Biomechanics of the Sensor-Tissue Interfaceâ€"Effects Sensor Performance and Foreign Body Responseâ€"Par

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Citation Report

#	Article	IF	Citations
1	Interstitial Fluid Physiology as it Relates to Glucose Monitoring Technologies: Symposium Introduction. Journal of Diabetes Science and Technology, 2011, 5, 579-582.	1.3	3
2	Biomechanics of the Sensor-Tissue Interface—Effects of Motion, Pressure, and Design on Sensor Performance and the Foreign Body Response—Part I: Theoretical Framework. Journal of Diabetes Science and Technology, 2011, 5, 632-646.	1.3	105
3	Challenges and recent progress in the development of a closed-loop artificial pancreas. Annual Reviews in Control, 2012, 36, 255-266.	4.4	155
4	Enhancing the Accuracy of Subcutaneous Glucose Sensors: A Real-Time Deconvolution-Based Approach. IEEE Transactions on Biomedical Engineering, 2012, 59, 1658-1669.	2.5	55
5	Nitric Oxide-Releasing Silica Nanoparticle-Doped Polyurethane Electrospun Fibers. ACS Applied Materials & Interfaces, 2013, 5, 7956-7964.	4.0	43
6	Biocompatible Materials for Continuous Glucose Monitoring Devices. Chemical Reviews, 2013, 113, 2528-2549.	23.0	276
7	The formation of an organic coat and the release of corrosion microparticles from metallic magnesium implants. Acta Biomaterialia, 2013, 9, 7580-7589.	4.1	42
8	Bioinspired Water-Enhanced Mechanical Gradient Nanocomposite Films That Mimic the Architecture and Properties of the Squid Beak. Journal of the American Chemical Society, 2013, 135, 5167-5174.	6.6	112
9	A miniaturized transcutaneous system for continuous glucose monitoring. Biomedical Microdevices, 2013, 15, 151-160.	1.4	34
10	An Online Failure Detection Method of the Glucose Sensor-Insulin Pump System: Improved Overnight Safety of Type-1 Diabetic Subjects. IEEE Transactions on Biomedical Engineering, 2013, 60, 406-416.	2.5	46
11	Continuous Glucose Monitoring: Current Use and Future Directions. Current Diabetes Reports, 2013, 13, 657-662.	1.7	60
12	Detecting sensor and insulin infusion set anomalies in an artificial pancreas. , 2013, , .		9
13	Susceptibility of Interstitial Continuous Glucose Monitor Performance to Sleeping Position. Journal of Diabetes Science and Technology, 2013, 7, 863-870.	1.3	58
14	Clucose Sensing in the Peritoneal Space Offers Faster Kinetics Than Sensing in the Subcutaneous Space. Diabetes, 2014, 63, 2498-2505.	0.3	43
15	Artificial Pancreas: A Review of Fundamentals and Inpatient and Outpatient Studies. Frontiers in Diabetes, 2014, , 166-189.	0.4	1
16	Improving Accuracy and Precision of Glucose Sensor Profiles: Retrospective Fitting by Constrained Deconvolution. IEEE Transactions on Biomedical Engineering, 2014, 61, 1044-1053.	2.5	51
17	A Comparative Effectiveness Analysis of Three Continuous Glucose Monitors. Journal of Diabetes Science and Technology, 2014, 8, 699-708.	1.3	117
18	A Novel Method to Detect Pressure-Induced Sensor Attenuations (PISA) in an Artificial Pancreas. Journal of Diabetes Science and Technology, 2014, 8, 1091-1096.	1.3	64

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19	Fault Detection and Safety in Closed-Loop Artificial Pancreas Systems. Journal of Diabetes Science and Technology, 2014, 8, 1204-1214.	1.3	39
20	An Algorithm for Short-Term Prediction of Blood Glucose Concentration. Bio-Medical Engineering, 2014, 47, 312-314.	0.3	3
21	Real-time detection of Glucose Sensor and Insulin Pump Faults in an Artificial Pancreas IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1941-1946.	0.4	13
22	Enhancing Glucose Sensor Models: Modeling the Drop-Outs. Diabetes Technology and Therapeutics, 2015, 17, 420-426.	2.4	4
23	Current Standards and Advances in Diabetic Ulcer Prevention and Elderly Fall Prevention Using Wearable Technology. Current Geriatrics Reports, 2015, 4, 249-256.	1.1	26
24	CGM-measured glucose values have a strong correlation with C-peptide, HbA1c and IDAAC, but do poorly in predicting C-peptide levels in the two years following onset of diabetes. Diabetologia, 2015, 58, 1167-1174.	2.9	31
25	The Biocompatibility of Implant Materials. , 2015, , 37-51.		26
26	Modeling the Physiological Factors Affecting Glucose Sensor Function in Vivo. Journal of Diabetes Science and Technology, 2015, 9, 993-998.	1.3	12
27	An artificial pancreas for automated blood glucose control in patients with Type 1 diabetes. Therapeutic Delivery, 2015, 6, 609-619.	1.2	15
28	American Association Of Clinical Endocrinologists And American College Of Endocrinology 2016 Outpatient Glucose Monitoring Consensus Statement. Endocrine Practice, 2016, 22, 231-262.	1.1	97
29	Nonadjunctive Use of Continuous Glucose Monitoring for Diabetes Treatment Decisions. Journal of Diabetes Science and Technology, 2016, 10, 1169-1173.	1.3	45
30	Using meta-differential evolution to enhance a calculation of a continuous blood glucose level. Computer Methods and Programs in Biomedicine, 2016, 133, 45-54.	2.6	17
31	The Artificial Pancreas: A Dynamic Challenge. IFAC-PapersOnLine, 2016, 49, 765-772.	0.5	13
32	A classification-based fault detection method for Continuous glucose monitoring (CGM). , 2016, , .		4
33	Impact of CCL2 and CCR2 chemokine/receptor deficiencies on macrophage recruitment and continuous glucose monitoring in vivo. Biosensors and Bioelectronics, 2016, 86, 262-269.	5.3	22
34	Feasibility of an Orthogonal Redundant Sensor incorporating Optical plus Redundant Electrochemical Glucose Sensing. Journal of Diabetes Science and Technology, 2016, 10, 679-688.	1.3	7
35	CGM—How Good Is Good Enough?. Lecture Notes in Bioengineering, 2016, , 43-55.	0.3	3
36	Redundancy in Glucose Sensing. Journal of Diabetes Science and Technology, 2016, 10, 669-678.	1.3	14

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37	Analysis of the Accuracy and Performance of a Continuous Glucose Monitoring Sensor Prototype: An In-Silico Study Using the UVA/PADOVA Type 1 Diabetes Simulator. Journal of Diabetes Science and Technology, 2017, 11, 545-552.	1.3	9
38	A Review of the Current Challenges Associated with the Development of an Artificial Pancreas by a Double Subcutaneous Approach. Diabetes Therapy, 2017, 8, 489-506.	1.2	36
39	Activation of Macrophages in Response to Biomaterials. Results and Problems in Cell Differentiation, 2017, 62, 317-351.	0.2	30
40	Fault and meal detection by redundant continuous glucose monitors and the unscented Kalman filter. Biomedical Signal Processing and Control, 2017, 38, 86-99.	3.5	32
41	Long-term blood glucose monitoring with implanted telemetry device in conscious and stress-free cynomolgus monkeys. Journal of Endocrinological Investigation, 2017, 40, 967-977.	1.8	11
42	Thinking Small: Progress on Microscale Neurostimulation Technology. Neuromodulation, 2017, 20, 745-752.	0.4	55
43	Considerations for Successful Encapsulated \hat{l}^2 -Cell Therapy. Molecular and Translational Medicine, 2017, , 19-52.	0.4	3
44	Comparison of Continuous Glucose Monitoring between Dexcom G4 Platinum and HD-XG Systems in Nonhuman Primates (Macaca Fascicularis). Scientific Reports, 2017, 7, 9596.	1.6	3
45	Tissue-Integrating Oxygen Sensors: Continuous Tracking of Tissue Hypoxia. Advances in Experimental Medicine and Biology, 2017, 977, 377-383.	0.8	33
46	In Vivo Chemical Sensors: Role of Biocompatibility on Performance and Utility. Analytical Chemistry, 2017, 89, 276-299.	3.2	62
47	A Simple Method to Model a Continuous Glucose Monitoring Signal. IFAC-PapersOnLine, 2017, 50, 8775-8780.	0.5	2
48	Human Subcutaneous Tissue Response to Glucose Sensors: Macrophages Accumulation Impact on Sensor Accuracy. Diabetes Technology and Therapeutics, 2018, 20, 296-302.	2.4	12
49	Accuracy and precision of flash glucose monitoring sensors inserted into the abdomen and upper thigh compared with the upper arm. Diabetes, Obesity and Metabolism, 2018, 20, 1503-1507.	2.2	25
50	Bayesian Model Selection Framework to Improve Calibration of Continuous Glucose Monitoring Sensors for Diabetes Management. , 2018, 2018, 29-32.		1
51	Effect of sensor location on continuous intraperitoneal glucose sensing in an animal model. PLoS ONE, 2018, 13, e0205447.	1.1	12
52	Foreign Body Reaction to a Subcutaneously Implanted Self-Cleaning, Thermoresponsive Hydrogel Membrane for Glucose Biosensors. ACS Biomaterials Science and Engineering, 2018, 4, 4104-4111.	2.6	20
53	Consistency of Continuous Ambulatory Interstitial Glucose Monitoring Sensors. Biosensors, 2018, 8, 49.	2.3	3
54	A self-cleaning, mechanically robust membrane for minimizing the foreign body reaction: towards extending the lifetime of sub-Q glucose biosensors. Journal of Materials Science: Materials in Medicine, 2019, 30, 79.	1.7	15

CITATION REPORT

#	Article	IF	CITATIONS
55	Electrical Properties of Thiol-ene-based Shape Memory Polymers Intended for Flexible Electronics. Polymers, 2019, 11, 902.	2.0	23
56	Factory-Calibrated Continuous Glucose Monitoring: How and Why It Works, and the Dangers of Reuse Beyond Approved Duration of Wear. Diabetes Technology and Therapeutics, 2019, 21, 222-229.	2.4	23
57	Development of an Error Model for a Factory-Calibrated Continuous Glucose Monitoring Sensor with 10-Day Lifetime. Sensors, 2019, 19, 5320.	2.1	23
58	A Novel Needle-Injectable Millimeter scale Wireless Electrochemical Glucose Sensing Platform for Artificial Pancreas Applications. Scientific Reports, 2019, 9, 17421.	1.6	21
59	Benefits and Limitations of MARD as a Performance Parameter for Continuous Glucose Monitoring in the Interstitial Space. Journal of Diabetes Science and Technology, 2020, 14, 135-150.	1.3	72
60	Perioperative Management of Pediatric Patients With Type 1 Diabetes Mellitus, Updated Recommendations for Anesthesiologists. Anesthesia and Analgesia, 2020, 130, 821-827.	1.1	19
61	Analysis of "Accuracy of a 14-Day Factory Calibrated Continuous Glucose Monitoring System With Advanced Algorithm in Pediatric and Adult Population With Diabetes― Journal of Diabetes Science and Technology, 2022, 16, 78-80.	1.3	2
62	Monitoring of Pediatric Type 1 Diabetes. Frontiers in Endocrinology, 2020, 11, 128.	1.5	25
63	Continuous Glucose Monitoring Devices: Past, Present, and Future Focus on the History and Evolution of Technological Innovation. Journal of Diabetes Science and Technology, 2021, 15, 676-683.	1.3	54
64	Assessing the triad of biocompatibility, medical device functionality and biological safety. Medical Devices & Sensors, 2021, 4, e10150.	2.7	3
65	Detection of Glucose Sensor Faults in an Artificial Pancreas via Whiteness Test on Kalman Filter Residuals. IFAC-PapersOnLine, 2021, 54, 274-279.	0.5	3
66	Comparison of Insulins Glargine and Degludec in Diabetic Rhesus Macaques (<i>Macaca mulatta</i>) with CGM Devices. Comparative Medicine, 2021, 71, 247-255.	0.4	1
67	Examining Sensor Agreement in Neural Network Blood Glucose Prediction. Journal of Diabetes Science and Technology, 2022, 16, 1473-1482.	1.3	3
68	Optimizing antimicrobial use: challenges, advances and opportunities. Nature Reviews Microbiology, 2021, 19, 747-758.	13.6	51
69	Modulating the foreign body response of implants for diabetes treatment. Advanced Drug Delivery Reviews, 2021, 174, 87-113.	6.6	45
70	Systems of conductive skin for power transfer in clinical applications. European Biophysics Journal, 2021, , 1.	1.2	3
71	Sustained effect of glucagon on body weight and blood glucose: Assessed by continuous glucose monitoring in diabetic rats. PLoS ONE, 2018, 13, e0194468.	1.1	7
72	Intraperitoneal Glucose Sensing is Sometimes Surprisingly Rapid. Modeling, Identification and Control, 2016, 37, 121-131.	0.6	12

CITATION REPORT

#	Article	IF	CITATIONS
73	Infrared measurements of glucose in peritoneal fluid with a tuneable quantum cascade laser. Biomedical Optics Express, 2020, 11, 3818.	1.5	5
74	Strategies for extended lifetime of implantable intraperitoneal insulin catheters. Journal of Controlled Release, 2022, 341, 487-497.	4.8	3
75	Finite Element Modeling of Magnitude and Location of Brain Micromotion Induced Strain for Intracortical Implants. Frontiers in Neuroscience, 2021, 15, 727715.	1.4	2
76	Practical aspects of diabetes technology use: Continuous glucose monitors, insulin pumps, and automated insulin delivery systems. Journal of Clinical and Translational Endocrinology, 2022, 27, 100282.	1.0	5
77	Advanced strategies to thwart foreign body response to implantable devices. Bioengineering and Translational Medicine, 2022, 7, .	3.9	37
78	Neural Networks With Gated Recurrent Units Reduce Glucose Forecasting Error Due to Changes in Sensor Location. Journal of Diabetes Science and Technology, 2024, 18, 124-134.	1.3	1
79	Dynamic actuation enhances transport and extends therapeutic lifespan in an implantable drug delivery platform. Nature Communications, 2022, 13, .	5.8	10
80	Data-Driven Supervised Compression Artifacts Detection on Continuous Glucose Sensors. , 2022, , .		1
81	Continuous glucose monitoring and metrics for clinical trials: an international consensus statement. Lancet Diabetes and Endocrinology,the, 2023, 11, 42-57.	5.5	134
82	<scp>ISPAD</scp> Clinical Practice Consensus Guidelines 2022: Diabetes technologies: Glucose monitoring. Pediatric Diabetes, 2022, 23, 1390-1405.	1.2	35
83	100 Years of insulin: A chemical engineering perspective. Korean Journal of Chemical Engineering, 2023, 40, 1-10.	1.2	1
84	An electrospun macrodevice for durable encapsulation of human cells with consistent secretion of therapeutic antibodies. Biomaterials, 2023, , 122123.	5.7	0
87	Detection of compression artifacts in time-series data from continuous glucose monitoring sensors using matched filters. , 2023, , .		0