Peng Lin

List of Publications by Citations

105 papers	6,437 citations	40 h-index	79 g-index
114 ext. papers	7,223 ext. citations	8.5 avg, IF	6.38 L-index

#	Paper	IF	Citations
105	Organic thin-film transistors for chemical and biological sensing. *Advanced Materials*, **2012**, 24, 34-51	24	671
104	Photoelectrochemical bioanalysis: the state of the art. *Chemical Society Reviews*, **2015**, 44, 729-41	58.5	580
103	Photoelectrochemical DNA biosensors. *Chemical Reviews*, **2014**, 114, 7421-41	68.1	579
102	Highly sensitive photoelectrochemical immunoassay with enhanced amplification using horseradish peroxidase induced biocatalytic precipitation on a CdS quantum dots multilayer electrode. *Analytical Chemistry*, **2012**, 84, 917-23	7.8	241
101	Organic electrochemical transistors integrated in flexible microfluidic systems and used for label-free DNA sensing. *Advanced Materials*, **2011**, 23, 4035-40	24	239
100	The application of organic electrochemical transistors in cell-based biosensors. *Advanced Materials*, **2010**, 22, 3655-60	24	211
99	Highly Sensitive Glucose Biosensors Based on Organic Electrochemical Transistors Using Platinum Gate Electrodes Modified with Enzyme and Nanomaterials. *Advanced Functional Materials*, **2011**, 21, 2264-2272	15.6	203
98	In situ enzymatic ascorbic acid production as electron donor for CdS quantum dots equipped TiO2 nanotubes: a general and efficient approach for new photoelectrochemical immunoassay. *Analytical Chemistry*, **2012**, 84, 10518-21	7.8	192
97	Photoelectrochemical Immunoassays. *Analytical Chemistry*, **2018**, 90, 615-627	7.8	181
96	Photoelectrochemical enzymatic biosensors. *Biosensors and Bioelectronics*, **2017**, 92, 294-304	11.8	171
95	Highly sensitive dopamine biosensors based on organic electrochemical transistors. *Biosensors and Bioelectronics*, **2011**, 26, 4559-63	11.8	165
94	Ion-sensitive properties of organic electrochemical transistors. *ACS Applied Materials & Interfaces*, **2010**, 2, 1637-41	9.5	161
93	Energy transfer between CdS quantum dots and Au nanoparticles in photoelectrochemical detection. *Chemical Communications*, **2011**, 47, 10990-2	5.8	151
92	Exciton-plasmon interactions between CdS quantum dots and Ag nanoparticles in photoelectrochemical system and its biosensing application. *Analytical Chemistry*, **2012**, 84, 5892-7	7.8	150
91	Using G-quadruplex/hemin to "switch-on" the cathodic photocurrent of p-type PbS quantum dots: toward a versatile platform for photoelectrochemical aptasensing. *Analytical Chemistry*, **2015**, 87, 2892-900	7.8	134
90	Photoelectrochemical aptasensing. *TrAC - Trends in Analytical Chemistry*, **2016**, 82, 307-315	14.6	123
89	Hybrid PbS Quantum Dot/Nanoporous NiO Film Nanostructure: Preparation, Characterization, and Application for a Self-Powered Cathodic Photoelectrochemical Biosensor. *Analytical Chemistry*, **2017**, 89, 8070-8078	7.8	121

88	Solution-gated graphene field effect transistors integrated in microfluidic systems and used for flow velocity detection. *Nano Letters*, **2012**, 12, 1404-9	11.5	101
87	Acetylcholine esterase antibodies on BiOI nanoflakes/TiO2 nanoparticles electrode: a case of application for general photoelectrochemical enzymatic analysis. *Analytical Chemistry*, **2013**, 85, 11686-90	7.8	95
86	Simultaneous Photoelectrochemical Immunoassay of Dual Cardiac Markers Using Specific Enzyme Tags: A Proof of Principle for Multiplexed Bioanalysis. *Analytical Chemistry*, **2016**, 88, 1990-4	7.8	83
85	Al-TiO2 composite-modified single-layer graphene as an efficient transparent cathode for organic solar cells. *ACS Nano*, **2013**, 7, 1740-7	16.7	80
84	Transparent Indium Tin Oxide Electrodes on Muscovite Mica for High-Temperature-Processed Flexible Optoelectronic Devices. *ACS Applied Materials & Interfaces*, **2016**, 8, 28406-28411	9.5	67
83	Ultrasensitive photoelectrochemical biosensing based on biocatalytic deposition. *Electrochemistry Communications*, **2011**, 13, 495-497	5.1	64
82	Black phosphorus quantum dots as dual-functional electron-selective materials for efficient plastic perovskite solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 8886-8894	13	62
81	Quantum-dots-based photoelectrochemical bioanalysis highlighted with recent examples. *Biosensors and Bioelectronics*, **2017**, 94, 207-218	11.8	59
80	A giant negative electrocaloric effect in Eu-doped PbZrO3 thin films. *Journal of Materials Chemistry C*, **2016**, 4, 3375-3378	7.1	52
79	Cathodic photoelectrochemical bioanalysis. *TrAC - Trends in Analytical Chemistry*, **2019**, 114, 81-88	14.6	51
78	Protein Binding Bends the Gold Nanoparticle Capped DNA Sequence: Toward Novel Energy-Transfer-Based Photoelectrochemical Protein Detection. *Analytical Chemistry*, **2016**, 88, 3864-71	7.8	51
77	Folding-based photoelectrochemical biosensor: binding-induced conformation change of a quantum dot-tagged DNA probe for mercury(II) detection. *Chemical Communications*, **2014**, 50, 12088-90	5.8	50
76	Organic electrochemical transistor array for recording transepithelial ion transport of human airway epithelial cells. *Advanced Materials*, **2013**, 25, 6575-80	24	50
75	Panchromatic thin perovskite solar cells with broadband plasmonic absorption enhancement and efficient light scattering management by Au@Ag core-shell nanocuboids. *Nano Energy*, **2017**, 41, 654-664	17.1	49
74	Recent advances in the use of quantum dots for photoelectrochemical bioanalysis. *Nanoscale*, **2016** , 8, 17407-17414	7.7	47
73	Photoelectrochemical Bioanalysis Platform of Gold Nanoparticles Equipped Perovskite BiNbOCl. *Analytical Chemistry*, **2017**, 89, 7869-7875	7.8	47
72	Ionic liquid modified SnO2 nanocrystals as a robust electron transporting layer for efficient planar perovskite solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 22086-22095	13	47
71	Bismuthoxyiodide nanoflakes/titania nanotubes arrayed p-n heterojunction and its application for photoelectrochemical bioanalysis. *Scientific Reports*, **2014**, 4, 4426	4.9	45

70	Semitransparent organic solar cells with hybrid monolayer graphene/metal grid as top electrodes. *Applied Physics Letters*, **2013**, 102, 113303	3.4	45
69	Polarization-independent efficiency enhancement of organic solar cells by using 3-dimensional plasmonic electrode. *Applied Physics Letters*, **2013**, 102, 153304	3.4	44
68	Liposome-Mediated in Situ Formation of AgI/Ag/BiOI Z-Scheme Heterojunction on Foamed Nickel Electrode: A Proof-of-Concept Study for Cathodic Liposomal Photoelectrochemical Bioanalysis. *Analytical Chemistry*, **2019**, 91, 3800-3804	7.8	41
67	Large-area color controllable remote carbon white-light light-emitting diodes. *Carbon*, **2015**, 85, 344-350	10.4	41
66	Semiconducting Organic-Inorganic Nanodots Heterojunctions: Platforms for General Photoelectrochemical Bioanalysis Application. *Analytical Chemistry*, **2018**, 90, 3759-3765	7.8	40
65	Facile fabrication of highly efficient ETL-free perovskite solar cells with 20% efficiency by defect passivation and interface engineering. *Chemical Communications*, **2019**, 55, 2777-2780	5.8	38
64	Polymer Dots for Photoelectrochemical Bioanalysis. *Analytical Chemistry*, **2017**, 89, 4945-4950	7.8	37
63	Improvement of the tunable wettability property of poly(3-alkylthiophene) films. *Langmuir*, **2009**, 25, 7465-70	4	36
62	Simultaneous photoelectrochemical and visualized immunoassay of human chorionic gonadotrophin. *Biosensors and Bioelectronics*, **2016**, 85, 294-299	11.8	33
61	van der Waals epitaxy of Al-doped ZnO film on mica as a flexible transparent heater with ultrafast thermal response. *Applied Physics Letters*, **2018**, 112, 031905	3.4	32
60	Organic Photo-Electrochemical Transistor-Based Biosensor: A Proof-of-Concept Study toward Highly Sensitive DNA Detection. *Advanced Healthcare Materials*, **2018**, 7, e1800536	10.1	32
59	An ultrasensitive energy-transfer based photoelectrochemical protein biosensor. *Chemical Communications*, **2016**, 52, 3034-7	5.8	30
58	A Polymer Dots-Based Photoelectrochemical pH Sensor: Simplicity, High Sensitivity, and Broad-Range pH Measurement. *Analytical Chemistry*, **2018**, 90, 8300-8303	7.8	28
57	Structure, corrosion resistance and in vitro bioactivity of Ca and P containing TiO 2 coating fabricated on NiTi alloy by plasma electrolytic oxidation. *Applied Surface Science*, **2015**, 356, 1234-1243	6.7	27
56	Tuning of dielectric and ferroelectric properties in single phase BiFeO3 ceramics with controlled Fe2+/Fe3+ ratio. *Ceramics International*, **2014**, 40, 5263-5268	5.1	26
55	Hierarchical CuInS-based heterostructure: Application for photocathodic bioanalysis of sarcosine. *Biosensors and Bioelectronics*, **2018**, 107, 230-236	11.8	25
54	Variable-range-hopping conductivity in high-k Ba(Fe0.5Nb0.5)O3 ceramics. *Journal of Applied Physics*, **2013**, 114, 104106	2.5	25
53	3D Semiconducting Polymer/Graphene Networks: Toward Sensitive Photocathodic Enzymatic Bioanalysis. *Analytical Chemistry*, **2018**, 90, 9687-9690	7.8	24

52	Ferroelectric Polymer Thin Films for Organic Electronics. *Journal of Nanomaterials*, **2015**, 2015, 1-14	3.2	24
51	An Integrated Electrochemical Nanodevice for Intracellular RNA Collection and Detection in Single Living Cell. *Angewandte Chemie - International Edition*, **2021**, 60, 13244-13250	16.4	23
50	Multichannel quartz crystal microbalance array: Fabrication, evaluation, application in biomarker detection. *Analytical Biochemistry*, **2016**, 494, 85-92	3.1	21
49	Fabrication of organic electrochemical transistor arrays for biosensing. *Biochimica Et Biophysica Acta - General Subjects*, **2013**, 1830, 4402-6	4	19
48	Binding-induced formation of DNAzyme on an Au@Ag nanoparticles/TiO nanorods electrode: Stimulating biocatalytic precipitation amplification for plasmonic photoelectrochemical bioanalysis. *Biosensors and Bioelectronics*, **2019**, 134, 103-108	11.8	18
47	A novel and sensitive sarcosine biosensor based on organic electrochemical transistor. *Electrochimica Acta*, **2019**, 307, 100-106	6.7	17
46	Giant dielectric response and enhanced thermal stability of multiferroic BiFeO3. *Journal of Alloys and Compounds*, **2014**, 600, 118-124	5.7	17
45	Thickness effects on structures and electrical properties of lead zirconate titanate thick films. *Ceramics International*, **2008**, 34, 991-995	5.1	17
44	Effect of oxygen pressure on pulsed laser deposited WO3 thin films for photoelectrochemical water splitting. *Journal of Alloys and Compounds*, **2017**, 722, 913-919	5.7	16
43	Enhanced organic-inorganic heterojunction of polypyrrole@BiWO: Fabrication and application for sensitive photoelectrochemical immunoassay of creatine kinase-MB. *Biosensors and Bioelectronics*, **2019**, 140, 111349	11.8	15
42	A sensitive DNA sensor based on an organic electrochemical transistor using a peptide nucleic acid-modified nanoporous gold gate electrode. *RSC Advances*, **2017**, 7, 52118-52124	3.7	15
41	Efficient decomplexation of heavy metal-EDTA complexes by Co2+/peroxymonosulfate process: The critical role of replacement mechanism. *Chemical Engineering Journal*, **2020**, 392, 123639	14.7	14
40	A Tunneling Dielectric Layer Free Floating Gate Nonvolatile Memory Employing Type-I Core-Shell Quantum Dots as Discrete Charge-Trapping/Tunneling Centers. *Small*, **2019**, 15, e1804156	11	14
39	Dynamic restructuring induced Cu nanoparticles with ideal nanostructure for selective multi-carbon compounds production via carbon dioxide electroreduction. *Journal of Catalysis*, **2020**, 383, 42-50	7.3	13
38	Self-Assembled Peptide Nanostructures for Photoelectrochemical Bioanalysis Application: A Proof-of-Concept Study. *Analytical Chemistry*, **2019**, 91, 12606-12610	7.8	12
37	Revisit of amorphous semiconductor InGaZnO4: A new electron transport material for perovskite solar cells. *Journal of Alloys and Compounds*, **2019**, 789, 276-281	5.7	12
36	Origin of colossal dielectric response in (In + Nb) co-doped TiO rutile ceramics: a potential electrothermal material. *Scientific Reports*, **2017**, 7, 10144	4.9	12
35	1-Butyl-3-Methylimidazolium Tetrafluoroborate Film as a Highly Selective Sensing Material for Non-Invasive Detection of Acetone Using a Quartz Crystal Microbalance. *Sensors*, **2017**, 17,	3.8	12

34	Regulating Light-Sensitive Gate of Organic Photoelectrochemical Transistor toward Sensitive Biodetection at Zero Gate Bias. *Small Structures*,2100087	8.7	11
33	An Integrated Photoelectrochemical Nanotool for Intracellular Drug Delivery and Evaluation of Treatment Effect. *Angewandte Chemie - International Edition*, **2021**, 60, 25762-25765	16.4	11
32	Epitaxial ultrathin Au films on transparent mica with oxide wetting layer applied to organic light-emitting devices. *Applied Physics Letters*, **2019**, 114, 081902	3.4	10
31	Intrinsic and extrinsic effects on the ferroelectric switching of thin poly(vinylidene fluoride/trifluoroethylene) copolymer films. *APL Materials*, **2016**, 4, 046107	5.7	10
30	Integration of a miniature quartz crystal microbalance with a microfluidic chip for amyloid beta-A□2 quantitation. *Sensors*, **2015**, 15, 25746-60	3.8	9
29	Synthesis of Ni@NiSn Composite with High Lithium-Ion Diffusion Coefficient for Fast-Charging Lithium-Ion Batteries. *Global Challenges*, **2020**, 4, 1900073	4.3	9
28	Effect of poly(vinyl acetate) on structures and properties of PbZr0.52Ti0.48O3 thick films. *Journal of Applied Physics*, **2007**, 102, 084109	2.5	8
27	Flexible TiO2/Au thin films with greatly enhanced photocurrents for photoelectrochemical water splitting. *Journal of Alloys and Compounds*, **2020**, 815, 152471	5.7	8
26	Synthesis of ferroelectric KNbO 3 nanosheets by liquid exfoliation of layered perovskite K 2 NbO 3 F. *Journal of Alloys and Compounds*, **2017**, 698, 357-363	5.7	7
25	Designing electron transporting layer for efficient perovskite solar cell by deliberating over nano-electrical conductivity. *Solar Energy Materials and Solar Cells*, **2019**, 200, 109995	6.4	7
24	A Novel Organic Electrochemical Transistor-Based Platform for Monitoring the Senescent Green Vegetative Phase of Haematococcus pluvialis Cells. *Sensors*, **2017**, 17,	3.8	7
23	Temperature-dependent reversible and irreversible processes in Nb-doped PbZrO3 relaxor ferroelectric thin films. *Applied Physics Letters*, **2015**, 107, 202902	3.4	6
22	Mean-Field Approach to Dielectric Relaxation in Giant Dielectric Constant Perovskite Ceramics. *Journal of Ceramics*, **2013**, 2013, 1-7		6
21	A photoelectrochemical biosensor for rapid and ultrasensitive norovirus detection. *Bioelectrochemistry*, **2020**, 136, 107591	5.6	6
20	Multifunctional Hydrogel Hybrid-Gated Organic Photoelectrochemical Transistor for Biosensing. *Advanced Functional Materials*,2109046	15.6	6
19	Nano-electrical conductivity guided optimization of pulsed laser deposited ZnO electron transporting layer for efficient perovskite solar cell. *Journal of Power Sources*, **2020**, 468, 228392	8.9	5
18	One-Step and Ligand-Free Modification of Au Nanoparticles on Highly Ordered TiO2 Nanotube Arrays for Effective Photoelectrocatalytic Decontamination. *Industrial & Engineering Chemistry Research*, **2020**, 59, 668-675	3.9	5
17	Bipolar Modulation of the Ionic Circuit for Generic Organic Photoelectrochemical Transistor Logic and Sensor. *Advanced Optical Materials*,2102687	8.1	5

16	A Diagram of the Structure Evolution of Pb(Zn1/3Nb2/3) O3-9%PbTiO3 Relaxor Ferroelectric Crystals with Excellent Piezoelectric Properties. *Crystals*, **2017**, 7, 130	2.3	4
15	A novel protein binding strategy for energy-transfer-based photoelectrochemical detection of enzymatic activity of botulinum neurotoxin A. *Electrochemistry Communications*, **2018**, 97, 114-118	5.1	4
14	Ascorbic acid-mediated organic photoelectrochemical transistor sensing strategy for highly sensitive detection of heart-type fatty acid binding protein.. *Biosensors and Bioelectronics*, **2022**, 201, 113958	11.8	3
13	Morphotropic domain structures and dielectric relaxation in piezo-/ferroelectric Pb(In1/2Nb1/2)O3–Pb(Zn1/3Nb2/3)O3–PbTiO3 single crystals. *Journal of Crystal Growth*, **2016**, 441, 33-40	1.6	3
12	Pulsed laser deposition of amorphous InGaZnO4 as an electron transport layer for perovskite solar cells. *Journal of Advanced Dielectrics*, **2019**, 09, 1950042	1.3	3
11	Hybridization chain reaction for regulating surface capacitance of organic photoelectrochemical transistor toward sensitive miRNA detection.. *Biosensors and Bioelectronics*, **2022**, 209, 114224	11.8	3
10	POLYMER-ASSISTED MOD PREPARATION OF PbZr0.52Ti0.48O3 THICK FILMS FOR MEMS APPLICATIONS. *Integrated Ferroelectrics*, **2006**, 84, 75-82	0.8	2
9	PbZrO3-Based Antiferroelectric Thin Film Capacitors with High Energy Storage Density. *International Journal of Advanced Applied Physics Research*, **2014**, 1, 35-39	2	2
8	Novel graphitic sheets with ripple-like folds as NCA-cathode coating layer for high-energy-density lithium-ion batteries. *Nanotechnology*, **2020**,	3.4	2
7	Realizing 60 GHz narrow-linewidth photonic microwaves with very low RF driving power. *Laser Physics Letters*, **2016**, 13, 126202	1.5	2
6	New Micro- and Nanotechnologies for Electrochemical Biosensor Development **2019**, 279-313		1
5	Effect of poly(vinyl acetate) on structure and property of bismuth-doped strontium titanate thin films derived by sol–gel method. *Ceramics International*, **2008**, 34, 997-1001	5.1	1
4	Recent Advances in Electrochemical Sensor and Biosensors for Environmental Contaminants. *Nanotechnology in the Life Sciences*, **2020**, 1-31	1.1	1
3	Electrochemical-Assisted Reconstruction of Isoreticular Metal-Organic Framework-8 for Efficient Electroreduction of CO2 to CO. *Journal of the Electrochemical Society*, **2021**, 168, 096503	3.9	1
2	Recent Advances of Nanostructured Materials for Photoelectrochemical Bioanalysis. *Chemosensors*, **2022**, 10, 14	4	0
1	Light-Fueled Organic Photoelectrochemical Transistor for Probing Membrane Protein in an H-Cell. *Advanced Materials Interfaces*, **2022**, 9, 2102040	4.6	0