Martina Vettoretti

List of Publications by Year
in descending order

42 papers	1,386 citations	430754 18 h-index	395590 33 g-index
42 all docs	42 docs citations	42 times ranked	1209 citing authors

#	Article	IF	Citations
1	Continuous Glucose Monitoring Sensors for Diabetes Management: A Review of Technologies and Applications. Diabetes and Metabolism Journal, 2019, 43, 383.	1.8	232
2	The UVA/Padova Type 1 Diabetes Simulator Goes From Single Meal to Single Day. Journal of Diabetes Science and Technology, 2018, 12, 273-281.	1.3	169
3	Wearable Continuous Glucose Monitoring Sensors: A Revolution in Diabetes Treatment. Electronics (Switzerland), 2017, 6, 65.	1.8	153
4	A practical perspective on the concordance index for the evaluation and selection of prognostic time-to-event models. Journal of Biomedical Informatics, 2020, 108, 103496.	2.5	95
5	Type-1 Diabetes Patient Decision Simulator for In Silico Testing Safety and Effectiveness of Insulin Treatments. IEEE Transactions on Biomedical Engineering, 2018, 65, 1281-1290.	2.5	73
6	Calibration of Minimally Invasive Continuous Glucose Monitoring Sensors: State-of-The-Art and Current Perspectives. Biosensors, 2018, 8, 24.	2.3	72
7	Continuous Glucose Monitoring: Current Use in Diabetes Management and Possible Future Applications. Journal of Diabetes Science and Technology, 2018, 12, 1064-1071.	1.3	68
8	Advanced Diabetes Management Using Artificial Intelligence and Continuous Glucose Monitoring Sensors. Sensors, 2020, 20, 3870.	2.1	57
9	Personalized blood glucose prediction: A hybrid approach using grammatical evolution and physiological models. PLoS ONE, 2017, 12, e0187754.	1.1	56
10	A Neural-Network-Based Approach to Personalize Insulin Bolus Calculation Using Continuous Glucose Monitoring. Journal of Diabetes Science and Technology, 2018, 12, 265-272.	1.3	53
11	Combining continuous glucose monitoring and insulin pumps to automatically tune the basal insulin infusion in diabetes therapy: a review. BioMedical Engineering OnLine, 2019, 18, 37.	1.3	29
12	Machine-Learning Based Model to Improve Insulin Bolus Calculation in Type 1 Diabetes Therapy. IEEE Transactions on Biomedical Engineering, 2021, 68, 247-255.	2.5	29
13	Modeling Carbohydrate Counting Error in Type 1 Diabetes Management. Diabetes Technology and Therapeutics, 2020, 22, 749-759.	2.4	28
14	Forecasting of Glucose Levels and Hypoglycemic Events: Head-to-Head Comparison of Linear and Nonlinear Data-Driven Algorithms Based on Continuous Glucose Monitoring Data Only. Sensors, 2021, 21, 1647.	2.1	27
15	Reduction of Blood Glucose Measurements to Calibrate Subcutaneous Glucose Sensors: A Bayesian Multiday Framework. IEEE Transactions on Biomedical Engineering, 2018, 65, 587-595.	2.5	24
16	Development of an Error Model for a Factory-Calibrated Continuous Glucose Monitoring Sensor with 10-Day Lifetime. Sensors, 2019, 19, 5320.	2.1	23
17	Hypoglycaemia detection and prediction techniques: AÂsystematic review on the latest developments. Diabetes/Metabolism Research and Reviews, 2021, 37, e3449.	1.7	23
18	Online Calibration of Glucose Sensors From the Measured Current by a Time-Varying Calibration Function and Bayesian Priors. IEEE Transactions on Biomedical Engineering, 2016, 63, 1631-1641.	2.5	21

#	Article	IF	Citations
19	From Two to One Per Day Calibration of Dexcom G4 Platinum by a Time-Varying Day-Specific Bayesian Prior. Diabetes Technology and Therapeutics, 2016, 18, 472-479.	2.4	16
20	A Real-Time Continuous Glucose Monitoringâ€"Based Algorithm to Trigger Hypotreatments to Prevent/Mitigate Hypoglycemic Events. Diabetes Technology and Therapeutics, 2019, 21, 644-655.	2.4	16
21	A Model of Self-Monitoring Blood Glucose Measurement Error. Journal of Diabetes Science and Technology, 2017, 11, 724-735.	1.3	15
22	In Silico Assessment of Literature Insulin Bolus Calculation Methods Accounting for Glucose Rate of Change. Journal of Diabetes Science and Technology, 2019, 13, 103-110.	1.3	15
23	Toward Calibration-Free Continuous Glucose Monitoring Sensors: Bayesian Calibration Approach Applied to Next-Generation Dexcom Technology. Diabetes Technology and Therapeutics, 2018, 20, 59-67.	2.4	14
24	Predicting Insulin Treatment Scenarios with the Net Effect Method: Domain of Validity. Diabetes Technology and Therapeutics, 2016, 18, 694-704.	2.4	12
25	Design of clinical trials to assess diabetes treatment: Minimum duration of continuous glucose monitoring data to estimate timeâ€inâ€ranges with the desired precision. Diabetes, Obesity and Metabolism, 2021, 23, 2446-2454.	2.2	10
26	An analytical approach to determine the optimal duration of continuous glucose monitoring data required to reliably estimate time in hypoglycemia. Scientific Reports, 2020, 10, 18180.	1.6	9
27	Impact of Carbohydrate Counting Error on Glycemic Control in Open-Loop Management of Type 1 Diabetes: Quantitative Assessment Through an In Silico Trial. Journal of Diabetes Science and Technology, 2022, 16, 1541-1549.	1.3	8
28	Comparing the accuracy of transcutaneous sensor and 90-day implantable glucose sensor. Nutrition, Metabolism and Cardiovascular Diseases, 2021, 31, 650-657.	1.1	7
29	Mathematical Models of Meal Amount and Timing Variability With Implementation in the Type-1 Diabetes Patient Decision Simulator. Journal of Diabetes Science and Technology, 2021, 15, 346-359.	1.3	5
30	A Variable Ranking Method for Machine Learning Models with Correlated Features: In-Silico Validation and Application for Diabetes Prediction. Applied Sciences (Switzerland), 2021, 11, 7740.	1.3	4
31	877-P: Limits of Correlation Coefficient Analysis in Determining the Minimal Duration of CGM Data Needed to Estimate Time Below Range. Diabetes, 2020, 69, .	0.3	4
32	Importance of Recalibrating Models for Type 2 Diabetes Onset Prediction: Application of the Diabetes Population Risk Tool on the Health and Retirement Study. , 2018, 2018, 5358-5361.		3
33	Addressing practical issues of predictive models translation into everyday practice and public health management: a combined model to predict the risk of type 2 diabetes improves incidence prediction and reduces the prevalence of missing risk predictions. BMJ Open Diabetes Research and Care, 2020, 8, e001223.	1.2	3
34	Data Gap Modeling in Continuous Glucose Monitoring Sensor Data. , 2021, 2021, 4379-4382.		3
35	A Model of Acetaminophen Pharmacokinetics and its Effect on Continuous Glucose Monitoring Sensor Measurements. , 2018, 2018, 159-162.		2
36	Modeling the error of factory-calibrated continuous glucose monitoring sensors: application to Dexcom G6 sensor data. , 2019, 2019, 750-753.		2

#	Article	IF	Citations
37	A Dynamic Bayesian Network model for simulating the progression to diabetes onset in the ageing population. , 2021, , .		2
38	Optimal Insulin Bolus Dosing in Type 1 Diabetes Management: Neural Network Approach Exploiting CGM Sensor Information. , 2018, 2018, 1-4.		1
39	In-silico Assessment of Preventive Hypotreatment Efficacy and Development of a Continuous Glucose Monitoring Based Algorithm to Prevent/Mitigate Hypoglycemia in Type 1 Diabetes. , 2019, 2019, 4133-4136.		1
40	Calibration of CGM systems. , 2020, , 173-201.		1
41	Choosing the duration of continuous glucose monitoring for reliable assessment of time in range: A new analytical approach to overcome the limitations of correlationâ€based methods. Diabetic Medicine, 2021, , e14758.	1.2	1
42	Modeling the SMBG measurement error. , 2020, , 79-108.		0