

# Tim H Muster

## List of Publications by Year in descending order

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74  
papers

4,183  
citations

81900

39  
h-index

114465

63  
g-index

76  
all docs

76  
docs citations

76  
times ranked

4186  
citing authors

#	ARTICLE	IF	CITATIONS
1	Corrosion of AA2024-T3 Part I: Localised corrosion of isolated IM particles. Corrosion Science, 2011, 53, 17-26.	6.6	312
2	Enhanced efficiency fertilisers: a review of formulation and nutrient release patterns. Journal of the Science of Food and Agriculture, 2015, 95, 1131-1142.	3.5	290
3	Carbon dots as fluorescent probes for "off-on" detection of Cu <sup>2+</sup> and l-cysteine in aqueous solution. Biosensors and Bioelectronics, 2014, 51, 330-335.	10.1	278
4	Designing green, self-healing coatings for metal protection. NPG Asia Materials, 2010, 2, 143-151.	7.9	190
5	Stable pit formation on AA2024-T3 in a NaCl environment. Corrosion Science, 2010, 52, 90-103.	6.6	181
6	How complex is the microstructure of AA2024-T3?. Corrosion Science, 2009, 51, 1565-1568.	6.6	170
7	Corrosion of AA2024-T3 Part II: Co-operative corrosion. Corrosion Science, 2011, 53, 27-39.	6.6	169
8	The effect of inhibitor structure on the corrosion of AA2024 and AA7075. Corrosion Science, 2011, 53, 2184-2190.	6.6	119
9	Corrosion of AA2024-T3 Part III: Propagation. Corrosion Science, 2011, 53, 40-50.	6.6	111
10	Simulation of galvanic corrosion of magnesium coupled to a steel fastener in NaCl solution. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 468-474.	1.5	106
11	Anaerobic digestion/co-digestion kinetic potentials of different agro-industrial wastes: A comparative batch study for C/N optimisation. Waste Management, 2018, 71, 663-674.	7.4	106
12	A review of high throughput and combinatorial electrochemistry. Electrochimica Acta, 2011, 56, 9679-9699.	5.2	102
13	The protective nature of passivation films on zinc: surface charge. Corrosion Science, 2004, 46, 2319-2335.	6.6	100
14	A rapid screening multi-electrode method for the evaluation of corrosion inhibitors. Electrochimica Acta, 2009, 54, 3402-3411.	5.2	97
15	Water adsorption kinetics and contact angles of silica particles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 176, 253-266.	4.7	88
16	The characterisation and performance of Ce(dbp) <sub>3</sub> -inhibited epoxy coatings. Progress in Organic Coatings, 2011, 70, 91-101.	3.9	77
17	The influence of pH on corrosion inhibitor selection for 2024-T3 aluminium alloy assessed by high-throughput multielectrode and potentiodynamic testing. Electrochimica Acta, 2010, 55, 2457-2465.	5.2	73
18	Towards effective phosphorus recycling from wastewater: Quantity and quality. Chemosphere, 2013, 91, 676-684.	8.2	71

#	ARTICLE	IF	CITATIONS
19	Applying a chemical equilibrium model for optimizing struvite precipitation for ammonium recovery from anaerobic digester effluent. <i>Journal of Cleaner Production</i> , 2017, 147, 297-305.	9.3	65
20	A combinatorial matrix of rare earth chloride mixtures as corrosion inhibitors of AA2024-T3: Optimisation using potentiodynamic polarisation and EIS. <i>Electrochimica Acta</i> , 2012, 67, 95-103.	5.2	64
21	An "omics" approach towards the characterisation of laboratory scale anaerobic digesters treating municipal sewage sludge. <i>Water Research</i> , 2016, 88, 346-357.	11.3	63
22	Semi-continuous anaerobic co-digestion of chicken litter with agricultural and food wastes: A case study on the effect of carbon/nitrogen ratio, substrates mixing ratio and organic loading. <i>Bioresource Technology</i> , 2018, 270, 245-254.	9.6	63
23	Applications and Limitations of Scanning Kelvin Probe Force Microscopy for the Surface Analysis of Aluminum Alloys. <i>Journal of the Electrochemical Society</i> , 2006, 153, B474.	2.9	59
24	Multiscale modelling of the corrosion of metals under atmospheric corrosion. <i>Electrochimica Acta</i> , 2011, 56, 1856-1865.	5.2	58
25	Comparability and accuracy of time of wetness sensing methods relevant for atmospheric corrosion. <i>Corrosion Science</i> , 2013, 67, 233-241.	6.6	53
26	The protective nature of passivation films on zinc: wetting and surface energy. <i>Corrosion Science</i> , 2004, 46, 2337-2354.	6.6	52
27	Pitting of zinc: Observations on atmospheric corrosion in tropical countries. <i>Corrosion Science</i> , 2010, 52, 848-858.	6.6	50
28	Face specific surface properties of pharmaceutical crystals. <i>Journal of Pharmaceutical Sciences</i> , 2002, 91, 1432-1444.	3.3	49
29	The atmospheric corrosion of zinc: The effects of salt concentration, droplet size and droplet shape. <i>Electrochimica Acta</i> , 2011, 56, 1866-1873.	5.2	49
30	Photoluminescence enhancement of carbon dots by gold nanoparticles conjugated via PAMAM dendrimers. <i>Nanoscale</i> , 2013, 5, 11200.	5.6	49
31	A Review of Surface Functionalized Amine Terminated Dendrimers for Application in Biological and Molecular Sensing. <i>Supramolecular Chemistry</i> , 2007, 19, 431-445.	1.2	46
32	Products Formed during the Interaction of Seawater Droplets with Zinc Surfaces. <i>Journal of the Electrochemical Society</i> , 2010, 157, C213.	2.9	46
33	FIB/SEM study of AA2024 corrosion under a seawater drop: Part I. <i>Corrosion Science</i> , 2011, 53, 1086-1096.	6.6	45
34	Application of time-dependent sessile drop contact angles on compacts to characterise the surface energetics of sulfathiazole crystals. <i>International Journal of Pharmaceutics</i> , 2002, 234, 43-54.	5.2	44
35	High-throughput channel arrays for inhibitor testing: Proof of concept for AA2024-T3. <i>Corrosion Science</i> , 2009, 51, 2279-2290.	6.6	44
36	Products Formed during the Interaction of Seawater Droplets with Zinc Surfaces: I. Results from 1- and 2.5-Day Exposures. <i>Journal of the Electrochemical Society</i> , 2008, 155, C244.	2.9	42

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37	Co-operative corrosion phenomena. Corrosion Science, 2010, 52, 665-668.	6.6	42
38	A new high-throughput method for corrosion testing. Corrosion Science, 2012, 58, 327-331.	6.6	42
39	Rheological investigations of sulphide mineral slurries. Minerals Engineering, 1995, 8, 1541-1555.	4.3	41
40	Interactions between zinc sulphide particles under flotation-related conditions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 106, 203-211.	4.7	37
41	Factors influencing the deposition of Ce-based conversion coatings, part I: The role of Al <sup>3+</sup> ions. Surface and Coatings Technology, 2009, 203, 2927-2936.	4.8	34
42	FIB/SEM study of AA2024 corrosion under a seawater drop, part II. Corrosion Science, 2012, 55, 116-125.	6.6	34
43	Omics-based approaches and their use in the assessment of microbial-influenced corrosion of metals. Corrosion Reviews, 2016, 34, 1-15.	2.0	33
44	Vacancy ordering in $\hat{\text{I}}^3\text{-Fe}_2\text{O}_3$ nanocrystals observed by $^{57}\text{Fe}$ NMR. Journal of Magnetism and Magnetic Materials, 2009, 321, 2677-2681.	2.3	32
45	Urban transformation stories for the 21st century: Insights from strategic conversations. Global Environmental Change, 2018, 50, 222-237.	7.8	30
46	Factors influencing the deposition of Ce-based conversion coatings, Part II: The role of localised reactions. Surface and Coatings Technology, 2009, 203, 2937-2945.	4.8	26
47	Microstructure of a Paint Primer - a Data-Constrained Modeling Analysis. Materials Science Forum, 0, 654-656, 1686-1689.	0.3	23
48	Water Adsorption Kinetics and Contact Angles of Pharmaceutical Powders. Journal of Pharmaceutical Sciences, 2005, 94, 861-872.	3.3	21
49	The influence of microstructure on surface phenomena: Rolled zinc. Corrosion Science, 2007, 49, 2037-2058.	6.6	21
50	Electron-Beam-Induced Carbon Contamination on Silicon: Characterization Using Raman Spectroscopy and Atomic Force Microscopy. Microscopy and Microanalysis, 2010, 16, 13-20.	0.4	21
51	Using X-ray tomography, PALS and Raman spectroscopy for characterization of inhibitors in epoxy coatings. Progress in Organic Coatings, 2012, 74, 726-733.	3.9	16
52	Electrochemically-assisted ammonia recovery from wastewater using a floating electrode. Water Science and Technology, 2017, 75, 1804-1811.	2.5	15
53	Application of Victorian brown coal for removal of ammonium and organics from wastewater. Environmental Technology (United Kingdom), 2018, 39, 1041-1051.	2.2	14
54	Nano-scale reservoir computing. Nano Communication Networks, 2013, 4, 189-196.	2.9	13

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55	A High-Throughput Test Methodology for Atmospheric Corrosion Studies. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, C9.	2.2	12
56	Environmental Life Cycle Costing and Sustainability: Insights from Pollution Abatement and Resource Recovery in Wastewater Treatment. <i>Journal of Industrial Ecology</i> , 2018, 22, 1127-1138.	5.5	12
57	Non-chromate deoxidation of AA2024-T3 using Fe(III)-HF-HNO <sub>3</sub> . <i>Surface and Interface Analysis</i> , 2005, 37, 15-23.	1.8	10
58	Investigation into the Influence of Carbon Contamination on the Corrosion Behavior of Aluminum Microelectrodes and AA2024-T3. <i>Journal of the Electrochemical Society</i> , 2013, 160, C119-C127.	2.9	10
59	Attachment Efficiencies of Salt Aerosols onto Infrastructure and Implications for Atmospheric Corrosion. <i>Journal of the Electrochemical Society</i> , 2005, 152, B125.	2.9	8
60	Development of a System for Corrosion Diagnostics and Prognostics. <i>Corrosion Reviews</i> , 2007, 25, 161-178.	2.0	8
61	Development of a sensor-based learning approach to prognostics in intelligent vehicle health monitoring. , 2008, , .		8
62	Understanding soil water effects on nitrogen release from controlled-release fertilizers. <i>Soil Science Society of America Journal</i> , 2021, 85, 59-72.	2.2	8
63	Multilayered coatings: Tuneable protection for metals. <i>Corrosion Science</i> , 2010, 52, 3847-3850.	6.6	7
64	Data-constrained microstructure modeling with multi-spectrum x-ray CT. <i>Proceedings of SPIE</i> , 2010, , .	0.8	4
65	In-situ synthesis of functional silica nanoparticles for enhancement the corrosion resistance of TBCs. <i>Surface and Coatings Technology</i> , 2013, 225, 106-111.	4.8	4
66	Dynamic contact angle measurement on materials with an unknown wet perimeter. <i>International Journal of Pharmaceutics</i> , 2004, 282, 189-191.	5.2	3
67	Cu-based Fe phosphate coating and its application in CO <sub>2</sub> pipelines. <i>Surface and Coatings Technology</i> , 2013, 228, 167-175.	4.8	3
68	Aging of magnetite nanoparticles in aqueous solutions of differing pH. , 2008, , .		2
69	Cu <sup>2+</sup> , Fe <sup>2+</sup> and Fe <sup>3+</sup> analysis of bioleaching solutions using chronoamperometry and BDD electrode. <i>Journal of Applied Electrochemistry</i> , 2014, 44, 1135-1143.	2.9	2
70	Embedded magnetic nanoparticle sensors for monitoring primer failure beneath paint. <i>Sensors and Actuators B: Chemical</i> , 2015, 210, 446-452.	7.8	2
71	Particle formation and gelling behaviour of anionic oligoesters in aqueous solution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2003, 228, 181-187.	4.7	1
72	Nano-scale reservoir computing. , 2013, , .		1

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73	Fluorescence Studies of Anthracene Functionalized PAMAM Dendrimers Anchored to Self Assembled Monolayers. , 2006, , .		0
74	Application of a novel sampling bailer device for the analysis of dissolved methane concentrations in municipal wastewater during and following anaerobic treatment. Water Science and Technology, 2016, 73, 2936-2943.	2.5	0