Wei Wang

List of Publications by Year in Descending Order

88 papers	3,019 citations	28 h-index	53 g-index
96 ext. papers	3,508 ext. citations	10 avg, IF	5.7 L-index

#	Paper	IF	Citations
88	Visualizing electron transfer at semiconductor/metal interface by surface plasmon resonance imaging. *Journal of Electroanalytical Chemistry*, **2022**, 904, 115918	4.1	
87	Emerging Optical Microscopy Techniques for Electrochemistry.. *Annual Review of Analytical Chemistry*, **2022**,	12.5	3
86	Determining the depth of surface charging layer of single Prussian blue nanoparticles with pseudocapacitive behaviors.. *Nature Communications*, **2022**, 13, 2316	17.4	2
85	Bacterial bioluminescence assay for bioanalysis and bioimaging. *Analytical and Bioanalytical Chemistry*, **2021**, 1	4.4	0
84	Single-molecule calorimeter and free energy landscape. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	6
83	A Bubble-STORM Approach for Super-Resolved Imaging of Nucleation Sites in Hydrogen Evolution Reactions. *ACS Sensors*, **2021**, 6, 380-386	9.2	4
82	Imaging the oxygen wave with a single bioluminescent bacterium. *Chemical Science*, **2021**, 12, 12400-12406	9.4	1
81	Tracking the optical mass centroid of single electroactive nanoparticles reveals the electrochemically inactive zone. *Chemical Science*, **2021**, 12, 8556-8562	9.4	5
80	Vertical Diffusion of Ions within Single Particles during Electrochemical Charging. *ACS Nano*, **2021**, 15, 3522-3528	16.7	5
79	A microwell array-based approach for studying single nanoparticle catalysis with high turnover frequency. *Journal of Chemical Physics*, **2021**, 155, 071101	3.9	
78	Dynamically Monitoring the Photodeposition of Single Cocatalyst Nanoparticles on Semiconductors via Fluorescence Imaging. *Analytical Chemistry*, **2021**, 93, 11915-11919	7.8	2
77	Accessing the spatiotemporal heterogeneities of single nanocatalysts by optically imaging gas nanobubbles. *Current Opinion in Colloid and Interface Science*, **2021**, 55, 101465	7.6	2
76	Evanescent Wave-Guided Growth of an Organic Supramolecular Nanowire Array. *Angewandte Chemie - International Edition*, **2020**, 59, 19209-19214	16.4	1
75	Evanescent Wave-Guided Growth of an Organic Supramolecular Nanowire Array. *Angewandte Chemie*, **2020**, 132, 19371-19376	3.6	
74	Accessing the Electrochemical Activity of Single Nanoparticles by Eliminating the Heterogeneous Electrical Contacts. *Journal of the American Chemical Society*, **2020**, 142, 14307-14313	16.4	19
73	Imaging the Thermal Hysteresis of Single Spin-Crossover Nanoparticles. *Journal of the American Chemical Society*, **2020**, 142, 15852-15859	16.4	9
72	Single-entity electrochemistry at confined sensing interfaces. *Science China Chemistry*, **2020**, 63, 589-618	7.9	27

71	Determining the Subnanometer Thickness of the Water-Depletion Layer at the Interface between Water and the Hydrophobic Substrate. *Analytical Chemistry*, **2019**, 91, 11696-11702	7.8	1
70	Influence of Fixation and Permeabilization on the Mass Density of Single Cells: A Surface Plasmon Resonance Imaging Study. *Frontiers in Chemistry*, **2019**, 7, 588	5	18
69	Measuring the activation energy barrier for the nucleation of single nanosized vapor bubbles. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 12678-12683	11.5	25
68	Rational design of functional materials guided by single particle chemiluminescence imaging. *Chemical Science*, **2019**, 10, 5444-5451	9.4	11
67	Tracking Sub-Nanometer Shift in the Scattering Centroid of Single Gold Nanorods during Electrochemical Charging. *ACS Nano*, **2019**, 13, 6279-6286	16.7	16
66	Label-Free Optical Imaging of the Dynamic Stick-Slip and Migration of Single Sub-100-nm Surface Nanobubbles: A Superlocalization Approach. *Analytical Chemistry*, **2019**, 91, 4665-4671	7.8	23
65	Tracking the rotation of single CdS nanorods during photocatalysis with surface plasmon resonance microscopy. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 6630-6634	11.5	12
64	Sensitively fluorescent detection of H2 with resazurin hydrogenation reactions catalyzed by Pd/C nanocomposites. *Inorganic Chemistry Communication*, **2019**, 106, 139-143	3.1	2
63	Photoassisted Electrochemical Micropatterning of Gold Film. *Analytical Chemistry*, **2019**, 91, 9413-9418	7.8	2
62	Postrecording Pixel-Reconstruction Approach for Correcting the Lateral Drifts in Surface Plasmon Resonance Microscope. *Analytical Chemistry*, **2019**, 91, 13620-13626	7.8	2
61	Total Internal Reflection-Based Extinction Spectroscopy of Single Nanoparticles. *Angewandte Chemie - International Edition*, **2019**, 58, 572-576	16.4	18
60	Total Internal Reflection-Based Extinction Spectroscopy of Single Nanoparticles. *Angewandte Chemie*, **2019**, 131, 582-586	3.6	4
59	Staining a porous catalyst. *Nature Chemistry*, **2019**, 11, 17-18	17.6	1
58	imaging of self-catalyzed formaldehyde burst in methanol oxidation reactions under open circuit conditions. *Chemical Science*, **2018**, 9, 3318-3323	9.4	4
57	Surface plasmon resonance sensing: from purified biomolecules to intact cells. *Analytical and Bioanalytical Chemistry*, **2018**, 410, 3943-3951	4.4	19
56	Monitoring the dynamic photocatalytic activity of single CdS nanoparticles by lighting up H nanobubbles with fluorescent dyes. *Chemical Science*, **2018**, 9, 1448-1453	9.4	44
55	Electrochemical impedance spectroscopy of single Au nanorods. *Chemical Science*, **2018**, 9, 4424-4429	9.4	12
54	Imaging the chemical activity of single nanoparticles with optical microscopy. *Chemical Society Reviews*, **2018**, 47, 2485-2508	58.5	121

53	Cellular analysis and detection using surface plasmon resonance imaging. *TrAC - Trends in Analytical Chemistry*, **2018**, 103, 102-109	14.6	15
52	Innenrücktitelbild: Total Internal Reflection-Based Extinction Spectroscopy of Single Nanoparticles (Angew. Chem. 2/2019). *Angewandte Chemie*, **2018**, 131, 647	3.6	
51	Visualizing the Zero-Potential Line of Bipolar Electrodes with Arbitrary Geometry. *Analytical Chemistry*, **2018**, 90, 6390-6396	7.8	12
50	Point Spread Function of Objective-Based Surface Plasmon Resonance Microscopy. *Analytical Chemistry*, **2018**, 90, 9650-9656	7.8	28
49	Dynamic Nanoparticle-Substrate Contacts Regulate Multi-Peak Behavior of Single Silver Nanoparticle Collisions. *ChemElectroChem*, **2018**, 5, 2995-2999	4.3	14
48	Plasmonic Imaging of the Interfacial Potential Distribution on Bipolar Electrodes. *Angewandte Chemie - International Edition*, **2017**, 56, 1629-1633	16.4	26
47	Plasmonic Imaging of the Interfacial Potential Distribution on Bipolar Electrodes. *Angewandte Chemie*, **2017**, 129, 1651-1655	3.6	5
46	Simultaneous optical and electrochemical recording of single nanoparticle electrochemistry. *Nano Research*, **2017**, 10, 1740-1748	10	19
45	Nanofabrication of the gold scanning probe for the STM-SECM coupling system with nanoscale spatial resolution. *Science China Chemistry*, **2017**, 60, 649-655	7.9	15
44	Plasmonic-Based Electrochemical Impedance Imaging of Electrical Activities in Single Cells. *Angewandte Chemie - International Edition*, **2017**, 56, 8855-8859	16.4	46
43	Collision and Oxidation of Single LiCoO Nanoparticles Studied by Correlated Optical Imaging and Electrochemical Recording. *Analytical Chemistry*, **2017**, 89, 6050-6055	7.8	25
42	Visualizing the bidirectional electron transfer in a Schottky junction consisting of single CdS nanoparticles and a planar gold film. *Chemical Science*, **2017**, 8, 5019-5023	9.4	10
41	Plasmonic Imaging of Electrochemical Impedance. *Annual Review of Analytical Chemistry*, **2017**, 10, 183-200	12.5	26
40	Optical Imaging of Phase Transition and Li-Ion Diffusion Kinetics of Single LiCoO(2) Nanoparticles During Electrochemical Cycling. *Journal of the American Chemical Society*, **2017**, 139, 186-192	16.4	86
39	Thin-Film Electrochemistry of Single Prussian Blue Nanoparticles Revealed by Surface Plasmon Resonance Microscopy. *Analytical Chemistry*, **2017**, 89, 11641-11647	7.8	19
38	Firefly-mimicking intensive and long-lasting chemiluminescence hydrogels. *Nature Communications*, **2017**, 8, 1003	17.4	62
37	Intermittent photocatalytic activity of single CdS nanoparticles. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 10566-10571	11.5	54
36	Studying the electrochemistry of single nanoparticles with surface plasmon resonance microscopy. *Current Opinion in Electrochemistry*, **2017**, 6, 17-22	7.2	19

35	Label-Free Imaging of Histamine Mediated G Protein-Coupled Receptors Activation in Live Cells. *Analytical Chemistry*, **2016**, 88, 11498-11503	7.8	6
34	Measuring the number concentration of arbitrarily-shaped gold nanoparticles with surface plasmon resonance microscopy. *Science China Chemistry*, **2016**, 59, 843-847	7.9	5
33	Determining the Absolute Concentration of Nanoparticles without Calibration Factor by Visualizing the Dynamic Processes of Interfacial Adsorption. *Analytical Chemistry*, **2016**, 88, 2380-5	7.8	20
32	Digitizing Gold Nanoparticle-Based Colorimetric Assay by Imaging and Counting Single Nanoparticles. *Analytical Chemistry*, **2016**, 88, 2321-6	7.8	23
31	Simultaneous Transfer and Imaging of Latent Fingerprints Enabled by Interfacial Separation of Polydopamine Thin Film. *Analytical Chemistry*, **2016**, 88, 10357-10361	7.8	16
30	Plasmonic Imaging of Electrochemical Reactions of Single Nanoparticles. *Accounts of Chemical Research*, **2016**, 49, 2614-2624	24.3	80
29	Real-time monitoring of phosphorylation kinetics with self-assembled nano-oscillators. *Angewandte Chemie - International Edition*, **2015**, 54, 2538-42	16.4	32
28	Label-Free Tracking of Single Organelle Transportation in Cells with Nanometer Precision Using a Plasmonic Imaging Technique. *Small*, **2015**, 11, 2878-84	11	66
27	Quantification of epidermal growth factor receptor expression level and binding kinetics on cell surfaces by surface plasmon resonance imaging. *Analytical Chemistry*, **2015**, 87, 9960-5	7.8	104
26	How does fluorescent labeling affect the binding kinetics of proteins with intact cells?. *Biosensors and Bioelectronics*, **2015**, 66, 412-6	11.8	37
25	Plasmonic imaging of protein interactions with single bacterial cells. *Biosensors and Bioelectronics*, **2015**, 63, 131-137	11.8	42
24	Measuring Binding Kinetics of Antibody-Conjugated Gold Nanoparticles with Intact Cells. *Small*, **2015**, 11, 3782-8	11	24
23	Real-Time Monitoring of Phosphorylation Kinetics with Self-Assembled Nano-oscillators. *Angewandte Chemie*, **2015**, 127, 2568-2572	3.6	4
22	In situ drug-receptor binding kinetics in single cells: a quantitative label-free study of anti-tumor drug resistance. *Scientific Reports*, **2014**, 4, 6609	4.9	33
21	Detection, counting, and imaging of single nanoparticles. *Analytical Chemistry*, **2014**, 86, 2-14	7.8	117
20	Plasmonic imaging of electrochemical oxidation of single nanoparticles. *Journal of the American Chemical Society*, **2014**, 136, 12584-7	16.4	115
19	Measurement of small molecule binding kinetics on a protein microarray by plasmonic-based electrochemical impedance imaging. *Analytical Chemistry*, **2014**, 86, 9860-5	7.8	32
18	Charge-based detection of small molecules by plasmonic-based electrochemical impedance microscopy. *Analytical Chemistry*, **2013**, 85, 6682-7	7.8	25

17	Plasmonic-based electrochemical impedance spectroscopy: application to molecular binding. *Analytical Chemistry*, **2012**, 84, 327-33	7.8	60
16	Mapping single-cell-substrate interactions by surface plasmon resonance microscopy. *Langmuir*, **2012**, 28, 13373-9	4	70
15	Label-free measuring and mapping of binding kinetics of membrane proteins in single living cells. *Nature Chemistry*, **2012**, 4, 846-53	17.6	154
14	Imaging the electrocatalytic activity of single nanoparticles. *Nature Nanotechnology*, **2012**, 7, 668-72	28.7	228
13	Single cells and intracellular processes studied by a plasmonic-based electrochemical impedance microscopy. *Nature Chemistry*, **2011**, 3, 249-55	17.6	147
12	Plasmonic-based imaging of local square wave voltammetry. *Analytical Chemistry*, **2011**, 83, 7394-9	7.8	23
11	pH-dependent catalytic properties of Pd-Ag nanoparticles in luminol chemiluminescence. *Chemical Communications*, **2010**, 46, 1520-2	5.8	17
10	A novel electrochemiluminescence strategy for ultrasensitive DNA assay using luminol functionalized gold nanoparticles multi-labeling and amplification of gold nanoparticles and biotin-streptavidin system. *Chemical Communications*, **2010**, 46, 7560-2	5.8	89
9	Chitosan-Luminol Reduced Gold Nanoflowers: From One-Pot Synthesis to Morphology-Dependent SPR and Chemiluminescence Sensing. *Journal of Physical Chemistry C*, **2008**, 112, 10759-10766	3.8	76
8	Fluorescence and electrochemiluminescence of luminol-reduced gold nanoparticles: photostability and platform effect. *Langmuir*, **2008**, 24, 2826-33	4	49
7	Growth Mechanism of Flowerlike Gold Nanostructures: Surface Plasmon Resonance (SPR) and Resonance Rayleigh Scattering (RRS) Approaches to Growth Monitoring. *Journal of Physical Chemistry C*, **2008**, 112, 16348-16353	3.8	36
6	A general E-E/C mechanism for the counter-peak in luminol electrochemiluminescence. *Journal of Electroanalytical Chemistry*, **2008**, 612, 277-287	4.1	13
5	Ag nanoparticle-catalyzed chemiluminescent reaction between luminol and hydrogen peroxide. *Journal of Photochemistry and Photobiology A: Chemistry*, **2008**, 193, 89-96	4.7	184
4	Electrochemiluminescence of lucigenin/tributylamine system in ethanol solution. *Journal of Photochemistry and Photobiology A: Chemistry*, **2008**, 197, 55-61	4.7	4
3	Synthesis, characterization, and electrochemiluminescence of luminol-reduced gold nanoparticles and their application in a hydrogen peroxide sensor. *Chemistry - A European Journal*, **2007**, 13, 6975-84	4.8	173
2	Electrogenerated Chemiluminescence of Lucigenin in Ethanol Solution at a Polycrystalline Gold Electrode. *Electroanalysis*, **2007**, 19, 1703-1710	3	6
1	Spatiotemporally Controlled Access to Photoluminescence Dark State of 2D Monolayer Semiconductor by FRAP Microscopy. *Advanced Functional Materials*,2107551	15.6	1