

**Uniscan Instruments**  
**Scanning Probe Instrumentation**  
**Published References**

<u>Title</u>	<u>Author List</u>	<u>Journal Reference</u>	<u>System</u>
Investigating Localized Degradation of Organic Coatings Comparison of Electrochemical Impedance Spectroscopy with Local Electrochemical Impedance Spectroscopy	L. V. S. Philippe,(a) G. W. Walter,(b) and S. B. Lyon(a)	J. Electrochem. Soc., Volume 150, Issue 4, pp. B111-B119 (April 2003)	LEIS
Application of localized electrochemical impedance spectroscopy to localized corrosion of organic coatings	Philippe, L; Lyon, S; Walter, G	42nd Corrosion Science Symposium; Swansea; UK; 11-13 Sept. 2001. 21 pp. 2001	LEIS
Sensor Technologies for Monitoring Metabolic Activity in Single Cells—Part II: Nonoptical Methods and Applications	Rachel A. Yotter, Member, IEEE, and Denise Michelle Wilson, Member, IEEE	IEEE SENSORS JOURNAL, VOL. 4, NO. 4, AUGUST 2004	mentions Uniscan's SECM
Surface photovoltage phenomena: theory, experiment, and applications	Kronik, L. / Shapira, Y	Surface Science Reports, Dec 1999	mentions Uniscan's SKP

A comparative study of the anti-settlement properties of mytilid shells	A.V. Bers A1, G.S. Prendergast A2, C.M. Zürn A2, L. Hansson A3, R.M. Head A4, J.C. Thomason A2	Biology Letters , ISSN: 1744-9561 (Paper) 1744-957X (Online) Issue: Volume 2, Number 1 / March 22, 2006 Pages: 88 - 91	OSP
Behaviour of coated low-quality aggregates in road pavements	H. Al Nageim, H. Robinson	Transport, Volume: 159 Issue: 4, November 2006, Page(s): 165-172	OSP
Effect of the applied load on surface contact fatigue of dental filling materials	Koichi Fujii(a b), Thomas E. Carrick(a), Robert Bicker(c) and John F. McCabe(a)	Dental Materials, 2004, Volume 20, Issue 10, Pages 931-938	OSP
Assessment of vitrified CBN wheels for precision grinding	R. Cai, , a and W. B. Rowe	International journal of machine tools & manufacture 2004, vol. 44, no12-13, pp. 1391-1402	OSP
Emerging trends in corrosion protection of magnesium die-castings	Skar, J I; Albright, D	Magnesium Technology 2002 as held at the 2002 TMS Annual Meeting; Seattle, WA; USA; 17-21 Feb. 2002. pp. 255- 261. 2002	OSP

Densification, mechanical properties and wear behavior of WC–VC–Co–Al hardmetals	F. J. Arenas(a), A. Matos(a), M. Cabezas(a), C. Di Rauso(b) and C. Grigorescu(b)	International Journal of Refractory Metals and Hard Materials Volume 19, Issues 4-6 , July-November 2001, Pages 381-387	OSP
Protective Properties of Crude Oils in CO <sub>2</sub> and H <sub>2</sub> S corrosion	Marta Castillo, Hernan Rincon, Simona Duplat, Jose Vera, Evaristo Baron	CORROSION in CO <sub>2</sub> and H <sub>2</sub> S. paper no.5, Houston:NACE,2000	OSP
Numerical modelling of the electrochemical behaviour of 316 stainless steel based upon static and dynamic experimental micro-capillary based techniques: effects of electrolyte low and capillary size	Halina Krawiec, Vincent Vignal and Robert Akid	<a href="#">Journal of Surface and Interface Analysis</a> To be published	SDS
Emulsion-templated porous materials (PolyHIPEs) for selective ion and molecular recognition and transport: applications in electrochemical sensing	Chuntian Zhao, Ekram Danish, Neil R. Cameron and Ritu Katakya	J. Mater. Chem., 2007, 17, 2446 - 2453,	SECM
SECM imaging of electrocatalytic activity for oxygen reduction reaction on thin film materials	Guojin Lu, James S. Cooper and Paul J. McGinn	Electrochimica Acta Volume 52, 30 April 2007, Pages 5172-5181.	SECM
Advances in the application of Scanning Electrochemical Microscopy to Bioanalytical Systems	William S. Roberts <sup>1</sup> , Séamus P.J. Higson <sup>1</sup> , J Griffiths <sup>2</sup> , D Lonsdale <sup>2</sup> .	Biosensors and Bioelectronics 23 (2007) 310-318	SECM

Electrochemical Investigations of the Voltage Dependent Channel Opening Properties of a Gramicidin Analogue.	Thomas J. Jackson, John M. Sanderson and Ritu Katakya	Sensors and Actuators B, Nov 2007	SECM
SECM characterization of Pt–Ru–WC and Pt–Ru–Co ternary thin film combinatorial libraries as anode electrocatalysts for PEMFC	Guojin Lu, a, , James S. Cooper and Paul J. McGinna	Journal of Power Sources, 161 (1):106-114, 2006	SECM
The Study of Peptide Ion Channels by Electrochemical Techniques	Thomas J. Jackson, John M. Sanderson and Ritu Katakya	Robin Hood Interdisciplinary Network in Electrochemistry (RHINE) Meeting, University of Hull, UK. 13th December 2006	SECM
The influence of catalyst layer morphology on the electrochemical performance of DMFC anode	Zhanliang Wang, a, , Yang Liua and Vladimir M. Linkova	Journal of Power Sources, Volume 160, Issue 1 , 29 September 2006, Pages 326-333	SECM
Imaging and detecting DNA hybridisation in a sandwich like assay by means of scanning electrochemical microscopy (SECM)	Ilaria Palchetti, Serena Laschi, Giovanna Marrazza	Biosensors 2006 Congress, Toronto	SECM
The Study of Peptide-Lipid Interactions Using SECM	Thomas J. Jackson, John M. Sanderson and Ritu Katakya	Electrochem 2005, Northumbria University, UK. 4th – 7th September 2005	SECM

The Study of Peptide-Lipid Interactions Using SECM	Thomas J. Jackson, John M. Sanderson and Ritu Katakay	BioNEt Meeting: Bioimaging and Informatics: Across the Spectrum, University of Newcastle upon Tyne, UK. 16th May 2005	SECM
Ion Channels and Lipid bilayers probed by Scanning Electrochemical Microscopy (SECM)	R. Cotton, O. Atoloye, J. M. Sanderson and R. Katakay		SECM
Scanning electrochemical microscope characterization of thin film combinatorial libraries for fuel cell electrode applications	M Black, J Cooper and P McGinn	2005 Meas. Sci. Technol. 16 174-182	SECM
The Study of Peptide Ion Channels Using SECM	Thomas J. Jackson, John M. Sanderson and Ritu Katakay	BioNEt Meeting: Introducing the New Centre for Bioactive Chemistry at Durham. University of Durham, UK. 20th April 2005	SECM
The Study of Peptide-Lipid Interactions Using SECM	Thomas J. Jackson, John M. Sanderson and Ritu Katakay	Electrochem 2004, University of Leicester, UK. 13th – 15th September 2004	SECM

The Study of Peptide-Lipid Interactions Using SECM	Thomas J. Jackson, John M. Sanderson and Ritu Katakay	7th International Synopsium on Bio-Organic Chemistry, University of Sheffield, UK. 27th June – 1st July 2004	SECM
The Study of Peptide Ion Channels Using SECM	Thomas J. Jackson, John M. Sanderson and Ritu Katakay	New Developments in Potentiometric Analysis: Towards Lower Levels of Detection and Higher Precision, 31st March – 1st April 2004	SECM
Scanning Electrochemical Microscopy Studies of Enzyme Modified Microelectrode Surfaces	Emma. C. D. Lawrence, Séamus. P. J. Higson.	54th Annual meeting of the international society of electrochemistry 2003, Sao Paulo Brazil	SECM
Scanning Electrochemical Microscopy (SECM) Imaging of Glucose Oxidase (GOX) by the Amperometric Detection of Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> )	Emma. C. D. Lawrence, Séamus. P. J. Higson.	European Young Chemists Conference 2002, Heidelberg Germany	SECM
Investigating Surfaces with Scanning Electrochemical Microscopy.	Emma. C. D. Lawrence, Séamus. P. J. Higson.	Postgraduate Conference 2001, Machester Materials Science Centre. UMIST	SECM

Sol-gel coatings with phosphonate functionalities for surface modification of magnesium alloys	A.N. Khramov(a), V.N. Balbyshev(a), L.S. Kasten(b) and R.A. Mantz(c)	Thin Solid Films Volume 514, Issues 1-2 , 30 August 2006, Pages 174-181	SKP
Inhibition of corrosion by a mixture of nonchromate pigments in organic coatings on galvanized steel	V. I. Pokhmurskyi(1, 2), I. M. Zin(1, 2) and S. B. Lyon(1, 2)	Materials Science, Volume 40, Number 3, May 2004, pp. 383-390(8)	SKP
Mono- and multicrystalline silicon characterization by noncontacting techniques	Cavalcoli D, Cavallini A, Rossi M	Journal of the Electrochemical Society, Vol.151, No.4, G248-G251, 2004	SKP
Surface contaminant detection in semiconductors using noncontacting techniques.	CAVALCOLI D. (1) ; CAVALLINI A. (1) ; ROSSI M. (1) ; BINETTI S. (2) ; IZZIA F. (3) ; PIZZINI S. (2) ;	Journal of the Electrochemical Society. Vol. 150, no. 8, pp. G456- G460. Aug. 2003	SKP
Scanning Kelvin probe and surface photovoltage analysis of multicrystalline silicon	A. Castaldini, D. Cavalcoli, , A. Cavallini and M. Rossi	Materials Science & Engineering B, Volume 91, Issue 1, 30 April 2002, Page 234	SKP

A Pt-in-glass Kelvin scanning probe to observe corrosion under coatings	Hussain, A; Lyon, S	42nd Corrosion Science Symposium; Swansea; UK; 11-13 Sept. 2001. 27 pp. 2001	SKP
Scanning photo-induced impedance microscopy—an impedance based imaging technique	Steffi Krause(a), Habib Talabani(a), Ming Xu(a), Werner Moritz(b) and John Griffiths( c)	Electrochimica Acta, May 2002	SPIM
Photocurrent measurements for laterally resolved interface characterization	W. Moritz · I. Gerhardt · D. Roden · M. Xu · S. Krause	Chemistry and Materials Science, Issue Volume 367, Number 4 / June, 2000	SPIM
The role of solidification rate in the corrosion resistance of a directionally solidified novel aluminium–lanthanum alloy	L. Dzib-Pérez(a), J. González-Sánchez(a), T. Pérez(a), P. Bartolo-Pérez(a, b) and A. Juárez(c)	Scripta Materialia Volume 55, Issue 3 , August 2006, Pages 255-258	SRET
The role of solidification rate in the corrosion resistance of a directionally solidified novel aluminium–lanthanum alloy	L. Dzib-Pérez(a), J. González-Sánchez(a), T. Pérez(a), P. Bartolo-Pérez(a,b) and A. Juárez ( c)	Scripta Materialia Volume 55, Issue 3 , August 2006, Pages 255-258	SRET

Corrosion of Galvanized Steel with Damaged Epoxy Coatings	Zin, I. M.	MATERIALS SCIENCE C/C OF FIZIKO-KHIMICHESKAIA MEKHANIKA MATERIALOV 2001, VOL 37; NUMBER 6, pages 990-992	SRET
The mode of action of chromate inhibitor in epoxy primer on galvanized steel	I. M. Zin, R. L. Howard, S. J. Badger, J. D. Scantlebury and S. B. Lyon	Progress in Organic Coatings, Dec 1998	SRET
Applications of scanning ultra micro electrodes for studies on surface conductivity	K. Borgwarthb (a), D. Ebling(a) and J. Heinzea, (b),	Electrochimica Acta, Jul 1995	SRET
Advances in the scanning reference electrode technique	Johnson, G.R. Sargeant, D.A.	IEE Colloquium on Electrochemical Measurement, INSPEC Accession Number: 4795731, Pages, 1/1 - 1/4, 1994	SRET
Under-film corrosion of epoxy-coated galvanised steel an EIS and SVET study of the effect of inhibition at defects	I.M. Zina, S.B. Lyonb, , and A. Hussainb	Progress in organic coatings 2005, vol. 52, no2, pp. 126-135	SVET/SVP
Hybrid coating on steel: ZnNi electrodeposition and surface modification with organothiols and diazonium salts	Francois Berger, Joseph Delhalle and Zineb Mekhalif	Electrochimica Acta, volume 53, issue 6, pp. 2852-2861	SVP

Scanning vibrating reference electrode technique: a calibration study to evaluate the optimum operating parameters for maximum signal detection of point source activity	R. Akid(a) and M. Garma(b)	Electrochimica Acta, Jul 2004	SVP
Mechanisms of non-toxic anticorrosive pigments in organic waterborne coatings	Magorzata Zubielewicz (a) and Witold Gnot (b)	Progress in Organic Coatings, May 2004	SVP
Cohesive and adhesive interactions of polymeric coatings	SCHAUER Thadeus ; BERGER Markus ; EISENBACH Claus D.	European coatings Journal (Eur. coat. j.) ISSN 0930-3847 2001, no5, pp. 76-80	SVP
Chromate-free inhibiting pigments for coil-coated galvanised steel	I.M. Zin, S.B. Lyon, S.J. Badger*, J.D. Scantlebury, V.I. Pokhmurskii	The Journal of Corrosion Science and Engineering, Volume 2, Paper 21 (1999)	SVP
Corrosion Inhibition of Organic Coated Galvanized Steel Using a Chromate-Free Pigment Blend	Lyon, S B; Zin, I M; Pokhmurskii, V I; Hussain, A; Simmonds, M C	EUROCORR 2004: Long Term Prediction & Modelling of Corrosion; Nice; France; 12-16 Sept. 2004. 2004	SVP/SKP