

# Alastair Hales

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/539181/publications.pdf>

Version: 2024-02-01

18  
papers

687  
citations

840776

11  
h-index

839539

18  
g-index

18  
all docs

18  
docs citations

18  
times ranked

420  
citing authors

#	ARTICLE	IF	CITATIONS
1	Lithium ion battery degradation: what you need to know. Physical Chemistry Chemical Physics, 2021, 23, 8200-8221.	2.8	330
2	Cost and carbon footprint reduction of electric vehicle lithium-ion batteries through efficient thermal management. Applied Energy, 2021, 289, 116737.	10.1	65
3	Cool metric for lithium-ion batteries could spur progress. Nature, 2020, 582, 485-487.	27.8	49
4	A review of piezoelectric fans for low energy cooling of power electronics. Applied Energy, 2018, 215, 321-337.	10.1	47
5	The Cell Cooling Coefficient: A Standard to Define Heat Rejection from Lithium-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A2383-A2395.	2.9	46
6	The Surface Cell Cooling Coefficient: A Standard to Define Heat Rejection from Lithium Ion Battery Pouch Cells. Journal of the Electrochemical Society, 2020, 167, 020524.	2.9	28
7	The role of cell geometry when selecting tab or surface cooling to minimise cell degradation. ETransportation, 2020, 5, 100073.	14.8	20
8	The Cell Cooling Coefficient as a design tool to optimise thermal management of lithium-ion cells in battery packs. ETransportation, 2020, 6, 100089.	14.8	17
9	Optimisation of low energy cooling through phase variation between adjacent piezoelectric fan blades. International Journal of Heat and Mass Transfer, 2019, 139, 362-372.	4.8	15
10	The prismatic surface cell cooling coefficient: A novel cell design optimisation tool & thermal parameterization method for a 3D discretised electro-thermal equivalent-circuit model. ETransportation, 2021, 7, 100099.	14.8	15
11	Measuring Irreversible Heat Generation in Lithium-Ion Batteries: An Experimental Methodology. Journal of the Electrochemical Society, 2022, 169, 030523.	2.9	13
12	Ice formation in the subcooled brine environment. International Journal of Heat and Mass Transfer, 2016, 95, 198-205.	4.8	11
13	Geometric optimisation of piezoelectric fan arrays for low energy cooling. International Journal of Heat and Mass Transfer, 2019, 137, 52-63.	4.8	9
14	Noninvasive Ultrasonic Monitoring of Ice Piggling in Pipes Containing Liquid Food Materials. Journal of Food Process Engineering, 2017, 40, e12306.	2.9	8
15	Noninvasive Monitoring by Ultrasound of Liquid Foodstuff to Ice Slurry Transitions Within Steel Ducts and Pipes. Journal of Food Process Engineering, 2017, 40, e12415.	2.9	5
16	Novel methods for measuring the thermal diffusivity and the thermal conductivity of a lithium-ion battery. Applied Thermal Engineering, 2022, 212, 118573.	6.0	4
17	Thermal evaluation of lithium-ion batteries: Defining the cylindrical cell cooling coefficient. Journal of Energy Storage, 2022, 54, 105217.	8.1	3
18	A system for determining Li-ion cell cooling coefficients. HardwareX, 2022, 11, e00257.	2.2	2