

# Nicholas Winograd

## List of Publications by Year in descending order

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298  
papers

14,529  
citations

18465

62  
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29127

104  
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302  
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302  
docs citations

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times ranked

8662  
citing authors

#	ARTICLE	IF	CITATIONS
1	X-ray photoelectron spectroscopic studies of nickel-oxygen surfaces using oxygen and argon ion-bombardment. <i>Surface Science</i> , 1974, 43, 625-643.	0.8	759
2	The Magic of Cluster SIMS. <i>Analytical Chemistry</i> , 2005, 77, 142 A-149 A.	3.2	439
3	X-ray photoelectron spectroscopic studies of palladium oxides and the palladium-oxygen electrode. <i>Analytical Chemistry</i> , 1974, 46, 197-200.	3.2	414
4	Mass Spectrometric Imaging of Highly Curved Membranes During Tetrahymena Mating. <i>Science</i> , 2004, 305, 71-73.	6.0	319
5	X-ray photoelectron spectroscopic studies of cadmium- and silver-oxygen surfaces. <i>Analytical Chemistry</i> , 1975, 47, 2193-2199.	3.2	286
6	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, 976-990.	1.2	255
7	Atomic and Molecular Imaging at the Single-Cell Level with TOF-SIMS. <i>Analytical Chemistry</i> , 1997, 69, 2225-2231.	3.2	244
8	The regulation of integrin-mediated osteoblast focal adhesion and focal adhesion kinase expression by nanoscale topography. <i>Biomaterials</i> , 2007, 28, 1787-1797.	5.7	225
9	X-ray photoelectron spectra of lead oxides. <i>Analytical Chemistry</i> , 1973, 45, 2214-2218.	3.2	214
10	Bond Insertion, Complexation, and Penetration Pathways of Vapor-Deposited Aluminum Atoms with HO- and CH <sub>3</sub> O-Terminated Organic Monolayers. <i>Journal of the American Chemical Society</i> , 2002, 124, 5528-5541.	6.6	195
11	Enhancement of Sputtering Yields Due to C <sub>60</sub> versus Ga Bombardment of Ag{111} As Explored by Molecular Dynamics Simulations. <i>Analytical Chemistry</i> , 2003, 75, 4402-4407.	3.2	194
12	Explosive Boiling of Water Films Adjacent to Heated Surfaces: A Microscopic Description. <i>Journal of Physical Chemistry A</i> , 2001, 105, 2748-2755.	1.1	185
13	Metabolomics and mass spectrometry imaging reveal channeled de novo purine synthesis in cells. <i>Science</i> , 2020, 368, 283-290.	6.0	185
14	Microscopic Insights into the Sputtering of Ag{111} Induced by C <sub>60</sub> and Ga Bombardment. <i>Journal of Physical Chemistry B</i> , 2004, 108, 7831-7838.	1.2	182
15	Low energy ion impact phenomena on single crystal surfaces. <i>Surface Science</i> , 1978, 76, 311-322.	0.8	179
16	Molecular Depth Profiling with Cluster Ion Beams. <i>Journal of Physical Chemistry B</i> , 2006, 110, 8329-8336.	1.2	179
17	Performance characteristics of a chemical imaging time-of-flight mass spectrometer. , 1998, 12, 1246-1252.		167
18	The Dynamics of Noble Metal Atom Penetration through Methoxy-Terminated Alkanethiolate Monolayers. <i>Journal of the American Chemical Society</i> , 2004, 126, 3954-3963.	6.6	163

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19	Depth Profiling of Peptide Films with TOF-SIMS and a C60 Probe. <i>Analytical Chemistry</i> , 2005, 77, 3651-3659.	3.2	161
20	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.	6.6	142
21	Formation of small metal clusters by ion bombardment of single crystal surfaces. <i>Journal of Chemical Physics</i> , 1978, 69, 1440-1444.	1.2	136
22	Osteoblast Adhesion on Poly(l-lactic Acid)/Polystyrene Demixed Thin Film Blends: A Effect of Nanotopography, Surface Chemistry, and Wettability. <i>Biomacromolecules</i> , 2005, 6, 3319-3327.	2.6	131
23	Argon Cluster Ion Beams for Organic Depth Profiling: Results from a VAMAS Interlaboratory Study. <i>Analytical Chemistry</i> , 2012, 84, 7865-7873.	3.2	129
24	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.	6.6	128
25	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.	1.1	124
26	Structure sensitive factors in molecular cluster formation by ion bombardment of single crystal surfaces. <i>Surface Science</i> , 1978, 78, 467-477.	0.8	117
27	C60 Secondary Ion Mass Spectrometry with a Hybrid-Quadrupole Orthogonal Time-of-Flight Mass Spectrometer. <i>Analytical Chemistry</i> , 2008, 80, 7921-7929.	3.2	113
28	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.	6.6	108
29	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.	1.1	108
30	Surface Structure from Angle-Resolved Secondary-Ion Mass Spectrometry: Oxygen on Cu(001). <i>Physical Review Letters</i> , 1979, 43, 220-223.	2.9	105
31	Adsorption and desorption of no from Rh{111} and Rh{331} surfaces. <i>Surface Science</i> , 1985, 159, 199-213.	0.8	105
32	Nanometer-scale phase separation in mixed composition self-assembled monolayers. <i>Nanotechnology</i> , 1996, 7, 438-442.	1.3	105
33	Protocols for Three-Dimensional Molecular Imaging Using Mass Spectrometry. <i>Analytical Chemistry</i> , 2007, 79, 5529-5539.	3.2	103
34	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, 2231-2238.	3.2	103
35	Atomic and molecular ejection from ion-bombarded reacted single-crystal surfaces. Oxygen on copper(100). <i>Physical Review B</i> , 1978, 18, 6000-6010.	1.1	101
36	Solids analysis using energetic ion bombardment and multiphoton resonance ionization with time-of-flight detection. <i>Analytical Chemistry</i> , 1984, 56, 2782-2791.	3.2	101

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37	Secondary Ion MS Imaging To Relatively Quantify Cholesterol in the Membranes of Individual Cells from Differentially Treated Populations. <i>Analytical Chemistry</i> , 2007, 79, 3554-3560.	3.2	99
38	Evaluation of Mass Spectrometric Methods Applicable to the Direct Analysis of Non-Peptide Bead-Bound Combinatorial Libraries. <i>Analytical Chemistry</i> , 1996, 68, 237-242.	3.2	94
39	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, 11973-11979.	1.2	88
40	Imaging of Freeze-Fractured Cells with in Situ Fluorescence and Time-of-Flight Secondary Ion Mass Spectrometry. <i>Analytical Chemistry</i> , 2002, 74, 4011-4019.	3.2	87
41	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.	6.6	86
42	Molecular Depth Profiling of Histamine in Ice Using a Buckminsterfullerene Probe. <i>Analytical Chemistry</i> , 2004, 76, 7234-7242.	3.2	86
43	Identification of Cellular Sections with Imaging Mass Spectrometry Following Freeze Fracture. <i>Analytical Chemistry</i> , 2002, 74, 4020-4026.	3.2	82
44	Femtosecond Photoionization of Ion Beam Desorbed Aliphatic and Aromatic Amino Acids: $\hat{A}$ Fragmentation via $\pm$ -Cleavage Reactions. <i>Journal of Physical Chemistry B</i> , 1999, 103, 7889-7895.	1.2	81
45	Angular Distributions of Ejected Particles from Ion-Bombarded Clean and Reacted Single-Crystal Surfaces. <i>Physical Review Letters</i> , 1978, 41, 1120-1123.	2.9	79
46	Label free biochemical 2D and 3D imaging using secondary ion mass spectrometry. <i>Current Opinion in Chemical Biology</i> , 2011, 15, 733-740.	2.8	79
47	Interaction of vapor-deposited Ti and Au with molecular wires. <i>Applied Physics Letters</i> , 2004, 84, 4008-4010.	1.5	77
48	Sphingomyelin/Phosphatidylcholine and Cholesterol Interactions Studied by Imaging Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2007, 129, 15730-15731.	6.6	77
49	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, 2751-2756.	3.3	77
50	Characterization of solids and surfaces using ion beams and mass spectrometry. <i>Progress in Solid State Chemistry</i> , 1981, 13, 285-375.	3.9	74
51	MS/MS Methodology To Improve Subcellular Mapping of Cholesterol Using TOF-SIMS. <i>Analytical Chemistry</i> , 2008, 80, 8662-8667.	3.2	73
52	Static time-of-flight secondary ion mass spectrometry imaging of freeze-fractured, frozen-hydrated biological membranes. , 1998, 12, 1232-1235.		72
53	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.	6.6	71
54	High-Resolution TOF-SIMS Imaging of Eukaryotic Cells Preserved in a Trehalose Matrix. <i>Analytical Chemistry</i> , 2005, 77, 7950-7957.	3.2	71

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55	Subcellular Chemical Imaging of Antibiotics in Single Bacteria Using C <sub>60</sub> -Secondary Ion Mass Spectrometry. <i>Analytical Chemistry</i> , 2017, 89, 5050-5057.	3.2	71
56	Gas Cluster Ion Beams for Secondary Ion Mass Spectrometry. <i>Annual Review of Analytical Chemistry</i> , 2018, 11, 29-48.	2.8	69
57	Improvements in SIMS continue. <i>Applied Surface Science</i> , 2006, 252, 6836-6843.	3.1	68
58	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.	3.2	68
59	Quantitative Chemical Analysis of Single Cells. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2000, 29, 239-263.	18.3	66
60	Biological Cluster Mass Spectrometry. <i>Annual Review of Physical Chemistry</i> , 2010, 61, 305-322.	4.8	66
61	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.	0.6	65
62	Molecular Dynamics Simulation Study of Molecular Ejection Mechanisms: 1 keV Particle Bombardment of C <sub>6</sub> H <sub>6</sub> /Ag{111}. <i>Journal of Physical Chemistry B</i> , 1999, 103, 151-163.	1.2	64
63	Secondary Ion MS Imaging of Lipids in Picoliter Vials with a Buckminsterfullerene Ion Source. <i>Analytical Chemistry</i> , 2005, 77, 6190-6196.	3.2	64
64	Sputtering Yields for C <sub>60</sub> and Au <sub>3</sub> Bombardment of Water Ice as a Function of Incident Kinetic Energy. <i>Analytical Chemistry</i> , 2007, 79, 4493-4498.	3.2	64
65	Direct comparison of Au <sub>3</sub> <sup>+</sup> and C <sub>60</sub> <sup>+</sup> cluster projectiles in SIMS molecular depth profiling. <i>Journal of the American Society for Mass Spectrometry</i> , 2007, 18, 406-412.	1.2	61
66	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, 13710-13719.	6.6	60
67	Carbon monoxide adsorption and desorption on Rh{111} and Rh{331} surfaces. <i>Surface Science</i> , 1984, 138, 417-431.	0.8	59
68	Ion Beams and Laser Postionization for Molecule-Specific Imaging. <i>Analytical Chemistry</i> , 1993, 65, 622A-629A.	3.2	59
69	Proton Transfer in Time-of-Flight Secondary Ion Mass Spectrometry Studies of Frozen-Hydrated Dipalmitoylphosphatidylcholine. <i>Analytical Chemistry</i> , 2003, 75, 4087-4094.	3.2	57
70	Use of C <sub>60</sub> cluster projectiles for sputter depth profiling of polycrystalline metals. <i>Surface and Interface Analysis</i> , 2004, 36, 1367-1372.	0.8	57
71	Secondary Ion Mass Spectrometry Images Cardiolipins and Phosphatidylethanolamines at the Subcellular Level. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3156-3161.	7.2	57
72	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.	6.6	56

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73	Homogeneous electron-transfer reactions studied by internal reflection spectroelectrochemistry. <i>Journal of the American Chemical Society</i> , 1971, 93, 4343-4350.	6.6	56
74	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, 2287-2289.	6.6	56
75	Surface Sensitivity in Cluster-Ion-Induced Sputtering. <i>Physical Review Letters</i> , 2006, 96, 216104.	2.9	56
76	Measuring Compositions in Organic Depth Profiling: Results from a VAMAS Interlaboratory Study. <i>Journal of Physical Chemistry B</i> , 2015, 119, 10784-10797.	1.2	56
77	Azimuthal Anisotropies of Dimer Ions Ejected from Ion Bombarded Ni(001). <i>Physical Review Letters</i> , 1980, 44, 756-759.	2.9	55
78	Energy Deposition during Molecular Depth Profiling Experiments with Cluster Ion Beams. <i>Analytical Chemistry</i> , 2008, 80, 5293-5301.	3.2	55
79	Phosphatidylethanolamine-Induced Cholesterol Domains Chemically Identified with Mass Spectrometric Imaging. <i>Journal of the American Chemical Society</i> , 2004, 126, 13882-13883.	6.6	54
80	Depth Profiling of Langmuir-Blodgett Films with a Buckminsterfullerene Probe. <i>Analytical Chemistry</i> , 2004, 76, 6651-6658.	3.2	53
81	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.	1.5	53
82	Coarse-grained molecular dynamics studies of cluster-bombarded benzene crystals. <i>Applied Surface Science</i> , 2006, 252, 6436-6439.	3.1	52
83	Influence of Molecular Environment on the Analysis of Phospholipids by Time-of-Flight Secondary Ion Mass Spectrometry. <i>Langmuir</i> , 2004, 20, 4926-4932.	1.6	51
84	SIMS—A precursor and partner to contemporary mass spectrometry. <i>International Journal of Mass Spectrometry</i> , 2015, 377, 568-579.	0.7	51
85	Localization of Sphingomyelin in Cholesterol Domains by Imaging Mass Spectrometry. <i>Langmuir</i> , 2007, 23, 5645-5650.	1.6	50
86	Internal Energy of Molecules Ejected Due to Energetic C <sub>60</sub> Bombardment. <i>Analytical Chemistry</i> , 2009, 81, 2260-2267.	3.2	50
87	Mechanism for Increased Yield with SF <sub>5</sub> +Projectiles in Organic SIMS: The Substrate Effect. <i>Journal of Physical Chemistry A</i> , 1999, 103, 4587-4589.	1.1	49
88	Depth Resolution During C <sub>60</sub> + Profiling of Multilayer Molecular Films. <i>Analytical Chemistry</i> , 2008, 80, 7363-7371.	3.2	49
89	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, 11263-11272.	1.2	48
90	Freeze-Etching and Vapor Matrix Deposition for ToF-SIMS Imaging of Single Cells. <i>Langmuir</i> , 2008, 24, 7906-7911.	1.6	47

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91	X-ray photoelectron spectroscopic studies of silver(III) octaethylporphyrin. <i>Journal of the American Chemical Society</i> , 1974, 96, 591-592.	6.6	46
92	Understanding collision cascades in molecular solids. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2001, 180, 159-163.	0.6	46
93	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, 807-813.	1.6	45
94	Effect of Cluster Size in Kiloelectronvolt Cluster Bombardment of Solid Benzene. <i>Analytical Chemistry</i> , 2007, 79, 494-499.	3.2	45
95	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.	0.7	45
96	Ejection of molecular clusters from ion~bombarded surfaces. <i>Journal of Vacuum Science and Technology</i> , 1979, 16, 789-792.	1.9	44
97	Image potential and ion trajectories in secondary-ion mass spectrometry. <i>Physical Review B</i> , 1981, 24, 6178-6181.	1.1	44
98	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.	1.1	44
99	Metal Nanoparticle Deposition for TOF-SIMS Signal Enhancement of Polymers. <i>Analytical Chemistry</i> , 2006, 78, 141-148.	3.2	44
100	Depth profiling of polycrystalline multilayers using aBuckminsterfullerene projectile. <i>Applied Physics Letters</i> , 2004, 84, 5177-5179.	1.5	43
101	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, 3902-3909.	6.6	43
102	Imaging Mass Spectrometry on the Nanoscale with Cluster Ion Beams. <i>Analytical Chemistry</i> , 2015, 87, 328-333.	3.2	43
103	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> , 1978, 100, 5203-5207.	6.6	42
104	X-ray photoelectron spectra of some dirhodium carboxylate complexes. <i>Inorganica Chimica Acta</i> , 1980, 44, L139-L141.	1.2	42
105	Three-dimensional depth profiling of molecular structures. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 393, 1835-1842.	1.9	42
106	Particle ejection from ion~bombarded clean and reacted single~crystal surfaces. <i>Journal of Vacuum Science and Technology</i> , 1979, 16, 629-634.	1.9	41
107	Surface structure determinations with ion beams. <i>Accounts of Chemical Research</i> , 1980, 13, 406-412.	7.6	41
108	Molecular sputter depth profiling using carbon cluster beams. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 396, 105-114.	1.9	41

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109	Direct Observation of Ion Distributions near Electrodes in Ionic Polymer Actuators Containing Ionic Liquids. <i>Scientific Reports</i> , 2013, 3, 973.	1.6	41
110	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.	0.8	40
111	Deexcitation Model for Sputtered Excited Neutral Atoms. <i>Physical Review Letters</i> , 1986, 57, 1351-1354.	2.9	40
112	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.	1.2	40
113	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.	1.9	39
114	Angular distribution of Rh atoms desorbed from ion-bombarded Rh{100}: Effect of local environment. <i>Physical Review B</i> , 1990, 42, 7311-7316.	1.1	39
115	Effects of Cryogenic Sample Analysis on Molecular Depth Profiles with TOF-Secondary Ion Mass Spectrometry. <i>Analytical Chemistry</i> , 2010, 82, 8291-8299.	3.2	39
116	Investigation of the oxidation of polycrystalline lead by XPS and SIMS. <i>Surface Science</i> , 1978, 78, 1-14.	0.8	38
117	Prospects for imaging with TOF-SIMS using gold liquid metal ion sources. <i>Applied Surface Science</i> , 2003, 203-204, 198-200.	3.1	38
118	Substrate-Assisted Laser-Initiated Ejection of Proteins Embedded in Water Films. <i>Journal of Physical Chemistry B</i> , 2003, 107, 2362-2365.	1.2	38
119	Desorption of organic overlayers by Ga and C60 bombardment. <i>Vacuum</i> , 2006, 81, 167-173.	1.6	38
120	Direct Mapping of Phospholipid Ferroptotic Death Signals in Cells and Tissues by Gas Cluster Ion Beam Secondary Ion Mass Spectrometry (GCIB-SIMS). <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11784-11788.	7.2	38
121	Successive High-Resolution ( $H^{2+}$ ) $-GCIB$ and $C^{60+}$ -SIMS Imaging Integrates Multi-Omics in Different Cell Types in Breast Cancer Tissue. <i>Analytical Chemistry</i> , 2021, 93, 8143-8151.	3.2	38
122	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.	1.1	37
123	ToF-SIMS imaging with cluster ion beams. <i>Applied Surface Science</i> , 2004, 231-232, 159-163.	3.1	37
124	Surface and Depth Profiling Investigation of a Drug-Loaded Copolymer Utilized To Coat Taxus Express2Stents. <i>Analytical Chemistry</i> , 2006, 78, 8347-8353.	3.2	37
125	Time-of-Flight Secondary Ion Mass Spectrometry Imaging of Subcellular Lipid Heterogeneity: Poisson Counting and Spatial Resolution. <i>Analytical Chemistry</i> , 2009, 81, 5593-5602.	3.2	37
126	Molecular Depth Profiling with Argon Gas Cluster Ion Beams. <i>Journal of Physical Chemistry C</i> , 2015, 119, 15316-15324.	1.5	36



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127	Time of Flight Mass Spectrometry Imaging of Samples Fractured In Situ with a Spring-Loaded Trap System. <i>Analytical Chemistry</i> , 2010, 82, 6652-6659.	3.2	35
128	C60 of SIMS imaging of frozen hydrated HeLa cells. <i>Surface and Interface Analysis</i> , 2013, 45, 302-304.	0.8	35
129	CO <sub>2</sub> Cluster Ion Beam, an Alternative Projectile for Secondary Ion Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2016, 27, 1476-1482.	1.2	35
130	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.	6.6	34
131	Imaging of Exposed Headgroups and Tailgroups of Phospholipid Membranes by Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 1999, 121, 4716-4717.	6.6	34
132	Thickness effects of water overlayer on its explosive evaporation at heated metal surfaces. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2001, 180, 105-111.	0.6	34
133	Methyl formation from methanol decomposition on Pd{111} and Pt{111}. <i>Catalysis Letters</i> , 1988, 1, 385-389.	1.4	33
134	Molecular Depth Profiling Using a C60 Cluster Beam: The Role of Impact Energy. <i>Journal of Physical Chemistry C</i> , 2008, 112, 16550-16555.	1.5	33
135	Mass Spectral Imaging of Glycophospholipids, Cholesterol, and Glycophorin A in Model Cell Membranes. <i>Langmuir</i> , 2008, 24, 11803-11810.	1.6	33
136	Modification and Stability of Aromatic Self-Assembled Monolayers upon Irradiation with Energetic Particles. <i>Journal of Physical Chemistry B</i> , 2005, 109, 5085-5094.	1.2	32
137	Molecular depth profiling of multi-layer systems with cluster ion sources. <i>Applied Surface Science</i> , 2006, 252, 6498-6501.	3.1	32
138	Multiomics Imaging Using High-Energy Water Gas Cluster Ion Beam Secondary Ion Mass Spectrometry [(H <sub>2</sub> O) <sub>n</sub> -GCIB-SIMS] of Frozen-Hydrated Cells and Tissue. <i>Analytical Chemistry</i> , 2021, 93, 7808-7814.	3.2	32
139	Molecular Depth Profiling of Buried Lipid Bilayers Using C60-Secondary Ion Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 351-358.	3.2	31
140	Band Structure Effects in Ejection of Ni Atoms in Fine Structure States. <i>Physical Review Letters</i> , 1995, 75, 3950-3953.	2.9	30
141	Postionization of molecules desorbed from surfaces by keV ion bombardment with femtosecond laser pulses. , 1998, 12, 1253-1260.		30
142	Laser Desorption and Imaging of Proteins from Ice via UV Femtosecond Laser Pulses. <i>Analytical Chemistry</i> , 2003, 75, 5146-5151.	3.2	30
143	Design and performance of an energy- and angle-resolved secondary ion mass spectrometer. <i>Review of Scientific Instruments</i> , 1981, 52, 1148-1155.	0.6	29
144	Characterization of polycyclic aromatic compounds on surfaces using ion-beam-induced desorption and multiphoton resonance ionization. <i>Analytical Chemistry</i> , 1991, 63, 225-232.	3.2	29

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145	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.	3.1	29
146	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, 3318-3324.	3.2	29
147	Prospects for imaging TOF-SIMS: from fundamentals to biotechnology. <i>Applied Surface Science</i> , 2003, 203-204, 13-19.	3.1	29
148	Energetic ion bombardment of Ag surfaces by C60+ and Ga+ projectiles. <i>Journal of the American Society for Mass Spectrometry</i> , 2005, 16, 1677-1686.	1.2	29
149	Improving Secondary Ion Mass Spectrometry Image Quality with Image Fusion. <i>Journal of the American Society for Mass Spectrometry</i> , 2014, 25, 2154-2162.	1.2	29
150	Shadow-cone-enhanced secondary-ion mass-spectrometry studies of Ag{110}. <i>Physical Review B</i> , 1989, 39, 3467-3474.	1.1	28
151	The effect of incident angle on the C60+ bombardment of molecular solids. <i>Applied Surface Science</i> , 2008, 255, 1068-1070.	3.1	28
152	Which is more important in bioimaging SIMS experimentsâ€”The sample preparation or the nature of the projectile?. <i>Applied Surface Science</i> , 2008, 255, 1298-1304.	3.1	28
153	Strong-field ionization of sputtered molecules for biomolecular imaging. <i>Chemical Physics Letters</i> , 2009, 468, 264-269.	1.2	28
154	High sensitivity internal reflection spectroelectrochemistry for direct monitoring of diffusing species using signal averaging. <i>Analytical Chemistry</i> , 1971, 43, 252-259.	3.2	27
155	Molecular depth profiling. <i>Surface and Interface Analysis</i> , 2013, 45, 3-8.	0.8	27
156	Enhanced Ion Yields Using High Energy Water Cluster Beams for Secondary Ion Mass Spectrometry Analysis and Imaging. <i>Analytical Chemistry</i> , 2019, 91, 9058-9068.	3.2	27
157	Detection of biomolecules on surfaces using ion-beam-induced desorption and multiphoton resonance ionization. <i>Analytical Chemistry</i> , 1991, 63, 1947-1953.	3.2	26
158	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.	0.7	26
159	Three-dimensional molecular imaging using mass spectrometry and atomic force microscopy. <i>Applied Surface Science</i> , 2008, 255, 984-986.	3.1	26
160	Molecular desorption in bombardment mass spectrometries. <i>Chemical Physics Letters</i> , 1995, 233, 575-579.	1.2	25
161	Model multilayer structures for three-dimensional cell imaging. <i>Applied Surface Science</i> , 2006, 252, 6789-6792.	3.1	25
162	Characterizing <i>in situ</i> Glycerophospholipids with SIMS and MALDI Methodologies. <i>Surface and Interface Analysis</i> , 2011, 43, 269-271.	0.8	25

#	ARTICLE	IF	CITATIONS
163	On the SIMS Ionization Probability of Organic Molecules. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 1182-1191.	1.2	25
164	Defect induced surface chemistry: A comparison of the adsorption and thermal decomposition of C <sub>2</sub> H <sub>4</sub> on Rh{111} and Rh{331}. <i>Surface Science</i> , 1990, 230, 35-46.	0.8	24
165	Ion Emission from Water Ice Due to Energetic Particle Bombardment. <i>Journal of Physical Chemistry A</i> , 2004, 108, 2993-2998.	1.1	24
166	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, 21006-21014.	1.2	24
167	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.	1.5	24
168	Molecular Depth Profiling with Cluster Secondary Ion Mass Spectrometry and Wedges. <i>Analytical Chemistry</i> , 2010, 82, 57-60.	3.2	24
169	Angle-resolved velocity distributions of excited Rh atoms ejected from ion-bombarded Rh{100}. <i>Journal of Chemical Physics</i> , 1992, 97, 3846-3854.	1.2	23
170	Controlled Formation of Carboxylic Acid Groups at Polyphosphazene Surfaces: Oxidative and Hydrolytic Routes. <i>Chemistry of Materials</i> , 1996, 8, 2730-2738.	3.2	23
171	Solvation of zero-valent metals in organic thin films. <i>Chemical Physics Letters</i> , 2003, 369, 615-620.	1.2	23
172	Investigating lipid interactions and the process of raft formation in cellular membranes using ToF-SIMS. <i>Applied Surface Science</i> , 2006, 252, 6716-6718.	3.1	23
173	Angle of incidence effects in a molecular solid. <i>Applied Surface Science</i> , 2008, 255, 844-846.	3.1	23
174	Fluid Flow and Effusive Desorption: Dominant Mechanisms of Energy Dissipation after Energetic Cluster Bombardment of Molecular Solids. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 2009-2014.	2.1	23
175	Secondary-ion Mass Spectrometry Images Cardiolipins and Phosphatidylethanolamines at the Subcellular Level. <i>Angewandte Chemie</i> , 2019, 131, 3188-3193.	1.6	23
176	System for transferring samples between chambers in UHV. <i>Journal of Vacuum Science and Technology</i> , 1978, 15, 1756-1760.	1.9	22
177	GaAs{001}(2Å–4) surface-structure studies with shadow-cone-enhanced secondary-ion mass spectrometry. <i>Physical Review B</i> , 1992, 45, 6776-6785.	1.1	22
178	Chemistry of metal atoms reacting with alkanethiol self-assembled monolayers. <i>Applied Surface Science</i> , 2006, 252, 6686-6688.	3.1	22
179	Sputtering of thin benzene and polystyrene overlayers by keV Ga and C <sub>60</sub> bombardment. <i>Applied Surface Science</i> , 2006, 252, 6419-6422.	3.1	22
180	Molecular Depth Profiling by Wedged Crater Beveling. <i>Analytical Chemistry</i> , 2011, 83, 6410-6417.	3.2	22

#	ARTICLE	IF	CITATIONS
181	Angular distribution of Ga <sup>+</sup> ions desorbed by 3-keV-ion bombardment of GaAs{001}-(2Å—4). Physical Review B, 1991, 44, 12830-12836.	1.1	21
182	Biological tissue imaging with a hybrid cluster SIMS quadrupole time-of-flight mass spectrometer. Applied Surface Science, 2008, 255, 1572-1575.	3.1	21
183	Molecular depth profiling of trehalose using a C60 cluster ion beam. Applied Surface Science, 2008, 255, 959-961.	3.1	20
184	Inhibition of HMG CoA reductase reveals an unexpected role for cholesterol during PGC migration in the mouse. BMC Developmental Biology, 2008, 8, 120.	2.1	20
185	Molecular depth profiling and imaging using cluster ion beams with femtosecond laser postionization. Applied Surface Science, 2008, 255, 831-833.	3.1	20
186	Ionization Probability in Molecular Secondary Ion Mass Spectrometry: Protonation Efficiency of Sputtered Guanine Molecules Studied by Laser Postionization. Journal of Physical Chemistry C, 2017, 121, 8931-8937.	1.5	19
187	Photoionization of Gas-Phase versus Ion-Beam-Desorbed Dopamine with Femtosecond Laser Pulses. Analytical Chemistry, 1999, 71, 574-581.	3.2	18
188	Label-Free Optical Detection of Peptide Synthesis on a Porous Silicon Scaffold/Sensor. Langmuir, 2008, 24, 2908-2915.	1.6	18
189	Strong-Field Photoionization of Sputtered Neutral Molecules for Molecular Depth Profiling. Journal of Physical Chemistry C, 2010, 114, 5391-5399.	1.5	18
190	Dynamic Reactive Ionization with Cluster Secondary Ion Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2016, 27, 285-292.	1.2	18
191	Application of coulostatic charge injection techniques to improve potentiostat risetimes. Analytical Chemistry, 1972, 44, 2152-2156.	3.2	17
192	X-ray photoelectron spectroscopic studies of the thermal stability of chlorophyll a monohydrate. Journal of the American Chemical Society, 1976, 98, 2369-2370.	6.6	17
193	L3M23M23 Auger energies of metallic Ni, Cu, and Zn: Influence of 3d-4s admixed screening on calculating relaxation energies. Physical Review B, 1976, 14, 2281-2286.	1.1	17
194	Angle-resolved SIMS studies of organic monolayers on the silver (111) surface. Journal of the American Chemical Society, 1983, 105, 2916-2917.	6.6	17
195	Spectroscopically Encoded Resins for High Throughput Imaging Time-of-Flight Secondary Ion Mass Spectrometry. ACS Combinatorial Science, 2006, 8, 18-25.	3.3	17
196	Cluster SIMS with a hybrid quadrupole time-of-flight mass spectrometer. Applied Surface Science, 2008, 255, 1610-1613.	3.1	17
197	Nanotome cluster bombardment to recover spatial chemistry after preparation of biological samples for SIMS imaging. Journal of the American Society for Mass Spectrometry, 2010, 21, 833-836.	1.2	17
198	Reducing the Matrix Effect in Organic Cluster SIMS Using Dynamic Reactive Ionization. Journal of the American Society for Mass Spectrometry, 2016, 27, 2014-2024.	1.2	17

#	ARTICLE	IF	CITATIONS
199	Velocity dependence of azimuthal anisotropies in ion scattering from rhodium {111}. <i>Surface Science</i> , 1985, 154, 22-34.	0.8	16
200	The influence of surface atomic steps on site-selective adsorption processes. Ethylidyne formation on rhodium{111} and rhodium{331}. <i>Journal of the American Chemical Society</i> , 1987, 109, 6873-6875.	6.6	16
201	Vacuum ultraviolet single photon versus femtosecond multiphoton ionization of sputtered germanium clusters. , 1998, 12, 1241-1245.		16
202	Controlling energy deposition during the C <sub>60</sub> + bombardment of silicon: The effect of incident angle geometry. <i>Applied Surface Science</i> , 2008, 255, 886-889.	3.1	16
203	Near Infrared (NIR) Strong Field Ionization and Imaging of C <sub>60</sub> Sputtered Molecules: Overcoming Matrix Effects and Improving Sensitivity. <i>Analytical Chemistry</i> , 2014, 86, 8613-8620.	3.2	16
204	Secondary ion mass spectroscopic studies of the atomic geometry of GaAs(110). <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1988, 6, 1444.	1.6	15
205	Coverage-dependent bond-length changes of chlorine adsorbed on Ag{110} determined by shadow-cone-enhanced desorption. <i>Physical Review Letters</i> , 1989, 62, 2568-2568.	2.9	15
206	Tilting in the arsenic-induced c(4 $\sqrt{3}$ ×4) reconstruction of the GaAs{001} surface. <i>Physical Review B</i> , 1995, 52, 5172-5178.	1.1	15
207	Emission of ionic water clusters from water ice films bombarded by energetic projectiles. <i>Applied Surface Science</i> , 2004, 231-232, 72-77.	3.1	15
208	Fundamental studies of the cluster ion bombardment of water ice. <i>Applied Surface Science</i> , 2006, 252, 6526-6528.	3.1	15
209	Investigating lipid-lipid and lipid-protein interactions in model membranes by ToF-SIMS. <i>Applied Surface Science</i> , 2008, 255, 1190-1192.	3.1	15
210	Reducing the Matrix Effect in Molecular Secondary Ion Mass Spectrometry by Laser Post-ionization. <i>Journal of Physical Chemistry C</i> , 2017, 121, 19705-19715.	1.5	15
211	Polymethylmethacrylate by XPS. <i>Surface Science Spectra</i> , 1993, 2, 71-75.	0.3	14
212	Mechanical properties and the evolution of matrix molecules in PTFE upon irradiation with MeV alpha particles. <i>Applied Surface Science</i> , 2006, 253, 1330-1342.	3.1	14
213	Fundamental studies of molecular depth profiling and 3D imaging using Langmuir-Blodgett films as a model. <i>Applied Surface Science</i> , 2008, 255, 816-818.	3.1	14
214	Molecular Dynamics Simulations of Sputtering of Langmuir-Blodgett Multilayers by Kiloelectronvolt C <sub>60</sub> Projectiles. <i>Journal of Physical Chemistry C</i> , 2009, 113, 5641-5648.	1.5	14
215	Reduce the matrix effect in biological tissue imaging using dynamic reactive ionization and gas cluster ion beams. <i>Biointerphases</i> , 2016, 11, 02A320.	0.6	14
216	Sample Preparation for 3D SIMS Chemical Imaging of Cells. <i>Methods in Molecular Biology</i> , 2015, 1203, 9-19.	0.4	14

#	ARTICLE	IF	CITATIONS
217	Lipid Detection, Identification, and Imaging Single Cells with SIMS. <i>Methods in Molecular Biology</i> , 2010, 656, 85-97.	0.4	14
218	Vertical channeling of pyridine molecules ejected in ion bombardment experiments. <i>Chemical Physics Letters</i> , 1985, 114, 237-240.	1.2	13
219	Coverage dependent structural changes during chlorine adsorption on Ag{110}. <i>Journal of Chemical Physics</i> , 1986, 85, 1097-1103.	1.2	13
220	Energetic Ion-Stimulated Desorption of Physisorbed Molecules. <i>Journal of Physical Chemistry B</i> , 2002, 106, 12929-12937.	1.2	13
221	Depth profiling of taxol-loaded poly(styrene-b-isobutylene-b-styrene) using Ga <sup>+</sup> and C <sub>60</sub> <sup>+</sup> ion beams. <i>Applied Surface Science</i> , 2006, 252, 6615-6618.	3.1	13
222	Molecular dynamics simulations of sputtering of organic overlayers by slow, large clusters. <i>Applied Surface Science</i> , 2008, 255, 841-843.	3.1	13
223	Molecular imaging of biological tissue using gas cluster ions. <i>Surface and Interface Analysis</i> , 2014, 46, 115-117.	0.8	13
224	Strong Field Ionization of <sup>17</sup> O <sub>2</sub> -Estradiol in the IR: Strategies To Optimize Molecular Postionization in Secondary Neutral Mass Spectrometry. <i>Journal of Physical Chemistry C</i> , 2014, 118, 25534-25544.	1.5	13
225	Correction. High Sensitivity Internal Reflection Spectroelectrochemistry for Direct Monitoring of Diffusing Species Using Signal Averaging. <i>Analytical Chemistry</i> , 1971, 43, 755-755.	3.2	12
226	Angle and energy distributions of neutral atoms sputtered from Ni <sub>3</sub> Al(100). <i>Rapid Communications in Mass Spectrometry</i> , 1998, 12, 1236-1240.	0.7	12
227	Relative quantification of cellular sections with molecular depth profiling ToF-SIMS imaging. <i>Applied Surface Science</i> , 2008, 255, 1158-1161.	3.1	12
228	Instrument combining x-ray photoelectron spectroscopy and secondary ion mass spectrometry for surface studies. <i>Review of Scientific Instruments</i> , 1979, 50, 1386-1390.	0.6	11
229	Direct Oxidation of Alkylamines by YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> : A Key Step in the Formation of Self-Assembled Monolayers on Cuprate Superconductors. <i>Journal of the American Chemical Society</i> , 1998, 120, 5126-5127.	6.6	11
230	Cluster Secondary Ion Mass Spectrometry and the Temperature Dependence of Molecular Depth Profiles. <i>Analytical Chemistry</i> , 2012, 84, 3981-3989.	3.2	11
231	Depth Profiling of Metal Overlayers on Organic Substrates with Cluster SIMS. <i>Analytical Chemistry</i> , 2013, 85, 10565-10572.	3.2	11
232	Formation of Neutral In <sub>m</sub> C <sub>n</sub> Clusters under C <sub>60</sub> Ion Bombardment of Indium. <i>Journal of Physical Chemistry A</i> , 2014, 118, 8542-8552.	1.1	11
233	Shadow-cone enhanced desorption with angle-resolved secondary ion mass spectrometry detection. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1987, 5, 981-984.	0.9	10
234	Oxygen-induced near-surface structural rearrangements on Ni{001} studied by shadow-cone-enhanced secondary-ion mass spectrometry. <i>Physical Review B</i> , 1994, 49, 4842-4849.	1.1	10

#	ARTICLE	IF	CITATIONS
235	Ejection of neutral molecules from ion-bombarded organic surfaces. , 1998, 12, 1226-1231.		10
236	Mass spectrometry imaging of freeze-dried membrane phospholipids of dividing <i>Tetrahymena pyriformis</i> . Surface and Interface Analysis, 2013, 45, 211-214.	0.8	10
237	Multimodal image fusion with SIMS: Preprocessing with image registration. Biointerphases, 2016, 11, 02A311.	0.6	10
238	Molecular SIMS Ionization Probability Studied with Laser Postionization: Influence of the Projectile Cluster. Journal of Physical Chemistry C, 2019, 123, 565-574.	1.5	10
239	Energy and angular distributions of excited rhodium atoms ejected from the rhodium (100) surface. Physical Review B, 1991, 43, 12078-12081.	1.1	9
240	Analyses of cryogenic samples using ion-induced desorption and multiphoton resonance ionization. Analytical Chemistry, 1993, 65, 417-420.	3.2	9
241	Imaging macrophages in trehalose with SIMS. Applied Surface Science, 2008, 255, 929-933.	3.1	9
242	Short-Chain Alcohols Promote Accelerated Membrane Distention in a Dynamic Liposome Model of Exocytosis. Langmuir, 2008, 24, 2637-2642.	1.6	9
243	Investigating the fundamentals of molecular depth profiling using strong-field photoionization of sputtered neutrals. Surface and Interface Analysis, 2011, 43, 45-48.	0.8	9
244	Label-free visualization of nilotinib-functionalized gold nanoparticles within single mammalian cells by C60- SIMS imaging. Analytical and Bioanalytical Chemistry, 2017, 409, 3067-3076.	1.9	9
245	Application of panning to SIMS imaging. Surface and Interface Analysis, 2014, 46, 217-220.	0.8	8
246	Characterization of hydroxyapatite deposition on biomimetic polyphosphazenes by time-of-flight secondary ion mass spectrometry (ToF-SIMS). RSC Advances, 2014, 4, 19680-19689.	1.7	8
247	C60-SIMS imaging of nanoparticles within mammalian cells. Biointerphases, 2016, 11, 02A306.	0.6	8
248	C-O Bond Dissociation and Induced Chemical Ionization Using High Energy (CO <sub>2</sub> ) <sub>n</sub> + Gas Cluster Ion Beam. Journal of the American Society for Mass Spectrometry, 2019, 30, 476-481.	1.2	8
249	Characterization of metal surfaces by secondary ion mass spectrometry x-ray photoelectron spectroscopy. Analytical Chemistry, 1978, 50, 1286-1290.	3.2	7
250	Mechanism of fragmentation of organic molecules during keV particle bombardment. International Journal of Mass Spectrometry and Ion Physics, 1983, 52, 217-221.	1.3	7
251	Investigation of adsorption of benzene on nickel(001) by secondary ion mass spectrometry. Analytical Chemistry, 1983, 55, 790-792.	3.2	7
252	Applicability of Imaging Time-of Flight Secondary Ion MS to the Characterization of Solid-Phase Synthesized Combinatorial Libraries. Analytical Chemistry, 2003, 75, 6155-6162.	3.2	7

#	ARTICLE	IF	CITATIONS
253	An experimental and theoretical view of energetic C <sub>60</sub> cluster bombardment onto molecular solids. <i>Surface and Interface Analysis</i> , 2013, 45, 50-53.	0.8	7
254	Surface Structure and Reaction Studies by Ion-Solid Collisions. , 1991, , 45-141.		7
255	Matrix effects on the electronic partitioning of iron atoms desorbed from surfaces by energetic ion bombardment. <i>Analytical Chemistry</i> , 1985, 57, 2669-2674.	3.2	6
256	Methanolic carbon-oxygen bond activation on palladium{111}. A coverage-dependent reaction. <i>Journal of the American Chemical Society</i> , 1992, 114, 2722-2723.	6.6	6
257	Polystyrene by XPS. <i>Surface Science Spectra</i> , 1993, 2, 67-70.	0.3	6
258	Surface characterization with ion-induced desorption and multiphoton resonance ionization. <i>Surface and Interface Analysis</i> , 1994, 21, 298-303.	0.8	6
259	Time-of-flight static secondary ion mass spectrometry analysis of surface contamination on Pt/Ir standard mass material. <i>Rapid Communications in Mass Spectrometry</i> , 1998, 12, 1261-1265.	0.7	6
260	Molecular desorption and secondary ion mass spectrometry. <i>International Journal of Mass Spectrometry</i> , 2001, 212, 467-475.	0.7	6
261	TOF-SIMS Evidence of Intercalated Molecular Gases and Diffusion-Limited Reaction Kinetics in an $\hat{\pm}$ Particle-Irradiated PTFE Matrix. <i>Journal of Physical Chemistry B</i> , 2006, 110, 1820-1829.	1.2	6
262	Strong $\hat{\epsilon}$ field ionization of C <sub>60</sub> sputtered neutral molecules using $10^{15}$ W/cm <sup>2</sup> of fs IR radiation. <i>Surface and Interface Analysis</i> , 2013, 45, 510-512.	0.8	6
263	Effect of disorder on the Al/GaAs(001) interface. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1989, 7, 742.	1.6	5
264	Relative ion yields in mammalian cell components using C <sub>60</sub> SIMS. <i>Surface and Interface Analysis</i> , 2013, 45, 244-247.	0.8	5
265	A statistical interpretation of molecular delta layer depth profiles. <i>Surface and Interface Analysis</i> , 2013, 45, 39-41.	0.8	5
266	C60-SIMS studies of glycerophospholipid in a LIPID MAPS model system: KDO2-Lipid A stimulated RAW 264.7 cells. <i>Surface and Interface Analysis</i> , 2013, 45, 298-301.	0.8	5
267	Transport optics for a space $\hat{\epsilon}$ charge broadening ion beam. <i>Review of Scientific Instruments</i> , 1988, 59, 1294-1302.	0.6	4
268	Growth of Al on GaAs(001): Observation of interfacial submonolayer structure. <i>Applied Physics Letters</i> , 1989, 55, 1753-1755.	1.5	4
269	Angular distribution of Ga <sup>+</sup> ions desorbed by 3-keV ion bombardment of GaAs(110). <i>Physical Review B</i> , 1990, 42, 11027-11034.	1.1	4
270	Influence of the bombarding ion energy and surface composition on the ground-state atom fraction in solids analysis using multiphoton resonance ionization. <i>Surface and Interface Analysis</i> , 1992, 18, 743-750.	0.8	4



#	ARTICLE	IF	CITATIONS
271	Rapid screening of molecular arrays using imaging TOF-SIMS. Applied Surface Science, 2003, 203-204, 201-204.	3.1	4
272	Internal Excitation Mechanisms of Neutral Atoms and Molecules Emitted from Ion Bombarded Organic Thin Films. Journal of Physical Chemistry B, 2004, 108, 15686-15693.	1.2	4
273	Retrospective sputter depth profiling using 3D mass spectral imaging. Surface and Interface Analysis, 2011, 43, 41-44.	0.8	4
274	Direct Mapping of Phospholipid Ferroptotic Death Signals in Cells and Tissues by Gas Cluster Ion Beam Secondary Ion Mass Spectrometry (GCIB-SIMS). Angewandte Chemie, 2021, 133, 11890-11894.	1.6	4
275	Role of low-level impurities and intercalated molecular gases in the $\alpha$ particle radiolysis of polytetrafluoroethylene examined by static time-of-flight secondary-ion-mass spectrometry. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1166-1171.	0.9	3
276	Ion distribution in ionic electroactive polymer actuators. , 2011, , .		3
277	Quantitative detection of purines in biologically relevant films with TOF-SIMS. Surface and Interface Analysis, 2013, 45, 237-239.	0.8	3
278	Dye-enhanced imaging of mammalian cells with SIMS. Surface and Interface Analysis, 2014, 46, 177-180.	0.8	3
279	Effect of SIMS ionization probability on depth resolution for organic/inorganic interfaces. Surface and Interface Analysis, 2017, 49, 933-939.	0.8	3
280	Ionization probability of sputtered indium under irradiation with 20-keV fullerene and argon gas cluster projectiles. International Journal of Mass Spectrometry, 2019, 438, 13-21.	0.7	3
281	The Dynamics of Ion-Solid Interactions: A Basis for Understanding SIMS. Springer Series in Chemical Physics, 1979, , 2-6.	0.2	3
282	Temperature effects in the sputtering of a molecular solid by energetic atomic and cluster projectiles. Surface and Interface Analysis, 2011, 43, 78-80.	0.8	2
283	Investigations of molecular depth profiling with dual beam sputtering. Surface and Interface Analysis, 2013, 45, 175-177.	0.8	2
284	Temperature effects of sputtering of Langmuir-Blodgett multilayers. Surface and Interface Analysis, 2013, 45, 65-67.	0.8	2
285	Tandem MS and C 60 SIMS for the identification and characterization of lipids. Surface and Interface Analysis, 2014, 46, 118-122.	0.8	2
286	Cluster secondary ion mass spectrometry imaging of interfacial reactions of TiO <sub>2</sub> microspheres embedded in ionic liquids. Rapid Communications in Mass Spectrometry, 2016, 30, 379-385.	0.7	2
287	The Development of Secondary Ion Mass Spectrometry (SIMS) for Imaging. , 2016, , 103-112.		2
288	Electron Spectroscopy: Theory, techniques and applications, vol. 1. Journal of Electron Spectroscopy and Related Phenomena, 1978, 14, 487-488.	0.8	1

#	ARTICLE	IF	CITATIONS
289	Surface Characterization. Analytical Chemistry, 1985, 57, 1118A-1124A.	3.2	1
290	Looking at surfaces with cluster ion beams. Materials Today, 2006, 9, 50-51.	8.3	1
291	Evidence for the formation of dynamically created pre-formed ions at the interface of isotopically enriched thin films. Surface and Interface Analysis, 2013, 45, 54-56.	0.8	1
292	Investigations into the interactions of a MALDI Matrix with organic thin films using C <sub>60</sub> SIMS depth profiling. Surface and Interface Analysis, 2014, 46, 67-69.	0.8	1
293	Design of an ultrahigh vacuum direct-drive, cryogenic sample manipulator providing two degrees of rotational freedom. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 2867-2870.	0.9	0
294	Mass spectrometry and surface chemistry at Penn State University. Rapid Communications in Mass Spectrometry, 1998, 12, 1223-1225.	0.7	0
295	Atomic placement of Al on the GaAs {001}c(4 $\times$ 4)reconstruction determined by angle-resolved secondary-ion mass spectrometry. Physical Review B, 1999, 59, 10662-10669.	1.1	0
296	Photoionization of dipeptides with femtosecond laser pulses. AIP Conference Proceedings, 2001, , .	0.3	0
297	Nanoscale Imaging Mass Spectrometry using Cluster Ion Beams. Microscopy and Microanalysis, 2015, 21, 2391-2392.	0.2	0
298	Single-Cell Level Mass Spectrometric Imaging. , 2008, , 4046-4056.		0