

# Michael D Murphy

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

905  
citations

394421

19  
h-index

501196

28  
g-index

51  
all docs

51  
docs citations

51  
times ranked

677  
citing authors

#	ARTICLE	IF	CITATIONS
1	A near infrared spectroscopy calibration for the prediction of fresh grass quality on Irish pastures. <i>Information Processing in Agriculture</i> , 2022, 9, 243-253.	4.1	10
2	Global Dairy Sector: Trends, Prospects, and Challenges. <i>Sustainability</i> , 2022, 14, 4193.	3.2	10
3	Over 20 Years of Machine Learning Applications on Dairy Farms: A Comprehensive Mapping Study. <i>Sensors</i> , 2022, 22, 52.	3.8	15
4	A Review of EV Battery Utilization in Demand Response Considering Battery Degradation in Non-Residential Vehicle-to-Grid Scenarios. <i>Energies</i> , 2022, 15, 3227.	3.1	14
5	Demand Response Analysis Framework (DRAF): An Open-Source Multi-Objective Decision Support Tool for Decarbonizing Local Multi-Energy Systems. <i>Sustainability</i> , 2022, 14, 8025.	3.2	9
6	Evaluation of the precision of the rising plate meter for measuring compressed sward height on heterogeneous grassland swards. <i>Precision Agriculture</i> , 2021, 22, 922-946.	6.0	16
7	Passive control strategies for cooling a non-residential nearly zero energy office: Simulated comfort resilience now and in the future. <i>Energy and Buildings</i> , 2021, 231, 110607.	6.7	20
8	Development, Calibration and Validation of an Internal Air Temperature Model for a Naturally Ventilated Nearly Zero Energy Building: Comparison of Model Types and Calibration Methods. <i>Energies</i> , 2021, 14, 871.	3.1	13
9	Assessing the Effect of Modifying Milking Routines on Dairy Farm Economic and Environmental Performance. <i>AgriEngineering</i> , 2021, 3, 266-277.	3.2	2
10	A Review of Precision Technologies for Optimising Pasture Measurement on Irish Grassland. <i>Agriculture (Switzerland)</i> , 2021, 11, 600.	3.1	17
11	The effect of price-based demand response on carbon emissions in European electricity markets: The importance of adequate carbon prices. <i>Applied Energy</i> , 2021, 295, 117040.	10.1	68
12	elmada: Dynamic electricity carbon emission factors and prices for Europe. <i>Journal of Open Source Software</i> , 2021, 6, 3625.	4.6	7
13	Effect of introducing weather parameters on the accuracy of milk production forecast models. <i>Information Processing in Agriculture</i> , 2020, 7, 120-138.	4.1	7
14	A Global Review of Monitoring, Modeling, and Analyses of Water Demand in Dairy Farming. <i>Sustainability</i> , 2020, 12, 7201.	3.2	6
15	Photovoltaic systems on dairy farms: Financial and renewable multi-objective optimization (FARMOO) analysis. <i>Applied Energy</i> , 2020, 278, 115534.	10.1	20
16	Development of a grass measurement optimisation tool to efficiently measure herbage mass on grazed pastures. <i>Computers and Electronics in Agriculture</i> , 2020, 178, 105799.	7.7	9
17	Energy Consumption on Dairy Farms: A Review of Monitoring, Prediction Modelling, and Analyses. <i>Energies</i> , 2020, 13, 1288.	3.1	40
18	Announcement for "Energies Outstanding Reviewer Award 2020" Winners. <i>Energies</i> , 2020, 13, 2821.	3.1	0

#	ARTICLE	IF	CITATIONS
19	Facilitating high levels of wind penetration in a smart grid through the optimal utilization of battery storage in microgrids: An analysis of the trade-offs between economic performance and wind generation facilitation. <i>Energy Conversion and Management</i> , 2020, 206, 112354.	9.2	9
20	Predicting air temperatures in a naturally ventilated nearly zero energy building: Calibration, validation, analysis and approaches. <i>Applied Energy</i> , 2019, 250, 991-1010.	10.1	49
21	Annual electricity consumption prediction and future expansion analysis on dairy farms using a support vector machine. <i>Applied Energy</i> , 2019, 250, 1110-1119.	10.1	39
22	Development of a dairy multi-objective optimization (DAIRYMOO) method for economic and environmental optimization of dairy farms. <i>Applied Energy</i> , 2019, 242, 1697-1711.	10.1	16
23	Effect of parity weighting on milk production forecast models. <i>Computers and Electronics in Agriculture</i> , 2019, 157, 589-603.	7.7	8
24	&lt;i>&lt;i>A decision support and optimization platform for energy technology investments on dairy farms&lt;/i>, 2019, , .		0
25	&lt;i>&lt;i>GrassQ - A holistic precision grass measurement and analysis system to optimize pasture based livestock production&lt;/i>, 2019, , .		4
26	Development of a discrete infrastructure optimization model for economic assessment on dairy farms (DIOMOND). <i>Computers and Electronics in Agriculture</i> , 2019, 156, 508-522.	7.7	12
27	Multiple linear regression modelling of on-farm direct water and electricity consumption on pasture based dairy farms. <i>Computers and Electronics in Agriculture</i> , 2018, 148, 337-346.	7.7	40
28	Machine-learning algorithms for predicting on-farm direct water and electricity consumption on pasture based dairy farms. <i>Computers and Electronics in Agriculture</i> , 2018, 150, 74-87.	7.7	52
29	Electricity & direct water consumption on Irish pasture based dairy farms: A statistical analysis. <i>Applied Energy</i> , 2018, 210, 529-537.	10.1	26
30	&lt;i>&lt;i>Development of a Labour Utilisation Decision Support Tool to Efficiently Measure Grass Herbage Mass Using a Rising Plate Meter&lt;/i>, 2018, , .		1
31	&lt;i>&lt;i>Photovoltaic systems on dairy farms: An economic analysis&lt;/i>, 2018, , .		2
32	Comparing multiple linear regression and support vector machine models for predicting electricity consumption on pasture based dairy farms. , 2018, , .		0
33	Determination of optimal battery utilization to minimize operating costs for a grid-connected building with renewable energy sources. <i>Energy Conversion and Management</i> , 2018, 174, 157-174.	9.2	26
34	A field study of thermal comfort performance for a slotted louvre ventilation system in a low energy retrofit. <i>Energy and Buildings</i> , 2017, 135, 312-323.	6.7	22
35	A Decision Support Tool for Building Integrated Renewable Energy Microgrids Connected to a Smart Grid. <i>Energies</i> , 2017, 10, 1765.	3.1	19
36	Comparative Efficiency of Lactation Curve Models Using Irish Experimental Dairy Farms Data. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
37	A virtual laboratory for the simulation of sustainable energy systems in a low energy building: A case study. IOP Conference Series: Earth and Environmental Science, 2016, 32, 012061.	0.3	0
38	An automatic model configuration and optimization system for milk production forecasting. Computers and Electronics in Agriculture, 2016, 128, 100-111.	7.7	25
39	A modular virtual laboratory for quadrotor control simulation. IFAC-PapersOnLine, 2016, 49, 93-98.	0.9	8
40	One-day-ahead cost optimisation for a multi-energy source building using a genetic algorithm. , 2016, , .		6
41	Monetary savings produced by multiple microgrid controller configurations in a smart grid scenario. , 2016, , .		0
42	Economic optimisation for a building with an integrated micro-grid connected to the national grid. , 2015, , .		2
43	Investment appraisal of technology innovations on dairy farm electricity consumption. Journal of Dairy Science, 2015, 98, 898-909.	3.4	26
44	Comparison of control systems for the optimisation of ice storage in a dynamic real time electricity pricing environment. Applied Energy, 2015, 149, 392-403.	10.1	50
45	Assessing the impact of changes in the electricity price structure on dairy farm energy costs. Applied Energy, 2015, 137, 1-8.	10.1	30
46	Comparison of modelling techniques for milk-production forecasting. Journal of Dairy Science, 2014, 97, 3352-3363.	3.4	59
47	A mechanistic model for electricity consumption on dairy farms: Definition, validation, and demonstration. Journal of Dairy Science, 2014, 97, 4973-4984.	3.4	31
48	Rapid milk cooling control with varying water and energy consumption. Biosystems Engineering, 2013, 116, 15-22.	4.3	22
49	A load shifting controller for Cold Thermal Energy Storage systems. , 2012, , .		0
50	Recycled Polymers for Use as Bitumen Modifiers. Journal of Materials in Civil Engineering, 2001, 13, 306-314.	2.9	37