Jianfeng Ping

List of Publications by Citations

113 papers	6,077 citations	41 h-index	76 g-index
117 ext. papers	7,842 ext. citations	11 avg, IF	6.55 L-index

#	Paper	IF	Citations
113	Ultrathin 2D Metal-Organic Framework Nanosheets. *Advanced Materials*, **2015**, 27, 7372-8	24	684
112	Bioinspired Design of Ultrathin 2D Bimetallic Metal-Organic-Framework Nanosheets Used as Biomimetic Enzymes. *Advanced Materials*, **2016**, 28, 4149-55	24	320
111	Simultaneous determination of ascorbic acid, dopamine and uric acid using high-performance screen-printed graphene electrode. *Biosensors and Bioelectronics*, **2012**, 34, 70-6	11.8	317
110	Self-Assembly of Single-Layer CoAl-Layered Double Hydroxide Nanosheets on 3D Graphene Network Used as Highly Efficient Electrocatalyst for Oxygen Evolution Reaction. *Advanced Materials*, **2016**, 28, 7640-5	24	296
109	Recent advances in nanomaterial-based biosensors for antibiotics detection. *Biosensors and Bioelectronics*, **2017**, 91, 504-514	11.8	232
108	Direct electrochemical reduction of graphene oxide on ionic liquid doped screen-printed electrode and its electrochemical biosensing application. *Biosensors and Bioelectronics*, **2011**, 28, 204-9	11.8	196
107	All-electrospun flexible triboelectric nanogenerator based on metallic MXene nanosheets. *Nano Energy*, **2019**, 59, 268-276	17.1	174
106	Impedimetric immunosensor based on gold nanoparticles modified graphene paper for label-free detection of Escherichia coli O157:H7. *Biosensors and Bioelectronics*, **2013**, 49, 492-8	11.8	152
105	Recent advances in aptasensors based on graphene and graphene-like nanomaterials. *Biosensors and Bioelectronics*, **2015**, 64, 373-85	11.8	148
104	Recent Advances in Sensing Applications of Two-Dimensional Transition Metal Dichalcogenide Nanosheets and Their Composites. *Advanced Functional Materials*, **2017**, 27, 1605817	15.6	137
103	Application of electrochemically reduced graphene oxide on screen-printed ion-selective electrode. *Analytical Chemistry*, **2012**, 84, 3473-9	7.8	135
102	Development of an electrochemically reduced graphene oxide modified disposable bismuth film electrode and its application for stripping analysis of heavy metals in milk. *Food Chemistry*, **2014**, 151, 65-71	8.5	128
101	Development of an all-solid-state potassium ion-selective electrode using graphene as the solid-contact transducer. *Electrochemistry Communications*, **2011**, 13, 1529-1532	5.1	116
100	Recent advances in nanomaterial-enabled screen-printed electrochemical sensors for heavy metal detection. *TrAC - Trends in Analytical Chemistry*, **2019**, 115, 187-202	14.6	111
99	Recent advances in solid-contact ion-selective electrodes: functional materials, transduction mechanisms, and development trends. *Chemical Society Reviews*, **2020**, 49, 4405-4465	58.5	106
98	Simultaneous determination of Cd(II) and Pb(II) ions in honey and milk samples using a single-walled carbon nanohorns modified screen-printed electrochemical sensor. *Food Chemistry*, **2019**, 274, 8-15	8.5	93
97	Flexible freestanding graphene paper-based potentiometric enzymatic aptasensor for ultrasensitive wireless detection of kanamycin. *Biosensors and Bioelectronics*, **2019**, 123, 178-184	11.8	89

96	In Situ Synthesis of Metal Sulfide Nanoparticles Based on 2D Metal-Organic Framework Nanosheets. *Small*, **2016**, 12, 4669-74	11	88
95	Recent Progress in Nanomaterial-Based Optical Aptamer Assay for the Detection of Food Chemical Contaminants. *ACS Applied Materials & Interfaces*, **2017**, 9, 23287-23301	9.5	87
94	Recent developments in carbon nanomaterial-enabled electrochemical sensors for nitrite detection. *TrAC - Trends in Analytical Chemistry*, **2019**, 113, 1-12	14.6	86
93	Self-reduction bimetallic nanoparticles on ultrathin MXene nanosheets as functional platform for pesticide sensing. *Journal of Hazardous Materials*, **2020**, 384, 121358	12.8	79
92	Carbon nanomaterial-enabled pesticide biosensors: Design strategy, biosensing mechanism, and practical application. *TrAC - Trends in Analytical Chemistry*, **2018**, 106, 62-83	14.6	78
91	A multifunctional and highly flexible triboelectric nanogenerator based on MXene-enabled porous film integrated with laser-induced graphene electrode. *Nano Energy*, **2019**, 66, 104121	17.1	78
90	Copper oxide nanoparticles and ionic liquid modified carbon electrode for the non-enzymatic electrochemical sensing of hydrogen peroxide. *Mikrochimica Acta*, **2010**, 171, 117-123	5.8	78
89	One-step and large-scale fabrication of flexible and wearable humidity sensor based on laser-induced graphene for real-time tracking of plant transpiration at bio-interface. *Biosensors and Bioelectronics*, **2020**, 165, 112360	11.8	73
88	Recent progress in application of nanomaterial-enabled biosensors for ochratoxin A detection. *TrAC - Trends in Analytical Chemistry*, **2018**, 102, 236-249	14.6	69
87	Highly conductive 1D-2D composite film for skin-mountable strain sensor and stretchable triboelectric nanogenerator. *Nano Energy*, **2019**, 62, 319-328	17.1	61
86	Contamination-free visual detection of SARS-CoV-2 with CRISPR/Cas12a: A promising method in the point-of-care detection. *Biosensors and Bioelectronics*, **2020**, 169, 112642	11.8	59
85	Recent Advances in Nanomaterial-Enabled Wearable Sensors: Material Synthesis, Sensor Design, and Personal Health Monitoring. *Small*, **2020**, 16, e2002681	11	55
84	Nucleic acid amplification free biosensors for pathogen detection. *Biosensors and Bioelectronics*, **2020**, 153, 112049	11.8	52
83	Metallic Transition Metal Dichalcogenide Nanosheets as an Effective and Biocompatible Transducer for Electrochemical Detection of Pesticide. *Analytical Chemistry*, **2018**, 90, 11658-11664	7.8	51
82	Carbon dots: Current advances in pathogenic bacteria monitoring and prospect applications. *Biosensors and Bioelectronics*, **2020**, 156, 112085	11.8	50
81	Spontaneous growth and regulation of noble metal nanoparticles on flexible biomimetic MXene paper for bioelectronics. *Biosensors and Bioelectronics*, **2020**, 148, 111799	11.8	50
80	High-performance flexible potentiometric sensing devices using free-standing graphene paper. *Journal of Materials Chemistry B*, **2013**, 1, 4781-4791	7.3	49
79	Evaluation of trace heavy metal levels in soil samples using an ionic liquid modified carbon paste electrode. *Journal of Agricultural and Food Chemistry*, **2011**, 59, 4418-23	5.7	49

78	Development of an ionic liquid modified screen-printed graphite electrode and its sensing in determination of dopamine. *Electrochemistry Communications*, **2010**, 12, 1738-1741	5.1	49
77	Fully stretchable triboelectric nanogenerator for energy harvesting and self-powered sensing. *Nano Energy*, **2019**, 61, 78-85	17.1	48
76	Electrochemical doping of three-dimensional graphene networks used as efficient electrocatalysts for oxygen reduction reaction. *Nanoscale*, **2015**, 7, 9394-8	7.7	48
75	An amperometric sensor based on Prussian blue and poly(o-phenylenediamine) modified glassy carbon electrode for the determination of hydrogen peroxide in beverages. *Food Chemistry*, **2011**, 126, 2005-9	8.5	45
74	Adhesive curing through low-voltage activation. *Nature Communications*, **2015**, 6, 8050	17.4	44
73	Recent advances in graphene-based freestanding paper-like materials for sensing applications. *TrAC - Trends in Analytical Chemistry*, **2018**, 105, 75-88	14.6	42
72	One-Step and Spontaneous in Situ Growth of Popcorn-like Nanostructures on Stretchable Double-Twisted Fiber for Ultrasensitive Textile Pressure Sensor. *ACS Applied Materials & Interfaces*, **2020**, 12, 10689-10696	9.5	41
71	Smart plant-wearable biosensor for in-situ pesticide analysis. *Biosensors and Bioelectronics*, **2020**, 170, 112636	11.8	39
70	Sensitive determination of (-)-epigallocatechin gallate in tea infusion using a novel ionic liquid carbon paste electrode. *Journal of Agricultural and Food Chemistry*, **2012**, 60, 6333-40	5.7	38
69	Visual detection for nucleic acid-based techniques as potential on-site detection methods. A review. *Analytica Chimica Acta*, **2020**, 1099, 1-15	6.6	38
68	A multifunctional TENG yarn integrated into agrotextile for building intelligent agriculture. *Nano Energy*, **2020**, 74, 104863	17.1	37
67	Determination of ascorbic acid levels in food samples by using an ionic liquid-carbon nanotube composite electrode. *Food Chemistry*, **2012**, 135, 362-7	8.5	37
66	Rapid Fabrication of Flexible and Stretchable Strain Sensor by Chitosan-Based Water Ink for Plants Growth Monitoring. *Advanced Materials Technologies*, **2017**, 2, 1700021	6.8	35
65	End-point dual specific detection of nucleic acids using CRISPR/Cas12a based portable biosensor. *Biosensors and Bioelectronics*, **2020**, 157, 112153	11.8	35
64	All-solid-state nitrate-selective electrode and its application in drinking water. *Electrochimica Acta*, **2012**, 81, 186-190	6.7	34
63	Colorimetric aggregation assay for kanamycin using gold nanoparticles modified with hairpin DNA probes and hybridization chain reaction-assisted amplification. *Mikrochimica Acta*, **2019**, 186, 448	5.8	33
62	Transition Metal Dichalcogenide-Silk Nanofibril Membrane for One-Step Water Purification and Precious Metal Recovery. *ACS Applied Materials & Interfaces*, **2020**, 12, 24521-24530	9.5	33
61	Breathable Nanogenerators for an On-Plant Self-Powered Sustainable Agriculture System. *ACS Nano*, **2021**, 15, 5307-5315	16.7	32

60	Phase-Dependent Fluorescence Quenching Efficiency of MoS Nanosheets and Their Applications in Multiplex Target Biosensing. *ACS Applied Materials & Interfaces*, **2018**, 10, 42009-42017	9.5	31
59	A self-charging device with bionic self-cleaning interface for energy harvesting. *Nano Energy*, **2020**, 73, 104738	17.1	30
58	Development of an aptamer-based impedimetric bioassay using microfluidic system and magnetic separation for protein detection. *Biosensors and Bioelectronics*, **2014**, 59, 106-11	11.8	30
57	Determination of trace heavy metals in milk using an ionic liquid and bismuth oxide nanoparticles modified carbon paste electrode. *Science Bulletin*, **2012**, 57, 1781-1787		30
56	Contamination-free visual detection of CaMV35S promoter amplicon using CRISPR/Cas12a coupled with a designed reaction vessel: Rapid, specific and sensitive. *Analytica Chimica Acta*, **2020**, 1096, 130-137	6.6	27
55	Highly Efficient Raindrop Energy-Based Triboelectric Nanogenerator for Self-Powered Intelligent Greenhouse. *ACS Nano*, **2021**,	16.7	27
54	All-solid-state potentiometric sensor using single-walled carbon nanohorns as transducer. *Sensors and Actuators B: Chemical*, **2019**, 283, 284-289	8.5	27
53	Evaluation of trans-resveratrol level in grape wine using laser-induced porous graphene-based electrochemical sensor. *Science of the Total Environment*, **2020**, 714, 136687	10.2	26
52	A Prussian blue-based amperometric sensor for the determination of hydrogen peroxide residues in milk. *Ionics*, **2010**, 16, 523-527	2.7	26
51	An unmodified gold nanorods-based DNA colorimetric biosensor with enzyme-free hybridization chain reaction amplification. *Sensors and Actuators B: Chemical*, **2018**, 273, 642-648	8.5	26
50	Ultrathin transition-metal dichalcogenide nanosheet-based colorimetric sensor for sensitive and label-free detection of DNA. *Sensors and Actuators B: Chemical*, **2019**, 290, 565-572	8.5	23
49	Recent advances in emerging DNA-based methods for genetically modified organisms (GMOs) rapid detection. *TrAC - Trends in Analytical Chemistry*, **2018**, 109, 19-31	14.6	22
48	Fully Written Flexible Potentiometric Sensor Using Two-Dimensional Nanomaterial-Based Conductive Ink. *Analytical Chemistry*, **2018**, 90, 13088-13095	7.8	22
47	A stretchable and conductive fiber for multifunctional sensing and energy harvesting. *Nano Energy*, **2021**, 84, 105954	17.1	21
46	Biotriboelectric Nanogenerators: Materials, Structures, and Applications. *Advanced Energy Materials*, **2020**, 10, 2002001	21.8	20
45	Advanced DNA-based methods for the detection of peanut allergens in processed food. *TrAC - Trends in Analytical Chemistry*, **2019**, 114, 278-292	14.6	19
44	Water-Wave Driven Route Avoidance Warning System for Wireless Ocean Navigation. *Advanced Energy Materials*, **2021**, 11, 2101116	21.8	19
43	Two-dimensional MXene nanosheets (types TiCT and TiCT) as new ion-to-electron transducers in solid-contact calcium ion-selective electrodes. *Mikrochimica Acta*, **2019**, 186, 750	5.8	18

42	Recent Progress in 2D-Nanomaterial-Based Triboelectric Nanogenerators. *Advanced Functional Materials*, **2021**, 31, 2009994	15.6	18
41	Stimulation of ambient energy generated electric field on crop plant growth. *Nature Food*,	14.4	17
40	Magnetic particles for integrated nucleic acid purification, amplification and detection without pipetting. *TrAC - Trends in Analytical Chemistry*, **2020**, 127, 115912	14.6	13
39	Alchemy-Inspired Green Paper for Spontaneous Recovery of Noble Metals. *Small*, **2020**, 16, e1907282	11	12
38	Metamaterial-Free Flexible Graphene-Enabled Terahertz Sensors for Pesticide Detection at Bio-Interface. *ACS Applied Materials & Interfaces*, **2020**, 12, 44281-44287	9.5	12
37	A novel pH sensing membrane based on an ionic liquid-polymer composite. *Mikrochimica Acta*, **2012** , 176, 229-234	5.8	11
36	Structure, synthesis, and sensing applications of single-walled carbon nanohorns. *Biosensors and Bioelectronics*, **2020**, 167, 112495	11.8	11
35	Counting DNA molecules with visual segment-based readouts in minutes. *Chemical Communications* , **2018**, 54, 1105-1108	5.8	10
34	Novel Photochrome Aptamer Switch Assay (PHASA) for adaptive binding to aptamers. *Journal of Fluorescence*, **2014**, 24, 1581-91	2.4	10
33	Design and synthesis of a task-specific ionic liquid as a transducer in potentiometric sensors. *RSC Advances*, **2013**, 3, 19782	3.7	10
32	Wireless Technologies for Energy Harvesting and Transmission for Ambient Self-Powered Systems. *ACS Nano*, **2021**, 15, 9328-9354	16.7	10
31	A Filter Paper-Based Nanogenerator via Water-Drop Flow. *Advanced Sustainable Systems*, **2019**, 3, 1900052	5.9	9
30	Noble metal alloy nanoparticles coated flexible MoS paper for the determination of reactive oxygen species. *Biosensors and Bioelectronics*, **2020**, 166, 112463	11.8	9
29	Sustainable Natural Bio-Origin Materials for Future Flexible Devices.. *Advanced Science*, **2022**, e2200560	13.6	9
28	Development of a Graphene Paper-Based Flexible Solid-Contact Lead Ion-Selective Electrode and its Application in Water. *Transactions of the ASABE*, **2019**, 62, 245-252	0.9	8
27	A Flexible, Recyclable, and High-Performance Pullulan-Based Triboelectric Nanogenerator (TENG). *Advanced Materials Technologies*, **2020**, 5, 1900905	6.8	8
26	Fluorinated Graphene-Enabled Durable Triboelectric Coating for Water Energy Harvesting. *Small*, **2021**, 17, e2007805	11	8
25	Development of a Novel Carbon Composite Electrode for Trace Determination of Heavy Metals in Milk. *Transactions of the ASABE*, **2011**, 54, 1829-1835	0.9	7

24	Recent Advances in Plant Nanoscience. *Advanced Science*, **2021**, 9, e2103414	13.6	7
23	Nanomaterial-based biosensors for agro-product safety. *TrAC - Trends in Analytical Chemistry*, **2021**, 143, 116369	14.6	7
22	A flexible virtual sensor array based on laser-induced graphene and MXene for detecting volatile organic compounds in human breath. *Analyst, The*, **2021**, 146, 5704-5713	5	7
21	Two-dimensional nanocomposite-based electrochemical sensor for rapid determination of trans-resveratrol. *Science of the Total Environment*, **2020**, 742, 140351	10.2	6
20	Direct electrochemistry of double strand DNA on ionic liquid modified screen-printed graphite electrode. *Electrochimica Acta*, **2011**, 56, 4154-4158	6.7	6
19	Omnidirectional Wind Energy Harvester for Self-Powered Agro-Environmental Information Sensing. *Nano Energy*, **2021**, 106686	17.1	6
18	Growth-Controllable Triboelectric Nanogenerator Based on Surface-Attached Metal-Organic Framework Layer on Living Leaf. *Small*, **2021**, 17, e2103430	11	6
17	Determination of Inorganic Phosphate in Environmental Water Using Cobalt Film Modified Ionic Liquid-Carbon Paste Electrode. *Transactions of the ASABE*, **2013**, 56, 779-785	0.9	5
16	Triphenylamine as a conductive solid material for fabricating carbon electrodes. *Mikrochimica Acta*, **2011**, 172, 241-245	5.8	5
15	Carbon nanomaterial-based nanogenerators for harvesting energy from environment. *Nano Energy*, **2021**, 90, 106494	17.1	5
14	A disposable electrochemical sensor based on electrospinning of molecularly imprinted nanohybrid films for highly sensitive determination of the organotin acaricide cyhexatin. *Mikrochimica Acta*, **2019**, 186, 504	5.8	4
13	Screen-Printed Potentiometric Strip for Calcium Ion Determination in Water and Milk. *Transactions of the ASABE*, **2013**, 56, 739-744	0.9	4
12	The use of the platinum electrode coated with ultrathin poly(allylamine hydrochloride)/Nafion films for selective detection of hydrogen peroxide. *Ionics*, **2011**, 17, 443-449	2.7	4
11	A flexible and fully integrated wearable pressure sensing chip system for multi-scenario applications. *Journal of Materials Chemistry A*, **2021**, 9, 26875-26884	13	4
10	Flexible complementary circuits operating at sub-0.5 V via hybrid organic-inorganic electrolyte-gated transistors. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
9	Recent Advances in g-C N -Based Photocatalysts for Pollutant Degradation and Bacterial Disinfection: Design Strategies, Mechanisms, and Applications. *Small*, **2021**, e2105089	11	3
8	Nanosheet Sensors: Recent Advances in Sensing Applications of Two-Dimensional Transition Metal Dichalcogenide Nanosheets and Their Composites (Adv. Funct. Mater. 19/2017). *Advanced Functional Materials*, **2017**, 27,	15.6	2
7	Progress in molecular detection with high-speed nucleic acids thermocyclers. *Journal of Pharmaceutical and Biomedical Analysis*, **2020**, 190, 113489	3.5	2

6	Noble Metal Regeneration: Alchemy-Inspired Green Paper for Spontaneous Recovery of Noble Metals (Small 33/2020). *Small*, **2020**, 16, 2070184	11	2
5	An anti-passivation ink for the preparation of electrodes for use in electrochemical immunoassays. *Journal of Zhejiang University: Science B*, **2018**, 19, 726-734	4.5	2
4	Anion-Selective Layered Double Hydroxide Composites-Based Osmotic Energy Conversion for Real-Time Nutrient Solution Detection.. *Advanced Science*, **2022**, e2103696	13.6	1
3	Plant-protein-enabled biodegradable triboelectric nanogenerator for sustainable agriculture. *Fundamental Research*, **2021**,		1
2	Phase-dependent ion-to-electron transducing efficiency of WS nanosheets for an all-solid-state potentiometric calcium sensor. *Mikrochimica Acta*, **2020**, 187, 525	5.8	1
1	An easy-fabricated ordered mesoporous carbon-based electrochemical sensor for the analysis of trans-resveratrol in red wines. *Food Control*, **2021**, 129, 108203	6.2	1