Jianfeng Ping

List of Publications by Year
in descending order

117	9,870	28242	36008
papers	citations	55 h-index	97 g-index

117	117	117	11091
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultrathin 2D Metalâ€“Organic Framework Nanosheets. Advanced Materials, 2015, 27, 7372-7378.	11.1	943
2	Bioinspired Design of Ultrathin 2D Bimetallic Metalâ€“Organicâ€Framework Nanosheets Used as Biomimetic Enzymes. Advanced Materials, 2016, 28, 4149-4155.	11.1	440
3	Simultaneous determination of ascorbic acid, dopamine and uric acid using high-performance screen-printed graphene electrode. Biosensors and Bioelectronics, 2012, 34, 70-76.	5.3	375
4	Selfâ€Assembly of Singleâ€Layer CoAlâ€Layered Double Hydroxide Nanosheets on 3D Graphene Network Used as Highly Efficient Electrocatalyst for Oxygen Evolution Reaction. Advanced Materials, 2016, 28, 7640-7645.	11.1	355
5	Recent advances in nanomaterial-based biosensors for antibiotics detection. Biosensors and Bioelectronics, 2017, 91, 504-514.	5.3	328
6	All-electrospun flexible triboelectric nanogenerator based on metallic MXene nanosheets. Nano Energy, 2019, 59, 268-276.	8.2	314
7	Recent advances in solid-contact ion-selective electrodes: functional materials, transduction mechanisms, and development trends. Chemical Society Reviews, 2020, 49, 4405-4465.	18.7	257
8	Direct electrochemical reduction of graphene oxide on ionic liquid doped screen-printed electrode and its electrochemical biosensing application. Biosensors and Bioelectronics, 2011, 28, 204-209.	5.3	219
9	Recent Advances in Sensing Applications of Twoâ€Dimensional Transition Metal Dichalcogenide Nanosheets and Their Composites. Advanced Functional Materials, 2017, 27, 1605817.	7.8	206
10	Recent advances in nanomaterial-enabled screen-printed electrochemical sensors for heavy metal detection. TrAC - Trends in Analytical Chemistry, 2019, 115, 187-202.	5.8	189
11	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.	5.3	186
12	Impedimetric immunosensor based on gold nanoparticles modified graphene paper for label-free detection of Escherichia coli O157:H7. Biosensors and Bioelectronics, 2013, 49, 492-498.	5.3	183
13	Recent advances in aptasensors based on graphene and graphene-like nanomaterials. Biosensors and Bioelectronics, 2015, 64, 373-385.	5.3	174
14	Application of Electrochemically Reduced Graphene Oxide on Screen-Printed Ion-Selective Electrode. Analytical Chemistry, 2012, 84, 3473-3479.	3.2	173
15	Self-reduction bimetallic nanoparticles on ultrathin MXene nanosheets as functional platform for pesticide sensing. Journal of Hazardous Materials, 2020, 384, 121358.	6.5	160
16	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.	4.2	159
17	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.	4.2	158
18	Recent developments in carbon nanomaterial-enabled electrochemical sensors for nitrite detection. TrAC - Trends in Analytical Chemistry, 2019, 113, 1-12.	5.8	158

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19	A multifunctional and highly flexible triboelectric nanogenerator based on MXene-enabled porous film integrated with laser-induced graphene electrode. Nano Energy, 2019, 66, 104121.	8.2	155
20	Development of an all-solid-state potassium ion-selective electrode using graphene as the solid-contact transducer. Electrochemistry Communications, 2011, 13, 1529-1532.	2.3	145
21	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.	5.3	136
22	Recent Advances in Nanomaterialâ€Enabled Wearable Sensors: Material Synthesis, Sensor Design, and Personal Health Monitoring. Small, 2020, 16, e2002681.	5.2	133
23	Carbon nanomaterial-enabled pesticide biosensors: Design strategy, biosensing mechanism, and practical application. TrAC - Trends in Analytical Chemistry, 2018, 106, 62-83.	5.8	131
24	Recent Progress in Nanomaterial-Based Optical Aptamer Assay for the Detection of Food Chemical Contaminants. ACS Applied Materials & Interfaces, 2017, 9, 23287-23301.	4.0	129
25	Flexible freestanding graphene paper-based potentiometric enzymatic aptasensor for ultrasensitive wireless detection of kanamycin. Biosensors and Bioelectronics, 2019, 123, 178-184.	5.3	119
26	Smart plant-wearable biosensor for in-situ pesticide analysis. Biosensors and Bioelectronics, 2020, 170, 112636.	5.3	111
27	Highly Efficient Raindrop Energy-Based Triboelectric Nanogenerator for Self-Powered Intelligent Greenhouse. ACS Nano, 2021, 15, 12314-12323.	7.3	106
28	In Situ Synthesis of Metal Sulfide Nanoparticles Based on 2D Metalâ€Organic Framework Nanosheets. Small, 2016, 12, 4669-4674.	5.2	101
29	Carbon dots: Current advances in pathogenic bacteria monitoring and prospect applications. Biosensors and Bioelectronics, 2020, 156, 112085.	5.3	99
30	Breathable Nanogenerators for an On-Plant Self-Powered Sustainable Agriculture System. ACS Nano, 2021, 15, 5307-5315.	7.3	99
31	Spontaneous growth and regulation of noble metal nanoparticles on flexible biomimetic MXene paper for bioelectronics. Biosensors and Bioelectronics, 2020, 148, 111799.	5.3	95
32	Nucleic acid amplification free biosensors for pathogen detection. Biosensors and Bioelectronics, 2020, 153, 112049.	5.3	95
33	Recent progress in application of nanomaterial-enabled biosensors for ochratoxin A detection. TrAC - Trends in Analytical Chemistry, 2018, 102, 236-249.	5.8	93
34	Highly conductive 1D-2D composite film for skin-mountable strain sensor and stretchable triboelectric nanogenerator. Nano Energy, 2019, 62, 319-328.	8.2	93
35	Copper oxide nanoparticles and ionic liquid modified carbon electrode for the non-enzymatic electrochemical sensing of hydrogen peroxide. Mikrochimica Acta, 2010, 171, 117-123.	2.5	91
36	Room-temperature high-precision printing of flexible wireless electronics based on MXene inks. Nature Communications, 2022, 13, .	5.8	86

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37	A multifunctional TENG yarn integrated into agrotextile for building intelligent agriculture. Nano Energy, 2020, 74, 104863.	8.2	85
38	Metallic Transition Metal Dichalcogenide Nanosheets as an Effective and Biocompatible Transducer for Electrochemical Detection of Pesticide. Analytical Chemistry, 2018, 90, 11658-11664.	3.2	77
39	Visual detection for nucleic acid-based techniques as potential on-site detection methods. A review. Analytica Chimica Acta, 2020, 1099, 1-15.	2.6	77
40	Fully stretchable triboelectric nanogenerator for energy harvesting and self-powered sensing. Nano Energy, 2019, 61, 78-85.	8.2	75
41	End-point dual specific detection of nucleic acids using CRISPR/Cas12a based portable biosensor. Biosensors and Bioelectronics, 2020, 157, 112153.	5.3	74
42	Stimulation of ambient energy generated electric field on crop plant growth. Nature Food, 2022, 3, 133-142.	6.2	70
43	Phase-Dependent Fluorescence Quenching Efficiency of MoS₂ Nanosheets and Their Applications in Multiplex Target Biosensing. ACS Applied Materials & Interfaces, 2018, 10, 42009-42017.	4.0	68
44	Transition Metal Dichalcogenideâ€“Silk Nanofibril Membrane for One-Step Water Purification and Precious Metal Recovery. ACS Applied Materials & Interfaces, 2020, 12, 24521-24530.	4.0	68
45	A stretchable and conductive fiber for multifunctional sensing and energy harvesting. Nano Energy, 2021, 84, 105954.	8.2	67
46	Rapid Fabrication of Flexible and Stretchable Strain Sensor by Chitosanâ€Based Water Ink for Plants Growth Monitoring. Advanced Materials Technologies, 2017, 2, 1700021.	3.0	65
47	A self-charging device with bionic self-cleaning interface for energy harvesting. Nano Energy, 2020, 73, 104738.	8.2	65
48	Waterâ€Wave Driven Route Avoidance Warning System for Wireless Ocean Navigation. Advanced Energy Materials, 2021, 11, 2101116.	10.2	62
49	High-performance flexible potentiometric sensing devices using free-standing graphene paper. Journal of Materials Chemistry B, 2013, 1, 4781.	2.9	60
50	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.	4.0	60
51	Recent Progress in 2Dâ€Nanomaterialâ€Based Triboelectric Nanogenerators. Advanced Functional Materials, 2021, 31, 2009994.	7.8	60
52	Development of an ionic liquid modified screen-printed graphite electrode and its sensing in determination of dopamine. Electrochemistry Communications, 2010, 12, 1738-1741.	2.3	59
53	Colorimetric aggregation assay for kanamycin using gold nanoparticles modified with hairpin DNA probes and hybridization chain reaction-assisted amplification. Mikrochimica Acta, 2019, 186, 448.	2.5	59
54	Metamaterial-Free Flexible Graphene-Enabled Terahertz Sensors for Pesticide Detection at Bio-Interface. ACS Applied Materials & Interfaces, 2020, 12, 44281-44287.	4.0	59

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55	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, 4418-4423.	2.4	57
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.	2.6	57
57	Biotriboelectric Nanogenerators: Materials, Structures, and Applications. Advanced Energy Materials, 2020, 10, 2002001.	10.2	54
58	Wireless Technologies for Energy Harvesting and Transmission for Ambient Self-Powered Systems. ACS Nano, 2021, 15, 9328-9354.	7.3	53
59	Recent advances in graphene-based freestanding paper-like materials for sensing applications. TrAC - Trends in Analytical Chemistry, 2018, 105, 75-88.	5.8	52
60	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, 2005-2009.	4.2	51
61	All-solid-state potentiometric sensor using single-walled carbon nanohorns as transducer. Sensors and Actuators B: Chemical, 2019, 283, 284-289.	4.0	51
62	Electrochemical doping of three-dimensional graphene networks used as efficient electrocatalysts for oxygen reduction reaction. Nanoscale, 2015, 7, 9394-9398.	2.8	50
63	Adhesive curing through low-voltage activation. Nature Communications, 2015, 6, 8050.	5.8	49
64	All-solid-state nitrate-selective electrode and its application in drinking water. Electrochimica Acta, 2012, 81, 186-190.	2.6	48
65	Determination of ascorbic acid levels in food samples by using an ionic liquidâ€“carbon nanotube composite electrode. Food Chemistry, 2012, 135, 362-367.	4.2	46
66	Evaluation of trans-resveratrol level in grape wine using laser-induced porous graphene-based electrochemical sensor. Science of the Total Environment, 2020, 714, 136687.	3.9	45
67	Recent Advances in Plant Nanoscience. Advanced Science, 2022, 9, e2103414.	5.6	45
68	An unmodified gold nanorods-based DNA colorimetric biosensor with enzyme-free hybridization chain reaction amplification. Sensors and Actuators B: Chemical, 2018, 273, 642-648.	4.0	43
69	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.	4.0	43
70	Sustainable Natural Bioâ€Origin Materials for Future Flexible Devices. Advanced Science, 2022, 9, e2200560.	5.6	43
71	Sensitive Determination of (â˜)-Epigallocatechin Gallate in Tea Infusion Using a Novel Ionic Liquid Carbon Paste Electrode. Journal of Agricultural and Food Chemistry, 2012, 60, 6333-6340.	2.4	42
72	Two-dimensional MXene nanosheets (types Ti3C2Tx and Ti2CTx) as new ion-to-electron transducers in solid-contact calcium ion-selective electrodes. Mikrochimica Acta, 2019, 186, 750.	2.5	42

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73	Structure, synthesis, and sensing applications of single-walled carbon nanohorns. Biosensors and Bioelectronics, 2020, 167, 112495.	5.3	42
74	Recent advances in emerging DNA-based methods for genetically modified organisms (GMOs) rapid detection. TrAC - Trends in Analytical Chemistry, 2018, 109, 19-31.	5.8	40
75	Recent Advances in gâ€C₃N₄â€Based Photocatalysts for Pollutant Degradation and Bacterial Disinfection: Design Strategies, Mechanisms, and Applications. Small, 2022, 18, e2105089.	5.2	39
76	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.	1.7	38
77	Magnetic particles for integrated nucleic acid purification, amplification and detection without pipetting. TrAC - Trends in Analytical Chemistry, 2020, 127, 115912.	5.8	36
78	Development of an aptamer-based impedimetric bioassay using microfluidic system and magnetic separation for protein detection. Biosensors and Bioelectronics, 2014, 59, 106-111.	5.3	35
79	Carbon nanomaterial-based nanogenerators for harvesting energy from environment. Nano Energy, 2021, 90, 106494.	8.2	34
80	Flexible complementary circuits operating at sub-0.5 V via hybrid organicâ€“inorganic electrolyte-gated transistors. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	34
81	Omnidirectional wind energy harvester for self-powered agro-environmental information sensing. Nano Energy, 2022, 91, 106686.	8.2	33
82	A Prussian blue-based amperometric sensor for the determination of hydrogen peroxide residues in milk. Ionics, 2010, 16, 523-527.	1.2	32
83	Fully Written Flexible Potentiometric Sensor Using Two-Dimensional Nanomaterial-Based Conductive Ink. Analytical Chemistry, 2018, 90, 13088-13095.	3.2	31
84	Fluorinated Grapheneâ€Enabled Durable Triboelectric Coating for Water Energy Harvesting. Small, 2021, 17, e2007805.	5.2	27
85	Advanced DNA-based methods for the detection of peanut allergens in processed food. TrAC - Trends in Analytical Chemistry, 2019, 114, 278-292.	5.8	26
86	Alchemyâ€Inspired Green Paper for Spontaneous Recovery of Noble Metals. Small, 2020, 16, e1907282.	5.2	25
87	An integrated and robust plant pulse monitoring system based on biomimetic wearable sensor. Npj Flexible Electronics, 2022, 6, .	5.1	25
88	A Flexible, Recyclable, and Highâ€Performance Pullulanâ€Based Triboelectric Nanogenerator (TENG). Advanced Materials Technologies, 2020, 5, 1900905.	3.0	24
89	Noble metal alloy nanoparticles coated flexible MoS2 paper for the determination of reactive oxygen species. Biosensors and Bioelectronics, 2020, 166, 112463.	5.3	21
90	Growthâ€Controllable Triboelectric Nanogenerator Based on Surfaceâ€Attached Metalâ€Organic Framework Layer on Living Leaf. Small, 2021, 17, e2103430.	5.2	21

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91	Nanomaterial-based biosensors for agro-product safety. TrAC - Trends in Analytical Chemistry, 2021, 143, 116369.	5.8	19
92	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.	1.7	19
93	Plant-protein-enabled biodegradable triboelectric nanogenerator for sustainable agriculture. Fundamental Research, 2022, 2, 974-984.	1.6	19
94	A novel pH sensing membrane based on an ionic liquid-polymer composite. Mikrochimica Acta, 2012, 176, 229-234.	2.5	13
95	Design and synthesis of a task-specific ionic liquid as a transducer in potentiometric sensors. RSC Advances, 2013, 3, 19782.	1.7	13
96	A Filter Paperâ€Based Nanogenerator via Waterâ€Drop Flow. Advanced Sustainable Systems, 2019, 3, 1900012.	2.7	13
97	Counting DNA molecules with visual segment-based readouts in minutes. Chemical Communications, 2018, 54, 1105-1108.	2.2	12
98	Two-dimensional nanocomposite-based electrochemical sensor for rapid determination of trans-resveratrol. Science of the Total Environment, 2020, 742, 140351.	3.9	12
99	A flexible and fully integrated wearable pressure sensing chip system for multi-scenario applications. Journal of Materials Chemistry A, 2021, 9, 26875-26884.	5.2	12
100	Anionâ€Selective Layered Double Hydroxide Compositesâ€Based Osmotic Energy Conversion for Realâ€Time Nutrient Solution Detection. Advanced Science, 2022, 9, e2103696.	5.6	12
101	Direct electrochemistry of double strand DNA on ionic liquid modified screen-printed graphite electrode. Electrochimica Acta, 2011, 56, 4154-4158.	2.6	11
102	Novel Photochrome Aptamer Switch Assay (PHASA) for Adaptive Binding to Aptamers. Journal of Fluorescence, 2014, 24, 1581-1591.	1.3	11
103	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.	1.1	11
104	Determination of Inorganic Phosphate in Environmental Water Using Cobalt Film Modified Ionic Liquid-Carbon Paste Electrode. Transactions of the ASABE, 2013, 56, 779-785.	1.1	8
105	Development of a Novel Carbon Composite Electrode for Trace Determination of Heavy Metals in Milk. Transactions of the ASABE, 2011, 54, 1829-1835.	1.1	7
106	Progress in molecular detection with high-speed nucleic acids thermocyclers. Journal of Pharmaceutical and Biomedical Analysis, 2020, 190, 113489.	1.4	6
107	Triphenylamine as a conductive solid material for fabricating carbon electrodes. Mikrochimica Acta, 2011, 172, 241-245.	2.5	5
108	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.	1.2	5

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109	Screen-Printed Potentiometric Strip for Calcium Ion Determination in Water and Milk. Transactions of the ASABE, 2013, 56, 739-744.	1.1	5
110	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.	2.5	5
111	Phase-dependent ion-to-electron transducing efficiency of WS2 nanosheets for anÂall-solid-state potentiometric calcium sensor. Mikrochimica Acta, 2020, 187, 525.	2.5	5
112	An easy-fabricated ordered mesoporous carbon-based electrochemical sensor for the analysis of trans-resveratrol in red wines. Food Control, 2021, 129, 108203.	2.8	3
113	Nanosheet Sensors: Recent Advances in Sensing Applications of Twoâ€Dimensional Transition Metal Dichalcogenide Nanosheets and Their Composites (Adv. Funct. Mater. 19/2017). Advanced Functional Materials, 2017, 27, .	7.8	2
114	An anti-passivation ink for the preparation of electrodes for use in electrochemical immunoassays. Journal of Zhejiang University: Science B, 2018, 19, 726-734.	1.3	2
115	Noble Metal Regeneration: Alchemyâ€Inspired Green Paper for Spontaneous Recovery of Noble Metals (Small 33/2020). Small, 2020, 16, 2070184.	5.2	2
116	Screen-printed potentiometric strip for calcium ion determination in water and milk. , 2012, , .		0
117	Electrocatalytic Oxidation of Glucose at a Copper Oxide Modified Carbon Ionic Liquid Electrode. Sensor Letters, 2011, 9, 736-740.	0.4	0