

# Peng Lin

## List of Publications by Year in descending order

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113  
papers

8,227  
citations

53660

45  
h-index

46693

89  
g-index

114  
all docs

114  
docs citations

114  
times ranked

7491  
citing authors

#	ARTICLE	IF	CITATIONS
1	Organic Thin-Film Transistors for Chemical and Biological Sensing. <i>Advanced Materials</i> , 2012, 24, 34-51.	11.1	760
2	Photoelectrochemical bioanalysis: the state of the art. <i>Chemical Society Reviews</i> , 2015, 44, 729-741.	18.7	750
3	Photoelectrochemical DNA Biosensors. <i>Chemical Reviews</i> , 2014, 114, 7421-7441.	23.0	722
4	Organic Electrochemical Transistors Integrated in Flexible Microfluidic Systems and Used for Label-Free DNA Sensing. <i>Advanced Materials</i> , 2011, 23, 4035-4040.	11.1	278
5	Highly Sensitive Photoelectrochemical Immunoassay with Enhanced Amplification Using Horseradish Peroxidase Induced Biocatalytic Precipitation on a CdS Quantum Dots Multilayer Electrode. <i>Analytical Chemistry</i> , 2012, 84, 917-923.	3.2	270
6	The Application of Organic Electrochemical Transistors in Cell-Based Biosensors. <i>Advanced Materials</i> , 2010, 22, 3655-3660.	11.1	255
7	Photoelectrochemical Immunoassays. <i>Analytical Chemistry</i> , 2018, 90, 615-627.	3.2	255
8	Highly Sensitive Glucose Biosensors Based on Organic Electrochemical Transistors Using Platinum Gate Electrodes Modified with Enzyme and Nanomaterials. <i>Advanced Functional Materials</i> , 2011, 21, 2264-2272.	7.8	243
9	Photoelectrochemical enzymatic biosensors. <i>Biosensors and Bioelectronics</i> , 2017, 92, 294-304.	5.3	231
10	<i>In Situ</i> Enzymatic Ascorbic Acid Production as Electron Donor for CdS Quantum Dots Equipped TiO <sub>2</sub> Nanotubes: A General and Efficient Approach for New Photoelectrochemical Immunoassay. <i>Analytical Chemistry</i> , 2012, 84, 10518-10521.	3.2	210
11	Highly sensitive dopamine biosensors based on organic electrochemical transistors. <i>Biosensors and Bioelectronics</i> , 2011, 26, 4559-4563.	5.3	204
12	Ion-Sensitive Properties of Organic Electrochemical Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , 2010, 2, 1637-1641.	4.0	195
13	Energy transfer between CdS quantum dots and Au nanoparticles in photoelectrochemical detection. <i>Chemical Communications</i> , 2011, 47, 10990.	2.2	177
14	Exciton-Plasmon Interactions between CdS Quantum Dots and Ag Nanoparticles in Photoelectrochemical System and Its Biosensing Application. <i>Analytical Chemistry</i> , 2012, 84, 5892-5897.	3.2	174
15	Using G-Quadruplex/Hemin To "Switch-On" the Cathodic Photocurrent of p-Type PbS Quantum Dots: Toward a Versatile Platform for Photoelectrochemical Aptasensing. <i>Analytical Chemistry</i> , 2015, 87, 2892-2900.	3.2	152
16	Hybrid PbS Quantum Dot/Nanoporous NiO Film Nanostructure: Preparation, Characterization, and Application for a Self-Powered Cathodic Photoelectrochemical Biosensor. <i>Analytical Chemistry</i> , 2017, 89, 8070-8078.	3.2	149
17	Photoelectrochemical aptasensing. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 82, 307-315.	5.8	145
18	Solution-Gated Graphene Field Effect Transistors Integrated in Microfluidic Systems and Used for Flow Velocity Detection. <i>Nano Letters</i> , 2012, 12, 1404-1409.	4.5	121

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19	Cathodic photoelectrochemical bioanalysis. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 114, 81-88.	5.8	108
20	Acetylcholine Esterase Antibodies on BiOI Nanoflakes/TiO <sub>2</sub> Nanoparticles Electrode: A Case of Application for General Photoelectrochemical Enzymatic Analysis. <i>Analytical Chemistry</i> , 2013, 85, 11686-11690.	3.2	106
21	Simultaneous Photoelectrochemical Immunoassay of Dual Cardiac Markers Using Specific Enzyme Tags: A Proof of Principle for Multiplexed Bioanalysis. <i>Analytical Chemistry</i> , 2016, 88, 1990-1994.	3.2	97
22	Al-TiO <sub>2</sub> Composite-Modified Single-Layer Graphene as an Efficient Transparent Cathode for Organic Solar Cells. <i>ACS Nano</i> , 2013, 7, 1740-1747.	7.3	90
23	Transparent Indium Tin Oxide Electrodes on Muscovite Mica for High-Temperature-Processed Flexible Optoelectronic Devices. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 28406-28411.	4.0	83
24	Black phosphorus quantum dots as dual-functional electron-selective materials for efficient plastic perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8886-8894.	5.2	80
25	Quantum-dots-based photoelectrochemical bioanalysis highlighted with recent examples. <i>Biosensors and Bioelectronics</i> , 2017, 94, 207-218.	5.3	79
26	An Integrated Electrochemical Nanodevice for Intracellular RNA Collection and Detection in Single Living Cell. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 13244-13250.	7.2	75
27	Ultrasensitive photoelectrochemical biosensing based on biocatalytic deposition. <i>Electrochemistry Communications</i> , 2011, 13, 495-497.	2.3	68
28	Panchromatic thin perovskite solar cells with broadband plasmonic absorption enhancement and efficient light scattering management by Au@Ag core-shell nanocuboids. <i>Nano Energy</i> , 2017, 41, 654-664.	8.2	68
29	Protein Binding Bends the Gold Nanoparticle Capped DNA Sequence: Toward Novel Energy-Transfer-Based Photoelectrochemical Protein Detection. <i>Analytical Chemistry</i> , 2016, 88, 3864-3871.	3.2	67
30	Ionic liquid modified SnO <sub>2</sub> nanocrystals as a robust electron transporting layer for efficient planar perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22086-22095.	5.2	66
31	An Integrated Photoelectrochemical Nanotool for Intracellular Drug Delivery and Evaluation of Treatment Effect. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25762-25765.	7.2	64
32	A giant negative electrocaloric effect in Eu-doped PbZrO <sub>3</sub> thin films. <i>Journal of Materials Chemistry C</i> , 2016, 4, 3375-3378.	2.7	62
33	Photoelectrochemical Bioanalysis Platform of Gold Nanoparticles Equipped Perovskite Bi <sub>4</sub> NbO <sub>8</sub> Cl. <i>Analytical Chemistry</i> , 2017, 89, 7869-7875.	3.2	62
34	Facile fabrication of highly efficient ETL-free perovskite solar cells with 20% efficiency by defect passivation and interface engineering. <i>Chemical Communications</i> , 2019, 55, 2777-2780.	2.2	61
35	Recent advances in the use of quantum dots for photoelectrochemical bioanalysis. <i>Nanoscale</i> , 2016, 8, 17407-17414.	2.8	60
36	Organic Electrochemical Transistor Array for Recording Transepithelial Ion Transport of Human Airway Epithelial Cells. <i>Advanced Materials</i> , 2013, 25, 6575-6580.	11.1	59

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37	Liposome-Mediated in Situ Formation of Ag//Ag/BiOI Z-Scheme Heterojunction on Foamed Nickel Electrode: A Proof-of-Concept Study for Cathodic Liposomal Photoelectrochemical Bioanalysis. <i>Analytical Chemistry</i> , 2019, 91, 3800-3804.	3.2	56
38	Folding-based photoelectrochemical biosensor: binding-induced conformation change of a quantum dot-tagged DNA probe for mercury (<sc>ii</sc>) detection. <i>Chemical Communications</i> , 2014, 50, 12088-12090.	2.2	55
39	Semiconducting Organic-Inorganic Nanodots Heterojunctions: Platforms for General Photoelectrochemical Bioanalysis Application. <i>Analytical Chemistry</i> , 2018, 90, 3759-3765.	3.2	54
40	Organic Photoelectrochemical Transistor-Based Biosensor: A Proof-of-Concept Study toward Highly Sensitive DNA Detection. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800536.	3.9	54
41	Polymer Dots for Photoelectrochemical Bioanalysis. <i>Analytical Chemistry</i> , 2017, 89, 4945-4950.	3.2	51
42	Semitransparent organic solar cells with hybrid monolayer graphene/metal grid as top electrodes. <i>Applied Physics Letters</i> , 2013, 102, 113303.	1.5	49
43	Large-area color controllable remote carbon white-light light-emitting diodes. <i>Carbon</i> , 2015, 85, 344-350.	5.4	49
44	Polarization-independent efficiency enhancement of organic solar cells by using 3-dimensional plasmonic electrode. <i>Applied Physics Letters</i> , 2013, 102, 153304.	1.5	48
45	Bismuthoxyiodide Nanoflakes/Titania Nanotubes Arrayed p-n Heterojunction and Its Application for Photoelectrochemical Bioanalysis. <i>Scientific Reports</i> , 2014, 4, 4426.	1.6	45
46	van der Waals epitaxy of Al-doped ZnO film on mica as a flexible transparent heater with ultrafast thermal response. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	43
47	A Polymer Dots-Based Photoelectrochemical pH Sensor: Simplicity, High Sensitivity, and Broad-Range pH Measurement. <i>Analytical Chemistry</i> , 2018, 90, 8300-8303.	3.2	40
48	Multifunctional Hydrogel Hybrid-Gated Organic Photoelectrochemical Transistor for Biosensing. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	40
49	Simultaneous photoelectrochemical and visualized immunoassay of $\beta$ -human chorionic gonadotrophin. <i>Biosensors and Bioelectronics</i> , 2016, 85, 294-299.	5.3	39
50	Hierarchical CuInS <sub>2</sub> -based heterostructure: Application for photocathodic bioanalysis of sarcosine. <i>Biosensors and Bioelectronics</i> , 2018, 107, 230-236.	5.3	39
51	Regulating Light-Sensitive Gate of Organic Photoelectrochemical Transistor toward Sensitive Biodetection at Zero Gate Bias. <i>Small Structures</i> , 2021, 2, 2100087.	6.9	38
52	Improvement of the Tunable Wettability Property of Poly(3-alkylthiophene) Films. <i>Langmuir</i> , 2009, 25, 7465-7470.	1.6	37
53	Tuning of dielectric and ferroelectric properties in single phase BiFeO <sub>3</sub> ceramics with controlled Fe <sup>2+</sup> /Fe <sup>3+</sup> ratio. <i>Ceramics International</i> , 2014, 40, 5263-5268.	2.3	36
54	Structure, corrosion resistance and in vitro bioactivity of Ca and P containing TiO <sub>2</sub> coating fabricated on NiTi alloy by plasma electrolytic oxidation. <i>Applied Surface Science</i> , 2015, 356, 1234-1243.	3.1	36

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55	Ferroelectric Polymer Thin Films for Organic Electronics. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-14.	1.5	35
56	A novel and sensitive sarcosine biosensor based on organic electrochemical transistor. <i>Electrochimica Acta</i> , 2019, 307, 100-106.	2.6	35
57	An ultrasensitive energy-transfer based photoelectrochemical protein biosensor. <i>Chemical Communications</i> , 2016, 52, 3034-3037.	2.2	33
58	Variable-range-hopping conductivity in high-k Ba(Fe <sub>0.5</sub> Nb <sub>0.5</sub> )O <sub>3</sub> ceramics. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	30
59	Binding-induced formation of DNAzyme on an Au@Ag nanoparticles/TiO <sub>2</sub> nanorods electrode: Stimulating biocatalytic precipitation amplification for plasmonic photoelectrochemical bioanalysis. <i>Biosensors and Bioelectronics</i> , 2019, 134, 103-108.	5.3	28
60	A sensitive DNA sensor based on an organic electrochemical transistor using a peptide nucleic acid-modified nanoporous gold gate electrode. <i>RSC Advances</i> , 2017, 7, 52118-52124.	1.7	27
61	3D Semiconducting Polymer/Graphene Networks: Toward Sensitive Photocathodic Enzymatic Bioanalysis. <i>Analytical Chemistry</i> , 2018, 90, 9687-9690.	3.2	27
62	Fabrication of organic electrochemical transistor arrays for biosensing. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2013, 1830, 4402-4406.	1.1	26
63	Enhanced organic~inorganic heterojunction of polypyrrole@Bi <sub>2</sub> WO <sub>6</sub> : Fabrication and application for sensitive photoelectrochemical immunoassay of creatine kinase-MB. <i>Biosensors and Bioelectronics</i> , 2019, 140, 111349.	5.3	24
64	Multichannel quartz crystal microbalance array: Fabrication, evaluation, application in biomarker detection. <i>Analytical Biochemistry</i> , 2016, 494, 85-92.	1.1	23
65	A Tunneling Dielectric Layer Free Floating Gate Nonvolatile Memory Employing Type~Core~Shell Quantum Dots as Discrete Charge~Trapping/Tunneling Centers. <i>Small</i> , 2019, 15, e1804156.	5.2	23
66	Hybridization chain reaction for regulating surface capacitance of organic photoelectrochemical transistor toward sensitive miRNA detection. <i>Biosensors and Bioelectronics</i> , 2022, 209, 114224.	5.3	23
67	Dynamic restructuring induced Cu nanoparticles with ideal nanostructure for selective multi-carbon compounds production via carbon dioxide electroreduction. <i>Journal of Catalysis</i> , 2020, 383, 42-50.	3.1	22
68	Ascorbic acid-mediated organic photoelectrochemical transistor sensing strategy for highly sensitive detection of heart-type fatty acid binding protein. <i>Biosensors and Bioelectronics</i> , 2022, 201, 113958.	5.3	22
69	Giant dielectric response and enhanced thermal stability of multiferroic BiFeO <sub>3</sub> . <i>Journal of Alloys and Compounds</i> , 2014, 600, 118-124.	2.8	21
70	Effect of oxygen pressure on pulsed laser deposited WO <sub>3</sub> thin films for photoelectrochemical water splitting. <i>Journal of Alloys and Compounds</i> , 2017, 722, 913-919.	2.8	21
71	Bipolar Modulation of the Ionic Circuit for Generic Organic Photoelectrochemical Transistor Logic and Sensor. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	20
72	Thickness effects on structures and electrical properties of lead zirconate titanate thick films. <i>Ceramics International</i> , 2008, 34, 991-995.	2.3	19

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73	Efficient decomplexation of heavy metal-EDTA complexes by Co <sup>2+</sup> /peroxymonosulfate process: The critical role of replacement mechanism. <i>Chemical Engineering Journal</i> , 2020, 392, 123639.	6.6	19
74	Origin of colossal dielectric response in (In <sup>2+</sup> +â€‰Nb) co-doped TiO <sub>2</sub> rutile ceramics: a potential electrothermal material. <i>Scientific Reports</i> , 2017, 7, 10144.	1.6	18
75	A photoelectrochemical biosensor for rapid and ultrasensitive norovirus detection. <i>Bioelectrochemistry</i> , 2020, 136, 107591.	2.4	18
76	Revisit of amorphous semiconductor InGaZnO <sub>4</sub> : A new electron transport material for perovskite solar cells. <i>Journal of Alloys and Compounds</i> , 2019, 789, 276-281.	2.8	16
77	Organic photoelectrochemical transistor detection of tear lysozyme. <i>Sensors &amp; Diagnostics</i> , 2022, 1, 294-300.	1.9	16
78	1-Butyl-3-Methylimidazolium Tetrafluoroborate Film as a Highly Selective Sensing Material for Non-Invasive Detection of Acetone Using a Quartz Crystal Microbalance. <i>Sensors</i> , 2017, 17, 194.	2.1	15
79	Self-Assembled Peptide Nanostructures for Photoelectrochemical Bioanalysis Application: A Proof-of-Concept Study. <i>Analytical Chemistry</i> , 2019, 91, 12606-12610.	3.2	15
80	Integration of a Miniature Quartz Crystal Microbalance with a Microfluidic Chip for Amyloid Beta-A $\beta$ 242 Quantitation. <i>Sensors</i> , 2015, 15, 25746-25760.	2.1	13
81	Intrinsic and extrinsic effects on the ferroelectric switching of thin poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 422	2.2	13
82	Flexible TiO <sub>2</sub> /Au thin films with greatly enhanced photocurrents for photoelectrochemical water splitting. <i>Journal of Alloys and Compounds</i> , 2020, 815, 152471.	2.8	13
83	Epitaxial ultrathin Au films on transparent mica with oxide wetting layer applied to organic light-emitting devices. <i>Applied Physics Letters</i> , 2019, 114, 081902.	1.5	12
84	Synthesis of Ni@NiSn Composite with High Lithiumâ€‰ion Diffusion Coefficient for Fastâ€‰Charging Lithiumâ€‰ion Batteries. <i>Global Challenges</i> , 2020, 4, 1900073.	1.8	12
85	A Novel Organic Electrochemical Transistor-Based Platform for Monitoring the Senescent Green Vegetative Phase of <i>Haematococcus pluvialis</i> Cells. <i>Sensors</i> , 2017, 17, 1997.	2.1	11
86	Designing electron transporting layer for efficient perovskite solar cell by deliberating over nano-electrical conductivity. <i>Solar Energy Materials and Solar Cells</i> , 2019, 200, 109995.	3.0	10
87	Effect of poly(vinyl acetate) on structures and properties of PbZr <sub>0.52</sub> Ti <sub>0.48</sub> O <sub>3</sub> thick films. <i>Journal of Applied Physics</i> , 2007, 102, 084109.	1.1	9
88	Temperature-dependent reversible and irreversible processes in Nb-doped PbZrO <sub>3</sub> relaxor ferroelectric thin films. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	8
89	Synthesis of ferroelectric KNbO <sub>3</sub> nanosheets by liquid exfoliation of layered perovskite K <sub>2</sub> NbO <sub>3</sub> F. <i>Journal of Alloys and Compounds</i> , 2017, 698, 357-363.	2.8	8
90	Nano-electrical conductivity guided optimization of pulsed laser deposited ZnO electron transporting layer for efficient perovskite solar cell. <i>Journal of Power Sources</i> , 2020, 468, 228392.	4.0	8

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91	Mean-Field Approach to Dielectric Relaxation in Giant Dielectric Constant Perovskite Ceramics. <i>Journal of Ceramics</i> , 2013, 2013, 1-7.	0.9	8
92	Recent Advances of Nanostructured Materials for Photoelectrochemical Bioanalysis. <i>Chemosensors</i> , 2022, 10, 14.	1.8	8
93	One-Step and Ligand-Free Modification of Au Nanoparticles on Highly Ordered TiO <sub>2</sub> Nanotube Arrays for Effective Photoelectrocatalytic Decontamination. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 668-675.	1.8	7
94	A Diagram of the Structure Evolution of Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -9%PbTiO <sub>3</sub> Relaxor Ferroelectric Crystals with Excellent Piezoelectric Properties. <i>Crystals</i> , 2017, 7, 130.	1.0	6
95	Novel graphitic sheets with ripple-like folds as an NCA cathode coating layer for high-energy-density lithium-ion batteries. <i>Nanotechnology</i> , 2021, 32, 08LT01.	1.3	6
96	Light-Fueled Organic Photoelectrochemical Transistor for Probing Membrane Protein in an H <sub>2</sub> O Cell. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	6
97	Effect of poly(vinyl acetate) on structure and property of bismuth-doped strontium titanate thin films derived by sol-gel method. <i>Ceramics International</i> , 2008, 34, 997-1001.	2.3	5
98	A novel protein binding strategy for energy-transfer-based photoelectrochemical detection of enzymatic activity of botulinum neurotoxin A. <i>Electrochemistry Communications</i> , 2018, 97, 114-118.	2.3	5
99	Morphotropic domain structures and dielectric relaxation in piezo-/ferroelectric Pb(In <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> -Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -PbTiO <sub>3</sub> single crystals. <i>Journal of Crystal Growth</i> , 2016, 441, 33-40.	0.7	4
100	Pulsed laser deposition of amorphous InGaZnO <sub>4</sub> as an electron transport layer for perovskite solar cells. <i>Journal of Advanced Dielectrics</i> , 2019, 09, 1950042.	1.5	4
101	PbZrO <sub>3</sub> -Based Antiferroelectric Thin Film Capacitors with High Energy Storage Density. <i>International Journal of Advanced Applied Physics Research</i> , 2014, 1, 35-39.	0.4	4
102	POLYMER-ASSISTED MOD PREPARATION OF PbZr <sub>0.52</sub> Ti <sub>0.48</sub> O <sub>3</sub> THICK FILMS FOR MEMS APPLICATIONS. <i>Integrated Ferroelectrics</i> , 2006, 84, 75-82.	0.3	3
103	Realizing 60 GHz narrow-linewidth photonic microwaves with very low RF driving power. <i>Laser Physics Letters</i> , 2016, 13, 126202.	0.6	3
104	Highly-Crystalline SnO <sub>2</sub> Thin Films for Efficient Planar Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2022, 5, 5704-5710.	2.5	3
105	Electrochemical-Assisted Reconstruction of Isorecticular Metal-Organic Framework-8 for Efficient Electroreduction of CO <sub>2</sub> to CO. <i>Journal of the Electrochemical Society</i> , 2021, 168, 096503.	1.3	2
106	Sensors Based on Organic Thin Film Transistors. <i>ECS Transactions</i> , 2009, 16, 355-364.	0.3	1
107	The Application of Organic Electrochemical Transistors in Biosensors. <i>ECS Transactions</i> , 2010, 33, 399-408.	0.3	1
108	New Micro- and Nanotechnologies for Electrochemical Biosensor Development. , 2019, , 279-313.		1

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109	Defect-Structure-Related Ferroelectric Properties of K <sub>0.5</sub> Na <sub>0.5</sub> NbO <sub>3</sub> Lead-Free Piezoelectric Ceramics. International Journal of Advanced Applied Physics Research, 2015, 2, 35-39.	0.4	1
110	Recent Advances in Electrochemical Sensor and Biosensors for Environmental Contaminants. Nanotechnology in the Life Sciences, 2020, , 1-31.	0.4	1
111	Glucose sensors based on solution-gated graphene transistors. Shenzhen Daxue Xuebao (Ligong) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.1	0
112	Study on dielectric properties of hyperbranched zinc phthalocyanine. Shenzhen Daxue Xuebao (Ligong) Tj ETQq0 0.0 rgBT /Overlock 10	0.1	0
113	Conductive organic materials for DNA biosensors. , 2016, , 107-147.		0