

Nicholas Winograd

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ext. papers

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avg, IF

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L-index

#	Paper	IF	Citations
296	X-ray photoelectron spectroscopic studies of nickel-oxygen surfaces using oxygen and argon ion-bombardment. <i>Surface Science</i> , 1974 , 43, 625-643	1.8	644
295	The Magic of Cluster SIMS. <i>Analytical Chemistry</i> , 2005 , 77, 142 A-149 A	7.8	423
294	X-ray photoelectron spectroscopic studies of palladium oxides and the palladium-oxygen electrode. <i>Analytical Chemistry</i> , 1974 , 46, 197-200	7.8	367
293	Mass spectrometric imaging of highly curved membranes during Tetrahymena mating. <i>Science</i> , 2004 , 305, 71-3	33.3	300
292	X-ray photoelectron spectroscopic studies of cadmium- and silver-oxygen surfaces. <i>Analytical Chemistry</i> , 1975 , 47, 2193-2199	7.8	243
291	Lipid imaging with time-of-flight secondary ion mass spectrometry (ToF-SIMS). <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2011 , 1811, 976-90	5	223
290	Atomic and molecular imaging at the single-cell level with TOF-SIMS. <i>Analytical Chemistry</i> , 1997 , 69, 2225-31	7.8	221
289	The regulation of integrin-mediated osteoblast focal adhesion and focal adhesion kinase expression by nanoscale topography. <i>Biomaterials</i> , 2007 , 28, 1787-97	15.6	204
288	Bond insertion, complexation, and penetration pathways of vapor-deposited aluminum atoms with HO- and CH(3)O-terminated organic monolayers. <i>Journal of the American Chemical Society</i> , 2002 , 124, 5528-41	16.4	183
287	X-ray photoelectron spectra of lead oxides. <i>Analytical Chemistry</i> , 1973 , 45, 2214-2218	7.8	180
286	Enhancement of sputtering yields due to C60 versus Ga bombardment of Ag[111] as explored by molecular dynamics simulations. <i>Analytical Chemistry</i> , 2003 , 75, 4402-7	7.8	177
285	Microscopic Insights into the Sputtering of Ag{111} Induced by C60 and Ga Bombardment. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 7831-7838	3.4	174
284	Molecular depth profiling with cluster ion beams. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 8329-36	3.4	173
283	Performance characteristics of a chemical imaging time-of-flight mass spectrometer. <i>Rapid Communications in Mass Spectrometry</i> , 1998 , 12, 1246-52	2.2	164
282	Low energy ion impact phenomena on single crystal surfaces. <i>Surface Science</i> , 1978 , 76, 311-322	1.8	164
281	The dynamics of noble metal atom penetration through methoxy-terminated alkanethiolate monolayers. <i>Journal of the American Chemical Society</i> , 2004 , 126, 3954-63	16.4	156
280	Explosive Boiling of Water Films Adjacent to Heated Surfaces: A Microscopic Description. <i>Journal of Physical Chemistry A</i> , 2001 , 105, 2748-2755	2.8	154

279	Depth profiling of peptide films with TOF-SIMS and a C60 probe. <i>Analytical Chemistry</i> , 2005 , 77, 3651-9	7.8	150
278	Chemical Effects of Methyl and Methyl Ester Groups on the Nucleation and Growth of Vapor-Deposited Aluminum Films. <i>Journal of the American Chemical Society</i> , 1999 , 121, 8052-8064	16.4	135
277	Formation of small metal clusters by ion bombardment of single crystal surfaces. <i>Journal of Chemical Physics</i> , 1978 , 69, 1440-1444	3.9	125
276	Osteoblast adhesion on poly(L-lactic acid)/polystyrene demixed thin film blends: effect of nanotopography, surface chemistry, and wettability. <i>Biomacromolecules</i> , 2005 , 6, 3319-27	6.9	120
275	Argon cluster ion beams for organic depth profiling: results from a VAMAS interlaboratory study. <i>Analytical Chemistry</i> , 2012 , 84, 7865-73	7.8	119
274	Structure sensitive factors in molecular cluster formation by ion bombardment of single crystal surfaces. <i>Surface Science</i> , 1978 , 78, 467-477	1.8	112
273	Thermal decomposition of methanol absorbed on palladium{111}. A new reaction pathway involving methyl formation. <i>Journal of the American Chemical Society</i> , 1989 , 111, 4605-4612	16.4	111
272	Oxidation of polycrystalline indium studied by x-ray photoelectron spectroscopy and static secondary ion mass spectroscopy. <i>Journal of Applied Physics</i> , 1980 , 51, 2620	2.5	110
271	C60 secondary ion mass spectrometry with a hybrid-quadrupole orthogonal time-of-flight mass spectrometer. <i>Analytical Chemistry</i> , 2008 , 80, 7921-9	7.8	108
270	Many-body embedded-atom potential for describing the energy and angular distributions of Rh atoms desorbed from ion-bombarded Rh{111}. <i>Physical Review B</i> , 1988 , 37, 7197-7204	3.3	104
269	Surface Structure from Angle-Resolved Secondary-Ion Mass Spectrometry: Oxygen on Cu(001). <i>Physical Review Letters</i> , 1979 , 43, 220-223	7.4	100
268	Direct SIMS observation of methylidyne, methylene, and methyl intermediates on a nickel(III) methanation catalyst. <i>Journal of the American Chemical Society</i> , 1986 , 108, 1315-1316	16.4	98
267	Nanometer-scale phase separation in mixed composition self-assembled monolayers. <i>Nanotechnology</i> , 1996 , 7, 438-442	3.4	97
266	Protocols for three-dimensional molecular imaging using mass spectrometry. <i>Analytical Chemistry</i> , 2007 , 79, 5529-39	7.8	97
265	Atomic and molecular ejection from ion-bombarded reacted single-crystal surfaces. Oxygen on copper(100). <i>Physical Review B</i> , 1978 , 18, 6000-6010	3.3	97
264	Adsorption and desorption of no from Rh{111} and Rh{331} surfaces. <i>Surface Science</i> , 1985 , 159, 199-213	1.8	95
263	Secondary ion MS imaging to relatively quantify cholesterol in the membranes of individual cells from differentially treated populations. <i>Analytical Chemistry</i> , 2007 , 79, 3554-60	7.8	91
262	Metabolomics and mass spectrometry imaging reveal channeled de novo purine synthesis in cells. <i>Science</i> , 2020 , 368, 283-290	33.3	90

261	Single-cell lipidomics: characterizing and imaging lipids on the surface of individual <i>Aplysia californica</i> neurons with cluster secondary ion mass spectrometry. <i>Analytical Chemistry</i> , 2013 , 85, 2231-8	7.8	88
260	Microscopic insights into the sputtering of thin organic films on Ag{111} induced by C60 and Ga bombardment. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 11973-9	3.4	85
259	Molecule Specific Imaging of Freeze-Fractured, Frozen-Hydrated Model Membrane Systems Using Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2000 , 122, 603-610	16.4	83
258	Solids analysis using energetic ion bombardment and multiphoton resonance ionization with time-of-flight detection. <i>Analytical Chemistry</i> , 1984 , 56, 2782-2791	7.8	83
257	Molecular depth profiling of histamine in ice using a buckminsterfullerene probe. <i>Analytical Chemistry</i> , 2004 , 76, 7234-42	7.8	81
256	Imaging of freeze-fractured cells with in situ fluorescence and time-of-flight secondary ion mass spectrometry. <i>Analytical Chemistry</i> , 2002 , 74, 4011-9	7.8	80
255	Evaluation of mass spectrometric methods applicable to the direct analysis of non-peptide bead-bound combinatorial libraries. <i>Analytical Chemistry</i> , 1996 , 68, 237-42	7.8	80
254	Femtosecond Photoionization of Ion Beam Desorbed Aliphatic and Aromatic Amino Acids: Fragmentation via E Cleavage Reactions. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 7889-7895	3.4	77
253	Mass spectrometry imaging of mating <i>Tetrahymena</i> show that changes in cell morphology regulate lipid domain formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 2751-6	11.5	74
252	Interaction of vapor-deposited Ti and Au with molecular wires. <i>Applied Physics Letters</i> , 2004 , 84, 4008-4010	3.0	74
251	Angular Distributions of Ejected Particles from Ion-Bombarded Clean and Reacted Single-Crystal Surfaces. <i>Physical Review Letters</i> , 1978 , 41, 1120-1123	7.4	73
250	Label free biochemical 2D and 3D imaging using secondary ion mass spectrometry. <i>Current Opinion in Chemical Biology</i> , 2011 , 15, 733-40	9.7	72
249	Identification of cellular sections with imaging mass spectrometry following freeze fracture. <i>Analytical Chemistry</i> , 2002 , 74, 4020-6	7.8	72
248	Sphingomyelin/phosphatidylcholine and cholesterol interactions studied by imaging mass spectrometry. <i>Journal of the American Chemical Society</i> , 2007 , 129, 15730-1	16.4	71
247	Static time-of-flight secondary ion mass spectrometry imaging of freeze-fractured, frozen-hydrated biological membranes. <i>Rapid Communications in Mass Spectrometry</i> , 1998 , 12, 1232-5	2.2	67
246	MS/MS methodology to improve subcellular mapping of cholesterol using TOF-SIMS. <i>Analytical Chemistry</i> , 2008 , 80, 8662-7	7.8	67
245	Characterization of solids and surfaces using ion beams and mass spectrometry. <i>Progress in Solid State Chemistry</i> , 1981 , 13, 285-375	8	66
244	High-resolution TOF-SIMS imaging of eukaryotic cells preserved in a trehalose matrix. <i>Analytical Chemistry</i> , 2005 , 77, 7950-7	7.8	65

243	Sputtering yields for C ₆₀ and Au ₃ bombardment of water ice as a function of incident kinetic energy. <i>Analytical Chemistry</i> , 2007 , 79, 4493-8	7.8	64
242	Improvements in SIMS continue: Is the end in sight?. <i>Applied Surface Science</i> , 2006 , 252, 6836-6843	6.7	64
241	Molecular Dynamics Simulation Study of Molecular Ejection Mechanisms: keV Particle Bombardment of C ₆ H ₆ /Ag{111}. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 151-163	3.4	63
240	Detector for measuring energy- and angle-resolved neutral-particle (EARN) distributions for material desorbed from bombarded surfaces. <i>Review of Scientific Instruments</i> , 1986 , 57, 1354-1362	1.7	63
239	Biological cluster mass spectrometry. <i>Annual Review of Physical Chemistry</i> , 2010 , 61, 305-22	15.7	62
238	Evidence for activation of the carbon-oxygen bond of methanol on the palladium(111) surface after low temperature adsorption. <i>Journal of the American Chemical Society</i> , 1988 , 110, 4431-4432	16.4	62
237	Secondary ion MS imaging of lipids in picoliter vials with a buckminsterfullerene ion source. <i>Analytical Chemistry</i> , 2005 , 77, 6190-6	7.8	61
236	Controlling gold atom penetration through alkanethiolate self-assembled monolayers on Au{111} by adjusting terminal group intermolecular interactions. <i>Journal of the American Chemical Society</i> , 2006 , 128, 13710-9	16.4	58
235	Quantitative chemical analysis of single cells. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2000 , 29, 239-63		58
234	Direct comparison of Au(3)(+) and C(60)(+) cluster projectiles in SIMS molecular depth profiling. <i>Journal of the American Society for Mass Spectrometry</i> , 2007 , 18, 406-12	3.5	56
233	Ion Beams and Laser Postionization for Molecule-Specific Imaging. <i>Analytical Chemistry</i> , 1993 , 65, 622A-629A		56
232	Carbon monoxide adsorption and desorption on Rh{111} and Rh{331} surfaces. <i>Surface Science</i> , 1984 , 138, 417-431	1.8	56
231	Use of C ₆₀ cluster projectiles for sputter depth profiling of polycrystalline metals. <i>Surface and Interface Analysis</i> , 2004 , 36, 1367-1372	1.5	55
230	Subcellular Chemical Imaging of Antibiotics in Single Bacteria Using C-Secondary Ion Mass Spectrometry. <i>Analytical Chemistry</i> , 2017 , 89, 5050-5057	7.8	54
229	Energy deposition during molecular depth profiling experiments with cluster ion beams. <i>Analytical Chemistry</i> , 2008 , 80, 5293-301	7.8	54
228	Gas Cluster Ion Beam Time-of-Flight Secondary Ion Mass Spectrometry High-Resolution Imaging of Cardiolipin Speciation in the Brain: Identification of Molecular Losses after Traumatic Injury. <i>Analytical Chemistry</i> , 2017 , 89, 4611-4619	7.8	53
227	Proton transfer in time-of-flight secondary ion mass spectrometry studies of frozen-hydrated dipalmitoylphosphatidylcholine. <i>Analytical Chemistry</i> , 2003 , 75, 4087-94	7.8	53
226	Surface sensitivity in cluster-ion-induced sputtering. <i>Physical Review Letters</i> , 2006 , 96, 216104	7.4	52

225	Coarse-grained molecular dynamics studies of cluster-bombarded benzene crystals. <i>Applied Surface Science</i> , 2006 , 252, 6436-6439	6.7	51
224	Azimuthal Anisotropies of Dimer Ions Ejected from Ion Bombarded Ni(001). <i>Physical Review Letters</i> , 1980 , 44, 756-759	7.4	51
223	Internal energy of molecules ejected due to energetic C60 bombardment. <i>Analytical Chemistry</i> , 2009 , 81, 2260-7	7.8	50
222	Phosphatidylethanolamine-induced cholesterol domains chemically identified with mass spectrometric imaging. <i>Journal of the American Chemical Society</i> , 2004 , 126, 13882-3	16.4	50
221	Depth profiling of Langmuir-Blodgett films with a buckminsterfullerene probe. <i>Analytical Chemistry</i> , 2004 , 76, 6651-8	7.8	50
220	In vitro solar conversion after the primary light reaction in photosynthesis. Reversible photogalvanic effects of chlorophyll-quinhydrone half-cell reactions. <i>Journal of the American Chemical Society</i> , 1976 , 98, 2287-9	16.4	50
219	Depth resolution during C60+ profiling of multilayer molecular films. <i>Analytical Chemistry</i> , 2008 , 80, 7363-71	7.8	48
218	Localization of sphingomyelin in cholesterol domains by imaging mass spectrometry. <i>Langmuir</i> , 2007 , 23, 5645-50	4	48
217	Chemical pathways in the interactions of reactive metal atoms with organic surfaces: vapor deposition of Ca and Ti on a methoxy-terminated alkanethiolate monolayer on Au. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 11263-72	3.4	48
216	Influence of molecular environment on the analysis of phospholipids by time-of-flight secondary ion mass spectrometry. <i>Langmuir</i> , 2004 , 20, 4926-32	4	48
215	Gas Cluster Ion Beams for Secondary Ion Mass Spectrometry. <i>Annual Review of Analytical Chemistry</i> , 2018 , 11, 29-48	12.5	47
214	Microscopic Insight into the Sputtering of Thin Polystyrene Films on Ag{111} Induced by Large and Slow Ar Clusters. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 521-531	3.8	47
213	Measuring Compositions in Organic Depth Profiling: Results from a VAMAS Interlaboratory Study. <i>Journal of Physical Chemistry B</i> , 2015 , 119, 10784-97	3.4	46
212	Mechanism for Increased Yield with SF ₅ ⁺ Projectiles in Organic SIMS: The Substrate Effect. <i>Journal of Physical Chemistry A</i> , 1999 , 103, 4587-4589	2.8	46
211	Effect of cluster size in kiloelectronvolt cluster bombardment of solid benzene. <i>Analytical Chemistry</i> , 2007 , 79, 494-9	7.8	45
210	Freeze-etching and vapor matrix deposition for ToF-SIMS imaging of single cells. <i>Langmuir</i> , 2008 , 24, 7906-11	4	44
209	Depth profiling of polycrystalline multilayers using a buckminsterfullerene projectile. <i>Applied Physics Letters</i> , 2004 , 84, 5177-5179	3.4	43
208	Molecule-specific imaging with mass spectrometry and a buckminsterfullerene probe: application to characterizing solid-phase synthesized combinatorial libraries. <i>Journal of the American Chemical Society</i> , 2004 , 126, 3902-9	16.4	43

207	Understanding collision cascades in molecular solids. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2001 , 180, 159-163	1.2	43
206	Energy and angular distributions of Rh atoms ejected due to ion bombardment from Rh{111}: A theoretical study. <i>Physical Review B</i> , 1987 , 36, 3516-3521	3.3	43
205	X-ray photoelectron spectroscopic studies of silver(III) octaethylporphyrin. <i>Journal of the American Chemical Society</i> , 1974 , 96, 591-592	16.4	42
204	SIMS ^A precursor and partner to contemporary mass spectrometry. <i>International Journal of Mass Spectrometry</i> , 2015 , 377, 568-579	1.9	41
203	Lateral heterogeneity of dipalmitoylphosphatidylethanolamine-cholesterol Langmuir-Blodgett films investigated with imaging time-of-flight secondary ion mass spectrometry and atomic force microscopy. <i>Langmuir</i> , 2005 , 21, 807-13	4	41
202	Metal nanoparticle deposition for TOF-SIMS signal enhancement of polymers. <i>Analytical Chemistry</i> , 2006 , 78, 141-8	7.8	41
201	Ejection of molecular clusters from ion-bombarded surfaces. <i>Journal of Vacuum Science and Technology</i> , 1979 , 16, 789-792		41
200	Evaluation of fast homogeneous electron-exchange reaction rates using electrochemistry and reflection spectroscopy. <i>Journal of the American Chemical Society</i> , 1970 , 92, 224-226	16.4	41
199	Imaging mass spectrometry on the nanoscale with cluster ion beams. <i>Analytical Chemistry</i> , 2015 , 87, 328-338		40
198	Three-dimensional depth profiling of molecular structures. <i>Analytical and Bioanalytical Chemistry</i> , 2009 , 393, 1835-42	4.4	40
197	Molecular sputter depth profiling using carbon cluster beams. <i>Analytical and Bioanalytical Chemistry</i> , 2010 , 396, 105-14	4.4	40
196	Direct observation of ion distributions near electrodes in ionic polymer actuators containing ionic liquids. <i>Scientific Reports</i> , 2013 , 3, 973	4.9	39
195	Surface structure determinations with ion beams. <i>Accounts of Chemical Research</i> , 1980 , 13, 406-412	24.3	39
194	Stoichiometric determination of chlorophyll a-water aggregates and photosynthesis. Symbiotic roles of the magnesium atom and the ring V cyclopentanone group in the structural and photochemical properties of chlorophyll a monohydrate and dihydrate. <i>Journal of the American Chemical Society</i> , 1976 , 98, 5203-5207	16.4	39
193	A mixed cluster ion beam to enhance the ionization efficiency in molecular secondary ion mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2014 , 28, 396-400	2.2	38
192	Effects of cryogenic sample analysis on molecular depth profiles with TOF-secondary ion mass spectrometry. <i>Analytical Chemistry</i> , 2010 , 82, 8291-9	7.8	38
191	Angular distribution of Rh atoms desorbed from ion-bombarded Rh{100}: Effect of local environment. <i>Physical Review B</i> , 1990 , 42, 7311-7316	3.3	38
190	Deexcitation model for sputtered excited neutral atoms. <i>Physical Review Letters</i> , 1986 , 57, 1351-1354	7.4	38

189	Characterization of CO binding sites on Rh{111} and Rh{331} surfaces by XPS and LEED: Comparison to EELS results. <i>Surface Science</i> , 1984 , 147, 252-262	1.8	38
188	Image potential and ion trajectories in secondary-ion mass spectrometry. <i>Physical Review B</i> , 1981 , 24, 6178-6181	3.3	38
187	Chemically alternating Langmuir-Blodgett thin films as a model for molecular depth profiling by mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2008 , 19, 96-102	3.5	37
186	Substrate-Assisted Laser-Initiated Ejection of Proteins Embedded in Water Films. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 2362-2365	3.4	37
185	X-ray photoelectron spectra of some dirhodium carboxylate complexes. <i>Inorganica Chimica Acta</i> , 1980 , 44, L139-L141	2.7	37
184	Investigation of the oxidation of polycrystalline lead by XPS and SIMS. <i>Surface Science</i> , 1978 , 78, 1-14	1.8	37
183	Surface and depth profiling investigation of a drug-loaded copolymer utilized to coat taxus express2 stents. <i>Analytical Chemistry</i> , 2006 , 78, 8347-53	7.8	36
182	Mechanistic study of atomic desorption resulting from the keV-ion bombardment of fcc{001} single-crystal metals. <i>Physical Review B</i> , 1995 , 52, 6006-6014	3.3	36
181	Particle ejection from ion-bombarded clean and reacted single-crystal surfaces. <i>Journal of Vacuum Science and Technology</i> , 1979 , 16, 629-634		36
180	Homogeneous electron-transfer reactions studied by internal reflection spectroelectrochemistry. <i>Journal of the American Chemical Society</i> , 1971 , 93, 4343-4350	16.4	36
179	Secondary-Ion Mass Spectrometry Images Cardiolipins and Phosphatidylethanolamines at the Subcellular Level. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 3156-3161	16.4	35
178	Molecular Depth Profiling with Argon Gas Cluster Ion Beams. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 15316-15324	3.8	33
177	Time of flight mass spectrometry imaging of samples fractured in situ with a spring-loaded trap system. <i>Analytical Chemistry</i> , 2010 , 82, 6652-9	7.8	33
176	Thermal Desorption Induced by Kiloelectronvolt Ion Bombardment of Thiol-Bound Self-Assembled Monolayers on Gold. <i>Journal of the American Chemical Society</i> , 1997 , 119, 8089-8094	16.4	33
175	Molecular Depth Profiling using a C(60) Cluster Beam: the Role of Impact Energy. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 16550-16555	3.8	33
174	ToF-SIMS imaging with cluster ion beams. <i>Applied Surface Science</i> , 2004 , 231-232, 159-163	6.7	33
173	C60-ToF SIMS imaging of frozen hydrated HeLa cells. <i>Surface and Interface Analysis</i> , 2013 , 45, 302-304	1.5	32
172	Time-of-flight secondary ion mass spectrometry imaging of subcellular lipid heterogeneity: Poisson counting and spatial resolution. <i>Analytical Chemistry</i> , 2009 , 81, 5593-602	7.8	32

171	Molecular depth profiling of multi-layer systems with cluster ion sources. <i>Applied Surface Science</i> , 2006 , 252, 6498-6501	6.7	32
170	Desorption of organic overlayers by Ga and C60 bombardment. <i>Vacuum</i> , 2006 , 81, 167-173	3.7	32
169	Thickness effects of water overlayer on its explosive evaporation at heated metal surfaces. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2001 , 180, 105-111	1.2	32
168	Imaging of Exposed Headgroups and Tailgroups of Phospholipid Membranes by Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 1999 , 121, 4716-4717	16.4	32
167	Methyl formation from methanol decomposition on Pd{111} and Pt{111}. <i>Catalysis Letters</i> , 1988 , 1, 385-389	3.8	32
166	Mass spectral imaging of glycopospholipids, cholesterol, and glycophorin a in model cell membranes. <i>Langmuir</i> , 2008 , 24, 11803-10	4	31
165	X-ray photoelectron spectra of N-methyltetraphenylporphyrins: evidence for a correlation of binding energies with metal-nitrogen bond distances. <i>Inorganic Chemistry</i> , 1979 , 18, 1776-1780	5.1	31
164	Modification and stability of aromatic self-assembled monolayers upon irradiation with energetic particles. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 5085-94	3.4	30
163	Prospects for imaging with TOF-SIMS using gold liquid metal ion sources. <i>Applied Surface Science</i> , 2003 , 203-204, 198-200	6.7	30
162	Molecular depth profiling of buried lipid bilayers using C(60)-secondary ion mass spectrometry. <i>Analytical Chemistry</i> , 2011 , 83, 351-8	7.8	29
161	Laser desorption and imaging of proteins from ice via UV femtosecond laser pulses. <i>Analytical Chemistry</i> , 2003 , 75, 5146-51	7.8	29
160	Spatially resolved detection of attomole quantities of organic molecules localized in picoliter vials using time-of-flight secondary ion mass spectrometry. <i>Analytical Chemistry</i> , 1999 , 71, 3318-24	7.8	29
159	Strong-field ionization of sputtered molecules for biomolecular imaging. <i>Chemical Physics Letters</i> , 2009 , 468, 264-269	2.5	28
158	Postionization of molecules desorbed from surfaces by keV Ion bombardment with femtosecond laser pulses. <i>Rapid Communications in Mass Spectrometry</i> , 1998 , 12, 1253-60	2.2	28
157	The effect of incident angle on the C(60) bombardment of molecular solids. <i>Applied Surface Science</i> , 2008 , 255, 1068-1070	6.7	28
156	Prospects for imaging TOF-SIMS: from fundamentals to biotechnology. <i>Applied Surface Science</i> , 2003 , 203-204, 13-19	6.7	28
155	Band structure effects in ejection of Ni atoms in fine structure states. <i>Physical Review Letters</i> , 1995 , 75, 3950-3953	7.4	28
154	Which is more important in bioimaging SIMS experiments-The sample preparation or the nature of the projectile?. <i>Applied Surface Science</i> , 2008 , 255, 1298-1304	6.7	27

153	Design and performance of an energy- and angle-resolved secondary ion mass spectrometer. <i>Review of Scientific Instruments</i> , 1981 , 52, 1148-1155	1.7	27
152	CO ₂ Cluster Ion Beam, an Alternative Projectile for Secondary Ion Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2016 , 27, 1476-82	3.5	26
151	Molecular Depth Profiling. <i>Surface and Interface Analysis</i> , 2013 , 45, 3-8	1.5	26
150	Energetic ion bombardment of Ag surfaces by C ₆₀ ⁺ and Ga ⁺ projectiles. <i>Journal of the American Society for Mass Spectrometry</i> , 2005 , 16, 1677-86	3.5	26
149	A time-of-flight SIMS study of the chemical nature of highly dispersed Pt on alumina. <i>Journal of Catalysis</i> , 1994 , 146, 82-86	7.3	26
148	Shadow-cone-enhanced secondary-ion mass-spectrometry studies of Ag{110}. <i>Physical Review B</i> , 1989 , 39, 3467-3474	3.3	26
147	Characterizing in situ Glycerophospholipids with SIMS and MALDI Methodologies. <i>Surface and Interface Analysis</i> , 2011 , 43, 269-271	1.5	25
146	Sputtering of atoms in fine structure states: a probe of excitation and de-excitation events. <i>Rapid Communications in Mass Spectrometry</i> , 1998 , 12, 1266-1272	2.2	25
145	Dynamics of Interaction of Magnesium Atoms on Methoxy-Terminated Self-Assembled Monolayers: An Example of a Reactive Metal with a Low Sticking Probability. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 765-772	3.8	24
144	Three-dimensional molecular imaging using mass spectrometry and atomic force microscopy. <i>Applied Surface Science</i> , 2008 , 255, 984-986	6.7	24
143	Ion Emission from Water Ice Due to Energetic Particle Bombardment. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 2993-2998	2.8	24
142	Characterization of polycyclic aromatic compounds on surfaces using ion-beam-induced desorption and multiphoton resonance ionization. <i>Analytical Chemistry</i> , 1991 , 63, 225-232	7.8	24
141	Improving secondary ion mass spectrometry image quality with image fusion. <i>Journal of the American Society for Mass Spectrometry</i> , 2014 , 25, 2154-62	3.5	23
140	Angle of incidence effects in a molecular solid. <i>Applied Surface Science</i> , 2008 , 255, 844-846	6.7	23
139	Evolution of the interface and metal film morphology in the vapor deposition of Ti on hexadecanethiolate hydrocarbon monolayers on Au. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 21006-14	2.4	23
138	Model multilayer structures for three-dimensional cell imaging. <i>Applied Surface Science</i> , 2006 , 252, 6789-6792	6.7	23
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