Aleksandra Radenovic

List of Publications by Year in Descending Order

123 papers	21,495 citations	45 h-index	141 g-index
141 ext. papers	24,556 ext. citations	11.4 avg, IF	7.06 L-index

#	Paper	IF	Citations
123	Zero Bias Power Detector Circuits based on MoS Field Effect Transistors on Wafer-Scale Flexible Substrates.. *Advanced Materials*, **2022**, e2108469	24	1
122	Statistical distortion of supervised learning predictions in optical microscopy induced by image compression.. *Scientific Reports*, **2022**, 12, 3464	4.9	
121	Three-step, transfer-free growth of MoS2/WS2/graphene vertical van der Waals heterostructure. *2D Materials*, **2022**, 9, 025030	5.9	0
120	Rhesus Blood Typing within a Few Seconds by Packing-Enhanced Nanoscattering on Individual Erythrocytes. *Analytical Chemistry*, **2021**, 93, 15142-15149	7.8	1
119	Time-Resolved Scanning Ion Conductance Microscopy for Three-Dimensional Tracking of Nanoscale Cell Surface Dynamics. *ACS Nano*, **2021**,	16.7	10
118	Super-resolved Optical Mapping of Reactive Sulfur-Vacancies in Two-Dimensional Transition Metal Dichalcogenides. *ACS Nano*, **2021**, 15, 7168-7178	16.7	2
117	High resolution optical projection tomography platform for multispectral imaging of the mouse gut. *Biomedical Optics Express*, **2021**, 12, 3619-3629	3.5	1
116	Parameter-free rendering of single-molecule localization microscopy data for parameter-free resolution estimation. *Communications Biology*, **2021**, 4, 550	6.7	1
115	From Water Solutions to Ionic Liquids with Solid State Nanopores as a Perspective to Study Transport and Translocation Phenomena. *Small*, **2021**, 17, e2100777	11	4
114	Adaptive optics enables multimode 3D super-resolution microscopy via remote focusing. *Nanophotonics*, **2021**, 10, 2451-2458	6.3	0
113	Direct Growth of Hexagonal Boron Nitride on Photonic Chips for High-Throughput Characterization. *ACS Photonics*, **2021**, 8, 2033-2040	6.3	5
112	Correlative 3D microscopy of single cells using super-resolution and scanning ion-conductance microscopy. *Nature Communications*, **2021**, 12, 4565	17.4	10
111	Experimental Combination of Super-Resolution Optical Fluctuation Imaging with Structured Illumination Microscopy for Large Fields-of-View. *ACS Photonics*, **2021**, 8, 2440-2449	6.3	3
110	Electrochemical Functionalization of Selectively Addressed MoS2 Nanoribbons for Sensor Device Fabrication. *ACS Applied Nano Materials*, **2021**, 4, 1076-1084	5.6	7
109	Bio-orthogonal Red and Far-Red Fluorogenic Probes for Wash-Free Live-Cell and Super-resolution Microscopy. *ACS Central Science*, **2021**, 7, 1561-1571	16.8	11
108	Anomalous interfacial dynamics of single proton charges in binary aqueous solutions. *Science Advances*, **2021**, 7, eabg8568	14.3	2
107	Wetting of nanopores probed with pressure. *Physical Chemistry Chemical Physics*, **2021**, 23, 4975-4987	3.6	3

106	Aerolysin nanopores decode digital information stored in tailored macromolecular analytes. *Science Advances*, **2020**, 6,	14.3	16
105	Logic-in-memory based on an atomically thin semiconductor. *Nature*, **2020**, 587, 72-77	50.4	94
104	Microscopic Detection Analysis of Single Molecules in MoS Membrane Nanopores. *ACS Nano*, **2020**, 14, 16131-16139	16.7	9
103	Wafer-Scale Fabrication of Nanopore Devices for Single-Molecule DNA Biosensing using MoS2. *Small Methods*, **2020**, 4, 2000072	12.8	21
102	Spectral cross-cumulants for multicolor super-resolved SOFI imaging. *Nature Communications*, **2020** , 11, 3023	17.4	15
101	Self-Blinking Dyes Unlock High-Order and Multiplane Super-Resolution Optical Fluctuation Imaging. *ACS Nano*, **2020**, 14, 9156-9165	16.7	22
100	Nanocapillary confinement of imidazolium based ionic liquids. *Nanoscale*, **2020**, 12, 8867-8874	7.7	7
99	High-Throughput Nanocapillary Filling Enabled by Microwave Radiation for Scanning Ion Conductance Microscopy Imaging. *ACS Applied Nano Materials*, **2020**, 3, 7829-7834	5.6	9
98	Direct observation of water-mediated single-proton transport between hBN surface defects. *Nature Nanotechnology*, **2020**, 15, 598-604	28.7	17
97	Nanoscale Selective Passivation of Electrodes Contacting a 2D Semiconductor. *Advanced Functional Materials*, **2020**, 30, 1907860	15.6	3
96	Pressure-Induced Enlargement and Ionic Current Rectification in Symmetric Nanopores. *Nano Letters*, **2020**, 20, 8089-8095	11.5	4
95	Polymer Coatings to Minimize Protein Adsorption in Solid-State Nanopores. *Small Methods*, **2020**, 4, 2000187	11.8	11
94	Addendum: Parameter-free image resolution estimation based on decorrelation analysis. *Nature Methods*, **2020**, 17, 1061-1063	21.6	2
93	Towards artificial mechanosensing. *Nature Materials*, **2020**, 19, 1043-1044	27	6
92	Recent Advances and Prospects in the Research of Nascent Adhesions. *Frontiers in Physiology*, **2020**, 11, 574371	4.6	5
91	Identifying microbial species by single-molecule DNA optical mapping and resampling statistics. *NAR Genomics and Bioinformatics*, **2020**, 2, lqz007	3.7	8
90	Wafer-scale MOCVD growth of monolayer MoS2 on sapphire and SiO2. *Nano Research*, **2019**, 12, 2646-2652	10	52
89	Parameter-free image resolution estimation based on decorrelation analysis. *Nature Methods*, **2019** , 16, 918-924	21.6	81

88	Spatiotemporal Imaging of Water in Operating Voltage-Gated Ion Channels Reveals the Slow Motion of Interfacial Ions. *Nano Letters*, **2019**, 19, 7608-7613	11.5	7
87	Waveguide-PAINT offers an open platform for large field-of-view super-resolution imaging. *Nature Communications*, **2019**, 10, 1267	17.4	30
86	Fabrication and practical applications of molybdenum disulfide nanopores. *Nature Protocols*, **2019**, 14, 1130-1168	18.8	49
85	Wide-Field Spectral Super-Resolution Mapping of Optically Active Defects in Hexagonal Boron Nitride. *Nano Letters*, **2019**, 19, 2516-2523	11.5	37
84	Fluorescent Nanodiamonds as Versatile Intracellular Temperature Sensors. *Chimia*, **2019**, 73, 73-77	1.3	6
83	2D materials as an emerging platform for nanopore-based power generation. *Nature Reviews Materials*, **2019**, 4, 588-605	73.3	120
82	2D MoS 2 nanopores: ionic current blockade height for clustering DNA events. *2D Materials*, **2019**, 6, 045011	5.9	6
81	Facile Production of Hexagonal Boron Nitride Nanoparticles by Cryogenic Exfoliation. *Nano Letters*, **2019**, 19, 5417-5422	11.5	12
80	Light-Enhanced Blue Energy Generation Using MoS2 Nanopores. *Joule*, **2019**, 3, 1549-1564	27.8	68
79	Transverse Detection of DNA Using a MoS Nanopore. *Nano Letters*, **2019**, 19, 9075-9083	11.5	46
78	Waveguide-Based Platform for Large-FOV Imaging of Optically Active Defects in 2D Materials. *ACS Photonics*, **2019**, 6, 3100-3107	6.3	5
77	Supervised learning to quantify amyloidosis in whole brains of an Alzheimer's disease mouse model acquired with optical projection tomography. *Biomedical Optics Express*, **2019**, 10, 3041-3060	3.5	8
76	High-speed multiplane structured illumination microscopy of living cells using an image-splitting prism. *Nanophotonics*, **2019**, 9, 143-148	6.3	8
75	Single-molecule sensing of peptides and nucleic acids by engineered aerolysin nanopores. *Nature Communications*, **2019**, 10, 4918	17.4	30
74	Detecting topological variations of DNA at single-molecule level. *Nature Communications*, **2019**, 10, 3	17.4	31
73	Orthogonal Tip-to-Tip Nanocapillary Alignment Allows for Easy Detection of Fluorescent Emitters in Femtomolar Concentrations. *Nano Letters*, **2018**, 18, 3165-3171	11.5	1
72	Imaging of Optically Active Defects with Nanometer Resolution. *Nano Letters*, **2018**, 18, 1739-1744	11.5	44
71	Transverse Detection of DNA in a MoS2 Nanopore. *Biophysical Journal*, **2018**, 114, 180a	2.9	11

70	Centimeter-Sized Single-Orientation Monolayer Hexagonal Boron Nitride With or Without Nanovoids. *Nano Letters*, **2018**, 18, 1205-1212	11.5	34
69	Single step synthesis of Schottky-like hybrid graphene - titania interfaces for efficient photocatalysis. *Scientific Reports*, **2018**, 8, 8154	4.9	11
68	Combining PALM and SOFI for quantitative imaging of focal adhesions in living cells **2017**,		3
67	Geometrical Effect in 2D Nanopores. *Nano Letters*, **2017**, 17, 4223-4230	11.5	58
66	Investigating Focal Adhesion Substructures by Localization Microscopy. *Biophysical Journal*, **2017**, 113, 2508-2518	2.9	11
65	Single-layer MoS2 nanopores as nanopower generators. *Nature*, **2016**, 536, 197-200	50.4	560
64	Single Molecule Localization and Discrimination of DNA-Protein Complexes by Controlled Translocation Through Nanocapillaries. *Nano Letters*, **2016**, 16, 7882-7890	11.5	29
63	On characterizing protein spatial clusters with correlation approaches. *Scientific Reports*, **2016**, 6, 31164	4.9	7
62	Observation of ionic Coulomb blockade in nanopores. *Nature Materials*, **2016**, 15, 850-5	27	120
61	Complementarity of PALM and SOFI for super-resolution live-cell imaging of focal adhesions. *Nature Communications*, **2016**, 7, 13693	17.4	54
60	Revealing G-protein-coupled receptor oligomerization at the single-molecule level through a nanoscopic lens: methods, dynamics and biological function. *FEBS Journal*, **2016**, 283, 1197-217	5.7	56
59	High-Resolution Correlative Microscopy: Bridging the Gap between Single Molecule Localization Microscopy and Atomic Force Microscopy. *Nano Letters*, **2015**, 15, 4896-904	11.5	66
58	Electrochemical Reaction in Single Layer MoS2: Nanopores Opened Atom by Atom. *Nano Letters*, **2015**, 15, 3431-8	11.5	162
57	Large-Area Epitaxial Monolayer MoS2. *ACS Nano*, **2015**, 9, 4611-20	16.7	583
56	Identification of single nucleotides in MoS2 nanopores. *Nature Nanotechnology*, **2015**, 10, 1070-6	28.7	319
55	Relevance of the Drag Force during Controlled Translocation of a DNA-Protein Complex through a Glass Nanocapillary. *Nano Letters*, **2015**, 15, 7118-25	11.5	16
54	Single florescent nanodiamond in a three dimensional ABEL trap. *Scientific Reports*, **2015**, 5, 16669	4.9	9
53	Correlated Atomic Force Microscopy and Single Molecule Localization Microscopy. *Microscopy and Microanalysis*, **2015**, 21, 1625-1626	0.5	

52	Accounting for limited detection efficiency and localization precision in cluster analysis in single molecule localization microscopy. *PLoS ONE*, **2015**, 10, e0118767	3.7	10
51	Large-area MoS 2 grown using H 2 S as the sulphur source. *2D Materials*, **2015**, 2, 044005	5.9	60
50	The emergence of nanopores in next-generation sequencing. *Nanotechnology*, **2015**, 26, 074003	3.4	60
49	Light generation and harvesting in a van der Waals heterostructure. *ACS Nano*, **2014**, 8, 3042-8	16.7	337
48	Nanopore integrated nanogaps for DNA detection. *Nano Letters*, **2014**, 14, 244-9	11.5	53
47	Measurement of the position-dependent electrophoretic force on DNA in a glass nanocapillary. *Nano Letters*, **2014**, 14, 6606-13	11.5	20
46	Probing the size of proteins with glass nanopores. *Nanoscale*, **2014**, 6, 14380-7	7.7	57
45	Probing rotational and translational diffusion of nanodoublers in living cells on microsecond time scales. *Nano Letters*, **2014**, 14, 2552-7	11.5	23
44	Progress in quantitative single-molecule localization microscopy. *Histochemistry and Cell Biology*, **2014**, 142, 5-17	2.4	60
43	Electron spin resonance of nitrogen-vacancy defects embedded in single nanodiamonds in an ABEL trap. *Nano Letters*, **2014**, 14, 5335-41	11.5	22
42	Atomically thin molybdenum disulfide nanopores with high sensitivity for DNA translocation. *ACS Nano*, **2014**, 8, 2504-11	16.7	333
41	Challenges in quantitative single molecule localization microscopy. *FEBS Letters*, **2014**, 588, 3595-602	3.8	51
40	ComEA is essential for the transfer of external DNA into the periplasm in naturally transformable Vibrio cholerae cells. *PLoS Genetics*, **2014**, 10, e1004066	6	76
39	High throughput second harmonic imaging for label-free biological applications. *Optics Express*, **2014**, 22, 31102-12	3.3	25
38	Detecting the translocation of DNA through a nanopore using graphene nanoribbons. *Nature Nanotechnology*, **2013**, 8, 939-45	28.7	285
37	Enhancement of second harmonic signal in nanofabricated cones. *Nano Letters*, **2013**, 13, 6048-54	11.5	31
36	MosaicIA: an ImageJ/Fiji plugin for spatial pattern and interaction analysis. *BMC Bioinformatics*, **2013**, 14, 349	3.6	57
35	Enlightening G-protein-coupled receptors on the plasma membrane using super-resolution photoactivated localization microscopy. *Biochemical Society Transactions*, **2013**, 41, 191-6	5.1	21

34	Controllable shrinking and shaping of glass nanocapillaries under electron irradiation. *Nano Letters*, **2013**, 13, 1717-23	11.5	46
33	Ultrasensitive photodetectors based on monolayer MoS2. *Nature Nanotechnology*, **2013**, 8, 497-501	28.7	3412
32	DNA translocation through low-noise glass nanopores. *ACS Nano*, **2013**, 7, 11255-62	16.7	76
31	Detection of RNAP-DNA complexes using solid state nanopores. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 4106-9	0.9	3
30	Cell type-specific 2-adrenergic receptor clusters identified using photoactivated localization microscopy are not lipid raft related, but depend on actin cytoskeleton integrity. *Journal of Biological Chemistry*, **2012**, 287, 16768-80	5.4	68
29	Nanopore detection of single molecule RNAP-DNA transcription complex. *Nano Letters*, **2012**, 12, 1157-64	11.5	70
28	Identification of the factors affecting co-localization precision for quantitative multicolor localization microscopy. *Optical Nanoscopy*, **2012**, 1, 9		30
27	Fast and automatic processing of multi-level events in nanopore translocation experiments. *Nanoscale*, **2012**, 4, 4916-24	7.7	108
26	Alkaline niobate nanowires as opto-mechanical probes **2012**,		1
25	Micro-fabrication process for small transport devices of layered manganite. *Journal of Applied Physics*, **2012**, 111, 07E129	2.5	1
24	Identification of clustering artifacts in photoactivated localization microscopy. *Nature Methods*, **2011**, 8, 527-8	21.6	162
23	Niobates Nanowires: Synthesis, Characterization and Applications **2011**,		1
22	Quantitative photo activated localization microscopy: unraveling the effects of photoblinking. *PLoS ONE*, **2011**, 6, e22678	3.7	202
21	Single-layer MoS2 transistors. *Nature Nanotechnology*, **2011**, 6, 147-50	28.7	10521
20	Nonlinear optical response in single alkaline niobate nanowires. *Nano Letters*, **2011**, 11, 2517-21	11.5	123
19	ssDNA binding reveals the atomic structure of graphene. *Langmuir*, **2010**, 26, 18078-82	4	75
18	Photoactivatable Fluorescent Protein mEos2 Displays Repeated Photoactivation after a Long-Lived Dark State in the Red Photoconverted Form. *Journal of Physical Chemistry Letters*, **2010**, 1, 1506-1510	6.4	77
17	Beta amyloid and hyperphosphorylated tau deposits in the pancreas in type 2 diabetes. *Neurobiology of Aging*, **2010**, 31, 1503-15	5.6	138

16	Fabrication of 10 nm diameter hydrocarbon nanopores. *Applied Physics Letters*, **2008**, 93, 183101	3.4	23
15	Controlling DNA capture and propagation through artificial nanopores. *Nano Letters*, **2007**, 7, 2824-30	11.5	108
14	Tunable nanowire nonlinear optical probe. *Nature*, **2007**, 447, 1098-101	50.4	448
13	Study of DNA in Glasslike State by Atomic Force Microscopy: Importance of Substrates. *Japanese Journal of Applied Physics*, **2006**, 45, 2345-2348	1.4	4
12	ZnO-Al2O3 and ZnO-TiO2 core-shell nanowire dye-sensitized solar cells. *Journal of Physical Chemistry B*, **2006**, 110, 22652-63	3.4	644
11	Beta-amyloid deposition and Alzheimer's type changes induced by Borrelia spirochetes. *Neurobiology of Aging*, **2006**, 27, 228-36	5.6	134
10	Optical trapping and integration of semiconductor nanowire assemblies in water. *Nature Materials*, **2006**, 5, 97-101	27	323
9	Characterization of atomic force microscope probes at low temperatures. *Journal of Applied Physics* , **2003**, 94, 4210-4214	2.5	5
8	Low noise current-to-voltage converter and vibration damping system for a low-temperature ultrahigh vacuum scanning tunneling microscope. *Review of Scientific Instruments*, **2003**, 74, 1016-1021	1.7	18
7	A low-temperature ultrahigh vacuum atomic force microscope for biological applications. *Review of Scientific Instruments*, **2003**, 74, 1022-1026	1.7	14
6	Study of Probes and Substrates for Low Temperature Atomic Force Microscopy and Biological Applications. *Acta Physica Polonica A*, **2003**, 104, 373-380	0.6	
5	High speed multi-plane super-resolution structured illumination microscopy of living cells using an image-splitting prism		1
4	Bioorthogonal red and far-red fluorogenic probes for wash-free live-cell and super-resolution microscopy		5
3	Correlative 3D microscopy of single cells using super-resolution and scanning ion-conductance microscopy		1
2	Time-resolved scanning ion conductance microscopy for three-dimensional tracking of nanoscale cell surface dynamics		1
1	Stable Al 2 O 3 Encapsulation of MoS 2 -FETs Enabled by CVD Grown h-BN. *Advanced Electronic Materials*,2200123	6.4	1