule detection and molecular beacons. 2005 , 130, 483-8		35
1093	Single-molecule tracing on a fluidic microchip for quantitative detection of low-abundance nucleic acids. <i>Journal of the American Chemical Society</i> , 2005 , 127, 5354-9	16.4	97
1092	Emerging technologies in DNA sequencing. 2005 , 15, 1767-76		326
1091	A fluidic chemical and biological sensing mechanism with high transduction based on dissolvable membranes.		0
1090	A wireless chemical and biological microsensor based on dissolvable membranes. 2005 ,		
1089	The Quest for High-Speed and Low-Volume Bioanalysis. <i>Analytical Chemistry</i> , 2005 , 77, 264 A-272 A	7.8	24
1088	Investigating cellular signaling reactions in single attoliter vesicles. <i>Journal of the American Chemical Society</i> , 2005 , 127, 2908-12	16.4	107
1087	Enhancement of single-molecule fluorescence detection in subwavelength apertures. 2005 , 95, 117401		182
1086	Microscope objective for large-angle fluorescence used for rapid detection of single nucleotide polymorphisms in DNA hybridization. <i>Analytical Chemistry</i> , 2005 , 77, 2656-61	7.8	8
1085	Three-dimensional mapping of the light intensity transmitted through nanoapertures. <i>Nano Letters</i> , 2005 , 5, 1227-30	11.5	19
1084	Surface plasmon excitation on a single subwavelength hole in a metallic sheet. 2005 , 44, 2332-7		67
1083	Modeling of silica nanowires for optical sensing. 2005 , 13, 2135-40		170
1082	Single molecule fluorescence in rectangular nano-apertures. 2005 , 13, 7035-44		60
1081	Rapid analysis of Forster resonance energy transfer by two-color global fluorescence correlation spectroscopy: trypsin proteinase reaction. <i>Biophysical Journal</i> , 2005 , 89, 605-18	2.9	46
1080	lambda-Repressor oligomerization kinetics at high concentrations using fluorescence correlation spectroscopy in zero-mode waveguides. <i>Biophysical Journal</i> , 2005 , 88, 2145-53	2.9	85
1079	Two-photon cross-correlation analysis of intracellular reactions with variable stoichiometry. <i>Biophysical Journal</i> , 2005 , 88, 4319-36	2.9	101
1078	Probing vesicle dynamics in single hippocampal synapses. <i>Biophysical Journal</i> , 2005 , 89, 3615-27	2.9	50

1077	High spatial resolution observation of single-molecule dynamics in living cell membranes. <i>Biophysical Journal</i> , 2005 , 88, L43-5	2.9	57
1076	Toward the 1,000 dollars human genome. 2005 , 6, 373-82		205
1075	Next generation sequencing technologies. 2005 , 2, 255-60		12
1074	Terminal phosphate-labeled nucleotides with improved substrate properties for homogeneous nucleic acid assays. <i>Journal of the American Chemical Society</i> , 2005 , 127, 2394-5	16.4	48
1073	Streaming currents in a single nanofluidic channel. 2005 , 95, 116104		344
1072	DNA Sequencing Technology. 129-180		
1071	Enumeration of DNA molecules bound to a nanomechanical oscillator. <i>Nano Letters</i> , 2005 , 5, 925-9	11.5	211
1070	Modeling of subwavelength-diameter optical wire waveguides for optical sensing applications. 2005 ,		2
1069	Cell membranes suspended across nanoaperture arrays. 2006 , 22, 22-5		51
1068	Nanoscale Resolution with Focused Light: Stimulated Emission Depletion and Other Reversible Saturable Optical Fluorescence Transitions Microscopy Concepts. 2006 , 571-579		18
1067	Enhancement and quenching of single-molecule fluorescence. 2006 , 96, 113002		2309
1066	Zero mode waveguides for single-molecule spectroscopy on lipid membranes. <i>Biophysical Journal</i> , 2006 , 90, 3288-99	2.9	105
1065	Analysis method for measuring submicroscopic distances with blinking quantum dots. <i>Biophysical Journal</i> , 2006 , 91, 3050-60	2.9	51
1064	In situ fluorescent protein imaging with metal film-enhanced total internal reflection microscopy. <i>Biophysical Journal</i> , 2006 , 90, 4662-71	2.9	37
1063	Viewing dynamic assembly of molecular complexes by multi-wavelength single-molecule fluorescence. <i>Biophysical Journal</i> , 2006 , 91, 1023-31	2.9	116
1062	Application of surface plasmon coupled emission to study of muscle. <i>Biophysical Journal</i> , 2006 , 91, 2626-35		70
1061	Toward single molecule DNA sequencing: direct identification of ribonucleoside and deoxyribonucleoside 5'-monophosphates by using an engineered protein nanopore equipped with a molecular adapter. <i>Journal of the American Chemical Society</i> , 2006 , 128, 1705-10	16.4	272
1060	Fluorescence Correlation Spectroscopy. 2006 , 797-840		10

1059	Large-area nanoscale patterning: chemistry meets fabrication. 2006 , 39, 249-57		195
1058	In situ single-molecule imaging with attoliter detection using objective total internal reflection confocal microscopy. 2006 , 45, 4058-68		27
1057	Whole-genome re-sequencing. 2006 , 16, 545-52		621
1056	Field concentration by exciting surface defect modes. <i>Optics Letters</i> , 2006 , 31, 47-9	3	9
1055	Single-molecule detection sensitivity using planar integrated optics on a chip. <i>Optics Letters</i> , 2006 , 31, 2136-8	3	80
1054	Field enhancement in single subwavelength apertures. 2006 , 23, 2342-8		39
1053	Confining the sampling volume for Fluorescence Correlation Spectroscopy using a sub-wavelength sized aperture. 2006 , 14, 956-69		39
1052	Characterization of light collection through a subwavelength aperture from a point source. 2006 , 14, 10410-25		22
1051	Localized propagation modes guided by shear discontinuities in photonic crystals. 2006 , 14, 10887-97		1
1050	Dual-color fluorescence cross-correlation spectroscopy in a single nanoaperture : towards rapid multicomponent screening at high concentrations. 2006 , 14, 12206-16		38
1049	Nano-Biophotonics. 293-317		
1048	. 2006 ,		12
1047	Measuring rotations of a few cross-bridges in skeletal muscle. 2006 , 231, 28-38		11
1046	Spatial fluorescence cross-correlation spectroscopy between core and ring pinholes. 2006 ,		2
1045	Minimization of detection volume by surface plasmon-coupled emission. 2006 ,		
1044	Nanotechnologies in proteomics. 2006 , 6, 1399-414		69
1043	Integrating genomics against infectious disease. 2006 , 38, 513-4		4
1042	Fluorescence cross-correlation spectroscopy in living cells. 2006 , 3, 83-9		490

1041	Developing optofluidic technology through the fusion of microfluidics and optics. 2006 , 442, 381-6	1385
1040	Future lab-on-a-chip technologies for interrogating individual molecules. 2006 , 442, 387-93	580
1039	Towards single-molecule DNA sequencing: assays with low nonspecific adsorption. 2006 , 349, 181-5	12
1038	Minimization of detection volume by surface-plasmon-coupled emission. 2006 , 356, 125-31	28
1037	Sequencing single molecules of DNA. 2006 , 10, 628-37	142
1036	Chemical delivery microsystem for single-molecule analysis using multilaminar continuous flow. 2006 , 39, 519-525	7
1035	Raman scattering and fluorescence emission in a single nanoaperture: Optimizing the local intensity enhancement. 2006 , 267, 224-228	23
1034	Single-fluorophore diffusion in a lipid membrane over a subwavelength aperture. 2006 , 32, SN1-4	33
1033	Filling kinetics of liquids in nanochannels as narrow as 27 nm by capillary force. 2006 , 293, 151-7	88
1032	Plasmonics in Biology and Plasmon-Controlled Fluorescence. 2006 , 1, 5-33	449
1031	Downscaling functional bioassays by single-molecule techniques. 2006 , 11, 640-5	7
1030	What is the future of electrophoresis in large-scale genomic sequencing?. 2006 , 27, 3689-702	31
1029	High-speed optical nanofabrication by platinum oxide nano-explosion. 2006 , 8, S139-S143	14
1028	Fluorescence fluctuation spectroscopy in reduced detection volumes. 2006 , 7, 51-66	52
1027	Design and fabrication of nanofluidic devices by surface micromachining. <i>Nanotechnology</i> , 2006 , 17, 2498-503	38
1026	Stability analysis of plane wave solutions of the generalized Ablowitz-Adik system. 2006 , 74, 718-725	3
1025	Inference of DNA sequences from mechanical unzipping: an ideal-case study. 2006 , 96, 128102	23
1024	Fiber-optic evanescent field modulator using a magnetic fluid as the cladding. <i>Journal of Applied Physics</i> , 2006 , 99, 093516	2.5 76

- 1023 Single Molecule Pulsed Interleaved Excitation Fluorescence Resonance Energy Transfer (PIE-FRET) inside Nanometer-scale Apertures at Biologically Relevant Concentration. **2007**,
- 1022 Fluorescence fluctuation spectroscopic approaches to the study of a single molecule diffusing in solution and a live cell without systemic drift or convection: a theoretical study. **2007**, 8, 261-73 13
- 1021 Piezoresistor-equipped fluorescence-based cantilever probe for near-field scanning. **2007**, 78, 083106 2
- 1020 Photonic mode density effects on single-molecule fluorescence blinking. **2007**, 9, 21-21 24
- 1019 Towards Single-Molecule Diagnostics Using Microfluidic Manipulation and Quantum Dot Nanosensors. **2007**, 1133
- 1018 Gate-Controlled Microfluidic Chamber With Magnetic Bead for DNA Sequencing-by-Synthesis Technology. **2007**, 163
- 1017 Cell investigation of nanostructures: zero-mode waveguides for plasma membrane studies with single molecule resolution. *Nanotechnology*, **2007**, 18, 195101 3-4 42
- 1016 Single molecule transcription profiling with AFM. *Nanotechnology*, **2007**, 18, 44032 3-4 17
- 1015 Electrical control of loaded biomimetic femtoliter vesicles in microfluidic system. **2007**, 90, 173901 15
- 1014 Single molecule analysis of bacterial polymerase chain reaction products in submicrometer fluidic channels. **2007**, 1, 34105 17
- 1013 Inferring DNA sequences from mechanical unzipping data: the large-bandwidth case. **2007**, 75, 011904 13
- 1012 Fueling protein DNA interactions inside porous nanocontainers. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 12646-50 11.5 136
- 1011 Rotation of actin monomers during isometric contraction of skeletal muscle. **2007**, 12, 014013 22
- 1010 Nanodevices for Single Molecule Studies. **2007**, 271-301 3
- 1009 Scattering at silver-enhanced gold particles inside subwavelength-apertured metallic layers. **2007**,
- 1008 Introduction to nanotechnology: potential applications in physical medicine and rehabilitation. **2007**, 86, 225-41 13
- 1007 Increased throughput single molecule detection of DNA. **2007**,
- 1006 Chapter 4 Advances in Dye-Nucleotide Conjugate Chemistry for DNA Sequencing. **2007**, 119-149 3

1005	Single-scattering theory of light diffraction by a circular subwavelength aperture in a finitely conducting screen. 2007 , 24, 339-58		16
1004	Comparison of plasmon surface waves on shallow and deep metallic 1D and 2D gratings. 2007 , 15, 4224-37		56
1003	Plasmon surface waves and complex-type surface waves: comparative analysis of single interfaces, lamellar gratings, and two-dimensional hole arrays. 2007 , 46, 154-60		2
1002	Chapter 7 Single-Molecule Fluorescence Microscopy and its Applications to Single-Molecule Sequencing by Cyclic Synthesis. 2007 , 209-244		
1001	Integrated Biochips for DNA Analysis. 2007 ,		3
1000	Engineered holliday junctions as single-molecule reporters for protein-DNA interactions with application to a MerR-family regulator. <i>Journal of the American Chemical Society</i> , 2007 , 129, 12461-7	16.4	19
999	Nanoscale Resolution in Far-Field Fluorescence Microscopy. 2007 , 790-834		5
998	Controlled Nanoscale Motion. 2007 ,		3
997	Time-Resolved Evaporation Rate of Attoliter Glycerine Drops Using On-Chip CMOS Mass Sensors Based on Resonant Silicon Micro Cantilevers. 2007 , 6, 509-512		7
996	Optical field enhancement at cusps between adjacent nanoapertures. <i>Nano Letters</i> , 2007 , 7, 557-64	11.5	52
995	Pulsed-interleaved excitation FRET measurements on single duplex DNA molecules inside C-shaped nanoapertures. <i>Nano Letters</i> , 2007 , 7, 1749-56	11.5	30
994	Genome-wide analysis of DNA methylation patterns. 2007 , 134, 3959-65		205
993	Single-molecule fluorescence resonance energy transfer in nanopipets: improving distance resolution and concentration range. <i>Analytical Chemistry</i> , 2007 , 79, 7367-75	7.8	29
992	Terahertz electromagnetic wave transmission through random arrays of single rectangular holes and slits in thin metallic sheets. 2007 , 99, 137401		105
991	Diffusion analysis within single nanometric apertures reveals the ultrafine cell membrane organization. <i>Biophysical Journal</i> , 2007 , 92, 913-9	2.9	137
990	Fluorescence correlation spectroscopy at 100 nM concentrations using near-field scanning optical microscopic (NSOM) geometries and highly diffracting force sensing fiber probes. 2007 , 47, 171-176		7
989	Chapter 5 The history of near-field optics. 2007 , 137-184		77
988	Radiative and Nonradiative Photokinetics Alteration Inside a Single Metallic Nanometric Aperture. 2007 , 111, 11469-11474		21

987	Toward a new era in sequencing. 2007 , 13, 1-26	3
986	Nanohole Plasmons in Optically Thin Gold Films. 2007 , 111, 1207-1212	136
985	Nanofluidic structures for single biomolecule fluorescent detection. 2007 , 85, 131-43	62
984	Sizing trinucleotide repeat sequences by single-molecule analysis of fluorescence brightness. 2007 , 8, 1618-21	11
983	Reversible photoswitching enables single-molecule fluorescence fluctuation spectroscopy at high molecular concentration. 2007 , 70, 1003-9	20
982	Substrate effects on surface plasmons in single nanoholes. 2007 , 435, 123-126	19
981	Modeling of nanoparticle-induced Rayleigh-Gans scattering for nanofiber optical sensing. 2007 , 276, 293-297	35
980	Confined diffusion in ordered nanoporous alumina membranes. 2007 , 3, 380-5	30
979	Beaming light into the nanoworld. 2007 , 3, 839-840	3
978	Light in tiny holes. 2007 , 445, 39-46	1641
977	Next-generation sequencing outpaces expectations. 2007 , 25, 149	38
976	Toward nanoscale genome sequencing. 2007 , 25, 385-9	32
975	Chapter 1 Overview: Developments in DNA Sequencing. 2007 , 3-44	3
974	Bionanofabrication by Near-Field Optical Methods. 2007 , 3, 223-240	2
973	Modeling Fluorescence Enhancement from Metallic Nanocavities. 2007 , 2, 129-141	19
972	Surface modified single molecules free-diffusion evidenced by fluorescence correlation spectroscopy. 2008 , 18, 1115-22	5
971	Soft lithography meets self-organization: Some new developments in meso-patterning. 2008 , 31, 249-261	28
970	Optofluidic waveguides: I. Concepts and implementations. 2008 , 4, 3-16	130

969	Nanohole arrays in metal films as optofluidic elements: progress and potential. 2008 , 4, 107-116		70
968	Fluorescence fluctuations analysis in nanoapertures: physical concepts and biological applications. 2008 , 130, 795-805		13
967	Advantages and limitations of next-generation sequencing technologies: a comparison of electrophoresis and non-electrophoresis methods. 2008 , 29, 4618-26		111
966	Double layer overlap in ac electroosmosis. 2008 , 27, 297-308		47
965	Nano-biophotonics: new tools for chemical nano-analytics. 2008 , 12, 497-504		17
964	Translation at the single-molecule level. 2008 , 77, 177-203		106
963	Interaction of nanoparticles with lipid membrane. <i>Nano Letters</i> , 2008 , 8, 941-4	11.5	295
962	Analysis of DNA sequencing systems based on capillary electrophoresis. 2008 , 53, 763-775		2
961	The development and impact of 454 sequencing. 2008 , 26, 1117-24		381
960	Next-generation DNA sequencing. 2008 , 26, 1135-45		3040
959	Cutting the forest to see a single tree?. 2008 , 4, 440-3		18
958	Do-it-yourself guide: how to use the modern single-molecule toolkit. 2008 , 5, 475-89		268
957	Optical antennas focus in on biology. 2008 , 2, 201-203		84
956	Emerging DNA sequencing technologies for human genomic medicine. 2008 , 13, 569-77		56
955	Single-molecule DNA sequencing technologies for future genomics research. 2008 , 26, 602-11		160
954	Supercritical angle fluorescence correlation spectroscopy. <i>Biophysical Journal</i> , 2008 , 94, 221-9	2.9	48
953	FCS imaging--a way to look at cellular processes. <i>Biophysical Journal</i> , 2008 , 94, 1943-4	2.9	2
952	Conformation, length, and speed measurements of electrodynamically stretched DNA in nanochannels. <i>Biophysical Journal</i> , 2008 , 95, 273-86	2.9	67

951	Fluorescence imaging of membrane dynamics. 2008 , 10, 311-38		103
950	Overview of DNA sequencing strategies. 2008 , Chapter 7, Unit 7.1		38
949	Large-scale assembly of colloidal nanoparticles and fabrication of periodic subwavelength structures. <i>Nanotechnology</i> , 2008 , 19, 475604	3-4	82
948	Single-molecule biophysics: at the interface of biology, physics and chemistry. 2008 , 5, 15-45		224
947	Advances in single-molecule fluorescence methods for molecular biology. 2008 , 77, 51-76		596
946	Probing the dynamics of protein-protein interactions at neuronal contacts by optical imaging. 2008 , 108, 1565-87		54
945	Single Molecules and Nanotechnology. 2008 ,		6
944	Zero-mode waveguides: sub-wavelength nanostructures for single molecule studies at high concentrations. 2008 , 46, 11-7		48
943	Probing the function of ionotropic and G protein-coupled receptors in surface-confined membranes. 2008 , 46, 104-15		17
942	Parallel confocal detection of single molecules in real time. <i>Optics Letters</i> , 2008 , 33, 1026-8	3	72
941	Improved focused ion beam fabrication of near-field apertures using a silicon nitride membrane. <i>Optics Letters</i> , 2008 , 33, 2827-9	3	18
940	Plasmon-controlled fluorescence: a new paradigm in fluorescence spectroscopy. 2008 , 133, 1308-46		492
939	Emission and excitation contributions to enhanced single molecule fluorescence by gold nanometric apertures. 2008 , 16, 3008-20		110
938	Single molecule correlation spectroscopy in continuous flow mixers with zero-mode waveguides. 2008 , 16, 10077-90		19
937	Transmission resonances of electromagnetic wave through metallic gratings: phase and field characterizations. 2008 , 16, 17098-106		9
936	10000 times volume reduction for fluorescence correlation spectroscopy using nano-antennas. 2008 , 16, 20597-602		35
935	Surface enhanced fluorescence. 2008 , 41, 013001		517
934	Micro- and Nanotechnology Nanopores. <i>Biophysical Journal</i> , 2008 , 94, 553-566	2.9	

933	Keeping up with the next generation: massively parallel sequencing in clinical diagnostics. 2008 , 10, 484-92		163
932	Nanoaperture-enhanced fluorescence: Towards higher detection rates with plasmonic metals. 2008 , 77,		82
931	Chapter 7: Nanopore-Based Optofluidic Devices for Single Molecule Sensing. 2008 , 139-155		
930	New concepts for fluorescence correlation spectroscopy on membranes. 2008 , 10, 3487-97		103
929	Theory of fluorescence correlation spectroscopy at variable observation area for two-dimensional diffusion on a meshgrid. 2008 , 4, 1288-1301		27
928	State of the Art and Novel Trends in Fluorescence Correlation Spectroscopy. 2008 , 145-197		37
927	Templated fabrication of sub-100 nm periodic nanostructures. 2008 , 3163-5		27
926	Protein modification for single molecule fluorescence microscopy. 2008 , 6, 3031-7		13
925	Real-time imaging of single-molecule fluorescence with a zero-mode waveguide for the analysis of protein-protein interaction. <i>Analytical Chemistry</i> , 2008 , 80, 6018-22	7.8	65
924	Patterning fluid and elastomeric surfaces using short-wavelength UV radiation and photogenerated reactive oxygen species. 2008 , 59, 411-32		10
923	Fast mixing and reaction initiation control of single-enzyme kinetics in confined volumes. 2008 , 24, 4439-42		36
922	Sensing single base incorporation with nanopore micromanipulation. 2008 , 3, 92-4		1
921	Disposable microscope objective lenses for fluorescence correlation spectroscopy using latex microspheres. <i>Analytical Chemistry</i> , 2008 , 80, 6800-4	7.8	41
920	Nanophotonics with sub-wavelength holes and nanoparticles. 2008 ,		
919	Investigation of Electroosmotic Flow in Nanosilica Particle Packed Capillaries. 2008 , 31, 2541-2553		1
918	Chapter 1: In vivo applications of fluorescence correlation spectroscopy. 2008 , 89, 3-35		37
917	Long, processive enzymatic DNA synthesis using 100% dye-labeled terminal phosphate-linked nucleotides. 2008 , 27, 1072-83		64
916	Nanobiotechnology and cell biology: micro- and nanofabricated surfaces to investigate receptor-mediated signaling. 2008 , 37, 265-88		79

915	Selective aluminum passivation for targeted immobilization of single DNA polymerase molecules in zero-mode waveguide nanostructures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 1176-81	11,5	170
914	Effect of the C-terminal truncation on the functional cycle of chaperonin GroEL: implication that the C-terminal region facilitates the transition from the folding-arrested to the folding-competent state. 2008 , 283, 23931-9		27
913	An artificial processivity clamp made with streptavidin facilitates oriented attachment of polymerase-DNA complexes to surfaces. 2008 , 36, e121		14
912	Controlling the surface properties of nanostructures for studies of polymerases. <i>Nanotechnology</i> , 2008 , 19, 465301	3.4	2
911	Picocalorimetric method for DNA sequencing). 2008 , 26, 661		6
910	Improved fabrication of zero-mode waveguides for single-molecule detection. <i>Journal of Applied Physics</i> , 2008 , 103, 034301	2.5	74
909	Fluorescence correlation spectroscopy with sub-diffraction-limited resolution using near-field optical probes. 2008 , 93, 163904		51
908	Giant optical transmission through a metallic nano-slit achieved by the optimization of the groove periodicity and other parameters. 2008 ,		4
907	Imaging and Molecular Motors. 41-85		
906	Red light, green light: probing single molecules using alternating-laser excitation. 2008 , 36, 738-44		23
905	Studying the Dynamics of Ligand-Receptor Complexes by Single-Molecule Techniques. 131-170		
904	Protein Dynamics and Interactions. 191-236		
903	Large areas of periodic nanoholes perforated in multistacked films produced by lift-off. 2008 , 26, 1745		18
902	Fluorescence enhancement and focal volume reduction observed in c-shaped nano-apertures. 2008		
901	Recent patents of gene sequences relative to DNA polymerases. 2008 , 2, 145-63		5
900	A novel nano-photonics biosensor concept for rapid molecular diagnostics. 2008 ,		
899	. 2008 ,		12
898	. 2009 ,		2

897	High volume confinement in two-photon total-internal-reflection fluorescence correlation spectroscopy. 2009 , 94, 083902	14
896	Emergence of single-molecule sequencing and potential for molecular diagnostic applications. 2009 , 9, 659-66	25
895	Single-nucleotide discrimination in immobilized DNA oligonucleotides with a biological nanopore. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 7702-7	11.5 351
894	Fabrication and interfacing of nanochannel devices for single-molecule studies. 2009 , 19, 065017	21
893	Metal-Based Photonic Coatings from Electrochemical Deposition. 2009 , 156, D508	16
892	Dynamical modeling of molecular constructions and setups for DNA unzipping. 2009 , 6, 025003	4
891	Future lab-on-a-chip technologies for interrogating individual molecules. 2009 , 330-336	2
890	Near-Field Fluorescence Correlation Spectroscopy Using a Fiber Probe. 2009 , 48, 070209	4
889	Single-Molecule Assay of Biological Reaction in Femtoliter Chamber Array. 2009 , 48, 08JA04	4
888	Large-scale assembly of periodic nanostructures with metastable square lattices. 2009 , 27, 1043	16
887	Near-field optical probes provide subdiffraction-limited excitation areas for fluorescence correlation spectroscopy on membranes. 2009 , 81, 1645-1653	4
886	Shell closure effects studied via cluster decay in heavy nuclei. 2009 , 36, 015110	16
885	Chapter 15 - Complex nanotube-liposome networks. 2009 , 464, 309-25	4
884	Integrated microfluidic systems for high-performance genetic analysis. 2009 , 27, 572-81	115
883	Micro- and nanofluidic systems for high-throughput biological screening. 2009 , 14, 134-46	171
882	Sequenzierung einzelner DNA-Moleküle in Echtzeit. 2009 , 121, 4777-4779	1
881	Sequencing single DNA molecules in real time. 2009 , 48, 4683-5	11
880	Probing cell-surface dynamics and mechanics at different scales. 2009 , 132, 247-52	1

879	Waveguiding properties and applications of silica nanowires in various environments. 2009 , 5, 241-243		0
878	Localization of Near-Field Resonances in Bowtie Antennae: Influence of Adhesion Layers. 2009 , 4, 37-50		67
877	Optical nano-antennas and metamaterials. 2009 , 12, 16-24		20
876	Perspectives and challenges of emerging single-molecule DNA sequencing technologies. 2009 , 5, 2638-49		81
875	The challenges of sequencing by synthesis. 2009 , 27, 1013-23		189
874	Sequencing in real time. 2009 , 27, 150-1		26
873	Eavesdropping on DNA replication. 2009 , 3, 79-80		3
872	Nanostructure-based electrical biosensors. 2009 , 4, 318-334		143
871	Resonantly enhanced transmission of light through subwavelength apertures with dielectric filling. 2009 , 282, 1467-1471		18
870	Real-time DNA sequencing from single polymerase molecules. <i>Science</i> , 2009 , 323, 133-8	33.3	2491
869	Metamaterial-induced band-gap of surface plasmon propagation. 2009 , 11, 114018		0
868	Exploring single-molecule dynamics with fluorescence nanoscopy. 2009 , 11, 103054		69
867	Shear-driven redistribution of surfactant affects enzyme activity in well-mixed femtoliter droplets. <i>Analytical Chemistry</i> , 2009 , 81, 4922-8	7.8	26
866	Nanoaperture-enhanced signal-to-noise ratio in fluorescence correlation spectroscopy. <i>Analytical Chemistry</i> , 2009 , 81, 834-9	7.8	41
865	Near-field optical study of protein transport kinetics at a single nuclear pore. <i>Nano Letters</i> , 2009 , 9, 3330-5	16.5	35
864	Electrochemical Control of the Time-Dependent Intensity Fluctuations in Surface-Enhanced Raman Scattering (SERS). 2009 , 113, 17737-17744		56
863	Interaction of lipid membrane with nanostructured surfaces. 2009 , 25, 6287-99		73
862	Generations of sequencing technologies. 2009 , 93, 105-11		239

861	Total internal reflection with fluorescence correlation spectroscopy: Applications to substrate-supported planar membranes. 2009 , 168, 95-106		28
860	Molecular neuroimaging--a proposal for a novel approach to high resolution recording of neural activity in nervous systems. 2009 , 73, 876-82		
859	Extraordinary optical absorption through subwavelength slits. <i>Optics Letters</i> , 2009 , 34, 686-8	3	170
858	Effect of target localization on the sensitivity of a localized surface plasmon resonance biosensor based on subwavelength metallic nanostructures. 2009 , 26, 1027-34		40
857	Nanocavity antenna array for enhancing extraordinary optical transmission of light through a metallic nanoslit. 2009 , 26, 2131		11
856	A theoretical re-examination of giant transmission of light through a metallic nano-slit surrounded with periodic grooves. 2009 , 17, 13995-4000		18
855	Numerical analysis of the propagation properties of subwavelength semiconductor slit in the terahertz region. 2009 , 17, 15359-71		41
854	Characterization of acceptance angles of small circular apertures. 2009 , 17, 23903-13		2
853	Lorentzian spatial intensity distribution in one-photon fluorescence correlation spectroscopy. 2009 , 48, 6050-8		7
852	In Honor of W.E. Moerner: Confining Molecules for Single-Molecule Spectroscopy. 2009 , 49, 275-282		4
851	Next-generation sequencing: from basic research to diagnostics. 2009 , 55, 641-58		555
850	Overview of electrochemical DNA biosensors: new approaches to detect the expression of life. 2009 , 9, 3122-48		101
849	Handbook of Single-Molecule Biophysics. 2009 ,		49
848	Bacterial genome sequencing. <i>Methods in Molecular Biology</i> , 2009 , 551, 231-47	1.4	18
847	Optical Guided-wave Chemical and Biosensors I. 2009 ,		7
846	Simulation of Single Mode Nanowires for Ambient Refractive Index Sensing. 2009 ,		0
845	Short-read sequencing technologies for transcriptional analyses. 2009 , 60, 305-33		111
844	Fundamental Concepts in Biophysics. 2009 ,		6

843	Optical Sensor Systems in Biotechnology. 2009 ,	2
842	Plasmon-controlled fluorescence towards high-sensitivity optical sensing. 2009 , 116, 29-72	12
841	Fluorescence Spectroscopy. 2009 , 1-48	
840	Mutants of Taq DNA polymerase resistant to PCR inhibitors allow DNA amplification from whole blood and crude soil samples. 2009 , 37, e40	164
839	High-Throughput DNA Sequencing. 47-67	
838	Biophotonics applications of nanometric apertures. 2009 , 34, 488	5
837	High volume confinement in two-photon fluorescence correlation spectroscopy with radially polarized light. 2009 ,	1
836	Near-field optical fluorescence correlation spectroscopy. 2010 ,	
835	Enhanced fluorescence from metal nanoapertures: physical characterizations and biophotonic applications. 2010 ,	8
834	Fluorescence correlation spectroscopy of particles in a transport channel illuminated by the evanescent field of a near-field optical aperture. 2010 ,	
833	Localized Surface Plasmon Coupled Fluorescence Fiber Optic Based Biosensing. 2010 , 183-259	0
832	Magnetic-field enhancement beyond the skin-depth limit. 2010 ,	
831	Nanohole Arrays in Metal Films as Integrated Chemical Sensors and Biosensors. 2010 , 155-179	
830	Highly confined surface plasmon polariton resonances in rectangular nanopore cavities. 2010 , 4, 247-249	9
829	Motion of an atom in a weakly driven fiber-Bragg-grating cavity: Force, friction, and diffusion. 2010 , 81,	10
828	Confined detection volume of fluorescence correlation spectroscopy by bare fiber probes. 2010 , 39, 855-60	7
827	Advances in genome studies: The PAG 2010 conference. 2010 , 10, 1-9	4
826	Single-molecule fluorescence characterization in native environment. 2010 , 2, 159-167	7

825	The next-generation sequencing technology and application. 2010 , 1, 520-36	97
824	The next-generation sequencing technology: a technology review and future perspective. 2010 , 53, 44-57	47
823	Nanoaperture Fluorescence Enhancement in the Ultraviolet. 2010 , 5, 169-174	33
822	Plasmon-Assisted Optical Curtains. 2010 , 5, 369-374	4
821	Joint Base-Calling of Two DNA Sequences With Factor Graphs. 2010 , 56, 724-733	2
820	Enhanced Fluorescence Microscopic Imaging by Plasmonic Nanostructures: From a 1D Grating to a 2D Nanohole Array. 2010 , 20, 945-950	62
819	Analytische Chemie im Femtoliter. 2010 , 122, 3970-3986	12
818	Analytical chemistry on the femtoliter scale. 2010 , 49, 3880-95	62
817	Resonant optical transmission through hole-arrays in metal films: physics and applications. 2010 , 4, 311-335	124
816	Single-molecule studies of DNA replisome function. 2010 , 1804, 1094-112	17
815	Modifications to the dNTP triphosphate moiety: from mechanistic probes for DNA polymerases to antiviral and anti-cancer drug design. 2010 , 1804, 1223-30	28
814	Visualizing protein-DNA interactions at the single-molecule level. 2010 , 14, 15-22	41
813	Third generation DNA sequencing: pacific biosciences' single molecule real time technology. 2010 , 17, 675-6	140
812	Recent advances in single-molecule sequencing. 2010 , 21, 4-11	46
811	Single-molecule FRET imaging for enzymatic reactions at high ligand concentrations. 2010 , 6, 346-50	23
810	Real-time tRNA transit on single translating ribosomes at codon resolution. 2010 , 464, 1012-7	291
809	Third-generation sequencing fireworks at Marco Island. 2010 , 28, 426-8	57
808	Detecting methylated bases in real time. 2010 , 28, 565	

807	Plasmonics for extreme light concentration and manipulation. 2010 , 9, 193-204	3116
806	Direct detection of DNA methylation during single-molecule, real-time sequencing. 2010 , 7, 461-5	1023
805	Sequencing technologies - the next generation. 2010 , 11, 31-46	4986
804	Nanoscale Techniques for Biomarker Quantification. 2010 , 457-493	
803	. 2010 ,	69
802	. 2010 ,	15
801	A flexible and efficient template format for circular consensus sequencing and SNP detection. 2010 , 38, e159	292
800	Integrated Carbon Nanotubes Electrodes in Microfluidic Chip via MWPCVD. 2010 , 12, 556-560	1
799	Fluorescence correlation spectroscopy on nano-fakir surfaces. 2010 ,	1
798	Single-molecule study on the decay process of the football-shaped GroEL-GroES complex using zero-mode waveguides. 2010 , 285, 23159-64	31
797	Liquid-Core Waveguide Sensors. 2010 , 195-219	2
796	Bimetallic nanopetals for thousand-fold fluorescence enhancements. 2010 , 97, 203101	43
795	Single-molecule binding experiments on long time scales. 2010 , 81, 083705	12
794	Wafer-scale nanopatterning using electrodeposition. 2010 , 28, 849-853	1
793	Enhancing Fluorescence with Sub-Wavelength Metallic Apertures. 2010 , 489-527	1
792	Recent developments in fluorescence correlation spectroscopy for diffusion measurements in planar lipid membranes. 2010 , 11, 427-57	41
791	Photonic methods to enhance fluorescence correlation spectroscopy and single molecule fluorescence detection. 2010 , 11, 206-21	39
790	Targeted deep resequencing of the human cancer genome using next-generation technologies. 2010 , 27, 135-58	10

789	High-throughput single-molecule fluorescence spectroscopy using parallel detection. 2010 , 7608,		11
788	A novel fabrication method for centimeter-long surface-micromachined nanochannels. 2010 , 20, 015040		7
787	Nanovesicle trapping for studying weak protein interactions by single-molecule FRET. 2010 , 472, 41-60		19
786	Surfing on a new wave of single-molecule fluorescence methods. 2010 , 7, 031001		68
785	A window into third-generation sequencing. 2010 , 19, R227-40		628
784	Prospects for the Use of Next-Generation Sequencing Methods in Ornithology. 2010 , 127, 4-15		40
783	Temperature-independent porous nanocontainers for single-molecule fluorescence studies. <i>Analytical Chemistry</i> , 2010 , 82, 9694-701	7.8	19
782	Formation of SiO ₂ Air-Gap Patterns Through scCO ₂ Infusion of NIL Patterned PHEMA. 2010 , 22, 1445-1451		10
781	Templated Fabrication of Periodic Arrays of Metallic Attoliter Petri Dishes. 2010 , 22, 1768-1775		12
780	Convex lens-induced confinement for imaging single molecules. <i>Analytical Chemistry</i> , 2010 , 82, 6224-9	7.8	67
779	Nonradiative Excitation Fluorescence: Probing Volumes Down to the Attoliter Range. 2010 , 1, 2451-2454		12
778	Two-photon fluorescence correlation spectroscopy with high count rates and low background using dielectric microspheres. 2010 , 1, 1075-1083		13
777	Small volume excitation and enhancement of dye fluorescence on a 2D photonic crystal surface. 2010 , 18, 3693-9		19
776	Fluorescence enhancement by a two-dimensional dielectric annular Bragg resonant cavity. 2010 , 18, 25029-34		11
775	Single-molecule DNA analysis. 2010 , 3, 109-28		21
774	Electromagnetic scattering by a subwavelength circular hole in a perfect metal plate of finite thickness: matched asymptotic expansion. 2010 , 27, 1031		2
773	Lipid diffusion in planar membranes investigated by fluorescence correlation spectroscopy. 2010 , 1798, 1377-91		176
772	Light passing through subwavelength apertures. 2010 , 82, 729-787		940

771	Complex molecular dynamics in the spotlight. 2010 , 28, 564-5		7
770	Strong Modification of Quantum Dot Spontaneous Emission via Gap Plasmon Coupling in Metal Nanoslits 2010 , 114, 7269-7273		42
769	Controlled directionality of ellipsoids in monolayer and multilayer colloidal crystals. 2010 , 26, 11544-9		26
768	Optical Guided-wave Chemical and Biosensors II. 2010 ,		18
767	High-throughput nanofabrication of infrared plasmonic nanoantenna arrays for vibrational nanospectroscopy. <i>Nano Letters</i> , 2010 , 10, 2511-8	11.5	171
766	Single Molecule Spectroscopy in Chemistry, Physics and Biology. 2010 ,		22
765	Nanofluidic technology for biomolecule applications: a critical review. 2010 , 10, 957-85		181
764	Nanofluidics in chemical analysis. 2010 , 39, 1060-72		140
763	References. 2010 , 807-843		
762	Systems Biology for Ecology: From Molecules to Ecosystems. 2010 , 43, 87-149		26
761	Real-time DNA sequencing from single polymerase molecules. 2010 , 472, 431-55		151
760	DNA manipulation, sorting, and mapping in nanofluidic systems. 2010 , 39, 1133-52		142
759	Determination of surface protein coverage by composite waveguide based polarimetric interferometry. 2011 , 136, 5277-82		7
758	Photoactivated capture molecule immobilization in plasmonic nanoapertures in the ultraviolet. 2011 , 11, 841-4		9
757	The properties and applications of single-molecule DNA sequencing. 2011 , 12, 217		84
756	Unfolding dynamics of cytochrome c revealed by single-molecule and ensemble-averaged spectroscopy. 2011 , 13, 5651-8		36
755	Biophysics at the cutting edge: a report from the 55th Annual Meeting of the Biophysical Society. 2011 , 6, 395-400		
754	Bright unidirectional fluorescence emission of molecules in a nanoaperture with plasmonic corrugations. <i>Nano Letters</i> , 2011 , 11, 637-44	11.5	228

753	A 265-base DNA sequencing read by capillary electrophoresis with no separation matrix. <i>Analytical Chemistry</i> , 2011 , 83, 509-15	7.8	25
752	The cat that caught the canary: what to do with single-molecule trapping. 2011 , 5, 5296-9		13
751	Fluorescence correlation spectroscopy: past, present, future. <i>Biophysical Journal</i> , 2011 , 101, 2855-70	2.9	282
750	Transcriptome profiling using single-molecule direct RNA sequencing. <i>Methods in Molecular Biology</i> , 2011 , 733, 51-61	1.4	27
749	Plasmonic antennas for directional sorting of fluorescence emission. <i>Nano Letters</i> , 2011 , 11, 2400-6	11.5	150
748	Nanodevices for DNA Analysis. 2011 ,		
747	Detecting nanodomains in living cell membrane by fluorescence correlation spectroscopy. 2011 , 62, 417-36		115
746	Mechanistic insights into antibiotic action on the ribosome through single-molecule fluorescence imaging. 2011 , 1241, E1-16		6
745	Overview of DNA sequencing strategies. 2011 , Chapter 7, Unit7.1		54
744	Single-Molecule FRET of Protein-Folding Dynamics. 2011 , 23-48		1
743	Vertical nanopillars for highly localized fluorescence imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 3894-9	11.5	86
742	Ribosomes. 2011 ,		9
741	A low-voltage electrokinetic nanochannel drug delivery system. 2011 , 11, 2526-34		37
740	Single molecule experimentation in biological physics: exploring the living component of soft condensed matter one molecule at a time. 2011 , 23, 503101		10
739	Ultrasensitive fluorescence-based methods for nucleic acid detection: towards amplification-free genetic analysis. 2011 , 47, 3717-35		52
738	Single-Molecule FRET: Technique and Applications to the Studies of Molecular Machines. 4-19		1
737	Damage-free Fabrication of Perfluoropolymer Microaperture Array Device for Single-molecule Imaging. 2011 , 36, 553-556		1
736	Advances in whole genome sequencing technology. 2011 , 12, 293-305		46

735	Frontiers in DNA Sequencing: the (R)Evolution of Sequencing Technologies. 2011,		
734	Moving into the cell: single-molecule studies of molecular motors in complex environments. 2011, 12, 163-76		131
733	Probing cellular protein complexes using single-molecule pull-down. 2011, 473, 484-8		288
732	Extraordinary transmission of evanescent modes through a dielectric-filled nanowaveguide. 2011, 284, 4805-4809		10
731	Dynamics of the translational machinery. 2011, 21, 137-45		49
730	Biophysics of single molecules. 2011, 56, 858-882		
729	In vitro and in vivo single-molecule fluorescence imaging of ribosome-catalyzed protein synthesis. 2011, 15, 853-63		16
728	Landscape of next-generation sequencing technologies. <i>Analytical Chemistry,</i> 2011, 83, 4327-41	7.8	253
727	Fungal Genomics. <i>Methods in Molecular Biology,</i> 2011,	1.4	2
726	Single molecule fluorescence spectroscopy: a tool for protein studies approaching cellular environmental conditions. 2011, 7, 1254-1259		15
725	Plasmonic beaming and active control over fluorescent emission. <i>Nature Communications,</i> 2011, 2, 283	17.4	156
724	Next generation sequencing 2011, 159, 827-833		11
723	Micro/nanofabricated environments for synthetic biology. 2011, 22, 516-26		13
722	Sequencing technologies and genome sequencing. 2011, 52, 413-35		426
721	Current trends in nanobiosensor technology. 2011, 3, 229-46		95
720	Fluorescence correlation spectroscopy in vivo. 2011, 5, 52-67		47
719	Single-molecule approaches to characterizing kinetics of biomolecular interactions. 2011, 22, 75-80		93
718	Fluorescence correlation spectroscopy near individual gold nanoparticle. 2011, 503, 256-261		20

717	Multiple beams surface plasmon interference generation: A theoretical analysis. 2011 , 284, 2042-2045	7
716	Engineering optical response through gold bowtie nanoantennas array. 2011 , 33, 807-811	2
715	Fabrication of Zero-Mode Waveguide by Ultraviolet Nanoimprint Lithography Lift-Off Process. 2011 , 50, 06GK07	2
714	Subsequent bilateral comparison to CCT-K3, CIPM key comparison CCT-K3.1: Comparison of standard platinum resistance thermometers at the triple point of water (T= 273.16 K) and at the melting point of gallium (T= 302.9146 K). 2011 , 48, 03001-03001	
713	THE CENTRAL SLOPE OF DARK MATTER CORES IN DWARF GALAXIES: SIMULATIONS VERSUS THINGS. 2011 , 142, 24	188
712	Enhanced transmission of electromagnetic waves through split-ring resonator-shaped apertures. 2011 , 5, 051812	5
711	Array imaging using intensity-only measurements. 2011 , 27, 015005	111
710	New photon-counting detectors for single-molecule fluorescence spectroscopy and imaging. 2011 , 8033, 803316	9
709	Biological mechanisms, one molecule at a time. 2011 , 25, 1205-31	87
708	Enhancing single molecule imaging in optofluidics and microfluidics. 2011 , 12, 5135-56	18
707	Proofreading of misincorporated nucleotides in DNA transcription. 2012 , 9, 036002	2
706	Composition of the early intestinal microbiota: knowledge, knowledge gaps and the use of high-throughput sequencing to address these gaps. 2012 , 3, 203-20	159
705	Nano/microchannel fabrication based on SU-8 using sacrificial resist etching method. 2012 , 7, 1320-1323	3
704	Resonant transmission of light through ZnO nanowaveguides in a silver film. 2012 , 101, 081113	4
703	Fabrication of long poly(dimethyl siloxane) nanochannels by replicating protein deposit from confined solution evaporation. 2012 , 6, 26504	7
702	Integrated photonic structures for efficient, massively-parallel collection of directional single-molecule fluorescence. 2012 ,	
701	Mutation Discovery Using High-Throughput Mutation Screening Technology. 2012 , 139-163	
700	Improved fabrication of zero-mode waveguides for monitoring specific molecular dynamics in living cells. 2012 ,	

699	Single-molecule enzyme dynamics of monomeric sarcosine oxidase in a gold-based zero-mode waveguide. 2012 , 66, 163-9		19
698	Characteristics analysis of coating layer power distribution of eccentric core optical fiber. 2012 ,		1
697	Localization of light with near-field probes. 165-200		
696	Mass action at the single-molecule level. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14618-23	16.4	34
695	Exploiting the light-metal interaction for biomolecular sensing and imaging. 2012 , 45, 209-55		57
694	Current state-of-art of sequencing technologies for plant genomics research. 2012 , 11, 3-11		102
693	Optical imaging techniques in microfluidics and their applications. 2012 , 12, 3566-75		173
692	Implantation of nanomaterials and nanostructures on surface and their applications. 2012 , 7, 258-281		63
691	Fluorescence correlation spectroscopy at high concentrations using gold bowtie nanoantennas. 2012 , 406, 3-8		40
690	Thermal materials: Pulling together to control heat flow. 2012 , 7, 82-3		10
689	An organic nanowire-metal nanoparticle hybrid for the highly enhanced fluorescence detection of dopamine. 2012 , 48, 5883-5		22
688	Exonucleolytic degradation of high-density labeled DNA studied by fluorescence correlation spectroscopy. 2012 , 137, 1160-7		3
687	A zeptoliter volume meter for analysis of single protein molecules. <i>Nano Letters</i> , 2012 , 12, 370-5	11.5	22
686	Live-cell imaging of single receptor composition using zero-mode waveguide nanostructures. <i>Nano Letters</i> , 2012 , 12, 3690-4	11.5	55
685	Nanophotonics using a subwavelength aperture in a metal film. 2012 , 1, 339-362		6
684	Single molecule fluorescence under conditions of fast flow. <i>Analytical Chemistry</i> , 2012 , 84, 179-85	7.8	30
683	Engineered Nanostructures for the Ultrasensitive DNA Detection. 2012 , 67-87		1
682	A general approach to break the concentration barrier in single-molecule imaging. 2012 , 9, 987-92		63

681	Micro and nanotechnological tools for study of RNA. 2012 , 94, 1588-94		2
680	Encyclopedia of Nanotechnology. 2012 , 769-775		1
679	Fluorescence enhancement at docking sites of DNA-directed self-assembled nanoantennas. <i>Science</i> , 2012 , 338, 506-10	33.3	512
678	Ultrabright bowtie nanoaperture antenna probes studied by single molecule fluorescence. <i>Nano Letters</i> , 2012 , 12, 5972-8	11.5	64
677	Single-molecule, genome-scale analyses of DNA modifications: exposing the epigenome with next-generation technologies. 2012 , 4, 403-14		10
676	High-throughput bacterial genome sequencing: an embarrassment of choice, a world of opportunity. 2012 , 10, 599-606		326
675	Encyclopedia of Nanotechnology. 2012 , 783-783		
674	3.6 Single-Molecule Spectroscopy of Protein Folding. 2012 , 115-137		
673	5.17 Single Molecule Measurements in Membranes. 2012 , 337-365		
672	Applications of next-generation sequencing in plant biology. 2012 , 99, 175-85		212
671	Nanopores: Tiny holes with great promise. 2012 , 7, 81-2		10
670	Nanofluidics: Neither shaken nor stirred. 2011 , 7, 6-7		21
669	Optofluidic concentration: plasmonic nanostructure as concentrator and sensor. <i>Nano Letters</i> , 2012 , 12, 1592-6	11.5	102
668	2.11 Fluorescence Correlation Spectroscopy. 2012 , 210-245		9
667	Plasmonic near-field in the vicinity of a single gold nanoparticle investigated with fluorescence correlation spectroscopy. 2012 , 4, 3359-64		12
666	Characterization of dark quencher chromophores as nonfluorescent acceptors for single-molecule FRET. <i>Biophysical Journal</i> , 2012 , 102, 2658-68	2.9	37
665	Future challenges in single-molecule fluorescence and laser trap approaches to studies of molecular motors. 2012 , 23, 1084-91		22
664	Biosensor based on hollow-core metal-cladding waveguide. 2012 , 183, 22-27		6

663 CHAPTER 2:Fluorophore Conjugates for Single Molecule Work. **2012**, 34-74

662 Silver Nanostructures for Fluorescence Correlation Spectroscopy: Reduced Volumes and Increased Signal Intensities. **2012**, 3, 2915-2919 19

661 Zero-mode waveguides for single-molecule analysis. **2012**, 41, 269-93 82

660 Fabrication of nanoscale zero-mode waveguides using microlithography for single molecule sensing. *Nanotechnology*, **2012**, 23, 455301 3-4 5

659 Detection of Non-Amplified Genomic DNA. **2012**, 10

658 Nanofibers with Bragg gratings from equidistant holes. **2012**, 59, 274-286 16

657 Plasmonic-enhanced molecular fluorescence within isolated bowtie nano-apertures. **2012**, 6, 1438-48 70

656 Encyclopedia of Nanotechnology. **2012**, 789-789

655 2.8 Super-Resolution Near-Field Optical Microscopy. **2012**, 144-164

654 References. 387-445

653 Applications for next-generation sequencing in fish ecotoxicogenomics. **2012**, 3, 62 47

652 Subwavelength Plasmonic Waveguides and Plasmonic Materials. **2012**, 2012, 1-12 25

651 Single molecular level analysis and processing in nanochannels. **2012**, 4, 1461-74

650 Direct Visualization of Single-Molecule DNA-Binding Proteins Along DNA to Understand DNA-Protein Interactions. **2012**,

649 Direct sequencing of small genomes on the Pacific Biosciences RS without library preparation. **2012**, 53, 365-72 40

648 Single-molecule analysis of translational dynamics. **2012**, 4, a011551 30

647 Nanofluidic devices towards single DNA molecule sequence mapping. **2012**, 5, 673-86 27

646 Overview of Sequencing Technology Platforms. **2012**, 11-25 19

645	Third-generation sequencing techniques and applications to drug discovery. 2012 , 7, 231-43	42
644	Nanoantennas for visible and infrared radiation. 2012 , 75, 024402	599
643	Biologically Enabled Syntheses of Freestanding Metallic Structures Possessing Subwavelength Pore Arrays for Extraordinary (Surface Plasmon-Mediated) Infrared Transmission. 2012 , 22, 2550-2559	35
642	Einzelmolekülanalysen mithilfe von DNA-Origami. 2012 , 124, 898-915	33
641	Fluorescence correlation spectroscopy. 2012 , 34, 361-8	172
640	Heterogeneous pathways and timing of factor departure during translation initiation. 2012 , 487, 390-3	70
639	Toward the single-hour high-quality genome. 2012 , 81, 359-78	24
638	Single-molecule mechanoenzymatics. 2012 , 41, 497-518	55
637	Diffraction regimes of single holes. 2012 , 109, 023901	31
636	Nanofabrication for the analysis and manipulation of membranes. 2012 , 40, 1356-66	5
635	Advances in top-down and bottom-up surface nanofabrication: techniques, applications & future prospects. 2012 , 170, 2-27	512
634	Next-generation sequencing approaches for genetic mapping of complex diseases. 2012 , 248, 10-22	15
633	Creating attoliter detection volume by microsphere photonic nanojet and fluorescence depletion. 2012 , 285, 402-406	13
632	Reflection and Transmission Modes in Nanohole-Array-Based Plasmonic Sensors. 2012 , 4, 26-33	37
631	Next-generation sequencing technologies for environmental DNA research. 2012 , 21, 1794-805	554
630	Single-molecule analysis using DNA origami. 2012 , 51, 874-90	175
629	Prism-based spectral imaging of four species of single-molecule fluorophores by using one excitation laser. 2013 , 23, 591-7	2
628	Diagnostics in Plant Breeding. 2013 ,	1

627	Single-molecule nanometry for biological physics. 2013 , 76, 016601	31
626	Introduction to next-generation nucleic acid sequencing in cardiovascular disease research. <i>Methods in Molecular Biology</i> , 2013 , 1027, 157-79	1-4
625	Robustly passivated, gold nanoaperture arrays for single-molecule fluorescence microscopy. 2013 , 7, 8158-66	18
624	Experimental Validation of Resonant Microwave Transmission Through Subwavelength Ridged Circular Apertures in Thin Conducting Screen. 2013 , 55, 2497-2501	1
623	Enhanced Single-Molecule Spontaneous Emission in an Optimized Nanoantenna with Plasmonic Gratings. 2013 , 8, 869-875	7
622	Low-cost fabrication of centimetre-scale periodic arrays of single plasmid DNA molecules. 2013 , 13, 3367-72	3
621	A glimpse into past, present, and future DNA sequencing. 2013 , 110, 3-24	106
620	Micro- and nanoscale devices for the investigation of epigenetics and chromatin dynamics. 2013 , 8, 709-18	47
619	Plasmonic Coupling Effect in Silver Spongelike Networks Nanoantenna for Large Increases of Surface Enhanced Raman Scattering. 2013 , 117, 26295-26304	13
618	Bright cathodoluminescent thin films for scanning nano-optical excitation and imaging. 2013 , 7, 10397-404	12
617	Single-Molecule Applications. 2013 , 323-356	
616	Single-molecule FRET of protein structure and dynamics - a primer. 2013 , 11 Suppl 1, S2	39
615	Scalable bottom-up fabrication of colloidal photonic crystals and periodic plasmonic nanostructures. 2013 , 1, 6031	43
614	Single-molecule studies of RNA polymerases. 2013 , 113, 8377-99	15
613	Potential-dependent single molecule blinking dynamics for flavin adenine dinucleotide covalently immobilized in zero-mode waveguide array of working electrodes. 2013 , 164, 57-69	33
612	207 Nanopore immobilization of DNA polymerase enhances single-molecule sequencing. 2013 , 31, 134-135	1
611	Next-generation sequencing: the future of molecular genetics in poultry production and food safety. 2013 , 92, 562-72	51
610	Precise quantification of transcription factors in a surface-based single-molecule assay. 2013 , 184, 1-7	2

609	In the spotlight: Bioinformatics. 2013 , 6, 3-8	1
608	Nanofluidic delivery of molecules: integrated plasmonic sensing with nanoholes. 2013 , 14, 743-751	4
607	Bacterial replication, transcription and translation: mechanistic insights from single-molecule biochemical studies. 2013 , 11, 303-15	51
606	Encyclopedia of Biophysics. 2013 , 2793-2793	
605	High throughput and high yield nanofabrication of precisely designed gold nanohole arrays for fluorescence enhanced detection of biomarkers. 2013 , 13, 2405-13	34
604	Entering the era of bacterial epigenomics with single molecule real time DNA sequencing. 2013 , 16, 192-8	87
603	Brief introduction to fluorescence correlation spectroscopy. 2013 , 518, 11-41	28
602	DNA sequencing using electrical conductance measurements of a DNA polymerase. 2013 , 8, 452-8	19
601	Detection of DNA Bases and Oligonucleotides in Plasmonic Nanoslits Using Fluidic SERS. 2013 , 19, 4600707-4600707	
600	On-chip nanohole array based sensing: a review. 2013 , 13, 2445-63	135
599	Making connections--strategies for single molecule fluorescence biophysics. 2013 , 17, 691-8	14
598	Single-molecule detection: Breaking the concentration barrier. 2013 , 8, 480-2	16
597	Lab-on-a-chip technologies for single-molecule studies. 2013 , 13, 2183-98	34
596	The impact of aminoglycosides on the dynamics of translation elongation. 2013 , 3, 497-508	54
595	Incident-angle dependence of fluorescence enhancement and biomarker immunoassay on gold nanohole array. 2013 , 186, 205-211	17
594	Reflective plasmonic color filters based on lithographically patterned silver nanorod arrays. 2013 , 5, 6243-8	130
593	Single-molecule measurements of transient biomolecular complexes through microfluidic dilution. <i>Analytical Chemistry</i> , 2013 , 85, 6855-9	7.8 21
592	Nanomechanics: Sensing from the bottom up. 2013 , 8, 482-3	11

591	A plasmonic 'antenna-in-box' platform for enhanced single-molecule analysis at micromolar concentrations. 2013 , 8, 512-6	248
590	Spectroscopy on Single Metallic Nanoparticles Using Subwavelength Apertures. 2013 , 117, 7751-7756	9
589	Optical methods for single molecule detection and analysis. <i>Analytical Chemistry</i> , 2013 , 85, 1258-63	7.8 137
588	Modeling kinetic rate variation in third generation DNA sequencing data to detect putative modifications to DNA bases. 2013 , 23, 129-41	63
587	Single molecule sensing with solid-state nanopores: novel materials, methods, and applications. 2013 , 42, 15-28	357
586	DNA-templated nanoantennas for single-molecule detection at elevated concentrations. 2013 ,	
585	Second harmonic generation correlation spectroscopy for single molecule experiments. 2013 , 21, 27063-73	10
584	Single-molecule fluorescence imaging of processive myosin with enhanced background suppression using linear zero-mode waveguides (ZMWs) and convex lens induced confinement (CLIC). 2013 , 21, 1189-202	36
583	Gold nanoparticles for enhanced single molecule fluorescence analysis at micromolar concentration. 2013 , 21, 27338-43	33
582	Molecule fluorescence modified by a slit-based nanoantenna with dual gratings. 2013 , 30, 2420	7
581	When Medicine Meets Engineering-Paradigm Shifts in Diagnostics and Therapeutics. 2013 , 3, 126-54	4
580	Resonant dipole-dipole interaction in confined and strong-coupling dielectric geometries. 2013 , 15, 083033	30
579	Single molecule interactions studied by using a modified DNA sequencer: a comparison with surface plasmon resonance. 2013 ,	
578	Development of new photon-counting detectors for single-molecule fluorescence microscopy. 2013 , 368, 20120035	81
577	DNA-templated nanoantennas for single-molecule detection at elevated concentrations. 2013 , 18, 65001	9
576	Single-molecule microscopy using tunable nanoscale confinement. 2013 ,	1
575	Surface-enhanced Raman scattering within silver-nanoparticle-decorated nanometric apertures. 2013 , 44, 1512-1517	6
574	Precision platform for convex lens-induced confinement microscopy. 2013 , 84, 103704	17

- 573 Improving zero-mode waveguide structure for enhancing signal-to-noise ratio of real-time single-molecule fluorescence imaging: a computational study. **2013**, 88, 012727 9
- 572 208 Electrophoresis and capture of DNA into a nanopore. **2013**, 31, 135-136
- 571 INSIGHTS IN ENZYME FUNCTIONAL DYNAMICS AND ACTIVITY REGULATION BY SINGLE MOLECULE STUDIES. **2013**, 08, 137-160 15
- 570 Nanoapertures for AFM-based single-molecule force spectroscopy. **2013**, 10, 607 9
- 569 Pyrosequencing for microbial identification and characterization. **2013**, e50405 6
- 568 Enhancement of single molecule fluorescence using conical micromirrors. **2013**,
- 567 Measurements of single molecules in solution and live cells over longer observation times than those currently possible: the meaningful time. **2013**, 14, 441-4 2
- 566 Plasmonic biosensing devices and systems. 217-248
- 565 Waveguide structures for efficient evanescent field coupling to zero mode waveguides. **2014**, 9,
- 564 . **2014**, 3
- 563 Unlocking the mystery of the hard-to-sequence phage genome: PaP1 methylome and bacterial immunity. *BMC Genomics*, **2014**, 15, 803 4-5 10
- 562 Plasmonic Effects. **2014**, 5-50
- 561 Single gold nanoparticles to enhance the detection of single fluorescent molecules at micromolar concentration using fluorescence correlation spectroscopy. **2014**,
- 560 The Chaperonin GroEL Switches the Reaction Cycles in Response to the Concentration of Denatured Proteins. **2014**, 54, 189-194
- 559 Role of epigenetics in expression of recombinant proteins from mammalian cells. **2014**, 2, 403-419 11
- 558 Enhanced spontaneous emission inside hyperbolic metamaterials. **2014**, 22, 4301-6 60
- 557 Simple model for plasmon enhanced fluorescence correlation spectroscopy. **2014**, 22, 15397-409 15
- 556 Combining single-molecule manipulation and single-molecule detection. **2014**, 28, 142-8 34

555	Remote detection of single emitters via optical waveguides. 2014 , 89,	7
554	Zero-mode waveguide detection of flow-driven DNA translocation through nanopores. 2014 , 113, 028302	22
553	Silicon photon-counting avalanche diodes for single-molecule fluorescence spectroscopy. 2014 , 20, 38044201-38044202	1
552	Revolutionizing Prokaryotic Systematics Through Next-Generation Sequencing. 2014 , 75-101	6
551	Extraordinary Transmission-based Plasmonic Nanoarrays for Axially Super-Resolved Cell Imaging. 2014 , 2, 48-55	34
550	Analysis and design of a cross dipole nanoantenna for fluorescence-sensing applications. 2014 , 31, 302	17
549	UV Fluorescence Lifetime Modification by Aluminum Nanoapertures. <i>ACS Photonics</i> , 2014 , 1, 1270-1277 6.3	29
548	New Horizons in Next-Generation Sequencing. 2014 , 51-59	3
547	YOUNG GALAXY CANDIDATES IN THE HUBBLE FRONTIER FIELDS. I. A2744. 2014 , 795, 93	55
546	COMPARING M31 AND MILKY WAY SATELLITES: THE EXTENDED STAR FORMATION HISTORIES OF ANDROMEDA II AND ANDROMEDA XVI. 2014 , 789, 24	27
545	Analysis of plant microbe interactions in the era of next generation sequencing technologies. 2014 , 5, 216	150
544	ATP turnover by individual myosin molecules hints at two conformers of the myosin active site. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 2536-41	11.5 11
543	Low Temperature Fabrication and Surface Modification Methods for Fused Silica Micro- and Nanochannels. 2014 , 1659, 15-26	
542	Application of deep sequence technology in hepatology. 2014 , 44, 141-8	2
541	The dynamic epitranscriptome: N6-methyladenosine and gene expression control. 2014 , 15, 313-26	545
540	Studying DNA-protein interactions with single-molecule Förster resonance energy transfer. 2014 , 251, 317-32	13
539	Second-Generation Sequencing for Cancer Genome Analysis. 2014 , 13-30	1
538	Role of substrate unbinding in Michaelis-Menten enzymatic reactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 4391-6	11.5 130

537	Nanophotonic approaches for nanoscale imaging and single-molecule detection at ultrahigh concentrations. 2014 , 77, 537-45		7
536	Next Generation Sequencing Technologies and Challenges in Sequence Assembly. 2014 ,		31
535	Anomalous light absorption around subwavelength apertures in metal films. 2014 , 112, 193903		11
534	High-throughput platform for real-time monitoring of biological processes by multicolor single-molecule fluorescence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 664-9	11.5	83
533	Metal-enhanced fluorescence using aggregated silver nanoparticles. 2014 , 444, 9-14		15
532	Microarrays and single molecules: an exciting combination. 2014 , 10, 931-41		20
531	Breaking the concentration limit of optical single-molecule detection. 2014 , 43, 1014-28		138
530	Quantum yield and excitation rate of single molecules close to metallic nanostructures. <i>Nature Communications</i> , 2014 , 5, 5356	17.4	60
529	Plasmonic antennas and zero-mode waveguides to enhance single molecule fluorescence detection and fluorescence correlation spectroscopy toward physiological concentrations. 2014 , 6, 268-82		43
528	Complete genome sequence of the plant growth-promoting rhizobacterium <i>Pseudomonas aurantiaca</i> strain JD37. 2014 , 192 Pt A, 85-6		5
527	Directional and enhanced spontaneous emission with a corrugated metal probe. 2014 , 6, 7512-8		11
526	smFRET studies of the 'encounter' complexes and subsequent intermediate states that regulate the selectivity of ligand binding. 2014 , 588, 3526-38		7
525	Fluorescent Methods for Molecular Motors. 2014 ,		
524	Molecular recognition with nanostructures fabricated by photopolymerization within metallic subwavelength apertures. 2014 , 6, 8656-63		12
523	Protein measurements in microwells. 2014 , 14, 3195-200		28
522	Near-field fluorescence cross-correlation spectroscopy on planar membranes. 2014 , 8, 7392-404		18
521	Nanophotonic enhancement of the Förster resonance energy-transfer rate with single nanoapertures. <i>Nano Letters</i> , 2014 , 14, 4707-14	11.5	69
520	Detection of charges and molecules with self-assembled nano-oscillators. <i>Nano Letters</i> , 2014 , 14, 4151-7	11.5	41

519	Efficient synthesis of terminal 4-methylumbelliferyl labeled 5-fluoro-2'-deoxyuridine-5'-O-tetraphosphate (Um-PPPP-FdU): a potential probe for homogenous fluorescent assay. 2014 , 55, 4822-4825		3
518	Optical MEMS: From Micromirrors to Complex Systems. 2014 , 23, 517-538		78
517	Single-molecule positioning in zeromode waveguides by DNA origami nanoadapters. <i>Nano Letters</i> , 2014 , 14, 3499-503	11.5	38
516	Optical Waveguide Spectroscopy. 2014 , 1611-1642		
515	The optical near-field: super-resolution imaging with structural and phase correlation. 2014 , 3, 3-18		4
514	Single-molecule patch-clamp FRET microscopy studies of NMDA receptor ion channel dynamics in living cells: revealing the multiple conformational states associated with a channel at its electrical off state. <i>Journal of the American Chemical Society</i> , 2014 , 136, 12998-3005	16.4	23
513	Fluorescence correlation spectroscopy at micromolar concentrations without optical nanoconfinement. 2014 , 118, 9662-7		16
512	Next generation sequencing technology: Advances and applications. 2014 , 1842, 1932-1941		423
511	Magnetic Field Sensor Based on Nonadiabatic Tapered Optical Fiber With Magnetic Fluid. 2014 , 26, 1904-1907		70
510	Future of portable devices for plant pathogen diagnosis. 2014 , 14, 2887-904		61
509	Visualizing cellular machines with colocalization single molecule microscopy. 2014 , 43, 1189-200		21
508	Potentiometric DNA sensing platform using redox-active DNA probe pair for sandwich-type dual hybridization at indicator electrode surface. 2014 , 720-721, 71-75		2
507	Nanofluidics in point of care applications. 2014 , 14, 3201-5		25
506	Plasmon-Enhanced Brightness and Photostability from Single Fluorescent Proteins Coupled to Gold Nanorods. 2014 , 118, 15027-15035		40
505	Fluorescence correlation spectroscopy: principles and applications. 2014 , 2014, 709-25		39
504	Dark-field illumination on zero-mode waveguide/microfluidic hybrid chip reveals T4 replisomal protein interactions. <i>Nano Letters</i> , 2014 , 14, 1952-60	11.5	22
503	Reversible positioning of single molecules inside zero-mode waveguides. <i>Nano Letters</i> , 2014 , 14, 6023-9	11.5	46
502	Single-enzyme kinetics with fluorogenic substrates: lessons learnt and future directions. 2014 , 588, 3553-63		11

501	The dynamics of SecM-induced translational stalling. 2014 , 7, 1521-1533		35
500	Decoding long nanopore sequencing reads of natural DNA. 2014 , 32, 829-33		291
499	Single-molecule detection and radiation control in solutions at high concentrations via a heterogeneous optical slot antenna. 2014 , 6, 9103-9		30
498	Enhancing single-molecule fluorescence with nanophotonics. 2014 , 588, 3547-52		16
497	Nanomedicine in Diabetes: Using Nanotechnology in Prevention and Management of Diabetes Mellitus. 2014 , 189-204		
496	Placing individual molecules in the center of nanoapertures. <i>Nano Letters</i> , 2014 , 14, 391-5	11.5	29
495	Molecular Plasmonics: Life Sciences Applications. 2014 , 117-156		
494	Optical Properties of Metamaterials and Nanoparticles Made from Them. 2014 , 367-420		
493	. 2014 , 26, 2166-2169		3
492	Improving image contrast in fluorescence microscopy with nanostructured substrates. 2015 , 23, 29772-8		3
491	Synergistic effect of ATP for RuvA-RuvB-Holliday junction DNA complex formation. <i>Scientific Reports</i> , 2015 , 5, 18177	4.9	8
490	Femtoliter-scale optical nanofiber sensors. 2015 , 23, 28408-15		17
489	Modal engineering of Surface Plasmons in apertured Au Nanoprisms. <i>Scientific Reports</i> , 2015 , 5, 16635	4.9	16
488	Nanoscale volume confinement and fluorescence enhancement with double nanohole aperture. <i>Scientific Reports</i> , 2015 , 5, 15852	4.9	45
487	Biomarkers: From Discovery to Commercialization. 2015 , 183-205		
486	Global insights into acetic acid resistance mechanisms and genetic stability of <i>Acetobacter pasteurianus</i> strains by comparative genomics. <i>Scientific Reports</i> , 2015 , 5, 18330	4.9	31
485	FRET enhancement in aluminum zero-mode waveguides. 2015 , 16, 782-8		37
484	. 2015 ,		

483	Single Molecule Oscillations of an RNA/DNA Duplex in a Plasmonic Nanocavity. 2015 , 06,		1
482	MinION—New, Long Read, Portable Nucleic Acid Sequencing Device. 2015 , 45, 285		5
481	Advances in Genetic Diagnosis and Treatment of Hearing Loss [A Thirst for Revolution. 2015 ,		
480	Aluminum Nanoholes for Optical Biosensing. 2015 , 5, 417-31		14
479	High-throughput sequencing technologies. 2015 , 58, 586-97		629
478	Large-Scale Arrays of Bowtie Nanoaperture Antennas for Nanoscale Dynamics in Living Cell Membranes. <i>Nano Letters</i> , 2015 , 15, 4176-82	11.5	32
477	Nanohole Array-Directed Trapping of Mammalian Mitochondria Enabling Single Organelle Analysis. <i>Analytical Chemistry</i> , 2015 , 87, 11973-7	7.8	11
476	Probing molecular choreography through single-molecule biochemistry. 2015 , 22, 948-52		20
475	DNA Origami Nanoantennas with over 5000-fold Fluorescence Enhancement and Single-Molecule Detection at 25 fM. <i>Nano Letters</i> , 2015 , 15, 8354-9	11.5	163
474	Single occupancy spectroelectrochemistry of freely diffusing flavin mononucleotide in zero-dimensional nanophotonic structures. 2015 , 184, 101-15		36
473	Bacterial genomic epidemiology, from local outbreak characterization to species-history reconstruction. 2015 , 109, 319-27		6
472	DNA separation and fluorescent detection in an optofluidic chip with sub-base-pair resolution. 2015 ,		1
471	Single-molecule imaging at high fluorophore concentrations by local activation of dye. <i>Biophysical Journal</i> , 2015 , 108, 949-956	2.9	10
470	Extracting physics of life at the molecular level: A review of single-molecule data analyses. 2015 , 13, 107-37		19
469	The emergence of nanopores in next-generation sequencing. <i>Nanotechnology</i> , 2015 , 26, 074003	3.4	60
468	Enhanced-fluorescence correlation spectroscopy at micro-molar dye concentration around a single gold nanorod. 2015 , 17, 21127-32		18
467	Metagenome assembly through clustering of next-generation sequencing data using protein sequences. 2015 , 109, 180-7		1
466	Emerging DNA Sequencing Technologies. 2015 , 69-76		

465	Correlated Fluctuations of DNA between Nanofluidic Entropic Traps. 2015 , 48, 4742-4747		10
464	Lens-based fluorescence nanoscopy. 2015 , 48, 178-243		101
463	Tip localization of an atomic force microscope in transmission microscopy with nanoscale precision. 2015 , 86, 035109		4
462	An integrated system for optical and electrical detection of single molecules/particles inside a solid-state nanopore. 2015 , 184, 85-99		17
461	Self-Assembled Nanoparticle Dimer Antennas for Plasmonic-Enhanced Single-Molecule Fluorescence Detection at Micromolar Concentrations. <i>ACS Photonics</i> , 2015 , 2, 1099-1107	6.3	91
460	Cancer modelling in the NGS era - Part I: Emerging technology and initial modelling. 2015 , 96, 274-307		7
459	Analysis on the temperature property of sensors based on symmetrical metal-cladding optical waveguide. 2015 ,		
458	Current methods for automated annotation of protein-coding genes. 2015 , 7, 8-14		18
457	A straightforward approach for gated STED-FCS to investigate lipid membrane dynamics. 2015 , 88, 67-75		40
456	Genomic Elements in Health, Disease and Evolution. 2015 ,		3
455	Matching Nanoantenna Field Confinement to FRET Distances Enhances Förster Energy Transfer Rates. <i>Nano Letters</i> , 2015 , 15, 6193-201	11.5	63
454	Genomic Analysis Through High-Throughput Sequencing. 2015 , 297-311		
453	Electrospun polymeric nanofibers encapsulated with nanostructured materials and their applications: A review. 2015 , 24, 1-13		60
452	Advancing small-molecule-based chemical biology with next-generation sequencing technologies. 2015 , 16, 20-38		23
451	Epigenetic Mechanisms in Cellular Reprogramming. 2015 ,		2
450	The Biology and Genomic Localization of Cytosine Modifications. 2015 , 167-191		1
449	Electrospun ZnO hybrid nanofibers for photodegradation of wastewater containing organic dyes: A review. 2015 , 21, 26-35		110
448	Single molecule and single cell epigenomics. 2015 , 72, 41-50		34

447	Microbial Whole-Genome Sequencing: Applications in Clinical Microbiology and Public Health. 2016 , 32-48	1
446	Omnidirectional excitation of sidewall gap-plasmons in a hybrid gold-nanoparticle/aluminum-nanopore structure. 2016 , 1, 031301	
445	Combined microfluidic-optical DNA analysis with single-base-pair sizing capability. 2016 , 7, 5201-5207	1
444	Neuroplasmonics: From Kretschmann configuration to plasmonic crystals. 2016 , 131, 1	13
443	The molecular choreography of protein synthesis: translational control, regulation, and pathways. 2016 , 49, e11	11
442	Encyclopedia of Nanotechnology. 2016 , 931-940	
441	Crystal structures of the TRIC trimeric intracellular cation channel orthologues. 2016 , 26, 1288-1301	15
440	Encyclopedia of Nanotechnology. 2016 , 948-948	
439	Single-molecule fluorescence imaging of kinesin using linear zero-mode waveguides. 2016 ,	2
438	Innovations and challenges in detecting long read overlaps: an evaluation of the state-of-the-art. 2017 , 33, 1261-1270	15
437	Waves of DNA: Propagating excitations in extended nanoconfined polymers. 2016 , 94, 042603	4
436	Recent Advances of Plasmon-Enhanced Spectroscopy at Bio-Interfaces. 2016 , 183-207	4
435	Genomic analyses of multidrug resistant <i>Pseudomonas aeruginosa</i> PA1 resequenced by single-molecule real-time sequencing. 2016 , 36,	10
434	Measuring the Hydrodynamic Size of Nanoparticles Using Fluctuation Correlation Spectroscopy. 2016 , 67, 489-514	17
433	Coming of age: ten years of next-generation sequencing technologies. 2016 , 17, 333-51	2189
432	Roadmap on biosensing and photonics with advanced nano-optical methods. 2016 , 18, 063003	46
431	Single-molecule detection at high concentrations with optical aperture nanoantennas. 2016 , 8, 9480-7	17
430	On nanopore DNA sequencing by signal and noise analysis of ionic current. <i>Nanotechnology</i> , 2016 , 27, 215502	3-4 14

429	Dye-embedded and nanopatterned hyperbolic metamaterials for spontaneous emission rate enhancement. 2016 , 33, 1038		18
428	Experimental investigation of confinement effect on phase behavior of hexane, heptane and octane using lab-on-a-chip technology. 2016 , 423, 25-33		74
427	The past, present and future of microbiome analyses. 2016 , 11, 2049-2053		40
426	A Comparison of Single-Molecule Emission in Aluminum and Gold Zero-Mode Waveguides. 2016 , 120, 6719-27		14
425	Reactions in ultra-small droplets by tip-assisted chemistry. 2016 , 52, 11617-26		17
424	Third generation sequencing technologies applied to diagnostic microbiology: benefits and challenges in applications and data analysis. 2016 , 16, 1011-23		25
423	Nanometric Gap Structure with a Fluid Lipid Bilayer for the Selective Transport and Detection of Biological Molecules. 2016 , 32, 7958-64		6
422	High-Speed Calcium Imaging of Neuronal Activity Using Acousto-Optic Deflectors. 2016 , 331-356		1
421	All-Dielectric Silicon Nanogap Antennas To Enhance the Fluorescence of Single Molecules. <i>Nano Letters</i> , 2016 , 16, 5143-51	11.5	147
420	Preserving the Sequence of a Biopolymer's Monomers as They Enter an Electrospray Mass Spectrometer. 2016 , 6,		10
419	Gold Nanorods as Plasmonic Sensors for Particle Diffusion. 2016 , 7, 4951-4955		17
418	Extraordinary Optical Transmission: Fundamentals and Applications. 2016 , 104, 2288-2306		43
417	Gold-Nanorod-Enhanced Fluorescence Correlation Spectroscopy of Fluorophores with High Quantum Yield in Lipid Bilayers. 2016 , 120, 25996-26003		19
416	Observing Extremely Weak Protein-Protein Interactions with Conventional Single-Molecule Fluorescence Microscopy. <i>Journal of the American Chemical Society</i> , 2016 , 138, 14238-14241	16.4	14
415	Fluorescent Labeling of Proteins in Whole Cell Extracts for Single-Molecule Imaging. 2016 , 581, 83-104		6
414	Model Biological Membrane Based on Patterned Lipid Bilayers. 2016 , 37, 230-234		
413	A new double-sided grating coupled optical sensor using a cross-shaped microchannel for minimizing the dispersion effect. 2016 , 302, 707-716		1
412	Advancements in Next-Generation Sequencing. 2016 , 17, 95-115		305

411	Single Molecule Approaches in RNA-Protein Interactions. 2016 , 907, 89-106		0
410	Exact Analysis of Nanoantenna Enhanced Fluorescence Correlation Spectroscopy at a Mie Sphere. 2016 , 120, 13684-13692		1
409	Biophysical Insights from Temperature-Dependent Single-Molecule Förster Resonance Energy Transfer. 2016 , 67, 441-65		18
408	Protein Conformational Motions: Enzyme Catalysis. 2016 , 45-70		
407	Sensitive detection of adenosine triphosphate by exonuclease III-assisted cyclic amplification coupled with surface plasmon resonance enhanced fluorescence based on nanopore. 2016 , 228, 509-514		10
406	Evolution of plant genome architecture. 2016 , 17, 37		213
405	Nanowire-Aperture Probe: Local Enhanced Fluorescence Detection for the Investigation of Live Cells at the Nanoscale. <i>ACS Photonics</i> , 2016 , 3, 1208-1216	6.3	17
404	Analysis of single nucleic acid molecules in micro- and nano-fluidics. 2016 , 16, 790-811		27
403	The sequence of sequencers: The history of sequencing DNA. 2016 , 107, 1-8		543
402	Monitoring the Waiting Time Sequence of Single Ras GTPase Activation Events Using Liposome Functionalized Zero-Mode Waveguides. <i>Nano Letters</i> , 2016 , 16, 2890-5	11.5	16
401	Graphene nanodevices for DNA sequencing. 2016 , 11, 127-36		398
400	Single-molecule DNA hybridisation studied by using a modified DNA sequencer: a comparison with surface plasmon resonance data. 2016 , 4, 015002		12
399	Minimizing DNA microarrays to a single molecule per spot: using zero-mode waveguide technology to obtain kinetic data for a large number of short oligonucleotide hybridization reactions. 2016 ,		1
398	Directional fluorescence emission co-enhanced by localized and propagating surface plasmons for biosensing. 2016 , 8, 8008-16		24
397	Origin and prediction of free-solution interaction studies performed label-free. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E1595-604	11.5	29
396	RNA Study Using DNA Nanotechnology. 2016 , 139, 121-63		
395	Nanoscale Electrochemistry Revisited. <i>Analytical Chemistry</i> , 2016 , 88, 414-30	7.8	110
394	Next Generation Sequencing General Information about the Technology, Possibilities, and Limitations. 2016 , 1-18		2

393	Optical Transmission Enhancement of Stacked Plasmonic Apertures. 2016 , 34, 961-968	3
392	Evanescent wave fluorescence biosensors: Advances of the last decade. 2016 , 76, 103-12	80
391	Plasmon-Enhanced Fluorescence from Single Proteins in Living Bacteria. 2016 , 120, 20512-20517	24
390	Fighting an old disease with modern tools: characteristics and molecular detection methods of drug-resistant <i>Mycobacterium tuberculosis</i> . 2016 , 48, 1-17	15
389	A practical guide to the oral microbiome and its relation to health and disease. 2017 , 23, 276-286	149
388	A Survey of Software and Hardware Approaches to Performing Read Alignment in Next Generation Sequencing. 2017 , 14, 1202-1213	6
387	Optical DNA mapping in nanofluidic devices: principles and applications. 2017 , 17, 579-590	55
386	Fabrication methods of plasmonic and magnetoplasmonic crystals: a review. 2017 , 132, 1	16
385	Observing Single-Molecule Dynamics at Millimolar Concentrations. 2017 , 56, 2399-2402	31
384	Electrochemically Modulated Luminescence in Nanophotonic Structures. 2017 , 79-104	
383	Observing Single-Molecule Dynamics at Millimolar Concentrations. 2017 , 129, 2439-2442	15
382	Strategies to reduce detection volume of fluorescence correlation spectroscopy (FCS) to realize physiological concentration measurements. 2017 , 89, 181-189	3
381	Genomic sequencing of a strain of <i>Acinetobacter baumannii</i> and potential mechanisms to antibiotics resistance. 2017 , 50, 20-24	2
380	In-Plane Plasmonic Antenna Arrays with Surface Nanogaps for Giant Fluorescence Enhancement. <i>Nano Letters</i> , 2017 , 17, 1703-1710	11.5 90
379	Phosphate-Modified Nucleotides for Monitoring Enzyme Activity. 2017 , 375, 28	10
378	Stimulated Emission Depletion Microscopy. 2017 , 117, 7377-7427	152
377	Suppression of Bulk Fluorescence Noise by Combining Waveguide-Based Near-Field Excitation and Collection. <i>ACS Photonics</i> , 2017 , 4, 495-500	6.3 10
376	The metagenomics worldwide research. 2017 , 63, 819-829	47

375	ZnO nanotube waveguide arrays on graphene films for local optical excitation on biological cells. 2017 , 5, 046106		3
374	The state of rhizospheric science in the era of multi-omics: A practical guide to omics technologies. 2017 , 3, 212-221		36
373	Single-Molecule Photoactivation FRET: A General and Easy-To-Implement Approach To Break the Concentration Barrier. 2017 , 56, 6882-6885		21
372	The State of Whole-Genome Sequencing. 2017 , 45-62		2
371	The more the merrier: high-throughput single-molecule techniques. 2017 , 45, 759-769		11
370	Single-molecule spectroelectrochemical cross-correlation during redox cycling in recessed dual ring electrode zero-mode waveguides. 2017 , 8, 5345-5355		28
369	A novel metal enhanced fluorescence bio probe for insulin sensing based on poly vinyl alcohol-borax hydrogel functionalized by Ag dots. 2017 , 251, 609-616		17
368	Characterizing Slow Photochemical Reaction Kinetics by Enhanced Sampling of Rare Events with Capillary Optical Fibers and Kramers' Theory. 2017 , 2, 2719-2727		3
367	Advantages of genome sequencing by long-read sequencer using SMRT technology in medical area. 2017 , 30, 149-161		108
366	Improving the Radiative Efficiency of InGaN Quantum Dots via an Open Top Cavity. <i>ACS Photonics</i> , 2017 , 4, 795-799	6.3	8
365	Single-Molecule Arrays for Protein and Nucleic Acid Analysis. 2017 , 10, 345-363		64
364	Dynamics of intracellular processes in live-cell systems unveiled by fluorescence correlation microscopy. 2017 , 69, 8-15		5
363	Light-Enhancing Plasmonic-Nanopore Biosensor for Superior Single-Molecule Detection. <i>Advanced Materials</i> , 2017 , 29, 1605442	24	63
362	DNA sequencing at 40: past, present and future. 2017 , 550, 345-353		486
361	Systems biology approach in plant abiotic stresses. 2017 , 121, 58-73		36
360	Length-independent DNA packing into nanopore zero-mode waveguides for low-input DNA sequencing. 2017 , 12, 1169-1175		69
359	An tag-and-modify protein sample generation method for single-molecule fluorescence resonance energy transfer. 2017 , 292, 15636-15648		3
358	Nano-antenna enhanced two-focus fluorescence correlation spectroscopy. <i>Scientific Reports</i> , 2017 , 7, 5985	4.9	5

357	Deep learning for single-molecule science. <i>Nanotechnology</i> , 2017 , 28, 423001	3.4	38
356	Single-Molecule Photoactivation FRET: A General and Easy-To-Implement Approach To Break the Concentration Barrier. 2017 , 129, 6986-6989		2
355	Real-Time Sensing of Single-Ligand Delivery with Nanoaperture-Integrated Microfluidic Devices. 2017 , 2, 3858-3867		8
354	Single-Molecule Plasmon Sensing: Current Status and Future Prospects. 2017 , 2, 1103-1122		177
353	Centromere evolution and CpG methylation during vertebrate speciation. <i>Nature Communications</i> , 2017 , 8, 1833	17.4	37
352	Electrostatic confinement and manipulation of DNA molecules for genome analysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 13400-13405	11.5	20
351	Tip-enhanced ablation and ionization mass spectrometry for nanoscale chemical analysis. 2017 , 3, eaaq1059		24
350	[Big Data Revolution or Data Hubris? : On the Data Positivism of Molecular Biology]. 2017 , 25, 459-483		
349	Polarization Multiplexing of Fluorescent Emission Using Multiresonant Plasmonic Antennas. 2017 , 11, 12167-12173		7
348	Fabrication of polygonal nanoholes by localized mask-free wet anisotropic etching. <i>AIP Advances</i> , 2017 , 7, 105115	1.5	1
347	Microfluidic Devices and Their Applications. 2017 , 487-536		16
346	Accurate characterization of the IFITM locus using MiSeq and PacBio sequencing shows genetic variation in Galliformes. <i>BMC Genomics</i> , 2017 , 18, 419	4.5	6
345	Digital Bioassays: Theory, Applications, and Perspectives. <i>Analytical Chemistry</i> , 2017 , 89, 92-101	7.8	67
344	GalnN Quantum Wells as Optochemical Transducers for Chemical Sensors and Biosensors. 2017 , 23, 15-23		12
343	Implementation and Data Analysis of Tn-seq, Whole-Genome Resequencing, and Single-Molecule Real-Time Sequencing for Bacterial Genetics. 2017 , 199,		13
342	Nanopore DNA Sequencing for Metagenomic Soil Analysis. 2017 ,		3
341	Molecular Markers in <i>Salvia L.</i> : Past, Present and Future. 2017 , 291-398		1
340	<i>Salvia</i> Biotechnology. 2017 ,		1

339	Application of Next-Generation Sequencing in the Era of Precision Medicine. 2017 ,	5
338	Silicon nitride waveguide platform for fluorescence microscopy of living cells. 2017 , 25, 27678-27690	38
337	DNA Sequencing Sensors: An Overview. 2017 , 17,	36
336	Advanced Personal Genome Sequencing as the Ultimate Diagnostic Test. 2017 , 155-172	
335	Next-Generation Sequencing in the Clinical Laboratory. 2017 , 25-33	0
334	Multispot single-molecule FRET: High-throughput analysis of freely diffusing molecules. 2017 , 12, e0175766	20
333	Single Molecule Measurements in Membranes. 2017 ,	
332	The Single-Molecule Centroid Localization Algorithm Improves the Accuracy of Fluorescence Binding Assays. 2018 , 57, 1572-1576	5
331	Zero-Mode Waveguide Nanophotonic Structures for Single Molecule Characterization. 2018 , 51, 193001	15
330	Potentials and pitfalls of inverse fluorescence correlation spectroscopy. 2018 , 140-141, 23-31	1
329	Using Three-color Single-molecule FRET to Study the Correlation of Protein Interactions. 2018 ,	4
328	Nanopore Electrochemistry: A Nexus for Molecular Control of Electron Transfer Reactions. 2018 , 4, 20-29	38
327	Target Confinement in Small Reaction Volumes Using Microfluidic Technologies: A Smart Approach for Single-Entity Detection and Analysis. 2018 , 3, 264-284	21
326	Life under the Microscope: Single-Molecule Fluorescence Highlights the RNA World. 2018 , 118, 4120-4155	36
325	Comparative Genome Annotation. <i>Methods in Molecular Biology</i> , 2018 , 1704, 189-212	1.4 3
324	Mapping the dynamical organization of the cell nucleus through fluorescence correlation spectroscopy. 2018 , 140-141, 10-22	5
323	Zero-mode waveguide detection of DNA translocation through FIB-organised arrays of engineered nanopores. 2018 , 187-188, 90-94	5
322	Antenna-Enhanced Fluorescence Correlation Spectroscopy Resolves Calcium-Mediated Lipid-Lipid Interactions. 2018 , 12, 3272-3279	3

321	Single-molecule peptide fingerprinting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 3338-3343	11.5	37
320	Recent Perspective of Next Generation Sequencing: Applications in Molecular Plant Biology and Crop Improvement. 2018 , 88, 435-449		11
319	Breaking the Concentration Barrier for Single-Molecule Fluorescence Measurements. 2018 , 24, 1002-1009		6
318	Advancing Development of Synthetic Gene Regulators. <i>Springer Theses</i> , 2018 ,	0.1	
317	Optical Antenna-Based Fluorescence Correlation Spectroscopy to Probe the Nanoscale Dynamics of Biological Membranes. 2018 , 9, 110-119		28
316	Introduction to fluorescence correlation Spectroscopy-Brief and simple. 2018 , 140-141, 3-9		11
315	Transmission surface plasmon resonance techniques and their potential biosensor applications. 2018 , 99, 399-415		34
314	Role of Next-Generation RNA-Seq Data in Discovery and Characterization of Long Non-Coding RNA in Plants. 2018 ,		3
313	Electrochemical Zero-Mode Waveguide Studies of Single Enzyme Reactions. 2018 , 2018,		
312	Simultaneous Observation of Kinesin-Driven Microtubule Motility and Binding of Adenosine Triphosphate Using Linear Zero-Mode Waveguides. 2018 , 12, 11975-11985		10
311	Counting Single Redox Molecules in a Nanoscale Electrochemical Cell. <i>Analytical Chemistry</i> , 2018 , 90, 13837-13841	7.8	14
310	Fluorescent observation of ATP binding in Kinesin driven microtubule gliding using nano-slits. 2018 ,		
309	Bioanalytical Chemistry, Biosensors. 2018 , 1-28		
308	Real-time assembly of ribonucleoprotein complexes on nascent RNA transcripts. <i>Nature Communications</i> , 2018 , 9, 5087	17.4	23
307	Optimization of Nanopatterned Multilayer Hyperbolic Metamaterials for Spontaneous Light Emission Enhancement. 2018 , 215, 1800263		5
306	Surface Charge Density-Dependent DNA Capture through Polymer Planar Nanopores. 2018 , 10, 40927-40937		6
305	Nanofluidic Biosensor Created by Bonding Patterned Model Cell Membrane and Silicone Elastomer with Silica Nanoparticles. 2018 , 14, e1802804		4
304	Digital enzyme assay using attoliter droplet array. 2018 , 143, 4923-4929		10

303	Plasmonic zero mode waveguide for highly confined and enhanced fluorescence emission. 2018 , 10, 17362-17369		24
302	Hybrid Metal-Dielectric Nano-Aperture Antenna for Surface Enhanced Fluorescence. 2018 , 11,		7
301	Plasmon-Enhanced Single-Molecule Enzymology. <i>ACS Photonics</i> , 2018 , 5, 3073-3081	6.3	2
300	[DNA sequencing by nanopores: achievements and prospects]. 2018 , 34, 161-165		0
299	Long reads: their purpose and place. 2018 , 27, R234-R241		146
298	Catalytic single-chain polymeric nanoparticles at work: from ensemble towards single-particle kinetics. 2018 , 3, 609-618		18
297	Science and technology of electrochemistry at nano-interfaces: concluding remarks. 2018 , 210, 481-493		4
296	Incorporation of STED technique into single-molecule spectroscopy to break the concentration limit of diffusing molecules in single-molecule detection. 2018 , 54, 9667-9670		3
295	Next-generation sequencing approaches for the study of genome and epigenome toxicity induced by sulfur mustard. 2018 , 92, 3443-3457		8
294	Massively parallel sequencing techniques for forensics: A review. 2018 , 39, 2642-2654		70
293	Nanoarrays on Passivated Aluminum Surface for Site-Specific Immobilization of Biomolecules. 2018 , 1, 125-135		0
292	Plasmonic molecular assays: Recent advances and applications for mobile health. <i>Nano Research</i> , 2018 , 11, 5439-5473	10	29
291	Single-Molecule Fluorescence Applied to Translation. 2019 , 11,		13
290	A framework and an algorithm to detect low-abundance DNA by a handy sequencer and a palm-sized computer. 2019 , 35, 584-592		7
289	Sequence Analysis. 2019 , 292-322		3
288	Absorption dispersion in a three-level electromagnetically induced transparency medium including near dipole-dipole interaction effects. 2019 , 430, 119-130		1
287	Microscale and Nanoscale Electrophotonic Diagnostic Devices. 2019 , 9,		1
286	Smart Design of Zero-Mode Waveguide Nanodevices for Effective Detection of Single-Molecule Fluorescence. 2019 , 12,		5

285	Acute Vector-Borne Viral Infection: Zika and MinION Surveillance. 2019 , 7,	9
284	ArtiFuse-computational validation of fusion gene detection tools without relying on simulated reads. 2020 , 36, 373-379	2
283	Modern technologies and algorithms for scaffolding assembled genomes. 2019 , 15, e1006994	31
282	Extending Single-Molecule Förster Resonance Energy Transfer (FRET) Range beyond 10 Nanometers in Zero-Mode Waveguides. 2019 , 13, 8469-8480	30
281	A hybrid metal-dielectric zero mode waveguide for enhanced single molecule detection. 2019 , 55, 9725-9728	15
280	Relating Structure and Dynamics in RNA Biology. 2019 , 11,	12
279	Mapping chromatin modifications at the single cell level. 2019 , 146,	27
278	Determination of Aneurysm Volume Critical for Stability After Coil Embolization: A Retrospective Study of 3530 Aneurysms. 2019 , 132, e766-e774	5
277	Essentials of Bioinformatics, Volume II. 2019 ,	1
276	Nanoaperture fabrication via colloidal lithography for single molecule fluorescence analysis. 2019 , 14, e0222964	8
275	Microbial Genomics in Sustainable Agroecosystems. 2019 ,	1
274	The Evolution of DNA Sequencing in Pharmacogenomics. 2019 , 2, 119-131	1
273	Electro-osmotic trapping and compression of single DNA molecules while passing through a nanopore. 2019 , 144, 5381-5388	4
272	Metal-induced energy transfer. 2019 , 8, 1689-1699	6
271	Microbial Technology for the Welfare of Society. 2019 ,	2
270	Preventing Aluminum Photocorrosion for Ultraviolet Plasmonics. 2019 , 10, 5700-5707	12
269	DNA Sequencing Technologies. 2019 , 52, 1-30	4
268	Transcriptome analysis and the effects of polyunsaturated fatty acids on the immune responses of the critically endangered angler sturgeon (<i>Acipenser dabryanus</i>). 2019 , 94, 199-210	9

267	Deep Ultraviolet Plasmonic Enhancement of Single Protein Autofluorescence in Zero-Mode Waveguides. <i>Nano Letters</i> , 2019 , 19, 7434-7442	11.5	23
266	Probing dynamics in single molecules. 2019 , 71-115		1
265	Biophysics and the Genomic Sciences. <i>Biophysical Journal</i> , 2019 , 117, 2047-2053	2.9	2
264	Plasmonic Nanopores for Single-Molecule Detection and Manipulation: Toward Sequencing Applications. <i>Nano Letters</i> , 2019 , 19, 7553-7562	11.5	73
263	Nano-Optical Tweezing of Single Proteins in Plasmonic Nanopores. 2019 , 3, 1800465		49
262	Integrated transcriptomic and proteomic analysis of pathogenic mycobacteria and their esx-1 mutants reveal secretion-dependent regulation of ESX-1 substrates and WhiB6 as a transcriptional regulator. 2019 , 14, e0211003		9
261	Recompleting the genome. 2019 , 29, 1009-1022		47
260	Optical bistability in a E-type atomic system including near dipole-dipole interaction. 2019 , 445, 291-295		0
259	Expanding single-molecule fluorescence spectroscopy to capture complexity in biology. 2019 , 58, 233-240		2
258	Multi-parameter measurements of conformational dynamics in nucleic acids and nucleoprotein complexes. 2019 , 169, 69-77		1
257	Carbon-based archiving: current progress and future prospects of DNA-based data storage. 2019 , 8,		19
256	A theoretical analysis of single molecule protein sequencing via weak binding spectra. 2019 , 14, e0212868		5
255	Si3N4 waveguide platform for label-free super-resolution imaging: simulation and analysis. 2019 , 52, 284002		4
254	RNA Sequencing Data: Hitchhiker's Guide to Expression Analysis. 2019 , 2, 139-173		50
253	Next-Generation Sequencing and Emerging Technologies. 2019 , 45, 661-673		84
252	Single-molecule fluorescence studies of intrinsically disordered proteins and liquid phase separation. 2019 , 1867, 980-987		17
251	Long-Read Sequencing Emerging in Medical Genetics. 2019 , 10, 426		162
250	Design of anapole mode electromagnetic field enhancement structures for biosensing applications. 2019 , 27, 7196-7212		22

249	Nanostructured metals for light-based technologies. <i>Nanotechnology</i> , 2019 , 30, 212001	3.4	13
248	Novel Diagnostic Tool for p47 -Deficient Chronic Granulomatous Disease Patient and Carrier Detection. 2019 , 13, 274-278		2
247	Analysis of Transcriptome and Epitranscriptome in Plants Using PacBio Iso-Seq and Nanopore-Based Direct RNA Sequencing. 2019 , 10, 253		57
246	Plasmonic-Nanopore Biosensors for Superior Single-Molecule Detection. <i>Advanced Materials</i> , 2019 , 31, e1900422	24	76
245	Coming Together: RNAs and Proteins Assemble under the Single-Molecule Fluorescence Microscope. 2019 , 11,		9
244	Efficient and unique cobarcoding of second-generation sequencing reads from long DNA molecules enabling cost-effective and accurate sequencing, haplotyping, and de novo assembly. 2019 , 29, 798-808		74
243	Long-Read Sequencing - A Powerful Tool in Viral Transcriptome Research. 2019 , 27, 578-592		38
242	6. Practical overview of bioinformatics data mining in environmental genomics. 2019 , 127-150		
241	Transient Protein-RNA Interactions Guide Nascent Ribosomal RNA Folding. 2019 , 179, 1357-1369.e16		31
240	High-throughput long paired-end sequencing of a Fosmid library by PacBio. 2019 , 15, 142		3
239	Next-Generation Sequencing Technologies. 2019 , 9,		57
238	Single-Molecule Techniques and Cell-Free Protein Synthesis: A Perfect Marriage. <i>Analytical Chemistry</i> , 2019 , 91, 2570-2576	7.8	2
237	Next-Generation Sequencing Strategies. 2019 , 9,		11
236	Deciphering bacterial epigenomes using modern sequencing technologies. 2019 , 20, 157-172		61
235	Porous Zero-Mode Waveguides for Picogram-Level DNA Capture. <i>Nano Letters</i> , 2019 , 19, 921-929	11.5	19
234	New Approaches for Genome Assembly and Scaffolding. 2019 , 7, 17-40		42
233	Bibliography. 2019 , 497-718		1
232	The Role and Future Possibilities of Next-Generation Sequencing in Studying Microbial Diversity. 2019 , 611-630		2

231	Fluorescence microscopy for visualizing single-molecule protein dynamics. 2020 , 1864, 129362		12
230	Make Life Visible. 2020 ,		
229	Population-level inferences from environmental DNA-Current status and future perspectives. 2020 , 13, 245-262		33
228	Adhesion layer influence on controlling the local temperature in plasmonic gold nanoholes. 2020 , 12, 2524-2531		8
227	Single-Molecule Nanotechnologies: An Evolution in Biological Dynamics Detection.. 2020 , 3, 68-85		12
226	Single-molecule measurements in microwells for clinical applications. 2019 , 1-21		12
225	Single-molecule fluorescence resonance energy transfer and its biomedical applications. 2020 , 122, 115753		12
224	Clinical Massively Parallel Sequencing. 2020 , 66, 77-88		6
223	Long walk to genomics: History and current approaches to genome sequencing and assembly. 2020 , 18, 9-19		72
222	Innovations in CAZyme gene diversity and its modification for biorefinery applications. 2020 , 28, e00525		12
221	Concentration Determination at a Countable Molecular Level in Nanofluidics by Solvent-Enhanced Photothermal Optical Diffraction. <i>Analytical Chemistry</i> , 2020 , 92, 14366-14372	7.8	2
220	Toward all on chip optical detection in the few molecule regime. 2020 , 169, 112600		1
219	CRISPR-Directed Therapeutic Correction at the Locus Is Challenged by Frequent Incidence of Chromosomal Deletions. 2020 , 17, 936-943		3
218	Near-Field Spot for Localized Light-Excitation of a Single Fluorescent Molecule. 2020 , 10, 364-374		0
217	Dependence of Fluorescence Quenching of CY3 Oligonucleotide Conjugates on the Oxidation Potential of the Stacking Base Pair. 2020 , 25,		1
216	Viewpoint: Single Molecules at 31: What's Next?. <i>Nano Letters</i> , 2020 , 20, 8427-8429	11.5	3
215	Electro-Optical Detection of Single Molecules Based on Solid-State Nanopores. 2020 , 1, 2000003		6
214	Critical Review: digital resolution biomolecular sensing for diagnostics and life science research. 2020 , 20, 2816-2840		13

213	LROD: An Overlap Detection Algorithm for Long Reads Based on -mer Distribution. 2020 , 11, 632		2
212	Zero-mode waveguides can be made better: fluorescence enhancement with rectangular aluminum nanoapertures from the visible to the deep ultraviolet. 2020 , 2, 4153-4160		8
211	Recent Developments in Plasmonic Nanostructures for Metal Enhanced Fluorescence-Based Biosensing. <i>Nanomaterials</i> , 2020 , 10,	5-4	39
210	Deep Mining of Human Antibody Repertoires: Concepts, Methodologies, and Applications. 2020 , 4, 2000451		1
209	Metal Nanoapertures and Single Emitters. 2020 , 8, 2001110		4
208	A lab in the field: applications of real-time, metagenomic sequencing. 2020 , 5, bpaa016		3
207	Acid-base chemistry at the single ion limit. 2020 , 11, 10951-10958		5
206	Förster-Resonance Energy Transfer between Diffusing Molecules and a Functionalized Plasmonic Nanopore. 2020 , 14,		2
205	Genetic Engineering and Synthetic Genomics in Yeast to Understand Life and Boost Biotechnology. 2020 , 7,		4
204	Genome analysis of plant growth-promoting rhizobacterium <i>Pseudomonas chlororaphis</i> subsp. <i>aurantiaca</i> JD37 and insights from comparison of genomics with three <i>Pseudomonas</i> strains. 2020 , 237, 126483		10
203	Rapid, highly accurate and cost-effective open-source simultaneous complete HLA typing and phasing of class I and II alleles using nanopore sequencing. 2020 , 96, 163-178		8
202	Fabrication of Zero Mode Waveguides for High Concentration Single Molecule Microscopy. 2020 ,		
201	Single-molecule quantification of 5-methylcytosine and 5-hydroxymethylcytosine in cancer genome. 2020 , 1, e9		7
200	Single-molecule analysis of nucleic acid biomarkers - A review. 2020 , 1115, 61-85		15
199	Long-Range Single-Molecule Förster Resonance Energy Transfer between Alexa Dyes in Zero-Mode Waveguides. 2020 , 5, 6947-6955		3
198	Microfluidic Systems Applied in Solid-State Nanopore Sensors. 2020 , 11,		8
197	Single-Molecule Manipulation in Zero-Mode Waveguides. 2020 , 16, e1906740		1
196	Overcoming evanescent field decay using 3D-tapered nanocavities for on-chip targeted molecular analysis. <i>Nature Communications</i> , 2020 , 11, 2930	17.4	11

195	Mixed metal zero-mode guides (ZMWs) for tunable fluorescence enhancement. 2020 , 2, 1894-1903	2
194	Methodologies for Transcript Profiling Using Long-Read Technologies. 2020 , 11, 606	24
193	Light-Harvesting Nanoparticle Probes for FRET-Based Detection of Oligonucleotides with Single-Molecule Sensitivity. 2020 , 59, 6811-6818	43
192	Light-Harvesting Nanoparticle Probes for FRET-Based Detection of Oligonucleotides with Single-Molecule Sensitivity. 2020 , 132, 6878-6885	14
191	Single Entity Electrochemistry in Nanopore Electrode Arrays: Ion Transport Meets Electron Transfer in Confined Geometries. 2020 , 53, 719-728	27
190	Biology of Composts. <i>Soil Biology</i> , 2020 ,	1 2
189	Surface passivation of zero-mode waveguide nanostructures: benchmarking protocols and fluorescent labels. <i>Scientific Reports</i> , 2020 , 10, 5235	4-9 7
188	Probing the dynamic structural changes of DNA using ultrafast laser pulse in graphene-based optofluidic device. 2021 , 3, 316-326	1
187	DNA methylation methods: Global DNA methylation and methylomic analyses. 2021 , 187, 28-43	13
186	Iso-Seq Long Read Transcriptome Sequencing. 2021 , 486-500	0
185	Next-Generation Sequencing (NGS). 2021 , 305-327	1
184	Genomic disorders in the genomics era. 2021 , 35-59	
183	Synthetic genomics for curing genetic diseases. 2021 , 182, 477-520	
182	Miniaturized DNA Sequencers for Personal Use: Unreachable Dreams or Achievable Goals. 3,	1
181	KERA: analysis tool for multi-process, multi-state single-molecule data. 2021 , 49, e53	1
180	Review of biosensing with whispering-gallery mode lasers. 2021 , 10, 42	56
179	Unsupervised selection of optimal single-molecule time series idealization criterion.	
178	Rapid Methods for Antimicrobial Resistance Diagnostics. 2021 , 10,	10

177	Palladium zero-mode waveguides for optical single-molecule detection with nanopores. <i>Nanotechnology</i> , 2021 , 32, 18LT01	3.4	4
176	DNA Manipulation and Single-Molecule Imaging. 2021 , 26,		2
175	The Impact of Modern Technologies on Molecular Diagnostic Success Rates, with a Focus on Inherited Retinal Dystrophy and Hearing Loss. 2021 , 22,		3
174	Substrate-supported Model Membrane as a Versatile Analytical/Biosensing Platform. 2021 , 37, 683-689		1
173	Cutaneous Melanoma Classification: The Importance of High-Throughput Genomic Technologies. 2021 , 11, 635488		8
172	Enhancing Single-Molecule Fluorescence Spectroscopy with Simple and Robust Hybrid Nanoapertures.. <i>ACS Photonics</i> , 2021 , 8, 1673-1682	6.3	2
171	Bioinformatic tools for DNA methylation and histone modification: A survey. 2021 , 113, 1098-1113		6
170	Nanowaveguide-illuminated fluorescence correlation spectroscopy for single molecule studies. <i>AIP Advances</i> , 2021 , 11, 065112	1.5	0
169	cAMP binding to closed pacemaker ion channels is non-cooperative. 2021 , 595, 606-610		3
168	Membrane-Suspended Nanopores in Microchip Arrays for Stochastic Transport Recording and Sensing. 2021 , 3,		0
167	Plasmon-enhanced fluorescence correlation spectroscopy for super-localized detection of nanoscale subcellular dynamics. 2021 , 184, 113219		3
166	Third-generation sequencing and metabolome analysis reveal candidate genes and metabolites with altered levels in albino jackfruit seedlings. <i>BMC Genomics</i> , 2021 , 22, 543	4.5	1
165	Computing the local ion concentration variations for electric-double-layer-modulation microscopy. 2021 , 54, 384005		
164	DNA Origami Nanoantennas for Fluorescence Enhancement. 2021 , 54, 3338-3348		7
163	Correlative nanophotonic approaches to enlighten the nanoscale dynamics of living cell membranes. 2021 , 49, 2357-2369		0
162	Bitki Patojeni Fungusların Tespitinde Polimeraz Zincir Reaksiyonunuñ Dayal Bazı Moleküler Teknikler. 1831-1845		1
161	Unsupervised selection of optimal single-molecule time series idealization criterion. <i>Biophysical Journal</i> , 2021 , 120, 4472-4483	2.9	
160	Solid-state nanopores and nanochannels for the detection of biomolecules. 2021 , 2, 021306		4

159	Integrating single-molecule spectroscopy and simulations for the study of intrinsically disordered proteins. 2021 , 193, 116-135		6
158	Processes shaping cancer genomes - From mitotic defects to chromosomal rearrangements. 2021 , 107, 103207		0
157	Genomic sequencing of rare diseases. 2021 , 61-95		0
156	SiN-based platform toward monolithic integration in photonics and electronics. 2021 , 32, 1-18		6
155	Total Internal Reflection-Fluorescence Correlation Spectroscopy. 2006 , 215-237		2
154	Single-Molecule FRET: Methods and Biological Applications. 2009 , 129		2
153	Single-Molecule Enzymology. 2009 , 165		1
152	Single Molecule DNA Detection. 2007 , 139-150		1
151	Mapping DNA Methylation in Mammals: The State of the Art. <i>Methods in Molecular Biology</i> , 2021 , 2198, 37-50	1.4	2
150	Genome sequencing and assembly. <i>Methods in Molecular Biology</i> , 2011 , 722, 1-9	1.4	5
149	Single molecule detection approach to muscle study: kinetics of a single cross-bridge during contraction of muscle. <i>Methods in Molecular Biology</i> , 2012 , 875, 311-34	1.4	6
148	Fluorescence Microscopy with Nanometer Resolution. 2019 , 1089-1143		4
147	Enzymology and Life at the Single Molecule Level. 2010 , 435-448		7
146	Single Molecule Spectroscopy Illuminating the Molecular Dynamics of Life. 2010 , 107-117		3
145	Exploring the structural dynamics of the translational machinery using single-molecule fluorescence resonance energy transfer. 2011 , 273-293		1
144	Principles and Applications of Fluorescence Correlation Spectroscopy (FCS). 2011 , 63-85		6
143	Molecular Dynamics Revealed by Single-Molecule FRET Measurement. 2020 , 105-113		1
142	Next-Generation Sequencing and Its Application: Empowering in Public Health Beyond Reality. 2019 , 313-341		6

141	Probing the Translation Dynamics of Ribosomes Using Zero-Mode Waveguides. 2016 , 139, 1-43	11
140	Single-Molecule Fluorescence Resonance Energy Transfer Investigations of Ribosome-Catalyzed Protein Synthesis. 93-116	1
139	Chapter 5:Single-molecule FRET Analysis of the Path from Transcription Initiation to Elongation. 2009 , 115-156	1
138	Chapter 9:Low Noise Nanopore Platforms Optimised for the Synchronised Optical and Electrical Detection of Biomolecules. 2016 , 270-300	1
137	Multispot single-molecule FRET: high-throughput analysis of freely diffusing molecules.	1
136	A theoretical analysis of single molecule protein sequencing via weak binding spectra.	1
135	PlantSEED enables automated annotation and reconstruction of plant primary metabolism with improved compartmentalization and comparative consistency. 2018 , 95, 1102-1113	17
134	Near-Field Optical Microscopy. 2010 , 18-1-18-28	1
133	- Use of Protein Biomarkers for the Early Detection of Breast Cancer. 2013 , 322-339	1
132	Fluorescence enhancement in an over-etched gold zero-mode waveguide. 2019 , 27, 19002-19018	8
131	Rapid Advances in Nucleic Acid Technologies for Detection and Diagnostics of Pathogens. 2014 , 1,	2
130	The Microbiome: A Reservoir to Discover New Antimicrobials Agents. 2020 , 20, 1291-1299	2
129	Genotypic Methods for HIV Drug Resistance Monitoring: The Opportunities and Challenges Faced by China. 2019 , 17, 225-239	2
128	Lab-on-Antennas: Plasmonic Antennas for Single-Molecule Spectroscopy. 2017 , 299-331	1
127	Structure and dynamics underlying elementary ligand binding events in human pacemaking channels. 2016 , 5,	30
126	Top-down machine learning approach for high-throughput single-molecule analysis. 2020 , 9,	15
125	Fast interaction dynamics of G-quadruplex and RGG-rich peptides unveiled in zero-mode waveguides. 2021 , 49, 12348-12357	0
124	Integrated optical devices with nanoscale guiding layers. 2004 ,	

123 Recent Advances in Single Molecule Fluorescence Spectroscopy. **2004**, 121-163

122 Biosensors DNA Based Sensor Technology. **2004**, 119-123

121 Single Molecule Fluorescence Imaging and Spectroscopy: Far-Field Studies. **2006**, 183-221

120 Modulation of transmission through isolated subwavelength apertures by dielectric filling and its implications for use in biophysical research. **2006**,

119 Single Molecule Imaging of Biomolecules. **2006**, 34, 241-245

118 Separation and single-molecule analysis of biomolecules using micro-and nano-devices. **2006**, 21, 608-614

117 1?????????????????????. **2006**, 26, 327-332

116 Optofluidic Microscope [Fitting a Microscope onto a Sensor Chip. **2007**, 293-330

115 Mobility and Signaling of Single Receptor Proteins. **2008**, 131-162

114 Single-Molecule Studies of Biomolecules.

113 Optical Tools. **2009**, 253-373

112 Fluorescence Microscopy on a 2D Photonic Crystal Transparent in the Visible. **2010**,

111 Visualization of Single Molecule Translation in Real Time at Codon Resolution. **2010**, 50, 294-295

110 Plasmonics. **2010**, 18-1-18-37

109 Single-Molecule Detection. **2010**, 13-1-13-39

108 Lab-on-a-Chip. **2010**, 7-1-7-33

107 Integrated Optofluidic Waveguides. **2010**, 16-1-16-28

106 Total Internal Reflection with Fluorescence Correlation Spectroscopy. **2011**, 345-380

- 105 Single-Molecule, Real-Time (SMRT) Monitoring of Biomolecules. **2011**,
- 104 Real-time monitoring of single-molecule translation. **2011**, 295-302
- 103 Fabrication of Zero-Mode Waveguide by Ultraviolet Nanoimprint Lithography Lift-Off Process. **2011**, 50, 06GK07 2
- 102 Recent Advances in Sequencing Technology. **2012**, 281-308
- 101 Methylation-Based Markers. **2013**, 251-264 1
- 100 Allele Re-sequencing Technologies. **2013**, 91-118
- 99 Capillary Electrophoresis and Multicolor Fluorescent DNA Analysis in an Optofluidic Chip. 247-266 1
- 98 Atom-Specific Mutagenesis of RNAs for Structure, Function, and Therapeutics Studies. **2013**, 231-252
- 97 Using Tunable Nanoscale Confinement to Image and Manipulate DNA. **2014**,
- 96 Encyclopedia of Microfluidics and Nanofluidics. **2014**, 1-7
- 95 Single-molecule and single-particle imaging of molecular motors in vitro and in vivo. **2014**, 105, 131-59 3
- 94 Emerging Next-Generation Sequencing Technologies. **2015**, 19-29
- 93 Nanophotonic Approaches for Nanoscale Imaging and Single- Molecule Detection at Ultrahigh Concentrations. **2014**, 474-493
- 92 Molecular Plasma Membrane Dynamics Dissected by STED Nanoscopy and Fluorescence Correlation Spectroscopy (STED-FCS). **2014**, 452-473 1
- 91 Current and Evolving Technologies. **2015**, 11-34
- 90 Encyclopedia of Nanotechnology. **2016**, 1024-1033
- 89 CHAPTER 6:An Evanescent Wave Fluorescent Immunosensor for Milk Quality Monitoring. **2016**, 131-160
- 88 Introduction to Molecular Genetics. **2016**, 3-24

87	Chapter 5:Nanofluidic Strategies for Cancer Research. 2016 , 114-149		
86	Overlapping long sequence reads: Current innovations and challenges in developing sensitive, specific and scalable algorithms.		
85	Genome and Transcriptome-Wide Research of Brain Evolution. 2017 , 187-212		
84	Applications of Genomics in Weed Science. 2017 , 185-217		
83	Boosting the localization precision of dSTORM by biocompatible metal-dielectric coated glass coverslips.		
82	Analysis of the force between DNA molecules and substrate in AFM-based manipulation process. 2017 ,		
81	Overview of Next-Generation Sequencing Technologies and Its Application in Chemical Biology. <i>Springer Theses</i> , 2018 , 1-41	0.1	
80	Single-Molecule Peptide Fingerprinting.		0
79	Genomic and Transcriptomic Sequencing and Analysis Approaches. <i>Middle Black Sea Journal of Health Science</i> , 34-42		0
78	WhiB6 is required for the secretion-dependent regulation of ESX-1 substrates in pathogenic mycobacteria.		
77	Dimer arrangement and monomer flattening determine actin filament formation.		
76	Efficient long single molecule sequencing for cost effective and accurate sequencing, haplotyping, and de novo assembly.		
75	In Vitro Cancer Diagnostics. <i>Bioanalysis</i> , 2019 , 109-132	0.5	
74	Emerging Next-Generation Sequencing Technologies. 2019 , 23-31		
73	Dental Stem Cells in Regenerative Medicine: Emerging Trends and Prospects in the Era of Bioinformatics. 2019 , 119-150		
72	Microbial Genome Diversity and Microbial Genome Sequencing. 2019 , 175-201		
71	Nanoaperture fabrication via colloidal lithography for single molecule fluorescence imaging.		0
70	Asymmetric near-zero edge mode in topological photonic lattice without chiral or particle-hole symmetries. <i>Optics Letters</i> , 2020 , 45, 49	3	2

69	Molecular Tools and Techniques for Understanding the Microbial Community Dynamics of Vermicomposting. <i>Soil Biology</i> , 2020 , 127-151	1	
68	Surface plasmon generation and field intensification by sub-wavelength double-ring structure of plasmas. <i>AIP Advances</i> , 2020 , 10, 015050	1.5	0
67	Introduction to Molecular Genetics. 2020 , 3-26		
66	Utility and Possibility of Next-Generation Sequencing in Forensic DNA Typing. 2020 , 473-496		
65	Genome Sequencing. <i>Learning Materials in Biosciences</i> , 2021 , 225-255	0.3	
64	Advances in Non-Coding RNA Sequencing. <i>Non-coding RNA</i> , 2021 , 7,	7.1	3
63	Single-Molecule Fluorescence Imaging Techniques. 1-20		
62	[Analysis and Discovery of Functional Biomolecules Using a Combination of Fluorescence Microscopy and Micro- and Nano-devices for Single-molecule Detection]. <i>Yakugaku Zasshi</i> , 2020 , 140, 1299-1303	0	
61	Two Color Single Molecule Sequencing on GenoCare™ 600 Platform to Facilitate Clinical Applications.		
60	Impact of the next generation DNA sequencers. <i>International Journal of Clinical and Experimental Medicine</i> , 2009 , 2, 193-202		6
59	Advances in sequencing technology, databases, and analyses tools for the assessment of microbial diversity. 2022 , 317-347		0
58	smBEVO: A computer vision approach to rapid baseline correction of single-molecule time series.		
57	smBEVO: A Computer Vision Approach to Baseline Drift Correction for Single-Molecule Time Series. <i>SSRN Electronic Journal</i> ,	1	
56	Zero-mode waveguides visualize the first steps during gelsolin-mediated actin filament formation.. <i>Biophysical Journal</i> , 2021 ,	2.9	1
55	Real-time, single-molecule observation of biomolecular interactions inside nanophotonic zero mode waveguides.. <i>Nanotechnology</i> , 2021 ,	3.4	0
54	Rapid Identification of DNA Fragments through Direct Sequencing with Electro-Optical Zero-Mode Waveguides.. <i>Advanced Materials</i> , 2021 , e2108479	24	1
53	Effect of Structure on Sensitivity of Magnetic Field Sensor Based on Non-adiabatic Tapered Optical Fiber with Magnetic Fluid. <i>IEEE Sensors Journal</i> , 2022 , 1-1	4	1
52	Multi-Omics Data Mining: A Novel Tool for BioBrick Design.		

51 Can DyeCycling break the photobleaching limit in single-molecule FRET?.

50 Single-Molecule Ionic and Optical Sensing with Nanoapertures. *Nanostructure Science and Technology*, **2022**, 367-387 0.9

49 Electrochemical Zero-Mode Waveguide Potential-Dependent Fluorescence of Glutathione Reductase at Single-Molecule Occupancy.. *Analytical Chemistry*, **2022**, 7.8 0

48 Fast custom wavelet analysis technique for single molecule detection and identification.. *Nature Communications*, **2022**, 13, 1035 17.4 1

47 Application of next-generation sequencing in the diagnosis of gastric cancer.. *Scandinavian Journal of Gastroenterology*, **2022**, 1-14 2.4 0

46 Context-dependent DNA polymerization effects can masquerade as DNA modification signals.. *BMC Genomics*, **2022**, 23, 249 4.5 0

45 Analysis tools for single-monomer measurements of self-assembly processes.. *Scientific Reports*, **2022**, 12, 4682 4.9 1

44 Ultraviolet optical horn antennas for label-free detection of single proteins.. *Nature Communications*, **2022**, 13, 1842 17.4 2

43 Spontaneous Emission Enhancement by a Rectangular-Aperture Optical Nanoantenna: An Intuitive Semi-Analytical Model of Surface Plasmon Polaritons. *Photonics*, **2021**, 8, 572 2.2

42 The Cucumber Genome An Update. *Compendium of Plant Genomes*, **2022**, 25-35 0.8

41 Single-molecule Detection of Ultrafast Biomolecular Dynamics with Nanophotonics.. *Journal of the American Chemical Society*, **2021**, 16.4 2

40 Pacific bioscience sequence technology: Review. *International Journal of Veterinary Science and Research*, **2022**, 8, 027-033 0.3

39 Data_Sheet_1.pdf. **2020**,

38 Data_Sheet_1.PDF. **2020**,

37 Linear-Zero Mode Waveguides for Single-Molecule Fluorescence Observation of Nucleotides in Kinesin-Microtubule Motility Assay.. *Methods in Molecular Biology*, **2022**, 2430, 121-131 1.4

36 Optical Quantification by Nanopores of Viruses, Extracellular Vesicles, and Nanoparticles.. *Nano Letters*, **2022**, 11.5 1

35 Fluorescence Brightness, Photostability, and Energy Transfer Enhancement of Immobilized Single Molecules in Zero-Mode Waveguide Nanoapertures. *ACS Photonics*, 6.3

34 Can DyeCycling break the photobleaching limit in single-molecule FRET?. *Nano Research*, **2022**, 1-13 10 0

33	Gold Ion Beam Milled Gold Zero-Mode Waveguides. <i>Nanomaterials</i> , 2022 , 12, 1755	5.4	○
32	Structure and Organization of Plant Nuclear Genome. 2022 , 15-40		
31	Transcriptomics in Plant. 2022 , 99-127		
30	Next-Generation Sequencing Technologies: Approaches and Applications for Crop Improvement. <i>Springer Protocols</i> , 2022 , 31-94	0.3	1
29	Experimental study of a nanoscale translocation ratchet. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119,	11.5	1
28	A terahertz signal enhancement implemented by subwavelength metallic grooves. <i>Journal of Applied Physics</i> , 2022 , 132, 023101	2.5	1
27	Emerging tools for understanding the human microbiome. 2022 ,		
26	Autopsy. 2022 , 183-247		
25	Zero-mode waveguides and nanopore-based sequencing technologies accelerate single-molecule studies. 2022 , 19, n/a		○
24	Use of Quantitative Metagenomics Next-Generation Sequencing to Confirm Fever of Unknown Origin and Infectious Disease. 13,		○
23	Next Generation and Other Sequencing Technologies in Diagnostic Microbiology and Infectious Diseases. 2022 , 13, 1566		○
22	PacBio single molecule real-time sequencing of a full-length transcriptome of the greenfin horse-faced filefish <i>Thamnaconus modestus</i> . 9,		○
21	Construction of a trio-based structural variation panel utilizing activated T lymphocytes and long-read sequencing technology. 2022 , 5,		○
20	A nanophotonic interferometer for small particle detection. 2022 ,		○
19	Broadband single-molecule fluorescence enhancement based on self-assembled Ag@Au dimer plasmonic nanoantennas.		1
18	Conventional and Omics Approaches for Understanding the Abiotic Stress Response in Cereal Crops An Updated Overview. 2022 , 11, 2852		○
17	Photonic-Plasmonic Coupling Enhanced Fluorescence Enabling Digital-Resolution Ultrasensitive Protein Detection.		○
16	Playing catch and release with single molecules: Mechanistic insights into plasmon-controlled nanogaps.		○

15	High conopeptide diversity in <i>Conus striatus</i> : Revealed by integration of two transcriptome sequencing platforms. 9,	0
14	Method of the year: long-read sequencing. 2023 , 20, 6-11	2
13	Ultraviolet Nanophotonics Enables Autofluorescence Correlation Spectroscopy on Label-Free Proteins with a Single Tryptophan.	1
12	Advances in sequencing technologies for amyotrophic lateral sclerosis research. 2023 , 18,	0
11	Single-Molecule Optical Biosensing: Recent Advances and Future Challenges.	1
10	A Nanophotonic Interferometer.	0
9	Artificial intelligence aids in development of nanomedicines for cancer management. 2023 , 89, 61-75	4
8	Diameter Dependence of Transport through Nuclear Pore Complex Mimics Studied Using Optical Nanopores.	0
7	Plasmon-Enhanced Fluorescence of Single Quantum Dots Immobilized in Optically Coupled Aluminum Nanoholes. 2023 , 14, 2339-2346	0
6	Hyperlens for capturing sub-diffraction nanoscale single molecule dynamics. 2023 , 31, 12162	0
5	Broadband Plasmonic Nanoantennas for Multi-Color Nanoscale Dynamics in Living Cells.	0
4	Hybrid Plasmonic Nanostructures for Enhanced Single-Molecule Detection Sensitivity.	0
3	Achieving High Temporal Resolution in Single-Molecule Fluorescence Techniques Using Plasmonic Nanoantennas.	0
2	cAMP binding to closed pacemaker ion channels is cooperative.	0
1	The Principles and Applications of High-Throughput Sequencing Technologies. 2023 , 27, 9-24	0