

# Woon-Hong Yeo

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

113 papers	5,881 citations	28 h-index	75 g-index
138 ext. papers	7,246 ext. citations	9.5 avg, IF	5.88 L-index

#	Paper	IF	Citations
113	Breathable, Wireless, Thin-Film Wearable Biopatch Using Noise-Reduction Mechanisms. <i>ACS Applied Electronic Materials</i> , <b>2022</b> , 4, 503-512	4	3
112	Soft Wireless Bioelectronics Designed for Real-Time, Continuous Health Monitoring of Farmworkers.. <i>Advanced Healthcare Materials</i> , <b>2022</b> , e2200170	10.1	3
111	Recent advances in wearable exoskeletons for human strength augmentation. <i>Flexible and Printed Electronics</i> , <b>2022</b> , 7, 023002	3.1	1
110	Fully implantable wireless batteryless vascular electronics with printed soft sensors for multiplex sensing of hemodynamics.. <i>Science Advances</i> , <b>2022</b> , 8, eabm1175	14.3	7
109	VR-enabled portable brain-computer interfaces via wireless soft bioelectronics.. <i>Biosensors and Bioelectronics</i> , <b>2022</b> , 210, 114333	11.8	1
108	Smart bioelectronic pacifier for real-time continuous monitoring of salivary electrolytes.. <i>Biosensors and Bioelectronics</i> , <b>2022</b> , 210, 114329	11.8	3
107	Soft Wearable Patch for Continuous Cardiac Biometric Security. <i>Engineering Proceedings</i> , <b>2021</b> , 10, 73	0.5	
106	Ultrahigh Sensitive Au-Doped Silicon Nanomembrane Based Wearable Sensor Arrays for Continuous Skin Temperature Monitoring with High Precision. <i>Advanced Materials</i> , <b>2021</b> , e2105865	24	10
105	Advances in Screen Printing of Conductive Nanomaterials for Stretchable Electronics. <i>ACS Omega</i> , <b>2021</b> , 6, 9344-9351	3.9	21
104	All-in-one, wireless, fully flexible sodium sensor system with integrated Au/CNT/Au nanocomposites. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 331, 129416	8.5	12
103	Recent Advances in Printing Technologies of Nanomaterials for Implantable Wireless Systems in Health Monitoring and Diagnosis. <i>Advanced Healthcare Materials</i> , <b>2021</b> , 10, e2100158	10.1	7
102	Recent advances in wearable sensors and portable electronics for sleep monitoring. <i>IScience</i> , <b>2021</b> , 24, 102461	6.1	21
101	Recent Advances in High-Throughput Nanomaterial Manufacturing for Hybrid Flexible Bioelectronics. <i>Materials</i> , <b>2021</b> , 14,	3.5	2
100	Strain-Isolating Materials and Interfacial Physics for Soft Wearable Bioelectronics and Wireless, Motion Artifact-Controlled Health Monitoring. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2104070	15.6	10
99	Recent advances in graphene-based nanobiosensors for salivary biomarker detection. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 171, 112723	11.8	19
98	Soft Wireless Bioelectronics and Differential Electrodermal Activity for Home Sleep Monitoring. <i>Sensors</i> , <b>2021</b> , 21,	3.8	6
97	Development of Flexible Ion-Selective Electrodes for Saliva Sodium Detection. <i>Sensors</i> , <b>2021</b> , 21,	3.8	7

96	Wireless Soft Scalp Electronics and Virtual Reality System for Motor Imagery-Based Brain-Machine Interfaces. <i>Advanced Science</i> , <b>2021</b> , 8, e2101129	13.6	14
95	Real-Time Functional Assay of Volumetric Muscle Loss Injured Mouse Masseter Muscles via Nanomembrane Electronics. <i>Advanced Science</i> , <b>2021</b> , 8, e2101037	13.6	3
94	Recent Advances in Wearable Sensors and Integrated Functional Devices for Virtual and Augmented Reality Applications (Adv. Funct. Mater. 39/2021). <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2170289	15.6	0
93	Advances in Microsensors and Wearable Bioelectronics for Digital Stethoscopes in Health Monitoring and Disease Diagnosis. <i>Advanced Healthcare Materials</i> , <b>2021</b> , 10, e2101400	10.1	1
92	Recent advances in wearable biosensing gloves and sensory feedback biosystems for enhancing rehabilitation, prostheses, healthcare, and virtual reality. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 190, 113443	11.8	12
91	Soft Material-Enabled Packaging for Stretchable and Flexible Hybrid Electronics <b>2021</b> , 377-403		
90	At-home wireless monitoring of acute hemodynamic disturbances to detect sleep apnea and sleep stages via a soft sternal patch.. <i>Science Advances</i> , <b>2021</b> , 7, eabl4146	14.3	7
89	Printed, Soft, Nanostructured Strain Sensors for Monitoring of Structural Health and Human Physiology. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 25020-25030	9.5	31
88	Fully Integrated, Stretchable, Wireless Skin-Conformal Bioelectronics for Continuous Stress Monitoring in Daily Life. <i>Advanced Science</i> , <b>2020</b> , 7, 2000810	13.6	40
87	Challenges and Advances in Aerosol Jet Printing of Regenerated Silk Fibroin Solutions. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 1902005	4.6	6
86	Wireless, Flexible, Ion-Selective Electrode System for Selective and Repeatable Detection of Sodium. <i>Sensors</i> , <b>2020</b> , 20,	3.8	12
85	Soft, wireless periocular wearable electronics for real-time detection of eye vergence in a virtual reality toward mobile eye therapies. <i>Science Advances</i> , <b>2020</b> , 6, eaay1729	14.3	61
84	Breathable, large-area epidermal electronic systems for recording electromyographic activity during operant conditioning of H-reflex. <i>Biosensors and Bioelectronics</i> , <b>2020</b> , 165, 112404	11.8	13
83	Ultrathin, long-term stable, solid-state reference electrode enabled by enhanced interfacial adhesion and conformal coating of AgCl. <i>Sensors and Actuators B: Chemical</i> , <b>2020</b> , 309, 127761	8.5	9
82	Soft Nanomembrane Sensors and Flexible Hybrid Bioelectronics for Wireless Quantification of Blepharospasm. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2020</b> , 67, 3094-3100	5	9
81	Thin dielectric-layer-enabled low-voltage operation of fully printed flexible carbon nanotube thin-film transistors. <i>Nanotechnology</i> , <b>2020</b> , 31, 235301	3.4	9
80	Development of 60-GHz millimeter wave, electromagnetic bandgap ground planes for multiple-input multiple-output antenna applications. <i>Scientific Reports</i> , <b>2020</b> , 10, 8541	4.9	6
79	Skin-conformal, soft material-enabled bioelectronic system with minimized motion artifacts for reliable health and performance monitoring of athletes. <i>Biosensors and Bioelectronics</i> , <b>2020</b> , 151, 111981	11.8	16

78	Wireless, Skin-Like Membrane Electronics With Multifunctional Ergonomic Sensors for Enhanced Pediatric Care. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2020</b> , 67, 2159-2165	5	10
77	Soft Materials, Stretchable Mechanics, and Optimized Designs for Body-Wearable Compliant Antennas. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 3059-3067	9.5	14
76	Recent Advances in Wearable Sensors and Integrated Functional Devices for Virtual and Augmented Reality Applications. <i>Advanced Functional Materials</i> , <b>2020</b> , 31, 2005692	15.6	23
75	All-printed nanomembrane wireless bioelectronics using a biocompatible solderable graphene for multimodal human-machine interfaces. <i>Nature Communications</i> , <b>2020</b> , 11, 3450	17.4	60
74	Aerosol Jet Printing: Challenges and Advances in Aerosol Jet Printing of Regenerated Silk Fibroin Solutions (Adv. Mater. Interfaces 12/2020). <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 2070065	4.6	2
73	Stretchable Nanocomposite Sensors, Nanomembrane Interconnectors, and Wireless Electronics toward Feedback-Loop Control of a Soft Earthworm Robot. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 43388-43397	9.5	17
72	Printed, Wireless, Soft Bioelectronics and Deep Learning Algorithm for Smart Human-Machine Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 49398-49406	9.5	16
71	Recent Advances in Portable Biosensors for Biomarker Detection in Body Fluids. <i>Biosensors</i> , <b>2020</b> , 10,	5.9	15
70	Advanced Nanomaterials, Printing Processes, and Applications for Flexible Hybrid Electronics. <i>Materials</i> , <b>2020</b> , 13,	3.5	14
69	Advanced Soft Materials, Sensor Integrations, and Applications of Wearable Flexible Hybrid Electronics in Healthcare, Energy, and Environment. <i>Advanced Materials</i> , <b>2020</b> , 32, e1901924	24	305
68	Wearable Flexible Hybrid Electronics: Advanced Soft Materials, Sensor Integrations, and Applications of Wearable Flexible Hybrid Electronics in Healthcare, Energy, and Environment (Adv. Mater. 15/2020). <i>Advanced Materials</i> , <b>2020</b> , 32, 2070116	24	5
67	Wireless, continuous monitoring of daily stress and management practice via soft bioelectronics. <i>Biosensors and Bioelectronics</i> , <b>2020</b> , 173, 112764	11.8	8
66	Flexible Electronics: Soft Material-Enabled, Active Wireless, Thin-Film Bioelectronics for Quantitative Diagnostics of Cervical Dystonia (Adv. Mater. Technol. 10/2019). <i>Advanced Materials Technologies</i> , <b>2019</b> , 4, 1970055	6.8	
65	Fully portable and wireless universal brain-machine interfaces enabled by flexible scalp electronics and deep learning algorithm. <i>Nature Machine Intelligence</i> , <b>2019</b> , 1, 412-422	22.5	58
64	Green Manufacturing of Highly Conductive Cu <sub>2</sub> O and Cu Nanoparticles for Photonic-Sintered Printed Electronics. <i>ACS Applied Electronic Materials</i> , <b>2019</b> , 1, 2069-2075	4	7
63	Electrospun CuS/PVP Nanowires and Superior Near-Infrared Filtration Efficiency for Thermal Shielding Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 6575-6580	9.5	18
62	Directly Accessible and Transferrable Nanofluidic Systems for Biomolecule Manipulation. <i>ACS Sensors</i> , <b>2019</b> , 4, 1417-1423	9.2	
61	Fully Printed, Wireless, Stretchable Implantable Biosystem toward Batteryless, Real-Time Monitoring of Cerebral Aneurysm Hemodynamics. <i>Advanced Science</i> , <b>2019</b> , 6, 1901034	13.6	26

60	Soft Material-Enabled, Active Wireless, Thin-Film Bioelectronics for Quantitative Diagnostics of Cervical Dystonia. <i>Advanced Materials Technologies</i> , <b>2019</b> , 4, 1900458	6.8	5
59	All-in-One, Wireless, Stretchable Hybrid Electronics for Smart, Connected, and Ambulatory Physiological Monitoring. <i>Advanced Science</i> , <b>2019</b> , 6, 1900939	13.6	55
58	Radiotherapy-Compatible Robotic System for Multi-Landmark Positioning in Head and Neck Cancer Treatments. <i>Scientific Reports</i> , <b>2019</b> , 9, 14358	4.9	2
57	Stretchable Hybrid Electronics: All-in-One, Wireless, Stretchable Hybrid Electronics for Smart, Connected, and Ambulatory Physiological Monitoring (Adv. Sci. 17/2019). <i>Advanced Science</i> , <b>2019</b> , 6, 1970104	13.6	1
56	Implantable Electronics: Fully Printed, Wireless, Stretchable Implantable Biosystem toward Batteryless, Real-Time Monitoring of Cerebral Aneurysm Hemodynamics (Adv. Sci. 18/2019). <i>Advanced Science</i> , <b>2019</b> , 6, 1970110	13.6	1
55	Use of Superelastic Nitinol and Highly-Stretchable Latex to Develop a Tongue Prosthetic Assist Device and Facilitate Swallowing for Dysphagia Patients. <i>Materials</i> , <b>2019</b> , 12,	3.5	3
54	Mechanically transformative electronics, sensors, and implantable devices. <i>Science Advances</i> , <b>2019</b> , 5, eaay0418	14.3	70
53	Soft Material-Enabled, Flexible Hybrid Electronics for Medicine, Healthcare, and Human-Machine Interfaces. <i>Materials</i> , <b>2018</b> , 11,	3.5	108
52	Advances in Materials for Recent Low-Profile Implantable Bioelectronics. <i>Materials</i> , <b>2018</b> , 11,	3.5	26
51	Stretchable, Implantable, Nanostructured Flow-Diverter System for Quantification of Intra-aneurysmal Hemodynamics. <i>ACS Nano</i> , <b>2018</b> , 12, 8706-8716	16.7	15
50	Wireless, intraoral hybrid electronics for real-time quantification of sodium intake toward hypertension management. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 5377-5382	11.5	92
49	Ultrahigh Conductivity and Superior Interfacial Adhesion of a Nanostructured, Photonic-Sintered Copper Membrane for Printed Flexible Hybrid Electronics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 44071-44079	9.5	26
48	Soft, conformal bioelectronics for a wireless human-wheelchair interface. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 91, 796-803	11.8	56
47	Assessment of endothelial cell growth behavior in thin film nitinol. <i>Biochip Journal</i> , <b>2017</b> , 11, 39-45	4	2
46	Phase Behavior for the Poly(phenyl methacrylate) and Phenyl Methacrylate in Supercritical Carbon Dioxide and Dimethyl Ether. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2017</b> , 62, 1876-1883	2.8	10
45	Soft Electronics Enabled Ergonomic Human-Computer Interaction for Swallowing Training. <i>Scientific Reports</i> , <b>2017</b> , 7, 46697	4.9	25
44	An electromechanical, patient positioning system for head and neck radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2017</b> , 62, 7520-7531	3.8	5
43	Fractal-Structured, Wearable Soft Sensors for Control of a Robotic Wheelchair via Electrooculograms <b>2017</b> ,		1

42	Synthesis of a Soft Nanocomposite for Flexible, Wearable Bioelectronics <b>2017</b> ,		2
41	Swallowing detection for game control: Using skin-like electronics to support people with dysphagia <b>2017</b> ,		2
40	Recent Advances in Nanoparticle Concentration and Their Application in Viral Detection Using Integrated Sensors. <i>Sensors</i> , <b>2017</b> , 17,	3.8	11
39	Recent advances in salivary cancer diagnostics enabled by biosensors and bioelectronics. <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 81, 181-197	11.8	42
38	A Simulation Study of a Radiofrequency Localization System for Tracking Patient Motion in Radiotherapy. <i>Sensors</i> , <b>2016</b> , 16,	3.8	2
37	Flexible Electronics: An Epidermal Stimulation and Sensing Platform for Sensorimotor Prosthetic Control, Management of Lower Back Exertion, and Electrical Muscle Activation (Adv. Mater. 22/2016). <i>Advanced Materials</i> , <b>2016</b> , 28, 4563	24	6
36	An Epidermal Stimulation and Sensing Platform for Sensorimotor Prosthetic Control, Management of Lower Back Exertion, and Electrical Muscle Activation. <i>Advanced Materials</i> , <b>2016</b> , 28, 4462-71	24	173
35	Microstructured Thin Film Nitinol for a Neurovascular Flow-Diverter. <i>Scientific Reports</i> , <b>2016</b> , 6, 23698	4.9	13
34	Soft, curved electrode systems capable of integration on the auricle as a persistent brain-computer interface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 3920-5	11.5	238
33	Phase behaviour of binary and ternary mixtures for the poly(methyl methacrylate-co-hexafluorobutyl methacrylate) [P(MMA-co-HFBMA)] in supercritical fluorine solvents. <i>Journal of Chemical Thermodynamics</i> , <b>2015</b> , 82, 76-87	2.9	3
32	Fabrication and Characterization of a Conformal Skin-like Electronic System for Quantitative, Cutaneous Wound Management. <i>Journal of Visualized Experiments</i> , <b>2015</b> ,	1.6	4
31	A novel low-profile flow sensor for monitoring of hemodynamics in cerebral aneurysm. <i>Biomaterials and Biomechanics in Bioengineering</i> , <b>2015</b> , 2, 71-84		1
30	Fractal design concepts for stretchable electronics. <i>Nature Communications</i> , <b>2014</b> , 5, 3266	17.4	625
29	Rugged and breathable forms of stretchable electronics with adherent composite substrates for transcutaneous monitoring. <i>Nature Communications</i> , <b>2014</b> , 5, 4779	17.4	245
28	Experimental and Theoretical Studies of Serpentine Microstructures Bonded To Prestrained Elastomers for Stretchable Electronics. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2028-2037	15.6	220
27	Multifunctional skin-like electronics for quantitative, clinical monitoring of cutaneous wound healing. <i>Advanced Healthcare Materials</i> , <b>2014</b> , 3, 1597-607	10.1	175
26	Capacitive epidermal electronics for electrically safe, long-term electrophysiological measurements. <i>Advanced Healthcare Materials</i> , <b>2014</b> , 3, 642-8	10.1	200
25	Immunologic and tissue biocompatibility of flexible/stretchable electronics and optoelectronics. <i>Advanced Healthcare Materials</i> , <b>2014</b> , 3, 515-25	10.1	80

24	Electrostatic dimension of aligned-array carbon nanotube field-effect transistors. <i>ACS Nano</i> , <b>2013</b> , 7, 1299-308	16.7	15
23	Nanotip analysis for dielectrophoretic concentration of nanosized viral particles. <i>Nanotechnology</i> , <b>2013</b> , 24, 185502	3.4	10
22	Ultrathin conformal devices for precise and continuous thermal characterization of human skin. <i>Nature Materials</i> , <b>2013</b> , 12, 938-44	27	826
21	Materials and optimized designs for human-machine interfaces via epidermal electronics. <i>Advanced Materials</i> , <b>2013</b> , 25, 6839-46	24	509
20	Multifunctional epidermal electronics printed directly onto the skin. <i>Advanced Materials</i> , <b>2013</b> , 25, 2773-84	24	590
19	Rapid extraction and preservation of genomic DNA from human samples. <i>Analytical and Bioanalytical Chemistry</i> , <b>2013</b> , 405, 1977-83	4.4	7
18	Multi-Functional Electronics: Multifunctional Epidermal Electronics Printed Directly Onto the Skin (Adv. Mater. 20/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 2772-2772	24	13
17	Epidermal Electronics: Materials and Optimized Designs for Human-Machine Interfaces Via Epidermal Electronics (Adv. Mater. 47/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 6776-6776	24	9
16	Bio-integrated electronics and sensor systems <b>2013</b> ,		1
15	Enhanced bioreaction efficiency of a microfluidic mixer toward high-throughput and low-cost bioassays. <i>Microfluidics and Nanofluidics</i> , <b>2012</b> , 12, 143-156	2.8	9
14	Electric field-induced concentration and capture of DNA onto microtips. <i>Microfluidics and Nanofluidics</i> , <b>2012</b> , 13, 217-225	2.8	11
13	Epidermal differential impedance sensor for conformal skin hydration monitoring. <i>Biointerphases</i> , <b>2012</b> , 7, 52	1.8	103
12	Nanoscale sensor analysis using the immersed molecular electrokinetic finite element method. <i>Nanoscale</i> , <b>2012</b> , 4, 5189-94	7.7	13
11	Dielectrophoretic concentration of low-abundance nanoparticles using a nanostructured tip. <i>Nanotechnology</i> , <b>2012</b> , 23, 485707	3.4	18
10	Immunosensor towards low-cost, rapid diagnosis of tuberculosis. <i>Lab on A Chip</i> , <b>2012</b> , 12, 1437-40	7.2	51
9	Ion Diffusion and DNA Stretching in an Open Nanofluidic System. <i>Journal of Nanotechnology in Engineering and Medicine</i> , <b>2011</b> , 2,		1
8	Size-selective immunofluorescence of Mycobacterium tuberculosis cells by capillary- and viscous forces. <i>Lab on A Chip</i> , <b>2010</b> , 10, 3178-81	7.2	12
7	Rapid detection of Mycobacterium tuberculosis cells by using microtip-based immunoassay. <i>Analytical and Bioanalytical Chemistry</i> , <b>2009</b> , 393, 1593-600	4.4	21



6	Size-specific concentration of DNA to a nanostructured tip using dielectrophoresis and capillary action. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 10849-58	3.4	3 <sup>1</sup>
5	Nanostructured biosensing platform-shadow edge lithography for high-throughput nanofabrication. <i>Lab on A Chip</i> , <b>2009</b> , 9, 449-55	7.2	12
4	Hybrid nanofibril assembly using an alternating current electric field and capillary action. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2009</b> , 9, 7288-92	1.3	6
3	Direct concentration of circulating DNA by using a nanostructured tip <b>2008</b> ,		1
2	Manipulation of nanoparticles and biomolecules by electric field and surface tension. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2008</b> , 197, 2156-2172	5.7	3 <sup>2</sup>
1	Bioinspired Soft Robotic Fish for Wireless Underwater Control of Gliding Locomotion. <i>Advanced Intelligent Systems</i> , 2100271	6	2