Barbara J Garrison

List of Publications by Year
in descending order

170 papers	6,829 citations	50170 46 h-index	74018 75 g-index
170 all docs	170 docs citations	170 times ranked	3024 citing authors

#	Article	IF	Citations
1	C-O Bond Dissociation and Induced Chemical Ionization Using High Energy (CO2)n+ Gas Cluster Ion Beam. Journal of the American Society for Mass Spectrometry, 2019, 30, 476-481.	1.2	8
2	Development of a Charge-Implicit ReaxFF Potential for Hydrocarbon Systems. Journal of Physical Chemistry Letters, 2018, 9, 359-363.	2.1	27
3	Physical basis of energy per cluster atom in the universal concept of sputtering. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, .	0.6	14
4	Computer modeling of angular emission from Ag(100) and Mo(100) surfaces due to Arn cluster bombardment. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, .	0.6	8
5	Effect of Oxygen Chemistry in Sputtering of Polymers. Journal of Physical Chemistry Letters, 2016, 7, 1559-1562.	2.1	9
6	Micro- and Macroscopic Modeling of Sputter Depth Profiling. Journal of Physical Chemistry C, 2016, 120, 25473-25480.	1.5	6
7	CO₂ Cluster Ion Beam, an Alternative Projectile for Secondary Ion Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2016, 27, 1476-1482.	1.2	35
8	Seduction of Finding Universality in Sputtering Yields Due to Cluster Bombardment of Solids. Accounts of Chemical Research, 2015, 48, 2529-2536.	7.6	18
9	Correction to â€œOn Universality in Sputtering Yields Due to Cluster Bombardmentâ€. Journal of Physical Chemistry Letters, 2014, 5, 3435-3435.	2.1	2
10	On Universality in Sputtering Yields Due to Cluster Bombardment. Journal of Physical Chemistry Letters, 2014, 5, 3227-3230.	2.1	17
11	Investigation of Carbon Buildup in Simulations of Multi-Impact Bombardment of Si with 20 keV C₆₀ Projectiles. Journal of Physical Chemistry A, 2014, 118, 8081-8087.	1.1	4
12	Computer simulations of sputtering and fragment formation during keV C₆₀ bombardment of octane and Î²â€carotene. Surface and Interface Analysis, 2014, 46, 3-6.	0.8	6
13	How material properties affect depth profiles â€“ insight from computer modeling. Surface and Interface Analysis, 2014, 46, 253-256.	0.8	4
14	Modeling dynamic cluster SIMS experiments. Surface and Interface Analysis, 2013, 45, 14-17.	0.8	4
15	Sputtering of a coarseâ€grained benzene and Ag(111) crystals by large Ar clusters â€“ effect of impact angle and cohesive energy. Surface and Interface Analysis, 2013, 45, 27-30.	0.8	8
16	Mixed MD simulation â€“ analytical model analysis of Ag(111), C₆₀ repetitive bombardment in the context of depth profiling for dynamic SIMS. Surface and Interface Analysis, 2013, 45, 154-157.	0.8	3
17	Surface topography effects in C₆₀ bombardment of Si. Surface and Interface Analysis, 2013, 45, 93-96.	0.8	6
18	Chemical damage resulting from 15â€‰keVâ€‰C₆₀, Ar₁₈ and Ar₆₀ cluster bombardments of solid benzene. Surface and Interface Analysis, 2013, 45, 42-45.	0.8	5

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19	An experimental and theoretical view of energetic C₆₀ cluster bombardment onto molecular solids. Surface and Interface Analysis, 2013, 45, 50-53.	0.8	7
20	Computed Molecular Depth Profile for C₆₀ Bombardment of a Molecular solid. Analytical Chemistry, 2013, 85, 11628-11633.	3.2	10
21	Combined molecular dynamics and analytical model for repetitive cluster bombardment of solids. Nuclear Instruments & Methods in Physics Research B, 2013, 303, 196-199.	0.6	4
22	Molecular dynamics study of polystyrene bond-breaking and crosslinking under C60 and Arn cluster bombardment. Nuclear Instruments & Methods in Physics Research B, 2013, 303, 23-27.	0.6	18
23	Dynamics Displayed by Energetic C60Bombardment of Metal Overlayers on an Organic Substrate. Analytical Chemistry, 2013, 85, 2348-2355.	3.2	3
24	Depth Profiling of Metal Overlayers on Organic Substrates with Cluster SIMS. Analytical Chemistry, 2013, 85, 10565-10572.	3.2	11
25	Partnering Analytic Models and Dynamic Secondary Ion Mass Spectrometry Simulations to Interpret Depth Profiles Due to Kiloelectronvolt Cluster Bombardment. Analytical Chemistry, 2012, 84, 3010-3016.	3.2	10
26	Steady-State Statistical Sputtering Model for Extracting Depth Profiles from Molecular Dynamics Simulations of Dynamic SIMS. Journal of Physical Chemistry C, 2012, 116, 1042-1051.	1.5	14
27	Molecular Dynamics Simulations Elucidate the Synergy of C₆₀ and Low-Energy Ar Cobombardment for Molecular Depth Profiling. Journal of Physical Chemistry Letters, 2011, 2, 2635-2638.	2.1	9
28	Fluid Flow and Effusive Desorption: Dominant Mechanisms of Energy Dissipation after Energetic Cluster Bombardment of Molecular Solids. Journal of Physical Chemistry Letters, 2011, 2, 2009-2014.	2.1	23
29	Erosion of Ag surface by continuous irradiation with slow, large Ar clusters. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1586-1590.	0.6	22
30	Effect of impact angle and projectile size on sputtering efficiency of solid benzene investigated by molecular dynamics simulations. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1578-1581.	0.6	35
31	The effect of the H:C ratio on the sputtering of molecular solids by fullerenes. Surface and Interface Analysis, 2011, 43, 116-119.	0.8	12
32	Effect of Si¿C bond formation in 20 keV C60 bombardment of Si. Surface and Interface Analysis, 2011, 43, 123-125.	0.8	8
33	Strategies for modeling diverse chemical reactions in molecular dynamics simulations of cluster bombardment. Surface and Interface Analysis, 2011, 43, 126-128.	0.8	1
34	Molecular ions in cluster bombardment: what clues do the molecular dynamics simulations provide?. Surface and Interface Analysis, 2011, 43, 134-136.	0.8	8
35	Effect of sample rotation on surface roughness with keV C60 bombardment in secondary ion mass spectrometry (SIMS) experiments. Chemical Physics Letters, 2011, 506, 129-134.	1.2	13
36	Desorption of large molecules with light-element clusters: Effects of cluster size and substrate nature. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1572-1577.	0.6	18

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37	Mixed resolution model for C60 cluster bombardment of solid benzene. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1564-1567.	0.6	2
38	Molecular dynamics simulations of matrix assisted laser desorption ionization: Matrixâ€“analyte interactions. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1744-1747.	0.6	4
39	Theoretical advances in the dissolution studies of mineralâ€“water interfaces. Theoretical Chemistry Accounts, 2010, 127, 271-284.	0.5	13
40	Molecular Dynamics Study of the Effect of Surface Topography on Sputtering Induced by 20 keV Au₃ and C₆₀ Clusters. Journal of Physical Chemistry C, 2010, 114, 5532-5539.	1.5	26
41	Role of Intrasurface Hydrogen Bonding on Silica Dissolution. Journal of Physical Chemistry C, 2010, 114, 2267-2272.	1.5	13
42	Biological Cluster Mass Spectrometry. Annual Review of Physical Chemistry, 2010, 61, 305-322.	4.8	66
43	Ab initiostudy of dissolution and precipitation reactions from the edge, kink, and terrace sites of quartz as a function of pH. Molecular Physics, 2009, 107, 831-843.	0.8	35
44	Development of Homogeneous Water Condensation Models Using Molecular Dynamics. AIAA Journal, 2009, 47, 1241-1251.	1.5	12
45	A technique to study doped ablation in polymethyl methacrylate using molecular dynamics simulation. Applied Surface Science, 2009, 255, 9588-9591.	3.1	0
46	Molecular dynamics computer simulations of 5keV C60 bombardment of benzene crystal. Vacuum, 2009, 83, S95-S98.	1.6	11
47	A Computational Investigation of C60 Depth Profiling of Ag: Molecular Dynamics of Multiple Impact Events. Journal of Physical Chemistry C, 2009, 113, 3270-3276.	1.5	39
48	Internal Energy of Molecules Ejected Due to Energetic C₆₀ Bombardment. Analytical Chemistry, 2009, 81, 2260-2267.	3.2	50
49	Ab Initio Investigation of Dissolution Mechanisms in Aluminosilicate Minerals. Journal of Physical Chemistry A, 2009, 113, 1343-1352.	1.1	55
50	Interplay between Chemical, Thermal, and Mechanical Processes Occurring upon Laser Excitation of Poly(methyl methacrylate) and Its Role in Ablation. Journal of Physical Chemistry C, 2009, 113, 11491-11506.	1.5	10
51	Advanced Monte Carlo Approach To Study Evolution of Quartz Surface during the Dissolution Process. Journal of the American Chemical Society, 2009, 131, 9538-9546.	6.6	30
52	Theoretical Study of the Role of Chemistry and Substrate Characteristics in C₆₀ keV Bombardment of Si, SiC, and Diamond by Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2009, 113, 3239-3245.	1.5	16
53	Kinetic nucleation model for free expanding water condensation plume simulations. Journal of Chemical Physics, 2009, 130, 174309.	1.2	23
54	Trench formation and lateral damage induced by gallium milling of silicon. Applied Surface Science, 2008, 255, 828-830.	3.1	18

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55	Angle of incidence effects in a molecular solid. Applied Surface Science, 2008, 255, 844-846.	3.1	23
56	Influence of photoexcitation pathways on the initiation of ablation inÂpoly (methylÂmethacrylate). Applied Physics A: Materials Science and Processing, 2008, 92, 877-881.	1.1	11
57	The impact of point thermal absorbers in ablation ofÂpoly(methylÂmethacrylate). Applied Physics A: Materials Science and Processing, 2008, 92, 1037-1041.	1.1	4
58	Computational view of surface based organic mass spectrometry. Mass Spectrometry Reviews, 2008, 27, 289-315.	2.8	139
59	Friction model to describe cluster bombardment. Applied Surface Science, 2008, 255, 893-896.	3.1	6
60	Simulations of C60 bombardment of Si, SiC, diamond and graphite. Applied Surface Science, 2008, 255, 837-840.	3.1	27
61	Combined simulations and analytical model for predicting trends in cluster bombardment. Applied Surface Science, 2008, 255, 897-900.	3.1	12
62	Elucidating the Thermal, Chemical, and Mechanical Mechanisms of Ultraviolet Ablation in Poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 T	7.6	16
63	Gallium-Induced Milling of Silicon: A Computational Investigation of Focused Ion Beams. Microscopy and Microanalysis, 2008, 14, 315-320.	0.2	20
64	Energy Deposition Control during Cluster Bombardment: A Molecular Dynamics View. Analytical Chemistry, 2008, 80, 5302-5306.	3.2	23
65	A molecular dynamics study of the effects of the inclusion of dopants on ablation in polymethyl methacrylate. Physical Chemistry Chemical Physics, 2008, 10, 6002.	1.3	2
66	Reaction Rates and Dissolution Mechanisms of Quartz as a Function of pH. Journal of Physical Chemistry A, 2008, 112, 2027-2033.	1.1	101
67	Microscopic Insight into the Sputtering of Thin Polystyrene Films on Ag{111} Induced by Large and Slow Ar Clusters. Journal of Physical Chemistry C, 2008, 112, 521-531.	1.5	53
68	Cluster Size Dependence and Yield Linearity in Cluster Bombardment Simulations of Benzene. Analytical Chemistry, 2008, 80, 6666-6670.	3.2	22
69	Kinetic Nucleation Model for Free-Expanding Water Condensation Plume Simulations. , 2008, , .		1
70	On the correlation between the photoexcitation pathways and the critical energies required for ablation of poly(methyl methacrylate): A molecular dynamics study. Journal of Applied Physics, 2008, 103, 103114.	1.1	5
71	Coupled molecular dynamics-Monte Carlo model to study the role of chemical processes during laser ablation of polymeric materials. Journal of Chemical Physics, 2007, 127, 084705.	1.2	24
72	On the role of chemical reactions in initiating ultraviolet laser ablation in poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td (meth	1.1	38

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73	Molecular dynamics simulations of 30 and 2â€‚keV Ga in Si. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 1417.	0.9	7
74	Gas-Surface Reactions: Molecular Dynamics Simulations of Real Systems. Advances in Chemical Physics, 2007, , 281-334.	0.3	10
75	Simulations of Laser Ablation of Poly(methyl methacrylate):â€‰ Fluence versus Number of Photons. Journal of Physical Chemistry C, 2007, 111, 12024-12030.	1.5	13
76	Effect of Cluster Size in Kiloelectronvolt Cluster Bombardment of Solid Benzene. Analytical Chemistry, 2007, 79, 494-499.	3.2	45
77	Quadratic Friction Model for Cluster Bombardment of Molecular Solids. Journal of Physical Chemistry C, 2007, 111, 10135-10137.	1.5	12
78	Sputtering Yields for C60and Au3Bombardment of Water Ice as a Function of Incident Kinetic Energy. Analytical Chemistry, 2007, 79, 4493-4498.	3.2	64
79	Reaction Dynamics Following keV Cluster Bombardment. Journal of Physical Chemistry C, 2007, 111, 12822-12826.	1.5	31
80	Sputtering Polymers with Buckminsterfullerene Projectiles:â€‰ A Coarse-Grain Molecular Dynamics Study. Journal of Physical Chemistry C, 2007, 111, 15312-15324.	1.5	61
81	Study of a Family of 40 Hydroxylated Î²-Cristobalite Surfaces Using Empirical Potential Energy Functions. Journal of Physical Chemistry C, 2007, 111, 5169-5177.	1.5	30
82	Effects of thermal energy deposition on material ejection in poly(methyl methacrylate). Applied Surface Science, 2007, 253, 6386-6389.	3.1	17
83	Computational investigation into the mechanisms of UV ablation of poly(methyl methacrylate). Applied Surface Science, 2007, 253, 6382-6385.	3.1	21
84	keV fullerene interaction with hydrocarbon targets: Projectile penetration, damage creation and removal. Nuclear Instruments & Methods in Physics Research B, 2007, 255, 223-228.	0.6	40
85	Cluster induced chemistry at solid surfaces: Molecular dynamics simulations of keV C60 bombardment of Si. Nuclear Instruments & Methods in Physics Research B, 2007, 255, 238-241.	0.6	31
86	Incorporation of chemical reactions into UV photochemical ablation of coarse-grained material. Applied Surface Science, 2007, 253, 6377-6381.	3.1	9
87	Mesoscale Energy Deposition Footprint Model for Kiloelectronvolt Cluster Bombardment of Solids. Analytical Chemistry, 2006, 78, 7206-7210.	3.2	85
88	Atoms, clusters and photons: Energetic probes for mass spectrometry. Applied Surface Science, 2006, 252, 6409-6412.	3.1	13
89	Coarse-grained molecular dynamics studies of cluster-bombarded benzene crystals. Applied Surface Science, 2006, 252, 6436-6439.	3.1	52
90	Improvements in SIMS continue. Applied Surface Science, 2006, 252, 6836-6843.	3.1	68

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91	Sputtering of amorphous ice induced by C60 and Au3 clusters. Applied Surface Science, 2006, 252, 6423-6425.	3.1	35
92	Bombardment induced surface chemistry on Si under keV C60 impact. Applied Surface Science, 2006, 252, 6463-6465.	3.1	32
93	Surface Sensitivity in Cluster-Ion-Induced Sputtering. Physical Review Letters, 2006, 96, 216104.	2.9	56
94	Electronic structure calculations of radical reactions for poly(methyl methacrylate) degradation. Chemical Physics Letters, 2005, 406, 294-299.	1.2	33
95	Microscopic Insights into the Sputtering of Thin Organic Films on Ag{111} Induced by C60 and Ga Bombardment. Journal of Physical Chemistry B, 2005, 109, 11973-11979.	1.2	88
96	Collision-Induced Dissociation of Water into Ions. Journal of Physical Chemistry B, 2005, 109, 2894-2898.	1.2	11
97	Coarse-Grained Model of the Interaction of Light with Polymeric Material: Onset of Ablation. Journal of Physical Chemistry B, 2005, 109, 16482-16489.	1.2	42
98	Emission of ionic water clusters from water ice films bombarded by energetic projectiles. Applied Surface Science, 2004, 231-232, 72-77.	3.1	15
99	Kiloelectronvolt Argon-Induced Molecular Desorption from a Bulk Polystyrene Solid. Journal of Physical Chemistry B, 2004, 108, 15652-15661.	1.2	27
100	Microscopic Insights into the Sputtering of Ag{111} Induced by C60and Ga Bombardment. Journal of Physical Chemistry B, 2004, 108, 7831-7838.	1.2	182
101	Ion Emission from Water Ice Due to Energetic Particle Bombardmentâ€. Journal of Physical Chemistry A, 2004, 108, 2993-2998.	1.1	24
102	Coarse-Grained Chemical Reaction Model. Journal of Physical Chemistry B, 2004, 108, 1815-1821.	1.2	29
103	Photochemical ablation of organic solids. Nuclear Instruments & Methods in Physics Research B, 2003, 202, 188-194.	0.6	19
104	Computer Simulations of Laser Ablation of Molecular Substrates. ChemInform, 2003, 34, no.	0.1	0
105	Molecular dynamics simulations of matrix-assisted laser desorptionâ€"connections to experiment. International Journal of Mass Spectrometry, 2003, 226, 85-106.	0.7	68
106	Computer Simulations of Laser Ablation of Molecular Substrates. Chemical Reviews, 2003, 103, 321-348.	23.0	278
107	Substrate-Assisted Laser-Initiated Ejection of Proteins Embedded in Water Films. Journal of Physical Chemistry B, 2003, 107, 2362-2365.	1.2	38
108	Enhancement of Sputtering Yields Due to C60versus Ga Bombardment of Ag{111} As Explored by Molecular Dynamics Simulations. Analytical Chemistry, 2003, 75, 4402-4407.	3.2	194

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109	Particle-Induced Desorption of Kilodalton Molecules Embedded in a Matrix:Â A Molecular Dynamics Study. Journal of Physical Chemistry B, 2003, 107, 2297-2310.	1.2	34
110	Limit of overheating and the threshold behavior in laser ablation. Physical Review E, 2003, 68, 041501.	0.8	106
111	Combined molecular dynamicsâ€“direct simulation Monte Carlo computational study of laser ablation plume evolution. Journal of Applied Physics, 2002, 92, 2181-2193.	1.1	54
112	Pressure-transmitting boundary conditions for molecular-dynamics simulations. Computational Materials Science, 2002, 24, 421-429.	1.4	85
113	Multiscale simulation of laser ablation of organic solids: evolution of the plume. Applied Surface Science, 2002, 197-198, 27-34.	3.1	10
114	Photochemical induced effects in material ejection in laser ablation. Chemical Physics Letters, 2002, 364, 237-243.	1.2	28
115	Microscopic Mechanisms of Matrix Assisted Laser Desorption of Analyte Molecules:Â Insights from Molecular Dynamics Simulation. Journal of Physical Chemistry B, 2002, 106, 303-310.	1.2	42
116	Explosive Boiling of Water Films Adjacent to Heated Surfaces:Â A Microscopic Descriptionâ€. Journal of Physical Chemistry A, 2001, 105, 2748-2755.	1.1	185
117	The role of the photochemical fragmentation in laser ablation: a molecular dynamics study. Journal of Photochemistry and Photobiology A: Chemistry, 2001, 145, 173-181.	2.0	40
118	Thickness effects of water overlayer on its explosive evaporation at heated metal surfaces. Nuclear Instruments & Methods in Physics Research B, 2001, 180, 105-111.	0.6	34
119	Understanding collision cascades in molecular solids. Nuclear Instruments & Methods in Physics Research B, 2001, 180, 159-163.	0.6	46
120	Photochemical fragmentation processes in laser ablation of organic solids. Nuclear Instruments & Methods in Physics Research B, 2001, 180, 171-175.	0.6	16
121	Laser ablation in a model two-phase system. Nuclear Instruments & Methods in Physics Research B, 2001, 180, 209-215.	0.6	10
122	Matrix-assisted pulsed laser evaporation of polymeric materials: a molecular dynamics study. Nuclear Instruments & Methods in Physics Research B, 2001, 180, 238-244.	0.6	36
123	Molecular dynamics simulations of laser disintegration of amorphous aerosol particles with spatially nonuniform absorption. Nuclear Instruments & Methods in Physics Research B, 2001, 180, 245-250.	0.6	20
124	Laser ablation of bicomponent systems: A probe of molecular ejection mechanisms. Applied Physics Letters, 2001, 78, 1631-1633.	1.5	36
125	Molecular Dynamics Simulation of the Laser Disintegration of Aerosol Particles. Analytical Chemistry, 2000, 72, 5143-5150.	3.2	46
126	Molecule Liftoff from Surfaces. Accounts of Chemical Research, 2000, 33, 69-77.	7.6	95

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127	A Theoretical Investigation of the Yield-to-Damage Enhancement with Polyatomic Projectiles in Organic SIMS. Journal of Physical Chemistry B, 2000, 104, 8221-8228.	1.2	39
128	Microscopic mechanisms of laser ablation of organic solids in the thermal and stress confinement irradiation regimes. Journal of Applied Physics, 2000, 88, 1281-1298.	1.1	387
129	Molecular dynamics simulation study of the fluence dependence of particle yield and plume composition in laser desorption and ablation of organic solids. Applied Physics Letters, 1999, 74, 1341-1343.	1.5	103
130	A combined molecular dynamics and finite element method technique applied to laser induced pressure wave propagation. Computer Physics Communications, 1999, 118, 11-16.	3.0	65
131	Phase transition at low fluences in laser desorption of organic solids: a molecular dynamics study. Nuclear Instruments & Methods in Physics Research B, 1999, 153, 167-171.	0.6	10
132	Molecular Dynamics Simulation Study of Molecular Ejection Mechanisms:Â keV Particle Bombardment of C6H6/Ag{111}. Journal of Physical Chemistry B, 1999, 103, 151-163.	1.2	64
133	Mechanism for Increased Yield with SF5+Projectiles in Organic SIMS:Â The Substrate Effect. Journal of Physical Chemistry A, 1999, 103, 4587-4589.	1.1	49
134	Angle and energy distributions of neutral atoms sputtered from Ni3Al(100). Rapid Communications in Mass Spectrometry, 1998, 12, 1236-1240.	0.7	12
135	Sputtering of atoms in fine structure states: a probe of excitation and de-excitation events. Rapid Communications in Mass Spectrometry, 1998, 12, 1266-1272.	0.7	26
136	Velocity distributions of analyte molecules in matrix-assisted laser desorption from computer simulations. Rapid Communications in Mass Spectrometry, 1998, 12, 1273-1277.	0.7	62
137	Computer simulation study of damage and ablation of submicron particles from short-pulse laser irradiation. Applied Surface Science, 1998, 127-129, 142-150.	3.1	54
138	A Microscopic View of Laser Ablation. Journal of Physical Chemistry B, 1998, 102, 2845-2853.	1.2	170
139	Microscopic simulation of short-pulse laser damage of melanin particles. , 1998, , .		15
140	Pressure Waves in Microscopic Simulations of Laser Ablation Leonid. Materials Research Society Symposia Proceedings, 1998, 538, 491.	0.1	73
141	Pushing the limits of classical modeling of bombardment events in solids. Radiation Effects and Defects in Solids, 1997, 142, 127-145.	0.4	9
142	Structure of c(4Ã—2) Superlattice in Alkanethiolate Self-Assembled Monolayers. Langmuir, 1997, 13, 4038-4043.	1.6	53
143	Phase Transitions in a Methyl-Terminated Monolayer Self-Assembled on Au{111}. Langmuir, 1997, 13, 765-769.	1.6	69
144	Diffusion of a Butanethiolate Molecule on a Au{111} Surface. Journal of Physical Chemistry B, 1997, 101, 771-773.	1.2	82

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145	Molecular Dynamics Model for Laser Ablation and Desorption of Organic Solids. Journal of Physical Chemistry B, 1997, 101, 2028-2037.	1.2	193
146	Velocity distributions of molecules ejected in laser ablation. Applied Physics Letters, 1997, 71, 551-553.	1.5	98
147	Vibrational dynamics of the CH stretching mode of H-terminated diamond surfaces. Surface Science, 1997, 374, 333-344.	0.8	27
148	On the threshold behavior in laser ablation of organic solids. Chemical Physics Letters, 1997, 276, 269-273.	1.2	82
149	Modeling of Surface Processes as Exemplified by Hydrocarbon Reactions. Chemical Reviews, 1996, 96, 1327-1342.	23.0	87
150	Molecular desorption in bombardment mass spectrometries. Chemical Physics Letters, 1995, 233, 575-579.	1.2	25
151	A microscopic view of particle bombardment of organic films. International Journal of Mass Spectrometry and Ion Processes, 1995, 143, 225-233.	1.9	23
152	Molecular Dynamics Simulations of Reactions between Molecules: High-Energy Particle Bombardment of Organic Films. Langmuir, 1995, 11, 1220-1228.	1.6	48
153	Potential Energy Surfaces for Chemical Reactions at Solid Surfaces. Annual Review of Physical Chemistry, 1995, 46, 373-396.	4.8	75
154	Electronic distortion in keV particle bombardment. Journal of Chemical Physics, 1994, 100, 8437-8443.	1.2	14
155	Hydrogen Abstraction Reactions in the Kiloelectronvolt Particle Bombardment of Organic Films. Journal of the American Chemical Society, 1994, 116, 4465-4466.	6.6	33
156	Production of excited Rh atoms via keV particle bombardment of Rh{100}: Simulation of excitations due to collisions above the surface. Journal of Chemical Physics, 1992, 97, 6910-6916.	1.2	13
157	Angleâ€resolved velocity distributions of excited Rh atoms ejected from ionâ€bombarded Rh{100}. Journal of Chemical Physics, 1992, 97, 3846-3854.	1.2	23
158	Molecular dynamics simulations of surface chemical reactions. Chemical Society Reviews, 1992, 21, 155.	18.7	57
159	Initial stages of etching of the silicon Si{100} (2 .times. 1) surface by 3.0-eV normal incident fluorine atoms: a molecular dynamics study. Journal of the American Chemical Society, 1991, 113, 8221-8228.	6.6	66
160	The dynamics of surface rearrangements in Si adatom diffusion on the Si{100}(2Ã—1) surface. Journal of Chemical Physics, 1991, 95, 6885-6891.	1.2	52
161	Growth mechanisms of Si and Ge epitaxial films on the dimer reconstructed Si{100} surface via molecular dynamics. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 3506-3511.	0.9	14
162	Summary Abstract: Molecular dynamics studies of dynamical processes on the silicon {100} reconstructed surface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 1905-1906.	0.9	1

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163	Molecular Dynamics Studies of the Adatom Induced Rearrangement of the Silicon {100} Surface. Materials Research Society Symposia Proceedings, 1987, 94, 77.	0.1	0
164	Charge exchange in gasâ€“surface collisions: Momentum transfer. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 1222-1226.	0.9	5
165	Vertical channeling of pyridine molecules ejected in ion bombardment experiments. Chemical Physics Letters, 1985, 114, 237-240.	1.2	13
166	Laser ablation of organic polymers: Microscopic models for photochemical and thermal processes. Journal of Applied Physics, 1985, 57, 2909-2914.	1.1	223
167	Microscopic model for the ablative photodecomposition of polymers by farâ€ultraviolet radiation (193) Tj ETQq1 1 0.784314 rgBT /O	1.5	132
168	Theoretical studies of the angular distributions of oxygen atoms ejected from an ion bombarded c(2Ã—2) overlayer of oxygen on Ni(001). I. Effect of geometry. Journal of Chemical Physics, 1981, 75, 445-452.	1.2	19
169	Mechanisms of particle ejection from Cu(001) induced by the relative orientation of the bombarding primary ion. Journal of Chemical Physics, 1980, 72, 1018-1027.	1.2	36
170	Mechanism of ejection of organic molecules from surfaces by keV ion bombardment. Journal of the American Chemical Society, 1980, 102, 6553-6555.	6.6	65