Mark Hadfield

List of Publications by Year
in descending order

84 papers	2,151 citations	236925 25 h-index	289244 40 g-index
87 all docs	87 docs citations	87 times ranked	1377 citing authors

#	Article	IF	Citations
1	Electrochemically exfoliated graphene and molybdenum disulfide nanoplatelets as lubricant additives. Journal of Molecular Liquids, 2021, 342, 116959.	4.9	8
2	An approac h for adaptive model performance validation within digital twinning. International Journal of Computational Methods and Experimental Measurements, 2021, 9, 213-225.	0.2	0
3	DESIGN OF EXPERIMENTS PLATFORM FOR ONLINE SIMULATION MODEL VALIDATION AND PARAMETER UPDATING WITHIN DIGITAL TWINNING. WIT Transactions on Engineering Sciences, 2021, , .	0.0	0
4	Comparison between thermophysical and tribological properties of two engine lubricant additives: electrochemically exfoliated graphene and molybdenum disulfide nanoplatelets. Nanotechnology, 2021, 32, 025701.	2.6	12
5	Modelling the criticality of silicon nitride surface imperfections under rolling and sliding contact. Tribology International, 2020, 148, 106317.	5.9	2
6	Two phosphonium cation-based ionic liquids as lubricant additive to a polyalphaolefin base oil. Journal of Molecular Liquids, 2019, 293, 111536.	4.9	31
7	Finite elements based approaches for the modelling of radial crack formation upon Vickers indentation in silicon nitride ceramics. Journal of the European Ceramic Society, 2019, 39, 4011-4022.	5.7	18
8	Tribological performance of tributylmethylammonium bis(trifluoromethylsulfonyl)amide as neat lubricant and as an additive in a polar oil. Friction, 2019, 7, 282-288.	6.4	15
9	Thermal analysis and tribological investigation on TPU and NBR elastomers applied to sealing applications. Tribology International, 2018, 127, 24-36.	5.9	48
10	Ensuring Rigor in Qualitative Data Analysis. International Journal of Qualitative Methods, The, 2018, 17, 160940691878636.	2.8	259
11	Tribological Behaviour of PVD Coatings Lubricated with a FAPâ^' Anion-Based Ionic Liquid Used as an Additive. Lubricants, 2016, 4, 8.	2.9	15
12	Assessing Boundary Film Forming Behavior of Phosphonium Ionic Liquids as Engine Lubricant Additives. Lubricants, 2016, 4, 17.	2.9	6
13	Ionic liquids as a neat lubricant applied to steelâ€“steel contacts. Tribology International, 2014, 72, 42-50.	5.9	52
14	FAPâ^' Anion Ionic Liquids Used in the Lubrication of a Steelâ€“Steel Contact. Tribology Letters, 2013, 52, 431-437.	2.6	49
15	Experimental and analytical thermal study of PTFE composite sliding against high carbon steel as a function of the surface roughness, sliding velocity and applied load. Wear, 2013, 303, 154-168.	3.1	51
16	Material Characterization and Real-Time Wear Evaluation of Pistons and Cylinder Liners of the Tiger 131 Military Tank. Tribology Transactions, 2013, 56, 637-644.	2.0	24
17	Lubrication of PVD coatings with ethyl-dimethyl-2-methoxyethylammonium tris(pentafluoroethyl)trifluorophosphate. Tribology International, 2013, 58, 71-78.	5.9	37
18	The challenges of evaluation: assessing Early Talk's impact on speech language and communication practice in children's centres. International Journal of Early Years Education, 2013, 21, 70-84.	0.8	5

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19	Becoming critical again: reconnecting critical social theory with the practice of action research. Educational Action Research, 2012, 20, 571-585.	1.5	9
20	Video: modalities and methodologies. International Journal of Research and Method in Education, 2012, 35, 311-324.	1.9	11
21	How might better network theories support school leadership research?. School Leadership and Management, 2012, 32, 109-121.	1.6	24
22	Future perspectives on sustainable tribology. Renewable and Sustainable Energy Reviews, 2012, 16, 4126-4140.	16.4	104
23	Cavitation damage incubation with typical fluids applied to a scroll expander system. Tribology International, 2011, 44, 1668-1678.	5.9	20
24	A model of friction for a pin-on-disc configuration with imposed pin rotation. Mechanism and Machine Theory, 2011, 46, 1755-1772.	4.5	13
25	Use of optical profilometry in the ASTM D4172 standard. Wear, 2011, 271, 2963-2967.	3.1	16
26	Observations of acoustically generated cavitation bubbles within typical fluids applied to a scroll expander lubrication system. Experimental Thermal and Fluid Science, 2011, 35, 1544-1554.	2.7	26
27	Pseudoplastic deformation pits on polished ceramics due to cavitation erosion. Ceramics International, 2011, 37, 1919-1927.	4.8	13
28	Experimental study and analytical model of the cavitation ring region with small diameter ultrasonic horn. Ultrasonics Sonochemistry, 2011, 18, 73-79.	8.2	25
29	Low-Cost Oil Quality Sensor Based on Changes in Complex Permittivity. Sensors, 2011, 11, 10675-10690.	3.8	42
30	Leading School-Based Networks and Collaborative Learning: Working Together for Better Outcomes?. , 2011, , 915-929.		2
31	Cavitation and rolling wear in silicon nitride. Ceramics International, 2010, 36, 1373-1381.	4.8	10
32	Surface strength of silicon nitride in relation to rolling contact performance measured on ball-on-rod and modified four-ball tests. Tribology International, 2010, 43, 423-432.	5.9	6
33	Cavitation erosion in silicon nitride: Experimental investigations on the mechanism of material degradation. Tribology International, 2010, 43, 2251-2257.	5.9	17
34	Mechanical Properties of Silicon Nitride Using RUS & C-Sphere Methodology. Advances in Science and Technology, 2010, 64, 71-75.	0.2	2
35	Realising the potential of school-based networks. Educational Research, 2010, 52, 309-323.	1.8	34
36	School-Based Networking for Educational Change. , 2010, , 765-780.		10

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37	Investment in Sustainable Development: A UK Perspective on the Business and Academic Challenges. Sustainability, 2009, 1, 1144-1160.	3.2	2
38	Experimental wear modelling of lifeboat slipway launches. Tribology International, 2009, 42, 1706-1714.	5.9	7
39	Wear observations applied to lifeboat slipway launches. Wear, 2009, 267, 2062-2069.	3.1	6
40	Early stage cavitation erosion within ceramicsâ€"An experimental investigation. Ceramics International, 2009, 35, 3301-3312.	4.8	25
41	Surface strength of silicon nitride in relation to rolling contact performance. Ceramics International, 2009, 35, 3339-3346.	4.8	15
42	Strategies for developing sustainable design practice for students and SME professionals. European Journal of Engineering Education, 2008, 33, 331-342.	2.3	17
43	Meeting the challenges of active learning in Webâ€based case studies for sustainable development. Innovations in Education and Teaching International, 2007, 44, 331-343.	2.5	19
44	Co-leaders and middle leaders: the dynamic between leaders and followers in networks of schools. School Leadership and Management, 2007, 27, 259-283.	1.6	24
45	Manufacturing induced residual stress influence on the rolling contact fatigue life performance of lubricated silicon nitride bearing materials. Materials & Design, 2007, 28, 2688-2693.	5.1	17
46	Residual stress variations during rolling contact fatigue of refrigerant lubricated silicon nitride bearing elements. Ceramics International, 2006, 32, 751-754.	4.8	19
47	A sustainable product design model. Materials & Design, 2006, 27, 1128-1133.	5.1	101
48	Subsurface propagation of partial ring cracks under rolling contact. Wear, 2006, 261, 390-397.	3.1	16
49	Examination of the material removal mechanisms during the lapping process of advanced ceramic rolling elements. Wear, 2005, 258, 2-12.	3.1	28
50	Pressurised chamber design for conducting rolling contact experiments with liquid refrigerant lubrication. Materials & Design, 2005, 26, 680-689.	5.1	17
51	Ceramic rolling elements with ring crack defectsâ€"A residual stress approach. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 404, 221-226.	5.6	76
52	The influence of test lubricants on the rolling contact fatigue failure mechanisms of silicon nitride ceramic. Wear, 2004, 257, 1047-1057.	3.1	13
53	A study of tribological durability with associated environmental impacts of a domestic refrigerator. Materials & Design, 2004, 25, 331-341.	5.1	10
54	Failure modes of ceramic rolling elements with surface crack defects. Wear, 2004, 256, 208-219.	3.1	28

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55	A mechanism for nucleating secondary fractures near a pre-existing flaw subjected to contact loading. Wear, 2003, 254, 597-605.	3.1	16
56	Teachers' Perspectives on Effective School Leadership. Teachers and Teaching: Theory and Practice, 2003, 9, 67-77.	1.9	20
57	Residual stress field of HIPed silicon nitride rolling elements. Ceramics International, 2002, 28, 645-650.	4.8	6
58	A study of line defect fatigue failure of ceramic rolling elements in rolling contact. Wear, 2002, 253, 975-985.	3.1	19
59	Mechanisms of Fatigue Failure in Thermal Spray Coatings. Journal of Thermal Spray Technology, 2002, 11, 333-349.	3.1	49
60	Rolling contact fatigue performance of HIPed Si3N4 with different surface roughness. Ceramics International, 2001, 27, 781-794.	4.8	12
61	Ring crack propagation in silicon nitride under rolling contact. Wear, 2001, 250, 282-292.	3.1	30
62	The influence of POE and PVE lubricant blends within hermetic refrigerating compressors operating with HFC-134a refrigerant. Wear, 2000, 241, 53-64.	3.1	12
63	The influence of ring crack location on the rolling contact fatigue failure of lubricated silicon nitride: experimental studies. Wear, 2000, 243, 157-166.	3.1	47
64	The influence of ring crack location on the rolling contact fatigue failure of lubricated silicon nitride: fracture mechanics analysis. Wear, 2000, 243, 167-174.	3.1	37
65	The influence of heterogeneous porosity on silicon nitride/steel wear in lubricated rolling contact. Ceramics International, 2000, 26, 315-324.	4.8	11
66	An environmental evaluation of mechanical systems using environmentally acceptable refrigerants. International Journal of Life Cycle Assessment, 2000, 5, 209-220.	4.7	12
67	Failure modes of plasma sprayed WCâ€“15%Co coated rolling elements. Wear, 1999, 230, 39-55.	3.1	38
68	The influence of lubricant viscosity on the wear of hermetic compressor components in HFC-134a environments. Wear, 1999, 236, 1-8.	3.1	25
69	Wear behaviour of the piston/gudgeon pin in a hermetic compressor with replacement CFC refrigerants. Wear, 1998, 219, 8-15.	3.1	8
70	Rolling contact fatigue performance of plasma sprayed coatings. Wear, 1998, 220, 80-91.	3.1	25
71	Failure of silicon nitride rolling elements with ring crack defects. Ceramics International, 1998, 24, 379-386.	4.8	37
72	Residual stress measurements of hot isostatically pressed silicon nitride rolling elements. Ceramics International, 1998, 24, 387-392.	4.8	5

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73	Fatigue behaviour of HVOF coated M50 steel rolling elements. Surface Engineering, 1998, 14, 473-480.	2.2	8
74	Experimental measurement of the residual stress field within thermally sprayed rolling elements. Wear, 1997, 209, 84-95.	3.1	35
75	Rolling contact fatigue performance of detonation gun coated elements. Tribology International, 1997, 30, 129-137.	5.9	40
76	Rolling contact fatigue behaviour of thermally sprayed rolling elements. Surface and Coatings Technology, 1996, 82, 176-186.	4.8	26
77	Observations of delamination fatigue on pre-cracked ceramic elements in rolling contact. Ceramics International, 1995, 21, 125-130.	4.8	6
78	Observations of lubricated rolling contact fatigue on silicon nitride rods. Ceramics International, 1995, 21, 13-19.	4.8	8
79	The effect of the test machine on the failure mode in lubricated rolling contact of silicon nitride. Tribology International, 1995, 28, 377-382.	5.9	37
80	Subsurface crack investigation on delaminated ceramic elements. Tribology International, 1994, 27, 359-367.	5.9	16
81	Delamination of ceramic balls in rolling contact. Ceramics International, 1993, 19, 151-158.	4.8	14
82	Residual stresses in failed ceramic rolling-contact balls. Ceramics International, 1993, 19, 307-313.	4.8	8
83	Failure modes of ceramic elements with ring-crack defects. Tribology International, 1993, 26, 157-164.	5.9	43
84	Failure modes of pre-cracked ceramic elements under rolling contact. Wear, 1993, 169, 69-75.	3.1	30