

Peter R N Childs

List of Publications by Year in descending order

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56
papers

1,771
citations

567281

15
h-index

302126

39
g-index

56
all docs

56
docs citations

56
times ranked

1921
citing authors

#	ARTICLE	IF	CITATIONS
1	Review of temperature measurement. Review of Scientific Instruments, 2000, 71, 2959-2978.	1.3	710
2	Air-Gap Convection in Rotating Electrical Machines. IEEE Transactions on Industrial Electronics, 2012, 59, 1367-1375.	7.9	230
3	A Data-Driven Text Mining and Semantic Network Analysis for Design Information Retrieval. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	89
4	Contaminated Interaction: Another Barrier to Circular Material Flows. Journal of Industrial Ecology, 2017, 21, 507-516.	5.5	87
5	A psychological ownership approach to designing object attachment. Journal of Engineering Design, 2015, 26, 140-156.	2.3	55
6	A computational tool for creative idea generation based on analogical reasoning and ontology. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2018, 32, 462-477.	1.1	46
7	The Combinator “a computer-based tool for creative idea generation based on a simulation approach. Design Science, 2018, 4, .	2.1	45
8	A Low Cost Desktop Electrochemical Metal 3D Printer. Advanced Materials Technologies, 2017, 2, 1700148.	5.8	44
9	Shroud heat transfer measurements inside a heated multiple rotating cavity with axial throughflow. International Journal of Heat and Fluid Flow, 2007, 28, 1405-1417.	2.4	36
10	Future aircraft cabins and design thinking: optimisation vs. win-win scenarios. Propulsion and Power Research, 2013, 2, 85-95.	4.3	32
11	Multi-metal 4D printing with a desktop electrochemical 3D printer. Scientific Reports, 2019, 9, 3973.	3.3	32
12	Passivity Preservation for Variable Impedance Control of Compliant Robots. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2342-2353.	5.8	32
13	Materials, use and contaminated interaction. Materials and Design, 2016, 90, 1218-1227.	7.0	28
14	ICAS-GT: A European Collaborative Research Programme on Internal Cooling Air Systems for Gas Turbines. , 2002, , 907.		25
15	Chemical Aspects of the Dynamic Performance of a Three-Way Catalyst. , 1999, , .		22
16	In-situ fabrication of carbon-metal fabrics as freestanding electrodes for high-performance flexible energy storage devices. Energy Storage Materials, 2020, 30, 329-336.	18.0	19
17	Sustainability by design: a reflection on the suitability of pedagogic practice in design and engineering courses in the teaching of sustainable design. European Journal of Engineering Education, 2007, 32, 135-142.	2.3	18
18	Energy Recovery Systems for Engines. , 0, , .		17

#	ARTICLE	IF	CITATIONS
19	The effect of gravity on R410A condensing flow in horizontal circular tubes. Numerical Heat Transfer; Part A: Applications, 2017, 71, 327-340.	2.1	16
20	Metrics for Measuring Sustainable Product Design Concepts. Energies, 2021, 14, 3469.	3.1	14
21	Online impedance regulation techniques for compliant humanoid balancing. Robotics and Autonomous Systems, 2018, 104, 85-98.	5.1	12
22	Promoting creativity and innovation in biotechnology. Trends in Biotechnology, 2009, 27, 445-447.	9.3	11
23	Producing Hydrogen and Power Using Chemical Looping Combustion and Water-Gas Shift. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	11
24	Variable impedance walking using Time-Varying Lyapunov Stability Margins. , 2017, , .		10
25	Towards Mass Individualisation: setting the scope and industrial implication. Design Science, 2021, 7, .	2.1	10
26	Heat 'Transfer on the Surface of a Cylinder Rotating in an Annulus at High Axial and Rotational Reynolds Numbers. , 1994, , .		9
27	Prediction of ingress rates to turbine and compressor wheelspaces. International Journal of Heat and Fluid Flow, 1997, 18, 218-228.	2.4	8
28	A case-based decision theory based process model to aid product conceptual design. Cluster Computing, 2019, 22, 10145-10162.	5.0	8
29	Is group work beneficial for producing creative designs in STEM design education?. International Journal of Technology and Design Education, 2022, 32, 2801-2826.	2.6	8
30	A Tapered Whisker-Based Physical Reservoir Computing System for Mobile Robot Terrain Identification in Unstructured Environments. IEEE Robotics and Automation Letters, 2022, 7, 3608-3615.	5.1	8
31	266 Fuzzy front-end studies: current state and future directions for new product development. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2021, 32, 377-409.	2.1	7
32	Creativity in the design process in the turbomachinery industry. Journal of Design Research, 2010, 8, 145.	0.1	6
33	Using functional analysis diagrams to improve product reliability and cost. Advances in Mechanical Engineering, 2017, 9, 168781401668522.	1.6	6
34	Neurocognition-inspired design with machine learning. Design Science, 2020, 6, .	2.1	6
35	A Bibliometric Review of Sustainable Product Design. Energies, 2021, 14, 6867.	3.1	6
36	Stator well flows in axial compressors. International Journal of Heat and Fluid Flow, 2000, 21, 710-716.	2.4	5

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37	Application of design rationale for a robotic system for single-incision laparoscopic surgery and natural orifice transluminal endoscopic surgery. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2013, 227, 821-830.	1.8	5
38	The Effect of Heat Transfer Coefficient Increase on Tip Clearance Control in H.P. Compressors in Gas Turbine Engine. , 2013, , .		5
39	A Method to use Nonlinear Dynamics in a Whisker Sensor for Terrain Identification by Mobile Robots. , 2021, , .		5
40	A Semi-Supervised Reservoir Computing System Based on Tapered Whisker for Mobile Robot Terrain Identification and Roughness Estimation. IEEE Robotics and Automation Letters, 2022, 7, 5655-5662.	5.1	5
41	Chemical Looping Combustion Using the Direct Combustion of Liquid Metal in a Gas Turbine Based Cycle. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	4
42	Empowering manufacturing personnel through functional understanding. Production Planning and Control, 2018, 29, 688-703.	8.8	4
43	MANUFACTURE AND CALIBRATION OF ROBUST HEAT FLUX SENSORS FOR ROTATING TURBOMACHINERY. Experimental Heat Transfer, 2004, 17, 181-197.	3.2	3
44	Functional Analysis Diagrams With the Representation of Movement Transitions. , 2013, , .		3
45	Application of Creativity Tools to Gas Turbine Engine Compressor Clearance Control. , 2013, , .		3
46	Engineering Freakout. International Journal of Mechanical Engineering Education, 2013, 41, 297-305.	1.0	3
47	A Novel Thermally Activated R744 Heat Pump Cycle. , 2013, , .		1
48	New directions in computational, combinatorial and structural creativity. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 425-431.	2.1	1
49	A Data-Driven Fuzzy Front End Model for Contextual Performance and Concurrent Collaboration. IEEE Transactions on Engineering Management, 2023, 70, 660-683.	3.5	1
50	Heat Transfer Characteristics of a Rotor-Stator System With Small Radial Outflow. , 2012, , .		0
51	A Design Model and Tackles for Systematic Conceptual Design. International Journal of Mechanical Engineering Education, 2013, 41, 341-353.	1.0	0
52	Turbine Aerodynamics, Heat Transfer, Materials and Mechanics. Progress in Aeronautics and Astronautics – Vol 243 Edited by T. I-P. Shih and V. Yang. American Institute of Aeronautics and Astronautics, 1801 Alexander Bell Drive, Suite 500, Reston, VA 20191-4344, USA. 2014. Distributed by Transatlantic Publishers Group, 97 Greenham Road, London, N10 1LN (Tel: 020-8815 5994; e-mail: Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	16	0
53	Using functional analysis diagrams for production cost optimization. , 2016, , .		0
54	3D Printing: A Low Cost Desktop Electrochemical Metal 3D Printer (Adv. Mater. Technol. 10/2017). Advanced Materials Technologies, 2017, 2, .	5.8	0

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55	An analysis of the effect of gravity compensation on compliant biped walking controllers. , 2018, , .		0
56	Machine elements. , 2019, , 145-165.		0