

# Liang Qiao

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

117  
papers

2,153  
citations

27  
h-index

39  
g-index

128  
ext. papers

2,724  
ext. citations

7  
avg, IF

5.27  
L-index

#	Paper	IF	Citations
117	Isothermal gene amplification coupled MALDI-TOF MS for SARS-CoV-2 detection.. <i>Talanta</i> , <b>2022</b> , 242, 123297	6.2	0
116	Self-assembled plasmonic nanoarrays for enhanced bacterial identification and discrimination. <i>Biosensors and Bioelectronics</i> , <b>2022</b> , 197, 113778	11.8	6
115	Multi-Omic Profiling of Multi-Biosamples Reveals the Role of Amino Acid and Nucleotide Metabolism in Endometrial Cancer.. <i>Frontiers in Oncology</i> , <b>2022</b> , 12, 861142	5.3	0
114	GproDIA enables data-independent acquisition glycoproteomics with comprehensive statistical control. <i>Nature Communications</i> , <b>2021</b> , 12, 6073	17.4	5
113	MALDI-TOF MS and Magnetic Beads for Rapid Seafood Allergen Tests. <i>Journal of Agricultural and Food Chemistry</i> , <b>2021</b> , 69, 12909-12918	5.7	1
112	Rapid Detection of COVID-19 Using MALDI-TOF-Based Serum Peptidome Profiling. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 4782-4787	7.8	28
111	Mesoporous Silica as Sorbents and Enzymatic Nanoreactors for Microbial Membrane Proteomics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 11571-11578	9.5	4
110	Direct MALDI-TOF profiling of gingival crevicular fluid sediments for periodontitis diagnosis. <i>Talanta</i> , <b>2021</b> , 225, 121956	6.2	1
109	Transpeptidation-mediated single-particle imaging assay for sensitive and specific detection of sortase with dark-field optical microscopy. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 178, 113003	11.8	2
108	Highly efficient exosome purification from human plasma by tangential flow filtration based microfluidic chip. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 333, 129563	8.5	13
107	Compartmentally scavenging hepatic oxidants through AMPK/SIRT3-PGC1 $\alpha$ axis improves mitochondrial biogenesis and glucose catabolism. <i>Free Radical Biology and Medicine</i> , <b>2021</b> , 168, 117-128	7.8	5
106	Fragment Mass Spectrum Prediction Facilitates Site Localization of Phosphorylation. <i>Journal of Proteome Research</i> , <b>2021</b> , 20, 634-644	5.6	10
105	Amorphous phosphatized ruthenium-iron bimetallic nanoclusters with Pt-like activity for hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 283, 119583	21.8	27
104	Microfluidic filter device coupled mass spectrometry for rapid bacterial antimicrobial resistance analysis. <i>Analyst, The</i> , <b>2021</b> , 146, 515-520	5	4
103	Mass Spectrometry Imaging of Mass Tag Immunoassay Enables the Quantitative Profiling of Biomarkers from Dozens of Exosomes. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 709-714	7.8	15
102	Self-Assembled Au Nanoparticle Arrays for Precise Metabolic Assay of Cerebrospinal Fluid. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 4886-4893	9.5	17
101	SERS and MALDI-TOF MS based plasma exosome profiling for rapid detection of osteosarcoma. <i>Analyst, The</i> , <b>2021</b> , 146, 6496-6505	5	7

100	Highly efficient enrichment and identification of pathogens using a herringbone microfluidic chip and by MALDI-TOF mass spectrometry. <i>Analyst, The</i> , <b>2021</b> , 146, 4146-4153	5	4
99	Matrix-assisted laser desorption ionization mass spectrometry profiling of plasma exosomes evaluates osteosarcoma metastasis. <i>IScience</i> , <b>2021</b> , 24, 102906	6.1	1
98	Rapid and specific detection nanoplatform of serum exosomes for prostate cancer diagnosis. <i>Mikrochimica Acta</i> , <b>2021</b> , 188, 283	5.8	2
97	Assessment of bacterial viability by laser desorption ionization mass spectrometry for antimicrobial susceptibility testing. <i>Talanta</i> , <b>2021</b> , 233, 122535	6.2	1
96	Rapid identification of bacteria directly from blood cultures by Co-magnetic bead enrichment and MALDI-TOF MS profiling. <i>Talanta</i> , <b>2021</b> , 233, 122472	6.2	3
95	Deep learning approaches for data-independent acquisition proteomics.. <i>Expert Review of Proteomics</i> , <b>2021</b> ,	4.2	2
94	Microfluidic Raman biochip detection of exosomes: a promising tool for prostate cancer diagnosis. <i>Lab on A Chip</i> , <b>2020</b> , 20, 4632-4637	7.2	35
93	Plasmonic Colloidosome-Coupled MALDI-TOF MS for Bacterial Heteroresistance Study at Single-Cell Level. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 8051-8057	7.8	10
92	Metaproteomics characterizes human gut microbiome function in colorectal cancer. <i>Npj Biofilms and Microbiomes</i> , <b>2020</b> , 6, 14	8.2	36
91	Water-in-oil microcompartments for the study of biomimetic drug metabolism. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 569, 378-385	9.3	1
90	Sensitive electrochemical aptasensor for detecting EpCAM with silica nanoparticles and quantum dots for signal amplification. <i>Journal of Electroanalytical Chemistry</i> , <b>2020</b> , 856, 113655	4.1	6
89	In silico spectral libraries by deep learning facilitate data-independent acquisition proteomics. <i>Nature Communications</i> , <b>2020</b> , 11, 146	17.4	59
88	Proteomic and Metabolic Elucidation of Solar-Powered Biomanufacturing by Bio-Abiotic Hybrid System. <i>Chem</i> , <b>2020</b> , 6, 234-249	16.2	30
87	Evaluation of prostate cancer based on MALDI-TOF MS fingerprinting of nanoparticle-treated serum proteins/peptides. <i>Talanta</i> , <b>2020</b> , 220, 121331	6.2	2
86	Liver-targeted Nano-MitoPBN normalizes glucose metabolism by improving mitochondrial redox balance. <i>Biomaterials</i> , <b>2019</b> , 222, 119457	15.6	16
85	Differentiation and authentication of fishes at the species level through analysis of fish skin by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , <b>2019</b> , 33, 1336-1343	2.2	12
84	Nanoporous silica coupled MALDI-TOF MS detection of Bence-Jones proteins in human urine for diagnosis of multiple myeloma. <i>Talanta</i> , <b>2019</b> , 200, 288-292	6.2	15
83	Mass spectrometry-based metabolomics approach to reveal differential compounds in pufferfish soups: Flavor, nutrition, and safety. <i>Food Chemistry</i> , <b>2019</b> , 301, 125261	8.5	14

82	Inverted Pyramid Textured p-Silicon Covered with Co <sub>2</sub> P as an Efficient and Stable Solar Hydrogen Evolution Photocathode. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 1755-1762	20.1	18
81	MALDI-TOF Characterization of Protein Expression Mutation During Morphological Changes of Bacteria Under the Impact of Antibiotics. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 2352-2359	7.8	10
80	Plasmonic Colloidosome-Based Multifunctional Platform for Bacterial Identification and Antimicrobial Resistance Detection. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 14220-14225	7.8	11
79	The Competitive Dynamic Binding of Some Blood Proteins Adsorbed on Gold Nanoparticles. <i>Particle and Particle Systems Characterization</i> , <b>2019</b> , 36, 1800257	3.1	10
78	Plasmonic Colloidosome-Based Single Cell Detector: A Strategy for Individual Cell Secretion Sensing. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 2260-2265	7.8	7
77	TiO-Assisted Laser Desorption/Ionization Mass Spectrometry for Rapid Profiling of Candidate Metabolite Biomarkers from Antimicrobial-Resistant Bacteria. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 3863-3870	7.8	26
76	Detection of antimicrobial resistance-associated proteins by titanium dioxide-facilitated intact bacteria mass spectrometry. <i>Chemical Science</i> , <b>2018</b> , 9, 2212-2221	9.4	31
75	Sensitive detection of thyroid stimulating hormone by inkjet printed microchip with a double signal amplification strategy. <i>Chinese Chemical Letters</i> , <b>2018</b> , 29, 1879-1882	8.1	5
74	Conformal and continuous deposition of bifunctional cobalt phosphide layers on p-silicon nanowire arrays for improved solar hydrogen evolution. <i>Nano Research</i> , <b>2018</b> , 11, 4823-4835	10	18
73	On-Chip Spyhole Nanoelectrospray Ionization Mass Spectrometry for Sensitive Biomarker Detection in Small Volumes. <i>Journal of the American Society for Mass Spectrometry</i> , <b>2018</b> , 29, 1538-1545	3.5	10
72	Highly-ordered silicon nanowire arrays for photoelectrochemical hydrogen evolution: an investigation on the effect of wire diameter, length and inter-wire spacing. <i>Sustainable Energy and Fuels</i> , <b>2018</b> , 2, 978-982	5.8	22
71	Detection of Pathogenic Microorganisms by Microfluidics Based Analytical Methods. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 5512-5520	7.8	65
70	Ultrasensitive profiling of multiple biomarkers from single cells by signal amplification mass spectrometry. <i>Chemical Communications</i> , <b>2018</b> , 54, 9659-9662	5.8	18
69	Toward Spectral Library-Free Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry Bacterial Identification. <i>Journal of Proteome Research</i> , <b>2018</b> , 17, 2124-2130	5.6	12
68	Direct MALDI-TOF MS Identification of Bacterial Mixtures. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 10400-10408	7.8	33
67	Amphiphilic mesoporous graphene mediated efficient photoionic cell. <i>Carbon</i> , <b>2018</b> , 128, 134-137	10.4	2
66	Mesoporous Silica for Triphase Nucleophilic Substitution Reactions. <i>Chimia</i> , <b>2018</b> , 72, 514-517	1.3	
65	Identification of pathogenic bacteria in human blood using IgG-modified FeO magnetic beads as a sorbent and MALDI-TOF MS for profiling. <i>Mikrochimica Acta</i> , <b>2018</b> , 185, 542	5.8	21

64	Highly Efficient Desalting by Silica Isoporous Membrane-Based Microfluidic Chip for Electrospray Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 14395-14401	7.8	14
63	Electrostatic Spray Ionization-Mass Spectrometry for Direct and Fast Wine Characterization. <i>ACS Omega</i> , <b>2018</b> , 3, 17881-17887	3.9	9
62	Advances in signal amplification strategies for electrochemical biosensing. <i>Current Opinion in Electrochemistry</i> , <b>2018</b> , 12, 5-12	7.2	18
61	Electrostatic Spray Ionization from 384-Well Microtiter Plates for Mass Spectrometry Analysis-Based Enzyme Assay and Drug Metabolism Screening. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 5983-5990	7.8	6
60	Electrochemistry-mass spectrometry for mechanism study of oxygen reduction at water/oil interface. <i>Scientific Reports</i> , <b>2017</b> , 7, 46669	4.9	6
59	Photochemical Bionanoreactor for Efficient Visible-Light-Driven in Vitro Drug Metabolism. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 7365-7372	7.8	8
58	Rapid Enrichment and Sensitive Detection of Multiple Metal Ions Enabled by Macroporous Graphene Foam. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 11758-11764	7.8	23
57	Bacterial Whole Cell Typing by Mass Spectra Pattern Matching with Bootstrapping Assessment. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 12556-12561	7.8	14
56	In-tip nanoreactors for cancer cells proteome profiling. <i>Analytica Chimica Acta</i> , <b>2017</b> , 949, 43-52	6.6	7
55	Open channel-based microchip electrophoresis interfaced with mass spectrometry via electrostatic spray ionization. <i>Chinese Chemical Letters</i> , <b>2016</b> , 27, 85-87	8.1	3
54	Sensitive and fast beverage/fruit antioxidant evaluation by TiO <sub>2</sub> -Au/graphene nanocomposites coupled with MALDI-MS. <i>Rapid Communications in Mass Spectrometry</i> , <b>2016</b> , 30 Suppl 1, 128-32	2.2	6
53	Microfluidic Air Sampler for Highly Efficient Bacterial Aerosol Collection and Identification. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 11504-11512	7.8	17
52	Mass Barcode Signal Amplification for Multiplex Allergy Diagnosis by MALDI-MS. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 6184-9	7.8	27
51	Ultrasensitive Detection of Low-Abundance Protein Biomarkers by Mass Spectrometry Signal Amplification Assay. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 6767-72	7.8	28
50	Polydopamine Grafted Porous Graphene as Biocompatible Nanoreactor for Efficient Identification of Membrane Proteins. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 6363-70	9.5	16
49	On-Chip Mesoporous Functionalized Magnetic Microspheres for Protein Sequencing by Extended Bottom-up Mass Spectrometry. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 1775-84	7.8	14
48	Sensitive and fast identification of bacteria in blood samples by immunoaffinity mass spectrometry for quick BSI diagnosis. <i>Chemical Science</i> , <b>2016</b> , 7, 2987-2995	9.4	41
47	Aluminium foil as a single-use substrate for MALDI-MS fingerprinting of different melanoma cell lines. <i>Analyst, The</i> , <b>2016</b> , 141, 3403-10	5	6

46	Porous silica enhanced proteolysis during Off-Gel separation for efficient protein identification. <i>Talanta</i> , <b>2015</b> , 144, 1182-8	6.2	
45	Multiple scanning electrochemical microscopy mapping of tyrosinase in micro-contact printed fruit samples on polyvinylidene fluoride membrane. <i>Electrochimica Acta</i> , <b>2015</b> , 179, 57-64	6.7	23
44	Multifunctional nanoreactor for comprehensive characterization of membrane proteins based on surface functionalized mesoporous foams. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 9360-7	7.8	12
43	Ambient in situ analysis and imaging of both hydrophilic and hydrophobic thin layer chromatography plates by electrostatic spray ionization mass spectrometry. <i>RSC Advances</i> , <b>2015</b> , 5, 75395-75402	3.7	8
42	Analytical Chemistry at the Laboratoire d'Electrochimie Physique et Analytique. <i>Chimia</i> , <b>2015</b> , 69, 290-3	1.3	1
41	Surprising acidity of hydrated lithium cations in organic solvents. <i>Chemical Communications</i> , <b>2014</b> , 50, 5554-7	5.8	18
40	Efficient drug metabolism strategy based on microsome-mesoporous organosilica nanoreactors. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 10870-6	7.8	11
39	Protein/peptide purification by three-well OFFGEL electrophoresis with immobilized ultra narrow pH gradient gels. <i>Analytical Methods</i> , <b>2014</b> , 6, 3995-4002	3.2	1
38	Fingerprinting the tertiary structure of electroadsorbed lysozyme at soft interfaces by electrostatic spray ionization mass spectrometry. <i>Chemical Communications</i> , <b>2014</b> , 50, 11829-32	5.8	20
37	Standard addition strip for quantitative electrostatic spray ionization mass spectrometry analysis: determination of caffeine in drinks. <i>Talanta</i> , <b>2014</b> , 130, 377-81	6.2	5
36	Electrostatic spray ionization mass spectrometry imaging. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 2033-41	7.8	16
35	On-Chip Spyhole Mass Spectrometry for Droplet-Based Microfluidics. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 4497-4501	3.6	11
34	Highly sensitive detection of five typical fluoroquinolones in low-fat milk by field-enhanced sample injection-based CE in bubble cell capillary. <i>Electrophoresis</i> , <b>2014</b> , 35, 3355-62	3.6	14
33	On-chip spyhole mass spectrometry for droplet-based microfluidics. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 4408-12	16.4	55
32	Antioxidant promotion of tyrosine nitration in the presence of copper(II). <i>Metallomics</i> , <b>2013</b> , 5, 686-92	4.5	1
31	Electrostatic-spray ionization mass spectrometry sniffing for perfume fingerprinting. <i>Rapid Communications in Mass Spectrometry</i> , <b>2013</b> , 27, 2310-6	2.2	10
30	Amino-functionalized macroporous silica for efficient tryptic digestion in acidic solutions. <i>Proteomics</i> , <b>2013</b> , 13, 3117-23	4.8	9
29	Compatible buffer for capillary electrophoresis and matrix-assisted laser desorption/ionization mass spectrometry. <i>Analytical Methods</i> , <b>2013</b> , 5, 4258	3.2	4

28	Electrochemically controlled proton-transfer-catalyzed reactions at liquid-liquid interfaces: nucleophilic substitution on ferrocene methanol. <i>ChemPhysChem</i> , <b>2013</b> , 14, 311-4	3.2	18
27	Coupling isoelectric focusing gel electrophoresis to mass spectrometry by electrostatic spray ionization. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 4745-52	7.8	16
26	Microchip emitter for solid-phase extraction-gradient elution-mass spectrometry. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 6254-63	7.8	16
25	Proteolysis in microfluidic droplets: an approach to interface protein separation and peptide mass spectrometry. <i>Lab on A Chip</i> , <b>2012</b> , 12, 2625-9	7.2	49
24	Electrostatic-spray ionization mass spectrometry. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 7422-30	7.8	58
23	Electrochemical push-pull scanner with mass spectrometry detection. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 6630-7	7.8	48
22	Improved conversion rates in drug screening applications using miniaturized electrochemical cells with frit channels. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 9176-83	7.8	29
21	Copper-catalyzed tyrosine nitration. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 19823-31	16.4	54
20	LEPA: from proteomics to energy conversion. <i>Chimia</i> , <b>2011</b> , 65, 672-6	1.3	
19	Ga <sub>2</sub> O <sub>3</sub> photocatalyzed on-line tagging of cysteine to facilitate peptide mass fingerprinting. <i>Proteomics</i> , <b>2011</b> , 11, 3501-9	4.8	11
18	Characterization of efficient proteolysis by trypsin loaded macroporous silica. <i>Molecular BioSystems</i> , <b>2011</b> , 7, 2890-8		15
17	Tandem 18O stable isotope labeling for quantification of N-glycoproteome. <i>Journal of Proteome Research</i> , <b>2010</b> , 9, 227-36	5.6	71
16	Nanomaterial-assisted laser desorption ionization for mass spectrometry-based biomedical analysis. <i>Nanomedicine</i> , <b>2010</b> , 5, 1641-52	5.6	22
15	Electrochemical aspects of electrospray and laser desorption/ionization for mass spectrometry. <i>Annual Review of Analytical Chemistry</i> , <b>2010</b> , 3, 231-54	12.5	36
14	Copper(I) and copper(II) binding to Amyloid 16 (A $\beta$ 16) studied by electrospray ionization mass spectrometry. <i>Metallomics</i> , <b>2010</b> , 2, 474-9	4.5	38
13	Controlling the specific enrichment of multi-phosphorylated peptides on oxide materials: aluminium foil as a target plate for laser desorption ionization mass spectrometry. <i>Chemical Science</i> , <b>2010</b> , 1, 374	9.4	24
12	Electrochemical reactions and ionization processes. <i>European Journal of Mass Spectrometry</i> , <b>2010</b> , 16, 341-9	1.1	11
11	TiO <sub>2</sub> -modified macroporous silica foams for advanced enrichment of multi-phosphorylated peptides. <i>Chemistry - A European Journal</i> , <b>2009</b> , 15, 2504-8	4.8	57

10	Photocatalytic redox reactions for in-source peptide fragmentation. <i>Chemistry - A European Journal</i> , <b>2009</b> , 15, 6711-7	4.8	15
9	Kinetics of proteolytic reactions in nanoporous materials. <i>Journal of Proteome Research</i> , <b>2009</b> , 8, 4685-92	5.6	46
8	TiO(2) printed aluminum foil: single-use film for a laser desorption/ionization target plate. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 1177-83	7.8	44
7	Macroporous materials as novel catalysts for efficient and controllable proteolysis. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 5749-56	7.8	53
6	In-source photocatalytic reduction of disulfide bonds during laser desorption ionization. <i>Chemical Communications</i> , <b>2008</b> , 6357-9	5.8	19
5	Proteins in Mesoporous Silicates. <i>ACS Symposium Series</i> , <b>2008</b> , 49-60	0.4	5
4	A nanoporous reactor for efficient proteolysis. <i>Chemistry - A European Journal</i> , <b>2008</b> , 14, 151-7	4.8	72
3	MALDI in-source photooxidation reactions for online peptide tagging. <i>Angewandte Chemie - International Edition</i> , <b>2008</b> , 47, 2646-8	16.4	35
2	MALDI In-Source Photooxidation Reactions for Online Peptide Tagging. <i>Angewandte Chemie</i> , <b>2008</b> , 120, 2686-2688	3.6	3
1	Specific on-plate enrichment of phosphorylated peptides for direct MALDI-TOF MS analysis. <i>Journal of Proteome Research</i> , <b>2007</b> , 6, 4763-9	5.6	86