

# Shanhong Xia

## List of Publications by Year in descending order

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78  
papers

1,036  
citations

471509

17  
h-index

454955

30  
g-index

78  
all docs

78  
docs citations

78  
times ranked

1445  
citing authors

#	ARTICLE	IF	CITATIONS
1	Label-free immunosensor based on one-step electrodeposition of chitosan-gold nanoparticles biocompatible film on Au microelectrode for determination of aflatoxin B1 in maize. <i>Biosensors and Bioelectronics</i> , 2016, 80, 222-229.	10.1	102
2	A wavelength-modulated localized surface plasmon resonance (LSPR) optical fiber sensor for sensitive detection of mercury(II) ion by gold nanoparticles-DNA conjugates. <i>Biosensors and Bioelectronics</i> , 2018, 114, 15-21.	10.1	95
3	Synthesis and electrochemical sensing application of poly(3,4-ethylenedioxythiophene)-based materials: A review. <i>Analytica Chimica Acta</i> , 2018, 1022, 1-19.	5.4	89
4	Determination of trace mercury in water based on N -octylpyridinium ionic liquids preconcentration and stripping voltammetry. <i>Journal of Hazardous Materials</i> , 2016, 301, 206-213.	12.4	60
5	Quantitative determination of aflatoxin B1 concentration in acetonitrile by chemometric methods using terahertz spectroscopy. <i>Food Chemistry</i> , 2016, 209, 286-292.	8.2	48
6	Highly-sensitive electrochemical sensing platforms for food colourants based on the property-tuning of porous carbon. <i>Analytica Chimica Acta</i> , 2015, 887, 75-81.	5.4	38
7	A Mediated BOD Biosensor Based on Immobilized B. Subtilis on Three-Dimensional Porous Graphene-Polypyrrole Composite. <i>Sensors</i> , 2017, 17, 2594.	3.8	36
8	Design, fabrication and application of an SOI-based resonant electric field microsensor with coplanar comb-shaped electrodes. <i>Journal of Micromechanics and Microengineering</i> , 2013, 23, 055002.	2.6	35
9	Characterization of Wheat Varieties Using Terahertz Time-Domain Spectroscopy. <i>Sensors</i> , 2015, 15, 12560-12572.	3.8	30
10	Early detection of germinated wheat grains using terahertz image and chemometrics. <i>Scientific Reports</i> , 2016, 6, 21299.	3.3	30
11	Electrochemical enhancement of long alkyl-chained surfactants for sensitive determination of tetrabromobisphenol A. <i>Electrochimica Acta</i> , 2016, 190, 490-494.	5.2	28
12	A High Sensitivity Electric Field Microsensor Based on Torsional Resonance. <i>Sensors</i> , 2018, 18, 286.	3.8	28
13	Fabrication of a Miniature Multi-Parameter Sensor Chip for Water Quality Assessment. <i>Sensors</i> , 2017, 17, 157.	3.8	26
14	Temperature-controlled ionic liquid dispersive liquid-liquid microextraction combined with fluorescence detection of ultra-trace Hg <sup>2+</sup> in water. <i>Analytical Methods</i> , 2019, 11, 2669-2676.	2.7	23
15	A Palladium-Tin Modified Microband Electrode Array for Nitrate Determination. <i>Sensors</i> , 2015, 15, 23249-23261.	3.8	19
16	Micromachined catalytic combustion type gas sensor for hydrogen detection. <i>Micro and Nano Letters</i> , 2013, 8, 668-671.	1.3	18
17	Discrimination of moldy wheat using terahertz imaging combined with multivariate classification. <i>RSC Advances</i> , 2015, 5, 93979-93986.	3.6	18
18	Palladium-Gold Modified Ultramicro Interdigital Array Electrode Chip for Nitrate Detection in Neutral Water. <i>Micromachines</i> , 2019, 10, 223.	2.9	17

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19	FET immunosensor for hemoglobin A1c using a gold nanofilm grown by a seed-mediated technique and covered with mixed self-assembled monolayers. <i>Mikrochimica Acta</i> , 2012, 176, 65-72.	5.0	16
20	Design, Fabrication and Characterization of a MEMS-Based Three-Dimensional Electric Field Sensor with Low Cross-Axis Coupling Interference. <i>Sensors</i> , 2018, 18, 870.	3.8	16
21	Simultaneous Detection of Copper, Lead and Zinc on Tin Film/Gold Nanoparticles/Gold Microelectrode by Square Wave Stripping Voltammetry. <i>Electroanalysis</i> , 2012, 24, 1783-1790.	2.9	15
22	Microsensor Chip Integrated with Gold Nanoparticles-Modified Ultramicroelectrode Array for Improved Electroanalytical Measurement of Copper Ions. <i>Electroanalysis</i> , 2013, 25, 1713-1721.	2.9	15
23	EMD-Based Electrocardiogram Delineation for a Wearable Low-Power ECG Monitoring Device. <i>Canadian Journal of Electrical and Computer Engineering</i> , 2014, 37, 212-221.	2.0	15
24	Salt-induced ionic liquid dispersive liquid-liquid microextraction and filter separation. <i>Analytical Methods</i> , 2016, 8, 1096-1102.	2.7	15
25	An Electrochemical Microsensor Based on a AuNPs-Modified Microband Array Electrode for Phosphate Determination in Fresh Water Samples. <i>Sensors</i> , 2014, 14, 24472-24482.	3.8	12
26	The Polypyrrole/Multiwalled Carbon Nanotube Modified Au Microelectrode for Sensitive Electrochemical Detection of Trace Levels of Pb <sup>2+</sup> . <i>Micromachines</i> , 2017, 8, 86.	2.9	12
27	Enhanced Sensitivity and Stability of a Novel Resonant MEMS Electric Field Sensor Based on Closed-Loop Feedback. <i>IEEE Sensors Journal</i> , 2021, 21, 22536-22543.	4.7	12
28	Three dimensional electric field measurement method based on coplanar decoupling structure. , 2014, , .		10
29	Microfluidic chip with interdigitated ultra-microelectrode array for total phosphorus detection. <i>Micro and Nano Letters</i> , 2014, 9, 862-865.	1.3	10
30	Ultramicroelectrode array modified with magnetically labeled <i>Bacillus subtilis</i> , palladium nanoparticles and reduced carboxy graphene for amperometric determination of biochemical oxygen demand. <i>Mikrochimica Acta</i> , 2017, 184, 763-771.	5.0	10
31	Determination of Mercury(II) on A Centrifugal Microfluidic Device Using Ionic Liquid Dispersive Liquid-Liquid Microextraction. <i>Micromachines</i> , 2019, 10, 523.	2.9	10
32	Modification of Graphene on Ultramicroelectrode Array and Its Application in Detection of Dissolved Oxygen. <i>Sensors</i> , 2015, 15, 382-393.	3.8	9
33	Single-chip 3D electric field microsensor. <i>Frontiers of Mechanical Engineering</i> , 2017, 12, 581-590.	4.3	9
34	Modelling and Experiment of a Silicon Resonant Pressure Sensor. <i>Analog Integrated Circuits and Signal Processing</i> , 2002, 32, 29-35.	1.4	8
35	A decoupling calibration method based on genetic algorithm for three dimensional electric field sensor. , 2016, , .		8
36	A micro amperometric immunosensor for detection of human immunoglobulin. <i>Science in China Series F: Information Sciences</i> , 2006, 49, 397-408.	1.1	7

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37	Computation of capacitance and electrostatic forces for the electrostatically driving actuators considering fringe effects. <i>Microsystem Technologies</i> , 2015, 21, 2089-2096.	2.0	7
38	Electrochemical sensing platform for tetrabromobisphenol A at pM level based on the synergetic enhancement effects of graphene and dioctadecyldimethylammonium bromide. <i>Analytica Chimica Acta</i> , 2016, 935, 90-96.	5.4	7
39	Poly(sulfosalicylic acid)-functionalized gold nanoparticles for the detection of tetrabromobisphenol A at pM concentrations. <i>Journal of Hazardous Materials</i> , 2020, 388, 121733.	12.4	7
40	Electric field sensors based on MEMS technology. <i>Journal of Electronics</i> , 2005, 22, 443-448.	0.2	6
41	Miniaturized Optical System for Detection of Ammonia Nitrogen in Water Based on Gas-Phase Colorimetry. <i>Analytical Letters</i> , 2012, 45, 2176-2184.	1.8	6
42	An Electrochemical Sensor System with Renewable Copper Nano-clusters Modified Electrode for Continuous Nitrate Determination. <i>IEEE Sensors Journal</i> , 2016, , 1-1.	4.7	6
43	Reusable Boron-Doped Diamond Electrodes for the Semi-Continuous Detection of Tetrabromobisphenol A. <i>IEEE Sensors Journal</i> , 2018, 18, 5219-5224.	4.7	6
44	High performance electric field micro sensor with combined differential structure. <i>Journal of Electronics</i> , 2014, 31, 143-150.	0.2	5
45	A novel 2-dimensional electric field sensor based on in-plane micro rotary actuator. , 2014, , .		4
46	False arrhythmia alarm reduction in the intensive care unit using data fusion and machine learning. , 2016, , .		4
47	Wafer-Level Vacuum-Packaged Electric Field Microsensor: Structure Design, Theoretical Model, Microfabrication, and Characterization. <i>Micromachines</i> , 2022, 13, 928.	2.9	4
48	Exploiting articulatory features for pitch accent detection. <i>Journal of Zhejiang University: Science C</i> , 2013, 14, 835-844.	0.7	3
49	Determination of Nitrate in Potable Water Using a Miniaturized Electrochemical Sensor. , 2018, , .		3
50	A Portable Sensor System for Determination of Copper Ions in Waters with Android Device. , 2019, , .		3
51	A novel micro-pellistor based on nanoporous alumina beam support. <i>Journal of Electronics</i> , 2012, 29, 469-472.	0.2	2
52	Continuous flowing micro-reactor for aqueous reaction at temperature higher than 100°C. <i>Biomicrofluidics</i> , 2013, 7, 034104.	2.4	2
53	Electric field microsensor based on the structure of piezoelectric interdigitated cantilever beams. <i>Journal of Electronics</i> , 2014, 31, 497-504.	0.2	2
54	Gold Nanospheres-Coated LSPR Fiber Sensor with High RI Sensitivity by a Rapid Fabricating Method. , 2018, , .		2

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55	A multi-parameter integrated chip system for water quality detection. International Journal of Modern Physics B, 2019, 33, 1950041.	2.0	2
56	Determination of total phosphorus in water environment by three-dimensional double coils microelectrode chip. , 2012, , .		1
57	A micro electrochemical sensor with porous copper-clusters for total nitrogen determination in freshwaters. , 2013, , .		1
58	Photocatalytic digestion of total phosphorus utilising nanotitanium dioxide photocatalyst. Micro and Nano Letters, 2013, 8, 582-586.	1.3	1
59	Electric field and induced charges distribution model for MEMS strip-type sensing electrodes. Microsystem Technologies, 2017, 23, 143-150.	2.0	1
60	Cuff-less blood pressure estimation using Kalman filter on android platform. , 2017, , .		1
61	Cationic Surfactant Enhanced Detection of Tetrabromobisphenol A with Boron-doped Diamond Electrode. , 2019, , .		1
62	Novel "cathode-on-membrane" VME pressure sensor. Journal of Electronics, 2001, 18, 255-259.	0.2	0
63	Self-assembly of micro parts on normal glass substrate *. Progress in Natural Science: Materials International, 2004, 14, 934-936.	4.4	0
64	A microfabricated metal grating oscillator for electric field detection. Journal of Electronics, 2005, 22, 564-568.	0.2	0
65	Efficient CMOS Preamplifier Dedicated for a MEMS-Based Electrostatic Field Sensor. , 2006, , .		0
66	A Micromachined Electrostatic Field Sensor with Vertical Thermal Actuator. , 2006, , .		0
67	Special Invited Lecture: Integrated MEMS Sensors. , 2007, , .		0
68	Fabrication of a 3D interdigitated double-coil microelectrode chip by MEMS technique. Mikrochimica Acta, 2012, 177, 491-496.	5.0	0
69	Photocatalytic digestion of total phosphorus in the presence of H <sub>2</sub> O <sub>2</sub> utilizing nano-TiO <sub>2</sub> photocatalyst. , 2013, , .		0
70	Mesoporous TiO <sub>2</sub> nano-spheres: Electrospray combined sol-gel fabrication and application to organic phosphorus degradation. Journal of Electronics, 2013, 30, 313-317.	0.2	0
71	Fabrication and characterization of SnO <sub>2</sub> nanospheres for hydrogen detection. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2013, 227, 125-129.	0.1	0
72	Micromachined catalytic combustion hydrogen gas sensor. , 2013, , .		0

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73	Development of a portable total nitrogen detection system based on microelectrodes. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2014, 228, 46-51.	0.1	0
74	Ru-MOFs Modified Microelectrode for Trace Mercury Detection. , 2019, , .		0
75	Chitosan/graphene oxide/mos2/aunps modified electrochemical sensor for trace mercury detection**. , 2021, , .		0
76	A low power health monitoring device for an electrocardiogram and respiration. WIT Transactions on Engineering Sciences, 2013, , .	0.0	0
77	Simple and efficient baseline removal method for a smartphone based ECG detection device. WIT Transactions on Engineering Sciences, 2013, , .	0.0	0
78	Study of an adsorption method for trace mercury based on Bacillus subtilis. Open Chemistry, 2021, 19, 1164-1170.	1.9	0