

Aonghus McNabola

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6565922/publications.pdf>

Version: 2024-02-01

111
papers

4,009
citations

156536

32
h-index

156644

58
g-index

111
all docs

111
docs citations

111
times ranked

3925
citing authors

#	ARTICLE	IF	CITATIONS
1	Prediction of Global Efficiency and Economic Viability of Replacing PRVs with Hydraulically Regulated Pump-as-Turbines at Instrumented Sites within Water Distribution Networks. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2022, 148, .	1.3	6
2	A numerical analysis of particulate matter control technology integrated with HVAC system inlet design and implications on energy consumption. <i>Building and Environment</i> , 2022, 211, 108726.	3.0	4
3	Developing green process innovation through network action learning. <i>Creativity and Innovation Management</i> , 2022, 31, 248-259.	1.9	3
4	In-kitchen aerosol exposure in twelve cities across the globe. <i>Environment International</i> , 2022, 162, 107155.	4.8	24
5	Is There a Residual and Hidden Potential for Small and Micro Hydropower in Europe? A Screening-Level Regional Assessment. <i>Water Resources Management</i> , 2022, 36, 1745-1762.	1.9	18
6	Spatiotemporal representativeness of air pollution monitoring in Dublin, Ireland. <i>Science of the Total Environment</i> , 2022, 827, 154299.	3.9	5
7	Energy Recovery Potential in Industrial and Municipal Wastewater Networks Using Micro-Hydropower in Spain. <i>Water (Switzerland)</i> , 2021, 13, 691.	1.2	13
8	Multi-Country Scale Assessment of Available Energy Recovery Potential Using Micro-Hydropower in Drinking, Pressurised Irrigation and Wastewater Networks, Covering Part of the EU. <i>Water (Switzerland)</i> , 2021, 13, 899.	1.2	19
9	Heat Recovery from Wastewater – A Review of Available Resource. <i>Water (Switzerland)</i> , 2021, 13, 1274.	1.2	50
10	Numerical investigation on the ingress of particulate matter from ambient air into the inlet of a building air handling unit. <i>Indoor Air</i> , 2021, 31, 1940-1951.	2.0	3
11	Optimization-Based Methodology for Selection of Pump-as-Turbine in Water Distribution Networks: Effects of Different Objectives and Machine Operation Limits on Best Efficiency Point. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2021, 147, .	1.3	18
12	Evaluation of the design and performance of a micro hydropower plant in a pressurised irrigation network: Real world application at farm-level in Southern Spain. <i>Renewable Energy</i> , 2021, 169, 1106-1120.	4.3	21
13	Sustainable Water-Energy Nexus towards Developing Countries – Water Sector Efficiency. <i>Energies</i> , 2021, 14, 3525.	1.6	14
14	Socio-Technical Viability Framework for Micro Hydropower in Group Water-Energy Schemes. <i>Energies</i> , 2021, 14, 4222.	1.6	8
15	The co-development of HedgeDATE, a public engagement and decision support tool for air pollution exposure mitigation by green infrastructure. <i>Sustainable Cities and Society</i> , 2021, 75, 103299.	5.1	7
16	Design and Year-Long Performance Evaluation of a Pump as Turbine (PAT) Pico-Hydropower Energy Recovery Device in a Water Network. <i>Water (Switzerland)</i> , 2021, 13, 3014.	1.2	8
17	Hydropower energy recovery in irrigation networks: Validation of a methodology for flow prediction and pump as turbine selection. <i>Renewable Energy</i> , 2020, 147, 1728-1738.	4.3	39
18	Maximizing Hydropower Generation in Gravity Water Distribution Networks: Determining the Optimal Location and Number of Pumps as Turbines. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2020, 146, .	1.3	28

#	ARTICLE	IF	CITATIONS
19	Smart Water Management towards Future Water Sustainable Networks. <i>Water (Switzerland)</i> , 2020, 12, 58.	1.2	61
20	Spatial and temporal considerations in the performance of wastewater heat recovery systems. <i>Journal of Cleaner Production</i> , 2020, 247, 119583.	4.6	40
21	Environmental Hydraulics Research. <i>Water (Switzerland)</i> , 2020, 12, 2749.	1.2	1
22	New Challenges in Water Systems. <i>Water (Switzerland)</i> , 2020, 12, 2340.	1.2	12
23	Estimating regional potential for micro-hydropower energy recovery in irrigation networks on a large geographical scale. <i>Renewable Energy</i> , 2020, 155, 396-406.	4.3	16
24	Energy Transfer from the Freshwater to the Wastewater Network Using a PAT-Equipped Turbopump. <i>Water (Switzerland)</i> , 2020, 12, 38.	1.2	13
25	The potential impacts of different traffic management strategies on air pollution and public health for a more sustainable city: A modelling case study from Dublin, Ireland. <i>Sustainable Cities and Society</i> , 2020, 60, 102229.	5.1	45
26	A Functional Data Analysis Approach for the Detection of Air Pollution Episodes and Outliers: A Case Study in Dublin, Ireland. <i>Mathematics</i> , 2020, 8, 225.	1.1	24
27	Energy harvesting in water supply systems. , 2020, , 229-254.		0
28	ASSESSMENT OF THE IMPACT OF ROOF-LEVEL BUILDING FEATURES ON AIR POLLUTION INSIDE URBAN STREET CANYONS. <i>WIT Transactions on Ecology and the Environment</i> , 2020, , .	0.0	0
29	A Model for Selecting the Most Cost-Effective Pressure Control Device for More Sustainable Water Supply Networks. <i>Water (Switzerland)</i> , 2019, 11, 1297.	1.2	33
30	The nexus between air pollution, green infrastructure and human health. <i>Environment International</i> , 2019, 133, 105181.	4.8	249
31	Pump-as-Turbine Selection Methodology for Energy Recovery in Irrigation Networks: Minimising the Payback Period. <i>Water (Switzerland)</i> , 2019, 11, 149.	1.2	21
32	Development of a fleet emissions control (FEC) framework for passenger cars. <i>Journal of Cleaner Production</i> , 2019, 226, 482-492.	4.6	2
33	Decentralized drain water heat recovery from commercial kitchens in the hospitality sector. <i>Energy and Buildings</i> , 2019, 194, 247-259.	3.1	25
34	Comparing the environmental and economic impacts of on- or off-grid solar photovoltaics with traditional energy sources for rural irrigation systems. <i>Renewable Energy</i> , 2019, 140, 895-904.	4.3	52
35	Assessing the Impact of Vehicle Speed Limits and Fleet Composition on Air Quality Near a School. <i>International Journal of Environmental Research and Public Health</i> , 2019, 16, 149.	1.2	20
36	Cost Model for Pumps as Turbines in Run-of-River and In-Pipe Microhydropower Applications. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2019, 145, .	1.3	50

#	ARTICLE	IF	CITATIONS
37	Potential of Energy Recovery and Water Saving Using Micro-Hydropower in Rural Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	1.3	20
38	Decentralized drain water heat recovery: A probabilistic method for prediction of wastewater and heating system interaction. Energy and Buildings, 2019, 183, 684-696.	3.1	13
39	Augmenting limited background monitoring data for improved performance in land use regression modelling: Using support vector regression and mobile monitoring. Atmospheric Environment, 2019, 201, 310-322.	1.9	13
40	Downscaling national road transport emission to street level: A case study in Dublin, Ireland. Journal of Cleaner Production, 2018, 183, 797-809.	4.6	24
41	Hydro-power energy recovery in pressurized irrigation networks: A case study of an Irrigation District in the South of Spain. Agricultural Water Management, 2018, 204, 17-27.	2.4	34
42	Analysing the Co-Benefits of transport fleet and fuel policies in reducing PM2.5 and CO2 emissions. Journal of Cleaner Production, 2018, 172, 623-634.	4.6	70
43	Network-wide traffic and environmental impacts of acceleration and deceleration among Eco-Driving Vehicles in different road configurations. Transportation Planning and Technology, 2018, 41, 244-264.	0.9	9
44	Decentralized Drain Water Heat Recovery: Interaction between Wastewater and Heating Flows on a Single Residence Scale. Proceedings (mdpi), 2018, 2, .	0.2	7
45	Energy Saving Measures in Pressurized Irrigation Networks: A New Challenge for Power Generation. Proceedings (mdpi), 2018, 2, .	0.2	3
46	Potential Micro-Hydropower Generation in Community-Owned Rural Water Supply Networks in Ireland. Proceedings (mdpi), 2018, 2, 677.	0.2	2
47	Potential Energy Recovery Using Micro-Hydropower Technology in Irrigation Networks: Real-World Case Studies in the South of Spain. Proceedings (mdpi), 2018, 2, 679.	0.2	6
48	Fostering Renewable Energies and Energy Efficiency in the Water Sector Using PATs and Wheels. Proceedings (mdpi), 2018, 2, .	0.2	1
49	Innovating for low-carbon energy through hydropower: Enabling a conservation charity's transition to a low-carbon community. Creativity and Innovation Management, 2018, 27, 375-386.	1.9	10
50	Reducing the Energy Dependency of Water Networks in Irrigation, Public Drinking Water, and Process Industry: REDAWN Project. Proceedings (mdpi), 2018, 2, 681.	0.2	4
51	A comparison of route-choice navigation across air pollution exposure, CO2 emission and traditional travel cost factors. Transportation Research, Part D: Transport and Environment, 2018, 65, 82-100.	3.2	20
52	The Development of a Decision Support Software for the Design of Micro-Hydropower Schemes Utilizing a Pump as Turbine. Proceedings (mdpi), 2018, 2, 678.	0.2	8
53	A Comparison of Energy Recovery by PATs against Direct Variable Speed Pumping in Water Distribution Networks. Fluids, 2018, 3, 41.	0.8	31
54	A model for the extrapolation of the characteristic curves of Pumps as Turbines from a datum Best Efficiency Point. Energy Conversion and Management, 2018, 174, 1-7.	4.4	70

#	ARTICLE	IF	CITATIONS
55	Assessment of pathways to reduce CO 2 emissions from passenger car fleets: Case study in Ireland. <i>Applied Energy</i> , 2017, 189, 283-300.	5.1	27
56	Evaluation of combined sewer overflow assessment methods: case study of Cork City, Ireland. <i>Water and Environment Journal</i> , 2017, 31, 202-208.	1.0	17
57	An evaluation of the impact of the Dublin Port Tunnel and HGV management strategy on air pollution emissions. <i>Transportation Research, Part D: Transport and Environment</i> , 2017, 52, 1-14.	3.2	27
58	Air pollution abatement performances of green infrastructure in open road and built-up street canyon environments – A review. <i>Atmospheric Environment</i> , 2017, 162, 71-86.	1.9	611
59	Modelling of intra-urban variability of prevailing ambient noise at different temporal resolution. <i>Noise Mapping</i> , 2017, 4, 20-44.	0.7	9
60	Pump-As-Turbine: Characterization as an Energy Recovery Device for the Water Distribution Network. <i>Journal of Hydraulic Engineering</i> , 2017, 143, .	0.7	21
61	Optimal Location of Pump as Turbines (PATs) in Water Distribution Networks to Recover Energy and Reduce Leakage. <i>Water Resources Management</i> , 2017, 31, 5043-5059.	1.9	72
62	Pressure management and energy recovery in water distribution networks: Development of design and selection methodologies using three pump-as-turbine case studies. <i>Renewable Energy</i> , 2017, 114, 1038-1050.	4.3	51
63	Improvement in the estimation and back-extrapolation of CO 2 emissions from the Irish road transport sector using a bottom-up data modelling approach. <i>Transportation Research, Part D: Transport and Environment</i> , 2017, 56, 18-32.	3.2	32
64	Reducing energy consumption and increasing filter life in HVAC systems using an aspiration efficiency reducer: Long-term performance assessment at full-scale. <i>Journal of Building Engineering</i> , 2017, 12, 267-274.	1.6	15
65	Effects of Long-Term Flow Variation on Microhydropower Energy Production in Pressure Reducing Valves in Water Distribution Networks. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2017, 143, 04016076.	1.3	7
66	Predicting and quantifying the effect of variations in long-term water demand on micro-hydropower energy recovery in water supply networks. <i>Urban Water Journal</i> , 2017, 14, 676-684.	1.0	11
67	Microhydropower Energy Recovery at Wastewater-Treatment Plants: Turbine Selection and Optimization. <i>Journal of Energy Engineering - ASCE</i> , 2017, 143, .	1.0	22
68	“Exposure Track” The Impact of Mobile-Device-Based Mobility Patterns on Quantifying Population Exposure to Air Pollution. <i>Environmental Science & Technology</i> , 2016, 50, 9671-9681.	4.6	119
69	Development of a high resolution wave climate modelling methodology for offshore, nearshore and onshore locations of interest. <i>International Journal of Marine Energy</i> , 2016, 16, 30-40.	1.8	6
70	Optimization of Water Distribution Networks for Combined Hydropower Energy Recovery and Leakage Reduction. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2016, 142, .	1.3	53
71	Current and Future Environmental Balance of Small-Scale Run-of-River Hydropower. <i>Environmental Science & Technology</i> , 2015, 49, 6344-6351.	4.6	24
72	Making green technology greener: Achieving a balance between carbon and resource savings through ecodesign in hydropower systems. <i>Resources, Conservation and Recycling</i> , 2015, 105, 11-17.	5.3	14

#	ARTICLE	IF	CITATIONS
73	Exploring the modeling of spatiotemporal variations in ambient air pollution within the land use regression framework: Estimation of PM ₁₀ concentrations on a daily basis. Journal of the Air and Waste Management Association, 2015, 65, 628-640.	0.9	32
74	Life cycle environmental balance and greenhouse gas mitigation potential of micro-hydropower energy recovery in the water industry. Journal of Cleaner Production, 2015, 99, 152-159.	4.6	54
75	A strategic assessment of micro-hydropower in the UK and Irish water industry: Identifying technical and economic constraints. Renewable Energy, 2015, 81, 808-815.	4.3	64
76	Passive methods for improving air quality in the built environment: A review of porous and solid barriers. Atmospheric Environment, 2015, 120, 61-70.	1.9	160
77	Inventory compilation for renewable energy systems: the pitfalls of materiality thresholds and priority impact categories using hydropower case studies. International Journal of Life Cycle Assessment, 2015, 20, 1701-1707.	2.2	6
78	Modelling personal exposure to particulate air pollution: An assessment of time-integrated activity modelling, Monte Carlo simulation & artificial neural network approaches. International Journal of Hygiene and Environmental Health, 2015, 218, 107-116.	2.1	10
79	Can teaching be evaluated through reflection on student performance in continuous assessment? A case study of practical engineering modules. Innovations in Education and Teaching International, 2015, 52, 464-473.	1.5	1
80	Energy recovery in the water industry: an assessment of the potential of micro-hydropower. Water and Environment Journal, 2014, 28, 294-304.	1.0	49
81	Evaluating artificial neural networks for predicting minute ventilation and lung deposited dose in commuting cyclists. Journal of Transport and Health, 2014, 1, 305-315.	1.1	15
82	Energy recovery in the water industry using micro-hydropower: an opportunity to improve sustainability. Water Policy, 2014, 16, 168-183.	0.7	103
83	Comparison of particulate matter dose and acute heart rate variability response in cyclists, pedestrians, bus and train passengers. Science of the Total Environment, 2014, 468-469, 821-831.	3.9	95
84	Development of an evaluation method for hydropower energy recovery in wastewater treatment plants: Case studies in Ireland and the UK. Sustainable Energy Technologies and Assessments, 2014, 7, 166-177.	1.7	58
85	A critical review and assessment of Eco-Driving policy & technology: Benefits & limitations. Transport Policy, 2014, 35, 42-49.	3.4	111
86	The development and assessment of an aspiration efficiency reducing system of air pollution control for particulate matter in building ventilation systems. Energy and Buildings, 2013, 61, 177-184.	3.1	16
87	Efficient drain water heat recovery in horizontal domestic shower drains. Energy and Buildings, 2013, 59, 44-49.	3.1	70
88	The passive control of air pollution exposure in Dublin, Ireland: A combined measurement and modelling case study. Science of the Total Environment, 2013, 458-460, 331-343.	3.9	33
89	Energy recovery potential using micro hydropower in water supply networks in the UK and Ireland. Water Science and Technology: Water Supply, 2013, 13, 552-560.	1.0	39
90	Energy recovery in the water industry: an assessment of the potential of micro-hydropower. Water and Environment Journal, 2013, 27, n/a-n/a.	1.0	6

#	ARTICLE	IF	CITATIONS
91	Personal Exposure to Air Pollution in Office Workers in Ireland: Measurement, Analysis and Implications. <i>Toxics</i> , 2013, 1, 60-76.	1.6	20
92	Environmental tobacco smoke in designated smoking areas in the hospitality industry: Exposure measurements, exposure modelling and policy assessment. <i>Environment International</i> , 2012, 44, 68-74.	4.8	7
93	Numerical modelling of the passive control of air pollution in asymmetrical urban street canyons using refined mesh discretization schemes. <i>Building and Environment</i> , 2012, 56, 232-240.	3.0	38
94	Energy Recovery in the Water & Waste Water Industry using Micro-Hydropower: A Review. , 2012, , .		3
95	Analysis of the relationship between urban background air pollution concentrations and the personal exposure of office workers in Dublin, Ireland, using baseline separation techniques. <i>Atmospheric Pollution Research</i> , 2011, 2, 80-88.	1.8	20
96	Spoiling air pollution dispersion: A numerical investigation of exhaust plume dispersion from cars with rear spoilers. <i>Transportation Research, Part D: Transport and Environment</i> , 2011, 16, 296-301.	3.2	0
97	Optimizing the use of on-street car parking system as a passive control of air pollution exposure in street canyons by large eddy simulation. <i>Atmospheric Environment</i> , 2011, 45, 1684-1694.	1.9	38
98	New Directions: Passive control of personal air pollution exposure from traffic emissions in urban street canyons. <i>Atmospheric Environment</i> , 2010, 44, 2940-2941.	1.9	29
99	A numerical analysis of the aspiration efficiency of a personal sampler. <i>International Journal of Environment and Pollution</i> , 2010, 41, 109.	0.2	2
100	The Control of Environmental Tobacco Smoke: A Policy Review. <i>International Journal of Environmental Research and Public Health</i> , 2009, 6, 741-758.	1.2	44
101	A principal components analysis of the factors effecting personal exposure to air pollution in urban commuters in Dublin, Ireland. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2009, 44, 1219-1226.	0.9	20
102	A numerical investigation of the impact of low boundary walls on pedestrian exposure to air pollutants in urban street canyons. <i>Science of the Total Environment</i> , 2009, 407, 760-769.	3.9	62
103	Reducing pedestrian exposure to environmental pollutants: A combined noise exposure and air quality analysis approach. <i>Transportation Research, Part D: Transport and Environment</i> , 2009, 14, 309-316.	3.2	47
104	The impacts of inter-vehicle spacing on in-vehicle air pollution concentrations in idling urban traffic conditions. <i>Transportation Research, Part D: Transport and Environment</i> , 2009, 14, 567-575.	3.2	32
105	Modelling the impacts of a carbon emission-differentiated vehicle tax system on CO2 emissions intensity from new vehicle purchases in Ireland. <i>Energy Policy</i> , 2009, 37, 1404-1411.	4.2	68
106	Relative exposure to fine particulate matter and VOCs between transport microenvironments in Dublin: Personal exposure and uptake. <i>Atmospheric Environment</i> , 2008, 42, 6496-6512.	1.9	122
107	Reduced exposure to air pollution on the boardwalk in Dublin, Ireland. Measurement and prediction. <i>Environment International</i> , 2008, 34, 86-93.	4.8	33
108	Optimal cycling and walking speed for minimum absorption of traffic emissions in the lungs. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2007, 42, 1999-2007.	0.9	22

#	ARTICLE	IF	CITATIONS
109	Effects of the Smoking Ban on Benzene and 1,3-Butadiene Levels in Pubs in Dublin. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2006, 41, 799-810.	0.9	27
110	New Directions: Improved atmosphere in pubs due to the smoking ban in Ireland. Atmospheric Environment, 2005, 39, 4815-4816.	1.9	0
111	The technical and economic feasibility of energy recovery in water supply networks. Renewable Energy and Power Quality Journal, 0, , 1123-1127.	0.2	18