Colin R Burvill

List of Publications by Year
in descending order

41 papers	635 citations	516215 16 h-index	642321 23 g-index
41 all docs	41 docs citations	41 times ranked	517 citing authors

#	Article	IF	Citations
1	Experimental, regression learner, numerical, and artificial neural network analyses on a complex composite structure subjected to compression loading. Mechanics of Advanced Materials and Structures, 2022, 29, 2437-2453.	1.5	11
2	Mesoporous Bioactive Glasses in Cancer Diagnosis and Therapy: Stimuliâ€Responsive, Toxicity, Immunogenicity, and Clinical Translation. Advanced Science, 2022, 9, e2102678.	5.6	76
3	The use of deep learning algorithms to predict mechanical strain from linear acceleration and angular rates of motion recorded from a horse hoof during exercise. International Journal of Mechanical Sciences, 2022, 216, 106972.	3.6	7
4	Feedforward backpropagation artificial neural networks for predicting mechanical responses in complex nonlinear structures: A study on a long bone. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 128, 105079.	1.5	14
5	A semi-empirical approach to evaluate the effect of constituent materials on mechanical strengths of GFRP mortar pipes. Structures, 2022, 36, 493-510.	1.7	5
6	Thermal response analysis and parameter prediction of additively manufactured polymers. Applied Thermal Engineering, 2022, 212, 118533.	3.0	11
7	Influence of welding sequences on induced residual stress and distortion in pipes. Construction and Building Materials, 2022, 342, 127995.	3.2	9
8	Static and dynamic deformation response of smart laminated composite plates induced by inclined piezoelectric actuators. Journal of Composite Materials, 2022, 56, 3269-3293.	1.2	10
9	Mechanical characterization of particulated FRP composite pipes: A comprehensive experimental study. Polymer Testing, 2021, 93, 107001.	2.3	25
10	Analytical solution of the electro-mechanical flexural coupling between piezoelectric actuators and flexible-spring boundary structure in smart composite plates. Archives of Civil and Mechanical Engineering, 2021, 21, 1.	1.9	21
11	A new analytical solution for elastic flexure of thick multi-layered composite hybrid plates resting on Winkler elastic foundation in air and water. Ocean Engineering, 2021, 235, 109372.	1.9	18
12	Linear elastic and hyperelastic studies of equine hoof mechanical response at different hydration levels. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 121, 104622.	1.5	6
13	What can artificial intelligence and machine learning tell us? A review of applications to equine biomechanical research. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 123, 104728.	1.5	18
14	Prediction of displacement in the equine third metacarpal bone using a neural network prediction algorithm. Biocybernetics and Biomedical Engineering, 2020, 40, 849-863.	3.3	19
15	Prediction of load in a long bone using an artificial neural network prediction algorithm. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 102, 103527.	1.5	19
16	Flexural and free vibration control of smart epoxy composite beams using shape memory alloy wires actuator. Journal of Intelligent Material Systems and Structures, 2020, 31, 1557-1566.	1.4	17
17	A novel smart assistive knee brace incorporated with shape memory alloy wire actuator. Journal of Intelligent Material Systems and Structures, 2020, 31, 1543-1556.	1.4	14
18	Prediction of load-displacement curve in a complex structure using artificial neural networks: A study on a long bone. International Journal of Engineering Science, 2020, 154, 103319.	2.7	40

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19	Uniaxial and biaxial ratcheting behavior of pressurized AISI 316L pipe under cyclic loading: Experiment and simulation. International Journal of Mechanical Sciences, 2020, 179, 105693.	3.6	22
20	Localized failure analysis of internally pressurized laminated ellipsoidal woven GFRP composite domes: Analytical, numerical, and experimental studies. Archives of Civil and Mechanical Engineering, 2019, 19, 1235-1250.	1.9	51
21	Accuracy Quantification of the Reverse Engineering and High-Order Finite Element Analysis of Equine MC3 Forelimb. Journal of Equine Veterinary Science, 2019, 78, 94-106.	0.4	11
22	Fatigue life reduction of GFRP composites due to delamination associated with the introduction of functional discontinuities. Composites Part B: Engineering, 2019, 163, 536-547.	5.9	19
23	An investigation on measurement accuracy of digitizing methods in turbine blade reverse engineering. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2018, 232, 1653-1671.	1.5	14
24	Fracture of laminated woven GFRP composite pressure vessels under combined low-velocity impact and internal pressure. Archives of Civil and Mechanical Engineering, 2018, 18, 1715-1728.	1.9	18
25	A quadratic piezoelectric multi-layer shell element for FE analysis of smart laminated composite plates induced by MFC actuators. Smart Materials and Structures, 2018, 27, 095004.	1.8	24
26	Investigation of end force distributions during wood bending using a novel differential-end-force sensor. International Wood Products Journal, 2015, 6, 123-130.	0.6	1
27	Industrial environmental performance evaluation: A Markov-based model considering data uncertainty. Environmental Modelling and Software, 2014, 60, 1-17.	1.9	7
28	The role of government, universities, and businesses in advancing technology for SMEsâ€™ innovativeness. Journal of Chinese Economic and Business Studies, 2014, 12, 171-180.	1.6	21
29	Motion planning for underactuated bipedal mechanisms with kinematic constraints. , 2013, , .		1
30	Determining an Optimum Model for the Bending ofEucalyptus regnansWood Heated by Microwave Energy. Forest Products Journal, 2013, 63, 101-111.	0.2	0
31	Tuning natural modes of vibration by prestress in the design of a harmonic gong. Journal of the Acoustical Society of America, 2012, 131, 926-934.	0.5	5
32	Mechanical loading of the distal end of the third metacarpal bone in horses during walking and trotting. American Journal of Veterinary Research, 2010, 71, 508-514.	0.3	21
33	Applicability of published data for fatigueâ€limited design. Quality and Reliability Engineering International, 2009, 25, 921-932.	1.4	4
34	Influence of Muscle-Tendon Wrapping on Calculations of Joint Reaction Forces in the Equine Distal Forelimb. Journal of Biomedicine and Biotechnology, 2008, 2008, 1-9.	3.0	32
35	Calculation of Joint Reaction Forces in the Equine Distal Forelimb during Walking and Trotting. , 2007, , .		2
36	Enhancing the Quality Function Deployment Conceptual Design Tool. Journal of Mechanical Design, Transactions of the ASME, 2007, 129, 701-708.	1.7	15

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37	A modular approach for incorporating mechanistic actuation to manual tasks. , 2006, , .		0
38	Determination of mechanical loading components of the equine metacarpus from measurements of strain during walking. Equine Veterinary Journal, 2006, 38, 440-444.	0.9	9
39	Implementation issues for an inexpensive inverted-pendulum mobile robot. , 2006, , .		3
40	Decoding of the coupling between brain and skin activities in olfactory stimulation by analysis of EEG and GSR signals. Waves in Random and Complex Media, 0, , 1-15.	1.6	8
41	Decoding of facial muscle-brain relation by information-based analysis of electromyogram (EMG) and electroencephalogram (EEG) signals. Waves in Random and Complex Media, 0, , 1-10.	1.6	7