

# Deqiang Wang

## List of Publications by Year in descending order

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59  
papers

1,293  
citations

430874  
18  
h-index

377865  
34  
g-index

59  
all docs

59  
docs citations

59  
times ranked

1563  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanopore-based Fourth-generation DNA Sequencing Technology. Genomics, Proteomics and Bioinformatics, 2015, 13, 4-16.	6.9	329
2	Nanopore Sequencing: Electrical Measurements of the Code of Life. IEEE Nanotechnology Magazine, 2010, 9, 281-294.	2.0	81
3	Nanopores in solid-state membranes engineered for single molecule detection. Nanotechnology, 2010, 21, 065502.	2.6	77
4	Fabrication of sub-20 nm nanopore arrays in membranes with embedded metal electrodes at wafer scales. Nanoscale, 2014, 6, 8900-8906.	5.6	57
5	Precise fabrication of a 5 nm graphene nanopore with a helium ion microscope for biomolecule detection. Nanotechnology, 2017, 28, 045302.	2.6	55
6	Quantitative detection of the respective concentrations of chiral compounds with weak measurements. Applied Physics Letters, 2017, 111, .	3.3	41
7	Regulating the Transport of DNA through Biofriendly Nanochannels in a Thin Solid Membrane. Scientific Reports, 2014, 4, 3985.	3.3	40
8	Detection of nerve agent hydrolytes in an engineered nanopore. Sensors and Actuators B: Chemical, 2009, 139, 440-446.	7.8	36
9	3D nanopore shape control by current-stimulus dielectric breakdown. Applied Physics Letters, 2016, 109, .	3.3	35
10	Helium-ion-beam nanofabrication: extreme processes and applications. International Journal of Extreme Manufacturing, 2021, 3, 012001.	12.7	34
11	Dynamics of DNA translocation in a solid-state nanopore immersed in aqueous glycerol. Nanotechnology, 2012, 23, 455102.	2.6	33
12	Label-Free Sensitive Detection of Microcystin-LR via Aptamer-Conjugated Gold Nanoparticles Based on Solid-State Nanopores. Langmuir, 2018, 34, 14825-14833.	3.5	32
13	Stochastic sensing of biomolecules in a nanopore sensor array. Nanotechnology, 2008, 19, 505504.	2.6	28
14	Displacement chemistry-based nanopore analysis of nucleic acids in complicated matrices. Chemical Communications, 2018, 54, 13977-13980.	4.1	27
15	High-efficiency synthesis of large-area monolayer WS <sub>2</sub> crystals on SiO <sub>2</sub> /Si substrate via NaCl-assisted atmospheric pressure chemical vapor deposition. Applied Surface Science, 2020, 533, 147479.	6.1	27
16	Unveiling the spin Hall effect of light in Imbert-Fedorov shift at the Brewster angle with weak measurements. Optics Express, 2018, 26, 22934.	3.4	25
17	A solid-state nanopore-based single-molecule approach for label-free characterization of plant polysaccharides. Plant Communications, 2021, 2, 100106.	7.7	23
18	Covalent Modification of Silicon Nitride Nanopore by Amphoteric Polylysine for Short DNA Detection. ACS Omega, 2017, 2, 7127-7135.	3.5	20

#	ARTICLE	IF	CITATIONS
19	A high extinction ratio THz polarizer fabricated by double-bilayer wire grid structure. AIP Advances, 2016, 6, .	1.3	17
20	Monitoring tetracycline through a solid-state nanopore sensor. Scientific Reports, 2016, 6, 27959.	3.3	17
21	Tungsten Disulfide Nanosheet-Based Field-Effect Transistor Biosensor for DNA Hybridization Detection. ACS Applied Nano Materials, 2022, 5, 5035-5044.	5.0	17
22	Nanopore Technology for the Application of Protein Detection. Nanomaterials, 2021, 11, 1942.	4.1	16
23	Single-Molecule Identification of the Conformations of Human C-Reactive Protein and Its Aptamer Complex with Solid-State Nanopores. ACS Applied Materials & Interfaces, 2022, 14, 12077-12088.	8.0	13
24	Nanopore-based aptasensor for label-free and sensitive vanillin determination in food samples. Food Chemistry, 2022, 389, 133051.	8.2	13
25	Highly Sensitive Fluorescence Assay for miRNA Detection: Investigation of the DNA Spacer Effect on the DSN Enzyme Activity toward Magnetic-Bead-Tethered Probes. ACS Omega, 2022, 7, 2224-2233.	3.5	12
26	Label-free single-molecule identification of telomere G-quadruplexes with a solid-state nanopore sensor. RSC Advances, 2020, 10, 27215-27224.	3.6	10
27	Fabrication of 3D nanovolcano-shaped nanopores with helium ion microscopy. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2018, 36, 011603.	1.2	9
28	A novel dielectric breakdown apparatus for solid-state nanopore fabrication with transient high electric field. Review of Scientific Instruments, 2020, 91, 093203.	1.3	9
29	Nanocrystalline graphite nanopores for DNA sensing. Carbon, 2021, 176, 271-278.	10.3	9
30	Toward clean and crackless polymer-assisted transfer of CVD-grown graphene and its recent advances in GFET-based biosensors. Materials Today Chemistry, 2021, 22, 100578.	3.5	9
31	Slowing down DNA translocation by a nanofiber meshed layer. Journal Physics D: Applied Physics, 2018, 51, 045402.	2.8	8
32	Slowing down DNA translocation velocity using a LiCl salt gradient and nanofiber mesh. European Biophysics Journal, 2019, 48, 261-266.	2.2	8
33	Single-Molecule Study on Interactions between Cyclic Nonribosomal Peptides and Protein Nanopore. ACS Applied Bio Materials, 2020, 3, 554-560.	4.6	8
34	Reduction chemistry-assisted nanopore determination method for immunoglobulin isotypes. Nanoscale, 2020, 12, 19711-19718.	5.6	8
35	Enzyme Hinders HIV-1 Tat Viral Transport and Real-Time Measured with Nanopores. ACS Sensors, 2021, 6, 3781-3788.	7.8	8
36	Comparison Study on Single Nucleotide Transport Phenomena in Carbon Nanotubes. Nano Letters, 2022, 22, 2147-2154.	9.1	8

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37	Graphene-based liquid gated field-effect transistor for label-free detection of DNA hybridization. , 2021, , .		7
38	Highly sensitive fluorescence multiplexed miRNAs biosensors for accurate clinically diagnosis lung cancer disease using LNA-modified DNA probe and DSN enzyme. <i>Analytica Chimica Acta</i> , 2022, 1208, 339778.	5.4	7
39	Investigation of the adsorption behavior of BSA with tethered lipid layer-modified solid-state nanopores in a wide pH range. <i>RSC Advances</i> , 2019, 9, 15431-15436.	3.6	6
40	Nanopore Fabrication via Transient High Electric Field Controlled Breakdown and Detection of Single RNA Molecules. <i>ACS Applied Bio Materials</i> , 2020, 3, 6368-6375.	4.6	6
41	Reversible photo-regulation on the folding/unfolding of telomere G-quadruplexes with solid-state nanopores. <i>Analyst</i> , The, 2021, 146, 655-663.	3.5	6
42	Cross Disjoint Mortise Confined Solid-State Nanopores for Single-Molecule Detection. <i>ACS Applied Nano Materials</i> , 2021, 4, 9811-9820.	5.0	6
43	Investigation of Substrate Swell-Induced Defect Formation in Suspended Graphene upon Helium Ion Implantation. <i>Journal of Physical Chemistry C</i> , 2021, 125, 16166-16174.	3.1	5
44	Central Limit Theorem-Based Analysis Method for MicroRNA Detection with Solid-State Nanopores. <i>ACS Applied Bio Materials</i> , 2021, 4, 6394-6403.	4.6	5
45	Nanopore detects $\gamma$ -radiation inhibited HIV-1 protease activity. <i>Biosensors and Bioelectronics</i> , 2021, 194, 113602.	10.1	5
46	The Raman band shift of suspended graphene impacted by the substrate edge and helium ion irradiation. <i>Nano Express</i> , 2021, 2, 010001.	2.4	5
47	DNA translocation through solid-state nanopore. <i>Journal of Micro-Bio Robotics</i> , 2018, 14, 35-40.	2.1	4
48	Probing the Influence of the Substrate Hole Shape on the Interaction between Helium Ions and Suspended Monolayer Graphene with Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2021, 125, 2202-2211.	3.1	4
49	Direct optical observation of DNA clogging motions near controlled dielectric breakdown silicon nitride nanopores. <i>Sensors and Actuators B: Chemical</i> , 2021, 349, 130796.	7.8	4
50	Investigation on the competition of duplex/ G-quadruplex/ i-motif in telomere sequences and c-MYC gene with a solid-state nanopore sensor. <i>Sensors and Actuators B: Chemical</i> , 2021, 348, 130712.	7.8	4
51	Recent Advances in Ultrasensitive miRNA Biomarkers Detection. <i>Smart Sensors, Measurement and Instrumentation</i> , 2021, , 137-164.	0.6	4
52	Simultaneous Dual-Site Identification of 5 <sup>m</sup> C/8 <sup>o</sup> G in DNA Triplex Using a Nanopore Sensor. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 32948-32959.	8.0	4
53	Stability of Solid-State Nanopore Fabricated by Dielectric Breakdown. <i>Biophysical Journal</i> , 2016, 110, 506a.	0.5	3
54	De novo profiling of insect-resistant proteins of rice via nanopore peptide differentiation. <i>Biosensors and Bioelectronics</i> , 2022, 212, 114415.	10.1	3

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55	Polarization conversion based on plasmonic phase control by an ultra-thin metallic nano-strips. AIP Advances, 2016, 6, 125304.	1.3	2
56	Fabrication of controllable mesh layers above SiNx micro pores with ZnO nanostructures. Microelectronic Engineering, 2017, 169, 43-48.	2.4	2
57	Solid-state nanopores fabricated by pulse-controlled dielectric breakdown. , 2016, , .		1
58	DNA translocation through solid-state nanopore. , 2017, , .		1
59	Ultrahigh Spatial Resolution Cross-Disjoint Mortise-Confined Solid-State Nanopores with an Ultrathin Middle Layer. Journal of Physical Chemistry C, 2022, 126, 8158-8164.	3.1	0