

# Xu Zhang

## List of Publications by Year in descending order

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83  
papers

4,410  
citations

87888

38  
h-index

106344

65  
g-index

89  
all docs

89  
docs citations

89  
times ranked

5893  
citing authors

#	ARTICLE	IF	CITATIONS
1	Instantaneous and Quantitative Functionalization of Gold Nanoparticles with Thiolated DNA Using a pH-Assisted and Surfactant-Free Route. <i>Journal of the American Chemical Society</i> , 2012, 134, 7266-7269.	13.7	477
2	Surface Science of DNA Adsorption onto Citrate-Capped Gold Nanoparticles. <i>Langmuir</i> , 2012, 28, 3896-3902.	3.5	260
3	Mechanisms of DNA Sensing on Graphene Oxide. <i>Analytical Chemistry</i> , 2013, 85, 7987-7993.	6.5	201
4	Ultrahigh Nanoparticle Stability against Salt, pH, and Solvent with Retained Surface Accessibility via Depletion Stabilization. <i>Journal of the American Chemical Society</i> , 2012, 134, 9910-9913.	13.7	189
5	Solid-phase microextraction in bioanalysis: New devices and directions. <i>Journal of Chromatography A</i> , 2010, 1217, 4041-4060.	3.7	182
6	Instantaneous Attachment of an Ultrahigh Density of Nonthiolated DNA to Gold Nanoparticles and Its Applications. <i>Langmuir</i> , 2012, 28, 17053-17060.	3.5	157
7	Hydrothermal growth of free standing TiO <sub>2</sub> nanowire membranes for photocatalytic degradation of pharmaceuticals. <i>Journal of Hazardous Materials</i> , 2011, 189, 278-285.	12.4	150
8	Polymeric microneedles for controlled transdermal drug delivery. <i>Journal of Controlled Release</i> , 2019, 315, 97-113.	9.9	140
9	Inhibition of Multidrug Resistance of Cancer Cells by Co-Delivery of DNA Nanostructures and Drugs Using Porous Silicon Nanoparticles@Giant Liposomes. <i>Advanced Functional Materials</i> , 2015, 25, 3330-3340.	14.9	114
10	Tissue-Specific In Vivo Bioconcentration of Pharmaceuticals in Rainbow Trout ( <i>Oncorhynchus</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 Technology, 2010, 44, 3417-3422.	10.0	107
11	Quantitative in Vivo Microsampling for Pharmacokinetic Studies Based on an Integrated Solid-Phase Microextraction System. <i>Analytical Chemistry</i> , 2007, 79, 4507-4513.	6.5	98
12	Adsorption of DNA Oligonucleotides by Titanium Dioxide Nanoparticles. <i>Langmuir</i> , 2014, 30, 839-845.	3.5	94
13	Fast pH-assisted functionalization of silver nanoparticles with monothiolated DNA. <i>Chemical Communications</i> , 2012, 48, 10114.	4.1	88
14	In-situ combination of fermentation and electrodialysis with bipolar membranes for the production of lactic acid: Continuous operation. <i>Bioresource Technology</i> , 2013, 147, 442-448.	9.6	87
15	Polarity Control for Nonthiolated DNA Adsorption onto Gold Nanoparticles. <i>Langmuir</i> , 2013, 29, 6091-6098.	3.5	77
16	Research Progress on Rolling Circle Amplification (RCA)-Based Biomedical Sensing. <i>Pharmaceuticals</i> , 2018, 11, 35.	3.8	74
17	Multifunctional Graphene-Oxide-Reinforced Dissolvable Polymeric Microneedles for Transdermal Drug Delivery. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 352-360.	8.0	74
18	Adsorption of doxorubicin on citrate-capped gold nanoparticles: insights into engineering potent chemotherapeutic delivery systems. <i>Nanoscale</i> , 2015, 7, 19611-19619.	5.6	69

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19	In vivo solid-phase microextraction for monitoring intravenous concentrations of drugs and metabolites. <i>Nature Protocols</i> , 2011, 6, 896-924.	12.0	68
20	DNA Adsorption by ZnO Nanoparticles near Its Solubility Limit: Implications for DNA Fluorescence Quenching and DNAzyme Activity Assays. <i>Langmuir</i> , 2016, 32, 5672-5680.	3.5	63
21	Development of the Space-Resolved Solid-Phase Microextraction Technique and Its Application to Biological Matrices. <i>Analytical Chemistry</i> , 2009, 81, 7349-7356.	6.5	62
22	Chloride accelerated Fenton chemistry for the ultrasensitive and selective colorimetric detection of copper. <i>Chemical Communications</i> , 2016, 52, 2087-2090.	4.1	61
23	Preparation and characterization of carboxyl-group functionalized superparamagnetic nanoparticles and the potential for bio-applications. <i>Journal of the Brazilian Chemical Society</i> , 2007, 18, 1329-1335.	0.6	59
24	Preparation and application of surface-coated superparamagnetic nanobeads in the isolation of genomic DNA. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 277, 16-23.	2.3	58
25	Toward Fast and Quantitative Modification of Large Gold Nanoparticles by Thiolated DNA: Scaling of Nanoscale Forces, Kinetics, and the Need for Thiol Reduction. <i>Journal of Physical Chemistry C</i> , 2013, 117, 15677-15684.	3.1	55
26	Evaluation of bio-compatible poly(ethylene glycol)-based solid-phase microextraction fiber for in vivo pharmacokinetic studies of diazepam in dogs. <i>Analyst</i> , 2007, 132, 672.	3.5	54
27	On-Fiber Standardization Technique for Solid-Coated Solid-Phase Microextraction. <i>Analytical Chemistry</i> , 2007, 79, 1221-1230.	6.5	53
28	Regenerative NanoOctopus Based on Multivalent-Aptamer-Functionalized Magnetic Microparticles for Effective Cell Capture in Whole Blood. <i>Analytical Chemistry</i> , 2019, 91, 4017-4022.	6.5	52
29	From polymer-metal complex framework to 3D architectures: growth, characterization and formation mechanism of micrometer-sized NiS. <i>New Journal of Chemistry</i> , 2003, 27, 1331-1335.	2.8	51
30	Direct monitoring of ochratoxin A in cheese with solid-phase microextraction coupled to liquid chromatography-tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2009, 1216, 7505-7509.	3.7	51
31	Standard-free kinetic calibration for rapid on-site analysis by solid-phase microextraction. <i>Journal of Separation Science</i> , 2008, 31, 1167-1172.	2.5	50
32	Bacteria capture, lysate clearance, and plasmid DNA extraction using pH-sensitive multifunctional magnetic nanoparticles. <i>Analytical Biochemistry</i> , 2010, 398, 120-122.	2.4	45
33	Effects of Polyethylene Glycol on DNA Adsorption and Hybridization on Gold Nanoparticles and Graphene Oxide. <i>Langmuir</i> , 2012, 28, 14330-14337.	3.5	44
34	CuO nanoparticles as haloperoxidase-mimics: Chloride-accelerated heterogeneous Cu-Fenton chemistry for H <sub>2</sub> O <sub>2</sub> and glucose sensing. <i>Sensors and Actuators B: Chemical</i> , 2019, 287, 180-184.	7.8	43
35	In vivo sampling of environmental organic contaminants in fish by solid-phase microextraction. <i>TrAC - Trends in Analytical Chemistry</i> , 2012, 32, 31-39.	11.4	42
36	Parts-per-Million of Polyethylene Glycol as a Non-Interfering Blocking Agent for Homogeneous Biosensor Development. <i>Analytical Chemistry</i> , 2013, 85, 10045-10050.	6.5	42

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37	Biodegradable Photothermal and pH Responsive Calcium Carbonate@Phospholipid@Acetalated Dextran Hybrid Platform for Advancing Biomedical Applications. <i>Advanced Functional Materials</i> , 2016, 26, 6158-6169.	14.9	40
38	Growth of BaWO <sub>4</sub> fishbone-like nanostructures in w/o microemulsion. <i>Journal of Colloid and Interface Science</i> , 2004, 274, 118-121.	9.4	39
39	Microfluidics Fabrication of Monodisperse Biocompatible Phospholipid Vesicles for Encapsulation and Delivery of Hydrophilic Drug or Active Compound. <i>Langmuir</i> , 2014, 30, 3905-3912.	3.5	37
40	Promoting DNA loading on magnetic nanoparticles using a DNA condensation strategy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 125, 247-254.	5.0	35
41	Pre-Equilibrium Solid-Phase Microextraction of Free Analyte in Complex Samples: Correction for Mass Transfer Variation from Protein Binding and Matrix Tortuosity. <i>Analytical Chemistry</i> , 2011, 83, 3365-3370.	6.5	34
42	Solid-Phase Microextraction Coupled to LC-ESI-MS/MS: Evaluation and Correction for Matrix-Induced Ionization Suppression/Enhancement for Pharmaceutical Analysis in Biological and Environmental Samples. <i>Analytical Chemistry</i> , 2011, 83, 6532-6538.	6.5	34
43	DNA-Functionalized Gold Nanoparticles in Macromolecularly Crowded Polymer Solutions. <i>Journal of Physical Chemistry B</i> , 2012, 116, 13396-13402.	2.6	29
44	Dissecting Colloidal Stabilization Factors in Crowded Polymer Solutions by Forming Self-Assembled Monolayers on Gold Nanoparticles. <i>Langmuir</i> , 2013, 29, 6018-6024.	3.5	29
45	Synergistic Multimodal Cancer Therapy Using Glucose Oxidase@CuS Nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 41464-41472.	8.0	28
46	Simplified kinetic calibration of solid-phase microextraction for in vivo pharmacokinetics. <i>Journal of Chromatography A</i> , 2009, 1216, 7664-7669.	3.7	27
47	Adsorption of Oligo-DNA on Magnesium Aluminum-Layered Double-Hydroxide Nanoparticle Surfaces: Mechanistic Implication in Gene Delivery. <i>Langmuir</i> , 2017, 33, 3926-3933.	3.5	26
48	Rapid enrichment of leucocytes and genomic DNA from blood based on bifunctional core-shell magnetic nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 311, 416-420.	2.3	25
49	Kinetically-Calibrated Solid-Phase Microextraction Using Label-Free Standards and Its Application for Pharmaceutical Analysis. <i>Analytical Chemistry</i> , 2011, 83, 2371-2377.	6.5	25
50	Chemisorption Mechanism of DNA on Mg/Fe Layered Double Hydroxide Nanoparticles: Insights into Engineering Effective siRNA Delivery Systems. <i>Langmuir</i> , 2016, 32, 2659-2667.	3.5	25
51	Non-invasive isolation of rare circulating tumor cells with a DNA mimic of double-sided tape using multimeric aptamers. <i>Nanoscale</i> , 2019, 11, 5879-5883.	5.6	25
52	Fabrication of Calcium Phosphate-Based Nanocomposites Incorporating DNA Origami, Gold Nanorods, and Anticancer Drugs for Biomedical Applications. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700664.	7.6	24
53	A benzene-thermal metathesis route to pure metastable rocksalt GaN. <i>New Journal of Chemistry</i> , 2003, 27, 565-567.	2.8	23
54	Temporal Resolution of Solid-Phase Microextraction: Measurement of Real-Time Concentrations within a Dynamic System. <i>Analytical Chemistry</i> , 2010, 82, 9492-9499.	6.5	21

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55	Chloride-accelerated Cu-Fenton chemistry for biofilm removal. <i>Chemical Communications</i> , 2017, 53, 5862-5865.	4.1	21
56	Rapid extraction of genomic DNA from saliva for HLA typing on microarray based on magnetic nanobeads. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 280, 164-168.	2.3	20
57	A simple and cost-effective approach to fabricate tunable length polymeric microneedle patches for controllable transdermal drug delivery. <i>RSC Advances</i> , 2020, 10, 15541-15546.	3.6	19
58	Hyaluronic-acid-based $\beta$ -cyclodextrin grafted copolymers as biocompatible supramolecular hosts to enhance the water solubility of tocopherol. <i>International Journal of Pharmaceutics</i> , 2020, 586, 119542.	5.2	18
59	Depth-Profiling of Environmental Pharmaceuticals in Biological Tissue by Solid-Phase Microextraction. <i>Analytical Chemistry</i> , 2012, 84, 6956-6962.	6.5	17
60	The Adsorption of Dextranase onto Mg/Fe-Layered Double Hydroxide: Insight into the Immobilization. <i>Nanomaterials</i> , 2018, 8, 173.	4.1	16
61	Temperature-dependent selective purification of plasmid DNA using magnetic nanoparticles in an RNase-free process. <i>Analytical Biochemistry</i> , 2011, 412, 117-119.	2.4	15
62	$\beta$ -Cyclodextrin-grafted hyaluronic acid as a supramolecular polysaccharide carrier for cell-targeted drug delivery. <i>International Journal of Pharmaceutics</i> , 2021, 602, 120602.	5.2	15
63	Regenerative nanobots based on magnetic layered double hydroxide for azo dye removal and degradation. <i>Chemical Communications</i> , 2017, 53, 10456-10458.	4.1	14
64	Calibration of pre-equilibrium HF-LPME and its application to the rapid determination of free analytes in biological fluids. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2015, 980, 28-33.	2.3	13
65	Surface interaction of doxorubicin with anatase determines its photodegradation mechanism: insights into removal of waterborne pharmaceuticals by TiO <sub>2</sub> nanoparticles. <i>Environmental Science: Nano</i> , 2018, 5, 1027-1035.	4.3	12
66	Prevention of doxorubicin sorptive losses in drug delivery studies using polyethylene glycol. <i>RSC Advances</i> , 2015, 5, 25693-25698.	3.6	11
67	Cu-DNAzyme facilitates highly sensitive immunoassay. <i>Chinese Chemical Letters</i> , 2019, 30, 1652-1654.	9.0	11
68	The mass transfer dynamics of hollow fiber liquid-phase microextraction and its application for rapid analysis of biological samples. <i>Journal of Chromatography A</i> , 2012, 1266, 10-16.	3.7	10
69	Graphene oxide and CuO double quantum dot composites (GOQD-q-CuO) with enhanced haloperoxidase-like activity and its application in colorimetric detection of H <sub>2</sub> O <sub>2</sub> and glucose. <i>Materials Chemistry and Physics</i> , 2021, 260, 124126.	4.0	10
70	Rapid photodegradation mechanism enabled by broad-spectrum absorbing black anatase and reduced graphene oxide nanocomposites. <i>Applied Surface Science</i> , 2022, 575, 151718.	6.1	10
71	Highly Hybridizable Spherical Nucleic Acids by Tandem Glutathione Treatment and Polythymine Spacing. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 12504-12513.	8.0	9
72	Carrier-mediated solvent bar microextraction coupled with HPLC-DAD for the quantitative analysis of the hydrophilic antihypertensive peptide VLPVPR in human plasma. <i>Analytical Methods</i> , 2018, 10, 69-75.	2.7	9

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73	Biofilm eradication by in situ generation of reactive chlorine species on nano-CuO surfaces. <i>Journal of Materials Science</i> , 2020, 55, 11609-11621.	3.7	7
74	Determination of ethambutol in biological samples using graphene oxide based dispersive solid-phase microextraction followed by ion mobility spectrometry. <i>International Journal for Ion Mobility Spectrometry</i> , 2020, 23, 19-27.	1.4	6
75	Nitrite-enhanced copper-based Fenton reactions for biofilm removal. <i>Chemical Communications</i> , 2021, 57, 5514-5517.	4.1	6
76	Anion-exchange membrane-separated electrochemical cells enable the use of sacrificial anodes for hydrogen peroxide detection with enhanced dynamic ranges. <i>Electrochimica Acta</i> , 2017, 246, 707-711.	5.2	4
77	Ultrasensitive and Remote SERS Enabled by Oxygen-free Integrated Plasmonic Field Transmission. <i>Cell Reports Physical Science</i> , 2020, 1, 100189.	5.6	4
78	Exacerbated Protein Oxidation and Tyrosine Nitration through Nitrite-Enhanced Fenton Chemistry. <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 353-359.	5.2	4
79	Analysis of Local Anesthetics in Biological Samples via Kinetically Calibrated Liquid-Phase Solvent Bar Micro-Extraction Combined with HPLC. <i>Chromatographia</i> , 2014, 77, 1213-1221.	1.3	3
80	Quantitation of polymeric-microneedle-delivered HA15 in tissues using liquid chromatography-tandem mass spectrometry. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2020, 185, 113230.	2.8	3
81	<scp>Noteworthy</scp> issues for producing and transforming bioproducts by electrolysis. <i>Journal of Chemical Technology and Biotechnology</i> , 2014, 89, 1437-1444.	3.2	2
82	Reduced Graphene Oxide-Cadmium Sulfide Quantum Dots Nanocomposite Based Dispersive Solid Phase Microextraction for Ultra-Trace Determination of Carbamazepine and Phenobarbital. <i>Journal of the Brazilian Chemical Society</i> , 0, , .	0.6	1
83	Drug Co-Delivery: Biodegradable Photothermal and pH Responsive Calcium Carbonate@Phospholipid@Acetalated Dextran Hybrid Platform for Advancing Biomedical Applications ( <i>Adv. Funct. Mater.</i> 34/2016). <i>Advanced Functional Materials</i> , 2016, 26, 6138-6138.	14.9	0