

# Kang Wang

## List of Publications by Year in descending order

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66  
papers

2,580  
citations

172457

29  
h-index

197818

49  
g-index

69  
all docs

69  
docs citations

69  
times ranked

3528  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bioinspired copper catalyst effective for both reduction and evolution of oxygen. <i>Nature Communications</i> , 2014, 5, 5285.	12.8	202
2	eg occupancy as an effective descriptor for the catalytic activity of perovskite oxide-based peroxidase mimics. <i>Nature Communications</i> , 2019, 10, 704.	12.8	199
3	Lanthanide-based metal-organic framework nanosheets with unique fluorescence quenching properties for two-color intracellular adenosine imaging in living cells. <i>NPG Asia Materials</i> , 2017, 9, e354-e354.	7.9	144
4	A Nanochannel Array-Based Electrochemical Device for Quantitative Label-free DNA Analysis. <i>ACS Nano</i> , 2010, 4, 6417-6424.	14.6	134
5	Solution-Modulated Rectification of Ionic Current in Highly Ordered Nanochannel Arrays Patterned with Chemical Functional Groups at Designed Positions. <i>Advanced Functional Materials</i> , 2013, 23, 3836-3844.	14.9	125
6	Ultrasensitive Detection of Bacteria Using a 2D MOF Nanozyme-Amplified Electrochemical Detector. <i>Analytical Chemistry</i> , 2021, 93, 8544-8552.	6.5	117
7	Insight into the Unique Fluorescence Quenching Property of Metal-Organic Frameworks upon DNA Binding. <i>Analytical Chemistry</i> , 2017, 89, 11366-11371.	6.5	81
8	Strategy for In Situ Imaging of Cellular Alkaline Phosphatase Activity Using Gold Nanoflower Probe and Localized Surface Plasmon Resonance Technique. <i>Analytical Chemistry</i> , 2018, 90, 14056-14062.	6.5	70
9	Photochemical synthesis of Prussian blue film from an acidic ferricyanide solution and application. <i>Electrochemistry Communications</i> , 2005, 7, 1252-1256.	4.7	69
10	Insight into Ion Transfer through the Sub-Nanometer Channels in Zeolitic Imidazolate Frameworks. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 4767-4771.	13.8	66
11	Organic Cyanide Decorated SERS Active Nanopipettes for Quantitative Detection of Hemeproteins and Fe <sup>3+</sup> in Single Cells. <i>Analytical Chemistry</i> , 2017, 89, 2522-2530.	6.5	62
12	Morpholino Monolayers: Preparation and Label-free DNA Analysis by Surface Hybridization. <i>Journal of the American Chemical Society</i> , 2009, 131, 4953-4961.	13.7	61
13	Morphology Controlled Poly(aminophenylboronic acid) Nanostructures as Smart Substrates for Enhanced Capture and Release of Circulating Tumor Cells. <i>Advanced Functional Materials</i> , 2015, 25, 6122-6130.	14.9	59
14	Nanopipette-Based SERS Aptasensor for Subcellular Localization of Cancer Biomarker in Single Cells. <i>Analytical Chemistry</i> , 2017, 89, 9911-9917.	6.5	56
15	Morpholino-Functionalized Nanochannel Array for Label-Free Single Nucleotide Polymorphisms Detection. <i>Analytical Chemistry</i> , 2015, 87, 3936-3941.	6.5	53
16	In Situ Detection and Imaging of Telomerase Activity in Cancer Cell Lines via Disassembly of Plasmonic Core-Satellites Nanostructured Probe. <i>Analytical Chemistry</i> , 2017, 89, 7262-7268.	6.5	52
17	Fluorescent Sulfur-Tagged Europium(III) Coordination Polymers for Monitoring Reactive Oxygen Species. <i>Analytical Chemistry</i> , 2015, 87, 6828-6833.	6.5	47
18	Reversible Plasmonic Probe Sensitive for pH in Micro/Nanospaces Based on i-Motif-Modulated Morpholino-Gold Nanoparticle Assembly. <i>Analytical Chemistry</i> , 2013, 85, 1053-1057.	6.5	43

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19	A Multiparameter pH-Sensitive Nanodevice Based on Plasmonic Nanopores. <i>Advanced Functional Materials</i> , 2018, 28, 1703847.	14.9	43
20	Size-Controllable Gold Nanopores with High SERS Activity. <i>Analytical Chemistry</i> , 2017, 89, 10407-10413.	6.5	42
21	Propagation of Concentration Polarization Affecting Ions Transport in Branching Nanochannel Array. <i>Analytical Chemistry</i> , 2015, 87, 8194-8202.	6.5	41
22	Greatly improved catalytic activity and direct electron transfer rate of cytochrome C due to the confinement effect in a layered self-assembly structure. <i>Chemical Communications</i> , 2012, 48, 2316.	4.1	40
23	Recognition of plastic nanoparticles using a single gold nanopore fabricated at the tip of a glass nanopipette. <i>Chemical Communications</i> , 2019, 55, 6397-6400.	4.1	40
24	A green approach to the synthesis of novel "Desert rose stone"-like nanobiocatalytic system with excellent enzyme activity and stability. <i>Scientific Reports</i> , 2014, 4, 6606.	3.3	36
25	pH-Dependent Slipping and Exfoliation of Layered Covalent Organic Framework. <i>Chemistry - A European Journal</i> , 2020, 26, 12996-13001.	3.3	35
26	Selective cadmium regulation mediated by a cooperative binding mechanism in CadR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 20398-20403.	7.1	34
27	Ice crystals growth driving assembly of porous nitrogen-doped graphene for catalyzing oxygen reduction probed by in situ fluorescence electrochemistry. <i>Scientific Reports</i> , 2014, 4, 6723.	3.3	33
28	Surface-Enhanced Raman Scattering Probing the Translocation of DNA and Amino Acid through Plasmonic Nanopores. <i>Analytical Chemistry</i> , 2019, 91, 6275-6280.	6.5	33
29	Highly Stable and Luminescent Layered Hybrid Materials for Sensitive Detection of TNT Explosives. <i>Analytical Chemistry</i> , 2015, 87, 4530-4537.	6.5	32
30	Conformational change and biocatalysis-triggered spectral shift of single Au nanoparticles. <i>Chemical Communications</i> , 2014, 50, 5480-5483.	4.1	27
31	A Dual-Electrode Approach for Highly Selective Detection of Glucose Based on Diffusion Layer Theory: Experiments and Simulation. <i>Chemistry - A European Journal</i> , 2005, 11, 1341-1347.	3.3	26
32	Insight into Ion Transfer through the Sub-Nanometer Channels in Zeolitic Imidazolate Frameworks. <i>Angewandte Chemie</i> , 2017, 129, 4845-4849.	2.0	26
33	Distance-determined sensitivity in attenuated total reflection-surface enhanced infrared absorption spectroscopy: aptamer-antigen compared to antibody-antigen. <i>Chemical Communications</i> , 2014, 50, 7787.	4.1	25
34	Enhanced Optical Spectroscopy for Multiplexed DNA and Protein-Sequencing with Plasmonic Nanopores: Challenges and Prospects. <i>Analytical Chemistry</i> , 2022, 94, 503-514.	6.5	25
35	Gold Nanowires Array-Based Closed Bipolar Nanoelectrode System for Electrochemiluminescence Detection of Î±-Fetoprotein on Cell Surface. <i>Analytical Chemistry</i> , 2022, 94, 7350-7357.	6.5	25
36	Molecular Mechanisms in Morpholino-DNA Surface Hybridization. <i>Journal of the American Chemical Society</i> , 2010, 132, 9663-9671.	13.7	24

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37	SERS Detection of Nucleobases in Single Silver Plasmonic Nanopores. ACS Sensors, 2020, 5, 2198-2204.	7.8	24
38	Single Molecule DNA Analysis Based on Atomic-Controllable Nanopores in Covalent Organic Frameworks. Nano Letters, 2022, 22, 1358-1365.	9.1	23
39	Sensitive label-free monitoring of protein kinase activity and inhibition using ferric ions coordinated to phosphorylated sites as electrocatalysts. Chemical Communications, 2013, 49, 8788.	4.1	22
40	Structure orientation of hemin self-assembly layer determining the direct electron transfer reaction. Chemical Communications, 2015, 51, 689-692.	4.1	22
41	Fabrication of High-Density and Superuniform Gold Nanoelectrode Arrays for Electrochemical Fluorescence Imaging. Analytical Chemistry, 2020, 92, 13493-13499.	6.5	22
42	Electric field driven protonation/deprotonation of 3,4,9,10-perylene tetracarboxylic acid immobilized on graphene sheets via $\pi$ - $\pi$ stacking. Journal of Electroanalytical Chemistry, 2013, 688, 304-307.	3.8	20
43	Attenuated Total Reflection Surface-Enhanced Infrared Absorption Spectroscopy: a Powerful Technique for Bioanalysis. Journal of Analysis and Testing, 2017, 1, 1.	5.1	18
44	d $\pi$ -sp Interband Transition Excited Carriers Promoting the Photochemical Growth of Plasmonic Gold Nanoparticles. Journal of Physical Chemistry Letters, 2020, 11, 8322-8328.	4.6	18
45	Probing Multidimensional Structural Information of Single Molecules Transporting through a Sub-10 nm Conical Plasmonic Nanopore by SERS. Analytical Chemistry, 2021, 93, 11679-11685.	6.5	15
46	Exploring the Confinement Effect of Carbon Nanotubes on the Electrochemical Properties of Prussian Blue Nanoparticles. Langmuir, 2018, 34, 6983-6990.	3.5	14
47	Label-Free Electrochemiluminescence Imaging of Single-Cell Adhesions by Using Bipolar Nanoelectrode Array. Chemistry - A European Journal, 2022, 28, e202103964.	3.3	14
48	Microchannel-electrode alignment and separation parameters comparison in microchip capillary electrophoresis by scanning electrochemical microscopy. Journal of Chromatography A, 2006, 1110, 222-226.	3.7	12
49	High Spatial Resolution of Ultrathin Covalent Organic Framework Nanopores for Single-Molecule DNA Sensing. Analytical Chemistry, 2022, 94, 9851-9855.	6.5	12
50	Novel Coupling Mechanism-Based Imaging Approach to Scanning Electrochemical Microscopy for Probing the Electric Field Distribution at the Microchannel End. Langmuir, 2006, 22, 7052-7058.	3.5	11
51	Donnan Potential Caused by Polyelectrolyte Monolayers. Langmuir, 2014, 30, 10127-10132.	3.5	11
52	Mass Transfer Modulation and Gas Mapping Based on Covalent Organic Frameworks-Covered Theta Micropipette. Analytical Chemistry, 2020, 92, 7343-7348.	6.5	11
53	An <i>in situ</i> SERS study of ionic transport and the Joule heating effect in plasmonic nanopores. Chemical Communications, 2018, 54, 13236-13239.	4.1	10
54	Structural Change of a Single Ag Nanoparticle Observed by Dark-Field Microspectroscopy. ChemPhysChem, 2018, 19, 954-958.	2.1	8

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55	Three-Dimensional Metamaterial for Plasmon-Enhanced Raman Scattering at any Excitation Wavelengths from the Visible to Near-Infrared Range. <i>Analytical Chemistry</i> , 2021, 93, 1409-1415.	6.5	8
56	Free-Standing Single Ag Nanowires for Multifunctional Optical Probes. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 19023-19030.	8.0	8
57	Electric-Field Distribution at the End of a Charged Capillary—A Coupling Imaging Study. <i>ChemPhysChem</i> , 2008, 9, 2109-2115.	2.1	7
58	End Group Properties of Thiols Affecting the Self-Assembly Mechanism at Gold Nanoparticles Film As Evidenced by Water Infrared Probe. <i>Analytical Chemistry</i> , 2019, 91, 14508-14513.	6.5	7
59	A single nanoparticle-based real-time monitoring of biocatalytic progress and detection of hydrogen peroxide. <i>Talanta</i> , 2018, 185, 581-585.	5.5	6
60	Specific cell capture and noninvasive release via moderate electrochemical oxidation of boronic ester linkage. <i>Biosensors and Bioelectronics</i> , 2019, 138, 111316.	10.1	6
61	Mass transport through a sub-10Ånm single gold nanopore: SERS and ionic current measurement. <i>Journal of Electroanalytical Chemistry</i> , 2021, 894, 115373.	3.8	6
62	The Enhanced Enzymolysis Resistance of Surface-Immobilized DNA Caused by Hybridizing with Morpholino. <i>Electroanalysis</i> , 2013, 25, 1074-1079.	2.9	5
63	Nanopore-based surface-enhanced Raman scattering technologies. <i>Science Bulletin</i> , 2022, 67, 1539-1541.	9.0	5
64	An Electrochemical Study of the Surface Hybridization Process of Morpholino-DNA: Thermodynamics and Kinetics. <i>Electroanalysis</i> , 2016, 28, 1647-1653.	2.9	2
65	Gas molecule modulated ionic migration through graphene oxide laminates. <i>Journal of Electroanalytical Chemistry</i> , 2019, 840, 182-186.	3.8	2
66	Construction of metal-organic frameworks-nucleic acids composites and their application in fluorescent biomedical sensing. <i>Scientia Sinica Chimica</i> , 2022, , .	0.4	0