Ian M Howard

List of Publications by Year
in descending order

52 papers	1,510 citations	361045 20 h-index	315357 38 g-index
54 all docs	54 docs citations	54 times ranked	1109 citing authors

#	Article	IF	Citations
1	A Novel Type of Noncontact Linear Piezoelectric Actuator Modulated by Electromagnetic Field: Design and Experiment. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 299-308.	1.7	5
2	Dynamic modelling of the gear system under non-stationary conditions using the iterative convergence of the tooth mesh stiffness. Engineering Failure Analysis, 2022, 131, 105908.	1.8	11
3	Study of Gravitational Force Effects, Magnetic Restoring Forces, and Coefficients of the Magnetic Spring-Based Nonlinear Oscillator System. IEEE Transactions on Magnetics, 2022, 58, 1-18.	1.2	3
4	Is wave energy untapped potential?. International Journal of Mechanical Sciences, 2021, 205, 106544.	3.6	22
5	Bayesian Fault Probability Estimation: Application in Wind Turbine Drivetrain Sensor Fault Detection. Asian Journal of Control, 2020, 22, 624-647.	1.9	8
6	Optimal robotâ€environment interaction using inverse differential Riccati equation. Asian Journal of Control, 2020, 22, 1401-1410.	1.9	1
7	The diagnostic analysis of the fault coupling effects in planet bearing. Engineering Failure Analysis, 2020, 108, 104266.	1.8	6
8	Life Cycle Sustainability Assessment of Alternative Energy Sources for the Western Australian Transport Sector. Sustainability, 2020, 12, 5565.	1.6	14
9	Advancements of wave energy converters based on power take off (PTO) systems: A review. Ocean Engineering, 2020, 204, 107248.	1.9	171
10	Pipeline Slug Flow Dynamic Load Characterization. Journal of Offshore Mechanics and Arctic Engineering, 2019, 141, .	0.6	3
11	Environmental Life Cycle Assessment of Alternative Fuels for Western Australiaâ€™s Transport Sector. Atmosphere, 2019, 10, 398.	1.0	12
12	The diagnostic analysis of the planet bearing faults using the torsional vibration signal. Mechanical Systems and Signal Processing, 2019, 134, 106304.	4.4	24
13	Vibration response from the planetary gear with flexible ring gear. International Journal of Powertrains, 2019, 8, 3.	0.1	7
14	Fault-Tolerant Neuro Adaptive Constrained Control of Wind Turbines for Power Regulation with Uncertain Wind Speed Variation. Energies, 2019, 12, 4712.	1.6	9
15	Reliability improvement of wind turbine power generation using model-based fault detection and fault tolerant control: A review. Renewable Energy, 2019, 135, 877-896.	4.3	124
16	Backstepping Nussbaum gain dynamic surface control for a class of input and state constrained systems with actuator faults. Information Sciences, 2019, 482, 27-46.	4.0	36
17	Neural impedance adaption for assistive humanâ€“robot interaction. Neurocomputing, 2018, 290, 50-59.	3.5	24
18	Neural adaptive tracking control for an uncertain robot manipulator with time-varying joint space constraints. Mechanical Systems and Signal Processing, 2018, 112, 44-60.	4.4	47

#	Article	IF	Citations
19	Neural network adaptive control design for robot manipulators under velocity constraints. Journal of the Franklin Institute, 2018, 355, 693-713.	1.9	28
20	Torsional vibration signal analysis as a diagnostic tool for planetary gear fault detection. Mechanical Systems and Signal Processing, 2018, 100, 706-728.	4.4	65
21	Sensor fault detection and isolation: a game theoretic approach. International Journal of Systems Science, 2018, , 1-21.	3.7	1
22	Bayesian Sensor Fault Detection in a Markov Jump System. Asian Journal of Control, 2017, 19, 1465-1481.	1.9	18
23	Power maximization of variable-speed variable-pitch wind turbines using passive adaptive neural fault tolerant control. Frontiers of Mechanical Engineering, 2017, 12, 377-388.	2.5	22
24	Optimum efficiency control of a wind turbine with unknown desired trajectory and actuator faults. Journal of Renewable and Sustainable Energy, 2017, 9, 063305.	0.8	12
25	Constrained control of wind turbines for power regulation in full load operation. , 2017, , .		4
26	A neuro-adaptive maximum power tracking control of variable speed wind turbines with actuator faults. , 2017, , .		4
27	Dynamic modelling of flexibly supported gears using iterative convergence of tooth mesh stiffness. Mechanical Systems and Signal Processing, 2016, 80, 460-481.	4.4	26
28	Theoretical and experimental investigations of a non-linear single degree of freedom electromagnetic vibration energy harvester. , 2016, , .		0
29	Design and simulation of core-ring magnet configurations for maximising energy transduction in linear actuators and micro-energy generators. , 2016, , .		0
30	The spur planetary gear torsional stiffness and its crack sensitivity under quasi-static conditions. Engineering Failure Analysis, 2016, 63, 106-120.	1.8	31
31	Parametric design-based modal damped vibrational piezoelectric energy harvesters with arbitrary proof mass offset: Numerical and analytical validations. Mechanical Systems and Signal Processing, 2016, 68-69, 562-586.	4.4	34
32	Ring-Planet Mesh Stiffness Study With Different Boundary Conditions and Crack Locations. , 2015, , .		1
33	Effect of shunted piezoelectric control for tuning piezoelectric power harvesting system responsesâ€"analytical techniques. Smart Materials and Structures, 2015, 24, 105029.	1.8	17
34	A vibration cavitation sensitivity parameter based on spectral and statistical methods. Expert Systems With Applications, 2015, 42, 67-78.	4.4	37
35	Electromechanical Piezoelectric Power Harvester Frequency Response Modeling Using Closed-Form Boundary Value Methods. IEEE/ASME Transactions on Mechatronics, 2014, 19, 32-44.	3.7	15
36	Intrinsic geometries and properties of piezo-MEMS power harvesters with tip mass offset using new electromechanical finite element vibration analysis. , 2014, , .		0

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37	Comparative numerical studies of electromechanical finite element vibration power harvester approaches of a piezoelectric unimorph. , 2014, , .		1
38	Analytical and experimental comparisons of electromechanical vibration response of a piezoelectric bimorph beam for power harvesting. Mechanical Systems and Signal Processing, 2013, 36, 66-86.	4.4	45
39	Analytical techniques for broadband multielectromechanical piezoelectric bimorph beams with multifrequency power harvesting. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 2555-2568.	1.7	31
40	Electromagnetic Energy Harvesting by Spatially Varying the Magnetic Field. Advances in Intelligent and Soft Computing, 2012, , 403-409.	0.2	3
41	Analytical modeling of self-powered electromechanical piezoelectric bimorph beams with multidirectional excitation. International Journal of Smart and Nano Materials, 2011, 2, 134-175.	2.0	14
42	Calculation of the Combined Torsional Mesh Stiffness of Spur Gears with Two- and Three-Dimensional Parametrical FE Models. Strojniski Vestnik/Journal of Mechanical Engineering, 2011, 57, 810-818.	0.6	87
43	An Analytical Method for Vibration Modelling of a Piezoelectric Bimorph Beam for Power Harvesting. , 2009, , .		1
44	A Further Study on High Contact Ratio Spur Gears in Mesh With Double Scope Tooth Profile Modification. , 2007, , 255.		2
45	An Experimental Investigation of the Static Transmission Error and Torsional Mesh Stiffness of Nylon Gears. , 2007, , 207.		4
46	Comparison of localised spalling and crack damage from dynamic modelling of spur gear vibrations. Mechanical Systems and Signal Processing, 2006, 20, 332-349.	4.4	148
47	Error Analysis on Finite Element Modeling of Involute Spur Gears. Journal of Mechanical Design, Transactions of the ASME, 2006, 128, 90-97.	1.7	22
48	Finite Element Analysis of High Contact Ratio Spur Gears in Mesh. Journal of Tribology, 2005, 127, 469-483.	1.0	89
49	THE DYNAMIC MODELLING OF A SPUR GEAR IN MESH INCLUDING FRICTION AND A CRACK. Mechanical Systems and Signal Processing, 2001, 15, 831-853.	4.4	205
50	The Dynamic Modelling of Multiple Pairs of Spur Gears in Mesh Including Friction. , 2001, , 841-848.		1
51	GDN-1 A COMMON FORMULA FOR SPUR GEAR MESH STIFFNESS(GEAR DYNAMICS AND NOISE). The Proceedings of the JSME International Conference on Motion and Power Transmissions, 2001, I.01.202, 1-4.	0.0	1
52	A Receptance Technique for the Modelling of the Vibration Characteristics of any Beam-Type Structure. CIRP Annals - Manufacturing Technology, 1988, 37, 355-360.	1.7	6