

# N Stewart McIntyre

## List of Publications by Year in descending order

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79  
papers

7,018  
citations

270111

25  
h-index

81351

76  
g-index

82  
all docs

82  
docs citations

82  
times ranked

13386  
citing authors

#	ARTICLE	IF	CITATIONS
1	A spectroscopic study of leak failures in cross-linked polyethylene tubing used in domestic water supply systems. <i>Surface and Interface Analysis</i> , 2017, 49, 1366-1371.	0.8	0
2	X-ray photoelectron study of oxides formed on Ni metal and Ni-Cr alloy surfaces under electrochemical control at 25°C and 150°C. <i>Surface and Interface Analysis</i> , 2017, 49, 1316-1324.	0.8	1
3	Mapping of changes in microscopic strain in Alloy 600 during multi-step applications of mechanical stress. <i>Surface and Interface Analysis</i> , 2017, 49, 1442-1448.	0.8	1
4	Acquisition, Sharing, and Processing of Large Data Sets for Strain Imaging: An Example of an Indented Ni3Al/Mo Composite. <i>Jom</i> , 2013, 65, 29-34.	0.9	2
5	Gas Phase Initial Oxidation of Incoloy 800 Surfaces. <i>Oxidation of Metals</i> , 2013, 79, 179-200.	1.0	8
6	Remote Internet Access to Advanced Analytical Facilities: A New Approach with Web-Based Services. <i>Analytical Chemistry</i> , 2012, 84, 7283-7291.	3.2	10
7	Plastic and elastic strains in short and long cracks in Alloy 600 studied by polychromatic X-ray microdiffraction and electron backscatter diffraction. <i>Acta Materialia</i> , 2012, 60, 5508-5515.	3.8	7
8	The study of stress application and corrosion cracking on Ni-16 Cr-9 Fe (Alloy 600) C-ring samples by polychromatic X-ray microdiffraction. <i>Acta Materialia</i> , 2012, 60, 781-792.	3.8	13
9	Study of residual elastic- and plastic-deformation in uniaxial tensile strained nickel-based Alloy 600 samples by polychromatic X-ray microdiffraction (PXM) and neutron diffraction methods. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 524, 20-27.	2.6	11
10	X-ray Micro Laue Diffraction and Neutron Diffraction Analysis of Residual Elastic Strains in a 1% Uniaxial Tensile Tested Nickel Alloy 600 Sample. <i>Materials Research Society Symposia Proceedings</i> , 2008, 1137, 102801.	0.1	3
11	XPS characterization of the corrosion film formed on the electroless nickel deposit prepared using different stabilizers in NaCl solution. <i>Surface and Interface Analysis</i> , 2007, 39, 405-414.	0.8	13
12	Structure and growth of oxides on polycrystalline nickel surfaces. <i>Surface and Interface Analysis</i> , 2007, 39, 582-592.	0.8	71
13	ToF-SIMS Investigation of Octadecylphosphonic Acid Monolayers on a Mica Substrate. <i>Langmuir</i> , 2006, 22, 9244-9250.	1.6	16
14	New interpretations of XPS spectra of nickel metal and oxides. <i>Surface Science</i> , 2006, 600, 1771-1779.	0.8	1,663
15	The open-circuit ennoblement of alloy C-22 and other Ni-Cr-Mo alloys. <i>Jom</i> , 2005, 57, 31-35.	0.9	39
16	XPS imaging investigations of pitting corrosion mechanisms in Inconel 600. <i>Surface and Interface Analysis</i> , 2005, 37, 478-494.	0.8	16
17	ToF-SIMS studies of the oxidation of Fe by D2 O vapour: comparison with XPS. <i>Surface and Interface Analysis</i> , 2005, 37, 495-498.	0.8	9
18	Static SIMS studies of fatty alcohols, amines and esters on gold and aluminium-magnesium alloy surfaces. <i>Surface and Interface Analysis</i> , 2005, 37, 499-508.	0.8	5

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19	Enhancement of the positive secondary ion yield during low-energy, dual-beam depth profiling of polytetrafluoroethylene with 1-keV Cs <sup>+</sup> . <i>Surface and Interface Analysis</i> , 2005, 37, 743-748.	0.8	3
20	XPS studies of octadecylphosphonic acid (OPA) monolayer interactions with some metal and mineral surfaces. <i>Surface and Interface Analysis</i> , 2005, 37, 749-754.	0.8	21
21	Atomic Force Microscopy Study of Biaxially Oriented Polypropylene Films. <i>Journal of Materials Engineering and Performance</i> , 2004, 13, 451-460.	1.2	14
22	Use of QUASES <sup>®</sup> /XPS measurements to determine the oxide composition and thickness on an iron substrate. <i>Surface and Interface Analysis</i> , 2004, 36, 632-639.	0.8	62
23	X-ray photoelectron spectroscopy studies of chromium compounds. <i>Surface and Interface Analysis</i> , 2004, 36, 1550-1563.	0.8	419
24	Investigation of multiplet splitting of Fe 2p XPS spectra and bonding in iron compounds. <i>Surface and Interface Analysis</i> , 2004, 36, 1564-1574.	0.8	2,742
25	Studies of the oxidation of iron by air after being exposed to water vapour using angle-resolved x-ray photoelectron spectroscopy and QUASES <sup>®</sup> . <i>Surface and Interface Analysis</i> , 2004, 36, 1637-1641.	0.8	40
26	Molecular Organization Revealed by Time-of-Flight Secondary Ion Mass Spectrometry of a Clinically Used Extracted Pulmonary Surfactant. <i>Langmuir</i> , 2003, 19, 3698-3704.	1.6	41
27	Use of biaxially oriented polypropylene film for evaluating and cleaning contaminated atomic force microscopy probe tips: An application to blind tip reconstruction. <i>Review of Scientific Instruments</i> , 2002, 73, 3831-3836.	0.6	16
28	Bilayer and Odd-Numbered Multilayers of Octadecylphosphonic Acid Formed on a Si Substrate Studied by Atomic Force Microscopy. <i>Langmuir</i> , 2002, 18, 2955-2958.	1.6	49
29	Mechanisms for pitting corrosion in alloy N04400 as revealed by imaging XPS, ToF-SIMS and low-voltage SEM. <i>Surface and Interface Analysis</i> , 2002, 33, 29-34.	0.8	16
30	Uses of SIMS three dimensional imaging to understand the relationships between grain boundary chemistry, orientation and intergranular degradation. <i>Surface and Interface Analysis</i> , 2002, 33, 447-452.	0.8	6
31	Interactions of CO <sub>2</sub> and CO at fractional atmosphere pressures with iron and iron oxide surfaces: one possible mechanism for surface contamination?. <i>Surface and Interface Analysis</i> , 2002, 33, 299-305.	0.8	234
32	Use of ToF-SIMS in the study of corrosion processes: Monel 400 steam generator tubing under CANDU start-up conditions. <i>Surface and Interface Analysis</i> , 2002, 34, 189-191.	0.8	4
33	Adventitious carbon growth on aluminium and gold-aluminium alloy surfaces. <i>Surface and Interface Analysis</i> , 2002, 33, 591-594.	0.8	67
34	A Simple and Effective Method of Evaluating Atomic Force Microscopy Tip Performance. <i>Langmuir</i> , 2001, 17, 432-436.	1.6	19
35	Oxidation studies of Au-Al alloys using x-ray photoelectron spectroscopy (XPS) and x-ray absorption near-edge structure (XANES). <i>Surface and Interface Analysis</i> , 2001, 31, 874-880.	0.8	27
36	Effects of temperature and Ar <sup>+</sup> ion bombardment on the initial oxidation stages of polycrystalline aluminium with water vapour. <i>Surface and Interface Analysis</i> , 2001, 31, 1068-1073.	0.8	1

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37	Application of parallel factor analysis and x-ray photoelectron spectroscopy to the initial stages in oxidation of aluminium. I. The Al 2p photoelectron line. Surface and Interface Analysis, 1999, 27, 618-628.	0.8	15
38	Surface studies of (111) facets of cBN mini-crystals. Surface and Interface Analysis, 1999, 27, 698-704.	0.8	5
39	Application of parallel factor analysis and x-ray photoelectron spectroscopy to the initial stages in oxidation of aluminium. II. The O 1s photoelectron line. Surface and Interface Analysis, 1999, 27, 1037-1045.	0.8	23
40	Study of ultraviolet light and ozone surface modification of polypropylene. Journal of Polymer Science Part A, 1999, 37, 2489-2501.	2.5	82
41	Microscopic Stripe Formation and Adhesion Force Increase Introduced by Local Shear-Stress Deformation of Polypropylene Film. Langmuir, 1999, 15, 6484-6489.	1.6	22
42	Analysis of three-dimensional SIMS images using image cross-correlation spectroscopy. Surface and Interface Analysis, 1998, 26, 188-194.	0.8	7
43	Resolution enhancement of x-ray photoelectron spectra by maximum entropy deconvolution. Surface and Interface Analysis, 1998, 26, 195-203.	0.8	30
44	Imaging of oxidized mineral surfaces. Surface and Interface Analysis, 1998, 26, 869-871.	0.8	5
45	Topographic Correction of 3D SIMS Images. Surface and Interface Analysis, 1997, 25, 788-789.	0.8	25
46	Sims image analysis of D2O migration in ZrO2 thin films. Surface and Interface Analysis, 1997, 25, 948-951.	0.8	4
47	XPS Characterization of the Corrosion Films Formed on Nanocrystalline Ni-P Alloys in Sulphuric Acid. Surface and Interface Analysis, 1996, 24, 181-186.	0.8	82
48	Comment on "Curve Fitting of Cr 2p Photoelectron Spectra of Cr2O3 and CrF3". Surface and Interface Analysis, 1996, 24, 529-530.	0.8	57
49	Quantitative XPS Measurements of Some Oxides, Sulphides and Complex Minerals. Surface and Interface Analysis, 1996, 24, 591-596.	0.8	12
50	Reactions of polyethylene surfaces with the downstream products of an air plasma: Gas phase and surface spectroscopic studies. Journal of Polymer Science Part A, 1996, 34, 2299-2310.	2.5	25
51	XPS Studies of the Interface Properties of Conductive Adhesive/Eutectic Solder. Materials Research Society Symposia Proceedings, 1995, 390, 219.	0.1	0
52	Application of the infinite velocity method for quantifying negative secondary ion emissions to multi-layered samples. Surface and Interface Analysis, 1995, 23, 163-170.	0.8	9
53	Use of Zr <sup>2+</sup> secondary ion energy distributions and factor analysis to construct chemical-state depth profiles in SIMS. Surface and Interface Analysis, 1995, 23, 573-580.	0.8	5
54	Addition of a single chemical functional group to a polymer surface with a mass-separated low-energy ion beam. Surface and Interface Analysis, 1995, 23, 873-878.	0.8	21

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55	Use of image depth profiling SIMS for the study of tinplate corrosion. Surface and Interface Analysis, 1994, 21, 177-183.	0.8	18
56	The infinite velocity method: A new method for SIMS quantification. Surface and Interface Analysis, 1994, 21, 747-757.	0.8	17
57	SIMS imaging of insulator surfaces. Surface and Interface Analysis, 1993, 20, 1000-1006.	0.8	3
58	SIMS imaging studies of the corrosion of alloy 800 and alloy 600 surfaces under secondary side boiler conditions. Surface and Interface Analysis, 1992, 18, 601-603.	0.8	12
59	SIMS studies of hydrogen diffusion through oxides on Zr <sub>5</sub> Nb alloy. Surface and Interface Analysis, 1991, 17, 757-763.	0.8	27
60	Study of tinplate structure using imaging secondary ion spectrometry. Surface and Interface Analysis, 1991, 17, 834-841.	0.8	17
61	Modification of polymer surfaces by two-step plasma sensitized reactions. Journal of Polymer Science Part A, 1990, 28, 803-809.	2.5	39
62	Studies of the UV/Ozone oxidation of GaAs using angle-resolved x-ray photoelectron spectroscopy. Surface and Interface Analysis, 1990, 15, 19-26.	0.8	44
63	X-ray photoelectron spectroscopic studies of thin film oxides of cobalt and molybdenum. Surface and Interface Analysis, 1990, 15, 265-272.	0.8	223
64	Analysis of zirconium-niobium pressure tube surfaces for hydrogen using secondary ion mass spectrometry (SIMS). Surface and Interface Analysis, 1990, 15, 591-597.	0.8	16
65	Characterization of oxide structures formed on nickel-chromium alloy during low pressure oxidation at 500-600°C. Oxidation of Metals, 1990, 33, 457-479.	1.0	87
66	Nitrogen plasma treatment of polyethylene and polystyrene in a remote plasma reactor. Journal of Applied Polymer Science, 1990, 40, 1903-1915.	1.3	104
67	Studies on the determination of surface deuterium in AISI 1062, 4037, and 4140 steels by secondary ion mass spectrometry. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1988, 19, 3071-3075.	1.4	1
68	An x-ray photoelectron spectroscopy study on ozone treated InP surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 1621-1624.	0.9	24
69	Spatial chemical analysis of polymer laminates and conducting organic films using SIMS. Surface and Interface Analysis, 1986, 8, 195-203.	0.8	1
70	Reactions on thin films of cobalt-molybdenum oxides: I. characterization of molybdenum and cobalt oxide species by high resolution XPS. Surface and Interface Analysis, 1986, 9, 253-254.	0.8	4
71	Reactions on thin films of cobalt-molybdenum oxides: II. Reduction, sulphidation and hydrodesulphurization (HDS) activities. Surface and Interface Analysis, 1986, 9, 255-257.	0.8	4
72	An x-ray photoelectron spectroscopy study on ozone treated GaAs surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 984-988.	0.9	70

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73	Studies of initial oxidation of nickel-chromium alloys: Surface annealing by hydrogen ion bombardment. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1986, 4, 1866-1874.	0.9	5
74	Suppression of molecular ions in SIMS spectra of metals and semiconductors. <i>Surface and Interface Analysis</i> , 1985, 7, 69-73.	0.8	7
75	Stabilization of charge on electrically insulating surfaces during SIMS experiments—experimental and theoretical studies of the specimen isolation method. <i>Surface and Interface Analysis</i> , 1985, 7, 275-281.	0.8	16
76	Channeling effects in polycrystalline copper—a serious impediment to quantitative Auger analysis?. <i>Surface and Interface Analysis</i> , 1984, 6, 282-285.	0.8	24
77	Suppression of molecular ions in the secondary ion mass spectra of minerals. <i>Surface and Interface Analysis</i> , 1983, 5, 181-185.	0.8	57
78	X-Ray Photoelectron Studies of the Aqueous Oxidation of Inconel-600 Alloy. <i>Journal of the Electrochemical Society</i> , 1979, 126, 750-760.	1.3	99
79	Interfacial Reactions between SF <sub>6</sub> and Molten Magnesium. , 0, , 37-41.		1