

Supplementary Materials

Table S1. Detailed list of all patent documents of cellulose-based biosensors between 2010 and 2020.

No	Jurisdiction	Publication Date	Application Number	Application Date	Title	Document Type
1	US	2010-08-26	US 71088510 A	2010-02-23	Methods, apparatus and systems for concentration, separation and removal of particles at/from the surface of drops	Patent Application
2	CN	2010-10-13	CN 201010177437 A	2010-05-13	Cellulose ether grafted and modified temperature-sensitive hydrogel and preparation method thereof	Patent Application
3	WO	2010-10-28	US 2010/0032329 W	2010-04-24	Functionalized polymer biosensor	Patent Application
4	US	2010-11-04	US 77070410 A	2010-04-29	Systems, Devices, and/or Methods Regarding Specific Precursors or Tube Control Agent for the Synthesis of Carbon Nanofiber and Nanotube	Patent Application
5	US	2010-11-18	US 66015610 A	2010-02-19	Systems, devices, and methods including infection-fighting and monitoring shunts	Patent Application
6	WO	2011-05-05	GB 2010051808 W	2010-10-28	Micro-channel structure method and apparatus	Patent Application
7	US	2011-06-16	US 94560610 A	2010-11-12	Functional layers of biomolecules and living cells, and a novel system to produce such	Patent Application
8	US	2011-06-16	US 96077710 A	2010-12-06	System and method for measuring analyte concentration with interferant correction	Patent Application
9	CA	2011-07-07	CA 2786141 A	2010-12-23	Transparent bacterial cellulose nanocomposite hydrogels	Patent Application
10	WO	2011-07-07	CA 2010002040 W	2010-12-23	Transparent bacterial cellulose nanocomposite hydrogels	Patent Application
11	WO	2011-07-28	US 2011/0000123 W	2011-01-24	Rapid pathogen detection techniques and apparatus	Patent Application
12	CN	2011-11-09	CN 201010157076 A	2010-04-20	Nucleic acid nano-gold biosensor based on bio-barcode	Patent Application
13	WO	2011-11-10	US 2011/0035303 W	2011-05-05	Water testing system	Patent Application
14	WO	2011-11-17	CA 2011050294 W	2011-05-12	Method of producing electrically conductive polymer and cellulose nanocomposites	Patent Application
15	WO	2012-01-05	FI 2011050629 W	2011-07-04	Functionalized films, sensory films, biosensors and methods for manufacturing them	Patent Application
16	WO	2012-01-19	IE 2011000038 W	2011-07-15	Silver electrode catalyst	Patent Application
17	EP	2012-02-22	EP 10764694 A	2010-04-19	Disease diagnosing biosensor capable of promptly separating blood cells	Patent Application
18	WO	2012-03-15	US 2011/0051193 W	2011-09-12	Enzyme co-factor enhancement of biosensor performance	Patent Application
19	US	2012-03-15	US 201113228947 A	2011-09-09	Polyionic transitional metal phosphorescent complex/polymer hybrid systems for bioimaging and sensing applications	Patent Application
20	US	2012-04-12	US 201113279509 A	2011-10-24	Functionalized polymer biosensor	Patent Application
21	US	2012-05-03	US 201113317228 A	2011-10-12	Food quality indicator	Patent Application
22	GB	2012-05-16	GB 201019119 A	2010-11-12	Porous fibre encapsulating biological material	Patent Application
23	KR	2012-05-18	KR 20100111810 A	2010-11-10	Disposable biosensors made with tin oxide - cellulose nanocomposite, manufacturing method of the same and measuring method using the same	Patent Application
24	WO	2012-05-24	MY 2011000137 W	2011-06-23	Composition of solvent casting solution comprising polypyrrole powder for use as a transducer in biochemical sensor applications	Patent Application
25	WO	2012-05-31	US 2011/0061956 W	2011-11-22	Biosensing systems for measurement of lactose	Patent Application
26	WO	2012-06-07	US 2011/0062951 W	2011-12-01	Tissue implantable microbiosensor	Patent Application
27	US	2012-06-14	US 201013264699 A	2010-04-19	Disease diagnosing biosensor capable of promptly separating blood cells	Patent Application
28	CN	2012-06-20	CN 201110365484 A	2011-11-17	Electrode surface modification material, preparation method thereof and application thereof	Patent Application

29	US	2012-06-21	US 201113171120 A	2011-06-28	Use and making of biosensors utilizing antimicrobial peptides for highly sensitive biological monitoring	Patent Application
30	US	2012-07-12	US 201113270357 A	2011-10-11	Polymer matrices for cell culture	Patent Application
31	US	2012-07-19	US 201213433779 A	2012-03-29	Determination of blood glucose in a small volume and in a short test time using a chemical coating including binders and very short read potentials	Patent Application
32	US	2012-08-09	US 201213451325 A	2012-04-19	Conjugate probes and optical detection of analytes	Patent Application
33	WO	2012-09-13	IL 2012050080 W	2012-03-07	Methods and devices for handling biofouling	Patent Application
34	US	2012-11-08	US 201013505417 A	2010-10-28	Micro-channel structure method and apparatus	Patent Application
35	US	2012-11-08	US 201113574296 A	2011-01-24	Rapid pathogen detection techniques and apparatus	Patent Application
36	CN	2012-11-28	CN 201010157076 A	2010-04-20	Nucleic acid nano-gold biosensor based on bio-barcode	Granted Patent
37	US	2013-01-08	US 201213433779 A	2012-03-29	Determination of blood glucose in a small volume and in a short test time using a chemical coating including binders and very short read potentials	Granted Patent
38	US	2013-01-10	US 201013520076 A	2010-12-23	Transparent bacterial cellulose nanocomposite hydrogels	Patent Application
39	CN	2013-01-16	CN 201210407536 A	2012-10-24	Method of using three-enzyme electrochemical biosensor for determining cellulase activity	Patent Application
40	WO	2013-02-21	US 2012/0050939 W	2012-08-15	Control of biofouling in implantable biosensors	Patent Application
41	WO	2013-03-07	AU 2012/001038 W	2012-08-31	Patterning method	Patent Application
42	CN	2013-03-20	CN 201210513705 A	2012-12-04	Preparation method of hollow superparamagnetic nanospheres	Patent Application
43	US	2013-04-04	US 201213639264 A	2012-09-25	Composition of redox-reagents for electrochemical biosensor and biosensor comprising the same	Patent Application
44	WO	2013-04-04	KR 2012007711 W	2012-09-25	Composition of redox-reagents for electrochemical biosensor and biosensor comprising the same	Patent Application
45	US	2013-04-25	US 201113277687 A	2011-10-20	Glucose biosensor with improved shelf life	Patent Application
46	WO	2013-04-25	US 2012/0060928 W	2012-10-19	Glucose biosensor with improved shelf life	Patent Application
47	US	2013-05-16	US 201113697698 A	2011-05-12	Method of producing electrically conductive polymer and cellulose nanocomposites	Patent Application
48	US	2013-05-23	US 201113698734 A	2011-04-19	Enzyme-fiber matrix composite of three-dimensional network structure, preparation method thereof, and use thereof	Patent Application
49	US	2013-07-04	US 201113821903 A	2011-09-12	Enzyme co-factor enhancement of biosensor performance	Patent Application
50	US	2013-08-22	US 201213586436 A	2012-08-15	Control of biofouling in implantable biosensors	Patent Application
51	US	2013-09-19	US 201113988723 A	2011-11-22	Biosensing systems for measurement of lactose	Patent Application
52	WO	2013-10-03	GB 2013050754 W	2013-03-22	Peridinin-chlorophyll binding proteins	Patent Application
53	WO	2013-11-07	SG 2013000175 W	2013-05-03	A mediator-less electrochemical glucose sensing procedure employing the leach-proof covalent binding of an enzyme(s) to electrodes and products thereof	Patent Application
54	WO	2013-11-07	EP 2013058186 W	2013-04-19	Diagnostic arrangement for determining an ageing condition of an electrical component	Patent Application
55	US	2013-11-14	US 201313943753 A	2013-07-16	Method for fabricating biosensor	Patent Application
56	US	2013-12-05	US 201113991113 A	2011-12-01	Tissue implantable microbiosensor	Patent Application
57	WO	2014-02-13	US 2013/0040671 W	2013-05-10	Wearable electrochemical sensors	Patent Application
58	IE	2014-03-26	IE S20120145 A	2012-03-07	Cellulose binding domain treated purified cotton fibers as textile biosensors	Patent Application
59	WO	2014-04-03	US 2013/0062249 W	2013-09-27	Biosensor compositions and methods of their use	Patent Application
60	WO	2014-04-24	US 2013/0065548 W	2013-10-17	Device and methods of using device for detection of aminoacidopathies	Patent Application
61	CN	2014-05-07	CN 201310749528 A	2013-12-31	Microbial film for biosensor and preparation method thereof	Patent Application

62	EP	2014-08-13	EP 14153774 A	2014-02-04	Silver nanowire-containing composition, biosensor strip comprising the same and its preparation method	Patent Application
63	US	2014-08-14	US 201414167158 A	2014-01-29	Silver nanowire-containing composition, biosensor strip comprising the same and its preparation method	Patent Application
64	US	2014-08-21	US 201213562592 A	2012-07-31	Enzymatic biosensing systems	Patent Application
65	US	2014-09-04	US 201313783330 A	2013-03-03	Gold nanoparticle based dipstick nano-biosensor for detecting plasmodium falciparum and plasmodium vivax and method of synthesizing the same	Patent Application
66	JP	2014-10-06	JP 2013064400 A	2013-03-26	Crystal oscillator microbalance biosensor and method for manufacturing the same	Patent Application
67	US	2014-10-21	US 201113270357 A	2011-10-11	Polymer matrices for cell culture	Granted Patent
68	WO	2014-10-23	SG 2014000163 W	2014-04-14	Electrochemical lateral flow bioassay and biosensor	Patent Application
69	US	2014-12-25	US 201414483490 A	2014-09-11	Method for manufacturing biosensor	Patent Application
70	US	2015-01-01	US 201414307916 A	2014-06-18	Biomaterials having nanoscale layers and coatings	Patent Application
71	CN	2015-01-07	CN 201410363321 A	2014-07-28	Graphene/nanometer cellulose composite fibers and preparation method thereof	Patent Application
72	EP	2015-01-07	EP 14175390 A	2014-07-02	Reagent composition for biosensor and biosensor having the same	Patent Application
73	US	2015-01-08	US 201414318161 A	2014-06-27	Reagent composition for biosensor and biosensor having the same	Patent Application
74	EP	2015-01-21	EP 13760769 A	2013-03-11	Biosensor	Patent Application
75	EP	2015-01-21	EP 13761636 A	2013-03-11	Method for manufacturing biosensor	Patent Application
76	US	2015-01-27	US 201013520076 A	2010-12-23	Transparent bacterial cellulose nanocomposite hydrogels	Granted Patent
77	US	2015-01-29	US 201414483456 A	2014-09-11	Biosensor	Patent Application
78	US	2015-02-05	US 201414452141 A	2014-08-05	Method for the topographically-selective passivation of micro- and nanoscale devices	Patent Application
79	KR	2015-02-10	KR 20100111810 A	2010-11-10	Disposable biosensors made with Tin oxide - cellulose nanocomposite, manufacturing method of the same and measuring method using the same	Granted Patent
80	WO	2015-03-05	US 2014/0053756 W	2014-09-02	Device and methods of using device for detection of hyperammonemia	Patent Application
81	EP	2015-03-11	EP 13784803 A	2013-01-25	Reagent composition for redox reaction	Patent Application
82	WO	2015-03-19	EP 2014069233 W	2014-09-09	Nanoparticles for use in bioadhesion	Patent Application
83	US	2015-03-19	US 201414554537 A	2014-11-26	Test Sensors and Methods of Using The Same	Patent Application
84	EP	2015-04-08	EP 13306243 A	2013-09-10	Use of nanoparticles for gluing gels	Patent Application
85	US	2015-04-16	US 201314398440 A	2013-01-25	Reagent composition for redox reaction	Patent Application
86	CN	2015-04-22	CN 201410822047 A	2014-12-25	Preparation method of enzyme biosensor for peroxide value of edible oil	Patent Application
87	US	2015-05-07	US 201314398669 A	2013-05-03	Mediator-less Electrochemical Glucose Sensing Procedure Employing the Leach-proof Covalent Binding of an Enzyme(s) to Electrodes and Products Thereof	Patent Application
88	US	2015-05-07	US 201314400242 A	2013-05-10	Wearable electrochemical sensors	Patent Application
89	US	2015-05-12	US 201113171120 A	2011-06-28	Use and making of biosensors utilizing antimicrobial peptides for highly sensitive biological monitoring	Granted Patent
90	WO	2015-05-21	US 2014/0065785 W	2014-11-14	Real-time satiety biofeedback	Patent Application
91	EP	2015-06-03	EP 13771551 A	2013-07-26	Biosensor comprising metallic nanoparticles	Patent Application
92	WO	2015-06-04	SG 2014000568 W	2014-11-28	Novel ultrashort hydrophobic peptides that self-assemble into nanofibrous hydrogels and their uses	Patent Application
93	US	2015-06-09	US 201313943753 A	2013-07-16	Method for fabricating biosensor	Granted Patent
94	WO	2015-07-23	CA 2014000027 W	2014-01-16	Lateral flow assay apparatus and method, and sensor therefor	Patent Application

95	WO	2015-07-30	US 2015/0012303 W	2015-01-21	Compositions for radiotherapy and uses thereof	Patent Application
96	US	2015-08-11	US 201213586436 A	2012-08-15	Control of biofouling in implantable biosensors	Granted Patent
97	CN	2015-09-02	CN 201510224331 A	2015-05-06	Preparation method of ethyl cellulose nano micelle with UCST (upper critical solution temperature)	Patent Application
98	US	2015-10-01	US 201214353731 A	2012-10-25	Biofuel cell, method for production of biofuel cell, electronic device, enzyme immobilization electrode, method for production of enzyme immobilization electrode, electrode for production of enzyme immobilization electrode, method for 5 production of electrode for production of enzyme immobilization electrode and enzyme reaction using device	Patent Application
99	US	2015-10-15	US 201314417006 A	2013-07-26	Biosensor comprising metal nanoparticles	Patent Application
100	CN	2015-11-25	CN 201510593230 A	2015-09-17	Environmental stress sensitive type immobilized enzyme porous micro-sphere carrier material and preparing method of porous micro-sphere carrier material	Patent Application
101	EP	2016-02-03	EP 12837571 A	2012-09-25	Composition of redox-reagents for electrochemical biosensor and biosensor comprising the same	Granted Patent
102	US	2016-02-25	US 201414784859 A	2014-04-14	Electrochemical lateral flow bioassay and biosensor	Patent Application
103	WO	2016-03-03	IB 2014064038 W	2014-08-25	Carbon nanotubes formulation and uses thereof	Patent Application
104	WO	2016-03-17	IB 2015056832 W	2015-09-07	Device and method for detection of haemoglobin and its complexes	Patent Application
105	WO	2016-03-17	IB 2015056854 W	2015-09-08	Device and method for non-enzymatic and electrochemical detection of glucose bioanalyte	Patent Application
106	US	2016-03-24	US 201514964721 A	2015-12-10	Electrochemical test sensor	Patent Application
107	WO	2016-06-02	US 2015/0062630 W	2015-11-25	Coated biosensor and method for preserving biosensor during implantation into the brain or other tissues	Patent Application
108	CN	2016-06-22	CN 201610138700 A	2016-03-12	Preparation method of composite biosensor for water-quality toxicity prewarning during sewage treatment	Patent Application
109	US	2016-07-28	US 201615088067 A	2016-03-31	Reagent composition for biosensor and biosensor having the same	Patent Application
110	WO	2016-07-28	DK 2016050016 W	2016-01-20	Substituted acridine-like and xanthenium-like fluorescent dyes	Patent Application
111	US	2016-07-28	US 201414917771 A	2014-09-09	Use of Nanoparticles For Gluing Gels	Patent Application
112	US	2016-08-04	US 201514708973 A	2015-05-11	Use and making of biosensors utilizing antimicrobial peptides for highly sensitive biological monitoring	Patent Application
113	WO	2016-08-11	AU 2016/050069 W	2016-02-05	Targeting constructs for delivery of payloads	Patent Application
114	CN	2016-09-07	CN 201610229037 A	2016-04-13	Carbon quantum dot modified glucose oxidase enzyme membrane and preparation method thereof	Patent Application
115	US	2016-09-08	US 201615059570 A	2016-03-03	Bioplasmonic calligraphy for label-free biodetection	Patent Application
116	US	2016-10-04	US 201514964721 A	2015-12-10	Electrochemical test sensor	Granted Patent
117	WO	2016-10-06	US 2016/0025507 W	2016-04-01	Analyte sensing for eye injuries and conditions	Patent Application
118	WO	2016-10-06	IB 2015056920 W	2015-09-10	Solid state electrolyte biosensor	Patent Application
119	US	2016-10-18	US 201113991113 A	2011-12-01	Tissue implantable microbiosensor	Granted Patent
120	US	2016-10-27	US 201415101007 A	2014-01-16	Lateral flow assay apparatus and method, and sensor therefor	Patent Application
121	WO	2016-11-03	US 2016/0029623 W	2016-04-27	Device and methods of using device for detection of hyperammonemia	Patent Application
122	US	2016-11-15	US 201213562592 A	2012-07-31	Enzymatic biosensing systems	Granted Patent
123	US	2016-11-17	US 201515112589 A	2015-01-21	Compositions for radiotherapy and uses thereof	Patent Application
124	US	2016-11-17	US 201615152208 A	2016-05-11	Needle for biosensor and bio sensor including the same	Patent Application

125	WO	2016-11-17	KR 2016004944 W	2016-05-11	Needle for biosensor and bio sensor including the same	Patent Application
126	CN	2016-11-30	CN 201610519084 A	2016-07-04	Interpenetration type petal-structured simulated nacre environmental-friendly composite membrane and preparation method thereof	Patent Application
127	US	2016-12-08	US 201615244212 A	2016-08-23	Biosensor System Having Enhanced Stability and Hematocrit Performance	Patent Application
128	WO	2016-12-08	US 2016/0035336 W	2016-06-01	Miniaturized electronic systems with wireless power and near-field communication capabilities	Patent Application
129	US	2017-02-16	US 201615160150 A	2016-05-20	Polymer coating comprising 2-methoxyethyl acrylate units synthesized by surface-initiated atom transfer radical polymerization	Patent Application
130	US	2017-03-23	US 201515126511 A	2015-03-24	A therapeutic agent for use in the treatment of infections	Patent Application
131	WO	2017-04-13	US 2016/0055706 W	2016-10-06	A biosensor device to detect target analytes in situ, in vivo, and/or in real time, and methods of making and using the same	Patent Application
132	EP	2017-04-26	EP 13771551 A	2013-07-26	Biosensor comprising metallic nanoparticles	Granted Patent
133	WO	2017-05-26	US 2016/0062963 W	2016-11-19	Bicarbonate biosensors, calcium biosensors, and uses thereof	Patent Application
134	WO	2017-05-26	US 2016/0062961 W	2016-11-19	Lactate biosensors and uses thereof	Patent Application
135	WO	2017-05-26	US 2016/0062958 W	2016-11-19	Ratiometric biosensors and non-geometrically modulated fret	Patent Application
136	WO	2017-05-26	US 2016/0062962 W	2016-11-19	Thermostable glucose biosensors and uses thereof	Patent Application
137	WO	2017-05-26	US 2016/0062960 W	2016-11-19	Urea biosensors and uses thereof	Patent Application
138	EP	2017-07-12	EP 12823633 A	2012-08-15	Control of biofouling in implantable biosensors	Granted Patent
139	WO	2017-07-27	GB 2017050147 W	2017-01-20	Alternative electrochemical biosensor	Patent Application
140	WO	2017-07-27	GB 2017050146 W	2017-01-20	Electronic biosensor	Patent Application
141	US	2017-08-24	US 201515509447 A	2015-09-07	Device and method for detection of haemoglobin and its complexes	Patent Application
142	WO	2017-08-24	SE 2017050147 W	2017-02-15	Diagnostic device and related method	Patent Application
143	EP	2017-09-06	EP 14175390 A	2014-07-02	Reagent composition for biosensor and biosensor having the same	Granted Patent
144	US	2017-09-14	US 201515529625 A	2015-11-25	Coated Biosensor and Method for Preserving Biosensor During Implantation into the Brain or Other Tissues	Patent Application
145	JP	2017-10-05	JP 2016070881 A	2016-03-31	Conductive laminate	Patent Application
146	CN	2017-10-10	CN 201710329483 A	2017-05-11	Glucose oxidase screen-printed electrode for online detection and preparation method thereof	Patent Application
147	EP	2017-11-08	EP 16000989 A	2016-05-02	A method for light-induced actuation of ph-sensitive assemblies and a composite material therefore	Patent Application
148	EP	2017-11-08	EP 15875765 A	2015-12-31	Electrochemical biosensor	Patent Application
149	US	2017-11-21	US 201314400242 A	2013-05-10	Wearable electrochemical sensors	Granted Patent
150	WO	2017-11-23	US 2017/0033579 W	2017-05-19	Methods of making gels and film using curli nanofibers	Patent Application
151	WO	2017-11-23	US 2017/0032923 W	2017-05-16	Scalable production of genetically engineered nanofibrous macroscopic materials via filtration	Patent Application
152	US	2017-12-07	US 201515533333 A	2015-12-31	Electrochemical biosensor	Patent Application
153	EP	2018-01-24	EP 17185090 A	2014-07-02	Reagent composition for biosensor and biosensor having the same	Patent Application
154	CN	2018-01-26	CN 201710822678 A	2017-09-13	Composite fluorescent biosensor, and preparation method and application thereof	Patent Application
155	US	2018-03-13	US 201515126511 A	2015-03-24	Therapeutic agent for use in the treatment of infections	Granted Patent
156	WO	2018-04-05	SG 2017050481 W	2017-09-27	Elastic bioresorbable encasement for implants	Patent Application
157	US	2018-04-10	US 201615088067 A	2016-03-31	Reagent composition for biosensor and biosensor having the same	Granted Patent
158	US	2018-04-19	US 201615562647 A	2016-04-01	Analyte Sensing for Eye Injuries and Conditions	Patent Application

159	CN	2018-05-04	CN 201711190156 A	2017-11-24	BOD (Biochemical Oxygen Demand) biosensor as well as preparation method and application thereof	Patent Application
160	US	2018-05-22	US 201414784859 A	2014-04-14	Electrochemical lateral flow bioassay and biosensor	Granted Patent
161	US	2018-05-24	US 201615570269 A	2016-04-27	Device and methods of using device for detection of hyperammonemia	Patent Application
162	US	2018-06-14	US 201615577807 A	2016-06-06	Biosensor chip and biosensor device	Patent Application
163	US	2018-06-14	US 201615578602 A	2016-06-01	Miniaturized electronic systems with wireless power and near-field communication capabilities	Patent Application
164	US	2018-06-19	US 201213639264 A	2012-09-25	Composition of redox-reagents for electrochemical biosensor and biosensor comprising the same	Granted Patent
165	US	2018-07-17	US 201113988723 A	2011-11-22	Biosensing systems for measurement of lactose	Granted Patent
166	EP	2018-08-08	EP 14786108 A	2014-04-14	Electrochemical lateral flow bioassay and biosensor	Granted Patent
167	US	2018-08-16	US 201715492581 A	2017-04-20	Biosensor test strip and its etchant-free fabrication method	Patent Application
168	EP	2018-08-29	EP 13784803 A	2013-01-25	Reagent composition for redox reaction	Granted Patent
169	CN	2018-09-04	CN 201810214019 A	2018-03-15	Optically-active cellulose nanocrystal/conjugate conductive polymer composite film preparation method	Patent Application
170	US	2018-09-06	US 201815964217 A	2018-04-27	Analyte sensors and methods of using same	Patent Application
171	US	2018-09-27	US 201615764627 A	2016-10-06	A biosensor device to detect target analytes in situ, in vivo, and/or in real time, and methods of making and using the same	Patent Application
172	WO	2018-11-01	US 2017/0029176 W	2017-04-24	Method for detecting presence of a thioether and kit for detecting same	Patent Application
173	CN	2018-11-06	CN 201810673840 A	2018-06-27	Composite hollow microsphere material for biosensor and preparation method thereof	Patent Application
174	US	2018-11-13	US 201314398440 A	2013-01-25	Reagent composition for redox reaction	Granted Patent
175	CN	2018-12-04	CN 201810917016 A	2018-08-13	Method for constructing nanocellulose paper-based biosensor	Patent Application
176	WO	2018-12-13	US 2018/0036048 W	2018-06-05	Electrochemical biosensors	Patent Application
177	CN	2018-12-14	CN 201810516705 A	2018-05-25	Preparation method and test method of GOP/CNF composite material with water-induced deformation memory function	Patent Application
178	US	2019-01-03	US 201816025608 A	2018-07-02	Method and electronic device for determining the concentration of an analyte	Patent Application
179	WO	2019-01-03	US 2018/0040448 W	2018-06-29	N-oxide and ectoine monomers, polymers, their compositions, and related methods	Patent Application
180	EP	2019-01-09	EP 18180351 A	2018-06-28	Method and electronic device for determining the concentration of an analyte	Patent Application
181	WO	2019-01-17	JP 2018025579 W	2018-07-05	Composite composition, method for producing same and biosensor	Patent Application
182	WO	2019-01-31	US 2018/0044428 W	2018-07-30	In situ sensing of water potential	Patent Application
183	US	2019-02-07	US 201816050460 A	2018-07-31	Digital biosensor	Patent Application
184	US	2019-02-07	US 201816057314 A	2018-08-07	Nanoparticle sensor having a nanofibrous membrane scaffold	Patent Application
185	US	2019-02-14	US 201716076672 A	2017-02-15	Diagnostic device and related method	Patent Application
186	US	2019-02-21	US 201715692353 A	2017-08-31	Method for making paper-based biosensor pattern	Patent Application
187	US	2019-02-26	US 201414452141 A	2014-08-05	Method for the topographically-selective passivation of micro- and nanoscale devices	Granted Patent
188	US	2019-03-07	US 201816121405 A	2018-09-04	Medical device with integrated biosensor	Patent Application
189	WO	2019-03-07	US 2018/0049377 W	2018-09-04	Medical device with integrated biosensor	Patent Application
190	WO	2019-03-21	US 2018/0051600 W	2018-09-18	Nanocellulose and nanocellulose composite arrays and devices and methods of making and using the same	Patent Application
191	US	2019-04-16	US 201615244212 A	2016-08-23	Electrochemical test sensor	Granted Patent

192	US	2019-05-02	US 201716302687 A	2017-05-19	Methods of making gels and films using curli nanofibers	Patent Application
193	WO	2019-05-16	SE 2018051117 W	2018-11-01	Novel biosensor and related wound dressing system	Patent Application
194	CN	2019-05-17	CN 201910064344 A	2019-01-23	Fluorescent oxidized nanocellulose thin film with adjustable light color and preparation method of fluorescent oxidized nanocellulose thin film	Patent Application
195	CN	2019-06-07	CN 201910201109 A	2019-03-18	Modification material for preparing working electrode of biosensor	Patent Application
196	RU	2019-06-11	RU 2016118529 A	2014-11-20	Obtaining graphene oxide	Granted Patent
197	US	2019-07-11	US 201916244084 A	2019-01-09	Bioactive nanoparticles and methods for making same	Patent Application
198	US	2019-08-15	US 201916393601 A	2019-04-24	Test sensors and methods of using the same	Patent Application
199	US	2019-08-22	US 201816221384 A	2018-12-14	Polar fluid gated field effect devices	Patent Application
200	US	2019-08-27	US 201615152208 A	2016-05-11	Needle for biosensor and bio sensor including the same	Granted Patent
201	US	2019-09-03	US 201615562647 A	2016-04-01	Analyte sensing for eye injuries and conditions	Granted Patent
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