

Dirk Pons

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1024679/publications.pdf>

Version: 2024-02-01

108
papers

1,291
citations

430874

18
h-index

501196

28
g-index

110
all docs

110
docs citations

110
times ranked

760
citing authors

#	ARTICLE	IF	CITATIONS
1	Design features for bobbin friction stir welding tools: Development of a conceptual model linking the underlying physics to the production process. <i>Materials & Design</i> , 2014, 54, 632-643.	5.1	88
2	Implementing leanâ€™s Outcomes from SME case studies. <i>Operations Research Perspectives</i> , 2018, 5, 94-104.	2.1	81
3	Success factors and barriers to implementing lean in the printing industry. <i>Journal of Manufacturing Technology Management</i> , 2017, 28, 458-484.	6.4	52
4	Taxonomy of Gas Turbine Blade Defects. <i>Aerospace</i> , 2019, 6, 58.	2.2	36
5	Thermomechanical Grain Refinement in AA6082-T6 Thin Plates under Bobbin Friction Stir Welding. <i>Metals</i> , 2018, 8, 375.	2.3	33
6	Development of Metallographic Etchants for the Microstructure Evolution of A6082-T6 BFSW Welds. <i>Metals</i> , 2017, 7, 423.	2.3	32
7	Implementing Lean Practices: Managing the Transformation Risks. <i>Journal of Industrial Engineering</i> , 2013, 2013, 1-19.	0.6	28
8	Crack Propagation Mechanisms for Creep Fatigue: A Consolidated Explanation of Fundamental Behaviours from Initiation to Failure. <i>Metals</i> , 2018, 8, 623.	2.3	28
9	Automated Defect Detection and Decision-Support in Gas Turbine Blade Inspection. <i>Aerospace</i> , 2021, 8, 30.	2.2	28
10	Advancing lean management: The missing quantitative approach. <i>Operations Research Perspectives</i> , 2019, 6, 100114.	2.1	25
11	A Systematic Methodology for Developing Bowtie in Risk Assessment: Application to Borescope Inspection. <i>Aerospace</i> , 2020, 7, 86.	2.2	25
12	Waveâ€™particle duality: A conceptual solution from the cordus conjecture. <i>Physics Essays</i> , 2012, 25, 132-140.	0.4	24
13	Formation Mechanisms for Entry and Exit Defects in Bobbin Friction Stir Welding. <i>Metals</i> , 2018, 8, 33.	2.3	24
14	A methodology for setting the injection moulding process parameters for polymer rapid tooling inserts. <i>Rapid Prototyping Journal</i> , 2019, 25, 1493-1505.	3.2	23
15	Time: An emergent property of matter. <i>Applied Physics Research</i> , 2013, 5, .	0.0	21
16	Relative importance of professional practice and engineering management competencies. <i>European Journal of Engineering Education</i> , 2016, 41, 530-547.	2.3	21
17	Creep-integrated fatigue equation for metals. <i>International Journal of Fatigue</i> , 2017, 98, 167-175.	5.7	20
18	Bowtie Methodology for Risk Analysis of Visual Borescope Inspection during Aircraft Engine Maintenance. <i>Aerospace</i> , 2019, 6, 110.	2.2	20

#	ARTICLE	IF	CITATIONS
19	Design mechanisms and constraints. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2005, 16, 73-85.	2.1	16
20	Environmentally Lean Production: The Development and Incorporation of an Environmental Impact Index into Value Stream Mapping. Journal of Industrial Engineering, 2013, 2013, 1-17.	0.6	16
21	Explanation of the Table of Nuclides: Qualitative Nuclear Mechanics From a NLHV Design. Applied Physics Research, 2013, 5, .	0.0	16
22	Why Do Workers Take Safety Risks?â€”A Conceptual Model for the Motivation Underpinning Perverse Agency. Safety, 2018, 4, 24.	1.7	16
23	Categorization of Failures in Polymer Rapid Tools Used for Injection Molding. Processes, 2019, 7, 17.	2.8	16
24	Comparative Analysis of Human Operators and Advanced Technologies in the Visual Inspection of Aero Engine Blades. Applied Sciences (Switzerland), 2022, 12, 2250.	2.5	16
25	Synchronous Interlocking of Discrete Forces: Strong Force Reconceptualised in a NLHV Solution. Applied Physics Research, 2013, 5, .	0.0	15
26	Outer Boundary of the Expanding Cosmos: Discrete Fields and Implications for the Holographic Principle. The Open Astronomy Journal, 2013, 6, 77-89.	1.6	15
27	Asymmetrical Genesis by Remanufacture of Antielectrons. Journal of Modern Physics, 2014, 05, 1980-1994.	0.6	15
28	Analysis of Raised Feature Failures on 3D Printed Injection Moulds. Polymers, 2021, 13, 1541.	4.5	14
29	Beta Decays and the Inner Structures of the Neutrino in a NLHV Design. Applied Physics Research, 2014, 6, .	0.0	13
30	Annihilation Mechanisms. Applied Physics Research, 2014, 6, .	0.0	13
31	Differentiation of matter and antimatter by hand: Internal and external structures of the electron and antielectron. Physics Essays, 2014, 27, 26-35.	0.4	13
32	Nuclear Polymer Explains the Stability, Instability, and Nonexistence of Nuclides. Research Letters in Physics, 2015, 2015, 1-19.	0.2	13
33	Changing importances of professional practice competencies over an engineering career. Journal of Engineering and Technology Management - JET-M, 2015, 38, 89-101.	2.7	13
34	Texture Evolution in AA6082-T6 BFSW Welds: Optical Microscopy and EBSD Characterisation. Materials, 2019, 12, 3215.	2.9	13
35	Assessment of the Effect of Cleanliness on the Visual Inspection of Aircraft Engine Blades: An Eye Tracking Study. Sensors, 2021, 21, 6135.	3.8	13
36	Pike River Mine Disaster: Systems-Engineering and Organisational Contributions. Safety, 2016, 2, 21.	1.7	12

#	ARTICLE	IF	CITATIONS
37	AFM Characterization of Stir-Induced Micro-Flow Features within the AA6082-T6 BFSW Welds. Technologies, 2019, 7, 80.	5.1	12
38	Internal Material Flow Layers in AA6082-T6 Butt-Joints during Bobbin Friction Stir Welding. Metals, 2019, 9, 1059.	2.3	12
39	Structural Anatomy of Tunnel Void Defect in Bobbin Friction Stir Welding, Elucidated by the Analogue Modelling. Applied System Innovation, 2020, 3, 2.	4.6	12
40	Flow-Based Anatomy of Bobbin Friction-Stirred Weld; AA6082-T6 Aluminium Plate and Analogue Plasticine Model. Applied Mechanics, 2020, 1, 3-19.	1.5	12
41	The Unified Creep-Fatigue Equation for Stainless Steel 316. Metals, 2016, 6, 219.	2.3	11
42	Dynamic Interaction between Machine, Tool, and Substrate in Bobbin Friction Stir Welding. International Journal of Manufacturing Engineering, 2016, 2016, 1-14.	0.8	10
43	Development of a unified creep-fatigue equation including heat treatment. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 170-182.	3.4	10
44	Measuring Industrial Health Using a Diminished Quality of Life Instrument. Safety, 2018, 4, 55.	1.7	10
45	Alignment of the Safety Assessment Method with New Zealand Legislative Responsibilities. Safety, 2019, 5, 59.	1.7	10
46	Methodology for Evaluating Risk of Visual Inspection Tasks of Aircraft Engine Blades. Aerospace, 2021, 8, 117.	2.2	10
47	Internal Flow Behaviour and Microstructural Evolution of the Bobbin-FSW Welds: Thermomechanical Comparison between 1xxx and 3xxx Aluminium Grades. Advances in Materials Science, 2021, 21, 40-64.	1.0	10
48	Evaluation of Influence Factors on the Visual Inspection Performance of Aircraft Engine Blades. Aerospace, 2022, 9, 18.	2.2	10
49	Inner Processes of Photon Emission and Absorption. Applied Physics Research, 2015, 7, .	0.0	9
50	A Methodology for Harmonizing Safety and Health Scales in Occupational Risk Assessment. International Journal of Environmental Research and Public Health, 2021, 18, 4849.	2.6	9
51	Analogue Modelling of Flow Patterns in Bobbin Friction Stir Welding by the Dark-Field/Bright-Field Illumination Method. Advances in Materials Science, 2020, 20, 56-70.	1.0	9
52	Design with uncertain qualitative variables under imperfect knowledge. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2004, 218, 977-986.	2.4	8
53	Integrative Approach to the Plant Commissioning Process. Journal of Industrial Engineering, 2013, 2013, 1-12.	0.6	8
54	Weak Interaction and the Mechanisms for Neutron Stability and Decay. Applied Physics Research, 2014, 7, .	0.0	8

#	ARTICLE	IF	CITATIONS
55	Asymmetrical Neutrino Induced Decay of Nucleons. Applied Physics Research, 2015, 7, .	0.0	8
56	Energy Conversion Mechanics for Photon Emission per Non-Local Hidden-Variable Theory. Journal of Modern Physics, 2016, 07, 1049-1067.	0.6	8
57	Comparison of Visual and Visualâ€™Tactile Inspection of Aircraft Engine Blades. Aerospace, 2021, 8, 313.	2.2	8
58	System model of production inventory control. International Journal of Manufacturing Technology and Management, 2010, 20, 120.	0.1	7
59	Hidden Variable Theory Supports Variability in Decay Rates of Nuclides. Applied Physics Research, 2015, 7, .	0.0	7
60	Speed of Light as an Emergent Property of the Fabric. Applied Physics Research, 2016, 8, 111.	0.0	7
61	Freight Operations Modelling for Urban Delivery and Pickup with Flexible Routing: Cluster Transport Modelling Incorporating Discrete-Event Simulation and GIS. Infrastructures, 2021, 6, 180.	2.8	7
62	Rapid manufacturing facilitation through optimal machining prediction of polystyrene foam. Virtual and Physical Prototyping, 2011, 6, 41-46.	10.4	6
63	A Bootstrap Approach for Predicting Methoxyflurane Occupational Exposure in Paramedicine. IFAC-PapersOnLine, 2017, 50, 6666-6671.	0.9	6
64	Entropy at the Level of Individual Particles: Analysis of Maxwellâ€™s Agent with a Hidden-Variable Theory. Journal of Modern Physics, 2016, 07, 1277-1295.	0.6	6
65	Operator agency in process intervention: tampering versus application of tacit knowledge. Journal of Industrial Engineering International, 2015, 11, 403-425.	1.8	5
66	Principles of Product Design in Developing Countries. Applied System Innovation, 2018, 1, 11.	4.6	5
67	Electrification in Remote Communities: Assessing the Value of Electricity Using a Community Action Research Approach in Kabakaburi, Guyana. Sustainability, 2019, 11, 2566.	3.2	5
68	Microstructural deformation in the clinching process. Journal of Advanced Joining Processes, 2021, 3, 100041.	2.7	5
69	EBSD Characterization of Bobbin Friction Stir Welding of AA6082-T6 Aluminium Alloy. Advances in Materials Science, 2020, 20, 49-74.	1.0	5
70	Effect of Matter Distribution on Relativistic Time Dilation. Journal of Modern Physics, 2018, 09, 500-523.	0.6	5
71	Relative effectiveness of mechanisms for simulating uncertainty in quantitative systems. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2003, 217, 531-540.	2.4	4
72	Thermodynamic peculiarities of alpha-type Stirling engines for low-temperature difference power generation: Optimisation of operating parameters and heat exchangers using a third-order model. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2014, 228, 1936-1947.	2.1	4

#	ARTICLE	IF	CITATIONS
73	Team Interactions for Successful Project Management in Small and Medium-Sized Enterprises. International Journal of Information Technology Project Management, 2016, 7, 17-43.	0.5	4
74	Physical-Mechanism Exploration of the Low-Cycle Unified Creep-Fatigue Formulation. Metals, 2017, 7, 379.	2.3	4
75	An Explicit Creep-Fatigue Model for Engineering Design Purposes. Metals, 2018, 8, 853.	2.3	4
76	Interaction Diagrams: Development of a Method for Observing Group Interactions. Behavioral Sciences (Basel, Switzerland), 2019, 9, 5.	2.1	4
77	Team Role Adoption and Distribution in Engineering Project Meetings. Behavioral Sciences (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlo	2.1	4
78	Aviation Human Error Modelled as a Production Process. The Ergonomics Open Journal, 2015, 8, 1-12.	1.8	4
79	Characterization of Dissimilar Al-Cu BFSW Welds; Interfacial Microstructure, Flow Mechanism and Intermetallics Formation. Advances in Materials Science, 2020, 20, 52-78.	1.0	4
80	A Physical Basis for Entanglement in a Non-Local Hidden Variable Theory. Journal of Modern Physics, 2017, 08, 1257-1274.	0.6	4
81	Assessment of Aircraft Engine Blade Inspection Performance Using Attribute Agreement Analysis. Safety, 2022, 8, 23.	1.7	4
82	Minimum Viable Model (MVM) Methodology for Integration of Agile Methods into Operational Simulation of Logistics. Logistics, 2022, 6, 37.	4.3	4
83	Simulation of key performance characteristics under uncertainty. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2005, 219, 151-162.	2.4	3
84	Development of a stress-based creep-fatigue equation: Accommodating pure-fatigue to pure-creep for the high-cycle loading regime. International Journal of Damage Mechanics, 2018, 27, 1397-1415.	4.2	3
85	Plant system simulation for engineering training workshops. Computer Applications in Engineering Education, 2020, 28, 17-30.	3.4	3
86	Exposure to methoxyflurane: Low-dose analgesia and occupational exposure. Australasian Journal of Paramedicine, 0, 17, .	0.3	3
87	Ventures of coordinated effort. International Journal of Project Organisation and Management, 2012, 4, 231.	0.1	2
88	Defining Lean Changeâ€”Framing Lean Implementation in Organizational Development. International Journal of Business and Management, 2017, 12, 10.	0.2	2
89	Serum fluoride levels following commencement of methoxyflurane for patient analgesia in an ambulance service. British Journal of Anaesthesia, 2020, 125, e457-e458.	3.4	2
90	What is the role of expert intuition in process control. International Journal of Productivity and Quality Management, 2020, 31, 227.	0.2	2

#	ARTICLE	IF	CITATIONS
91	Explanation of Photon Navigation in the Mach-Zehnder Interferometer. <i>Optics</i> , 2020, 1, 243-254.	1.2	2
92	3D-Printed Tool Shoulder Design for the Analogue Modelling of Bobbin Friction Stir Weld Joint Quality. <i>Advances in Materials Science</i> , 2021, 21, 27-42.	1.0	2
93	Ontological Approach to New Product Development. <i>Journal of Industrial and Intelligent Information</i> , 2014, 2, 98-107.	0.1	2
94	Methoxyflurane toxicity: historical determination and lessons for modern patient and occupational exposure. <i>New Zealand Medical Journal</i> , 2021, 134, 76-90.	0.5	2
95	Material Properties of Wire for the Fabrication of Knotted Fences. <i>International Journal of Metals</i> , 2014, 2014, 1-12.	0.3	1
96	A bootstrap approach for predicting fluoride toxicity in paramedics after occupational methoxyflurane exposure. <i>IFAC Journal of Systems and Control</i> , 2019, 9, 100061.	1.7	1
97	Serum fluoride levels in ambulance staff after commencement of methoxyflurane administration compared to meta-analysis results for the general public. <i>International Journal of Occupational Medicine and Environmental Health</i> , 2021, , .	1.3	1
98	Towards a descriptive framework of the engineering ethical worldview. <i>Australasian Journal of Engineering Education</i> , 2021, 26, 201-218.	1.4	1
99	Motion of Particles at the Fundamental Level: NLHV Theory Predictions for a Spiral Gait Locus. <i>Journal of Modern Physics</i> , 2021, 12, 1931-1953.	0.6	1
100	The Effects of Cooling and Shrinkage on the Life of Polymer 3D Printed Injection Moulds. <i>Polymers</i> , 2022, 14, 520.	4.5	1
101	Multiscale Analogue Modelling of Clinching Process to Investigate Thickness Tolerance and Tool Misalignment. <i>Materials</i> , 2022, 15, 3674.	2.9	1
102	Design With Uncertain Qualitative Variables Under Imperfect Knowledge. <i>IEEE Engineering Management Review</i> , 2007, 35, 92-92.	1.3	0
103	A unique orbital IC engine, illustrating advantages of engineering to academia relationships. , 2014, , .		0
104	A Unified Creep-Fatigue Equation with Application to Engineering Design. , 0, , .		0
105	Communication Adjustment in Engineering Professional and Student Project Meetings. <i>Behavioral Sciences (Basel, Switzerland)</i> , 2020, 10, 111.	2.1	0
106	Frequency and duration of ambulance officer exposure to nitrous oxide and methoxyflurane in New Zealand. <i>International Archives of Occupational and Environmental Health</i> , 2021, 94, 1773-1782.	2.3	0
107	Project Management for the Development of New Products. , 2015, , 983-1046.		0
108	A Framework for Interactive Development of Simulation Models with Strategicalâ€”Tacticalâ€”Operational Layering Applied to the Logistics of Bulk Commodities. <i>Modelling</i> , 2022, 3, 272-299.	1.4	0