Zhang-Run Xu

List of Publications by Year
in descending order

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74 papers	1,971 citations	218677 26 h-index	289244 40 g-index
75 all docs	75 docs citations	75 times ranked	2454 citing authors

#	Article	IF	Citations
1	Manipulation of droplets in microfluidic systems. TrAC - Trends in Analytical Chemistry, 2010, 29, 141-157.	11.4	124
2	Boron nitride nanosheet/CuS nanocomposites as mimetic peroxidase for sensitive colorimetric detection of cholesterol. Sensors and Actuators B: Chemical, 2017, 246, 118-126.	7.8	96
3	Sensitive Multicolor Visual Detection of Exosomes via Dual Signal Amplification Strategy of Enzyme-Catalyzed Metallization of Au Nanorods and Hybridization Chain Reaction. ACS Sensors, 2019, 4, 3210-3218.	7.8	87
4	Sensitive multicolor visual detection of telomerase activity based on catalytic hairpin assembly and etching of Au nanorods. Biosensors and Bioelectronics, 2018, 122, 247-253.	10.1	84
5	A radial microfluidic concentration gradient generator with high-density channels for cell apoptosis assay. Lab on A Chip, 2011, 11, 3305.	6.0	70
6	Plasmonic Colorimetric Biosensor for Sensitive Exosome Detection via Enzyme-Induced Etching of Gold Nanobipyramid@MnO₂ Nanosheet Nanostructures. Analytical Chemistry, 2020, 92, 15244-15252.	6.5	69
7	Multicolor and photothermal dual-readout biosensor for visual detection of prostate specific antigen. Biosensors and Bioelectronics, 2019, 140, 111345.	10.1	68
8	Effect of TiO₂ on Altering Direction of Interfacial Charge Transfer in a TiO₂â€Agâ€MPYâ€FePc System by SERS. Angewandte Chemie - International Edition, 2019, 58, 8172-8176.	13.8	66
9	SERSâ€“Fluorescence Dual-Mode pH-Sensing Method Based on Janus Microparticles. ACS Applied Materials & Interfaces, 2017, 9, 39699-39707.	8.0	58
10	Microfluidic fabrication of multifunctional particles and their analytical applications. Talanta, 2014, 121, 163-177.	5.5	45
11	Multitarget sensing of glucose and cholesterol based on Janus hydrogel microparticles. Biosensors and Bioelectronics, 2017, 92, 81-86.	10.1	41
12	High-Throughput/High-Precision Sampling of Single Cells into ICP-MS for Elucidating Cellular Nanoparticles. Analytical Chemistry, 2018, 90, 14543-14550.	6.5	41
13	A SERS substrate of mesoporous g-C3N4 embedded with in situ grown gold nanoparticles for sensitive detection of 6-thioguanine. Sensors and Actuators B: Chemical, 2018, 260, 400-407.	7.8	40
14	A Chiralâ€Labelâ€Free SERS Strategy for the Synchronous Chiral Discrimination and Identification of Small Aromatic Molecules. Angewandte Chemie - International Edition, 2020, 59, 19079-19086.	13.8	40
15	Microfluidic preparation of polymer-lipid Janus microparticles with staged drug release property. Journal of Colloid and Interface Science, 2019, 553, 631-638.	9.4	36
16	Highly reproducible and fast detection of 6-thioguanine in human serum using a droplet-based microfluidic SERS system. Sensors and Actuators B: Chemical, 2019, 283, 532-537.	7.8	36
17	Inertial-Force-Assisted, High-Throughput, Droplet-Free, Single-Cell Sampling Coupled with ICP-MS for Real-Time Cell Analysis. Analytical Chemistry, 2020, 92, 6604-6612.	6.5	36
18	A microfluidic concentration-gradient droplet array generator for the production of multi-color nanoparticles. Lab on A Chip, 2013, 13, 2815.	6.0	33

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19	Plasmonic colorimetric biosensor for visual detection of telomerase activity based on horseradish peroxidase-encapsulated liposomes and etching of Au nanobipyramids. Sensors and Actuators B: Chemical, 2019, 296, 126646.	7.8	32
20	Pd nanoparticle-decorated hydroxy boron nitride nanosheets as a novel drug carrier for chemo-photothermal therapy. Colloids and Surfaces B: Biointerfaces, 2019, 176, 300-308.	5.0	32
21	A Spiral-Helix (3D) Tubing Array That Ensures Ultrahigh-Throughput Single-Cell Sampling. Analytical Chemistry, 2019, 91, 15826-15832.	6.5	31
22	On-chip preparation of calcium alginate particles based on droplet templates formed by using a centrifugal microfluidic technique. Journal of Colloid and Interface Science, 2016, 466, 20-27.	9.4	30
23	Droplet-based microfluidic synthesis of (Au nanorod@Ag)â€“polyaniline Janus nanoparticles and their application as a surface-enhanced Raman scattering nanosensor for mercury detection. Analytical Methods, 2019, 11, 3966-3973.	2.7	30
24	A chiral signal-amplified sensor for enantioselective discrimination of amino acids based on charge transfer-induced SERS. Chemical Communications, 2019, 55, 9697-9700.	4.1	29
25	DNA mutation detection with chip-based temperature gradient capillary electrophoresis using a slantwise radiative heating system. Lab on A Chip, 2007, 7, 1162.	6.0	28
26	High sensitivity and non-background SERS detection of endogenous hydrogen sulfide in living cells using core-shell nanoparticles. Analytica Chimica Acta, 2020, 1094, 106-112.	5.4	28
27	Label-free detection of exosomes based on ssDNA-modulated oxidase-mimicking activity of CuCo2O4 nanorods. Analytica Chimica Acta, 2021, 1145, 9-16.	5.4	28
28	A simple microfluidic system for efficient capillary electrophoretic separation and sensitive fluorimetric detection of DNA fragments using light-emitting diode and liquid-core waveguide techniques. Electrophoresis, 2005, 26, 3602-3608.	2.4	26
29	Controlled formation of porous CuCo2O4 nanorods with enhanced oxidase and catalase catalytic activities using bimetal-organic frameworks as templates. Colloids and Surfaces B: Biointerfaces, 2020, 188, 110764.	5.0	26
30	ICP-MS and Photothermal Dual-Readout Assay for Ultrasensitive and Point-of-Care Detection of Pancreatic Cancer Exosomes. Analytical Chemistry, 2021, 93, 11540-11546.	6.5	25
31	Advances in droplet microfluidics for SERS and Raman analysis. Biosensors and Bioelectronics, 2022, 198, 113822.	10.1	25
32	Microparticles with size/charge selectivity and pH response for SERS monitoring of 6-thioguanine in blood serum. Sensors and Actuators B: Chemical, 2018, 273, 1539-1547.	7.8	23
33	Fast DNA hybridization on a microfluidic mixing device based on pneumatic driving. Talanta, 2011, 84, 565-571.	5.5	22
34	Simultaneous quantitative detection of multiple tumor markers in microfluidic nanoliter-volume droplets. Talanta, 2019, 205, 120096.	5.5	22
35	DNA purification on a lab-on-valve system incorporating a renewable microcolumn with in situ monitoring by laser-induced fluorescence. Analytical and Bioanalytical Chemistry, 2007, 388, 157-163.	3.7	21
36	NiO Nanoparticles for Exceptionally Stable DNA Adsorption and Its Extraction from Biological Fluids. Langmuir, 2018, 34, 9314-9321.	3.5	20

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37	A multicolor-SERS dual-mode pH sensor based on smart nano-in-micro particles. Sensors and Actuators B: Chemical, 2020, 310, 127889.	7.8	20
38	Enhanced chemodynamic therapy at weak acidic pH based on g-C3N4-supported hemin/Au nanoplatform and cell apoptosis monitoring during treatment. Colloids and Surfaces B: Biointerfaces, 2021, 197, 111437.	5.0	19
39	Two-Dimensional Cytometry Platform for Single-Particle/Cell Analysis with Laser-Induced Fluorescence and ICPâ€“MS. Analytical Chemistry, 2021, 93, 8203-8209.	6.5	18
40	One-step synthesis of bifunctional PEGDA/TiO 2 composite film by photopolymerization for the removal of Congo red. Applied Surface Science, 2018, 445, 437-444.	6.1	17
41	SERS monitoring of the Fenton degradation reaction based on microfluidic droplets and alginate microparticles. Analyst, The, 2019, 144, 5882-5889.	3.5	17
42	Accurate quantitative detection of cell surface sialic acids with a background-free SERS probe. Talanta, 2020, 209, 120579.	5.5	16
43	DNA-Engineered iron-based metal-organic framework bio-interface for rapid visual determination of exosomes. Journal of Colloid and Interface Science, 2022, 612, 424-433.	9.4	16
44	An extrusion fluidic driving method for continuous-flow polymerase chain reaction on a microfluidic chip. Mikrochimica Acta, 2010, 168, 71-78.	5.0	15
45	Three-dimensional poly(lactic-co-glycolic acid)/silica colloidal crystal microparticles for sustained drug release and visualized monitoring. Journal of Colloid and Interface Science, 2018, 530, 465-472.	9.4	15
46	A pneumatic micromixer facilitating fluid mixing at a wide range flow rate for the preparation of quantum dots. Science China Chemistry, 2013, 56, 799-805.	8.2	14
47	A pH-responsive colorimetric detection of human telomerase RNA based on a three-dimensional DNA amplifier. Analytica Chimica Acta, 2020, 1111, 67-74.	5.4	14
48	A review on sensing mechanisms and strategies for telomerase activity detection. TrAC - Trends in Analytical Chemistry, 2021, 134, 116115.	11.4	14
49	Near-infrared upper phenyl-fused BODIPY as a photosensitizer for photothermalâ€“photodynamic therapy. Journal of Materials Chemistry B, 2022, 10, 3048-3054.	5.8	14
50	A three-dimensional nickel-doped reduced graphene oxide composite for selective separation of hemoglobin with a high adsorption capacity. RSC Advances, 2016, 6, 56278-56286.	3.6	13
51	Alkaline phosphatase-regulated in situ formation of chromogenic probes for multicolor visual sensing of biomarkers. Talanta, 2021, 228, 122222.	5.5	13
52	Highâ€throughput analysis of DNA fragments using a miniaturized CE system combined with a slottedâ€vial array sample introduction system. Electrophoresis, 2008, 29, 4733-4738.	2.4	12
53	Effect of TiO 2 on Altering Direction of Interfacial Charge Transfer in a TiO 2 â€Agâ€MPYâ€FePc System by SERS. Angewandte Chemie, 2019, 131, 8256-8260.	2.0	12
54	Colloidal photonic crystal array chip based on nanoparticle self-assembly on patterned hydrophobic surface for signal-enhanced fluorescent assay of adenosine. Mikrochimica Acta, 2020, 187, 194.	5.0	12

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55	A digital microfluidic platform based on a near-infrared light-responsive shape-memory micropillar array. Lab on A Chip, 2021, 21, 1131-1138.	6.0	12
56	Plasmonic photothermal biosensor for visual detection of tyrosinase and dopamine based on manganese dioxide nanosheets-mediated etching of gold nanorods. Sensors and Actuators B: Chemical, 2022, 353, 131139.	7.8	12
57	Automated sampling system for the analysis of amino acids using microfluidic capillary electrophoresis. Talanta, 2009, 78, 448-452.	5.5	11
58	Generation of two-dimensional concentration-gradient droplet arrays on a two-layer chip for screening of protein crystallization conditions. Microfluidics and Nanofluidics, 2015, 18, 493-501.	2.2	11
59	Visual detection of acid phosphatase based on hollow mesoporous manganese dioxide nanospheres. Analytica Chimica Acta, 2020, 1138, 1-8.	5.4	11
60	Near-infrared vinyl-containing aza-BODIPY nanoparticles as photosensitizer for phototherapy. Dyes and Pigments, 2022, 198, 110026.	3.7	11
61	A nanohybrid of Prussian blue supported by boracic acid-modified g-C3N4 for Raman recognition of cell surface sialic acid and photothermal/photodynamic therapy. Colloids and Surfaces B: Biointerfaces, 2022, 215, 112490.	5.0	11
62	A polydopamine-coated mesoporous nanocomposite with robust affinity to horseradish peroxidase based on catecholic adhesion. Colloids and Interface Science Communications, 2021, 40, 100340.	4.1	9
63	Near-infrared absorbing aza-BODIPYs with 1,7-di-tert-butyl groups by low-barrier rotation for photothermal application. Materials Advances, 2022, 3, 1254-1262.	5.4	9
64	In situ SERS monitoring of intracellular H₂O₂ in single living cells based on label-free bifunctional Fe₃O₄@Ag nanoparticles. Analyst, The, 2022, 147, 1815-1823.	3.5	9
65	In situ selfâ€assembled reduced graphene oxide aerogel embedded with nickel oxide nanoparticles for the highâ€efficiency separation of ovalbumin. Journal of Separation Science, 2017, 40, 1765-1772.	2.5	8
66	A Chiralâ€Labelâ€Free SERS Strategy for the Synchronous Chiral Discrimination and Identification of Small Aromatic Molecules. Angewandte Chemie, 2020, 132, 19241-19248.	2.0	7
67	A miniaturized spatial temperature gradient capillary electrophoresis system with radiative heating and automated sample introduction for DNA mutation detection. Electrophoresis, 2010, 31, 3137-3143.	2.4	6
68	A biochip based on shell-isolated Au@MnO2 nanoparticle array-enhanced fluorescence effect for simple and sensitive exosome assay. Biosensors and Bioelectronics, 2022, 216, 114373.	10.1	6
69	Preparation of encoded bar-like core-shell microparticles on a microfluidic chip. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 588, 124373.	4.7	5
70	Reduced graphene oxide aerogel with packaged TiO₂ nanoparticles as a promising adsorbent for the separation of DNA from human whole blood. Separation Science Plus, 2018, 1, 217-224.	0.6	4
71	Structural modulation of heterometallic metalâ€“organic framework via a facile metal-ion-assisted surface etching and structural transformation. Journal of Molecular Liquids, 2021, 334, 116073.	4.9	4
72	A superposable double-gradient droplet array chip for preparation of PEGDA microspheres containing concentration-gradient drugs. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	2

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73	In situ monitoring PUVA therapy by using a cell-array chip-based SERS platform. Analytica Chimica Acta, 2022, 1189, 339224.	5.4	2
74	Innentitelbild: A Chiralâ€Labelâ€Free SERS Strategy for the Synchronous Chiral Discrimination and Identification of Small Aromatic Molecules (Angew. Chem. 43/2020). Angewandte Chemie, 2020, 132, 18982-18982.	2.0	0