

Margaret M Stack

List of Publications by Year in descending order

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papers

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#	ARTICLE	IF	CITATIONS
1	Erosion Mapping of Through-Thickness Toughened Powder Epoxy Gradient Glass-Fiber-Reinforced Polymer (GFRP) Plates for Tidal Turbine Blades. <i>Lubricants</i> , 2021, 9, 22.	2.9	3
2	A Study of Raindrop Impacts on a Wind Turbine Material: Velocity and Impact Angle Effects on Erosion MAPS at Various Exposure Times. <i>Lubricants</i> , 2021, 9, 60.	2.9	6
3	Mapping of Meteorological Observations over the Island of Ireland to Enhance the Understanding and Prediction of Rain Erosion in Wind Turbine Blades. <i>Energies</i> , 2021, 14, 4555.	3.1	4
4	On a multiphysics approach to modelling the erosion-enhanced corrosion of low-alloy carbon steel in chloride containing environments. <i>Corrosion Science</i> , 2020, 176, 109045.	6.6	11
5	Mapping Tribo-Corrosion Behaviour of Ti-6Al-4V Eli in Laboratory Simulated Hip Joint Environments. <i>Lubricants</i> , 2020, 8, 69.	2.9	10
6	On the Effect of Pre-formed Scales in Mitigating Corrosion of Steels in CO2 Environments. <i>Journal of Bio- and Tribo-Corrosion</i> , 2020, 6, 1.	2.6	1
7	Mapping the Micro-Abrasion Mechanisms of CoCrMo: Some Thoughts on Varying Ceramic Counterface Diameter on Transition Boundaries In Vitro. <i>Lubricants</i> , 2020, 8, 71.	2.9	6
8	Mapping Raindrop Erosion of GFRP Composite Wind Turbine Blade Materials: Perspectives on Degradation Effects in Offshore and Acid Rain Environmental Conditions. <i>Journal of Tribology</i> , 2020, 142, .	1.9	2
9	Repeated impact of simulated hail ice on glass fibre composite materials. <i>Wear</i> , 2019, 432-433, 102926.	3.1	10
10	A note on a design protocol for deoxygenation of water. <i>Electrochemistry Communications</i> , 2019, 103, 12-16.	4.7	7
11	Some Views on the Mapping of Erosion of Coated Composites In Tidal Turbine Simulated Conditions. <i>Tribology Transactions</i> , 2019, 62, 512-523.	2.0	6
12	Raindrop Erosion of Composite Materials: Some Views on the Effect of Bending Stress on Erosion Mechanisms. <i>Journal of Bio- and Tribo-Corrosion</i> , 2019, 5, 1.	2.6	11
13	Some Thoughts on Mapping Tribological Issues of Wind Turbine Blades Due to Effects of Onshore and Offshore Raindrop Erosion. <i>Journal of Bio- and Tribo-Corrosion</i> , 2018, 4, 1.	2.6	11
14	The Effect of Dissolved Oxygen in Slurry on Erosion-Corrosion of En30B Steel. <i>Journal of Bio- and Tribo-Corrosion</i> , 2017, 3, 1.	2.6	19
15	Corrosion, Tribology, and Tribocorrosion Research in Biomedical Implants: Progressive Trend in the Published Literature. <i>Journal of Bio- and Tribo-Corrosion</i> , 2017, 3, 1.	2.6	53
16	Mapping hail meteorological observations for prediction of erosion in wind turbines. <i>Wind Energy</i> , 2016, 19, 777-784.	4.2	27
17	Mapping Synergy of Erosion Mechanisms of Tidal Turbine Composite Materials in Sea Water Conditions. <i>Journal of Bio- and Tribo-Corrosion</i> , 2016, 2, 1.	2.6	10
18	Impact Angle Effects on Erosion Maps of GFRP: Applications to Tidal Turbines. <i>Journal of Bio- and Tribo-Corrosion</i> , 2016, 2, 1.	2.6	9

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19	Micro-abrasion-corrosion Maps of 316L Stainless Steel in Artificial Saliva. Journal of Bio- and Tribo-Corrosion, 2015, 1, 1.	2.6	8
20	Wear mapping of CoCrMo alloy in simulated bio-tribocorrosion conditions of a hip prosthesis bearing in calf serum solution. Materials Science and Engineering C, 2015, 49, 452-462.	7.3	38
21	Methodology Development for Investigation of Slurry Abrasion Corrosion by Integrating an Electrochemical Cell to a Miller Tester. Journal of Bio- and Tribo-Corrosion, 2015, 1, 1.	2.6	5
22	Mapping wear mechanisms of TiC/Ti composite coatings. Wear, 2015, 328-329, 498-508.	3.1	56
23	Tribo-oxidation maps for Ti against steel. Tribology International, 2015, 91, 258-266.	5.9	14
24	Wear maps for TiC composite based coatings deposited on 303 stainless steel. Tribology International, 2014, 74, 93-102.	5.9	78
25	Tribo-corrosion of steel in artificial saliva. Tribology International, 2014, 75, 80-86.	5.9	20
26	Bio-tribocorrosion mechanisms in orthopaedic devices: Mapping the micro-abrasionâ€“corrosion behaviour of a simulated CoCrMo hip replacement in calf serum solution. Wear, 2014, 316, 58-69.	3.1	33
27	Phase transformation behavior of 3mol% yttria partially-stabilized ZrO ₂ (3Yâ€“PSZ) precursor powder by an isothermal method. Ceramics International, 2014, 40, 3243-3251.	4.8	31
28	Mapping the role of Cr content in dry sliding of steels: Comparison between maps for material and counterface. Tribology International, 2014, 80, 49-57.	5.9	15
29	Growth kinetics of tetragonal and monoclinic ZrO ₂ crystallites in 3mol% yttria partially stabilized ZrO ₂ (3Y-PSZ) precursor powder. Journal of Alloys and Compounds, 2014, 592, 288-295.	5.5	16
30	Micro-abrasion of Y-TZP in tea. Wear, 2013, 297, 713-721.	3.1	13
31	3rd International Conference on Tribocorrosion â€“ Atlanta 2012. Tribology International, 2013, 68, iv.	5.9	0
32	On erosion issues associated with the leading edge of wind turbine blades. Journal Physics D: Applied Physics, 2013, 46, 383001.	2.8	158
33	Special cluster issue on tribocorrosion of dental materials. Journal Physics D: Applied Physics, 2013, 46, 400301.	2.8	0
34	A comparison of the tribological behaviour of Y-TZP in tea and coffee under micro-abrasion conditions. Journal Physics D: Applied Physics, 2013, 46, 404008.	2.8	4
35	Future Needs and Challenges in Tribo-Corrosion Research and Testing. , 2013, , 214-226.		5
36	An Approach to Mapping the Erosionâ€“Corrosion of Stainless Steel: Applications to Tidal Energy Systems. , 2013, , 19-46.		3

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37	Modelling Rain Drop Impact of Offshore Wind Turbine Blades. , 2012, , .		26
38	Particle concentration and size effects on the erosion-corrosion of pure metals in aqueous slurries. Tribology International, 2012, 53, 35-44.	5.9	47
39	Mapping erosion-corrosion of carbon steel in oil-water solutions: Effects of velocity and applied potential. Wear, 2012, 274-275, 401-413.	3.1	45
40	Some views on the construction of bio-tribo-corrosion maps for Titanium alloys in Hank's solution: Particle concentration and applied loads effects. Tribology International, 2011, 44, 1827-1837.	5.9	28
41	A CFD model of particle concentration effects on erosion-corrosion of Fe in aqueous conditions. Wear, 2011, 273, 38-42.	3.1	27
42	Micro-abrasion-corrosion interactions of Ni-Cr/WC based coatings: Approaches to construction of tribo-corrosion maps for the abrasion-corrosion synergism. Electrochimica Acta, 2011, 56, 8249-8259.	5.2	26
43	A note on threshold velocity criteria for modelling the solid particle erosion of WC/Co MMCs. Wear, 2011, 270, 439-445.	3.1	13
44	CrN/NbN coatings deposited by HIPIMS: A preliminary study of erosion-corrosion performance. Surface and Coatings Technology, 2010, 204, 1158-1162.	4.8	33
45	Some remarks on particle size effects on the abrasion of a range of Fe based alloys. Tribology International, 2010, 43, 1307-1317.	5.9	11
46	Mapping erosion-corrosion of carbon steel in oil exploration conditions: Some new approaches to characterizing mechanisms and synergies. Tribology International, 2010, 43, 1268-1277.	5.9	100
47	2nd International Conference on TriboCorrosion: East meets West. Tribology International, 2010, 43, 1201-1202.	5.9	0
48	On the construction of wear maps for Y-TZP dental ceramics in aqueous environments: pH, exposure time and impact angle effects. Tribology International, 2010, 43, 2258-2267.	5.9	10
49	Some perspectives on modelling the effect of temperature on the erosion-corrosion of Fe in aqueous conditions. Tribology International, 2010, 43, 2279-2297.	5.9	11
50	A new methodology for modelling erosion-corrosion regimes on real surfaces: Gliding down the galvanic series for a range of metal-corrosion systems. Wear, 2010, 268, 533-542.	3.1	38
51	Micro-abrasion-corrosion of a Co-Cr/UHMWPE couple in Ringer's solution: An approach to construction of mechanism and synergism maps for application to bio-implants. Wear, 2010, 269, 376-382.	3.1	68
52	Tribo-corrosion mechanisms of stainless steel in soft drinks. Wear, 2010, 270, 104-114.	3.1	15
53	Tribocorrosion behaviour of TiC O thin films in bio-fluids. Electrochimica Acta, 2010, 56, 929-937.	5.2	55
54	Some comments on mapping the combined effects of slurry concentration, impact velocity and electrochemical potential on the erosion-corrosion of WC/Co-Cr coatings. Wear, 2008, 264, 826-837.	3.1	64

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55	Micro-abrasion resistance of thermochemically treated steels in aqueous solutions: Mechanisms, maps, materials selection. Tribology International, 2008, 41, 141-149.	5.9	16
56	Some thoughts on neural network modelling of microabrasionâ€“corrosion processes. Tribology International, 2008, 41, 672-681.	5.9	27
57	Tribo-Corrosion 2006â€“A passage to India to celebrate the 1st International Conference on Tribo-Corrosion. Tribology International, 2008, 41, 571-572.	5.9	0
58	A celebration of 25 years of the Tribology Group: from tribo-physics to tribo-chemistry. Journal Physics D: Applied Physics, 2007, 40, .	2.8	0
59	Some views on the erosionâ€“corrosion response of bulk chromium carbide based cermets. Journal Physics D: Applied Physics, 2006, 39, 3165-3174.	2.8	19
60	Velocity effects on erosionâ€“corrosion of CrN/NbN â€œsuperlatticeâ€•PVD coatings. Surface and Coatings Technology, 2006, 201, 361-370.	4.8	36
61	Mapping erosionâ€“corrosion of WC/Coâ€“Cr based composite coatings: Particle velocity and applied potential effects. Surface and Coatings Technology, 2006, 201, 1335-1347.	4.8	62
62	Modelling sliding wear: From dry to wet environments. Wear, 2006, 261, 954-965.	3.1	68
63	On the construction of erosionâ€“corrosion maps for WC/Coâ€“Cr-based coatings in aqueous conditions. Wear, 2006, 261, 1181-1190.	3.1	36
64	A study of the erosionâ€“corrosion of PVD CrN/NbN superlattice coatings in aqueous slurries. Wear, 2005, 259, 256-262.	3.1	29
65	Modelling impact angle effects on erosionâ€“corrosion of pure metals: Construction of materials performance maps. Wear, 2005, 259, 243-255.	3.1	36
66	On the construction of micro-abrasion maps for a steel/polymer couple in corrosive environments. Tribology International, 2005, 38, 848-856.	5.9	57
67	Title is missing!. Tribology International, 2005, 38, 785.	5.9	0
68	Modelling particulate erosionâ€“corrosion regime transitions for Al/Al ₂ O ₃ and Cu/Al ₂ O ₃ MMCs in aqueous conditions. Tribology International, 2005, 38, 995-1006.	5.9	7
69	Bridging the gap between tribology and corrosion: from wear maps to Pourbaix diagrams. International Materials Reviews, 2005, 50, 1-17.	19.3	53
70	Transitions in microabrasion mechanisms for WC-Co (HVOF) coated steel. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2005, 219, 49-57.	1.8	5
71	A generic model for dry sliding wear of metals at elevated temperatures. Wear, 2004, 256, 973-985.	3.1	112
72	Erosionâ€“corrosion of chromium steel in a rotating cylinder electrode system: some comments on particle size effects. Wear, 2004, 256, 557-564.	3.1	28

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73	Erosion&corrosion mapping of Fe in aqueous slurries: some views on a new rationale for defining the erosion&corrosion interaction. <i>Wear</i> , 2004, 256, 565-576.	3.1	83
74	Some comments on micro-abrasion interactions of pure metals in bio-oils. <i>Journal of Synthetic Lubrication: Research, Development and Application of Synthetic Lubricants and Functional Fluids</i> , 2004, 21, 105-118.	0.7	3
75	Modelling particulate erosion&corrosion in aqueous slurries: some views on the construction of erosion&corrosion maps for a range of pure metals. <i>Wear</i> , 2004, 256, 986-1004.	3.1	61
76	Mapping the micro-abrasion resistance of WC/Co based coatings in aqueous conditions. <i>Surface and Coatings Technology</i> , 2004, 183, 337-346.	4.8	24
77	Impact angle effects on the erosion&corrosion of superlattice CrN/NbN PVD coatings. <i>Surface and Coatings Technology</i> , 2004, 188-189, 556-565.	4.8	32
78	There's something in the way you move. <i>Physics World</i> , 2004, 17, 24-25.	0.0	0
79	Micro-abrasion transitions of metallic materials. <i>Wear</i> , 2003, 255, 14-22.	3.1	54
80	Some thoughts on modelling the effects of oxygen and particle concentration on the erosion&corrosion of steels in aqueous slurries. <i>Wear</i> , 2003, 255, 225-236.	3.1	36
81	Mapping sliding wear of steels in aqueous conditions. <i>Wear</i> , 2003, 255, 456-465.	3.1	49
82	Particulate erosion&corrosion of Al in aqueous conditions: some perspectives on pH effects on the erosion&corrosion map. <i>Tribology International</i> , 2002, 35, 651-660.	5.9	38
83	Modelling the tribo-corrosion interaction in aqueous sliding conditions. <i>Tribology International</i> , 2002, 35, 669-679.	5.9	171
84	Mapping tribo-corrosion processes in dry and in aqueous conditions: some new directions for the new millennium. <i>Tribology International</i> , 2002, 35, 681-689.	5.9	57
85	Title is missing!. <i>Journal of Materials Science Letters</i> , 2001, 20, 547-550.	0.5	2
86	Macroparticle induced corrosion for arc bond sputtering CrN/NbN superlattice coatings. <i>Journal of Materials Science Letters</i> , 2001, 20, 1995-1997.	0.5	6
87	Title is missing!. <i>Journal of Applied Electrochemistry</i> , 2001, 31, 1373-1379.	2.9	5
88	Mapping erosion of Ni&Cr/WC-based composites at elevated temperatures: some recent advances. <i>Wear</i> , 2001, 251, 1433-1443.	3.1	22
89	Corrosion behaviour and characterisation of iron in hot flowing Bayer liquors. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2000, 51, 705-711.	1.5	2
90	The corrosion behaviour of macroparticle defects in arc bond-sputtered CrN/NbN superlattice coatings. <i>Surface and Coatings Technology</i> , 2000, 126, 279-287.	4.8	107

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91	Wear associated with growth defects in combined cathodic arc/unbalanced magnetron sputtered CrN/NbN superlattice coatings during erosion in alkaline slurry. <i>Surface and Coatings Technology</i> , 2000, 135, 82-90.	4.8	24
92	Title is missing!. <i>Journal of Materials Science</i> , 2000, 35, 5263-5273.	3.7	21
93	Slurry erosion of metallics, polymers, and ceramics: particle size effects. <i>Materials Science and Technology</i> , 1999, 15, 337-344.	1.6	41
94	The influence of low concentrations of chromium and yttrium on the oxidation behaviour, residual stress and corrosion performance of TiAlN hard coatings on steel substrates. <i>Vacuum</i> , 1999, 55, 109-114.	3.5	53
95	Impact angle effects on the transition boundaries of the aqueous erosion-corrosion map. <i>Wear</i> , 1999, 225-229, 190-198.	3.1	22
96	Simplifying the erosion-corrosion mechanism map for erosion of thin coatings in aqueous slurries. <i>Wear</i> , 1999, 233-235, 542-551.	3.1	14
97	Some recent advances in the development of theoretical approaches for the construction of erosion-corrosion maps in aqueous conditions. <i>Wear</i> , 1999, 233-235, 535-541.	3.1	23
98	Looking beyond the millennium: critical issues in the evaluation of materials performance for resistance to erosive wear in corrosive conditions. <i>Wear</i> , 1999, 233-235, 484-496.	3.1	5
99	Particle size effects on the elevated temperature erosion behaviour of Ni-Cr/WC MMC-based coatings. <i>Surface and Coatings Technology</i> , 1999, 113, 5-12.	4.8	15
100	Some thoughts on the construction of erosion-corrosion maps for PVD coated steels in aqueous environments. <i>Surface and Coatings Technology</i> , 1999, 113, 52-62.	4.8	7
101	In situ solid state electrochemical impedance spectroscopy of NiO scales. <i>Solid State Ionics</i> , 1999, 126, 363-372.	2.7	9
102	Title is missing!. <i>Tribology Letters</i> , 1999, 6, 23-36.	2.6	10
103	Some thoughts on the effect of elastic rebounds on the boundaries of the aqueous erosion-corrosion map. <i>Wear</i> , 1998, 214, 175-185.	3.1	26
104	A note on the construction of materials performance maps for resistance to erosion in aqueous slurries. <i>Wear</i> , 1998, 215, 67-76.	3.1	9
105	The role of triboparticulates in dry sliding wear. <i>Tribology International</i> , 1998, 31, 245-256.	5.9	227
106	Erosion of PVD TiN coatings under simultaneous corrosion in sodium carbonate/bicarbonate buffer slurries containing alumina particles. <i>Surface and Coatings Technology</i> , 1998, 106, 1-7.	4.8	12
107	Corrosion of PVD TiN coatings under simultaneous erosion in sodium carbonate/bicarbonate buffered slurries. <i>Surface and Coatings Technology</i> , 1998, 105, 141-146.	4.8	13
108	Optimizing the performance of materials in FBC conditions using erosion-corrosion wastage and materials performance maps. <i>Materials at High Temperatures</i> , 1997, 14, 313-324.	1.0	2

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109	Characterization of wear scar surfaces using combined three-dimensional topographic analysis and contact resistance measurements. <i>Tribology International</i> , 1997, 30, 517-526.	5.9	15
110	Some issues relating to the construction of materials selection maps for resistance to elevated temperature erosion. <i>Tribology International</i> , 1997, 30, 435-444.	5.9	7
111	A methodology for the construction of the erosion-corrosion map in aqueous environments. <i>Wear</i> , 1997, 203-204, 474-488.	3.1	55
112	Solid particle erosion of metal matrix composites at elevated temperatures: construction of erosion mechanism and process control maps. <i>Wear</i> , 1997, 203-204, 489-497.	3.1	26
113	The effect of partial pressure of oxygen on the tribological behaviour of a nickel-based alloy, N80A, at elevated temperatures. <i>Wear</i> , 1997, 203-204, 615-625.	3.1	38
114	Electrochemical studies of anodic dissolution of mild steel in a carbonate-bicarbonate buffer under erosion-corrosion conditions. <i>Corrosion Science</i> , 1996, 38, 1071-1084.	6.6	43
115	Characterization of Synergistic Effects Between Erosion and Corrosion in an Aqueous Environment Using Electrochemical Techniques. <i>Corrosion</i> , 1996, 52, 934-946.	1.1	79
116	Elevated temperature erosion of range of composite layers of Ni-Cr based functionally graded material. <i>Materials Science and Technology</i> , 1996, 12, 171-177.	1.6	11
117	Construction of erosion-corrosion maps for erosion in aqueous slurries. <i>Materials Science and Technology</i> , 1996, 12, 662-672.	1.6	22
118	Effects of particle velocity and applied potential on erosion of mild steel in carbonate/bicarbonate slurry. <i>Materials Science and Technology</i> , 1996, 12, 261-268.	1.6	27
119	Erosion-corrosion Mapping in Dry and in Aqueous Environments: Review of Recent Developments. <i>Zairyo To Kankyo/ Corrosion Engineering</i> , 1996, 45, 551-559.	0.2	0
120	Erosion-corrosion regimes: number, nomenclature and justification?. <i>Tribology International</i> , 1995, 28, 445-451.	5.9	40
121	The erosion-corrosion of alloys under oxidizing-sulphidizing conditions at high temperature. <i>Wear</i> , 1995, 186-187, 291-298.	3.1	11
122	Relationship between the effects of velocity and alloy corrosion resistance in erosion-corrosion environments at elevated temperatures. <i>Wear</i> , 1995, 180, 91-99.	3.1	45
123	Interpretation of wastage mechanisms of materials exposed to elevated temperature erosion-corrosion using erosion-corrosion maps and computer graphics. <i>Wear</i> , 1995, 186-187, 273-283.	3.1	24
124	Identification of transitions in erosion-corrosion regimes in aqueous environments. <i>Wear</i> , 1995, 186-187, 523-532.	3.1	57
125	A mathematical model for sliding wear of metals at elevated temperatures. <i>Wear</i> , 1995, 181-183, 20-31.	3.1	118
126	Computer simulation of erosion-corrosion interactions at elevated temperatures. <i>Wear</i> , 1995, 181-183, 516-523.	3.1	5

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127	Synergism between effects of velocity, temperature, and alloy corrosion resistance in laboratory simulated fluidised bed environments. <i>Materials Science and Technology</i> , 1995, 11, 1180-1186.	1.6	14
128	Some frictional features associated with the sliding wear of the nickel-base alloy N80A at temperatures to 250 Å°C. <i>Wear</i> , 1994, 176, 185-194.	3.1	113
129	Review of mechanisms of erosion-corrosion of alloys at elevated temperatures. <i>Wear</i> , 1993, 162-164, 706-712.	3.1	38
130	An approach to modelling erosion-corrosion of alloys using erosion-corrosion maps. <i>Corrosion Science</i> , 1993, 35, 1027-1034.	6.6	30
131	The effect of substrate hardness on the erosion-corrosion resistance of materials in low-velocity conditions. <i>Corrosion Science</i> , 1993, 35, 1045-1051.	6.6	23
132	Computer simulation of the effect of pre-oxidation in erosion-corrosion environments. <i>Journal Physics D: Applied Physics</i> , 1992, 25, A170-A176.	2.8	1
133	The effect of pre-oxidation of chromia and alumina forming alloys on erosion in laboratory simulated fluidized-bed conditions. <i>Corrosion Science</i> , 1992, 33, 965-983.	6.6	19
134	High temperature erosion of pre-oxidized and as received alloys: Effects of impact angle, temperature and hot hardness. <i>Materials at High Temperatures</i> , 1991, 9, 153-159.	1.0	8
135	Erosion-“corrosion of preoxidised Incoloy 800H in fluidised bed environments: effects of temperature, velocity, and exposure time. <i>Materials Science and Technology</i> , 1991, 7, 1128-1137.	1.6	30