

# Francis J Doyle Jr

## 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.

32  
papers

1,824  
citations

18  
h-index

36  
g-index

36  
ext. papers

2,054  
ext. citations

8.2  
avg. IF

4.33  
L-index

#	Paper	IF	Citations
32	Reply to Furlan et al.: The role of SIRT1 in cell autonomous clock function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 13173	11.5	
31	Computational and experimental insights into the circadian effects of SIRT1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 11643-11648	11.5	28
30	Feasibility of Long-Term Closed-Loop Control: A Multicenter 6-Month Trial of 24/7 Automated Insulin Delivery. <i>Diabetes Technology and Therapeutics</i> , <b>2017</b> , 19, 18-24	8.1	97
29	Early Detection of Infusion Set Failure During Insulin Pump Therapy in Type 1 Diabetes. <i>Journal of Diabetes Science and Technology</i> , <b>2016</b> , 10, 1268-1276	4.1	26
28	Enhanced Model Predictive Control (eMPC) Strategy for Automated Glucose Control. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 11857-11868	3.9	26
27	Randomized Crossover Comparison of Personalized MPC and PID Control Algorithms for the Artificial Pancreas. <i>Diabetes Care</i> , <b>2016</b> , 39, 1135-42	14.6	93
26	Is Psychological Stress a Factor for Incorporation Into Future Closed-Loop Systems?. <i>Journal of Diabetes Science and Technology</i> , <b>2016</b> , 10, 640-6	4.1	14
25	Challenges Associated With Exercise Studies in Type 1 Diabetes. <i>Journal of Diabetes Science and Technology</i> , <b>2016</b> , 10, 993-4	4.1	1
24	Functional network inference of the suprachiasmatic nucleus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 4512-7	11.5	39
23	Multinational Home Use of Closed-Loop Control Is Safe and Effective. <i>Diabetes Care</i> , <b>2016</b> , 39, 1143-50	14.6	83
22	Clinical results of an automated artificial pancreas using technosphere inhaled insulin to mimic first-phase insulin secretion. <i>Journal of Diabetes Science and Technology</i> , <b>2015</b> , 9, 564-72	4.1	25
21	Collective Oscillation Period of Inter-Coupled Biological Negative Cyclic Feedback Oscillators. <i>IEEE Transactions on Automatic Control</i> , <b>2015</b> , 60, 1392-1397	5.9	5
20	Early Detection of Physical Activity for People With Type 1 Diabetes Mellitus. <i>Journal of Diabetes Science and Technology</i> , <b>2015</b> , 9, 1236-45	4.1	26
19	Quantifying Stochastic Noise in Cultured Circadian Reporter Cells. <i>PLoS Computational Biology</i> , <b>2015</b> , 11, e1004451	5	11
18	Engineering the artificial pancreas <b>2014</b> ,		1
17	Design of the Glucose Rate Increase Detector: A Meal Detection Module for the Health Monitoring System. <i>Journal of Diabetes Science and Technology</i> , <b>2014</b> , 8, 307-320	4.1	32
16	Novel insulin delivery profiles for mixed meals for sensor-augmented pump and closed-loop artificial pancreas therapy for type 1 diabetes mellitus. <i>Journal of Diabetes Science and Technology</i> , <b>2014</b> , 8, 957-68	4.1	17

15	The hypothalamic-pituitary-adrenal-leptin axis and metabolic health: a systems approach to resilience, robustness and control. <i>Interface Focus</i> , <b>2014</b> , 4, 20140020	3.9	27
14	Safety of outpatient closed-loop control: first randomized crossover trials of a wearable artificial pancreas. <i>Diabetes Care</i> , <b>2014</b> , 37, 1789-96	14.6	144
13	Design and in silico evaluation of an intraperitoneal-subcutaneous (IP-SC) artificial pancreas. <i>Computers and Chemical Engineering</i> , <b>2014</b> , 70, 180-188	4	10
12	Intercellular delay regulates the collective period of repressively coupled gene regulatory oscillator networks. <i>IEEE Transactions on Automatic Control</i> , <b>2014</b> , 59, 211-216	5.9	11
11	Clinical evaluation of a personalized artificial pancreas. <i>Diabetes Care</i> , <b>2013</b> , 36, 801-9	14.6	91
10	Zone model predictive control of an artificial pancreas <b>2012</b> ,		7
9	Increasing sync rate of pulse-coupled oscillators via phase response function design: theory and application to wireless networks. <i>IEEE Transactions on Control Systems Technology</i> , <b>2012</b> , 21,	4.8	22
8	Modeling cortisol dynamics in the neuro-endocrine axis distinguishes normal, depression, and post-traumatic stress disorder (PTSD) in humans. <i>PLoS Computational Biology</i> , <b>2012</b> , 8, e1002379	5	85
7	Bio-inspired hybrid control of pulse-coupled oscillators and application to synchronization of a wireless network <b>2012</b> ,		6
6	Identification of empirical dynamic models from type 1 diabetes subject data <b>2008</b> ,		8
5	Systems interface biology. <i>Journal of the Royal Society Interface</i> , <b>2006</b> , 3, 603-16	4.1	40
4	Nonlinear model order reduction and control of particle size distribution in a semibatch vinyl acetate/butyl acrylate emulsion copolymerization reactor. <i>Korean Journal of Chemical Engineering</i> , <b>2004</b> , 21, 168-176	2.8	9
3	Manufacture of Thin-Film Solar Cells: Modeling and Control of Cu(InGa)Se <sub>2</sub> Physical Vapor Deposition onto a Moving Substrate. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 566-576	3.9	8
2	Regulation of the Emulsion Particle Size Distribution to an Optimal Trajectory Using Partial Least Squares Model-Based Predictive Control. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 7227-7237	2.5	25
1	Robustness of cellular functions. <i>Cell</i> , <b>2004</b> , 118, 675-85	56.2	803