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Atomic force microscope

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|------|---|-----|-----------|
| 2201 | A Miniaturised Fabry Perot AFM Sensor. | | |
| 2200 | Magnetic force microscopy measurement of current on integrated circuits. | | 1 |
| 2199 | The STM learning curve and where it may take us*. 1870 , 3, 113-133 | | 1 |
| 2198 | Materials science. Snapshots of crystal growth. 2005 , 308, 1566-7 | | 41 |
| 2197 | Scanning thermal profiler. 1986 , 49, 1587-1589 | | 330 |
| 2196 | Interatomic forces in scanning tunneling microscopy: Giant corrugations of the graphite surface. <i>Physical Review Letters</i> , 1986 , 57, 444-447 | 7.4 | 335 |
| 2195 | Vacuum Tunneling: A New Technique for Microscopy. 1986 , 39, 26-33 | | 108 |
| 2194 | Raster-Tunnel-Mikroskopie: Herzliche Glückwünsche für Gerd Binnig und Heinrich Rohrer. 1986 , 42, 369-371 | | |
| 2193 | Scanning tunneling microscopy. 1986 , 5, 501-508 | | |
| 2192 | Scanning thermal profiler. 1986 , 5, 509-513 | | 21 |
| 2191 | March 1986: Open Problems in Condensed Matter Physics. 1986 , T13, 17-21 | | |
| 2190 | van der Waals interaction between an atom and a surface at finite separations. 1986 , 34, 6853-6859 | | 53 |
| 2189 | Comment on "Interatomic forces in scanning tunneling microscopy: Giant corrugations of the graphite surface". <i>Physical Review Letters</i> , 1986 , 57, 3235 | 7.4 | 130 |
| 2188 | Experimental observation of forces acting during scanning tunneling microscopy. <i>Physical Review Letters</i> , 1986 , 57, 2403-2406 | 7.4 | 203 |
| 2187 | Atomic point-contact imaging. 1986 , 49, 1166-1168 | | 33 |
| 2186 | Atomic-Scale Friction of a Tungsten Tip on a Graphite Surface. 1987 , 226-229 | | 10 |
| 2185 | Atomic Force Microscopy: General Principles and a New Implementation. 1987 , 1307-1314 | | 63 |

| | | |
|------|---|------|
| 2184 | Observation of Defects in Crystalline Polymers by HREM. 1987 , 12, 27-35 | 11 |
| 2183 | Scanning tunneling microscopy. 1987 , 61, R1-R24 | 527 |
| 2182 | Atomic force microscopy of liquid-covered surfaces: Atomic resolution images. 1987 , 51, 484-486 | 243 |
| 2181 | Scanning-tunneling microscopy at small tip-to-surface distances. 1987 , 36, 6194-6197 | 49 |
| 2180 | Atomic resolution imaging of a nonconductor by atomic force microscopy. 1987 , 62, 2599-2602 | 294 |
| 2179 | Atomic Force Michoscopy-Feasibility for Materials Research.. 1987 , 111, 465 | |
| 2178 | Geburt und Kindheit der Rastertunnelmikroskopie. 1987 , 43, 282-290 | 9 |
| 2177 | Observation of magnetic forces by the atomic force microscope. 1987 , 62, 4293-4295 | 302 |
| 2176 | Atomic force microscope force mapping and profiling on a sub 100-Å scale. 1987 , 61, 4723-4729 | 1180 |
| 2175 | Magnetic imaging by force microscopy with 1000 Å resolution. 1987 , 50, 1455-1457 | 952 |
| 2174 | Atomic resolution with atomic force microscope. 1987 , 189-190, 1-6 | 59 |
| 2173 | Design of an atomic force microscope and first results. 1987 , 189-190, 29-35 | 16 |
| 2172 | Tip Surface Interactions in STM and AFM. 1987 , T19A, 61-66 | 315 |
| 2171 | Scanning tunneling microscopy from birth to adolescence. 1987 , 59, 615-625 | 635 |
| 2170 | Atomic-Force Microscopy. 1987 , T19A, 53-54 | 20 |
| 2169 | Atomic-scale friction of a tungsten tip on a graphite surface. <i>Physical Review Letters</i> , 1987 , 59, 1942-1945.4 | 1427 |
| 2168 | A study of graphite surface with stm and electronic structure calculations. 1987 , 181, 126-138 | 148 |
| 2167 | An easily operable scanning tunneling microscope. 1987 , 181, 145-153 | 400 |

| | | |
|------|--|-----|
| 2166 | Scanning tunneling microscopy on biological matter. 1987 , 181, 380-390 | 100 |
| 2165 | Transition from the tunneling regime to point contact studied using scanning tunneling microscopy. 1987 , 36, 1284-1287 | 447 |
| 2164 | Atomic Resolution with Atomic Force Microscope. 1987 , 3, 1281-1286 | 442 |
| 2163 | High-stability bimorph scanning tunneling microscope. 1987 , 58, 1343-1348 | 25 |
| 2162 | The atomic force microscope: Can it be used to study biological molecules?. 1987 , 141, 366-368 | 64 |
| 2161 | Geburt und Kindheit der Rastertunnelmikroskopie (Nobel-Vortrag). 1987 , 99, 622-631 | 24 |
| 2160 | Measurements of Roughness of very Smooth Surfaces 1 Contribution of the U. S. National Bureau of Standards, not subject to copyright, except for Figures 2-10 and 15, reprinted with permission from other sources.. 1987 , 36, 503-509 | 15 |
| 2159 | . 1987 , 119, 29-50 | 10 |
| 2158 | Scanning tunneling microscope combined with scanning electron microscope. 1987 , 23, 115-118 | 33 |
| 2157 | Rastertunnelmikroskopie an Graphitoberflächen. 1987 , 329, 113-115 | 2 |
| 2156 | Tunneling experiments involving magnetic tip and magnetic sample. 1987 , 67, 125-128 | 32 |
| 2155 | New ways to see atoms. 1987 , 325, 388-389 | 6 |
| 2154 | A magneto-acoustic method for the noninvasive measurement of bioelectric currents. 1988 , 35, 892-4 | 65 |
| 2153 | Ein neuer Mikroskoptyp: AFM. 1988 , 19, 112-112 | |
| 2152 | Scanning Tunneling Microscopy and Spectroscopy of Ceramics: Silicon Carbide and Zinc Oxide. 1988 , 71, 629-637 | 27 |
| 2151 | Molecular resolution images of amino acid crystals with the atomic force microscope. 1988 , 332, 332-334 | 118 |
| 2150 | Force dependences for the definition of the atomic force microscopy spatial resolution. 1988 , 132, 354-358 | 47 |
| 2149 | Tip microscopy [top microscopy? An introduction. 1988 , 25, 103-105 | 5 |

| | | |
|------|---|-----|
| 2148 | Scanning tunneling and scanning electron microscopy investigations of nonuniform surfaces. 1988 , 25, 129-133 | 1 |
| 2147 | Restoration and pictorial representation of scanning-tunneling-microscope data. 1988 , 25, 149-153 | 12 |
| 2146 | Super-resolution imaging with near-field scanning optical microscopy (NSOM). 1988 , 25, 155-163 | 22 |
| 2145 | Molecular orbital theory and tunnelling currents. 1988 , 10, 303-311 | 42 |
| 2144 | The theoretical aspect of atomic force microscopy used for magnetic materials. 1988 , 71, 147-150 | 15 |
| 2143 | Magnetic forces measured by atomic force microscopy. Theoretical approach. 1988 , 72, 295-299 | 10 |
| 2142 | Tracking tunneling microscopy. 1988 , 59, 840-842 | 80 |
| 2141 | High-resolution capacitance measurement and potentiometry by force microscopy. 1988 , 52, 1103-1105 | 612 |
| 2140 | Deposition and imaging of localized charge on insulator surfaces using a force microscope. 1988 , 53, 2717-2719 | 377 |
| 2139 | Near-field optical scanning microscopy in reflection. 1988 , 52, 249-251 | 106 |
| 2138 | Compact scanning-force microscope using a laser diode. 1988 , 13, 1057-9 | 72 |
| 2137 | Scanning tunneling microscopy and atomic force microscopy: application to biology and technology. 1988 , 242, 209-16 | 517 |
| 2136 | Scanning probe microscopy of biological samples and other surfaces. 1988 , 152, 803-9 | 28 |
| 2135 | High-resolution force microscopy of in-plane magnetization. 1988 , 152, 863-869 | 5 |
| 2134 | Arrangement and stability of atoms at the apex of a scanning tip. 1988 , 152, 637-641 | 21 |
| 2133 | Novel optical approach to atomic force microscopy. 1988 , 53, 1045-1047 | 956 |
| 2132 | High-resolution magnetic imaging of domains in TbFe by force microscopy. 1988 , 52, 244-246 | 171 |
| 2131 | Atomic scale friction between the muscovite mica cleavage plane and a tungsten tip. 1988 , 89, 5190-5193 | 232 |

| | | | |
|------|---|-----|-----|
| 2130 | Force microscopy of magnetization patterns in longitudinal recording media. 1988 , 53, 1563-1565 | | 128 |
| 2129 | Low-temperature atomic force microscopy. 1988 , 59, 833-835 | | 65 |
| 2128 | Atomic force profiling by utilizing contact forces. 1988 , 63, 570-572 | | 8 |
| 2127 | Force microscope using a fiber-optic displacement sensor. 1988 , 59, 2337-2340 | | 220 |
| 2126 | Erratum: Novel optical approach to atomic force microscopy [Appl. Phys. Lett. 53, 1045 (1988)]. 1988 , 53, 2400-2402 | | 183 |
| 2125 | Scanning tunneling and atomic force microscopy combined. 1988 , 52, 2233-2235 | | 31 |
| 2124 | Vacuum tunneling probe: A nonreciprocal, reduced-back-action transducer. <i>Physical Review Letters</i> , 1988 , 61, 726-729 | 7.4 | 50 |
| 2123 | Magnetic force microscopy: Some remarks from the micromagnetic point of view. 1988 , 64, 1561-1564 | | 67 |
| 2122 | Measurement of in-plane magnetization by force microscopy. 1988 , 53, 1446-1448 | | 55 |
| 2121 | Control electronics for atomic force microscopy. 1988 , 59, 836-839 | | 19 |
| 2120 | Direct force measurement in scanning tunneling microscopy. 1988 , 52, 188-190 | | 35 |
| 2119 | Imaging of tip-sample compliance in STM. 1988 , 152, 643-650 | | 18 |
| 2118 | Effect of tip profile on atomic-force microscope images: A model study. <i>Physical Review Letters</i> , 1988 , 60, 1314-1317 | 7.4 | 113 |
| 2117 | Determination of displacements in ultrasonic waves by scanning tunneling microscopy. 1988 , 64, 1939-1944 | | 18 |
| 2116 | Theory of magnetic imaging by force microscopy. 1988 , 53, 1449-1451 | | 45 |
| 2115 | Scanning capacitance microscopy. 1988 , 21, 147-151 | | 71 |
| 2114 | Atomic force microscopy of an organic monolayer. 1988 , 239, 50-2 | | 155 |
| 2113 | Scanning tunneling microscopy of freeze-fracture replicas of biomembranes. 1988 , 239, 1013-5 | | 155 |

| | | |
|------|---|-----|
| 2112 | High resolution STM - studies on graphite and Langmuir-Blodgett films. 1988 , 38, 264-268 | 34 |
| 2111 | A Revised Philosophy of Surface Measuring Systems. 1988 , 202, 169-185 | 8 |
| 2110 | Mechanical Properties of Nanometre Volumes of Material: use of the Elastic Response of Small Area Indentations. 1988 , 130, 13 | 118 |
| 2109 | STM and AFM investigations of high-Tc superconductors. 1988 , 152, 399-405 | 5 |
| 2108 | Force sensing in scanning tunnelling microscopy: observation of adhesion forces on clean metal surfaces. 1988 , 152, 259-267 | 67 |
| 2107 | Scanning tunnelling engineering. 1988 , 152, 585-596 | 12 |
| 2106 | The STM learning curve and where it may take us*. 1988 , 152, 299-316 | 49 |
| 2105 | Investigation of Bloch wall fine structures by magnetic force microscopy. 1988 , 152, 527-536 | 58 |
| 2104 | Universal Aspects of Brittle Fracture, Adhesion, and Atomic Force Microscopy. 1988 , 140, 89 | 4 |
| 2103 | Interfacial Adhesion: Theory and Experiment. 1988 , 119, 3 | 9 |
| 2102 | Direct Observation of Friction at the Atomic Scale. 1988 , 119, 81 | 5 |
| 2101 | Micromechanics and Microdynamics Via Atomistic Simulations. 1988 , 140, 101 | 3 |
| 2100 | Fundamentals of Tribology at the Atomic Level. 1988 , 140, 37 | 2 |
| 2099 | Scanning tunnelling and atomic force microscopy performed with the same probe in one unit. 1988 , 152, 871-875 | 5 |
| 2098 | Scanning Tunneling Microscopy. 1988 , 40, 9-25 | |
| 2097 | Calculation of the Bloch wall contrast in magnetic force microscopy. 1988 , 152, 281-288 | 21 |
| 2096 | Atomic force microscopy of purple membranes. 1988 , 152, 817-21 | 32 |
| 2095 | Molecular orbital theory for chemisorption and physisorption: The case of He on metals. 1989 , 39, 5684-5693 | 57 |

| | | | |
|------|---|-----|-----|
| 2094 | Theoretical approach to magnetic force microscopy. 1989 , 39, 12013-12017 | | 77 |
| 2093 | Tribological studies of storage media by atomic force microscopy. 1989 , | | 2 |
| 2092 | Determination of tilted superlattice structure by atomic force microscopy. 1989 , 55, 2491-2493 | | 40 |
| 2091 | Theory for the atomic force microscopy of deformable surfaces. <i>Physical Review Letters</i> , 1989 , 63, 876-879 | 7.4 | 63 |
| 2090 | Nonlinear alternating-current tunneling microscopy. <i>Physical Review Letters</i> , 1989 , 62, 2285-2288 | 7.4 | 77 |
| 2089 | Magnetic force microscopy of a CoCr thin film. 1989 , 66, 6001-6006 | | 19 |
| 2088 | Simple theory for the atomic-force microscope with a comparison of theoretical and experimental images of graphite. 1989 , 40, 5363-5366 | | 72 |
| 2087 | Atomic force microscopy of polymeric liquid films. 1989 , 90, 7550-7555 | | 198 |
| 2086 | Investigation of hydrogenated amorphous carbon coatings for magnetic data storage media by atomic force microscopy. 1989 , 55, 1624-1626 | | 8 |
| 2085 | A study of the AgBr(111) and AgBr(100) surface by means of atomic force microscopy. 1989 , 66, 4243-4247 | | 11 |
| 2084 | Noise in vacuum tunneling: Application for a novel scanning microscope. 1989 , 55, 2360-2362 | | 37 |
| 2083 | Lateral forces and topography using scanning tunneling microscopy with optical sensing of the tip position. 1989 , 54, 801-803 | | 7 |
| 2082 | Contact electrification using force microscopy. <i>Physical Review Letters</i> , 1989 , 63, 2669-2672 | 7.4 | 428 |
| 2081 | Reduced-noise nonreciprocal transducer based upon vacuum tunneling. 1989 , 40, 6615-6625 | | 15 |
| 2080 | van der Waals force between a spherical tip and a solid surface. 1989 , 40, 12133-12139 | | 43 |
| 2079 | Analysis of Bloch-wall fine structures by magnetic force microscopy. 1989 , 40, 7421-7424 | | 34 |
| 2078 | Atomic theory of scanning tunneling microscopy. 1989 , 40, 10286-10293 | | 48 |
| 2077 | Different Response of Atomic Force Microscopy and Scanning Tunnelling Microscopy to Charge Density Waves. 1989 , 9, 695-700 | | 34 |

| | | |
|------|--|-----|
| 2076 | Surface Conductance of Metal Surfaces in Air Studied with a Force Microscope. 1989 , 28, L1634-L1636 | 25 |
| 2075 | A Possible Novel Scanning Ultrasonic Tip Microscope. 1989 , 28, L1297-L1299 | 15 |
| 2074 | Forces in atomic force microscopy in air and water. 1989 , 54, 2651-2653 | 541 |
| 2073 | Description of magnetic imaging in atomic force microscopy. 1989 , 78, 263-268 | 20 |
| 2072 | Monolayer freeze-fracture and scanning tunneling microscopy. 1989 , 13, 355-71 | 11 |
| 2071 | Surface Chemistry with the Scanning Tunneling Microscope. 1989 , 1, 13-18 | 6 |
| 2070 | Surface analysis I. Imaging surfaces, electric charges and magnetic domains with the atomic force microscope. 1989 , 1, 396-399 | |
| 2069 | Surface Chemistry with the Scanning Tunneling Microscope. 1989 , 101, 117-122 | 15 |
| 2068 | Surface Analysis I. Imaging Surfaces, Electric Charges and Magnetic Domains with the Atomic Force Microscope. 1989 , 101, 1610-1613 | 0 |
| 2067 | Interaction between a dielectric tip and an ionic crystal. Application to scanning force microscopy on LiF and MgO. 1989 , 162, 399-403 | 22 |
| 2066 | Surface Chemistry with the Scanning Tunneling Microscope. 1989 , 28, 117-122 | 20 |
| 2065 | Surface Analysis I: Imaging Surfaces, Electric Charges and Magnetic Domains with the Atomic Force Microscope. 1989 , 28, 1578-1581 | 1 |
| 2064 | A Tunneling-tip magnetometer. 1989 , 20, 199-205 | 12 |
| 2063 | An electron tunneling sensor. 1989 , 19, 201-210 | 59 |
| 2062 | Magnetic field sensing with magnetostrictive materials using a tunneling tip detector. 1989 , 19, 211-225 | 33 |
| 2061 | Atomic force microscopy for the study of tribology and adhesion. 1989 , 181, 527-544 | 56 |
| 2060 | Atomic resolution with a new atomic force tip. 1989 , 175, 81-84 | 4 |
| 2059 | The challenge of high technology for analytical chemistry. 1989 , 8, 192-202 | 2 |

| | | |
|------|--|-----|
| 2058 | Theoretical interpretation of atomic-force- microscope images of graphite. 1989 , 209, L125-L132 | 1 |
| 2057 | Dynamics of tip-substrate interactions in atomic force microscopy. 1989 , 210, L177-L184 | 7 |
| 2056 | Topography and correlation to wear of hydrogenated amorphous carbon coatings: An atomic force microscopy study. 1989 , 135, 109-117 | 8 |
| 2055 | Scanning near-field acoustic microscopy. 1989 , 48, 89-92 | 157 |
| 2054 | Bit analysis of magnetic recording media by force microscopy. 1989 , 115, 285-291 | 10 |
| 2053 | Microscopes: probing biological structure. 1989 , 339, 426-7 | 1 |
| 2052 | Optical absorption microscopy and spectroscopy with nanometre resolution. 1989 , 342, 783-785 | 88 |
| 2051 | Scanning capacitance microscopy on a 25 nm scale. 1989 , 55, 203-205 | 177 |
| 2050 | Scanning tunneling microscope instrumentation. 1989 , 60, 165-180 | 187 |
| 2049 | A differential interferometer for force microscopy. 1989 , 60, 3131-3134 | 163 |
| 2048 | Improved fiber-optic interferometer for atomic force microscopy. 1989 , 55, 2588-2590 | 519 |
| 2047 | Direct measurement of forces during scanning tunneling microscope imaging of graphite. 1989 , 208, 473-486 | 81 |
| 2046 | Theoretical interpretation of atomic-force-microscope images of graphite. 1989 , 209, L125-L132 | 113 |
| 2045 | Surface topography study of gold deposited on mica using scanning tunneling microscopy: Effect of mica temperature. 1989 , 217, 276-288 | 68 |
| 2044 | Local step structure of the AgBr(100) and (111) surfaces studied by atomic force microscopy. 1989 , 221, 1-10 | 12 |
| 2043 | Dynamics of tip-substrate interactions in atomic force microscopy. 1989 , 210, L177-L184 | 112 |
| 2042 | . 1989 , 25, 1968-1972 | 8 |
| 2041 | Scanning force microscopy using a simple low-noise interferometer. 1989 , 55, 439-441 | 33 |

| | | |
|------|---|---------|
| 2040 | The scanning ion-conductance microscope. 1989 , 243, 641-3 | 665 |
| 2039 | Imaging crystals, polymers, and processes in water with the atomic force microscope. 1989 , 243, 1586-9 | 913 |
| 2038 | An atomic-resolution atomic-force microscope implemented using an optical lever. 1989 , 65, 164-167 | 526 |
| 2037 | Avalanche in adhesion. <i>Physical Review Letters</i> , 1989 , 63, 1269-1272 | 7.4 130 |
| 2036 | Tunneling acoustic microscope. 1989 , 55, 1718-1720 | 63 |
| 2035 | Interactions between Surfaces Bearing Adsorbed Polymer Layers. 1989 , 28, 975-1001 | |
| 2034 | Tunnelmikroskopie und organische Moleküle. 1989 , 37, 1270-1274 | |
| 2033 | A New Approach to Atomic Force Microscopy. 1989 , 139, 229 | |
| 2032 | Atomic Force Microscope Designs and Applications. 1989 , 139, 235 | |
| 2031 | Measurement of Micromechanical Properties Using Atomic Force Microscope with Capacitive. 1989 , 153, 307 | 3 |
| 2030 | Strukturen [Farben [Kräfte: Wanderjahre der Raster-Tunnelmikroskopie. 1989 , 45, 105-115 | 12 |
| 2029 | Application of scanning electrochemical microscopy to biological samples. 1990 , 87, 1740-3 | 87 |
| 2028 | Nanotribology Of Diamond Films Studied By Atomic Force Microscopy. 1990 , 188, 219 | |
| 2027 | Monte-Carlo Investigation of Avalanche in Adhesion. 1990 , 193, 313 | 2 |
| 2026 | Characterization of Polymer Dielectrics for High-Density Electronic Packaging. 1990 , 203, 277 | 1 |
| 2025 | Atomic-Scale Simulation of Adhesion Between Metallic Surfaces. 1990 , 209, 225 | |
| 2024 | Atomare Bewegungen in der Tunnel- und Kraftmikroskopie. 1990 , 46, 307-312 | 5 |
| 2023 | Computer Simulation in the Physical Sciences. 1990 , 1990, 507-518 | 23 |

| | | |
|------|--|-----|
| 2022 | Scanning Tunneling Microscopy: A Mature Surface-Science Technique. 1990 , 79, 155-269 | 12 |
| 2021 | Atomic Force Microscopy. 1990 , 43, 23-30 | 511 |
| 2020 | Microscopy of chemical-potential variations on an atomic scale. 1990 , 344, 317-319 | 91 |
| 2019 | Atomic force microscopy. 1990 , 345, 839-840 | 25 |
| 2018 | . 1990 , 26, 1512-1514 | 11 |
| 2017 | . 1990 , 26, 1515-1517 | 13 |
| 2016 | . 1990 , 26, 1225-1228 | 24 |
| 2015 | Atomic resolution on LiF (001) by atomic force microscopy. 1990 , 79, 3-4 | 69 |
| 2014 | Model for scanning tunneling optical microscopy: A microscopic self-consistent approach. 1990 , 42, 9340-9349 | 115 |
| 2013 | Dynamic aspects of scanning surface instruments and microscopes. 1990 , 1, 93-102 | 20 |
| 2012 | Understanding magnetic force microscopy. 1990 , 80, 373-383 | 125 |
| 2011 | Magnetic microfield analysis by force microscopy. 1990 , 83, 545-547 | 9 |
| 2010 | Metrological surface scanning tunneling and atomic-force microscopy. 1990 , 33, 26-30 | |
| 2009 | Magnetic force microscopy. 1990 , 2, 550-552 | 7 |
| 2008 | The atomic force microscope: A tool for science and industry. 1990 , 33, 93-98 | 51 |
| 2007 | Lateral resolution in magnetic force microscopy. Application to periodic structures. 1990 , 146, 277-280 | 31 |
| 2006 | Proximal probes: Techniques for measuring at the nanometer scale. 1990 , 6, 77-85 | 7 |
| 2005 | Noise in sensors. 1990 , 21, 17-24 | 19 |

| | | |
|------|--|---------|
| 2004 | In situ scanning tunneling microscopy. 1990 , 290, 1-20 | 43 |
| 2003 | Study of metallic adhesion using scanning tunneling microscopy. 1990 , 41, 382-385 | 20 |
| 2002 | Molecular-Scale Imaging of Clay Mineral Surfaces with the Atomic Force Microscope. 1990 , 38, 337-342 | 66 |
| 2001 | Simultaneous Observation of Atomically Resolved AFM/STM Images of a Graphite Surface. 1990 , 29, L157-L159 | 14 |
| 2000 | Anomalous Force Dependence of AFM Corrugation Height of a Graphite Surface in Air. 1990 , 29, L1196-L1198 | 2 |
| 1999 | The Children of the STM: The Nobel Prize-winning scanning tunneling microscope has inspired a whole generation of imaging devices that use everything from magnetic forces to sound waves to examine samples. 1990 , 247, 634-6 | 39 |
| 1998 | Origin of Anomalous Corrugation Height of STM Images of Graphite. 1990 , 29, 1533-1538 | 15 |
| 1997 | STM imaging of a nanometre conducting structure in the exponential approximation. 1990 , 2, 2487-2490 | |
| 1996 | Simultaneous Imaging of a Graphite Surface with Atomic Force/Scanning Tunneling Microscope (AFM/STM). 1990 , 29, 1539-1543 | 11 |
| 1995 | Universal aspects of adhesion and atomic force microscopy. 1990 , 2, 8841-8846 | 20 |
| 1994 | Combined scanning force and friction microscopy of mica. 1990 , 1, 141-144 | 280 |
| 1993 | Tip-sample interaction effects in scanning-tunneling and atomic-force microscopy. 1990 , 41, 2763-2775 | 132 |
| 1992 | Imaging metal atoms in air and water using the atomic force microscope. 1990 , 56, 1758-1759 | 61 |
| 1991 | Spin-polarized scanning tunneling microscope: Concept, design, and preliminary results from a prototype operated in air. 1990 , 67, 6141-6152 | 54 |
| 1990 | Optical-beam-deflection atomic force microscopy: The NaCl (001) surface. 1990 , 56, 2100-2101 | 251 |
| 1989 | 10-nm resolution by magnetic force microscopy on FeNdB. 1990 , 67, 1437-1441 | 45 |
| 1988 | First-principles theory of atomic-scale friction. <i>Physical Review Letters</i> , 1990 , 64, 3054-3057 | 7.4 211 |
| 1987 | Force measurement using an ac atomic force microscope. 1990 , 67, 4045-4052 | 37 |

| | | | |
|------|---|-----|-----|
| 1986 | The topography effect on magnetic images in magnetic force microscopy. 1990 , 68, 4767-4771 | | 16 |
| 1985 | Force microscopy with a bidirectional capacitance sensor. 1990 , 61, 2296-2308 | | 150 |
| 1984 | Momentum noise in vacuum tunneling transducers. 1990 , 41, 8184-8194 | | 125 |
| 1983 | Probing the surface forces of monolayer films with an atomic-force microscope. <i>Physical Review Letters</i> , 1990 , 64, 1931-1934 | 7.4 | 285 |
| 1982 | . | | 1 |
| 1981 | Localizing periodicity in near-field images. <i>Physical Review Letters</i> , 1990 , 64, 1031-1034 | 7.4 | 4 |
| 1980 | Resonant-tunneling theory of imaging close-packed metal surfaces by scanning tunneling microscopy. 1990 , 41, 2671-2677 | | 29 |
| 1979 | Atomic-force-microscopy images of graphite due to van der Waals interactions. 1990 , 42, 11757-11761 | | 16 |
| 1978 | Improved microtips for scanning probe microscopy. 1990 , 61, 2538-2541 | | 56 |
| 1977 | Preparation of magnetic tips for a scanning force microscope. 1990 , 56, 2045-2047 | | 38 |
| 1976 | Rapid measurement of static and dynamic surface forces. 1990 , 56, 2408-2410 | | 29 |
| 1975 | Separation of magnetic and topographic effects in force microscopy. 1990 , 67, 7278-7280 | | 58 |
| 1974 | . 1990 , | | 6 |
| 1973 | Charge density waves of 1T-TaS ₂ imaged by atomic force microscopy. 1990 , 57, 992-994 | | 27 |
| 1972 | Imaging and manipulating molecules on a zeolite surface with an atomic force microscope. 1990 , 247, 1330-3 | | 126 |
| 1971 | Construction of an atomic force microscope and application of atomic force microscopy and scanning tunneling microscopy in surface chemistry. 1990 , 56-58 | | |
| 1970 | Observation of single charge carriers by force microscopy. <i>Physical Review Letters</i> , 1990 , 65, 3162-3164 | 7.4 | 225 |
| 1969 | Atomistic mechanisms and dynamics of adhesion, nanoindentation, and fracture. 1990 , 248, 454-61 | | 934 |

| | | |
|------|--|-----|
| 1968 | . | 43 |
| 1967 | Manifestation of zero-point quantum fluctuations in atomic force microscopy. 1990 , 42, 1541-1546 | 57 |
| 1966 | Scanning Tunneling Microscopy and Atomic Force Microscopy of Biological Surfacesa. 1990 , 589, 476-491 | 16 |
| 1965 | Immobilized proteins in buffer imaged at molecular resolution by atomic force microscopy. 1990 , 58, 1251-8 | 161 |
| 1964 | Direct visualization of phosphorylase-phosphorylase kinase complexes by scanning tunneling and atomic force microscopy. 1990 , 58, 1437-48 | 69 |
| 1963 | Imaging the membrane protein bacteriorhodopsin with the atomic force microscope. 1990 , 58, 1473-80 | 203 |
| 1962 | Electrochemical Applications of Scanning Tunneling Microscopy. 1990 , 449-469 | 0 |
| 1961 | Magnetic force microscopy: General principles and application to longitudinal recording media. 1990 , 68, 1169-1183 | 517 |
| 1960 | Wet lipid-protein membranes imaged at submolecular resolution by atomic force microscopy. 1990 , 103, 89-94 | 104 |
| 1959 | Imaging cells with the atomic force microscope. 1990 , 105, 54-61 | 231 |
| 1958 | Simultaneous measurement of lateral and normal forces with an optical-beam-deflection atomic force microscope. 1990 , 57, 2089-2091 | 516 |
| 1957 | External and internal reflection near field microscopy: experiments and results. 1990 , 29, 3734-40 | 123 |
| 1956 | Optical interaction between a dielectric tip and a nanometric lattice: implications for near-field microscopy. 1990 , 7, 936 | 78 |
| 1955 | Scanning tunneling microscopy and the atomic structure of solid surfaces. 1990 , 20, 235-303 | 23 |
| 1954 | On the quadrant theorem of Orowan. 1990 , 232, L224-L226 | 1 |
| 1953 | The adsorption of SiO molecules on MgO Surfaces as a model for the silicon lever atomic force microscope (AFM). 1990 , 232, 399-406 | 13 |
| 1952 | On the possibility of resolving quantization axes of surface spins by means of a scanning tunneling microscope with a magnetic tip. 1990 , 236, L377-L381 | 41 |
| 1951 | Interaction between a spherical probe and an atomic lattice: implication for atomic force microscopy on graphite and diamond. 1990 , 234, 181-196 | 15 |

| | | |
|------|--|--------|
| 1950 | The interaction of crystal surfaces in close proximity. 1991 , 244, 266-276 | 14 |
| 1949 | Dispersion forces between a spherical probe tip and a periodic crystal: study of different asymptotic cases. 1991 , 255, L571-L578 | 3 |
| 1948 | Surface characterization of a single crystal of sodium decatungstocerate (IV) by the atomic force microscope. 1991 , 256, L613-L617 | 8 |
| 1947 | Measuring electrostatic, van der Waals, and hydration forces in electrolyte solutions with an atomic force microscope. 1991 , 60, 1438-44 | 645 |
| 1946 | Scanning tunneling microscopy and atomic force microscopy of perylene radical cation salt. 1991 , 42, 2335-2338 | 5 |
| 1945 | Submicron probe of polymer adhesion with atomic force microscopy: Dependence on topography and material inhomogeneities. 1991 , 59, 2901-2903 | 128 |
| 1944 | Atomic scale surface studies of conductive organic compounds 3. Scanning tunneling microscopy studies of monocrystals of bis(ethylenedithio)tetrathiofulvalene with triiodide, ET_2I_3 . 1991 , 40, 247-256 | 15 |
| 1943 | Molecular surface structure of tetracene mapped by the atomic force microscope. 1991 , 94, 8441-8443 | 25 |
| 1942 | . 1991 , 27, 5187-5189 | 50 |
| 1941 | . | 1 |
| 1940 | . | 46 |
| 1939 | Scanning Tunneling Microscopy and Atomic Force Microscopy of Thin Polymer Films. 1991 , 194, 305-310 | 1 |
| 1938 | Using force modulation to image surface elasticities with the atomic force microscope. 1991 , 2, 103-106 | 452 |
| 1937 | Laser-driven scanning tunneling microscope. <i>Physical Review Letters</i> , 1991 , 66, 1717-1720 | 7.4 71 |
| 1936 | Stylus profiling at high resolution and low force. 1991 , 30, 42-50 | 39 |
| 1935 | Structure of adsorbed fibrinogen obtained by scanning force microscopy. 1991 , 280, 225-8 | 81 |
| 1934 | Frequency modulation detection using high-Q cantilevers for enhanced force microscope sensitivity. 1991 , 69, 668-673 | 1981 |
| 1933 | A scanning force microscope with a fiber-optic-interferometer displacement sensor. 1991 , 62, 1280-1284 | 31 |

| | | |
|------|---|---------|
| 1932 | Atomic force microscopy of a hydrated bacterial surface protein. 1991 , 163, 79-84 | 34 |
| 1931 | Electrostatic interaction in atomic force microscopy. 1991 , 60, 777-85 | 187 |
| 1930 | Atomic force microscopy of hydrated phosphatidylethanolamine bilayers. 1991 , 59, 755-60 | 146 |
| 1929 | Detachment of agglutinin-bonded red blood cells. I. Forces to rupture molecular-point attachments. 1991 , 59, 838-48 | 267 |
| 1928 | Local electrical dissipation imaged by scanning force microscopy. 1991 , 59, 2171-2173 | 115 |
| 1927 | Anisotropy of frictional forces in muscovite mica. <i>Physical Review Letters</i> , 1991 , 67, 2642-2645 | 7.4 258 |
| 1926 | Atomic-resolution electrochemistry with the atomic force microscope: copper deposition on gold. 1991 , 251, 183-6 | 329 |
| 1925 | Imaging powders with the atomic force microscope: from biominerals to commercial materials. 1991 , 253, 1261-3 | 53 |
| 1924 | Chemical imaging of surfaces with the scanning electrochemical microscope. 1991 , 254, 68-74 | 349 |
| 1923 | Bistable behavior of a vibrating tip near a solid surface. 1991 , 58, 2989-2991 | 125 |
| 1922 | Nanotechnology Instrumentation. 1991 , 24, 37-46 | 16 |
| 1921 | SXM (Rastermikroskopien) für beliebige Oberflächeneigenschaften. 1991 , 47, 517-520 | 2 |
| 1920 | Imaging Magnetic Bit Patterns Using a Scanning Tunneling Microscope with a Flexible Tip. 1991 , 232, 141 | 1 |
| 1919 | Atomic Force Microscopy Of Micron Size Silicalite Crystals. 1991 , 233, 287 | 2 |
| 1918 | Nanometer-Scale Modification and Imaging of Polyimide Films by Scanning Force Microscopy. 1991 , 239, 535 | 3 |
| 1917 | Imaging Of Hierarchically Structured Materials. 1991 , 255, 293 | 7 |
| 1916 | On microscopic mechanisms of friction and wear. 1991 , 149, 199-208 | 59 |
| 1915 | Atomistic mechanisms of adhesion and compression of diamond surfaces. 1991 , 206, 213-219 | 44 |

| | | |
|------|--|------|
| 1914 | Dispersion forces between a spherical probe tip and a periodic crystal: study of different asymptotic cases. 1991 , 255, L571-L578 | 1 |
| 1913 | Surface characterization of a single crystal of sodium decatungstocerate (IV) by the atomic force microscope. 1991 , 256, L613-L617 | 3 |
| 1912 | Investigation and modification of free and adsorbate-covered surfaces by scanning tunneling microscopy. 1991 , 139, 230-238 | 3 |
| 1911 | Electron microscopy and the study of microstructure and domain structure of magnetic materials. 1991 , 7, 297-306 | 9 |
| 1910 | Theoretical estimates of forces acting on a magnetic force microscope tip over a high temperature superconductor. 1991 , 175, 357-362 | 36 |
| 1909 | Atomic-force microscopy of synthetic ultrafiltration membranes in air and under water. 1991 , 35, 155-159 | 25 |
| 1908 | Effect of surface roughness of carbon support films on high-resolution electron diffraction of two-dimensional protein crystals. 1991 , 36, 307-318 | 45 |
| 1907 | Measuring contact charge transfer at interfaces: a new experimental technique. 1991 , 26, 291-308 | 19 |
| 1906 | Magnetic force microscopy and its application to longitudinal thin films. 1991 , 93, 123-127 | 4 |
| 1905 | Magnetic force microscopy: Current status and future trends. 1991 , 101, 263-270 | 45 |
| 1904 | Atomic force microscopy of atomic-scale ledges and etch pits formed during dissolution of quartz. 1991 , 251, 1343-6 | 141 |
| 1903 | Molecular-resolution images of Langmuir-Blodgett films using atomic force microscopy. 1991 , 349, 398-400 | 212 |
| 1902 | Direct measurement of colloidal forces using an atomic force microscope. 1991 , 353, 239-241 | 1740 |
| 1901 | Measurement of the interaction between adsorbed polymer layers: the steric effect. 1991 , 34, 191-215 | 45 |
| 1900 | Study of solid-surface states by RYDMR spectroscopy. 1991 , 180, 569-572 | 0 |
| 1899 | Molecular resolution of zeolite surfaces as imaged by atomic force microscopy. 1991 , 11, 429-433 | 33 |
| 1898 | Atomic force microscopy on epitaxially crystallized isotactic polypropylene. 1991 , 26, 209-214 | 44 |
| 1897 | Atomic force microscopy on polymers and polymer related compounds. 1991 , 26, 215-222 | 34 |

| | | |
|------|---|-----|
| 1896 | Atomic force microscopy on polymers and polymer related compounds. 1991 , 26, 715-722 | 35 |
| 1895 | Calculation of an Atomically Modulated Friction Force in Atomic-Force Microscopy. 1991 , 15, 887-892 | 169 |
| 1894 | Attractive interatomic force as a tunnelling phenomenon. 1991 , 3, 1227-1245 | 53 |
| 1893 | Atomic force microscopy and dissection of gap junctions. 1991 , 253, 1405-8 | 233 |
| 1892 | Molecular directions in nanotechnology. 1991 , 2, 113-118 | 11 |
| 1891 | Limits of Resolution in Atomic Force Microscopy Images of Graphite. 1991 , 15, 49-54 | 37 |
| 1890 | Potential applications of electropolymerized thin organic films in nanotechnology. 1991 , 2, 19-32 | 26 |
| 1889 | Tip-structure effects on atomic force microscopy images. 1991 , 3, 2613-2619 | 16 |
| 1888 | Force Microscopy Using Common-Path Optical-Heterodyne Interferometer. 1991 , 30, 587-590 | 7 |
| 1887 | Atomic Resolution on the AgBr(001) Surface by Atomic Force Microscopy. 1991 , 15, 319-323 | 29 |
| 1886 | Electrical and mechanical contact between rough gold surfaces in air. 1991 , 3, 5195-5201 | 23 |
| 1885 | Monoatomic step observation on Si(111) surfaces by force microscopy in air. 1991 , 58, 2225-2227 | 46 |
| 1884 | Twin-probe scanning tunneling microscope. 1991 , 62, 1767-1771 | 27 |
| 1883 | Improved scanning ion-conductance microscope using microfabricated probes. 1991 , 62, 2634-2638 | 77 |
| 1882 | Tunneling stabilized, magnetic force microscopy with a gold-coated, nickel-film tip. 1991 , 70, 520-522 | 10 |
| 1881 | A new force sensor incorporating force-feedback control for interfacial force microscopy. 1991 , 62, 710-715 | 194 |
| 1880 | Optical scan-correction system applied to atomic force microscopy. 1991 , 62, 1393-1399 | 131 |
| 1879 | Interaction between a charged or neutral particle and a semi-infinite nonpolar dielectric liquid. 1991 , 44, 8226-8232 | 7 |

| | | | |
|------|---|-----|-----|
| 1878 | Roles of the attractive and repulsive forces in atomic-force microscopy. 1991 , 43, 4728-4731 | | 119 |
| 1877 | Theoretical atomic-force-microscopy study of a stepped surface: Nonlocal effects in the probe. 1991 , 43, 8822-8828 | | 24 |
| 1876 | Mechanical parametric amplification and thermomechanical noise squeezing. <i>Physical Review Letters</i> , 1991 , 67, 699-702 | 7.4 | 443 |
| 1875 | Atomic-force-microscopy observations of tracks induced by swift Kr ions in mica. <i>Physical Review Letters</i> , 1991 , 67, 1582-1585 | 7.4 | 149 |
| 1874 | Coupled electromagnetic modes between a corrugated surface and a thin probe tip. 1991 , 95, 2056-2064 | | 62 |
| 1873 | Enhanced effects with scanning force microscopy. 1991 , 69, 7330-7332 | | 3 |
| 1872 | van der Waals interactions between sharp probes and flat sample surfaces. 1991 , 43, 2404-2407 | | 107 |
| 1871 | A rocking beam electrostatic balance for the measurement of small forces. 1991 , 62, 705-709 | | 37 |
| 1870 | Palladium-graphite interaction potentials based on first-principles calculations. 1991 , 43, 12623-12625 | | 15 |
| 1869 | The influence of lateral forces in scanning force microscopy. 1991 , 62, 88-92 | | 57 |
| 1868 | Method of determining tip structure in atomic force microscopy. 1991 , 44, 3272-3276 | | 14 |
| 1867 | Limits of imaging resolution for atomic force microscopy of molecules. 1991 , 59, 3536-3538 | | 105 |
| 1866 | Adhesion between atomically flat metallic surfaces. 1991 , 44, 5834-5841 | | 25 |
| 1865 | ANALYTICAL TOOLS. 1991 , 1-99 | | 7 |
| 1864 | . | | 1 |
| 1863 | Tip-sample interactions in atomic force microscopy: I. Modulating adhesion between silicon nitride and glass. 1991 , 2, 119-122 | | 36 |
| 1862 | Scanning force microscopy - With Applications to Electric, Magnetic and Atomic Forces. 1991 , 2, 649-649 | | 78 |
| 1861 | Characterization of Surface Energetic Behavior by Atomic Force Microscopy. 1992 , 31, L977-L979 | | 13 |

| | | | |
|------|---|-----|-----|
| 1860 | Forces Acting on a Magnet Placed over a Superconducting Plane. 1992 , 31, L477-L480 | | 20 |
| 1859 | Electrostatic interaction in scanning probe microscopy when imaging in electrolyte solutions. 1992 , 3, 60-68 | | 48 |
| 1858 | A Magnetic Force Microscope Using an Optical Lever Sensor and Its Application to Longitudinal Recording Media. 1992 , 31, L1061-L1064 | | 10 |
| 1857 | Tribology and physics. 1992 , 25, A1-A2 | | 8 |
| 1856 | New approach to numerical treatment of scanning tunneling microscopy. 1992 , 45, 283-288 | | 1 |
| 1855 | Theory for the atomic force microscopy of layered elastic surfaces. 1992 , 4, 4233-4249 | | 14 |
| 1854 | Imaging and nanodissection of individual supercoiled plasmids by atomic force microscopy. 1992 , 20, 445-7 | | 96 |
| 1853 | Atomic force microscopy imaging of double stranded DNA and RNA. 1992 , 10, 589-606 | | 142 |
| 1852 | Scanning tunnelling microscopy. 1992 , 55, 1165-1240 | | 48 |
| 1851 | Electrocatalytic Oxidation of Oxygenated Aliphatic Organic Compounds at Noble Metal Electrodes. 1992 , 97-264 | | 85 |
| 1850 | . 1992 , | | 3 |
| 1849 | In situ observation of monolayer structures of underpotentially deposited Hg on Au(111) with the atomic force microscope. <i>Physical Review Letters</i> , 1992 , 68, 1571-1574 | 7.4 | 44 |
| 1848 | Lattice and thermal misfit dislocations in epitaxial CaF ₂ /Si(111) and BaF ₂ -CaF ₂ /Si(111) structures. <i>Physical Review Letters</i> , 1992 , 68, 3599-3602 | 7.4 | 62 |
| 1847 | Observation of deep contact holes and conductive components underlying insulator in a memory cell by tunneling acoustic microscopy. 1992 , 60, 515-517 | | 5 |
| 1846 | . 1992 , 28, 2310-2311 | | 19 |
| 1845 | van der Waals forces in atomic force microscopy operating in liquids: A spherical-tip model. 1992 , 46, 7946-7948 | | 29 |
| 1844 | Direct measurement of the van der Waals interaction between an atom and its images in a micron-sized cavity. <i>Physical Review Letters</i> , 1992 , 68, 3432-3435 | 7.4 | 159 |
| 1843 | Tip artifacts of microfabricated force sensors for atomic force microscopy. 1992 , 60, 2741-2743 | | 79 |

| | | |
|------|---|---------|
| 1842 | Multipolar propagators near a corrugated surface: Implication for local-probe microscopy. 1992 , 45, 1800-1810 | 19 |
| 1841 | Theory for an electrostatic imaging mechanism allowing atomic resolution of ionic crystals by atomic force microscopy. 1992 , 45, 13815-13818 | 37 |
| 1840 | Measuring adhesion, attraction, and repulsion between surfaces in liquids with an atomic-force microscope. 1992 , 45, 11226-11232 | 382 |
| 1839 | Atomic force microscopy on homoepitaxial SrTiO ₃ films grown under monitoring of intensity oscillation in reflection high energy electron diffraction. 1992 , 61, 2659-2661 | 39 |
| 1838 | . 1992 , 1, 14-22 | 55 |
| 1837 | Long-range scanning for scanning tunneling microscopy. 1992 , 63, 2200-2205 | 19 |
| 1836 | Attractive mode force microscopy using a feedback-controlled fiber interferometer. 1992 , 63, 5373-5376 | 6 |
| 1835 | Adhesive avalanche in covalently bonded materials. 1992 , 45, 4439-4444 | 20 |
| 1834 | Attractive-mode atomic force microscopy with optical detection in an orthogonal cantilever/sample configuration. 1992 , 71, 2499-2502 | 35 |
| 1833 | Atomic force microscope with integrated optical microscope for biological applications. 1992 , 63, 1914-1917 | 37 |
| 1832 | Theoretical study of short- and long-range forces and atom transfer in scanning force microscopy. 1992 , 46, 10411-10422 | 89 |
| 1831 | Long range constant force profiling for measurement of engineering surfaces. 1992 , 63, 4289-4295 | 13 |
| 1830 | Friction and wear of Langmuir-Blodgett films observed by friction force microscopy. <i>Physical Review Letters</i> , 1992 , 69, 1777-1780 | 7.4 236 |
| 1829 | Improved atomic force microscope using a laser diode interferometer. 1992 , 63, 3905-3908 | 8 |
| 1828 | Solvation forces near a graphite surface measured with an atomic force microscope. 1992 , 60, 2356-2358 | 119 |
| 1827 | Differentiation of topographical and chemical structures using an interfacial force microscope. 1992 , 60, 1175-1177 | 16 |
| 1826 | Nanometer-scale lithography using the atomic force microscope. 1992 , 61, 2293-2295 | 166 |
| 1825 | Computational studies of submicron probing of polymer surfaces. I. 1992 , 96, 7072-7085 | 9 |

| | | |
|------|--|-----|
| 1824 | A high stability and low drift atomic force microscope. 1992 , 63, 3900-3904 | 15 |
| 1823 | Calibration of height in atomic force microscope images with subnanometer scale silicon dioxide steps. 1992 , 61, 2479-2481 | 22 |
| 1822 | Magnetic imaging based on tunneling-stabilized, scanned-probe microscopies. | |
| 1821 | Mechanism of electron-spin resonance studied with use of scanning tunneling microscopy. 1992 , 46, 4795-4805 | 21 |
| 1820 | Surface structure of hydrated amorphous silicon oxide at 3 Å resolution by scanning force microscopy. 1992 , 60, 3111-3113 | 13 |
| 1819 | A detailed analysis of the optical beam deflection technique for use in atomic force microscopy. 1992 , 72, 6-12 | 190 |
| 1818 | Magnetic field imaging by using magnetic force scanning tunneling microscopy. 1992 , 60, 906-908 | 14 |
| 1817 | Models for the stray field from magnetic tips used in magnetic force microscopy. 1992 , 72, 203-206 | 27 |
| 1816 | Atomic force microscopy of uncoated plasmid DNA: nanometer resolution with only nanogram amounts of sample. 1992 , 10, 607-17 | 20 |
| 1815 | Thin piezoelectric VDF-TrFE copolymer films for data storage. 1992 , 1, 379-384 | 5 |
| 1814 | Experimental Characterization of Novel Materials for Nonlinear Optics Represented by Iodoform Complexes. 1992 , 217, 13-18 | 2 |
| 1813 | First STM Observation of Silica and Platinum-on-Silica Model Catalyst Systems. 1992 , 21, 2301-2302 | 3 |
| 1812 | Scanning Surface Potential Microscopy for Local Surface Analysis. 1992 , 21, 2223-2226 | 42 |
| 1811 | Reibungsmikroskopie. 1992 , 48, 1007-1009 | 5 |
| 1810 | Imaging VLSI Cross Sections by Atomic Force Microscopy. 1992 , 265, 283 | 5 |
| 1809 | Lattice Orientations of Evaporated Metals onto Uniaxially Oriented, Semicrystalline, Ultra thin Polymer Films. 1992 , 280, 345 | 1 |
| 1808 | AFM Imaging of the Crystalline-to-Amorphous Transition on the Surface of Ion-Implanted Mica. 1992 , 295, 139 | 1 |
| 1807 | AFM Imagings of Ferritin Molecules Bound to LB Films of Poly-1-Benzyl-L-Histidine: Imaging the ordered arrays of water-soluble protein ferritin with the atomic force microscope. 1992 , 295, 145 | 3 |

| | | | |
|------|---|-----|----------------|
| 1806 | Atomic Force Microscopy of Ammonium Perchlorate. 1992 , 296, 221 | | |
| 1805 | Scanning force microscopy [Examples of applications to surface chemistry. 1992 , 154-161 | | 1 |
| 1804 | Investigation of polymer surfaces using scanning force microscopy (SFM) [new direct look on old polymer problems [1992 , 62, 141-155 | | 1 |
| 1803 | References. 1992 , 381-414 | | |
| 1802 | How Are the Wetting Properties of Silanated Surfaces Affected by Their Structure? An Atomic-Force Microscopy Study. 1992 , 20, 633-638 | | 49 |
| 1801 | Edge profile of relief 2D domains at the free surface of smectic copolymer thin films. <i>Physical Review Letters</i> , 1992 , 68, 1575-1578 | 7-4 | 7 ¹ |
| 1800 | Paper I (I) Atomic Scale Mechanisms of Adhesion, Friction and Wear. 1992 , 21, 3-25 | | |
| 1799 | Tunneling stabilized magnetic force microscopy of BaFe ₂ O ₁₉ with a thin film tip. 1992 , 61, 357-359 | | 7 |
| 1798 | . 1992 , | | 10 |
| 1797 | Orientalional ordering of polymers by atomic force microscope tip-surface interaction. 1992 , 255, 64-6 | | 195 |
| 1796 | Near-field optics: microscopy, spectroscopy, and surface modification beyond the diffraction limit. 1992 , 257, 189-95 | | 1502 |
| 1795 | Magnetic force microscopy of Abrikosov vortices. 1992 , 5, 448-452 | | 30 |
| 1794 | Spatial mapping of the sensitivity function of magnetic recording heads using a MFM as a local flux applicator. | | |
| 1793 | Atomic scale imaging of hydroxyapatite and brushite in air by force microscopy. 1992 , 61, 2610-2612 | | 13 |
| 1792 | Nanotips by reverse electrochemical etching. 1992 , 60, 2935-2937 | | 24 |
| 1791 | Recent advances in surface analysis. Invited lecture. 1992 , 117, 313-322 | | |
| 1790 | A New Tool for Adhesion Science: The Atomic Force Microscope. 1992 , 40, 15-25 | | 25 |
| 1789 | Imaging of sodium decatungstocerate (IV) by scanning tunneling and atomic force microscopy. 1992 , 264, 271-280 | | 27 |

| | | |
|------|---|-----|
| 1788 | Raster-Tunnel-Mikroskopie zur Untersuchung und Modifizierung von Festkörperoberflächen. 1992 , 4, 195-201 | |
| 1787 | Surface structure of fluorine-graphite intercalation compounds observed by atomic force microscopy. 1992 , 274, L524-L528 | 9 |
| 1786 | Cleavage faces of alkaline earth fluorides studied by atomic force microscopy. 1992 , 277, L29-L33 | 27 |
| 1785 | Atomic force microscopy studies of atomic structures on AgBr(111) surfaces. 1992 , 275, L655-L661 | 9 |
| 1784 | Surface morphology of epitaxial CaF ₂ and SrF ₂ layers grown onto InP(001) studied by atomic force microscopy and low-energy electron diffraction. 1992 , 268, 319-324 | 15 |
| 1783 | Scanning probe microscopy. 1992 , 340, 600-601 | |
| 1782 | Wettability of MgO single crystal by liquid pure Pb, Sn and Bi. 1992 , 40, 1045-1050 | 30 |
| 1781 | Atomic force microscopy of conventional and unconventional nucleic acid structures. 1992 , 167, 77-84 | 7 |
| 1780 | High-resolution imaging of chromosome-related structures by atomic force microscopy. 1992 , 168, 239-47 | 61 |
| 1779 | STM/AFM study of grain boundary migration in nanostructured solids. 1992 , 15, 180-185 | 28 |
| 1778 | Imaging of DNA by scanning force microscopy. 1992 , 108, 69-73 | 38 |
| 1777 | Magnetic force microscopy utilizing an ultrasensitive vertical cantilever geometry. 1992 , 61, 2108-2110 | 21 |
| 1776 | Circular DNA molecules imaged in air by scanning force microscopy. 1992 , 31, 22-6 | 399 |
| 1775 | Combined shear force and near-field scanning optical microscopy. 1992 , 60, 2484-2486 | 816 |
| 1774 | Solid and liquid junctions. 1992 , 1, 1-24 | 51 |
| 1773 | Measuring local surface charge densities in electrolyte solutions with a scanning force microscope. 1992 , 63, 578-82 | 135 |
| 1772 | Measuring the microelastic properties of biological material. 1992 , 63, 1165-9 | 186 |
| 1771 | Imaging the ordered arrays of water-soluble protein ferritin with the atomic force microscope. 1992 , 63, 1425-31 | 49 |

| | | |
|------|---|-----|
| 1770 | Atomic-resolution surface studies of binary and ternary alkali-metal-graphite intercalation compounds by scanning tunneling microscopy. 1992 , 45, 1829-1837 | 24 |
| 1769 | Fibrous Textured Surface of an Ultrafiltration Membrane Delineated by Atomic Force Microscope. 1992 , 31, L1495-L1497 | 11 |
| 1768 | Vacuum Microelectronics. 1992 , 1-106 | 251 |
| 1767 | Atomic force microscopy of single- and double-stranded DNA. 1992 , 20, 3585-90 | 123 |
| 1766 | Atomic force microscopy of DNA molecules. 1992 , 301, 173-6 | 77 |
| 1765 | Imaging Without Lenses. 1992 , 00, 10-10 | |
| 1764 | STM and SFM. 1992 , 85-98 | |
| 1763 | Molecular packing at surfaces of oriented polyimide fiber and film observed by atomic force microscopy. 1992 , 29, 557-563 | 8 |
| 1762 | Detection of surface acoustic waves by scanning force microscopy. 1992 , 131, 69-71 | 50 |
| 1761 | The interfacial-force microscope. 1992 , 356, 266-267 | 65 |
| 1760 | Friction measurements on phase-separated thin films with a modified atomic force microscope. 1992 , 359, 133-135 | 479 |
| 1759 | Atomistic mechanisms of adhesive contact formation and interfacial processes. 1992 , 153, 3-30 | 151 |
| 1758 | Friction force microscopy of mixed Langmuir-Blodgett films. 1992 , 220, 132-137 | 167 |
| 1757 | Cleavage faces of alkaline earth fluorides studied by atomic force microscopy. 1992 , 277, L29-L33 | 4 |
| 1756 | Silicon cantilevers and tips for scanning force microscopy. 1992 , 34, 193-200 | 61 |
| 1755 | Scanning force microscopy of nanostructured uniaxially oriented ultra thin film surfaces of isotactic polystyrene. 1992 , 33, 5331-5333 | 10 |
| 1754 | Inductive forces generated by evanescent light fields: application to local probe microscopy. 1992 , 87, 79-83 | 14 |
| 1753 | Hydration force microscopy as a new option for studies of solid-liquid interfaces: Some theoretical considerations. 1992 , 330, 407-417 | 3 |

| | | |
|------|--|----|
| 1752 | The influence of hydrofluoric acid concentration on electroless copper deposition onto silicon. 1992 , 333, 363-369 | 28 |
| 1751 | Fabrication of nanometer structures using STM. 1992 , 54, 271-277 | 45 |
| 1750 | A study of the morphology of photochromic and thermochromic MoO ₃ amorphous films using an atomic force microscope. 1992 , 62, 145-149 | 11 |
| 1749 | Atomistic processes of surface and interface formation. 1992 , 60-61, 1-12 | 13 |
| 1748 | AFM investigation of microstructures of diacetylene Langmuir-Blodgett films. 1992 , 60-61, 321-325 | 10 |
| 1747 | Crystal faces of anhydrite (CaSO ₄) and their preferential dissolution in aqueous solutions studied with AFM. 1992 , 60-61, 491-497 | 13 |
| 1746 | Quantitative scanning tunneling microscopy and scanning force microscopy of organic materials. 1992 , 46, 375-393 | 82 |
| 1745 | Magnetic force microscope utilizing an ultra-small-spring-constant vertically cantilevered tip. 1992 , 47, 383-392 | 3 |
| 1744 | Magnetic force microscopy of magnetic materials. 1992 , 47, 393-399 | 40 |
| 1743 | Evolution of resolution in microscopy. 1992 , 47, 1-14 | 12 |
| 1742 | Plate-like microcrystals of silver bromide investigated by scanning force microscopy. 1992 , 41, 435-439 | 4 |
| 1741 | Force microscopy. 1992 , 42-44, 7-15 | 90 |
| 1740 | Atomic-scale tip-sample interactions and contact phenomena. 1992 , 42-44, 16-21 | 13 |
| 1739 | Theoretical modelling of AFM for bimetallic tip-substrate interactions. 1992 , 42-44, 55-58 | 15 |
| 1738 | Interaction forces between a tungsten tip and methylated SiO ₂ surfaces studied with scanning force microscopy. 1992 , 42-44, 73-79 | 11 |
| 1737 | Influence of STM tip on electronic structure: Si(100) dimers. 1992 , 42-44, 97-104 | 3 |
| 1736 | Adhesive energy, force and barrier height between simple metal surfaces. 1992 , 42-44, 163-168 | 15 |
| 1735 | Large-scale charge storage by scanning capacitance microscopy. 1992 , 42-44, 262-267 | 35 |

| | | |
|------|---|----|
| 1734 | Structure and dynamics of solid surfaces observed by atomic force microscopy. 1992 , 42-44, 274-280 | 24 |
| 1733 | Investigation of the (001) cleavage plane of potassium bromide with an atomic force microscope at 4.2 K in ultra-high vacuum. 1992 , 42-44, 281-289 | 76 |
| 1732 | Atomic surface and lattice structures of AgBr thin films. 1992 , 42-44, 290-297 | 18 |
| 1731 | Mechanical and thermal effects of laser irradiation on force microscope cantilevers. 1992 , 42-44, 345-350 | 84 |
| 1730 | Laser thermal effects on atomic force microscope cantilevers. 1992 , 42-44, 371-378 | 35 |
| 1729 | Self-consistent study of the electromagnetic coupling between a thin probe tip and a surface: implication for atomic-force and near-field microscopy. 1992 , 42-44, 430-436 | 6 |
| 1728 | Buckyball-substrate interactions probed by STM and AFM. 1992 , 42-44, 610-615 | 19 |
| 1727 | Atomic-scale imaging of anisotropic organic conductors by scanning probe techniques (STM/AFM). 1992 , 42-44, 644-652 | 10 |
| 1726 | Magnetic force microscopy investigation of superconductors: first results. 1992 , 42-44, 757-763 | 6 |
| 1725 | Molecular surface structure of organic crystals observed by atomic force microscopy. 1992 , 42-44, 983-988 | 15 |
| 1724 | Investigating poly(1-butene) films by SFM/STM. 1992 , 42-44, 989-997 | 11 |
| 1723 | Surface analysis of organic superconductors by scanning probe techniques: STM and AFM. 1992 , 42-44, 1009-1018 | 16 |
| 1722 | Imaging of organic molecular films with the atomic force microscope. 1992 , 42-44, 1044-1048 | 20 |
| 1721 | Ambient-pressure scanning probe microscopy of 2D regular protein arrays. 1992 , 42-44, 1118-1124 | 12 |
| 1720 | Streptavidin binding observed with an atomic force microscope. 1992 , 42-44 (Pt B), 1125-32 | 42 |
| 1719 | Na,K-ATPase in crystalline form investigated by scanning force microscopy. 1992 , 42-44 (Pt B), 1133-40 | 11 |
| 1718 | Electrodeposition procedure of E. coli RNA polymerase onto gold and deposition of E. coli RNA polymerase onto mica for observation with scanning force microscopy. 1992 , 42-44 (Pt B), 1173-80 | 9 |
| 1717 | Investigation of dialysis membranes with atomic force microscopy. 1992 , 42-44 (Pt B), 1181-8 | 14 |

| | | |
|------|--|-----|
| 1716 | Scanning force microscopy studies of the S-layers from <i>Bacillus coagulans</i> E38-66, <i>Bacillus sphaericus</i> CCM2177 and of an antibody binding process. 1992 , 42-44 (Pt B), 1236-42 | 34 |
| 1715 | Substrate preparation for reliable imaging of DNA molecules with the scanning force microscope. 1992 , 42-44 (Pt B), 1243-9 | 224 |
| 1714 | AFM images of dissolution and growth on a calcite crystal. 1992 , 42-44, 1387-1393 | 121 |
| 1713 | The atomic force microscope used as a powerful tool for machining surfaces. 1992 , 42-44, 1446-1451 | 75 |
| 1712 | Force measurement with a piezoelectric cantilever in a scanning force microscope. 1992 , 42-44, 1464-1469 | 36 |
| 1711 | A theoretical comparison between interferometric and optical beam deflection technique for the measurement of cantilever displacement in AFM. 1992 , 42-44, 1509-1513 | 28 |
| 1710 | Microfabrication of AFM tips using focused ion and electron beam techniques. 1992 , 42-44, 1526-1532 | 50 |
| 1709 | Atomic force microscope coupled with an optical microscope. 1992 , 42-44, 1542-1548 | 23 |
| 1708 | Atomic force microscope featuring an integrated optical microscope. 1992 , 42-44, 1549-1552 | 14 |
| 1707 | AFM and STM activities at advanced technologies center. 1992 , 42-44, 1596-1601 | 5 |
| 1706 | Proposal for a new optical device to sense AFM forces. 1992 , 42-44, 1668-1670 | 5 |
| 1705 | The surface structure and morphology of polyvinylidene fluoride microfiltration membranes by atomic force microscopy. 1992 , 68, 65-78 | 34 |
| 1704 | Surface pore structures of micro- and ultrafiltration membranes imaged with the atomic force microscope. 1992 , 65, 101-111 | 116 |
| 1703 | DNA and RNA polymerase/DNA complex imaged by scanning force microscopy: Influence of molecular-scale friction. 1992 , 14, 212-217 | 43 |
| 1702 | Atomic force microscope imaging of the plasma membrane Ca ²⁺ ATPase reconstituted in phospholipids. 1992 , 14, 276-281 | 4 |
| 1701 | AFM observations of the surface morphology of metallic glasses Fe ₇₈ B ₁₃ Si ₉ in the early stage of crystallization. 1992 , 7, 2126-2130 | 17 |
| 1700 | Reproducible imaging and dissection of plasmid DNA under liquid with the atomic force microscope. 1992 , 256, 1180-4 | 451 |
| 1699 | Atomic force microscopy of reovirus dsRNA: a routine technique for length measurements. 1992 , 20, 3983-6 | 85 |

- 1698 Magnetic force microscopy signal of flux line above a semi-infinite type II-superconductor. **1992**, 88, 317-320 43
- 1697 Atomic-scale contrast mechanism in atomic force microscopy. **1992**, 88, 321-326 32
- 1696 Atomic force microscopy for high-resolution imaging in cell biology. **1992**, 2, 208-13 167
- 1695 Defect structures of Langmuir-Blodgett films investigated by scanning force microscopy. **1992**, 210-211, 655-658 18
- 1694 Molecular recognition reactions at interfaces as seen by fluorescence, plasmon surface polaritons and atomic force microscopy. **1992**, 210-211, 666-669 10
- 1693 Molecular resolution of thin, highly oriented poly (tetrafluoroethylene) films with the atomic force microscope. **1992**, 33, 647-649 86
- 1692 Atomic force microscopy of polymer crystals: 1. Chain fold domains in poly(ethylene oxide) lamellae. **1992**, 33, 432-433 37
- 1691 Atomic force microscopy. **1992**, 41, 3-49 179
- 1690 Interactions of von Willebrand factor on mica studied by atomic force microscopy. **1992**, 148, 261-272 30
- 1689 Scanning probe microscopy of carbon fiber surfaces. **1992**, 30, 315-331 32
- 1688 Photodimerisierungen von Zimtsäure im Kristall: Neue Ergebnisse durch Anwendung der Kraftmikroskopie. **1992**, 104, 606-609 20
- 1687 Rastertunnel- und Kraftmikroskopie in der Organischen Chemie. **1992**, 104, 1325-1357 48
- 1686 Recent developments in the measurement of interparticle forces. **1993**, 44, 183-240 34
- 1685 In-situ organization of nanoparticles by scanning force microscopy under terrestrial and microgravity conditions. **1993**, 46, 221-262 6
- 1684 Surface microanalysis. **1993**, 283, 19-34 4
- 1683 Rasterkraftmikroskopie: Sehen durch Fühlen. **1993**, 23, 377-382
- 1682 Nanomachining and manipulation with the atomic force microscope. **1993**, 5, 392-394 10
- 1681 Detection of in situ hybridization to human chromosomes with the atomic force microscope. **1993**, 14, 356-61 37

| | | |
|------|--|-----|
| 1680 | An atomic force microscopy study of corona-treated polypropylene films. 1993 , 64, 197-203 | 45 |
| 1679 | Observation of recorded tracks in GeSbTe phase-change media by AFM. 1993 , 72, 245-248 | 3 |
| 1678 | Imaging of polydiacetylenes by atomic force microscopy. 1993 , 65-66, 366-370 | 8 |
| 1677 | Friction and measurement of friction on a nanometer scale. 1993 , 62, 510-516 | 14 |
| 1676 | Atomic-scale tribometer for friction studies in a controlled atmosphere. 1993 , 62, 523-528 | 29 |
| 1675 | Scanning force microscopy at -25°C. 1993 , 50, 147-155 | 4 |
| 1674 | Immunogold labels: cell-surface markers in atomic force microscopy. 1993 , 48, 177-182 | 49 |
| 1673 | Atomic layer-by-layer surface removal by force microscopy. 1993 , 293, L863-L869 | 1 |
| 1672 | Atomic force microscopy for the surface structure of the CuCl ₂ -graphite intercalation compound. 1993 , 291, L759-L762 | 3 |
| 1671 | Surface and domain structures of ferroelectric GASH crystals studied by scanning force microscopy. 1993 , 285, L498-L502 | 3 |
| 1670 | Fractured polymer/silica fiber surface studied by tapping mode atomic force microscopy. 1993 , 290, L688-L692 | 163 |
| 1669 | Lattice-scale imaging of mica and clay (001) surfaces by atomic force microscopy using net attractive forces. 1993 , 284, L405-L410 | 6 |
| 1668 | Atomic force microscopy for transition metals and tip structure effects. 1993 , 294, L969-L975 | 1 |
| 1667 | Role of relative humidity in atomic force microscopy imaging. 1993 , 294, L939-L943 | 21 |
| 1666 | Imaging of zeolite surface structures by atomic force microscopy. 1993 , 281, 331-334 | 8 |
| 1665 | Wear resistance of C ⁺ -implanted silicon investigated by scanning probe microscopy. 1993 , 162-164, 733-738 | 35 |
| 1664 | Microtribology today and tomorrow. 1993 , 168, 1-5 | 18 |
| 1663 | Effects of humidity and tip radius on the adhesive force measured with atomic force microscopy. 1993 , 168, 13-16 | 40 |

| | | |
|------|---|-----|
| 1662 | Surface roughness investigation of magnetic recording disks using STM and profilometry measurements. 1993 , 170, 15-24 | 9 |
| 1661 | Tribochemical characterization of the worn surface of the ternary system Cu-Ni-Zn. 1993 , 161, 187-191 | 1 |
| 1660 | Microwear processes of polymer surfaces. 1993 , 162-164, 370-377 | 51 |
| 1659 | Nucleation of diamond particles by hot filament chemical vapour deposition. 1993 , 236, 115-119 | 17 |
| 1658 | Effect of Tool Edge Geometry on Energy Dissipation in Ultraprecision Machining. 1993 , 42, 83-86 | 152 |
| 1657 | Nanotopography of Ultraprecise Ground Surface of Fine Ceramics Using Atomic Force Microscope. 1993 , 42, 647-650 | 9 |
| 1656 | CR-39 imaged by atomic force microscope. 1993 , 22, 249-250 | |
| 1655 | Surface morphology of metalorganic vapour phase epitaxy grown InP observed by atomic force microscopy. 1993 , 133, 185-188 | 2 |
| 1654 | Surface morphology and lattice distortion of heteroepitaxial GaInP on InP. 1993 , 130, 433-443 | 14 |
| 1653 | Crystallographic structure and defects in epitaxial bismuth films grown on mica. 1993 , 130, 571-577 | 8 |
| 1652 | Lattice resolution and solution kinetics on surfaces of amino acid crystals: an atomic force microscope study. 1993 , 130, 333-340 | 44 |
| 1651 | In-situ and real time monitoring of the InSe surface by atomic force microscopy with atomic resolution during electrochemical reactions. 1993 , 357, 301-306 | 19 |
| 1650 | Atomic force and scanning tunneling microscopies of organic surfaces. 1993 , 292, 29-47 | 29 |
| 1649 | First images obtained in the near infrared spectrum with the photon scanning tunneling microscope. 1993 , 102, 1-5 | 9 |
| 1648 | Internal structure of Kevlarfi fibres by atomic force microscopy. 1993 , 34, 4573-4575 | 40 |
| 1647 | Detection of displacements in the nanometre range by optical tunnelling. 1993 , 37-38, 577-581 | 0 |
| 1646 | Comb actuators for xy-microstages. 1993 , 39, 83-89 | 23 |
| 1645 | Atomic force microscopy of C60/C70 single-crystal fullerenes under ethanol. 1993 , 56, 207-210 | 11 |

| | | |
|------|---|-----|
| 1644 | Imaging the lamellipodium of migrating epithelial cells in vivo by atomic force microscopy. 1993 , 425, 506-10 | 33 |
| 1643 | Scanning force microscopy of nanofibrillar structure of drawn polyethylene tapes. 1993 , 31, 693-698 | 23 |
| 1642 | Atomic force microscopy of mammalian sperm chromatin. 1993 , 102, 623-30 | 69 |
| 1641 | A survey of non-destructive surface characterization methods used to insure reliable gate oxide fabrication for silicon IC devices. 1993 , 20, 127-139 | 20 |
| 1640 | AFM, SEM and XPS characterization of PAN-based carbon fibres etched in oxygen plasmas. 1993 , 28, 3601-3611 | 52 |
| 1639 | Molecular structure and thickness of highly oriented poly(tetrafluoroethylene) films measured by atomic force microscopy. 1993 , 28, 1372-1376 | 57 |
| 1638 | Domain structure of Ba ferrite observed by tunneling stabilized magnetic force microscopy. 1993 , 120, 379-382 | 4 |
| 1637 | Magnetic contrast from domain walls in BaFe ₁₂ O ₁₉ by tunneling stabilized magnetic force microscopy. 1993 , 91, 403-405 | 2 |
| 1636 | Investigation of nanoparticles by atomic and lateral force microscopy. 1993 , 15, 130-135 | 5 |
| 1635 | Applications of scanning probe microscopies in technology and manufacturing. 1993 , 15, 283-290 | 7 |
| 1634 | Recent advances in atomic force microscopy of DNA. 1993 , 15, 296-9 | 114 |
| 1633 | Trends in surface and interface analysis. 1993 , 346, 594-603 | 16 |
| 1632 | Atomic Force Microscopy of technological and biological samples. 1993 , 346, 58-60 | |
| 1631 | A combination of atomic force microscopy and secondary ion mass spectrometry for investigation of Al _x Ga _{1-x} As/GaAs superlattices. 1993 , 345, 615-617 | 6 |
| 1630 | Effects of oxygen doping on properties of microcrystalline silicon film grown using rapid thermal chemical vapor deposition. 1993 , 22, 1345-1351 | 6 |
| 1629 | Nonlinear Detection of Ultrasonic Vibrations in an Atomic Force Microscope. 1993 , 32, L1095-L1098 | 250 |
| 1628 | Scanning microsensors for nanotechnology. 1993 , 37-38, 11-15 | |
| 1627 | Use of atomic force microscopy for surface roughness determination of ball bearings. 1993 , 62, 517-522 | 4 |

| | | |
|------|--|------|
| 1626 | Scanning probe microscope with interchangeable AFM-FFM and STM heads. 1993 , 15, 279-292 | 13 |
| 1625 | Calibration of atomic-force microscope tips. 1993 , 64, 1868-1873 | 3213 |
| 1624 | Light scatter from polysilicon and aluminum surfaces and comparison with surface-roughness statistics by atomic force microscopy. 1993 , 32, 3377-400 | 8 |
| 1623 | Recent developments in profiling optical surfaces. 1993 , 32, 3442-7 | 10 |
| 1622 | Surface-Enhanced Raman Scattering and Atomic Force Microscopy of Brass Electrodes in Sulfuric Acid Solution Containing Benzotriazole and Chloride Ion. 1993 , 47, 80-84 | 6 |
| 1621 | Scanning-force microscope based on an optical trap. 1993 , 18, 1678-80 | 176 |
| 1620 | Immobilizing DNA on gold via thiol modification for atomic force microscopy imaging in buffer solutions. 1993 , 336, 452-6 | 95 |
| 1619 | Structure and morphology of nanostructured oxides synthesized by thermal vaporization/magnetron sputtering and gas condensation. 1993 , 24, 315-338 | 26 |
| 1618 | Atomic force microscopy for transition metals and tip structure effects. 1993 , 294, L969-L975 | 2 |
| 1617 | Role of relative humidity in atomic force microscopy imaging. 1993 , 294, L939-L943 | 75 |
| 1616 | Atomic layer-by-layer surface removal by force microscopy. 1993 , 293, L863-L869 | 12 |
| 1615 | Atomic force microscopy for the surface structure of the CuCl ₂ -graphite intercalation compound. 1993 , 291, L759-L762 | |
| 1614 | Lattice-scale imaging of mica and clay (001) surfaces by atomic force microscopy using net attractive forces. 1993 , 284, L405-L410 | 19 |
| 1613 | Fractured polymer/silica fiber surface studied by tapping mode atomic force microscopy. 1993 , 290, L688-L692-86 | |
| 1612 | Imaging of zeolite surface structures by atomic force microscopy. 1993 , 281, L331-L334 | 22 |
| 1611 | Surface and domain structures of ferroelectric GASH crystals studied by scanning force microscopy. 1993 , 285, L498-L502 | 28 |
| 1610 | Step dynamics and spiral growth on calcite. 1993 , 57, 491-495 | 208 |
| 1609 | Imaging viscoelasticity by force modulation with the atomic force microscope. 1993 , 64, 735-42 | 360 |

| | | |
|------|--|------|
| 1608 | STM/AFM/MFM Characterization of Electronic and Magnetic Materials and Their Applications. 1993 , 8, 226-235 | |
| 1607 | Domain structures in langmuir-blodgett films investigated by atomic force microscopy. 1993 , 259, 213-6 | 196 |
| 1606 | Scanning force microscopy of nucleic acids and nucleoprotein assemblies. 1993 , 3, 363-372 | 116 |
| 1605 | Structure of langmuir-blodgett films of disk-shaped molecules determined by atomic force microscopy. 1993 , 260, 323-6 | 88 |
| 1604 | True atomic resolution by atomic force microscopy through repulsive and attractive forces. 1993 , 260, 1451-6 | 563 |
| 1603 | Photon tunneling microscopy of polymeric surfaces. 1993 , 262, 1395-400 | 38 |
| 1602 | The role of topography and friction for the image contrast in lateral force microscopy. 1993 , 4, 143-151 | 83 |
| 1601 | A nondestructive method for determining the spring constant of cantilevers for scanning force microscopy. 1993 , 64, 403-405 | 1460 |
| 1600 | First images from a magnetic resonance force microscope. 1993 , 63, 2496-2498 | 81 |
| 1599 | Atomic force microscopy of oriented linear DNA molecules labeled with 5nm gold spheres. 1993 , 21, 99-103 | 61 |
| 1598 | Physics of electrophotography. 1993 , 65, 163-211 | 249 |
| 1597 | Regulation of a microcantilever response by force feedback. 1993 , 62, 2344-2346 | 215 |
| 1596 | Atomic force microscopy of DNA in aqueous solutions. 1993 , 21, 505-12 | 190 |
| 1595 | Electron reflection, diffraction and imaging of bulk crystal surfaces in TEM and STEM. 1993 , 56, 997-1065 | 24 |
| 1594 | Influence of substrate polarization on epitaxial overgrowth of a deposit. 1993 , 140, 59-64 | 3 |
| 1593 | . | 5 |
| 1592 | z calibration of the atomic force microscope by means of a pyramidal tip. 1993 , 64, 2595-2597 | 16 |
| 1591 | Inelastic electron tunneling spectroscopy and atomic force microscopy investigation of ultrathin sputtered amorphous silica films on gold. 1993 , 73, 2347-2352 | 8 |

| | | |
|------|---|-----|
| 1590 | Multifunctional probe microscope for facile operation in ultrahigh vacuum. 1993 , 63, 117-119 | 134 |
| 1589 | Scanning probe microscopy studies of electromigration in electroplated Au wires. 1993 , 73, 8189-8197 | 23 |
| 1588 | Friction force measurements on potential controlled graphite in an electrolytic environment. 1993 , 4, 59-63 | 44 |
| 1587 | . | |
| 1586 | Strained-layer van der Waals epitaxy in a Langmuir-Blodgett film. 1993 , 261, 449-52 | 57 |
| 1585 | A novel force microscope and point contact probe. 1993 , 64, 3515-3520 | 119 |
| 1584 | Surface morphology of nanocrystalline titanium oxide by AFM. 1993 , 3, 273-281 | 7 |
| 1583 | Investigation of diamond thin film growth on ferrous surfaces. 1993 , 2, 353-356 | 13 |
| 1582 | Microscopic manipulation of materials by atomic force microscopy. 1993 , 64, 903-4 | 1 |
| 1581 | Scanning tunneling microscopy studies of organic conductors. 1993 , 55, 426-433 | 2 |
| 1580 | In-situ synchrotron X-ray reflectivity measurements at the calcite-water interface. 1993 , 57, 4103-4110 | 60 |
| 1579 | Calcite precipitation mechanisms and inhibition by orthophosphate: In situ observations by Scanning Force Microscopy. 1993 , 57, 705-714 | 273 |
| 1578 | Scan speed limit in atomic force microscopy. 1993 , 169, 75-84 | 179 |
| 1577 | Promises and problems of biological atomic force microscopy. 1993 , 171, 183-98 | 89 |
| 1576 | Structure of the extracellular surface of the gap junction by atomic force microscopy. 1993 , 65, 149-63 | 169 |
| 1575 | Direct visualization of polypeptide shell of ferritin molecule by atomic force microscopy. 1993 , 65, 573-7 | 22 |
| 1574 | Colloidal gold particles as an incompressible atomic force microscope imaging standard for assessing the compressibility of biomolecules. 1993 , 65, 992-7 | 197 |
| 1573 | Two-dimensional crystallization of streptavidin by nonspecific binding to a surface film: study with a scanning electron microscope. 1993 , 65, 1714-7 | 29 |

| | | |
|------|--|-----|
| 1572 | Covalent binding of biological samples to solid supports for scanning probe microscopy in buffer solution. 1993 , 65, 2437-46 | 152 |
| 1571 | Observation of living cells using the atomic force microscope. 1993 , 64, 539-44 | 80 |
| 1570 | Attaching molecules to surfaces for scanning probe microscopy. 1993 , 64, 896-7 | 15 |
| 1569 | Cytoskeleton of living, unstained cells imaged by scanning force microscopy. 1993 , 64, 1282-6 | 56 |
| 1568 | Atomic resolution with an atomic force microscope using piezoresistive detection. 1993 , 62, 834-836 | 491 |
| 1567 | Tip sharpening by normal and reverse electrochemical etching. 1993 , 64, 159-167 | 72 |
| 1566 | Tip artifacts in atomic force microscope imaging of thin film surfaces. 1993 , 74, 3608-3610 | 80 |
| 1565 | Deformation and height anomaly of soft surfaces studied with an AFM. 1993 , 4, 106-113 | 357 |
| 1564 | Defect Formation in Alkali Halide Crystals. 1993 , 220-269 | 1 |
| 1563 | Atomic force microscopy and surface-enhanced Raman spectroscopy. I. Ag island films and Ag film over polymer nanosphere surfaces supported on glass. 1993 , 99, 2101-2115 | 416 |
| 1562 | Fundamentals and Special Applications of Non-Contact Scanning Force Microscopy. 1993 , 49-200 | 20 |
| 1561 | Contributed Papers in Specimen Mineralogy: 19th Rochester Mineralogical Symposium. 1993 , 68, 122-128 | 1 |
| 1560 | Analysis of banded human chromosomes and in situ hybridization patterns by scanning force microscopy. 1993 , 90, 2509-11 | 43 |
| 1559 | Atomic force microscopy of biochemically tagged DNA. 1993 , 90, 3811-4 | 46 |
| 1558 | Characterization by atomic-force microscopy of nanometre-scale plastic damage in Sic single crystals after being sintered by hot isostatic pressing. 1993 , 68, 45-52 | 4 |
| 1557 | Surface Characterization of Materials at Ambient Conditions by Scanning Tunneling Microscopy (STM) and Atomic Force Microscopy (AFM). 1993 , 28, 1-121 | 43 |
| 1556 | Scanning force microscopy of heavy-ion tracks. 1993 , 126, 213-216 | 11 |
| 1555 | Characterizing the nano-surface of carbon fibers in order to gain a better understanding of the interfaces they form. 1993 , 1, 15-35 | 3 |

| | | |
|------|---|-----|
| 1554 | Imaging of Organic Molecules by Atomic Force Microscopy. 1993 , 32, 2958-2961 | 8 |
| 1553 | Voltage contrast in integrated circuits with 100 nm spatial resolution by scanning force microscopy. 1993 , 26, 1801-1805 | 36 |
| 1552 | Observation of Atomic Defects on LiF(100) Surface with Ultrahigh Vacuum Atomic Force Microscope (UHV AFM). 1993 , 32, 2980-2982 | 37 |
| 1551 | Scanning Tunneling Microscope and Atomic Force Microscope Observation of Topography of Molecular-Beam-Epitaxy-Grown Pt Films on Cu Buffer Layer and Si(111)-(7 \times 7) Substrate. 1993 , 32, 2940-2944 | 4 |
| 1550 | A miniature fibre optic force microscope scan head. 1993 , 4, 769-775 | 40 |
| 1549 | Development of a force sensor for atomic force microscopy using piezoelectric thin films. 1993 , 4, 218-224 | 94 |
| 1548 | Microfabricated tools for nanoscience. 1993 , 3, 161-167 | 9 |
| 1547 | Atomic Force Microscope Combined with Scanning Tunneling Microscope [AFM/STM]. 1993 , 32, 2983-2988 | 35 |
| 1546 | Novel Method for Detecting Resonant Frequency Shift in Atomic Force Microscopy. 1993 , 32, 2455-2458 | 3 |
| 1545 | Scanning Force/Tunneling Microscopy as a Novel Technique for the Study of Nanometer-Scale Dielectric Breakdown of Silicon Oxide Layer. 1993 , 32, 290-293 | 17 |
| 1544 | A Novel Atomic Force Microscopy Observation Technique for Secondary Defects of Ion Implantation, using Anodic Oxidation. 1993 , 32, L157-L159 | 2 |
| 1543 | Atomic Force Microscopy Imaging of Filamentous Aggregates from an N-Terminal Peptide Fragment of Barnase. 1993 , 32, 2965-2968 | 3 |
| 1542 | High Resolution Images of Cell Surface Using a Tapping-Mode Atomic Force Microscope. 1993 , 32, L1711-L1714 | 37 |
| 1541 | A digital control system for scanning tunnelling microscopy and atomic force microscopy. 1993 , 4, 270-280 | 26 |
| 1540 | Whole electronic cantilever control for atomic force microscopy. 1993 , 64, 2598-2600 | 3 |
| 1539 | Surface and domain structures of ferroelectric crystals studied with scanning force microscopy. 1993 , 74, 7461-7471 | 143 |
| 1538 | Electron spin resonance-scanning tunneling microscopy experiments on thermally oxidized Si(111). 1993 , 48, 4887-4890 | 39 |
| 1537 | A multipurpose scanning probe microscope. 1993 , 64, 2591-2594 | 3 |

| | | |
|------|--|--------|
| 1536 | Ultra-high vacuum atomic force microscope using a pantograph inchworm mechanism. 1993 , 64, 3524-3529 | 9 |
| 1535 | Calibration and evaluation of scanning-force-microscopy probes. 1993 , 48, 5675-5678 | 132 |
| 1534 | Thermal imaging using the atomic force microscope. 1993 , 62, 2501-2503 | 189 |
| 1533 | Manipulation of van der Waals forces to improve image resolution in atomic-force microscopy. 1993 , 73, 4123-4129 | 70 |
| 1532 | Electron holography in the study of the leakage field of magnetic force microscope sensor tips. 1993 , 62, 1839-1841 | 14 |
| 1531 | Dynamic mode force microscopy for the detection of lateral and vertical electrostatic forces. 1993 , 63, 2573-2575 | 9 |
| 1530 | Ultrafast scanning probe microscopy. 1993 , 63, 2567-2569 | 98 |
| 1529 | Novel design for a compact fiber-optic scanning force microscope. 1993 , 64, 2888-2891 | 5 |
| 1528 | Observation of thin film of one-dimensional organic conductor tetrathiofulvalene tetracyanoquinodimethane by means of atomic force microscopy. 1993 , 62, 1892-1894 | 15 |
| 1527 | A high performance scanning force microscope head design. 1993 , 64, 904-907 | 3 |
| 1526 | An optical detection low temperature atomic force microscope at ambient pressure for biological research. 1993 , 64, 1483-1488 | 46 |
| 1525 | Jump to contact, neck formation, and surface melting in the scanning tunneling microscope. <i>Physical Review Letters</i> , 1993 , 70, 3907-3910 | 7.4 88 |
| 1524 | Hypothetical long-range interactions and restrictions on their parameters from force measurements. 1993 , 47, 2882-2891 | 27 |
| 1523 | Use of the Atomic Force Microscope to Study Mechanical Properties of Lubricant Layers. 1993 , 18, 20-25 | 29 |
| 1522 | An Atomic Force Microscopy Study of the Wetting of an Inorganic Surface by Latex Particles. 1993 , 42, 255-263 | 10 |
| 1521 | Study of silicon surfaces bombarded with noble gas ions in an electron cyclotron resonance plasma. 1993 , 74, 5217-5224 | 8 |
| 1520 | Theoretical atomic-force-microscopy study of adsorbed fullerene molecules. 1993 , 48, 15417-15424 | 11 |
| 1519 | Charge reversal seen in electrical double layer interaction of surfaces immersed in 2:1 calcium electrolyte. 1993 , 99, 6098-6113 | 171 |

| | | |
|------|---|--------|
| 1518 | Jumps in electronic conductance due to mechanical instabilities. <i>Physical Review Letters</i> , 1993 , 70, 2138-2141 | 199 |
| 1517 | Commensurate defect superstructures in a Langmuir-Blodgett film. <i>Physical Review Letters</i> , 1993 , 70, 1267-1270 | 7-4 43 |
| 1516 | Apparent and true feature heights in force microscopy. 1993 , 63, 114-116 | 13 |
| 1515 | Direct measurement of size fluctuation in reverse-mesa etched quantum wire structures by the atomic force microscope. 1993 , 62, 2350-2352 | 4 |
| 1514 | Surface morphology of metalorganic vapor phase epitaxy grown GaAs observed by atomic force microscopy. 1993 , 63, 1839-1841 | 13 |
| 1513 | A detection technique for scanning force microscopy. 1993 , 64, 912-916 | 13 |
| 1512 | Observation of contact holes by atomic force microscopy with a ZnO whisker tip. 1993 , 74, 4354-4356 | 17 |
| 1511 | Scanned-cantilever atomic force microscope. 1993 , 64, 908-911 | 22 |
| 1510 | Studies of dynamic magnetostriction by time-resolved scanning fiber interferometry. 1993 , 63, 1200-1202 | 7 |
| 1509 | Characterization of atomic force microscope tips by adhesion force measurements. 1993 , 63, 2150-2152 | 54 |
| 1508 | Discriminating Molecular Length of Chemically Adsorbed Molecules Using an Atomic Force Microscope Having a Tip Covered with Sensor Molecules (An Atomic Force Microscope Having Chemical Sensing Function). 1993 , 32, L294-L296 | 76 |
| 1507 | Nanotribology: Friction on a nanometer scale. 1993 , T49B, 599-604 | 31 |
| 1506 | Tribological Investigations Using Friction Force Microscopy. 1993 , 18, 26-34 | 127 |
| 1505 | Nanometer Recording on Graphite and Si Substrate Using an Atomic Force Microscope in Air. 1993 , 32, L464-L467 | 35 |
| 1504 | Interfacial Junctions and Cavitation. 1993 , 18, 36-44 | 23 |
| 1503 | Scanning Tunneling and Atomic Force Microscopy of T4 Bacteriophage and Tobacco Mosaic Virus. 1993 , 32, 2962-2964 | 16 |
| 1502 | Interpretation of force curves in force microscopy. 1993 , 4, 64-80 | 270 |
| 1501 | Nanoindentation studies of sublimed fullerene films using atomic force microscopy. 1993 , 8, 3019-3022 | 58 |

| | | |
|------|---|-----|
| 1500 | Scanning Probe Microscopy of Thin Films. 1993 , 18, 41-49 | 63 |
| 1499 | 3. Extensions of STM. 1993 , 77-94 | |
| 1498 | Atomic force microscopy of cloned nicotinic acetylcholine receptor expressed in <i>Xenopus</i> oocytes. 1993 , 90, 7280-4 | 44 |
| 1497 | Thickness Measurements and Optical Characterization of Thin Polymer Films. 1993 , 304, 221 | |
| 1496 | Mechanics of Contacts at less than 100nm Scale: Indentation and AFM. 1993 , 308, 127 | 5 |
| 1495 | Study of Silicon Surface Roughness by Atomic Force Microscopy. 1993 , 324, 391 | 3 |
| 1494 | Surface analysis: current capabilities. 1993 , 9, 365-377 | 6 |
| 1493 | Imaging of reconstituted biological channels at molecular resolution by atomic force microscopy. 1993 , 265, C851-6 | 28 |
| 1492 | Transmission electron microscopy, scanning tunneling microscopy, and atomic force microscopy of the cell envelope layers of the archaeobacterium <i>Methanospirillum hungatei</i> GP1. 1993 , 175, 1946-55 | 35 |
| 1491 | Biological applications of atomic force microscopy. 1994 , 266, C1-21 | 307 |
| 1490 | Atomic force microscopy at ultrasonic frequencies. 1994 , | 3 |
| 1489 | The Study of the Surface Topography of Microporous Materials Using Atomic Force Microscopy. 1994 , 485-492 | 7 |
| 1488 | . 1994 , | 3 |
| 1487 | Atomic force microscopy produces faithful high-resolution images of protein surfaces in an aqueous environment. 1994 , 91, 836-8 | 158 |
| 1486 | Observation of GaAs(110) Surface by an Ultrahigh-Vacuum Atomic Force Microscope. 1994 , 33, 3739-3742 | 11 |
| 1485 | Microtribological Studies by Using Atomic Force and Friction Force Microscopy and its Applications. 1994 , 332, 93 | 3 |
| 1484 | Atomic Force Microscope Images of Black Spruce Wood Sections and Pulp Fibres. 1994 , 48, 29-34 | 44 |
| 1483 | Probing specific molecular conformations with the scanning force microscope. Complexes of plasmid DNA and anti-Z-DNA antibodies. 1994 , 22, 3288-92 | 31 |

| | | |
|------|--|-----|
| 1482 | Surface force interactions between micrometer-size polystyrene spheres and silicon substrates using atomic force techniques. 1994 , 8, 197-210 | 48 |
| 1481 | Shear stress-induced reorganization of the surface topography of living endothelial cells imaged by atomic force microscopy. 1994 , 74, 163-71 | 287 |
| 1480 | Fundamental noise, electromechanical transduction and their role in resonant gravitational-wave detectors. 1994 , 11, A61-A72 | 2 |
| 1479 | A differential interferometer for scanning force microscopy. 1994 , 5, 1350-1354 | 20 |
| 1478 | Field Evaporation of Metal Atoms onto Insulator/Conducting Substrate Using Atomic Force Microscope. 1994 , 33, L1358-L1361 | 8 |
| 1477 | Atomically Resolved Image of Cleaved GaAs(110) Surface Observed with an Ultrahigh Vacuum Atomic Force Microscope. 1994 , 33, L52-L54 | 10 |
| 1476 | Fluctuation in Two-Dimensional Stick-Slip Phenomenon Observed with Two-Dimensional Frictional Force Microscope. 1994 , 33, 3752-3755 | 34 |
| 1475 | Piezoelectric Sensor for Detecting Force Gradients in Atomic Force Microscopy. 1994 , 33, 334-340 | 29 |
| 1474 | Atomic Force Microscopy and Real Atomic Resolution. Simple Computer Simulations. 1994 , 26, 103-107 | 25 |
| 1473 | Atomic Force Microscopy in Ultrahigh Vacuum. 1994 , 33, 3726-3734 | 65 |
| 1472 | Measurements of Electrostatic Double-Layer Forces Due to Charged Functional Groups on Langmuir-Blodgett Films with an Atomic Force Microscope. 1994 , 33, 4718-4722 | 25 |
| 1471 | Analysis of Subsurface Imaging and Effect of Contact Elasticity in the Ultrasonic Force Microscope. 1994 , 33, 3197-3203 | 63 |
| 1470 | A comparative study of local magnetic properties of vanadium and chromium adsorbed on graphite. 1994 , 6, 3321-3328 | 3 |
| 1469 | Elastic Compliances Measured by Atomic Force Microscopy. 1994 , 26, 443-447 | 25 |
| 1468 | Atomic Force Microscopy of Solution Grown Polyethylene Single Crystals. 1994 , 33, 3771-3774 | 19 |
| 1467 | Method for imaging sidewalls by atomic force microscopy. 1994 , 64, 2498-2500 | 142 |
| 1466 | Morphology of plasma polymerized methyl methacrylate films. 1994 , 64, 560-562 | 12 |
| 1465 | Imaging of single polymer chains based on their elasticity. 1994 , 65, 1915-1917 | 23 |

| | | |
|------|---|-----|
| 1464 | Low temperature magnetic force microscope utilizing a piezoresistive cantilever. 1994 , 65, 1308-1310 | 67 |
| 1463 | Theoretical study of friction: One-dimensional clean surfaces. 1994 , 49, 17286-17292 | 77 |
| 1462 | Photon scanning tunneling microscope in combination with a force microscope. 1994 , 75, 1254-1257 | 24 |
| 1461 | Scanning tunneling microscope measurement of insulator surfaces. 1994 , 64, 1100-1102 | 9 |
| 1460 | An integrated scanning tunneling, atomic force and lateral force microscope. 1994 , 65, 85-88 | 7 |
| 1459 | . | 2 |
| 1458 | Shape of the cantilever deflection for the atomic force microscope in force curve measurements. 1994 , 65, 1930-1934 | 9 |
| 1457 | Fabrication of optical fiber probes for nanometer-scale dimensional metrology. 1994 , 65, 2538-2541 | 6 |
| 1456 | Atomic-scale wear properties of muscovite mica evaluated by scanning probe microscopy. 1994 , 65, 980-982 | 34 |
| 1455 | Scanning shearing-stress microscope. 1994 , 64, 124-125 | 14 |
| 1454 | . | |
| 1453 | Difference between the forces measured by an optical lever deflection and by an optical interferometer in an atomic force microscope. 1994 , 65, 644-647 | 41 |
| 1452 | Beetle-like scanning tunneling microscope for ultrahigh vacuum and low-temperature applications. 1994 , 65, 1918-1922 | 25 |
| 1451 | A femtojoule calorimeter using micromechanical sensors. 1994 , 65, 3793-3798 | 229 |
| 1450 | Self-assembled monolayer film for enhanced imaging of rough surfaces with atomic force microscopy. 1994 , 76, 5731-5737 | 30 |
| 1449 | Magnetic force microscopy using electron-beam fabricated tips. 1994 , 65, 3224-3228 | 45 |
| 1448 | A new electrochemical cell for atomic force microscopy. 1994 , 65, 1019-1020 | 15 |
| 1447 | A dynamic model for analyzing piezoelectric steptomotors. 1994 , 65, 1566-1569 | 2 |

| | | | |
|------|--|-----|-----|
| 1446 | Physical interaction between tip and molecules in scanning force microscopy imaging of adsorbed C60 and fullerene tubules. 1994 , 101, 10973-10979 | | 2 |
| 1445 | Anisotropy in friction and molecular stick-slip motion. <i>Physical Review Letters</i> , 1994 , 72, 3546-3549 | 7.4 | 147 |
| 1444 | Flux measurements on ferromagnetic microprobes by electron holography. 1994 , 50, 6823-6828 | | 29 |
| 1443 | Low-temperature elastic moduli and dilational and shear internal frictions of superconducting ceramic GdBa ₂ Cu ₃ O _{7-δ} . 1994 , 49, 13099-13105 | | 34 |
| 1442 | Quantum-limited measurements with the atomic force microscope. 1994 , 50, 5256-5263 | | 69 |
| 1441 | Theoretical analysis of light-inductive forces in scanning probe microscopy. 1994 , 49, 13872-13881 | | 35 |
| 1440 | Atomic force microscope integrated with a scanning electron microscope for tip fabrication. 1994 , 65, 787-789 | | 12 |
| 1439 | Three-dimensional probe reconstruction for atomic force microscopy. 1994 , 65, 2249-2251 | | 64 |
| 1438 | Effects of the long-range macroscopic forces on atomic-force-microscope images. 1994 , 49, 2875-2877 | | 5 |
| 1437 | Atomic force microscope using piezoresistive cantilevers and combined with a scanning electron microscope. 1994 , 65, 2878-2880 | | 48 |
| 1436 | Adhesion force imaging in air and liquid by adhesion mode atomic force microscopy. 1994 , 65, 1195-1197 | | 166 |
| 1435 | A combined scanning tunneling, scanning force, frictional force, and attractive force microscope. 1994 , 65, 390-393 | | 9 |
| 1434 | Scanning force microscope springs optimized for optical-beam deflection and with tips made by controlled fracture. 1994 , 76, 172-181 | | 27 |
| 1433 | Scanning nearfield optical microscope using microfabricated probes. 1994 , 65, 2737-2738 | | 31 |
| 1432 | . 1994 , 17, 257-262 | | 16 |
| 1431 | Corona-treated isotactic polypropylene films investigated by friction force microscopy. 1994 , 75, 1401-1404 | | 20 |
| 1430 | Dispersion of surface plasmons in rectangular, sinusoidal, and incoherent silver gratings. 1994 , 75, 1577-1581 | | 19 |
| 1429 | Atomic force microscope with magnetic force modulation. 1994 , 65, 639-643 | | 129 |

| | | |
|------|--|----|
| 1428 | Component-resolved imaging of surface magnetic fields. 1994 , 75, 5910-5912 | 7 |
| 1427 | Aspects of the surface roughness of ceramic bonding tools on a nanometer scale investigated with atomic force microscopy. 1994 , 253, 308-310 | 20 |
| 1426 | Structural investigation of dipping lines in Langmuir-Blodgett films by scanning force microscopy. 1994 , 242, 170-173 | 6 |
| 1425 | Imaging of living cells by atomic force microscopy. 1994 , 46, 39-60 | 93 |
| 1424 | Atomic force microscopy observations of iron-sapphire fracture surfaces. 1994 , 176, 405-409 | 1 |
| 1423 | Piezoelectric force sensor for scanning force microscopy. 1994 , 43, 305-310 | 24 |
| 1422 | Applications of atomic force microscopy to structural characterization of organic thin films. 1994 , 93, 305-333 | 24 |
| 1421 | Fine structure of abnormal filaments isolated from Alzheimer's diseased brain: an application of atomic force microscopy. 1994 , 87, 213-216 | 3 |
| 1420 | Surface analysis with atomic force microscopy through measurement in air and under liquids. 1994 , 113, 179-202 | 20 |
| 1419 | Fractionation and characterization of Texas lignite class B fly ash by XRD, TGA, FTIR, and SFM. 1994 , 24, 1153-1164 | 51 |
| 1418 | Surface morphology and nanostructure of high modulus polyethylene fiber. 1994 , 32, 235-240 | 7 |
| 1417 | Scanning tunneling microscopy study of molecular order at liquid-solid interfaces. 1994 , 59, 119-133 | 27 |
| 1416 | Scanning force microscopy of the crystalline/amorphous interface of ultradrawn poly(ethylene). 1994 , 59, 145-150 | 9 |
| 1415 | Dynamical friction coefficient maps using a scanning force and friction microscope. 1994 , 59, 3-10 | 51 |
| 1414 | Study of the influence of native oxide layers on atomic force microscopy imaging of semiconductor surfaces. 1994 , 59, 23-27 | 11 |
| 1413 | Ultrathin-film hardness investigations by a modified atomic force microscope. 1994 , 59, 29-32 | 7 |
| 1412 | Scanning probe microscopy on superconductors: Achievements and challenges. 1994 , 59, 41-48 | 10 |
| 1411 | Atomic force microscopy of peritoneal macrophages after particle phagocytosis. 1994 , 140, 197-204 | 14 |

| | | |
|------|--|-----|
| 1410 | Anisotropic friction on lamellar crystals of polyethylene by lateral force microscopy. 1994 , 33, 459-464 | 13 |
| 1409 | Observation of the action of penicillin on bacillus subtilis using atomic force microscopy: Technique for the preparation of bacteria. 1994 , 21, 400-401 | 31 |
| 1408 | Latex film formation studied with the atomic force microscope: Influence of aging and annealing. 1994 , 272, 1218-1223 | 46 |
| 1407 | Cleaved surface structures of CuCl ₂ - and FeCl ₃ -graphite intercalation compounds detected by atomic force microscopy. 1994 , 32, 1191-1196 | 6 |
| 1406 | Observation of a chemical reaction using a micromechanical sensor. 1994 , 217, 589-594 | 403 |
| 1405 | Imaging crystal growth features using scanning force microscopy (SFM). 1994 , 29, 1005-1011 | 9 |
| 1404 | Effect of surface plasma treatment on the chemical, physical, morphological, and mechanical properties of totally absorbable bone internal fixation devices. 1994 , 28, 289-301 | 28 |
| 1403 | Interactions of human von Willebrand factor with a hydrophobic self-assembled monolayer studied by atomic force microscopy. 1994 , 28, 971-80 | 18 |
| 1402 | Layer-by-layer growth and decomposition of an organic crystal observed in real time by atomic force microscopy. 1994 , 6, 307-311 | 9 |
| 1401 | Interpreting STM and AFM Images. 1994 , 6, 355-371 | 90 |
| 1400 | Surface nano-topography of drawn polyethylene and its modification using scanning force microscopy. 1994 , 6, 476-480 | 21 |
| 1399 | Atomic force microscopy at MHz frequencies. 1994 , 506, 589-598 | 32 |
| 1398 | Low-temperature scanning tunneling microscopy. 1994 , 197, 64-71 | 7 |
| 1397 | Nanometer-scale observations of metallic glass fracture surfaces. 1994 , 176, 411-415 | 4 |
| 1396 | Microlever with combined integrated sensor/actuator functions for scanning force microscopy. 1994 , 43, 339-345 | 17 |
| 1395 | Design and fabrication of an overhanging xy-microactuator with integrated tip for scanning surface profiling. 1994 , 43, 346-350 | 29 |
| 1394 | Adhesive force distribution on microstructures investigated by an atomic force microscope. 1994 , 44, 153-158 | 37 |
| 1393 | Atomic scale imaging of pillared rectorite catalysts with the atomic force microscope. 1994 , 2, 205-215 | 13 |

| | | |
|------|---|----|
| 1392 | Initiation and study of localized corrosion by scanning electrochemical microscopy. 1994 , 93, 251-261 | 83 |
| 1391 | Compression of polyethylene glycol chains grafted onto silicon nitride surface as measured by scanning force microscopy. 1994 , 93, 349-357 | 23 |
| 1390 | Adhesive forces between ligand and receptor measured by AFM. 1994 , 93, 343-348 | 89 |
| 1389 | Controlled modification of silicon nitride interactions in water via zwitterionic surfactant adsorption. 1994 , 93, 275-292 | 42 |
| 1388 | Latex film surface morphology studied by atomic force microscopy: Effect of a non-ionic surfactant postadded to latex dispersion. 1994 , 87, 177-185 | 30 |
| 1387 | Specific ion adsorption at the mineral/water interface: Cesium adsorption on chlorite. 1994 , 87, 187-196 | 5 |
| 1386 | Examination of the geometry of long-range tip/sample interaction in atomic force microscopy. 1994 , 87, 217-234 | 84 |
| 1385 | Atomic force microscopy of polymer single crystals and melt-drawn films. 1994 , 87, 235-243 | 11 |
| 1384 | Morphological studies of ordered, solid polymers by scanning force microscopy. 1994 , 87, 263-275 | 19 |
| 1383 | Levitation forces acting on a magnet placed over a superconducting ring. 1994 , 2, 559-569 | 18 |
| 1382 | Contactless Surface Measurement with a New Acoustic Sensor. 1994 , 43, 487-490 | 6 |
| 1381 | Voltage-contrast scanning probe microscopy. 1994 , 24, 3-9 | 7 |
| 1380 | Scanning-force-microscope test system for device internal test with high spatial and temporal resolution. 1994 , 24, 91-98 | 9 |
| 1379 | Nano-hardness investigations of thin films by an atomic force microscope. 1994 , 24, 113-121 | 30 |
| 1378 | Confocal scanning laser scanning probe hybrid microscope for biological applications. 1994 , 53, 147-157 | 22 |
| 1377 | Evaluation of the probing profile of scanning force microscopy tips. 1994 , 53, 371-380 | 34 |
| 1376 | Improvement of scanning accuracy of PZT piezoelectric actuators by feed-forward model-reference control. 1994 , 16, 49-55 | 89 |
| 1375 | Analytical applications of scanning tunneling microscopy. 1994 , 13, 61-67 | 19 |

| | | |
|------|--|-----|
| 1374 | Thermal calorimetry of polymer simple shear deformation and its applications. 1994 , 247, 35-51 | 1 |
| 1373 | Scanning tunnelling microscopy. 1994 , 45, 805-817 | 2 |
| 1372 | A novel combined scanning tunnelling/scanning force microscope. 1994 , 45, 575-577 | |
| 1371 | Atomic force microscopy studies of photosynthetic protein membrane Langmuir-Blodgett films. 1994 , 243, 455-458 | 13 |
| 1370 | Scanning tunneling microscopy imaging of conducting Langmuir-Blodgett films. 1994 , 237, 225-230 | 9 |
| 1369 | Molecular dynamics simulations of friction in self-assembled monolayers. 1994 , 253, 185-189 | 72 |
| 1368 | Comparative investigation by laser profilometry, scanning electron microscopy and atomic force microscopy of wear on solar-beam-irradiated partially oxidized TiN coatings. 1994 , 241, 222-229 | 7 |
| 1367 | Morphology and molecular ordering in Langmuir-Blodgett films from ladder polyheteroarylenes. 1994 , 244, 745-749 | 7 |
| 1366 | Tribology of ultra-thin MoS ₂ platelets on mica: studies by scanning force microscopy. 1994 , 240, 101-104 | 26 |
| 1365 | Methods and apparatus for in situ investigations with the scanning force microscope. 1994 , 141, 291-298 | 18 |
| 1364 | Chloride adsorption on Ag(111) studied by in-situ scanning tunnelling microscopy. 1994 , 370, 297-300 | 46 |
| 1363 | Effect of tip shape on force-distance curves for AFM in aqueous electrolytes. 1994 , 374, 269-273 | 17 |
| 1362 | Atomic force microscopy of polymer crystals: 7. Chain packing, disorder and imaging of methyl groups in oriented isotactic polypropylene. 1994 , 35, 461-467 | 42 |
| 1361 | Scanning tunneling microscopy and related techniques for surface analysis. 1994 , 25, 371-385 | 8 |
| 1360 | Imaging human erythrocyte spectrin with atomic force microscopy. 1994 , 25, 227-32 | 18 |
| 1359 | Structural studies of ordered monolayers using atomic force microscopy. 1994 , 25, 271-292 | 12 |
| 1358 | Langmuir-Blodgett films. 1994 , 263, 1726-33 | 508 |
| 1357 | In-situ investigation of surface reactions on alkali halides by atomic force microscopy. 1994 , 349, 190-194 | 10 |

| | | |
|------|---|-----|
| 1356 | AFM studies of Pd silica supported thin film catalysts. 1994 , 26, 297-314 | 17 |
| 1355 | Stray-field investigations on sharp ferromagnetic tips by electron holography. 1994 , 133, 422-424 | 2 |
| 1354 | Characterization of organic matter/ minerals associations in oilfield rocks using the nuclear microprobe. 1994 , 85, 874-880 | 7 |
| 1353 | Surface morphology of arsenic implanted silicon dioxide observed by atomic force microscopy. 1994 , 91, 639-643 | 14 |
| 1352 | Atomic force microscopy and scanning tunnelling microscopy: refining techniques for studying biomolecules. 1994 , 12, 127-32 | 22 |
| 1351 | Investigations of ultrathin silicon nitride layers produced by low-energy ion implantation and EB-RTA. 1994 , 89, 362-368 | 24 |
| 1350 | Observation of Hydrogenated Amorphous Carbon Films by Atomic Force Microscopy. 1994 , 77, 1385-1387 | 5 |
| 1349 | Spontaneous chiral symmetry breaking by achiral molecules in a Langmuir-Blodgett film. 1994 , 368, 440-443 | 161 |
| 1348 | Role of linker histones in extended chromatin fibre structure. 1994 , 1, 761-3 | 42 |
| 1347 | Oxide-semiconductor interface roughness and electrical properties of polycrystalline silicon thin-film transistors. 1994 , 64, 2273-2275 | 8 |
| 1346 | . 1994 , 82, 1006-1034 | 190 |
| 1345 | Atomic force microscopy of the nacreous layer in mollusc shells. 1994 , 256, 17-23 | 39 |
| 1344 | Tapping mode atomic force microscopy in liquids. 1994 , 64, 1738-1740 | 723 |
| 1343 | Atomistic theory of the interaction between AFM tips and ionic surfaces. 1994 , 6, 1825-1846 | 61 |
| 1342 | Techniques Giving Mechanistic Information. 1994 , 36-227 | 2 |
| 1341 | Measurement of the forces between gold surfaces in water by atomic force microscopy. 1994 , 100, 8501-8505 | 128 |
| 1340 | Frictional behavior of highly oriented pyrolytic graphite. 1994 , 76, 8117-8120 | 109 |
| 1339 | Atomic force microscopy of freeze-fracture replicas of rat atrial tissue. 1994 , 173, 173-81 | 8 |

| | | |
|------|--|-----|
| 1338 | Tip artefacts in scanning force microscopy. 1994 , 173, 183-197 | 91 |
| 1337 | Calibration of the scanning (atomic) force microscope with gold particles. 1994 , 173, 199-210 | 79 |
| 1336 | An atomic force microscope for cytological and histological investigations. 1994 , 176, 121-31 | 9 |
| 1335 | Scanning force microscopy on live cultured cells: imaging and force-versus-distance investigations. 1994 , 176, 254-61 | 23 |
| 1334 | Atomic force microscopy in the photochemistry of chalcones. 1994 , 174, 15-22 | 11 |
| 1333 | Imaging of the membrane surface of MDCK cells by atomic force microscopy. 1994 , 67, 36-41 | 82 |
| 1332 | Viscoelasticity of living cells allows high resolution imaging by tapping mode atomic force microscopy. 1994 , 67, 1749-53 | 174 |
| 1331 | Reproducible acquisition of Escherichia coli porin surface topographs by atomic force microscopy. 1994 , 67, 2394-403 | 122 |
| 1330 | Motion and enzymatic degradation of DNA in the atomic force microscope. 1994 , 67, 2454-9 | 188 |
| 1329 | Structures of large T antigen at the origin of SV40 DNA replication by atomic force microscopy. 1994 , 66, 293-8 | 25 |
| 1328 | New internal structure of spider dragline silk revealed by atomic force microscopy. 1994 , 66, 1209-12 | 89 |
| 1327 | Structure and activation dynamics of RBL-2H3 cells observed with scanning force microscopy. 1994 , 66, 1717-25 | 41 |
| 1326 | Mapping interaction forces with the atomic force microscope. 1994 , 66, 2159-65 | 282 |
| 1325 | Numerical simulations of a scanning force microscope with a large-amplitude vibrating cantilever. 1994 , 5, 199-204 | 64 |
| 1324 | Resonance response of scanning force microscopy cantilevers. 1994 , 65, 2532-2537 | 212 |
| 1323 | Direct observation of enzyme activity with the atomic force microscope. 1994 , 265, 1577-9 | 426 |
| 1322 | A lateral modulation technique for simultaneous friction and topography measurements with the atomic force microscope. 1994 , 65, 2870-2873 | 51 |
| 1321 | Ultrasonic force microscopy for nanometer resolution subsurface imaging. 1994 , 64, 178-180 | 290 |

| | | |
|------|--|-----|
| 1320 | Atomic force microscopy of the electrochemical nucleation and growth of molecular crystals. 1994 , 263, 1261-4 | 68 |
| 1319 | Adhesion: molecules and mechanics. 1994 , 263, 1720-5 | 214 |
| 1318 | Unexpected square symmetry seen by atomic force microscopy in bilayer films of disk-like molecules. 1994 , 264, 77-9 | 38 |
| 1317 | Fibrous mini-collagens in hydra nematocysts. 1994 , 265, 402-4 | 81 |
| 1316 | Probing chromatin with the scanning force microscope. 1994 , 103, 231-6 | 52 |
| 1315 | Longitudinal patterns similar to G-banding in untreated human chromosomes: evidence from atomic force microscopy. 1994 , 103, 225-9 | 29 |
| 1314 | Thermal and ambient-induced deflections of scanning force microscope cantilevers. 1994 , 64, 2894-2896 | 334 |
| 1313 | A new, optical-lever based atomic force microscope. 1994 , 76, 796-799 | 43 |
| 1312 | Force sensing microcantilever using sputtered zinc oxide thin film. 1994 , 64, 37-39 | 47 |
| 1311 | Lateral, normal, and longitudinal spring constants of atomic force microscopy cantilevers. 1994 , 65, 2527-2531 | 283 |
| 1310 | Float-polishing process and analysis of float-polished quartz. 1994 , 33, 89-95 | 32 |
| 1309 | Simulation of photothermally diffused images and a concept of holoscan in photoacoustic and optical-probe imaging. 1994 , 33, 7251-7 | 1 |
| 1308 | Improved differential heterodyne interferometer for atomic force microscopy. 1994 , 65, 3697-3701 | 12 |
| 1307 | Molecular imaging of Na ⁺ ,K ⁽⁺⁾ -ATPase in purified kidney membranes. 1994 , 346, 289-94 | 8 |
| 1306 | Structure and stability of pertussis toxin studied by in situ atomic force microscopy. 1994 , 338, 89-92 | 59 |
| 1305 | A STM study of the effects of the ion incident angle and energy on surface damage induced by Ar ⁺ bombardment of HOPG. 1994 , 312, 399-410 | 52 |
| 1304 | Biological applications of scanning probe microscopies. 1994 , 61, 131-85 | 58 |
| 1303 | Alluvial gold in Kalimantan, Indonesia: A colloidal origin?. 1994 , 50, 457-478 | 13 |

| | | |
|------|--|------|
| 1302 | Observations of the Cu(1 11) adlayer on Au(111) in a sulfuric acid solution using atomic force microscopy. 1994 , 311, L641-L648 | 51 |
| 1301 | Topological aspects of iron corrosion in alkaline solution by means of scanning force microscopy (SFM). 1994 , 311, 153-158 | 10 |
| 1300 | Scanning tunneling microscopy: a surface science tool and beyond. 1994 , 299-300, 956-964 | 50 |
| 1299 | The AFM as a tool for surface imaging. 1994 , 299-300, 980-995 | 130 |
| 1298 | Imaging the surface of silica microparticles with the atomic force microscope: a novel sample preparation method. 1994 , 304, L393-L399 | 18 |
| 1297 | On the limits of the spectroscopic ability of AFM and the interaction between an AFM tip and a sample. 1994 , 311, 287-294 | 32 |
| 1296 | Scanning tunneling microscopy using a ZnO whisker tip. 1994 , 64, 3243-3245 | 13 |
| 1295 | Resolution in surface plasmon microscopy. 1994 , 65, 2829-2836 | 103 |
| 1294 | Molecular resolution atomic force microscopy of soluble proteins in solution. 1994 , 1199, 105-14 | 57 |
| 1293 | Adhesion forces between individual ligand-receptor pairs. 1994 , 264, 415-7 | 1744 |
| 1292 | Preparation and properties of highly oriented polytetrafluoroethylene films. 1994 , 67, 55-61 | 22 |
| 1291 | An investigation of doped polypyrrole by a combination of scanning tunnelling and atomic force microscopes. 1994 , 67, 211-214 | 8 |
| 1290 | Interpretation of scanning tunneling and atomic force microscopy images of TCNQ salts. 1994 , 62, 159-167 | 12 |
| 1289 | An amphiphilic trinuclear cobalt cluster-containing molecular unit: synthesis, characterization and Langmuir-Blodgett films. 1994 , 1051-1059 | 9 |
| 1288 | Short-range order in extended-chain crystals of polyoxymethylene from a true molecular perspective: an atomic force microscopy study. 1994 , 4, 55-59 | 7 |
| 1287 | The scanning dielectric microscope. 1994 , 5, 589-592 | 27 |
| 1286 | . | 2 |
| 1285 | Change of surface structure of thin silicon nitride layers during electron beam rapid thermal annealing. 1994 , 64, 2652-2654 | 24 |

| | | |
|------|---|-----|
| 1284 | Atomic-scale and microscale friction studies of graphite and diamond using friction force microscopy. 1994 , 76, 5022-5035 | 148 |
| 1283 | Interdiffusion between Y-Ba-Cu-O thin films and Al ₂ O ₃ substrates studied by applying Rutherford backscattering spectrometry combined with atomic force microscopy. 1994 , 76, 5724-5730 | 1 |
| 1282 | Imaging spectroscopy with the atomic force microscope. 1994 , 76, 33-38 | 71 |
| 1281 | Effect of PZT and PMN actuator hysteresis and creep on nanoindentation measurements using force microscopy. 1994 , 65, 1561-1565 | 56 |
| 1280 | . | 33 |
| 1279 | Intermolecular forces and energies between ligands and receptors. 1994 , 266, 257-9 | 783 |
| 1278 | Reliability test of popular fractal techniques applied to small two-dimensional self-affine data sets. 1994 , 76, 5070-5078 | 23 |
| 1277 | Adhesion Force Measurements Using an Atomic Force Microscope Upgraded with a Linear Position Sensitive Detector. 1994 , 10, 3217-3221 | 49 |
| 1276 | A novel AFM/STM/SEM system. 1994 , 65, 2853-2854 | 35 |
| 1275 | A Thermal Stage for Nanoscale Structure Studies with the Scanning Force Microscope. 1994 , 332, 105 | 1 |
| 1274 | Imaging Single Nacreous Tablets with the Atomic Force Microscope. 1994 , 332, 413 | |
| 1273 | Hydrogen Ion Beam Processing of Single Crystal Diamond Chips. 1994 , 354, 717 | |
| 1272 | Using Atomic Force Microscopy to Image Langmuir Blodgett Films of Disk Shaped Molecules. 1994 , 355, 147 | 1 |
| 1271 | Evaluation of Surface Characteristics of ZnS and Zn ₂ SiO ₄ Powders by SFM. 1994 , 355, 353 | |
| 1270 | Nanoscale Control of Ferroelectric Domain Structure by AFM. 1994 , 357, 363 | 2 |
| 1269 | Scanning Probe Microscopy Studies of the Activation and Deactivation of Pd Thin Film Catalysts. 1994 , 88, 69-84 | 1 |
| 1268 | Nano-Hardness, Nano-Friction and Nano-Wear of Ultra-Thin Overcoats. 1994 , 356, 737 | 9 |
| 1267 | Observation of Crystallization of Vapor-deposited TPD Films by AFM and FFM. 1994 , 23, 969-972 | 86 |

| | | |
|------|--|-----|
| 1266 | Scanning Near-field Fluorescence Microscopy and Nanoscopic Fluorescence Spectroscopy in Combination with a Non-contact Scanning Force Microscope. 1994 , 23, 657-660 | 23 |
| 1265 | Microtribology of Magnetic Media. 1994 , 208, 17-29 | 64 |
| 1264 | Surface Observation of MgO Single Crystal with Atomic Force Microscope and Crystallographic Orientation Dependence of Wettability of MgO by Liquid Metals. 1994 , 35, 466-472 | 6 |
| 1263 | Friction and Energy Dissipation at the Atomic Scale - A Review. 1994 , 27, 3-20 | 0 |
| 1262 | Probing toward atomic resolution in molecular topography. 1994 , 91, 1981-2 | 4 |
| 1261 | Three-dimensional structure of extended chromatin fibers as revealed by tapping-mode scanning force microscopy. 1994 , 91, 11621-5 | 210 |
| 1260 | Atomic force microscopy of anodized zirconium substrates. 1994 , 70, 1-9 | 4 |
| 1259 | Following the assembly of RNA polymerase-DNA complexes in aqueous solutions with the scanning force microscope. 1994 , 91, 12927-31 | 121 |
| 1258 | Static and dynamic structures of ferroelectric domains studied with scanning force microscopy. 1994 , 151, 143-149 | 32 |
| 1257 | Direct measurement of hydrogen bonding in DNA nucleotide bases by atomic force microscopy. 1995 , 92, 5297-301 | 216 |
| 1256 | Large secretory structures at the cell surface imaged with scanning force microscopy. 1995 , 92, 6976-80 | 17 |
| 1255 | Structural hierarchy in the clustering of HLA class I molecules in the plasma membrane of human lymphoblastoid cells. 1995 , 92, 1122-6 | 80 |
| 1254 | Electrostatic force microscope for probing surface charges in aqueous solutions. 1995 , 92, 10384-8 | 42 |
| 1253 | Atomic Force Microscope Information on Pollen Exine Substructure in Nuphar. 1995 , 108, 300-308 | 29 |
| 1252 | Scanning Force Microscopy in Biology. 1995 , 48, 32-38 | 222 |
| 1251 | Rasterkraftmikroskopie. 1995 , 43, 342-346 | 2 |
| 1250 | Scanning probe microscopy with chemical sensitivity. 1996 , 303-320 | |
| 1249 | Dynamics and control of piezotube actuators for subnanometer precision applications. | 7 |

| | | |
|------|--|----|
| 1248 | Molecular Dynamics Simulation of Mechanical Deformation of Ultra-Thin Metal and Ceramic Films. 1995 , 389, 181 | 11 |
| 1247 | Atomic Force and Scanning Electron Microscopy of Corrosion and Fatigue of an Aluminum-Copper Alloy. 1995 , 409, 201 | |
| 1246 | Chromic Polydiacetylene Single Crystals: Atomic Force Microscopy Studies. 1995 , 413, 445 | |
| 1245 | Nanoscale Indentation Hardness and Wear Characterization of Hydrogenated Carbon Thin Films. 1995 , 117, 594-601 | 12 |
| 1244 | Wear Resistance of N+-Implanted Silicon Investigated by Scanning Probe Microscopy. 1995 , 117, 612-616 | 3 |
| 1243 | Simultaneous Measurement of Surface Topography and Friction Force by a Single-Head Lateral Force Microscope. 1995 , 117, 334-340 | 5 |
| 1242 | Order of crystalline cellulose detected with the atomic force microscopy (AFM). 1995 , 69-74 | |
| 1241 | The application of atomic force microscopy for the detection of microcrystals in synovial fluid from patients with recurrent synovitis. 1995 , 24, 359-69 | 18 |
| 1240 | Atomic force microscopy of the morphology of the matrix and mineral components of the otolith of Hyperoglyphe antarctica. 1995 , 223, 203-214 | 8 |
| 1239 | Latex characterization by atomic force microscopy. 1995 , 18, 310-314 | 2 |
| 1238 | Properties of microfiltration membranes: Mechanisms of flux loss in the recovery of an enzyme. 1995 , 46, 28-35 | 30 |
| 1237 | Pretreatment of polymer surfaces—the crucial step prior to metal deposition. 1995 , 40, 1487-1494 | 24 |
| 1236 | The deposition of silica on carbon as a model system for oxidation protection coatings. 1995 , 33, 509-524 | 16 |
| 1235 | A novel design of a constant volume electrochemical cell for atomic force microscopy measurements. 1995 , 7, 260-263 | 6 |
| 1234 | Microtribological applications of probe microscopy. 1995 , 28, 195-202 | 9 |
| 1233 | Tip-based data storage using micromechanical cantilevers. 1995 , 48, 215-219 | 32 |
| 1232 | Resonator-based touch-sensitive probe. 1995 , 50, 23-29 | 14 |
| 1231 | Aggregation involved in silver perchlorate insertion process within LB multilayers. 1995 , 3, 245-248 | |

| | | |
|------|---|----|
| 1230 | Characterization of the surface of bio-ceramic thin films. 1995 , 270, 335-340 | 27 |
| 1229 | Structure of rat tail tendon collagen examined by atomic force microscope. 1995 , 51, 1063-7 | 24 |
| 1228 | Micromechanical elements for detection of molecules and molecular design. 1995 , 1, 202-208 | 10 |
| 1227 | A laser micro-chopper approach for molecular beam probe. 1995 , 61, 601-604 | |
| 1226 | Imaging and manipulating chromosomes with the atomic force microscope. 1995 , 3, 239-44 | 28 |
| 1225 | Observation of controlled, electrochemically induced friction force modulations in the nano-Newton range. 1995 , 1, 13-21 | 9 |
| 1224 | Nanotribology: an UHV-SFM study on thin films of AgBr(001). 1995 , 1, 23-33 | 2 |
| 1223 | Friction force microscopy in ultrahigh vacuum: an atomic-scale study on KBr(001). 1995 , 1, 129 | 4 |
| 1222 | An atomic force microscopy study of polyester surfaces. 1995 , 30, 5700-5704 | 26 |
| 1221 | Patch clamp and atomic force microscopy demonstrate TATA-binding protein (TBP) interactions with the nuclear pore complex. 1995 , 146, 263-72 | 21 |
| 1220 | Fractographic analysis of fatigue crack propagation in an amorphous copolyester. 1995 , 14, 1451-1454 | 1 |
| 1219 | Immunolocalization of lamins and nuclear pore complex proteins by atomic force microscopy. 1995 , 430, 795-801 | 23 |
| 1218 | Polarized ion transport during migration of transformed Madin-Darby canine kidney cells. 1995 , 430, 802-7 | 44 |
| 1217 | Physik in unserer Zeit auf der Nanometerskala. 1995 , 26, 206-216 | 6 |
| 1216 | Combined atomic force-, friction force- and local elasticity microscopy on ReS ₂ crystals: Surface topography and material contrast. 1995 , 23, 399-403 | 4 |
| 1215 | Determination of miller indices of side faces of small crystallites from scanning force microscopy angle measurements. 1995 , 23, 409-415 | 3 |
| 1214 | Direct morphological study of metal/polymer interfaces by scanning force microscopy. 1995 , 23, 426-427 | 8 |
| 1213 | Comparative film thickness determination by atomic force microscopy and ellipsometry for ultrathin polymer films. 1995 , 23, 797-808 | 22 |

| | | |
|------|--|------|
| 1212 | Atomic force microscopy on cross-sections of optical coatings: a new method. 1995 , 261, 70-75 | 13 |
| 1211 | Visualizing life on biomembranes by atomic force microscopy. 1995 , 48, 923-9 | 19 |
| 1210 | Nanotribology: friction, wear and lubrication at the atomic scale. 1995 , 374, 607-616 | 1345 |
| 1209 | Recent advances in biological atomic force microscopy. 1995 , 26, 35-49 | 52 |
| 1208 | Scanning probe microscopy in microbiology. 1995 , 26, 347-62 | 41 |
| 1207 | Immobilization of molecules, membranes and cells for modern optical and non-optical microscopy by photo-cross-linking. 1995 , 27, 275-277 | 3 |
| 1206 | Scanning probe microscopy (tunneling, atomic force, confocal and acoustic) in particle track detectors. 1995 , 25, 745-748 | 3 |
| 1205 | FIR microscopy. 1995 , 36, 217-224 | 49 |
| 1204 | Scanning tunneling and atomic force microscopy studies of Langmuir-Blodgett films. 1995 , 22, 73-126 | 49 |
| 1203 | Pretreatment of silicon substrates for CVD diamond deposition studied by atomic force microscopy. 1995 , 84, 133-143 | 7 |
| 1202 | Nanometres to micrometres: three-dimensional surface measurement in bio-engineering. 1995 , 71, 69-81 | 20 |
| 1201 | Micro/nanotribology and its applications to magnetic storage devices and MEMS. 1995 , 28, 85-96 | 90 |
| 1200 | Microtribology. 1995 , 28, 33-37 | 7 |
| 1199 | Measuring surface forces in aqueous electrolyte solution with the atomic force microscope. 1995 , 38, 191-201 | 205 |
| 1198 | Scanning near-field optic/atomic-force microscopy. 1995 , 57, 141-146 | 51 |
| 1197 | Near-field optical microscopic recording on Langmuir-Blodgett (LB) films and chemically modified surfaces. 1995 , 57, 176-179 | 14 |
| 1196 | Near field optical microscopy using a metallic vibrating tip. 1995 , 57, 318-322 | 55 |
| 1195 | Immobilizing and imaging microtubules by atomic force microscopy. 1995 , 57, 337-43 | 58 |

| | | |
|------|---|-----|
| 1194 | Problems in temperature control performing in situ investigations with the scanning force microscope. 1995 , 57, 333-335 | 19 |
| 1193 | Under buffer SFM observation of immunospecies adsorbed on a cyano grafted silicon substrate. 1995 , 60, 33-40 | 18 |
| 1192 | Scanning near-field optical microscopy of fluorescent polystyrene spheres with a combined SNOM and AFM. 1995 , 61, 271-277 | 13 |
| 1191 | Surface characterization of SiC composites exposed to deuterium ions, using atomic force microscopy. 1995 , 201, 277-285 | 5 |
| 1190 | AFM imaging with an xy-micropositioner with integrated tip. 1995 , 47, 562-565 | 37 |
| 1189 | Manufacture of micromechanical scanning tunnelling microscopes for observation of the tip apex in a transmission electron microscope. 1995 , 48, 127-136 | 19 |
| 1188 | Surface chemistry and tip-sample interactions in atomic force microscopy. 1995 , 94, 29-51 | 202 |
| 1187 | Adhesion of L1210 cells to sulfonated styrene copolymer surfaces in the absence of serum. 1995 , 4, 137-149 | 10 |
| 1186 | Scanning force microscopy of gelatin films in the dry, swollen and redried states. 1995 , 3, 85-89 | 12 |
| 1185 | Local probe investigation of molecular material. 1995 , 10, 85-98 | 2 |
| 1184 | Sensing specific molecular interactions with the atomic force microscope. 1995 , 10, 895-901 | 415 |
| 1183 | Application of 3-D topography to bio-engineering. 1995 , 35, 219-229 | 17 |
| 1182 | Scanning force microscopy study of single-crystal substrates used for thin-film growth of high-temperature superconductors. 1995 , 242, 174-182 | 49 |
| 1181 | Atomic force microscopy observation of the epitaxial growth of organic molecules. 1995 , 146, 641-644 | 12 |
| 1180 | Hydrophobic polytetrafluoroethylene-modified PbO ₂ : ex situ observations of morphology during nucleation and growth via atomic force microscopy. 1995 , 388, 53-67 | 5 |
| 1179 | Adsorbate-induced surface stress at the solid electrolyte interface measured with an STM. 1995 , 386, 267-270 | 62 |
| 1178 | Scanning probe microscopy of organic and polymeric films: from self-assembled monolayers to composite multilayers. 1995 , 36, 1791-1808 | 148 |
| 1177 | The structure of highly textured quasi-single-crystalline high-density polyethylene probed by atomic force microscopy and small-angle X-ray scattering. 1995 , 36, 2115-2121 | 24 |

| | | |
|------|---|----|
| 1176 | Characterization of a cantilever with an integrated deflection sensor. 1995 , 264, 159-164 | 58 |
| 1175 | Investigation of the atomic-scale friction and energy dissipation in diamond using molecular dynamics. 1995 , 260, 205-211 | 95 |
| 1174 | AFM for the imaging of large and steep submicroscopic features, artifacts and scraping with asymmetric cantilever tips. 1995 , 264, 205-211 | 11 |
| 1173 | AFM and TEM investigations of polypropylene/polyurethane blends. 1995 , 264, 148-152 | 28 |
| 1172 | Electron spectroscopy at Diamond (100)2 \times 1:H with a scanning tunnelling microscope. 1995 , 46, 1097-1100 | 3 |
| 1171 | An investigation of the experimental conditions and characteristics of a nano-wear test. 1995 , 181-183, 777-783 | 18 |
| 1170 | Semiconduction of proteins as an attribute of the living state: the ideas of Albert Szent-Györgyi revisited in light of the recent knowledge regarding oxygen free radicals. 1995 , 30, 327-35 | 9 |
| 1169 | Nanotopographical changes on graphite tube surfaces in electrothermal atomic absorption spectrometry experiments as studied by atomic force microscopy. 1995 , 50, 713-723 | 13 |
| 1168 | Atomic force microscopy observations of pitting corrosion and inhibition on 7075-T651 aluminum alloy in hydrochloric acid solutions. 1995 , 34, 73-79 | 6 |
| 1167 | Surface roughness characterization of Nicalon and HI-Nicalon ceramic fibers by atomic force microscopy. 1995 , 35, 199-206 | 22 |
| 1166 | Membrane pores--from biology to track-etched membranes. 1995 , 15, 553-65 | 8 |
| 1165 | Maximum entropy deconvolution of AFM and STM images. 1995 , 351, 143-147 | 8 |
| 1164 | Scanning force microscopy visualization of adsorption from liquids. 1995 , 44, 2073-2078 | 1 |
| 1163 | Atomic force microscope imaging of the surface roughness of SCS- and TiB ₂ -coated SiC fibres and uncoated sapphire fibres. 1995 , 26, 619-629 | 6 |
| 1162 | Low-load friction behavior of epitaxial C60 monolayers. 1995 , 99, 1-2 | 9 |
| 1161 | Three-dimensional displacement measurement of a tube scanner for a scanning tunneling microscope by optical interferometer. 1995 , 6, 121-126 | 7 |
| 1160 | Heart gap junction preparations reveal hemiplaques by atomic force microscopy. 1995 , 268, C968-77 | 55 |
| 1159 | Imaging real-time neurite outgrowth and cytoskeletal reorganization with an atomic force microscope. 1995 , 269, C275-85 | 55 |

| | | | |
|------|---|-----|-----|
| 1158 | A Scanning Probe Microscope in My Scanning Electron Microscope?. 1995 , 3, 22-23 | | |
| 1157 | Dynamic micromechanical properties of cultured rat atrial myocytes measured by atomic force microscopy. 1995 , 269, C286-92 | | 201 |
| 1156 | Evolution of Hematite Surface Microtopography Upon Dissolution by Simple Organic Acids. 1995 , 43, 29-38 | | 58 |
| 1155 | Characterization of 12-8-diacetylene Langmuir-Blodgett films by scanning-force microscopy. 1995 , 51, 454-461 | | 2 |
| 1154 | Rheological properties of confined thin films. 1995 , 52, 2587-2602 | | 56 |
| 1153 | Atomic force microscopy imaging of viscoelastic properties in toughened polypropylene resins. 1995 , 78, 5953-5958 | | 31 |
| 1152 | Compact large-range cryogenic scanner. 1995 , 66, 2520-2523 | | 33 |
| 1151 | In situ measurement of large piezoelectric displacements in resonant atomic force microscopy. 1995 , 66, 2848-2852 | | 11 |
| 1150 | A multifunctional scanning force microscope for biological applications. 1995 , 66, 4124-4129 | | 3 |
| 1149 | Charged nanocantilever as a generator of microscopic ac fields. 1995 , 66, 4588-4590 | | 1 |
| 1148 | Semi-automatic atomic force microscope for imaging in solution. 1995 , 66, 5527-5531 | | 3 |
| 1147 | Nanoscale visualization and control of ferroelectric domains by atomic force microscopy. <i>Physical Review Letters</i> , 1995 , 74, 4309-4312 | 7.4 | 211 |
| 1146 | Design and calibration of a scanning force microscope for friction, adhesion, and contact potential studies. 1995 , 66, 4566-4574 | | 46 |
| 1145 | Atomic-force microscopy on the Si(111)7 x 7 surface. 1995 , 51, 5484-5487 | | 71 |
| 1144 | Effect of the tip structure on atomic-force microscopy. 1995 , 52, 8471-8482 | | 37 |
| 1143 | Micromechanical sensors for chemical and physical measurements. 1995 , 66, 3662-3667 | | 108 |
| 1142 | Friction force microscopy study of lubricant thin films on thin-film magnetic recording media. 1995 , 78, 4189-4195 | | 6 |
| 1141 | Binding strength between cell adhesion proteoglycans measured by atomic force microscopy. 1995 , 267, 1173-5 | | 390 |

| | | |
|------|--|-----|
| 1140 | Theoretical study of the interaction between a magnetic nanotip and a magnetic surface. 1995 , 52, 7352-7362 | 41 |
| 1139 | Probing oscillatory hydration potentials using thermal-mechanical noise in an atomic-force microscope. 1995 , 52, R8692-R8695 | 132 |
| 1138 | Force-balancing force sensor with an optical lever. 1995 , 66, 5532-5536 | 14 |
| 1137 | Surface relief accompanying martensitic transitions in an Fe-Ni-C alloy by atomic-force microscopy and phenomenological theory of martensitic crystallography. 1995 , 52, 7879-7882 | 24 |
| 1136 | Scanning tunneling microscope with three-dimensional interferometer for surface roughness measurement. 1995 , 66, 2504-2507 | 3 |
| 1135 | Calibration of optical lever sensitivity for atomic force microscopy. 1995 , 66, 5096-5097 | 78 |
| 1134 | Phase-locked noncontact scanning force microscope. 1995 , 66, 101-105 | 5 |
| 1133 | Cross-sectional atomic force microscopy of semiconductor nanostructures. 1995 , 78, 4939-4942 | 8 |
| 1132 | Height calibration of optical lever atomic force microscopes by simple laser interferometry. 1995 , 66, 1258-1259 | 108 |
| 1131 | SCANNING PROBE MICROSCOPY APPLICATIONS TO CHARACTERIZATION IN MICROELECTRONICS. | |
| 1130 | High field magnetic force microscopy. 1995 , 78, 3303-3307 | 33 |
| 1129 | Low-load friction behavior of epitaxial C60 monolayers under Hertzian contact. 1995 , 52, 14976-14984 | 88 |
| 1128 | Sub-ångstrom resolution with a phonograph cartridge as bidimensional nanodisplacement sensor. 1995 , 66, 5337-5338 | |
| 1127 | Properties of small clusters at ionic surfaces: (NaCl) _n clusters (n=1-48) at the (100) MgO surface. 1995 , 51, 13631-13644 | 18 |
| 1126 | Periodic surface instabilities in stressed polymer solids. 1995 , 51, 6089-6092 | 6 |
| 1125 | Atomic Force Microscopy of Rubbed Polyimide Aligning Films for Liquid Crystal Displays. 1995 , 262, 89-98 | 7 |
| 1124 | Native Escherichia coli OmpF porin surfaces probed by atomic force microscopy. 1995 , 268, 92-4 | 270 |
| 1123 | Liquid to hexatic to crystalline order in Langmuir-Blodgett films. 1995 , 269, 51-4 | 49 |

| | | |
|------|---|-----|
| 1122 | Lateral Force Measurements In A Scanning Force Microscope With Piezoresistive Sensors. | 3 |
| 1121 | Dependence of Nano-Friction and Nano-Wear on Loading Force for Sharp Diamond Tips Sliding on Si, Mn-Zn Ferrite, and Au. 1995 , 117, 328-333 | 21 |
| 1120 | Local acoustic probing using mechanical and ultrafast optical techniques. | 1 |
| 1119 | Atomic force microscopy of human hair cuticles: a microscopic study of environmental effects on hair morphology. 1995 , 105, 96-9 | 36 |
| 1118 | The nanoscopic structure of annealed Ge ₂₀ Te ₈₀ glass: quasi-atomic-scale imaging using atomic-force microscopy. 1995 , 7, L135-L139 | 5 |
| 1117 | Controlled electrical contact of a scanned probe to nanostructures. 1995 , 6, 93-100 | |
| 1116 | Micromachined AFM transducer with differential capacitive read-out. 1995 , 5, 161-165 | 18 |
| 1115 | The electronic structure of transition metal interacting tip and sample and atomic force microscopy. II. 1995 , 7, 6641-6661 | 10 |
| 1114 | Forces affecting the substrate in resonant tapping force microscopy. 1995 , 6, 40-44 | 124 |
| 1113 | The electronic structure and stability of transition metal nanotips. I. 1995 , 7, 6625-6640 | 14 |
| 1112 | Friction Force Microscopy Study of the Langmuir-Blodgett Films with Different Molecular Structures. 1995 , 34, 4932-4939 | 4 |
| 1111 | A microwave scanning surface harmonic microscope using a re-entrant resonant cavity. 1995 , 6, 1208-1214 | 5 |
| 1110 | Evaluation of Thin Silicon Dioxide Layers by Beam Assisted Scanning Tunneling Microscope. 1995 , 34, 1376-1380 | 7 |
| 1109 | Atomic-Resolution Imaging of ZnSSe(110) Surface with Ultrahigh-Vacuum Atomic Force Microscope (UHV-AFM). 1995 , 34, L462-L464 | 10 |
| 1108 | Observation of Topography and Optical Image of Optical Fiber End by Atomic Force Mode Scanning Near-Field Optical Microscope. 1995 , 34, 321-324 | 28 |
| 1107 | Competition between Electrostatic and Capillary Forces Acting on a Single Particle. 1995 , 34, 4176-4184 | 10 |
| 1106 | Examination of Correlation of Surface Morphologies of Top-Silicon and Buried Oxide Layers in High-Temperature-Annealed Separation by IMplanted OXYgen Wafers. 1995 , 34, 6019-6020 | 6 |
| 1105 | Nanometer Modifications of Non-Conductive Materials Using Resist-Films by Atomic Force Microscopy. 1995 , 34, 3396-3399 | 36 |

| | | |
|------|---|-----|
| 1104 | A bimorph-driven inertial micropositioner for scanning tunnelling microscopy. 1995 , 6, 365-370 | 2 |
| 1103 | Recent Advances in Nanostructural Investigations and Modifications of Solid Surfaces by Scanning Probe Methods. 1995 , 34, 3388 | 12 |
| 1102 | Contrast of Atomic-Resolution Images from a Noncontact Ultrahigh-Vacuum Atomic Force Microscope. 1995 , 34, L1692-L1694 | 5 |
| 1101 | Theoretical Simulation of Atomic Force Microscope Based on Cluster Models. 1995 , 34, 3319-3324 | 11 |
| 1100 | Fractography of Glass at the Nanometer Scale. 1995 , 409, 365 | 7 |
| 1099 | Comparison of medical-grade ultrahigh molecular weight polyethylene microstructure by atomic force microscopy and transmission electron microscopy. 1994 , 6, 609-20 | 11 |
| 1098 | Progress in high resolution atomic force microscopy in biology. 1995 , 28, 195-251 | 141 |
| 1097 | Electron, Acoustic, and Tunneling Microscopy of Minerals. 1995 , 263-302 | |
| 1096 | AFM Studies of Copper Solid-Liquid Interfaces. 1995 , 83-101 | 5 |
| 1095 | A simple reproducible technique for producing sub-micrometre fibre-optic probes for near-field optical microscopy and chemical sensors. 1995 , 6, 1157-1162 | 11 |
| 1094 | Atomic force microscopy of the cornea and sclera. 1995 , 14, 529-35 | 40 |
| 1093 | Scanning tunnelling and atomic force microscopy in the electrochemistry of surfaces. 1995 , 64, 767-781 | 43 |
| 1092 | Real-time subnanometer position sensing with long measurement range. | 1 |
| 1091 | Magnetic resonance force microscopy. 1995 , 67, 249-265 | 372 |
| 1090 | Observation of 7×7 Reconstructed Structure on the Silicon (111) Surface using Ultrahigh Vacuum Noncontact Atomic Force Microscopy. 1995 , 34, L145-L148 | 280 |
| 1089 | Adsorption-induced surface stress and its effects on resonance frequency of microcantilevers. 1995 , 77, 3618-3622 | 440 |
| 1088 | Cryo atomic force microscopy: a new approach for biological imaging at high resolution. 1995 , 34, 8215-20 | 87 |
| 1087 | A robot system for automated handling in micro-world. | 21 |

- 1086 A new DNA nanostructure, the G-wire, imaged by scanning probe microscopy. **1995**, 23, 696-700 205
- 1085 Thermal imaging by atomic force microscopy using thermocouple cantilever probes. **1995**, 66, 3584-3592 115
- 1084 Nucleation mechanism of TTF-TCNQ on alkali halides. **1995**, 70, 1249-1250 5
- 1083 Atomic force microscopy surface morphology studies of in situ deposited polyaniline thin films. **1995**, 73, 205-208 141
- 1082 Ophthalmic applications of atomic force microscopy. **1995**, 22, 32-41 6
- 1081 Direct imaging of the tip shape by AFM. **1995**, 323, L314-L318 61
- 1080 In situ observations of the initial stage of electrodeposition of Cu on Au(100) from an aqueous sulfuric acid solution using atomic force microscopy. **1995**, 327, 261-273 41
- 1079 Corrections to the van der Waals forces in application to atomic force microscopy. **1995**, 328, 129-134 20
- 1078 From regular to irregular solid electrode surfaces: a systematic approach to their characterization. **1995**, 335, 378-388 3
- 1077 On possibility of spin-polarized atomic force microscopy. **1995**, 334, 257-262 2
- 1076 Jump to contact and neck formation between Pb surfaces and a STM tip. **1995**, 340, 231-244 20
- 1075 Near-field optical microscope based on local perturbation of a diffraction spot. **1995**, 20, 1924-6 164
- 1074 Atomic resolution of the silicon (111)-(7x7) surface by atomic force microscopy. **1995**, 267, 68-71 992
- 1073 Very sharp platinum tips for scanning tunneling microscopy. **1995**, 66, 97-100 91
- 1072 Scanning force microscope as a tool for studying optical surfaces. **1995**, 34, 213-30 33
- 1071 Unusual splitting behavior of the dispersion of surface polaritons in gratings of different symmetry, amplitude, and profile. **1995**, 34, 5773-9 6
- 1070 Microscopic and spectroscopic studies of untreated and hexanol-treated chlorosomes from *Chloroflexus aurantiacus*. **1995**, 1232, 197-207 18
- 1069 The calcite (101 4) cleavage surface in water: Early results of a crystal truncation rod study. **1995**, 59, 4557-4561 43

| | | |
|------|---|-----|
| 1068 | Imaging soft samples with the atomic force microscope: gelatin in water and propanol. 1995 , 69, 264-70 | 334 |
| 1067 | The relationship between ligand-binding thermodynamics and protein-ligand interaction forces measured by atomic force microscopy. 1995 , 69, 2125-30 | 152 |
| 1066 | Method for immobilizing microbial cells on gel surface for dynamic AFM studies. 1995 , 69, 2226-33 | 82 |
| 1065 | Polysaccharide helices in the atomic force microscope. 1995 , 68, 3-4 | 19 |
| 1064 | Atomic force microscopy of the myosin molecule. 1995 , 68, 1604-6 | 30 |
| 1063 | A method for anchoring round shaped cells for atomic force microscope imaging. 1995 , 68, 1678-80 | 177 |
| 1062 | Imaging purple membranes in aqueous solutions at sub-nanometer resolution by atomic force microscopy. 1995 , 68, 1681-6 | 304 |
| 1061 | Sequential assembly of collagen revealed by atomic force microscopy. 1995 , 68, 2124-8 | 79 |
| 1060 | Imaging biomolecule arrays by atomic force microscopy. 1995 , 68, 1653-60 | 44 |
| 1059 | Sensitive force technique to probe molecular adhesion and structural linkages at biological interfaces. 1995 , 68, 2580-7 | 450 |
| 1058 | Air operating atomic force-scanning tunneling microscope suitable to study semiconductors, metals, and biological samples. 1995 , 66, 2843-2847 | 70 |
| 1057 | Dissolution of barite by a chelating ligand: An atomic force microscopy study. 1995 , 59, 4623-4632 | 63 |
| 1056 | Hybrid scanning transmission electron/scanning tunneling microscope system for the preparation and investigation of biomolecules. 1995 , 177, 31-42 | 4 |
| 1055 | Identification and surface structure of crystalline cellulose studied by atomic force microscopy. 1995 , 178, 1-6 | 41 |
| 1054 | Atomic force microscopy under liquid: A comparative study of three different AC mode operations. 1995 , 178, 7-13 | 9 |
| 1053 | Imaging and nano-dissection of tobacco mosaic virus by atomic force microscopy. 1995 , 180, 174-181 | 21 |
| 1052 | Stereo representation of atomic force micrographs: Optimizing the view. 1995 , 180, 186-188 | 3 |
| 1051 | Application of atomic-force microscopy to metallography. 1995 , 25, 209-212 | 7 |

| | | | |
|------|---|-----|------|
| 1050 | Calculation of thermal noise in atomic force microscopy. 1995 , 6, 1-7 | | 1235 |
| 1049 | Atomic-Resolution Image of GaAs(110) Surface with an Ultrahigh-Vacuum Atomic Force Microscope (UHV-AFM). 1995 , 507-512 | | |
| 1048 | Direct imaging of the percolation network in a three-dimensional disordered conductor-insulator composite. <i>Physical Review Letters</i> , 1995 , 75, 4433-4436 | 7-4 | 83 |
| 1047 | Molecular Organization of Surfactants at Solid-Liquid Interfaces. 1995 , 270, 1480-1482 | | 621 |
| 1046 | Defect Motion on an InP(110) Surface Observed with Noncontact Atomic Force Microscopy. 1995 , 270, 1646-1648 | | 300 |
| 1045 | Magnetic levitation force and penetration depth in type-II superconductors. 1995 , 51, 424-434 | | 54 |
| 1044 | The contribution of the external surface to the catalytic activity of zeolite beta. 1995 , 94, 397-404 | | 36 |
| 1043 | In-situ investigation of surface processes on AlGaAs/GaAs cleavage edges as studied by atomic force microscopy. 1995 , 353, 670-674 | | |
| 1042 | Surface-near analyses of ultra thin silicon nitride layers by NRA, channeling RBS, FT IR ellipsometry and AFM. 1995 , 353, 734-739 | | 8 |
| 1041 | A very low current scanning tunneling microscope. 1995 , 66, 4876-4879 | | 11 |
| 1040 | Quality Control and Ultrastructural Evaluation of Surface-modified Intraocular Lenses in vitro by Atomic Force Microscopy. 1995 , 7, 186-188 | | |
| 1039 | Correlation of the electrical, thermal, and optical properties of CVD diamond films by scanning microscopy techniques. 1995 , 4, 645-651 | | 13 |
| 1038 | A variable temperature ultrahigh vacuum atomic force microscope. 1995 , 66, 5266-5271 | | 48 |
| 1037 | Chapter 2 Experimental techniques of solid state physics relevant to research on alloys. 1995 , 95, 73-141 | | |
| 1036 | The black silicon method. IV. The fabrication of three-dimensional structures in silicon with high aspect ratios for scanning probe microscopy and other applications. | | 12 |
| 1035 | Tribological characteristics of SiO ₂ /sub 2/ films investigated by scanning probe microscopy. 1995 , 31, 3018-3020 | | 6 |
| 1034 | Thermal detection of device failure by atomic force microscopy. 1995 , 16, 312-315 | | 35 |
| 1033 | Chapter 3. Electrochemistry (1992-1995). 1995 , 92, 23-73 | | 3 |

| | | |
|------|--|-----|
| 1032 | Atomically Resolved InP(110) Surface Observed with Noncontact Ultrahigh Vacuum Atomic Force Microscope. 1995 , 34, L1086-L1088 | 123 |
| 1031 | Study of aging rat tail collagen using atomic force microscope. 1995 , 7, 352-7 | 1 |
| 1030 | Rasterkraftmikroskopie oberflächenmodifizierter Intraokularlinsen. 1995 , 9, 177-182 | 3 |
| 1029 | A digital signal processor based atomic force microscope controller. | |
| 1028 | Characterization of photodeposited selenium planar structures by scanning force microscopy. 1995 , 77, 6208-6213 | 17 |
| 1027 | Atomic force microscopy in food research: A new technique comes of age. 1995 , 6, 359-365 | 36 |
| 1026 | Scanning capacitance microscopy and spectroscopy applied to local charge modifications and characterization of nitride-oxide-silicon heterostructures. 1995 , 61, 357-362 | 4 |
| 1025 | Tip Reconstruction for the Atomic Force Microscope. 1995 , 55, 1362-1371 | 3 |
| 1024 | Phospholipid Monolayers. 1995 , 161-211 | 22 |
| 1023 | Numerical simulations of a tapping-mode scanning force microscope operating in a liquid. 1995 , 3, 475-480 | 16 |
| 1022 | Direct Imaging and Geometrical Methods. 1996 , 361-421 | 1 |
| 1021 | Atomic resolution for non-equilibrium structures in the steady state and for structural transformations at the interface between NaCl(c) and water. 1996 , 8, 4889-4901 | 6 |
| 1020 | Effect of Substrate Hydrophobicity on Surfactant Surface Aggregate Geometry. 1996 , 100, 11507-11511 | 127 |
| 1019 | Analysis off cereal chromosomes by atomic force microscopy. 1996 , 39, 439-44 | 21 |
| 1018 | Differentiating inclusion complexes from host molecules by tapping-mode atomic force microscopy. 1996 , 71, 86-90 | 11 |
| 1017 | Imaging the internal and external pore structure of membranes in fluid: TappingMode scanning ion conductance microscopy. 1996 , 71, 2155-7 | 83 |
| 1016 | Imaging biological structures with the cryo atomic force microscope. 1996 , 71, 2168-76 | 79 |
| 1015 | Micropipette suction for measuring piconewton forces of adhesion and tether formation from neutrophil membranes. 1996 , 71, 2892-901 | 158 |

| | | |
|------|--|-----|
| 1014 | Measuring the viscoelastic properties of human platelets with the atomic force microscope. 1996 , 70, 556-67 | 678 |
| 1013 | Vertical dimension of hydrated biological samples in tapping mode scanning force microscopy. 1996 , 70, 1514-20 | 29 |
| 1012 | Theory of electrostatic effects in soft biological interfaces using atomic force microscopy. 1996 , 70, 1745-52 | 16 |
| 1011 | Immuno-atomic force microscopy of purple membrane. 1996 , 70, 1796-802 | 76 |
| 1010 | DNA binding to mica correlates with cationic radius: assay by atomic force microscopy. 1996 , 70, 1933-9 | 323 |
| 1009 | Directly probing rapid membrane protein dynamics with an atomic force microscope: a study of light-induced conformational alterations in bacteriorhodopsin. 1996 , 70, 2380-4 | 15 |
| 1008 | Protein tracking and detection of protein motion using atomic force microscopy. 1996 , 70, 2421-31 | 103 |
| 1007 | Specific antigen/antibody interactions measured by force microscopy. 1996 , 70, 2437-41 | 391 |
| 1006 | Short cantilevers for atomic force microscopy. 1996 , 67, 3583-3590 | 412 |
| 1005 | Immobilization of Antibodies on a Photoactive Self-Assembled Monolayer on Gold. 1996 , 12, 1997-2006 | 146 |
| 1004 | Keeping Pace with Colloids in Motion. 1996 , 12, 5254-5262 | 9 |
| 1003 | Picosecond spectral hole burning in ZnCdTe layers. 1996 , 80, 4632-4636 | 3 |
| 1002 | Chain Packing in Electro-Spun Poly(ethylene oxide) Visualized by Atomic Force Microscopy. 1996 , 29, 7634-7636 | 122 |
| 1001 | Determination of Single-Bond Forces from Contact Force Variances in Atomic Force Microscopy. 1996 , 12, 1291-1295 | 119 |
| 1000 | Variation of the Interfacial Shear Strength and Adhesion of a Nanometer-Sized Contact. 1996 , 12, 3334-3340 | 261 |
| 999 | Molecular Resolution Imaging of Dextran Monolayers Immobilized on Silica by Atomic Force Microscopy. 1996 , 12, 6436-6442 | 27 |
| 998 | Application of piezoresistive Wheatstone bridge cantilever in advanced atomic force microscopy techniques. 1996 , 81, 473-483 | 5 |
| 997 | Surface-Aggregate Shape Transformation. 1996 , 12, 5915-5920 | 108 |

| | | |
|-----|--|-----|
| 996 | Adhesion Forces between Surface-Modified AFM Tips and a Mica Surface. 1996 , 12, 2859-2862 | 135 |
| 995 | An Atomic Force Microscopy Study on the Transition from Mushrooms to Octopus Surface Micelles by Changing the Solvent Quality. 1996 , 12, 3221-3224 | 43 |
| 994 | In Situ, Real-Time Observations of the Adsorption and Self-Assembly of Macromolecules from Aqueous Solution onto an Untreated, Natural Surface. 1996 , 12, 1884-1891 | 28 |
| 993 | Surface Reconstruction of the Lamellar Morphology in a Symmetric Poly(styrene-block-butadiene-block-methyl methacrylate) Triblock Copolymer: A Tapping Mode Scanning Force Microscope Study. 1996 , 29, 7502-7507 | 106 |
| 992 | Interactions between Poly(ethylene oxide) Layers Adsorbed to Glass Surfaces Probed by Using a Modified Atomic Force Microscope. 1996 , 12, 4224-4237 | 91 |
| 991 | Molecular Dynamics Simulations of Elastic Response and Tensile Failure of Alumina 1996 , 12, 4605-4609 | 15 |
| 990 | Inhomogeneities in Sheared Ultrathin Lubricating Films. 1996 , 12, 4587-4593 | 80 |
| 989 | Application of the Light-Lever Technique to the Study of Colloidal Forces. 1996 , 12, 3557-3562 | 18 |
| 988 | Micro-fabricated piezoelectric cantilever for atomic force microscopy. 1996 , 67, 3898-3903 | 49 |
| 987 | Imaging of Single Polyethylenimine Polymers Adsorbed on Negatively Charged Latex Spheres by Chemical Force Microscopy. 1996 , 12, 857-860 | 56 |
| 986 | AFM and SALS Characterization of Spherulitic Structure in Polyethylene. 1996 , 12, 1084-1087 | 4 |
| 985 | In-Situ Imaging of Ionic Crystal Dissolution Using an Integrated Electrochemical/AFM Probe. 1996 , 118, 6445-6452 | 136 |
| 984 | Temperature influence on the formation of silanized monolayers on silica: an atomic force microscopy study. 1996 , 352-354, 369-373 | 35 |
| 983 | Theoretical simulation of atomic-scale friction in atomic force microscopy. 1996 , 357-358, 92-95 | 18 |
| 982 | Simulation of AFM/LFM by molecular dynamics: role of lateral force in contact-mode AFM imaging. 1996 , 357-358, 222-227 | 12 |
| 981 | How to describe AFM constant force surfaces in repulsive mode?. 1996 , 349, 196-206 | 13 |
| 980 | The interface surfaces of a CN-substituted poly(phenylenevinylene) light-emitting diode, a morphological study. 1996 , 79, 75-84 | 19 |
| 979 | Tapping-mode scanning force microscopy: Metallic tips and samples. 1996 , 5, 291-297 | 9 |

| | | |
|-----|--|-----|
| 978 | Scanning force microscopic study of surface structure and properties of (alkylsilane/fluoroalkylsilane) mixed monolayers. 1996 , 3, 123-130 | 28 |
| 977 | Nanometer undulations on CaF ₂ cleaved surfaces observed by Atomic Force Microscopy. 1996 , 34, 1673-1678 | 4 |
| 976 | Atomic force microscopy with simultaneous a.c. conductivity contrast for the analysis of carbon fibre surfaces. 1996 , 27, 677-684 | 4 |
| 975 | Les microscopies à champ proche. 1996 , 1996, 2-8 | 1 |
| 974 | Near-field microscopies in the study of glass. 1996 , 196, 7-15 | 6 |
| 973 | Mechanical unfolding of alpha2-macroglobulin molecules with atomic force microscope. 1996 , 385, 29-33 | 109 |
| 972 | In situ observation of streptavidin-biotin binding on an immunoassay well surface using an atomic force microscope. 1996 , 390, 161-4 | 64 |
| 971 | Scanning force microscopy of DNA deposited onto mica: equilibration versus kinetic trapping studied by statistical polymer chain analysis. 1996 , 264, 919-32 | 590 |
| 970 | Scanning force microscopy of organic thin-film amorphous hole transport materials. 1996 , 80, 3297-3305 | 29 |
| 969 | Biological atomic force microscopy: what is achieved and what is needed. 1996 , 45, 1-86 | 308 |
| 968 | Application of atomic-force microscopy to studies of microbial interactions with hydrous Fe(III)-oxides. 1996 , 132, 33-43 | 22 |
| 967 | Dynamic Viscoelastic Properties of Liquid Polymer Films Studied by Atomic Force Microscopy. 1996 , 12, 6138-6142 | 43 |
| 966 | Surface Morphology of Polymer Films Imaged by Atomic Force Microscopy. 1996 , 3, 89-105 | 28 |
| 965 | Studies of vibrating atomic force microscope cantilevers in liquid. 1996 , 80, 3622-3627 | 219 |
| 964 | Observation of ferroelectric domain structure branching and large step mobility on the TGS surface by atomic force and SNOM microscopy. 1996 , 184, 1-10 | 7 |
| 963 | Structure and Frictional Properties of Self-Assembled Surfactant Monolayers. 1996 , 12, 1235-1244 | 143 |
| 962 | Micromechanical engineering: a basis for the low-cost manufacturing of mechanical microdevices using microequipment. 1996 , 6, 410-425 | 53 |
| 961 | Conformational states of the nuclear pore complex induced by depletion of nuclear Ca ²⁺ stores. 1996 , 273, 1875-7 | 178 |

| | | |
|-----|---|-----|
| 960 | Vibrations of free and surface-coupled atomic force microscope cantilevers: Theory and experiment. 1996 , 67, 3281-3293 | 587 |
| 959 | General technique for fabricating large arrays of nanowires. 1996 , 7, 263-265 | 24 |
| 958 | High-Resolution Optical Spectroscopy of Single Molecules in Solids. 1996 , 29, 563-571 | 89 |
| 957 | Molecular Weight Dependence of Surface Dynamic Viscoelastic Properties for the Monodisperse Polystyrene Film. 1996 , 29, 3040-3042 | 166 |
| 956 | Failure Analysis of Sub-Micrometer Devices and Structures Using Scanning Thermal Microscopy. 1996 , | 3 |
| 955 | Electron Holography and Lorentz Microscopy of Magnetic Materials. 1996 , 98, 323-426 | 12 |
| 954 | Study on the morphology of XLPE power cable by means of atomic force microscopy. 1996 , 3, 283-288 | 11 |
| 953 | Scanning tunnelling microscopy of semiconductor surfaces. 1996 , 59, 701-769 | 71 |
| 952 | A piezotube scanner for atomic force microscopy in solution. 1996 , 67, 2654-2655 | 7 |
| 951 | Improvements to atomic force microscopy cantilevers for increased stability. 1996 , 67, 4191-4197 | 34 |
| 950 | A new leadframe design solution for improved pop-corn cracking performance. | 4 |
| 949 | Atomic force microscopy of long and short double-stranded, single-stranded and triple-stranded nucleic acids. 1996 , 24, 713-20 | 277 |
| 948 | Mineral characterization in calcifying tissues: atomic, molecular and macromolecular perspectives. 1996 , 34, 239-46 | 65 |
| 947 | Vicinal Faces on Synthetic Goethite Observed by Atomic Force Microscopy. 1996 , 44, 437-442 | 37 |
| 946 | Morphology of Lead(II) and Chromium(III) Reaction Products on Phyllosilicate Surfaces As Determined By Atomic Force Microscopy. 1996 , 44, 734-743 | 24 |
| 945 | Nanoscale Indentation Hardness and Wear Characterization of Hydrogenated Carbon Thin Films. 1996 , 118, 431-438 | 20 |
| 944 | Imaging of single molecule diffusion. 1996 , 93, 2926-9 | 535 |
| 943 | Imaging ROMK1 inwardly rectifying ATP-sensitive K ⁺ channel protein using atomic force microscopy. 1996 , 93, 8756-60 | 61 |

| | | |
|-----|---|------|
| 942 | Atomic force microscopy images of a pollen grain: A preliminary study. 1996 , 62, 221-223 | 3 |
| 941 | Tunneling Current Change of Graphite Surface by Single Ion Irradiation. 1996 , 438, 561 | |
| 940 | True Atomic Resolution Imaging on Semiconductor Surfaces with Noncontact Atomic Force Microscopy. 1996 , 442, 15 | 7 |
| 939 | Atomic-Scale Simulations of Structural Properties of Ceramics. 1996 , 453, 209 | |
| 938 | Atomic Force Probe of Mesoscopic Dielectric and Viscoelastic Fluctuations Near the Glass Transition. 1996 , 455, 453 | 1 |
| 937 | Morphology Characterization in Multicomponent Polymer Systems using Scanning Probe Microscopy. 1996 , 461, 211 | |
| 936 | Interfacially Confined Polymeric Systems Studied by Atomic Force Microscopy. 1996 , 464, 133 | 4 |
| 935 | An improved method for the synthesis of mercurated dUTP. Enzymic synthesis of Hg-labelled DNA of high molecular weight suitable for use in an image based DNA sequencing strategy. 1996 , 6, 199-209 | 2 |
| 934 | Conformational change of the hexagonally packed intermediate layer of <i>Deinococcus radiodurans</i> monitored by atomic force microscopy. 1996 , 178, 3025-30 | 125 |
| 933 | Detection and localization of individual antibody-antigen recognition events by atomic force microscopy. 1996 , 93, 3477-81 | 1018 |
| 932 | Effect of Capillary Force on Friction Force Microscopy : A Scanning Hydrophilicity Microscope. 1996 , 25, 499-500 | 61 |
| 931 | Nanosopic Hardness Measurement by Atomic Force Microscope. 1996 , 39, 456-462 | 3 |
| 930 | Imaging of Single Extended DNA Molecules on Flat (Aminopropyl)triethoxysilane/Mica by Atomic Force Microscopy. 1996 , 12, 1697-1700 | 97 |
| 929 | Inequivalent atoms and imaging mechanisms in ac-mode atomic-force microscopy of Si(111)7 x 7. 1996 , 54, R8309-R8312 | 113 |
| 928 | Friction-force microscopy of peptide filament: an application to estimate the size of a supramolecular unit. 1996 , 281-282, 624-629 | |
| 927 | Impact and characterisation of heavy ion tracks on epitaxial growth. 1996 , 107, 327-332 | 3 |
| 926 | Atomic force microscopy of pollen grains, cellulose microfibrils, and protoplasts. 1996 , 194, 29-39 | 17 |
| 925 | Observation of baker's yeast strains used in biotransformation by atomic force microscopy. 1996 , 59, 135-43 | 17 |

| | | |
|-----|---|-----|
| 924 | Aldosterone activates the nuclear pore transporter in cultured kidney cells imaged with atomic force microscopy. 1996 , 432, 831-8 | 14 |
| 923 | Experimental observation of single-asperity friction at the atomic scale. 1996 , 273, 317-321 | 18 |
| 922 | Scanning force microscopy characterization of thin lipid films on a substrate. 1996 , 273, 289-296 | 12 |
| 921 | Experimental observation of the interference of three-and five-wave mixing processes in optical second harmonic generation in a solution of bacteriorhodopsin. 1996 , 64, 718-723 | 9 |
| 920 | Biological applications of near-field optical microscopy. 1996 , 15, 51-58 | 17 |
| 919 | Comparison of atomic force microscope and Rutherford backscattering spectrometry data of nanometre size zinc islands. 1996 , 290-291, 312-316 | 3 |
| 918 | Atomic force and electron microscopy of sporangial wall microfibrils in <i>Linderina pennispora</i> . 1996 , 100, 821-826 | 9 |
| 917 | Golden interfaces: The Surface of Self-Assembled Monolayers. 1996 , 8, 719-729 | 274 |
| 916 | Anorganische Materialien mit Hilfe von Rastersondenmikroskopen verstehen und manipulieren. 1996 , 108, 748-768 | 1 |
| 915 | Topographic Changes on the Surfaces of PVD Coatings in Humid Air: an AFM/LFM Study. 1996 , 24, 7-14 | 4 |
| 914 | Characterization of PTFE on Silicon Wafer Tribological Transfer Films by XPS, Imaging XPS and AFM. 1996 , 24, 204-210 | 26 |
| 913 | Determination of Fractured Steel Surface Roughness by Atomic Force Microscopy Using Fractal-based Approaches. 1996 , 24, 282-285 | 6 |
| 912 | Freeze-substitution as a preparative technique for immunoelectronmicroscopy: evaluation by atomic force microscopy. 1996 , 33, 251-61 | 12 |
| 911 | Human low density lipoprotein and human serum albumin adsorption onto model surfaces studied by total internal reflection fluorescence and scanning force microscopy. 1996 , 9, 444-55 | 22 |
| 910 | Techniques for measuring surface forces. 1996 , 67, 119-183 | 215 |
| 909 | Measuring the thermal properties of photoresist thin films using atomic force microscopy. 1996 , 273, 308-311 | 6 |
| 908 | UFM observation of lattice defects in highly oriented pyrolytic graphite. 1996 , 273, 116-121 | 27 |
| 907 | Analysis of surface forces on oxides in aqueous solutions using AFM. 1996 , 273, 322-326 | 46 |

| | | |
|-----|--|-----|
| 906 | Scanning probe microscopies for molecular photodiodes. 1996 , 273, 168-176 | 22 |
| 905 | Calibration procedures for frictional measurements with a lateral force microscope. 1996 , 192, 141-150 | 111 |
| 904 | The effects of compressive stresses on the abrasion of diamond coatings. 1996 , 196, 226-233 | 21 |
| 903 | Morphology and mechanical properties of polymer surfaces via scanning force microscopy. 1996 , 52, 1-52 | 59 |
| 902 | Analytical applications of retinoid-cyclodextrin inclusion complexes. 1. Characterization of a retinal-beta-cyclodextrin complex. 1996 , 14, 909-15 | 30 |
| 901 | Microstructural observation of organic thin film in optical recording. 1996 , 39, 101-105 | 1 |
| 900 | From microsensors to microinstruments. 1996 , 56, 143-149 | 14 |
| 899 | Interfacial interaction between low-energy surfaces. 1996 , 16, 97-159 | 188 |
| 898 | The atomic force microscope as a tool to study and manipulate local surface properties. 1996 , 11, 601-612 | 18 |
| 897 | pH-dependent charge density at the insulator-electrolyte interface probed by a scanning force microscope. 1996 , 11, 1009-1017 | 27 |
| 896 | Langmuir-Blodgett films and nanotechnology. 1996 , 11, 923-932 | 19 |
| 895 | A fractal model for the static coefficient of friction at the fiber-matrix interface. 1996 , 27, 421-430 | 7 |
| 894 | Artefacts in non-contact mode force microscopy: the role of adsorbed moisture. 1996 , 63, 115-124 | 12 |
| 893 | Spatially quantized friction with a lattice periodicity. 1996 , 23, 1-41 | 117 |
| 892 | Atom Electronics: A proposal of nano-scale devices based on atom/molecule switching. 1996 , 30, 375-382 | 13 |
| 891 | Electric force microscopy: Gigahertz and nanometer measurement tool. 1996 , 31, 171-179 | 10 |
| 890 | Observation of voltage contrast in non contact resonant mode Atomic Force Microscopy. 1996 , 31, 215-225 | 3 |
| 889 | Thermal imaging and measurement techniques for electronic materials and devices. 1996 , 31, 251-270 | 60 |

| | | |
|-----|---|----|
| 888 | Spectro-ellipsometric investigations of polycrystalline silicon surface roughness. 1996 , 31, 309-316 | 10 |
| 887 | Scanning probe microscopy for nanometer inspections and industrial applications. 1996 , 32, 389-409 | 2 |
| 886 | SCREAM MicroElectroMechanical Systems. 1996 , 32, 49-73 | 75 |
| 885 | Investigations of surface properties of polymeric membranes by near field microscopy. 1996 , 109, 271-284 | 82 |
| 884 | Structural characterization of an UF membrane by gas adsorption-desorption and AFM measurements. 1996 , 117, 291-302 | 39 |
| 883 | Surface characterization of plasma deposited organic thin films. 1996 , 81, 303-317 | 81 |
| 882 | Atomistic dynamics of interfacial processes: films, junctions and nanostructures. 1996 , 92, 237-256 | 17 |
| 881 | Scanning tunneling microscopy observations of recorded organic thin films. 1996 , 93, 151-155 | 5 |
| 880 | A simulation study of multi-atom tips and estimation of resolution in atomic force microscopy. 1996 , 99, 255-260 | 1 |
| 879 | An AFM investigation of the deposition of nanometer-sized rhodium and copper clusters by spin coating. 1996 , 103, 127-140 | 8 |
| 878 | Characterization of aluminium nitride thin films. 1996 , 22, 509-513 | 8 |
| 877 | Surface structures of MgO(100) and SrTiO ₃ (100) as revealed by atomic force microscopy. 1996 , 160, 104-110 | 33 |
| 876 | Cooling crystallization experiments observed by in situ scanning force microscopy. 1996 , 160, 320-329 | 11 |
| 875 | High quality CaF ₂ layers on Si(111) with type-A epitaxial relation at the interface. 1996 , 169, 40-50 | 5 |
| 874 | Diagnosis in submicron integrated circuits by electric force microscopy. 1996 , 36, 1113-1118 | 1 |
| 873 | Progress in 3D Surface Microtopography Characterization. 1996 , 45, 589-598 | 68 |
| 872 | Near-field optical microscopy in the infrared range. 1996 , 27, 335-339 | 4 |
| 871 | Friction force microscopy characterization of semiconductor heterostructures. 1996 , 42, 122-126 | 3 |

| | | |
|-----|---|-----|
| 870 | Nanoscale characterization of semiconductor materials and devices using scanning probe techniques. 1996 , 17, 147-206 | 24 |
| 869 | STM and AFM of bio/organic molecules and structures. 1996 , 26, 261-332 | 168 |
| 868 | Intrinsic surface atom manipulations in STM and AFM. 1996 , 104-105, 286-290 | 4 |
| 867 | Atomic force microscopy of III-V nanostructures in air. 1996 , 104-105, 529-538 | 12 |
| 866 | A constant compliance force modulation technique for scanning force microscopy (SFM) imaging of polymer surface elasticity. 1996 , 66, 237-49 | 9 |
| 865 | The use of force modulation microscopy to investigate block copolymer morphology. 1996 , 31, 2531-2538 | 21 |
| 864 | Surface characterization of natural graphite powder composite electrodes by atomic force microscopy. 1996 , 31, 513-518 | |
| 863 | Scanning probe microscopy for testing ultrafast electronic devices. 1996 , 28, 819-841 | 22 |
| 862 | Characterization of latex blend films by atomic force microscopy. 1996 , 37, 5577-5582 | 45 |
| 861 | Surface morphology study of poly(ethylene oxide) crystals by scanning force microscopy. 1996 , 37, 183-185 | 22 |
| 860 | Recent progress in microtribology. 1996 , 200, 296-304 | 32 |
| 859 | Estimation of the linear thermal expansion coefficient in friction-deposited, oriented poly(tetrafluoroethylene) films by temperature-dependent lateral force microscopy. 1996 , 36, 471-476 | 5 |
| 858 | The surface topography of retrieved femoral heads. 1996 , 7, 739-744 | 19 |
| 857 | Characterization of titanium alloy implant surfaces with improved dissolution resistance. 1996 , 7, 323-329 | 38 |
| 856 | Nano-wear of the diamond AFM probing tip under scratching of silicon, studied by AFM. 1996 , 2, 345-354 | 55 |
| 855 | Bestimmung der Buchstabenfolge der Erbsubstanz Möglichkeiten physikalischer Methoden. 1996 , 27, 113-117 | 1 |
| 854 | Effect of roughness as determined by atomic force microscopy on the wetting properties of PTFE thin films. 1996 , 36, 1849-1855 | 199 |
| 853 | Studies of optical haze and surface morphology of blown polyethylene films using atomic force microscopy. 1996 , 36, 2129-2134 | 43 |

| | | | |
|-----|---|-----|-----|
| 852 | Atomic (scanning) force microscopy in cardiovascular research. 1996 , 7, 639-52 | | 18 |
| 851 | Scanning Force Microscopy Study of Ceramic Fibers for Advanced Composites. 1996 , 79, 2341-2344 | | 2 |
| 850 | Direct mechanical measurement of interatomic potentials. 1996 , 384, 247-249 | | 115 |
| 849 | Scanning force microscopy: new instrumentation and applications. 1996 , 1, 264-269 | | 11 |
| 848 | Human stratum corneum lipids have a distorted orthorhombic packing at the surface of cohesive failure. 1996 , 107, 15-9 | | 28 |
| 847 | Metal silicide patterning: a new approach to silicon nanoelectronics. 1996 , 7, 275-287 | | 38 |
| 846 | Surface microstructure of Zr _{41.25} Ti _{13.75} Cu _{12.5} Ni _{10.0} Be _{22.5} , a bulk metallic glass. 1996 , 11, 1494-1499 | | 8 |
| 845 | Applications of Aluminium Nitride Films Deposited by Reactive Sputtering to Silicon-On-Insulator Materials. 1996 , 35, 4175-4181 | | 54 |
| 844 | Ultrasonic Force Microscopy. 1996 , 21, 36-41 | | 9 |
| 843 | Atomic-scale friction image of graphite in atomic-force microscopy. 1996 , 54, 2138-2149 | | 121 |
| 842 | Quantitative scanning tunneling microscopy at atomic resolution: Influence of forces and tip configuration. <i>Physical Review Letters</i> , 1996 , 76, 1276-1279 | 7-4 | 62 |
| 841 | A scanning force microscope designed for fluid cell measurements. 1996 , 67, 4201-4207 | | 1 |
| 840 | Temperature controlled microstage for an atomic force microscope. 1996 , 67, 2554-2556 | | 41 |
| 839 | Imaging material properties by resonant tapping-force microscopy: A model investigation. 1996 , 54, 8908-8912 | | 121 |
| 838 | SCANNING THERMAL MICROSCOPY AT NANOMETER SCALES: A NEW FRONTIER IN EXPERIMENTAL HEAT TRANSFER. 1996 , 9, 83-103 | | 15 |
| 837 | Ultrahigh vacuum scanning force/scanning tunneling microscope: Application to high-resolution imaging of Si(111)7 \times 7. 1996 , 67, 2289-2296 | | 18 |
| 836 | Measurement of Double-Layer Forces at the Electrode/Electrolyte Interface Using the Atomic Force Microscope: Potential and Anion Dependent Interactions. 1996 , 100, 18808-18817 | | 163 |
| 835 | Ultrasonically facilitated two-dimensional crystallization of colloid particles. 1996 , 80, 5427-5431 | | 18 |

| | | |
|-----|--|-----|
| 834 | Novel optical probing system with submicron spatial resolution for internal diagnosis of VLSI circuits. | 6 |
| 833 | Surface roughness of sputtered ZrO ₂ films studied by atomic force microscopy and spectroscopic light scattering. 1996 , 54, 4021-4026 | 20 |
| 832 | Direct observation of polymer gel surfaces by atomic force microscopy. 1996 , 104, 1751-1757 | 70 |
| 831 | Surface relief associated with martensite and bainite in a Cu ₃ NiAl alloy measured by atomic force microscopy. 1996 , 79, 9129-9133 | 3 |
| 830 | Magnetic force acting on a magnetic dipole over a superconducting thin film. 1996 , 54, 15429-15437 | 20 |
| 829 | Ultrahigh vacuum scanning force microscope with fiber-optic deflection sensor. 1996 , 67, 2957-2959 | 8 |
| 828 | Force and conductance jumps in atomic-scale metallic contacts. 1996 , 54, R14234-R14237 | 50 |
| 827 | Size dependence of force between parallel planar jellium metal surfaces at small separation. 1996 , 54, 4492-4495 | 4 |
| 826 | Simulations of atomic-scale sliding friction. 1996 , 53, 2101-2113 | 241 |
| 825 | Calibration of frictional forces in atomic force microscopy. 1996 , 67, 3298-3306 | 486 |
| 824 | Low-cost modification of a contact atomic force microscope (AFM) into a sound-activated tapping mode AFM for use in air and liquids. 1996 , 67, 387-392 | 8 |
| 823 | Design of a Beetle-type atomic force microscope using the beam deflection technique. 1996 , 67, 1925-1929 | 5 |
| 822 | Study of shear force as a distance regulation mechanism for scanning near-field optical microscopy. 1996 , 79, 1219-1223 | 21 |
| 821 | Thermal conductivity and diffusivity measurements in the sub- μ m and sub- μ m scale on centimeter area samples using a microthermocouple. 1996 , 67, 4246-4255 | 25 |
| 820 | Flipping silicon dimers on Si(100) using scanning tip microscopy: A theoretical investigation. 1996 , 53, 4553-4556 | 19 |
| 819 | Thermomechanical deflection of microcantilever beams in scanning force microscopes. 1996 , 6, 330-336 | 8 |
| 818 | Anisotropic Crystal Growth of TTF-TCNQ Films on Alkali Halides. 1996 , 280, 295-300 | 11 |
| 817 | Adhesion and composites. 1996 , 4, 299-311 | 11 |

| | | |
|-----|---|----|
| 816 | Comparative studies of bacterial biofilms on steel surfaces using atomic force microscopy and environmental scanning electron microscopy. 1996 , 10, 65-77 | 60 |
| 815 | Comparative studies of the multiplexability of SSFLC devices with respect to alignment characteristics. 1996 , 178, 41-54 | 3 |
| 814 | Construction of well organized functional Langmuir-Blodgett films by mimicking structures and functions of biological membranes. 1996 , 4, 181-209 | 1 |
| 813 | Nanoindentation and nanowear tests on amorphous carbon films. 1996 , 74, 1143-1157 | 25 |
| 812 | QUALITATIVE AND QUANTITATIVE SURFACE MICROSCOPY. 1996 , 943-1032 | 6 |
| 811 | Transfer of a Single Particle between Two Surfaces with an Atomic Force Microscope. 1996 , 100, 8369-8372 | 1 |
| 810 | Scanned Probe Microscopies in Chemistry. 1996 , 100, 13103-13120 | 88 |
| 809 | Real Time Monitoring of the Electrochemical Transformation of a Ferrocene-Terminated Alkanethiolate Monolayer at Gold via an Adhesion-Based Atomic Force Microscopic Characterization. 1996 , 100, 13342-13345 | 44 |
| 808 | Evidence of Octopolar Symmetry in Bacteriorhodopsin Trimers by Hyper-Rayleigh Scattering from Purple Membrane Suspensions. 1996 , 100, 19672-19680 | 24 |
| 807 | Measuring Electrostatic Double-Layer Forces at High Surface Potentials with the Atomic Force Microscope. 1996 , 100, 16700-16705 | 52 |
| 806 | Ultra-long glass tips for atomic force microscopy. 1996 , 6, 254-260 | 12 |
| 805 | Reversible Tip-induced Structural Modifications in Scanning Tip Microscopy. 1996 , 35, 3714-3718 | 4 |
| 804 | Instrumentation of the High-Vacuum Atomic Force Microscope. 1996 , 35, 3783-3786 | 5 |
| 803 | Interpretation of Frictional-Force Microscopy Images Based on the Two-Dimensional Stick-Slip Motion of the Tip Atom. 1996 , 35, 3700-3705 | 14 |
| 802 | SiO ₂ /SiSystem Studied by Scanning Capacitance Microscopy. 1996 , 35, 3793-3797 | 12 |
| 801 | Evaluation of Tribological Properties of a Longitudinal Magnetic Recording Medium using Lateral Modulation Friction Force Microscope. 1996 , 35, 6286-6291 | 13 |
| 800 | Characterization of surface damage via surface acoustic waves. 1996 , 7, 295-301 | 21 |
| 799 | Imaging Two-dimensional Crystals of Catalase by Atomic Force Microscopy. 1996 , 35, 6233-6238 | 14 |

| | | |
|-----|---|-----|
| 798 | The direct observation of the core region of a propagating fracture crack in glass. 1996 , 34, 549-554 | 42 |
| 797 | Nanomachining, manipulation and fabrication by force microscopy. 1996 , 7, 236-240 | 16 |
| 796 | Friction force microscopy on well defined surfaces. 1996 , 7, 340-344 | 12 |
| 795 | PZT thin film actuator/sensor for atomic force microscope. | 3 |
| 794 | Effects of Atomic Arrangement at Tip Apex and Tip-Sample Distance on Atomic Force Microscopy Images: A Simulation Study. 1996 , 35, 2318-2325 | 11 |
| 793 | Rydberg states of the hydrogen atom near a metal surface. 1996 , 29, 1293-1306 | 57 |
| 792 | Ultrasonic Atomic Force Microscope with Overtone Excitation of Cantilever. 1996 , 35, 3787-3792 | 152 |
| 791 | Distance-dependent noise measurements in scanning force microscopy. 1996 , 8, 7561-7577 | 66 |
| 790 | Morphological, chemical and electrical characterization of thin film grown on rough and mechanically polished substrates. 1996 , 29, 2235-2239 | 9 |
| 789 | Localized Fluctuation of a Two-Dimensional Atomic-Scale Friction. 1996 , 35, 5909-5913 | 13 |
| 788 | Nature of Tip-Sample Interaction in Dynamic Mode Atomic Force Microscopy. 1997 , 36, 7354-7357 | 1 |
| 787 | Identification of Materials using Direct Force Modulation Technique with Magnetic AFM Cantilever. 1997 , 36, 3868-3871 | 10 |
| 786 | Scanning Force Microscopy Studies of Domain Structure in BaTiO ₃ Single Crystals. 1997 , 36, 2207-2211 | 76 |
| 785 | Nanorheology of Polymer Blends Investigated by Atomic Force Microscopy. 1997 , 36, 3850-3854 | 45 |
| 784 | Nanometer-Scale Erasable Recording Using Atomic Force Microscope on Phase Change Media. 1997 , 36, 523-525 | 32 |
| 783 | Silicon Nitride Thin Films Young's Modulus Determination by an Optical Non Destructive Method. 1997 , 36, L794-L797 | 24 |
| 782 | Atomic Force Microscopy Studies of Erythrocyte Membranes Immobilized by Centrifugation under Aqueous Conditions. 1997 , 36, 3872-3876 | 4 |
| 781 | Structural Studies on Phosphatidylcholine Liposomes in Various Phases Using Atomic Force Microscopy. 1997 , 36, 3913-3916 | 4 |

| | | |
|-----|--|---------|
| 780 | Scanning Auger Electron Microscopy Evaluation and Composition Control of Cantilevers for Ultrahigh Vacuum Atomic Force Microscopy. 1997 , 36, 3855-3859 | 12 |
| 779 | Imaging of Proteins Adsorbed on Self-Assembled Monolayers by Atomic Force Microscopy in Liquid. 1997 , 36, L945-L948 | |
| 778 | Sensing Molecular Density of Monolayers from Fluoroalkyltrichlorosilane Using Atomic Force Microscope Having a Tip Modified with Fluoroalkyltrichlorosilane Molecules. 1997 , 36, L162-L165 | 10 |
| 777 | Spin-polarized scanning tunnelling microscopy with detection of polarized luminescence emerging from a semiconductor tip. 1997 , 9, 5697-5707 | 8 |
| 776 | Chemical storage of data. 1997 , 8, 1-5 | 12 |
| 775 | Submicrometer lithography of a silicon substrate by machining of photoresist using atomic force microscopy followed by wet chemical etching. 1997 , 8, 76-81 | 13 |
| 774 | Interplay between stick-slip motion and structural phase transitions in dry sliding friction. 1997 , 55, 12892-12895 | 9 |
| 773 | Determination of interface roughness cross correlation of thin films from spectroscopic light scattering measurements. 1997 , 81, 3627-3636 | 10 |
| 772 | Frictional Force between a Sharp Asperity and a Surface Step. <i>Physical Review Letters</i> , 1997 , 79, 5066-5069 | 44 |
| 771 | Scanning Motions of an Atomic Force Microscope Tip in Water. <i>Physical Review Letters</i> , 1997 , 79, 853-856 | 14 |
| 770 | Role of Covalent Tip-Surface Interactions in Noncontact Atomic Force Microscopy on Reactive Surfaces. <i>Physical Review Letters</i> , 1997 , 78, 678-681 | 7-4 196 |
| 769 | Use of atomic force microscopy to probe surface charge densities in electrolyte solutions on a nanometer scale. | |
| 768 | Self-sharpening tip integrated on micro cantilevers with self-exciting piezoelectric sensor for parallel atomic force microscopy. 1997 , 70, 2318-2320 | 2 |
| 767 | Precise force curve detection system with a cantilever controlled by magnetic force feedback. 1997 , 68, 4132-4136 | 15 |
| 766 | Improved spatial resolution in magnetic force microscopy. 1997 , 71, 3293-3295 | 62 |
| 765 | Dynamical frictional phenomena in an incommensurate two-chain model. 1997 , 56, 13932-13942 | 25 |
| 764 | Static and dynamic properties of frictional phenomena in a one-dimensional system with randomness. 1997 , 56, 4261-4265 | 28 |
| 763 | Geometry effects on the van der Waals force in atomic force microscopy. 1997 , 56, 4159-4165 | 35 |

- 762 Nanoscale determination of phase velocity by scanning acoustic force microscopy. **1997**, 55, 15852-15855 27
- 761 Nonlinear dynamics of intermittent-contact mode atomic force microscopy. **1997**, 55, 14899-14908 34
- 760 Surface modifications induced by scanning force microscopy on Langmuir-Blodgett films.
- 759 Electrostatic Nanotitration of Weak Biochemical Bonds. *Physical Review Letters*, **1997**, 79, 1949-1952 7.4 9
- 758 Characterization of micromachined piezoelectric PZT force sensors for dynamic scanning force microscopy. **1997**, 68, 2091-2100 61
- 757 First-principles calculation of the exchange interaction and the exchange force between magnetic Fe films. **1997**, 56, 3218-3221 37
- 756 Tapping mode imaging with an interfacial force microscope. **1997**, 68, 4124-4131 11
- 755 Self-oscillating mode for frequency modulation noncontact atomic force microscopy. **1997**, 70, 2529-2531 19
- 754 Atomic-scale study of dry sliding friction. **1997**, 55, 2606-2611 49
- 753 Force-balancing microforce sensor with an optical-fiber interferometer. **1997**, 68, 2475-2478 16
- 752 Microfabrication of oxidation-sharpened silicon tips on silicon nitride cantilevers for atomic force microscopy. **1997**, 6, 303-306 27
- 751 Vibrational dynamics of force microscopy: Effect of tip dimensions. **1997**, 71, 626-628 52
- 750 Investigation of the Cu/BCB and Cu/PPQ interfaces by photoelectron spectroscopy. **1997**, 15, 2529-2536 10
- 749 Atomic force microscopy on cells adhering to a substrate: a tool for cellular engineering.
- 748 Surface modifications with a scanning force microscope. **1997**, 68, 1458-1460 13
- 747 A flexible implementation of scanning probe microscopy utilizing a multifunction system linked to a PC-Pentium controller. **1997**, 68, 3799-3802 32
- 746 Ferroelectric domains and domain boundaries observed by scanning force microscopy. **1997**, 191, 211-218 39
- 745 High-Resolution Imaging of Liquid Structures: Wetting and Capillary Phenomena at the Nanometer Scale. **1997**, 22, 36-41 33

| | | |
|-----|--|----|
| 744 | Characterization of Strained Epitaxial Si _{1-x} Ge _x Films Grown using Gas Source Molecular Beam Epitaxy. 1997 , 43, 155-163 | 12 |
| 743 | Study of Attractive Interactions between Poly (Ethylene-Oxide) Coated Surfaces Using AFM. 1997 , 121-127 | |
| 742 | Nanofabrication for Electronics. 1997 , 87-185 | 5 |
| 741 | Scanning Probe Microscopes and their Applications. 1997 , 503-547 | |
| 740 | Plastic deformation of oxide scales at elevated temperatures. 1997 , 12, 697-705 | 17 |
| 739 | Doping high T _c superconductors with oxygen and metallic atoms: A molecular dynamics study. 1997 , 12, 2901-2906 | |
| 738 | Atomare Auflöung auf einem Isolator mittels Rasterkraftmikroskopie. 1997 , 53, 435-435 | 3 |
| 737 | Torsional force probes optimized for higher order mode suppression. | 2 |
| 736 | Force Titration of a Carboxylic Acid Terminated Self-Assembled Monolayer Using Chemical Force Microscopy. 1997 , 294, 99-102 | 30 |
| 735 | Atomic force microscopic demonstration of DNA looping by GalR and HU. 1997 , 25, 873-6 | 82 |
| 734 | Protein Stretching II*1: Results for Carbonic Anhydrase. 1997 , 36, 3887-3893 | 20 |
| 733 | Microsecond atomic force sensing of protein conformational dynamics: implications for the primary light-induced events in bacteriorhodopsin. 1997 , 94, 7937-41 | 56 |
| 732 | Evaluation of Interaction Forces between Surfaces in Electrolyte Solutions by Atomic Force Microscope.. 1997 , 30, 52-58 | 20 |
| 731 | Statistical analysis of in-situ slip lines by atomic force microscopy observations. 1997 , 76, 1139-1152 | 8 |
| 730 | Using Atomic Force Microscopy to Study Soil Mineral Reactions. 1997 , 1-43 | 7 |
| 729 | 6. Surface Characterization. 1997 , 30, 291-331 | 2 |
| 728 | Parallelization of an algorithm used to simulate Atomic Force Microscope images. 1997 , 175-189 | |
| 727 | The Relationship Between Near-Surface Mechanical Properties, Loading Rate and Surface Chemistry. 1997 , 505, 307 | 7 |

| | | |
|-----|---|-----|
| 726 | AFM Observations of Oxide Morphologies Formed at high Temperatures. 1997 , 472, | |
| 725 | Surface Molecular Motion of Amorphous Polymeric Solids. 1997 , 70, 1491-1503 | 3 |
| 724 | Studies on falciparum malaria with atomic-force and surface-potential microscopes. 1997 , 91, 689-692 | 5 |
| 723 | Novel optical probing system for quarter-/spl mu/m VLSI circuits. | |
| 722 | Thermal and electrical imaging of surface properties with high lateral resolution. | |
| 721 | Attonewton force detection using ultrathin silicon cantilevers. 1997 , 71, 288-290 | 314 |
| 720 | Viscous drag effect on imaging of linearized plasmid deoxyribonucleic acid in liquid medium with the atomic force microscope. 1997 , 70, 1977-1979 | 23 |
| 719 | Thermal analyses by means of scanning probe microscopy [CMOS ICs]. | 2 |
| 718 | Design and construction of a heat stage for investigations of samples by atomic force microscopy above ambient temperatures. 1997 , 68, 140-142 | 10 |
| 717 | A scanning force microscope for simultaneous force and patch-clamp measurements on living cell tissues. 1997 , 68, 2583-2590 | 22 |
| 716 | A critical look at surface force measurement using a commercial atomic force microscope in the noncontact mode. 1997 , 68, 4145-4151 | 23 |
| 715 | A versatile stable scanning proximal probe microscope. 1997 , 68, 1759-1763 | 15 |
| 714 | Nanoscale Visualization of Crystal Habit Modification by Atomic Force Microscopy. 1997 , 9, 773-783 | 19 |
| 713 | Morphology Characterization in Multicomponent Macromolecular Systems Using Scanning Probe Phase Microscopy. 1997 , 13, 1840-1843 | 20 |
| 712 | Scanning tunneling microscope investigation of carbon nanotubes produced by catalytic decomposition of acetylene. 1997 , 56, 12490-12498 | 46 |
| 711 | Cross-Sectional Scanning Tunneling Microscopy. 1997 , 97, 1017-1044 | 35 |
| 710 | Static Frictional Forces at Crystalline Interfaces. 1997 , 101, 4992-4997 | 6 |
| 709 | Effect of Substrate Hydrophobicity on Surface Aggregate Geometry: Zwitterionic and Nonionic Surfactants. 1997 , 101, 5337-5345 | 70 |

| | | |
|-----|--|-----|
| 708 | Mapping Local Electrostatic Forces with the Atomic Force Microscope. 1997 , 13, 2825-2832 | 119 |
| 707 | Nanotribological Properties of Octadecyltrichlorosilane Self-Assembled Ultrathin Films Studied by Atomic Force Microscopy: Contact and Tapping Modes. 1997 , 13, 2333-2339 | 49 |
| 706 | Scanning Force Microscopy with Chemical Specificity: An Extensive Study of Chemically Specific Tip-Surface Interactions and the Chemical Imaging of Surface Functional Groups. 1997 , 13, 4357-4368 | 237 |
| 705 | Theoretical Calculations of Coefficients of Friction between Weakly Interacting Surfaces. 1997 , 101, 10045-10052 | 52 |
| 704 | Quantification of Specific Immunological Reactions by Atomic Force Microscopy. 1997 , 13, 2557-2563 | 51 |
| 703 | Effects of Guest Microparticles on the Phase Transition of Bulk Polymer Gels. 1997 , 13, 7039-7044 | 17 |
| 702 | Direct Force Measurements between Silica and Alumina. 1997 , 13, 2109-2112 | 128 |
| 701 | On-chip RBC deformability checker embedded with vision analyzer. 2017 , | 0 |
| 700 | Integrated Cantilever-Based Biosensors for the Detection of Chemical and Biological Entities. 2017 , 469-530 | |
| 699 | Surface Complexation of Metals by Natural Colloids. 2017 , 211-236 | |
| 698 | Atomic Force Microscopy in Hydrogen Storage Materials Research. 2017 , 103-117 | |
| 697 | Wear Measurement. 2017 , 225-232 | |
| 696 | Measurement of Surface Forces and Adhesion. 2017 , 56-66 | |
| 695 | Three-Dimensional Fabrication of Micro-/Nanostructure Using Scanning Probe Lithography. 2018 , 445-477 | |
| 694 | Three-Dimensional Fabrication of Micro-/Nanostructure Using Scanning Probe Lithography. 2018 , 1-33 | |
| 693 | Introduction. 2018 , 1-19 | |
| 692 | Observation of strained SiGe nanoislands embedded in a Si matrix using ambient cross-sectional atomic force microscopy. 2018 , 123-126 | |
| 691 | Introduction. 2018 , 1-13 | |

- 690 Desenvolvimento de nanodispositivos baseados em biomoléculas: abordagens computacionais. **2018**, 118-155
- 689 High-Speed Atomic Force Microscopy. **2018**, 263-267
- 688 Pore Structures. **2018**, 17-56
- 687 Scanning Probe Microscopy. **2018**, 23-41
- 686 Atomic Force Microscopy: A three-dimensional reconstructive tool of oral microbiota in gingivitis and periodontitis. **2017**, 21, 264-269 4
- 685 Silicon photonics based on-chip vibrometer. **2018**, 2
- 684 On-chip ultraviolet holography for high-throughput nanoparticle and biomolecule detection. **2018**, 1
- 683 Atomic force stiffness imaging: capturing differences in mechanical properties to identify and localize areas of prostate cancer tissue. **2018**,
- 682 Direct Measurement of Dissipation in a Single Protein using Small Amplitude Atomic Force Microscopy.
- 681 Young's moduli of cellulose nanofibers measured by atomic force microscopy. **2018**,
- 680 Concurrent Atomic Force Spectroscopy.
- 679 Experimental Analysis of Cellular Membrane Mechanical Properties. **2019**, 745-749
- 678 Single Molecule Method for Molecular Biology. **2018**, 43, 53-59
- 677 Features of mechanical scanning probe lithography on graphene oxide and As(Ge)Se chalcogenide resist. **2018**, 21, 152-159
- 676 Fabrication of a Switchable Dual AFM Cantilever through a Large Deflection using Magneto-strictive Film. **2018**, 138, 412-416
- 675 Design of AFM automatically feeding probe system. **2018**, 19, 205-209
- 674 Characterization and Measurement of Microcomponents with the Atomic Force Microscope (AFM). **2018**, 139-162
- 673 Molecular anatomy and plasticity of the long noncoding RNA HOTAIR.

- 672 Multilayer X-ray interference structures. **2019**, 189, 1137-1171 1
- 671 1. Particle Characteristics and Measurement1.9 Interparticle Forces1.9.4 Measurement Methods of Interparticle Forces. **2018**, 55, 542-546
- 670 Characterization of carbon materials using high-resolution scanning probe microscopy. **2018**, 2018, 204-209 1
- 669 Investigation of tribological properties of nanostructured objects on atomic-smooth surfaces. **2018**, 40-47
- 668 From Nanomaterials and Nanotechnologies to the Alternative Energy. **2018**, 19, 442-486 0
- 667 Introduction. **2019**, 1-9
- 666 Introduction. **2019**, 1-11
- 665 Super-Resolution Imaging Based on Nonlinear Plasmonic Scattering. **2019**, 239-259
- 664 Recent advances in probing surface/interfacial water by scanning probe microscopy. **2019**, 68, 016802
- 663 Chapter 14:Applications of Scanning Electron Microscopy and Atomic Force Microscopy to Food Structure Characterisation. **2019**, 361-382
- 662 Background Review. **2019**, 11-31
- 661 Application to Fundamental Studies. **2019**, 545-592
- 660 CIRP Encyclopedia of Production Engineering. **2019**, 93-96
- 659 Atomic Force Microscopy. **2019**, 725-738
- 658 Scanning Probe Microscopy for Nanoscale Semiconductor Device Analysis. **2019**, 485-498
- 657 References. **2019**, 179-203
- 656 Introduction to Scanning Probe Microscopy. **2019**, 709-724
- 655 Introduction. **2019**, 1-13

- 654 Tactile Surface Metrology. **2019**, 43-55
- 653 Heterogeneous Structure in Elastomers and Polymer Nanotechnology :. **2019**, 92, 188-194
- 652 CHAPTER 2:Structure, Function, Orientation, Characterization and Immobilization of Antibodies for Immunosensor Development. **2019**, 21-41
- 651 Amplitude Modulation (AM) Mode in Dynamic Atomic Force Microscopy. **2019**, 209-229
- 650 Scanning Probe Microscopes. **2019**, 279-297
- 649 Characterization of Nanomaterials. **2019**, 44-80
- 648 Real-time and non-invasive quantitative phase imaging of pancreatic ductal adenocarcinoma cell mechanical properties. **2019**, 0
- 647 First results from the Large Dynamic Range Atomic Force Microscope for overlay metrology. **2019**, 1
- 646 Development of hybrid measuring system for the complex micro-arrayed surface. **2019**,
- 645 Simultaneous 3D super-resolution fluorescence microscopy and atomic force microscopy: combined SIM and AFM platform for cell imaging.
- 644 Characterization and Measurement of Microcomponents with the Atomic Force Microscope (AFM). **2019**, 155-176 0
- 643 Micro- and nanofabrication technologies using the nanopositioning and nanomeasuring machines. **2019**,
- 642 Differential expansion microscopy. 2
- 641 National Nanotechnology Initiative: A Model for Advancing Revolutionary Technologies. **2020**, 121-133 0
- 640 Studying the Tribological Properties of n-alkanes Monolayer Films on Atomic Flat Surface of Gold. **2019**, 15, 70-77
- 639 Studying the Tribological Properties of n-alkanes Monolayer Films on Atomic Flat Surface of Gold. **2019**, 15, 62-68
- 638 Characterization by Atomic Force Microscope. **2019**, 53-58
- 637 Encyclopedia of Systems and Control. **2020**, 1-6

| | | |
|-----|--|---|
| 636 | Topography measurement by normal-incidence reflection ptychography. 2019, | |
| 635 | Imaging Oral Biofilm and Plaque. 2020, 85-97 | |
| 634 | Generation of coupled orbital angular momentum modes from an optical vortex parametric laser source. 2019, 27, 37025-37033 | 4 |
| 633 | Development of Three-degree-of-freedom Zero-compliance Mechanism for Micro Force Measurement with a Cantilever. 2020, 53, 8339-8344 | |
| 632 | Combinatorial Thin-Film Synthesis for New Nanoelectronics Materials. 2020, 75-87 | |
| 631 | DNA Sequencing Modified Method through Effective Regulation of Its Translocation Speed in Aqueous Solution. 2020, 10, 96-112 | 3 |
| 630 | Polymer Interface Reactions. 2020, 55-96 | 1 |
| 629 | Mechanical Unfolding and Refolding of Single Membrane Proteins by Atomic Force Microscopy. 2020, 2127, 359-372 | |
| 628 | Introduction. 2020, 1-31 | 0 |
| 627 | Three-dimensional reconstruction of individual helical nano-filament structures from atomic force microscopy topographs. | 1 |
| 626 | Atomic force microscopy for cell mechanics and diseases. 2020, | 0 |
| 625 | High-dynamic-range areal profilometry using an imaging, dispersion-encoded low-coherence interferometer. 2020, 28, 17320-17333 | 1 |
| 624 | Stiffening of prostate cancer cells driven by actin filaments \square microtubules crosstalk confers resistance to microtubule-targeting drugs. | |
| 623 | Subnanometer-scale imaging of nanobio-interfaces by frequency modulation atomic force microscopy. 2020, 48, 1675-1682 | 2 |
| 622 | Scanning Probe Microscopy \square From Surfaces to Single Atoms. 1-39 | |
| 621 | Hollow Atomic Force Microscopy Cantilevers with Nanoscale Wall Thicknesses. 2021, e2102979 | 0 |
| 620 | Modulating the catalytic activity of metal-organic frameworks for CO oxidation with N ₂ O through an oriented external electric field. 2021, 516, 111970 | 2 |
| 619 | Bionic effects of nano hydroxyapatite dentifrice on demineralised surface of enamel post orthodontic debonding: in-vivo split mouth study. 2021, 22, 39 | 1 |

- 618 Characterization Techniques for Studying the Properties of Nanocarriers for Systemic Delivery. **2020**, 57-86
- 617 Optomechanical atomic force microscope. **2021**, 32, 085505 3
- 616 Experimental validation of the simultaneous damping and tracking controller design strategy for high-bandwidth nan positioning using PAVPF approach. **2020**, 14, 3506-3514 4
- 615 In-situ Study on Structure Dependent Quantized Conductance uncovered via Electron Crystallography. **2020**, 62, 226-233
- 614 Image reconstruction of TGZ3 grating by eliminating tip-sample convolution effect in AFM. **2020**, 15, 1167-1172 0
- 613 Low-cost spectrum analyzer for trouble shooting noise sources in scanning probe microscopy. **2020**, 38, 061202 0
- 612 Periodic Solutions of a Tapping Mode Cantilever in an Atomic Force Microscope with Harmonic Excitation.
- 611 Nanoscale geochemical heterogeneity of organic matter in thermally-mature shales: An AFM-IR study. **2022**, 310, 122278 0
- 610 [Atomic force microscopy in the study of retinal structure]. **2020**, 136, 251-257 0
- 609 Microscopy of Polymers. **2021**, 61-103
- 608 Comparative study of photoinduced surface-relief-gratings on azo polymer and azo molecular glass films.. **2021**, 11, 34766-34778 1
- 607 Molecular packing and film morphology control in organic electrochemical transistors. 2
- 606 Introduction. **2020**, 1-33
- 605 Sub-Nanoscale Three-Dimensional Analysis of Hydration Structures at Solid-Liquid Interfaces by Atomic Force Microscopy. **2020**, 20, 305-309
- 604 Evolutionary Design, Deposition and Characterization Techniques for Interference Optical Thin-Film Multilayer Coatings and Devices. **2020**, 281-343
- 603 Effects of subsurface charge on surface defect and adsorbate of rutile TiO₂ (110). **2020**, 69, 210701 2
- 602 Calcifying Extracellular Vesicles: Biology, Characterization, and Mineral Formation. **2020**, 97-116
- 601 Metrology for Microsystems Manufacturing. **2020**, 173-225

600 Mechanical View on the Mitochondria. **2020**, 163-189

599 Wege in die Nanowelt: Skalierungs- und Strukturprinzipien, Werkzeuge der Erkenntnisgewinnung, Modelle und Experimente. **2020**, 325-359

598 Polishing characteristics of polyetherketoneketone on Candida albicans adhesion. **2020**, 58, 207

1

597 Mechanobiology Analysis of Manifold Live Cells in Vitro with Atomic Force Acoustic Microscopy.. **2020**, 3, 1210-1215

596 Fehleranalyse. **2020**, 573-614

595 Mechanical properties of nanoporous organo silicate glass films for the use in integrated circuits interconnects. **2020**,

1

594 The Definition of Biophysics: What Exactly is Biophysics?. **2020**, 3-34

1

593 Interaction between two calcite surfaces in aqueous solutions: Study of nano-scale interfacial forces using AFM and SFA.

1

592 Atomic Force Microscopy of Biomembranes. **2020**, 63-92

591 Three-Dimensional Evaluation of Paper Surfaces Using Confocal Microscopy. **2020**, 301-324

590 Towards a fast detection of microbial resistance to antibiotics. **2020**, 6, 010-013

0

589 Ferroelectric Properties. **2021**, 173-206

588 Total-reflection high-energy positron diffractometer at NEPOMUC - Instrumentation, simulation, and first measurements. **2021**, 92, 115103

587 Scanning probe microscopy for electrocatalysis. **2021**, 4, 3483-3514

1

586 Utilizing deep learning and advanced image processing techniques to investigate the microstructure of a waxy bitumen. **2021**, 313, 125481

3

585 Length of Mucin-Like Domains Enhance Cell-Ebola Virus Adhesion by Increasing Binding Probability.

584 High aspect ratio topography reconstruction in sub-resonant atomic force microscopy exploiting stick-slip dynamics*. **2020**,

583 Nanosciences and Nanotechnologies. 1-20

- 582 Beispiele komplexer Mikrosysteme. **2006**, 453-481
- 581 Nuclear Envelope: Nanoarray Responsive to Aldosterone. **2007**, 38-54
- 580 Introduction. **2002**, 127-205
- 579 Theories and Laws of Molecular Adhesion: All Molecules Adhere. **2004**, 41-60
- 578 Direct Force Measurement at Liquid/Liquid Interfaces. **2005**, 77-95
- 577 Nanometer-Scale Electronics and Storage. **2005**, 333-354
- 576 Imaging, Measuring and Manipulating Biological Matter from the Millimeter to Nanometer Scale. **2005**, 85-110
- 575 Scanning Probe Microscopy across Dimensions. **2005**, 139-165
- 574 Darstellung von Strukturveränderungen der Kernporenkomplexe Durch Zeitraffer Atomkraftmikroskopie. **2005**, 18-19
- 573 Sichtbarmachung des Wachstums von Amyloidfibrillen durch Zeitraffer Atomkraftmikroskopie. **2005**, 264-265
- 572 Laser-Cantilever-Anemometer. **2005**, 129-132
- 571 Introduction [Measurement Techniques and Applications. **2005**, 1-37
- 570 Dynamic Force Microscopy. **2005**, 243-281
- 569 Tip Geometry and Tip-Sample Interactions in Scanning Probe Microscopy (SPM). **2006**, 456-463
- 568 Magnetic Imaging. **2001**, 316-331
- 567 Forces between carboxyl and amide groups measured by atomic force microscopy. **2000**, 209-213
- 566 Scanning Probe Measurements of Electron Transport in Molecules. **2007**, 395-422
- 565 Dynamic Force Microscopy and Spectroscopy in Vacuum. **2007**, 506-533

- 564 Integral Equation Modeling of Electrostatic Interactions in Atomic Force Microscopy. **2008**, 237-246
- 563 Characterization and Handling of Biological Cells. **2008**, 237-266
- 562 The Error Analysis of Cross-section Curve with Contact Mode Atomic Force Microscopy Simulation Measurement by Using Trapezoidal Cantilever Based on Molecular Mechanics. **2007**, 265-270
- 561 Atomic and Molecular Scale Imaging of Layered and Other Mineral Structures. 91-138
- 560 Atomic Force Microscopy. **2008**, 121-143
- 559 Atomic Force Microscopy. **2008**, 19-45
- 558 Exact Energy Landscapes of Proteins Using a Coarse-Grained Model. **2008**, 247-268 2
- 557 Probing Electrical Transport Properties at the Nanoscale by Current-Sensing Atomic Force Microscopy. **2008**, 421-450 1
- 556 Self-Sensing Cantilever Sensor for Bioscience. **2008**, 219-245
- 555 High Sliding Velocity Nanotribological Investigations of Materials for Nanotechnology Applications. **2008**, 283-310
- 554 Measurement of the Mechanical Properties of One-Dimensional Polymer Nanostructures by AFM. **2008**, 311-328
- 553 Introduction [Measurement Techniques and Applications. **2008**, 1-34
- 552 Computer Simulations of Nanometer-Scale Indentation and Friction. **2008**, 655-740
- 551 Noncontact Atomic Force Microscopy and Related Topics. **2008**, 135-177
- 550 Molecular Recognition Force Microscopy: From Simple Bonds to Complex Energy Landscapes. **2008**, 279-308 o
- 549 Electro-Oxidative Lithography and Self-Assembly Concepts for Bottom-Up Nanofabrication. **2009**, 45-70 1
- 548 Progress in High-resolution Scanning Probe Microscopy. **2008**, 3-4
- 547 Mass-producible monolithic silicon probes for scanning probe microscopes. 1

| | | |
|-----|---|----|
| 546 | Scanning tunneling microscopy and atomic force microscopy: New tools for biology. 1989 , 47, 778-779 | |
| 545 | Development and application of scanning electrochemical cell microscope for electrochemical imaging of catalytic active sites. 2020 , 88, 229-234 | |
| 544 | Direct visualization of native infectious SARS-CoV-2 and its inactivation forms using high resolution Atomic Force Microscopy. | |
| 543 | Nanowire Detection in AFM Images Using Deep Learning. 2021 , 27, 54-64 | 1 |
| 542 | Longitudinal Vibration of Variable Cross-Sectional Nanorods. 64, 49-60 | 1 |
| 541 | AFM Research in Catalysis and Medicine. 2020 , 7, 248-255 | 1 |
| 540 | The influence of epitope availability on atomic-force microscope studies of antigen-antibody interactions. 1999 , 341 (Pt 1), 173-8 | 5 |
| 539 | Atomic force microscopy of gastric mucin and chitosan mucoadhesive systems. 2000 , 348 Pt 3, 557-63 | 19 |
| 538 | Atomic force microscopy of paired helical filaments isolated from the autopsied brains of patients with Alzheimer's disease and immunolabeled against microtubule-associated protein tau. 1995 , 147, 516-28 | 9 |
| 537 | Twisted ribbon structure of paired helical filaments revealed by atomic force microscopy. 1994 , 144, 869-73 | 41 |
| 536 | Measuring cell viscoelastic properties using a force-spectrometer: influence of protein-cytoplasm interactions. 2005 , 42, 321-33 | 40 |
| 535 | Atomic force microscopy measurements of lens elasticity in monkey eyes. 2007 , 13, 504-10 | 23 |
| 534 | Scanning probe recognition microscopy investigation of tissue scaffold properties. 2007 , 2, 651-61 | 4 |
| 533 | Single Molecule Probing of Exocytotic Protein Interactions Using Force Spectroscopy. 2008 , 81, 31 | 12 |
| 532 | A novel technique for quantifying mouse heart valve leaflet stiffness with atomic force microscopy. 2012 , 21, 513-20 | 33 |
| 531 | Electrical Field Stimulation with a Novel Platform: Effect on Cardiomyocyte Gene Expression but not on Orientation. 2012 , 8, 109-20 | 6 |
| 530 | The Emergence of AFM Applications to Cell Biology: How new technologies are facilitating investigation of human cells in health and disease at the nanoscale. 2011 , 1', 87-101 | 6 |
| 529 | Micromorphology analysis of the anterior human lens capsule. 2018 , 24, 902-912 | 3 |

- 528 [Influence of surface roughness on oral streptococcal adhesion forces to dental filling materials]. **2016**, 34, 448-453 1
- 527 Effect of Hydrofluoric Acid Surface Treatments on Surface Roughness and Three-Point Flexural Strength of Suprinity Ceramic. **2020**, 17, 1-7
- 526 Comparison of surface topography of low-friction and conventional TMA orthodontic arch wires using atomic force microscopy. **2021**, 10, 2
- 525 Atomic-scale structures and dynamics at the growing calcite step edge investigated by high-speed frequency modulation atomic force microscopy.. **2022**,
- 524 Electromagnetic description of the interaction between talcum and the rough surface of a composite material. **2022**, 115, 103639
- 523 Experimental methods in fracturing mechanics focused on minimizing their environmental footprint. **2022**, 143-182 0
- 522 Two dynamic modes to streamline challenging atomic force microscopy measurements. **2021**, 12, 1226-1236
- 521 Surface Tension and Shear Strain Contributions to the Mechanical Behavior of Individual Mg-Ni-Phyllosilicate Nanoscrolls. 2100153 1
- 520 Concepts and Application of DNA Origami and DNA Self-Assembly: A Systematic Review. **2021**, 2021, 9112407 1
- 519 Cantilever signature of tip detachment during contact resonance AFM.. **2021**, 12, 1286-1296
- 518 Cyclic Single Atom Vertical Manipulation on a Nonmetallic Surface. **2021**, 12, 11383-11390
- 517 Site-specific variations in surface structure and Young's modulus of human hair surfaces at the nanometer scale as induced through bleach treatment.. **2021**, 126, 105001 1
- 516 Accelerating AFM Characterization via Deep-Learning-Based Image Super-Resolution. **2021**, e2103779 4
- 515 Double Lamellar Morphologies and OddEven Effects in Two- and Three-Dimensional N,N'-bis(n-alkyl)-naphthalenediimide Materials. **2021**, 33, 8800-8811 3
- 514 Relaxation dynamics of a flexible rod in a fluid. **2021**, 6, 1
- 513 The biophysics of cancer: emerging insights from micro- and nanoscale tools.. **2022**, 2, 2100056 5
- 512 Reactive-Oxygen-Species-Mediated Surface Oxidation of Single-Molecule DNA Origami by an Atomic Force Microscope Tip-Mounted C Photocatalyst. **2021**,
- 511 Deep Bayesian local crystallography. **2021**, 7, 5

| | | |
|-----|---|---|
| 510 | Unraveling Dissipation-Related Features in Magnetic Imaging by Bimodal Magnetic Force Microscopy. 2021 , 11, 10507 | 0 |
| 509 | Correlation between Contact Angle and Surface Roughness of Silicon Carbide Wafers. 2021 , 10, 113008 | 1 |
| 508 | Cancer Cell Mechanobiology: A New Frontier for Cancer Research. 2021 , | 1 |
| 507 | A survey of physical methods for studying nuclear mechanics and mechanobiology. 2021 , 5, 041508 | 5 |
| 506 | Tools and Techniques Used in Nanobiotechnology. 2022 , 29-52 | |
| 505 | Interaction energy contours of molecules as probed by a test atom. 1994 , 106, 327-337 | 5 |
| 504 | Can super-resolution microscopy become a standard characterization technique for materials chemistry?. 2022 , 13, 2152-2166 | 3 |
| 503 | Real-time Force Reconstruction in a Transverse Dynamic Force Microscope. 2021 , 1-1 | |
| 502 | Sound Wave Propagation from Underdamped Free Oscillation of Metallic Cantilever Beams. 2022 , 60, 66-69 | |
| 501 | Effect of lubricants on the rotational transmission between solid-state gears.. 2022 , 13, 54-62 | 1 |
| 500 | Study of High-Low KPFM on a pn-Patterned Si Surface.. 2022 , | 0 |
| 499 | Effect of a Misidentified Centre of a Type ASG Material Measure on the Determined Topographic Spatial Resolution of an Optical Point Sensor. 2022 , 2, 19-32 | |
| 498 | Electrical Measurement by Multiple-Probe Scanning Probe Microscope. 2022 , 289-302 | |
| 497 | Advancement in fabrication of carbon nanotube tip for atomic force microscope using multi-axis nanomanipulator in scanning electron microscope.. 2022 , | |
| 496 | Review of additive electrochemical micro-manufacturing technology. 2022 , 173, 103848 | 2 |
| 495 | Ageing studies of Multi-Strip Multi-Gap Resistive Plate Counters based on low resistivity glass electrodes in high irradiation dose. 2022 , 1024, 166122 | 0 |
| 494 | Decoupling competing electromechanical mechanisms in dynamic atomic force microscopy. 2022 , 159, 104758 | 0 |
| 493 | Automated tip functionalization via machine learning in scanning probe microscopy. 2022 , 273, 108258 | 4 |

- 492 Effect of Hydrofluoric Acid Surface Treatments on Surface Roughness and Three-Point Flexural Strength of Suprinity Ceramic. **2020**, 17, 1-7 1
- 491 New Sensing Technologies: Biosensor Based on Magnetic Nanoparticles and Magnetic Force Microscopy. **2021**,
- 490 Redistributing Controller Orders to Increase Positioning Bandwidth in Nanopositioners. **2021**, 54, 97-102
- 489 Imaging from anatomic to molecular and atomic resolution scales: A review. **2021**, 20, 266-274 1
- 488 Topographical changes in high-protein, milk powders as a function of moisture sorption using amplitude-modulation atomic force microscopy. **2022**, 127, 107504 0
- 487 Spatial distribution of single guest molecules along thickness of thin films of poly(2-hydroxyethyl acrylate).. **2022**, 21, 175 1
- 486 Fluorescence Record Diagnostics of 3D Rough-Surface Landscapes With Nano-Scale Inhomogeneities. **2022**, 9, 0
- 485 Evaluation of sensors. **2022**, 283-291
- 484 Optoelectronic Angular Displacement Measurement Technology for 2-Dimensional Mirror Galvanometer.. **2022**, 22, 0
- 483 Biosensing, Characterization of Biosensors, and Improved Drug Delivery Approaches Using Atomic Force Microscopy: A Review. **2022**, 3, 0
- 482 Nanoscale cutting using self-excited microcantilever.. **2022**, 12, 618 0
- 481 Theoretical and Experimental Study of the Phase Optimization of Tapping Mode Atomic Force Microscope.
- 480 Applications of Atomic Force Microscopy in Corrosion Research. **2022**, 187-201
- 479 Q Control of an AFM Microcantilever with Double-Stack AlN Sensors and Actuators. **2022**, 1-1 2
- 478 Nanoscale friction and wear of a polymer coated with graphene.. **2022**, 13, 63-73
- 477 Magnetic Domain Structure of Galfenol at Elevated Temperatures. **2022**, 1-1
- 476 Full Width at Half Maximum of Nanopore Current Blockage Controlled by a Single-Biomolecule Interface.. **2022**, 1
- 475 Nanoscale characterization methods in plant disease management. **2022**, 149-177

- 474 Development of an improved mathematical model for the dynamic response of a sphere located at a viscoelastic medium interface. **2022**, 43, 025002 0
- 473 Nonlinear atomic force microscopy: Squeezing and skewness of micromechanical oscillators interacting with a surface. **2022**, 105, 0
- 472 Studying the Rhodopsin-Like G Protein Coupled Receptors by Atomic Force Microscopy.. **2022**, 0
- 471 Fabrication of Nanoscale Active Plasmonic Elements Using Atomic Force Microscope Tip-Based Nanomachining. 1 0
- 470 Metal-nanocluster science and technology: my personal history and outlook.. **2022**, 2
- 469 Characterization of bituminite in Kimmeridge Clay by confocal laser scanning and atomic force microscopy. **2022**, 251, 103927 0
- 468 Dielectric Manipulated Charge Dynamics in Contact Electrification.. **2022**, 2022, 9862980 0
- 467 MEMS-Based Platforms for Multi-Physical Characterization of Nanomaterials: A Review. **2022**, 22, 1827-1841 1
- 466 On-machine measurement with an electrochemical jet machine tool. **2022**, 174, 103859 2
- 465 Adaptive AFM imaging based on object detection using compressive sensing.. **2022**, 154, 103197 1
- 464 Showing differences in viscoelastic properties of cells growing on micropattern by using very long-time high speed microrheology as a new way to measure cell mechanics. **2022**, 0
- 463 Virus morphology: Insights from super-resolution fluorescence microscopy.. **2022**, 166347 0
- 462 Nanomechanics Using Atomic Force Microscopy and Its Practical Examples. **2022**, 78, 83-89 0
- 461 Experimental Analysis of Tip Vibrations at Higher Eigenmodes of QPlus Sensors for Atomic Force Microscopy.. **2021**, 0
- 460 Revealing local molecular distribution, orientation, phase separation, and formation of domains in artificial lipid layers: Towards comprehensive characterization of biological membranes.. **2022**, 301, 102614 2
- 459 Optimization of Measurement of the Interaction Force Vector in Atomic Force Microscopy. **2021**, 66, 835 1
- 458 Simulation and experimental analysis of tip response of tapping mode atomic force microscope. **2022**, 40, 50-56 0
- 457 Visualizing Nanobio-Interfaces by In-Liquid Frequency Modulation Atomic Force Microscopy. **2022**, 65, 72-77 0

- 456 Revealing Layer-Specific Ultrastructure and Nanomechanics of Fibrillar Collagen in Human Aorta via Atomic Force Microscopy Testing: Implications on Tissue Mechanics at Macroscopic Scale. 2100159 3
- 455 Fractional Viscoelastic Modeling Enabling Accurate Atomic Force Microscope Contact Resonance Spectroscopy Characterization. **2022**, 33-37
- 454 Force measurement of plant cell utilizing atomic force microscopy. **2021**, 33, 41-45
- 453 Electrostatically-blind quantitative piezoresponse force microscopy free of distributed-force artifacts. 1
- 452 Atomic force microscopy study on the effect of different irrigation regimens on the surface roughness of human root canal dentin.. **2022**, 25, 261-266
- 451 Chemical bond imaging using torsional and flexural higher eigenmodes of qPlus sensors.. **2022**, 0
- 450 Morphological Characterization of Bio-nanocomposites. **2022**, 1-29
- 449 Nanoscale characterization of cementitious composites. **2022**, 375-406
- 448 Investigations on sub-structures within cavities of surface imprinted polymers using AFM and PF-QNM.. **2022**, 3
- 447 A Comparative Study of Cellulose Nanocomposite Derived from Algae and Bacteria and Its Applications. **2022**, 151-187
- 446 Atomic Force Acoustics Microscope. **2022**, 49-58
- 445 Synthesis and applications of carbon nanomaterials-based sensors. **2022**, 451-476
- 444 Atomic force microscopy applied to interrogate nanoscale cellular chemistry and supramolecular bond dynamics for biomedical applications.. **2022**, 1
- 443 Characterization, performance evaluation and lifetime analysis of thermoset resin. **2022**, 503-582
- 442 Assessing Collagen D-Band Periodicity with Atomic Force Microscopy.. **2022**, 15, 0
- 441 Amide Compounds as Corrosion Inhibitors for Carbon Steel in Acidic Environment. 1 0
- 440 Correlative AFM and Scanning Microlens Microscopy for Time-Efficient Multiscale Imaging.. **2022**, e2103902 0
- 439 Changes in nanomechanical properties of single neuroblastoma cells as a model for oxygen and glucose deprivation (OGD).

| | | |
|-----|--|---|
| 438 | Automated measurement and analysis of sidewall roughness using three-dimensional atomic force microscopy.. 2022 , 52, 1 | |
| 437 | VULCANIZATION FOR REINFORCEMENT OF RUBBER. 2022 , | 0 |
| 436 | Applications of Atomic Force Microscopy in HIV-1 Research.. 2022 , 14, | 1 |
| 435 | Depth estimation from a single CD-SEM image using domain adaptation with multimodal data. 2022 , | |
| 434 | A critical review of marine biofilms on metallic materials. 2022 , 6, | 4 |
| 433 | Atomic Force Microscopy (AFM) Applications in Arrhythmogenic Cardiomyopathy.. 2022 , 23, | 2 |
| 432 | Atomic Force Microscopy (AFM) on Biopolymers and Hydrogels for Biotechnological Applications-Possibilities and Limits.. 2022 , 14, | 7 |
| 431 | Atomic force microscopy: A nanobiotechnology for cellular research. 2022 , 9130004 | 0 |
| 430 | Nanomechanical Study of Enzyme: Coenzyme Complexes: Bipartite Sites in Plastidic Ferredoxin-NADP Reductase for the Interaction with NADP.. 2022 , 11, | 2 |
| 429 | Structured Water Molecules on Membrane Proteins Resolved by Atomic Force Microscopy.. 2022 , | 1 |
| 428 | Atomic Force Microscopy for Tumor Research at Cell and Molecule Levels.. 2022 , 1-18 | 0 |
| 427 | Investigation of Red Blood Cells by Atomic Force Microscopy.. 2022 , 22, | 1 |
| 426 | Time-resolved photo-assisted Kelvin probe force microscopy on Cu(In,Ga)Se ₂ solar cells. | |
| 425 | Analytical Characterisation of Material Corrosion by Biofilms. 2022 , 8, 1 | 1 |
| 424 | Speeding up the Topography Imaging of Atomic Force Microscopy by Convolutional Neural Network.. 2022 , 94, 5041-5047 | |
| 423 | Determination of an unknown shear force in cantilever Kirchhoff plate from measured \bar{f} al data with application to Atomic Force Microscope. | |
| 422 | Investigation of Structural and Thermal Properties of Graphene Oxide Reinforced Epoxy Nanocomposites. | |
| 421 | CENP-B-mediated DNA loops regulate activity and stability of human centromeres.. 2022 , | 0 |

| | | |
|-----|---|---|
| 420 | Binary-state scanning probe microscopy for parallel imaging.. 2022 , 13, 1438 | 0 |
| 419 | Peak-tracking scanning capacitance force microscopy with multibias modulation technique. 2022 , 33, 065405 | 1 |
| 418 | Bioleaching of Chalcopyrite Waste Rock in the Presence of the Copper Solvent Extractant LIX984N.. 2022 , 13, 820052 | |
| 417 | Quantitative capacitance measurements in frequency modulation electrostatic force microscopy. | 1 |
| 416 | Very-high-frequency probes for atomic force microscopy with silicon optomechanics.. 2022 , 8, 32 | 0 |
| 415 | Applications of Environmental Nanotechnologies in Remediation, Wastewater Treatment, Drinking Water Treatment, and Agriculture. 2022 , 3, 54-90 | 1 |
| 414 | A qPlus-based scanning probe microscope compatible with optical measurements.. 2022 , 93, 043701 | |
| 413 | Bonding character of intermediates in on-surface Ullmann reactions revealed with energy decomposition analysis.. 2022 , | |
| 412 | Atomic force spectroscopy is a promising tool to study contractile properties of cardiac cells.. 2021 , 103199 | |
| 411 | Scanning force sensing at micrometer distances from a conductive surface with nanospheres in an optical lattice.. 2022 , 61, 3486-3493 | 3 |
| 410 | Principle, implementation, and applications of charge control for piezo-actuated nanopositioners: A comprehensive review. 2022 , 171, 108885 | 3 |
| 409 | Simultaneous tip force and displacement sensing for AFM cantilevers with on-chip actuation: Design and characterization for off-resonance tapping mode. 2022 , 338, 113496 | |
| 408 | Decoupled tracking and damping control of piezo-actuated nanopositioner enabled by multimode charge sensing. 2022 , 173, 109046 | |
| 407 | High performance raster scanning of atomic force microscopy using Model-free Repetitive Control. 2022 , 173, 109027 | 0 |
| 406 | Periodic solutions of a tapping mode cantilever in an Atomic Force Microscope with harmonic excitation. 2022 , 110, 106396 | |
| 405 | The role of microplastics in microalgae cells aggregation: A study at the molecular scale using atomic force microscopy.. 2022 , 832, 155036 | 0 |
| 404 | Design and Implementation of Multi-mode Scanning Atomic Force Microscope. 2021 , | |
| 403 | Atomic Force Microscopy of Biopolymers on Graphite Surfaces. 2021 , 63, 601-622 | 1 |

- 402 Visualizing intracellular nanostructures of living cells by nanoendoscopy-AFM.. **2021**, 7, eabj4990 2
- 401 The Structural Characteristics of Cell Membrane Defined by Atomic Force Microscopy. 1-16
- 400 Combined High-Speed Atomic Force and Optical Microscopy Shows That Viscoelastic Properties of Melanoma Cancer Cells Change during the Cell Cycle. 2101000 1
- 399 True 3D Nanometrology: 3D-Probing with a Cantilever-Based Sensor.. **2021**, 22, 0
- 398 Vibrational behavior of atomic force microscope beam via different polymers and immersion environments. **2022**, 137, 1
- 397 Resolving surface potential variation in Ge/MoS2 heterostructures with Kelvin probe force microscopy. **2021**, 11, 125105 0
- 396 Characterisation and Interpretation of On-Surface Chemical Reactions Studied by Ultra-High-Resolution Scanning Probe Microscopy. **2022**, 9-42
- 395 Lattice Strain and Defects Analysis in Nanostructured Semiconductor Materials and Devices by High-Resolution X-Ray Diffraction: Theoretical and Practical Aspects.. **2021**, e2100932 3
- 394 Breakthrough instruments and products: DriveAFM for high-performance atomic force microscopy.. **2021**, 92, 129503 2
- 393 AFM characterization of surface mechanical and electrical properties of some common rocks. **2021**, 2
- 392 Flexoelectric control of physical properties by atomic force microscopy. **2021**, 8, 041327 7
- 391 AFM Nanotribomechanical Characterization of Thin Films for MEMS Applications.. **2021**, 13, 0
- 390 Two-Dimensional Supramolecular Chemistry on Surfaces. **2022**, 1-8
- 389 New methods for measuring of surface landscape. **2021**,
- 388 Balancing of Coupled Piezoelectric NEMS Resonators. **2021**, 7,
- 387 ReviewMultiscale Characterization of Li-Ion Batteries through the Combined Use of Atomic Force Microscopy and X-ray Microscopy and Considerations for a Correlative Analysis of the Reviewed Data. **2021**, 168, 126522 2
- 386 An integrated optical waveguide micro-cantilever system for chip-based AFM. **2021**,
- 385 Iterative Learning Controller with Learning Gain Optimization and Online Data Adjustment for Atomic Force Microscope. **2020**,

- 384 Microgels react to force: mechanical properties, syntheses, and force-activated functions.. **2022**, 1
- 383 Cell-matrix interactions, force transmission, and mechanosensation. **2022**, 129-147
- 382 Atomic Force Microscopy for Structural and Biophysical Investigations on Nuclear Pore Complexes.. **2022**, 2502, 299-310
- 381 Towards High Accuracy Surface Profile Characterization in Atomic Force Microscopy. **2022**, 277-284
- 380 Practical considerations for feature assignment in high-speed AFM of live cell membranes. **2022**, 0
- 379 Experimental Methods in Chemical Engineering: Atomic force microscopy (AFM).
- 378 Magnetic Force Microscopy in Physics and Biomedical Applications. **2022**, 8, 42 2
- 377 Molecular Recognition of Proteins through Quantitative Force Maps at Single Molecule Level.. **2022**, 12, 2
- 376 Applications and Techniques for Fast Machine Learning in Science.. **2022**, 5, 787421 0
- 375 Complementary Powerful Techniques for Investigating the Interactions of Proteins with Porous TiO₂ and Its Hybrid Materials: A Tutorial Review.. **2022**, 12,
- 374 Cocktail of REGN Antibodies Binds More Strongly to SARS-CoV-2 Than Its Components, but the Omicron Variant Reduces Its Neutralizing Ability.. **2022**, 0
- 373 Direct investigations of the electrical conductivity of normal and cancer breast cells by conductive atomic force microscopy.. **2022**, 237, 113531 0
- 372 Image_1.PDF. **2018**,
- 371 Table_1.docx. **2019**,
- 370 Image_1.TIFF. **2018**,
- 369 Table_1.pdf. **2018**,
- 368 Scanning probe microscopy of epitaxial oxide thin films. **2022**, 331-367
- 367 Microtubule Preparation for Investigation with High-Speed Atomic Force Microscopy.. **2022**, 2430, 337-347

- 366 Characterisation of an AFM Tip Bluntness Using Indentation of Soft Materials. **2022**, 221-242 ○
- 365 Dynamic Behavior of Rectangular Atomic Force Microscope Cantilever by Supposing Diverse Polymeric Specimens and Immersion Media. 1
- 364 Mechanical energy dissipation of an oscillating cantilever close to a conductive substrate partly covered with thin mica films evaluated by frequency modulation atomic force microscopy.
- 363 Mapping DNA Molecules at the Single-Molecule Level. **2022**, 95-124
- 362 Atomic Force Microscopy and Detecting a DNA Biomarker of a Few Copies without Amplification. **2022**, 111-124
- 361 Measuring (biological) materials mechanics with atomic force microscopy. 3. Mechanical unfolding of biopolymers.. **2022**,
- 360 Micromanipulation and Automatic Data Analysis to Determine the Mechanical Strength of Microparticles. **2022**, 13, 751 2
- 359 Surface and mechanical characterization of bionanocomposites for advanced applications: A review. 146442072210969
- 358 Determination of Multidirectional Pathways for Ligand Release from the Receptor: A New Approach Based on Differential Evolution.. **2022**, ○
- 357 Super-Resolution Microscopy and Molecular Imaging Techniques to Probe Biology. **2022**, 1-64
- 356 Introduction on Single-Molecule Science. **2022**, 3-19
- 355 AFM Characterization of Halloysite Clay Nanocomposites Superficial Properties: Current State-of-the-Art and Perspectives. **2022**, 15, 3441 ○
- 354 Adaptive semi-empirical model for non-contact atomic force microscopy.
- 353 Correlative imaging to resolve molecular structures in individual cells: Substrate validation study for super-resolution infrared microspectroscopy.. **2022**, 102563 ○
- 352 Microscopic wettability of medium rank coals involved pore features and functional groups. **2022**,
- 351 Review on the applications of atomic force microscopy imaging in proteins. **2022**, 103293 ○
- 350 Stability and contrast in bimodal amplitude modulation atomic force microscopy for different mode combinations in ambient air. **2022**, 12, 055321
- 349 Determination of retained austenite in multiphase steels by magnetic force microscopy. **2022**, 97, 1158-1162 1

- 348 Adhesion of Living Cells: Mechanisms of Adhesion and Contact Models. **2022**, 1-30 1
- 347 AFM Tip Localization and Efficient Scanning Method for MEMS Inspection. **2022**, 1-1 1
- 346 Enhancing sensitivity in atomic force microscopy for planar tip-on-chip probes.. **2022**, 8, 51
- 345 Nanomechanical Characterization of Bacterial Polyhydroxyalkanoates Using Atomic Force Microscopy. **2022**, 12, 4994
- 344 Fluid-structure interactions and its implications on EOR: Critical analysis, experimental techniques and knowledge gaps. **2022**, 8, 6355-6395 3
- 343 Analisis de membranas polimericas compuestas por Microscopia de Fuerza Atomica. **2018**, 1, 18-26
- 342 Optimizing the Formulation of Poorly Water-Soluble Drugs. **2022**, 33-102
- 341 Will Polycrystalline Platinum Tip Sliding on a Gold(111) Surface Produce Regular Stick-Slip Friction?. 1
- 340 Atomic resolution with high-eigenmode tapping mode atomic force microscopy. **2022**, 4,
- 339 Role of Actin-binding Proteins in the Regulation of Cellular Mechanics. **2022**, 151241 0
- 338 Tribology at the Atomic Scale with Density Functional Theory. 0
- 337 Extraction algorithm for longitudinal and transverse mechanical information of AFM. **2022**, 5, 023004
- 336 Novel Paradigm in Afm Probe Fabrication: Broadened Range of Stiffness, Materials, and Tip Shapes.
- 335 ??????????????????. **2022**,
- 334 Physicochemical and Biological Evaluation of Chitosan-Coated Magnesium-Doped Hydroxyapatite Composite Layers Obtained by Vacuum Deposition. **2022**, 12, 702 2
- 333 Magnification in Periodontics: An Overview.
- 332 Characterisation of enzyme catalysed hydrolysis stage of poly(lactic acid) fibre surface by nanoscale thermal analysis: New mechanistic insight. **2022**, 110810
- 331 A three million Q factor tuning fork resonator based on a vibration isolation structure. **2022**, 12, 065203

- 330 Modern testing and analyzing techniques in corrosion. **2022**, 429-450
- 329 Introduction. **2022**, 1-22
- 328 Nano-materials in biochemical analysis. **2022**, 255-284
- 327 Introduction to Nanomedicine. **2022**, 1-14
- 326 Understanding the fundamentals of TiO₂ surfaces. Part I. The influence of defect states on the correlation between crystallographic structure, electronic structure and physical properties of single-crystal surfaces. **2022**, 38, 91-149 3
- 325 Imaging technology that enables simultaneous visualization of weak interaction interfaces and cell responses. **2022**, 37, 102-111
- 324 Real-time Tracking of Living Cell Proliferation with Nano Mechanical Biomarkers. **2022**,
- 323 On AFM Measurements of the Interaction Force Vector by Means of Interferometry, Optical Lever, and the Piezoresistive Method. **2022**, 16, 247-253 1
- 322 Anisotropic mechanics of two-dimensional materials. 0
- 321 miR -218 affects the ECM composition and cell biomechanical properties of glioblastoma cells.
- 320 Atomic Force Microscope in Forensic Examination.
- 319 Extending applications of AFM to fluidic AFM in single living cell studies. 1
- 318 Counting Gold: Using Atomic Force Microscopy to Characterize Gold Nanoparticles.
- 317 Development of Defocus Atomic Force Microscope (DeF-AFM). 1-8
- 316 Functionalized Nanocomposites as Corrosion Inhibitors. 141-154
- 315 Zwitterionic Conducting Polymers: From Molecular Design, Surface Modification, and Interfacial Phenomenon to Biomedical Applications. **2022**, 38, 7383-7399 1
- 314 Atomic force microscopy in energetic materials research: A review. **2022**, 1
- 313 Measuring (biological) materials mechanics with atomic force microscopy. 4. Determination of viscoelastic cell properties from stress relaxation experiments. 1

- 312 In-situ imaging techniques for advanced battery development. **2022**, 1
- 311 Wax in Asphalt: A comprehensive literature review. **2022**, 342, 128011 0
- 310 Nanoscale quantitative characterization of microstructure evolution of partly graphitized high rank coal: Evidence from AFM and HRTEM. **2022**, 324, 124802 1
- 309 Toughness and its mechanisms in epoxy resins. **2022**, 130, 100977 7
- 308 Exploring the Microcosm at Atomic Precision Using Atomic Force Microscopy. **2022**, 137-164
- 307 Atomic Force Microscopy: An Advanced Imaging Technique From Molecules to Morphologies. **2022**, 115-136
- 306 Atomic force microscopy probing interactions and microstructures of ionic liquids at solid interfaces. 0
- 305 Scanning Probe Microscopy: Tipping the Path Toward Atomic Visions. **2022**, 83-113
- 304 Nanotechnology and Nanomedicine. **2022**, 325-361 1
- 303 Novel Paradigm in Afm Probe Fabrication: Broadened Range of Stiffness, Materials, and Tip Shapes.
- 302 A fast localization method for discrete interface based on phase information of complex master-slave OCT. **2022**,
- 301 A Beginner's Guide to Different Types of Microscopes. **2022**, 1-23
- 300 Atomic Force Microscope with an Adjustable Probe Direction and Integrated Sensing and Actuation. **2022**, 5, 139-148
- 299 Effects of aging on rheological, chemical, and micromechanical properties of waterborne epoxy resin modified bitumen emulsion. 1-12 1
- 298 Extracellular Matrix Stiffness in Lung Health and Disease. 3523-3558 0
- 297 Approaches to visualize microtubule dynamics in vitro. **2022**, 1, 1-16
- 296 Construction of a vector-field cryogenic magnetic force microscope. **2022**, 93, 063701 0
- 295 Antibody-nanobody combination increases their neutralizing activity against SARS-CoV-2 and nanobody H11-H4 is effective against Alpha, Kappa and Delta variants. **2022**, 12, 1

- 294 Foreword to the special issue on different approaches to force spectroscopy in the research of cell pathologies. **2022**, 103325
- 293 Application of Atomic Force Microscopy as Advanced Asphalt Testing Technology: A Comprehensive Review. **2022**, 14, 2851 1
- 292 Molecule graph reconstruction from atomic force microscope images with machine learning.
- 291 Seeing how ice breaks the rule. **2022**, 377, 264-265 0
- 290 An Update on Sophisticated and Advanced Analytical Tools for Surface Characterization of Nanoparticles. **2022**, 102165 0
- 289 An Inquiry-Based Introduction to Atomic Force Microscopy Techniques through Optical Storage Disc Surface Imaging. 0
- 288 Hidden Markov Modeling of Molecular Orientations and Structures from High-Speed Atomic Force Microscopy Time-Series Images.
- 287 Depth estimation from a single SEM image using pixel-wise fine-tuning with multimodal data. **2022**, 33, 0
- 286 High resolution atomic force microscopy with an active piezoelectric microcantilever. **2022**, 93, 073706
- 285 Protein aggregation rate depends on mechanical stability of fibrillar structure . 1
- 284 Nanoscale physical parameters of source rocks identified by atomic force microscopy: A review.
- 283 Combining AFM, XPS and chemical hydrolysis to understand the complexity and dynamics of *C. vulgaris* cell wall composition and architecture. 0
- 282 Optimized Phase-Retrieval Technique for Coherent Diffractive Microscopy: Guided Ptychography Iterative Engine. **2022**, 14, 1-4
- 281 Molecular area dependences of monolayers at the air/water interface. **2022**, 7, 100057 0
- 280 Nano-scale studies of quantum phenomena by scanning probe spectroscopy. **2000**, 512, 895-904
- 279 Imaging of atomic orbitals with the Atomic Force Microscope [Experiments and simulations. **2001**, 513, 887-910 0
- 278 Foreword to the special issue on different approaches to force spectroscopy in the research of cell pathologies. **2022**, 103329
- 277 A Comprehensive Review for Micro/Nanoscale Thermal Mapping Technology Based on Scanning Thermal Microscopy. **2022**, 31, 976-1007 1

276 Comparative Study of Deep Learning Algorithms for Atomic Force Microscopy Image Denoising. **2022**, 103332

275 Tools shaping drug discovery and development. **2022**, 3, 031301

o

274 Open-source controller for low-cost and high-speed atomic force microscopy imaging of skin corneocyte nanotextures. **2022**, 12, e00341

o

273 List of Tables. **2007**, xxi-xxii

272 . **2007**, 373-376

271 List of Figures. **2007**, xv-xx

270 MONOGRAPHS ON THE PHYSICS AND CHEMISTRY OF MATERIALS. **2007**, ii-ii

269 . **2007**, 377-380

268 Preface to the First Edition. **2007**, xxvii-xxxii

267 Copyright Page. **2007**, iv-iv

266 Gallery. **2007**, xxxiii-lxiv

265 . **2007**, 389-400

264 . **2007**, 381-388

263 Preface to the Second Edition. **2007**, xxiii-xxvi

262 . **2007**, 371-372

261 Dedication. **2007**, v-vi

260 Biological Characterization of Magnetic Hybrid Nanoalloys. **2022**, 1-18

259 The Evolution of Scanning Ion Conductance Microscopy. **2022**,

| | | |
|-----|---|---|
| 258 | Electrostatic Actuation of AFM Cantilevers in Aqueous Solutions. 2022 , | |
| 257 | Microelectronic materials, microfabrication processes, micromechanical structural configuration based stiffness evaluation in MEMS: A review. 2022 , 263, 111854 | 0 |
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| 246 | Optimising correlative super resolution and atomic force microscopies for investigating the cellular cytoskeleton. 2022 , 10, 045005 | 0 |
| 245 | Thin head atomic force microscope for integration with optical microscope. 2022 , 93, 083702 | 0 |
| 244 | Prospects and Challenges of AI and Neural Network Algorithms in MEMS Microcantilever Biosensors. 2022 , 10, 1658 | 1 |
| 243 | Robust Tipless Positioning Device for Near-Field Investigations: Press and Roll Scan (PROscan). 2022 , 16, 12831-12839 | |
| 242 | Applicability of atomic force microscopy to determine cancer-related changes in cells. 2022 , 380, | 0 |
| 241 | Advanced Atomic Force Microscopies and their Applications in Two-Dimensional Materials: A Review. | 0 |

- 240 Evidence for temporary and local transition of sp² graphite-type to sp³ diamond-type bonding induced by the tip of an atomic force microscope. **2022**, 24, 083018 ○
- 239 Emerging machine learning strategies for diminishing measurement uncertainty in SPM nanometrology. ○
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- 237 Interpretable Machine Learning Approach for Identifying the Tip Sharpness in Atomic Force Microscopy. **2022**, 221, 114965 ○
- 236 Gold nanomaterials The golden approach from synthesis to applications. **2022**, ○
- 235 Sub-5 nm AFM Tip Characterizer Based on Multilayer Deposition Technology. **2022**, 9, 665 ○
- 234 A systematic and critical review of asphaltene adsorption from macroscopic to microscopic scale: Theoretical, experimental, statistical, intelligent, and molecular dynamics simulation approaches. **2022**, 329, 125379 ○
- 233 A transversal approach to predict surface charge compensation in piezoelectric force microscopy. **2023**, 607, 154991 1
- 232 Progress of functionalized atomic force microscopy in the study of the properties of nanometric dielectric materials. **2022**, 0 ○
- 231 Identifying and manipulating single atoms with scanning transmission electron microscopy. ○
- 230 Characterisation Techniques. **2022**, 49-79 ○
- 229 In situ characterization of lithium-metal anodes. **2022**, 10, 17917-17947 2
- 228 Crystal habit analysis of LiFePO₄ microparticles by AFM and first-principles calculations. ○
- 227 Introduction and overview. **2022**, 3-24 ○
- 226 Benchmarking in electrocatalysis. **2022**, ○
- 225 Multimodal imaging using combined Optical Fourier Ptychographic Microscopy and Atomic Force Microscopy for biological measures. **2022**, ○
- 224 Imaging of Extracellular Vesicles Derived from Plasmodium falciparum Infected Red Blood Cells Using Atomic Force Microscopy. **2022**, 133-145 1
- 223 High-Speed Atomic Force Microscopy Visualization of Protein-DNA Interactions Using DNA Origami Frames. **2022**, 157-167 ○

| | | |
|-----|--|---|
| 222 | Numerical simulation of deformability cytometry: Transport of a biological cell through a microfluidic channel. 2022 , 33-56 | 0 |
| 221 | Scanning Ion Conductance Microscopy and Atomic Force Microscopy: A Comparison of Strengths and Limitations for Biological Investigations. 2022 , 23-71 | 0 |
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| 214 | Application of atomic force microscopy for food foams and emulsions. 2023 , 189-232 | 0 |
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| 210 | Design and implementation of sequential excitation module for high fidelity piezoresponse force microscopy. 2022 , 93, 083707 | 1 |
| 209 |  2022 12, 1-18 | 0 |
| 208 | Measurement Precision of a Planar Nanopositioning Machine with a Range of Motion of 100 mm. 2022 , 12, 7843 | 0 |
| 207 | Targeting cell-matrix interface mechanobiology by integrating AFM with fluorescence microscopy. 2022 , | 0 |
| 206 | Tracking the Interaction between a CO-Functionalized Probe and Two Ag-Phthalocyanine Conformers by Local Vertical Force Spectroscopy. 2022 , 126, 6890-6897 | 0 |
| 205 | Comparing the performance of single and multifrequency Kelvin probe force microscopy techniques in air and water. 13, 922-943 | 1 |

| | | |
|-----|--|---|
| 204 | Extraction of Chemical Reactivity and Structural Relaxations of an Organic Dye from the Short-Range Interaction with a Molecular Probe. 2022 , 13, 8660-8665 | 2 |
| 203 | Changes in nanomechanical properties of single neuroblastoma cells as a model for oxygen and glucose deprivation (OGD). 2022 , 12, | 0 |
| 202 | Bayesian Active Learning for Scanning Probe Microscopy: From Gaussian Processes to Hypothesis Learning. 2022 , 16, 13492-13512 | 0 |
| 201 | Intercalation Leads to Inverse Layer Dependence of Friction on Chemically Doped MoS ₂ . | 1 |
| 200 | Advances in Atomic Force Microscopy for the Electromechanical Characterization of Piezoelectric and Ferroelectric Nanomaterials. 2022 , 60, 629-643 | 0 |
| 199 | Molecular dynamics analysis of friction-triggering process with spherical probe. 2022 , 10, 035040 | 0 |
| 198 | Self-folding magnetic TiNi Bi-metallic micro-origami. | 0 |
| 197 | Force-Detected Magnetic Resonance Imaging of Influenza Viruses in the Overcoupled Sensor Regime. 2022 , 18, | 0 |
| 196 | Unraveling the Role of Defects in Electrocatalysts for Water Splitting: Recent Advances and Perspectives. 2022 , 36, 11660-11690 | 1 |
| 195 | Mechanical characterization of piezoelectric materials: A perspective on deformation behavior across different microstructural length scales. 2022 , 132, 121103 | 2 |
| 194 | End-to-End Differentiable Blind Tip Reconstruction for Noisy Atomic Force Microscopy Images. | 1 |
| 193 | Scanning probe microscope probe switching unit with electrical measurement for in situ multifunctional characterization: Design and preliminary application in tribocorrosion investigation. 2022 , 132, 105303 | 0 |
| 192 | Advances in assembled micro- and nanoscale mechanical contact probes. 8, | 0 |
| 191 | Structural Peculiarities of Mechanically Deformed HeLa Nuclei Observed by Atomic-Force Microscopy. 2022 , 16, 854-859 | 0 |
| 190 | AFM advanced modes for dental and biomedical applications. 2022 , 136, 105475 | 1 |
| 189 | Biological Characterization of Magnetic Hybrid Nanoalloys. 2022 , 861-878 | 0 |
| 188 | Direct visualization of cooperative adsorption of a string-like molecule onto a solid. 2022 , 8, | 2 |
| 187 | Polarization suppresses local photocurrent in triple-cation mixed-halide perovskite. 2022 , 132, 144102 | 0 |

- 186 Principles and Applications of Liquid-Environment Atomic Force Microscopy. 2201864 ○
- 185 Visualization of G-Quadruplexes, i-Motifs and Their Associates. **2022**, 14, 4-18 ○
- 184 Toward Unifying the Mechanistic Concepts in Electrochemical CO₂ Reduction from an Integrated Material Design and Catalytic Perspective. 2209023 2
- 183 High-Resolution Atomic Force Microscopy Imaging of RNA Molecules in Solution. **2023**, 133-145 ○
- 182 True Atomic-Resolution Surface Imaging and Manipulation under Ambient Conditions via Conductive Atomic Force Microscopy. ○
- 181 Geomorphometric modeling of nanotopography using data from atomic force microscopy. ○
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- 179 Surface Characterization Techniques: A Systematic Review of their Principles, Applications, and Perspectives in Corrosion Studies. ○
- 178 Structure and Dynamics of dsDNA in Cell-like Environments. **2022**, 24, 1587 ○
- 177 The Role of Machine Learning in Tribology: A Systematic Review. ○
- 176 Three-dimensional optical coherence digital-null deformography of multi-refractive-surface optics with nanometer sensitivity. **2022**, 30, 42069 ○
- 175 Coacervation of biopolymers on muscovite surface. 2, ○
- 174 Photo-induced force microscopy applied to electronic devices and biosensors. **2022**, ○
- 173 Gain and noise spectral density in a parametric amplifier with added white noise: Theory and experiment. **2022**, 132, 174902 ○
- 172 Surface-enhanced Raman scattering for biosensing platforms: a review. 1-13 ○
- 171 Preparation and characterization of conductive diamond for a scanning tunneling microscope tip. **2022**, 130, 109473 ○
- 170 Grazing incidence neutron scattering for the study of solid-liquid interfaces. **2023**, ○
- 169 Characterization and RST control of a nonlinear piezoelectric actuator for a robotic hand. **2022**, 55, 375-380 1

- 168 A high-throughput microfluidic device inspired by the Wheatstone bridge principle for characterizing the mechanical properties of single cells. ○
- 167 Urinary exosomes: Diagnostic impact with a bioinformatic approach. **2022**, ○
- 166 Non-contact base excited AFM: Modeling and simulation. **2022**, ○
- 165 Perspectives on weak interactions in complex materials at different length scales. ○
- 164 Fabrication of high aspect ratio atomic force microscope probes using focused ion beam milled etch mask. **2023**, 267-268, 111909 ○
- 163 Influence of Imaging Parameters on AFM Surface Potential Measurements in Aqueous Solutions. **2022**, 1
- 162 Discrete-time Implementation of Adaptive Estimation in the Transverse Dynamic Force Microscope. **2022**, ○
- 161 Chaos prediction in trolling mode atomic force microscopy: analytical approach. ○
- 160 Microsensor for Cancer Detection and MEMS Actuator for Cancer Therapy. ○
- 159 A DNA origami fiducial for accurate 3D AFM imaging. ○
- 158 In Situ Kinetic Observations on Crystal Nucleation and Growth. 8
- 157 Atomic-Scale Friction Study by EC-AFM: Underpotential Deposition (UPD) of Ag on I-Modified Au(111) and Its Tip Penetration. ○
- 156 Advances in the Fabrication and Characterization of Superhydrophobic Surfaces Inspired by the Lotus Leaf. **2022**, 7, 196 ○
- 155 Tip-scan high-speed atomic force microscopy with a uniaxial substrate stretching device for studying dynamics of biomolecules under mechanical stress. **2022**, 93, 113703 ○
- 154 Experimental Techniques. **2023**, 41-89 ○
- 153 A 3D-printed Microcantilever Holder for Atomic Force Microscopes Using a Mounted Microcantilever. ○
- 152 Evaluation of dosimetric characteristics of a ternary nanocomposite based on High Density Polyethylene/Bismuth Oxide/Graphene Oxide for gamma-rays. **2022**, 12, ○
- 151 A Digital Observer-Based Repetitive Learning Composite Control Method for Large Range Piezo-Driven Nanopositioning Systems. **2022**, 10, 1092 ○

- 150 Finite Element Analysis of Squeezed Film Damping on Trapezoidal Microcantilever Resonators at Different Pressure Levels. **2023**, 223-231 ○
- 149 Microstructure study of YBa₂Cu₃O_{7- δ} thin film with Synchrotron-based Three-dimensional Reciprocal Space Mapping. **2023**, 0 ○
- 148 Expression of Tumor Suppressors PTEN and TP53 in Isogenic Glioblastoma U-251MG Cells Affects Cellular Mechanical Properties [An AFM-Based Quantitative Investigation]. **2013**, 1, 011002-011002 ○
- 147 Half-wet nanomechanical sensors for cellular dynamics investigations. **2023**, 144, 213222 ○
- 146 Nano-apertures vs. nano-barriers: Surface scanning through obstacles and super-resolution in AFM-NSOM dual-mode. **2023**, 33, 100933 ○
- 145 Dahl hysteresis modeling and position control of piezoelectric digital manipulator. **2022**, 1-1 ○
- 144 Combining Electrothermal Actuation with Piezoelectric Actuation and Sensing in a Dynamic Mode AFM Microcantilever. **2022**, ○
- 143 Atomic force and infrared spectroscopic studies on the role of surface charge for the anti-biofouling properties of polydopamine films. ○
- 142 Study on Gelatin Biomaterial for Embryonic Stem Cell Culture by Measuring Young's Modulus via Atomic Force Microscopy. **2022**, 31, 171-174 ○
- 141 Visualizing Intramolecular Dynamics of Membrane Proteins. **2022**, 23, 14539 ○
- 140 Cellulose Nanocrystals Examined by Atomic Force Microscopy: Applications and Fundamentals. **2022**, 2, 1789-1818 2
- 139 MEMS-Based Atomic Force Microscope: Nonlinear Dynamics Analysis and Its Control. ○
- 138 Nanomechanical insights into hydrophobic interactions of mineral surfaces in interfacial adsorption, aggregation and flotation processes. **2022**, 140642 ○
- 137 Measurement Science and Technology starts its second century by looking back as well as forward. **2023**, 34, 020101 ○
- 136 Structural Characterization of Defects in the Topological Insulator Bi₂Se₃ at the Picometer Scale. ○
- 135 Hepatoprotective Effect of Millettia dielsiana: In Vitro and In Silico Study. **2022**, 27, 8978 ○
- 134 Single-Molecule Methods for Characterizing Different DNA Higher-Order Structures. **2022**, ○
- 133 Experimental and Numerical Analyses of a Novel Magnetostatic Force Sensor for Defect Inspection in Ferromagnetic Materials. **2022**, 8, 182 ○

| | | |
|-----|---|---|
| 132 | Correlating the Interfacial Polar-Phase Structure to the Local Chemistry in Ferroelectric Polymer Nanocomposites by Combined Scanning Probe Microscopy. 2023 , 15, | 0 |
| 131 | Thermal Treatment Impact on the Mechanical Properties of Mg ₃ Si ₂ O ₅ (OH) ₄ Nanoscrolls. 2022 , 15, 9023 | 1 |
| 130 | Effects of Vitamin E and D on the Stiffness of MCF-7. | 0 |
| 129 | Methods for Surface Imaging and Combined Structural and Chemical Surface Analysis: Atomic Force Microscopy. 2023 , 119-157 | 0 |
| 128 | Frequency-dependent nanomechanical profiling for medical diagnosis. 13, 1483-1489 | 0 |
| 127 | Dual-bias modulation heterodyne Kelvin probe force microscopy in FM mode. 2022 , 121, 241602 | 0 |
| 126 | From Conventional to Microfluidic: Progress in Extracellular Vesicle Separation and Individual Characterization. 2202437 | 0 |
| 125 | Methods for the Visualization of Multispecies Biofilms. 2023 , 35-78 | 0 |
| 124 | The trend of structured light-induced force microscopy: a review. | 0 |
| 123 | The Effects of Cetuximab and Cisplatin Anti-Cancer Drugs on the Mechanical Properties of the Lung Cancerous Cells Using Atomic Force Microscope. | 0 |
| 122 | Study of the Structure and Elastic Properties of Ethylene-Propylene-Diene Elastomers by Atomic Force Microscopy. | 0 |
| 121 | A single-atom mechano-optical transducer for sensing sub-attonewton vector DC force. 2022 , 121, 254002 | 0 |
| 120 | Review: Advanced Atomic Force Microscopy Modes for Biomedical Research. 2022 , 12, 1116 | 1 |
| 119 | Correction of AFM data artifacts using a convolutional neural network trained with synthetically generated data. 2022 , 113666 | 0 |
| 118 | Measurement of Nanometric Heights by Modal Decomposition. 2022 , 18, | 0 |
| 117 | AtomAI framework for deep learning analysis of image and spectroscopy data in electron and scanning probe microscopy. 2022 , 4, 1101-1112 | 2 |
| 116 | Investigation of the Effects of Pulse-Atomic Force Nanolithography Parameters on 2.5D Nanostructures Morphology. 2022 , 12, 4421 | 0 |
| 115 | Force Probe Molecular Dynamics Simulations. 2005 , 493-515 | 6 |

- 114 Measurement and Control System for Atomic Force Microscope Based on Quartz Tuning Fork Self-Induction Probe. **2023**, 14, 227 ○
- 113 Mathematical model for adhesion between particles and rough walls with large RMS roughness. **2023**, 118239 ○
- 112 Regulators, functions, and mechanotransduction pathways of matrix stiffness in hepatic disease. 14, ○
- 111 Determining Spatial Variability of Elastic Properties for Biological Samples Using AFM. **2023**, 14, 182 1
- 110 High-Precision Tribometer for Studies of Adhesive Contacts. **2023**, 23, 456 1
- 109 The Effects of Cetuximab and Cisplatin Anti-Cancer Drugs on the Mechanical Properties of the Lung Cancerous Cells Using Atomic Force Microscope. ○
- 108 3D structure of ring-shaped microtubule swarms revealed by high-speed atomic force microscopy. ○
- 107 The Effects of Cetuximab and Cisplatin Anti-Cancer Drugs on the Mechanical Properties of the Breast Cancerous Cells Using Atomic Force Microscope. ○
- 106 Beyond biology: alternative uses of cantilever-based technologies. ○
- 105 Introduction to Nanomedicine. **2023**, 3-16 ○
- 104 Fabrication and Evaluation of YBa₂Cu₃O₇-IProbe for Scanning Probe Microscopy. **2023**, 1-4 ○
- 103 End-to-end differentiable blind tip reconstruction for noisy atomic force microscopy images. **2023**, 13, ○
- 102 Surface forces apparatus (SFA): instrumentation and current development. **2023**, ○
- 101 Electrochemical scanning probe microscopies for artificial photosynthesis. ○
- 100 Application of atomic force microscopy in conservative dentistry and endodontics - A short review. **2023**, 7, 160-162 ○
- 99 Single-cell extracellular vesicle analysis by microfluidics and beyond. **2023**, 159, 116930 ○
- 98 Optical trapping with holographically structured light for single-cell studies. **2023**, 4, 011302 ○
- 97 Bimodal Atomic Force Microscopy in Liquid Environment for Nanotribology. **2022**, 73, 359-363 ○

| | | |
|----|--|---|
| 96 | A Micro-Robotic Approach for The Correction of Angular Deviations in AFM Samples From Generic Topographic Data. 2022, | o |
| 95 | Low-noise analysis and design for the sensing system of the nanomanipulation robot by AFM. 2022, | o |
| 94 | Atomic Force Microscope Vertical Feedback Control Strategy for Semi-Automated Long-Range Probe Landing. 2022, | o |
| 93 | An AFM Scanning Method with a Rotating Probe and an Adaptive Scanning Speed Strategy. 2022, | o |
| 92 | Development of hidden Markov modeling method for molecular orientations and structure estimation from high-speed atomic force microscopy time-series images. 2022, 18, e1010384 | o |
| 91 | Recent Advances in In Situ/Operando Surface/Interface Characterization Techniques for the Study of Artificial Photosynthesis. 2023, 11, 16 | o |
| 90 | Phosphorylation alters the mechanical stiffness of a model fragment of the dystrophin homologue utrophin. 2022, 102847 | o |
| 89 | Position-Sensitive Measurements of a Single-Mode Laser Beam Spot Using the Dividing Plate Method. 2022, 19, 765-783 | o |
| 88 | High-Yield Characterization of Single Molecule Interactions with DeepTip™ Atomic Force Microscopy Probes. 2023, 28, 226 | o |
| 87 | Ana lisis de membranas polime ricas compuestas por Microscopi a de Fuerza Ato mica. 2018, 1, 18-26 | o |
| 86 | Quantifying stiffness and forces of tumor colonies and embryos using a magnetic microrobot. 2023, 8, | 1 |
| 85 | Instruments. 2023, 635-747 | o |
| 84 | Temperature dependent model for the quasi-static stick-slip process on a soft substrate. | o |
| 83 | DNA Origami Nanostructure Detection and Yield Estimation Using Deep Learning. | o |
| 82 | Bioinspired chiral inorganic nanomaterials. | o |
| 81 | An overview of nanoscale device fabrication technologypart I. 2023, 193-214 | o |
| 80 | Characterization of 2D transition metal dichalcogenides. 2023, 97-139 | o |
| 79 | Deciphering plausible role of DNA nanostructures in drug delivery. 2023, 215-251 | o |

- 78 Circulating Tumor Cells in Cancer Diagnostics and Prognostics by Single-Molecule and Single-Cell Characterization. 2
- 77 Quantum tunneling nanoelectromechanical system devices for biomedical applications. **2023**, 215-241 ○
- 76 Frequency response of cantilevered plates of small aspect ratio immersed in viscous fluids. **2023**, 133, 034501 ○
- 75 Biobased Nanomaterials-The Role of Interfacial Interactions for Advanced Materials. ○
- 74 HighLow Kelvin probe force spectroscopy for measuring the interface state density. 14, 175-189 ○
- 73 Siloxane Molecules: Nonlinear Elastic Behavior and Fracture Characteristics. ○
- 72 The Application of Scanning Microscopies to Optical Materials. **1990**, ○
- 71 The 3D structures of interfaces between solid electrodes and liquid electrolytes probed by atomic force measurements. **2023**, ○
- 70 Atomic force microscopy bending tests of a suspended rod-shaped object: Accounting for object fixing conditions. **2023**, 107, ○
- 69 Probe Microscopy is All You Need. ○
- 68 Advanced in-situ electrochemical scanning probe microscopies in electrocatalysis. **2023**, 47, 93-120 ○
- 67 Examination of Polymer Blends by AFM Phase Images. **2023**, 11, 56 ○
- 66 Recent advances in sensing the inter-biomolecular interactions at the nanoscale –A comprehensive review of AFM-based force spectroscopy. **2023**, 238, 124089 1
- 65 Synthesis, spectroscopic analysis and electrochemical studies of novel organic compound based on N-alkylphthalazinone chemistry as corrosion inhibitor for carbon steel in 1M HCl. **2023**, 18, 100121 ○
- 64 Influence of local chemical environment and external perturbations of porphyrins on surfaces. **2023**, 41, 030801 ○
- 63 Effects of Lactiplantibacillus plantarum fermentation on hydrolysis and immunoreactivity of Siberian apricot (*Prunus sibirica* L.) kernel. **2023**, 53, 102585 ○
- 62 A new insight into the mechanical properties of nanobiofibers and vibrational behavior of atomic force microscope beam considering them as the samples. **2023**, 142, 105842 ○
- 61 Critical analysis of adhesion work measurements from AFM-based techniques for soft contact. **2023**, 642, 216-226 ○

| | | |
|----|---|---|
| 60 | Mechanics of Leukemic T-Cell. | ○ |
| 59 | Application of <i>Saccharomyces cerevisiae</i> yeast in biofuel cells. | ○ |
| 58 | Exploring how lignin structure influences the interaction between carbohydrate-binding module and lignin using AFM. 2023 , 232, 123313 | ○ |
| 57 | Novel paradigm in AFM probe fabrication: Broadened range of stiffness, materials, and tip shapes. 2023 , 180, 108308 | ○ |
| 56 | Experimental Guides for Metallic Materials: 1. Microstructural Observation: 1-9 Other Microstructural Observation Techniques. 2023 , 62, 113-121 | ○ |
| 55 | Biophysical Reviews Issue Focus call: Computational biophysics of atomic force microscopy. 2023 , 15, 17-18 | ○ |
| 54 | The effect of sample viscoelastic properties and cantilever amplitudes on maximum repulsive force, indentation, and energy dissipation in bimodal AFM. 2023 , 98, 035708 | ○ |
| 53 | DNA Origami Fiducial for Accurate 3D Atomic Force Microscopy Imaging. 2023 , 23, 1236-1243 | ○ |
| 52 | Characterization of structures and molecular interactions of RNA and lipid carriers using atomic force microscopy. 2023 , 313, 102855 | ○ |
| 51 | Atomic Force Microscopy Micro-Indentation Methods for Determining the Elastic Modulus of Murine Articular Cartilage. 2023 , 23, 1835 | ○ |
| 50 | Advantages of using nanobiotechnology in enhancing the economic status of the country. 2023 , 369-392 | ○ |
| 49 | Envision and Appraisal of Biomolecules and Their Interactions through Scanning Probe Microscopy. 2200273 | ○ |
| 48 | Fabrication, Characterization, and Design of Facilitated Transport Membranes (FTMs). 2023 , 47-91 | ○ |
| 47 | Synthesis of atomically thin sheets by the intercalation-based exfoliation of layered materials. 2023 , 2, 101-118 | 1 |
| 46 | Measurements of optical tweezers stiffness. 2001 , | ○ |
| 45 | Dynamic morphology imaging of cardiomyocytes based on AFM. 2023 , 34, 245702 | ○ |
| 44 | A review of piezoelectric MEMS sensors and actuators for gas detection application. 2023 , 18, | ○ |
| 43 | Immobilized GPCRs in Drug-Receptor Interaction Analysis. 2023 , 71-82 | ○ |

- 42 Interaction of the fundamental frequencies of a torsional cantilever nanobeam and spring mass system single degree of freedom (SDOF) under axial load, including buckling. **2023**, 5, ○
- 41 Fourier ptychographic topography. **2023**, 31, 11007 ○
- 40 Investigation of Soft Matter Nanomechanics by Atomic Force Microscopy and Optical Tweezers: A Comprehensive Review. **2023**, 13, 963 4
- 39 Visualization of Electrolyte Reaction Field Near the Negative Electrode of a Lead Acid Battery by Means of Amplitude/Frequency Modulation Atomic Force Microscopy. **2023**, 16, 2146 ○
- 38 Optimization of somatic embryogenesis in *Euterpe edulis* Martius using auxin analogs and atomic force microscopy. ○
- 37 A polyelectrolyte handle for single-molecule force spectroscopy. ○
- 36 Molecular Imaging of Isolated *Escherichia coli* DH5 α Peptidoglycan Sacculi Identifies the Mechanism of Action of Cell Wall-Inhibiting Antibiotics. **2023**, 18, 848-860 ○
- 35 Switching Quantum Interference in Single-Molecule Junctions by Mechanical Tuning. ○
- 34 Switching Quantum Interference in Single-Molecule Junctions by Mechanical Tuning. ○
- 33 Accurate Electrostatic Force Measurements by Atomic Force Microscopy Using Proper Distance Control. **2023**, 72, 1-8 ○
- 32 Deformation- and rupture-controlled friction between PDMS and a nanometer-scale SiO_x single-asperity. ○
- 31 Introduction. **2023**, 1-17 ○
- 30 Breakdown of Thin-Film Dielectrics. **2022**, 39-52 ○
- 29 Label-Free Long-Term Methods for Live Cell Imaging of Neurons: New Opportunities. **2023**, 13, 404 ○
- 28 Influence of Surface Chemistry of Fiber and Lignocellulosic Materials on Adhesion Properties with Polybutylene Succinate at Nanoscale. **2023**, 16, 2440 ○
- 27 Artificial-intelligence-assisted mass fabrication of nanocantilevers from randomly positioned single carbon nanotubes. **2023**, 9, ○
- 26 Stiffness Considerations for a MEMS-Based Weighing Cell. **2023**, 23, 3342 ○
- 25 Accelerating the Heat Diffusion: Fast Thermal Relaxation of a Microcantilever. **2023**, 19, ○

- 24 Recent advances in in situ and operando characterization techniques for Li₇La₃Zr₂O₁₂-based solid-state lithium batteries. ○
- 23 Operando Scanning Electrochemical Probe Microscopy during Electrocatalysis. ○
- 22 Ag Thin Films from Pelargonium Zonale Leaves via Green Chemistry. **2023**, 17, 133-140 ○
- 21 Toward the Next Frontiers of Vibrational Bioimaging. ○
- 20 Congenital Defects with Impaired Red Blood Cell Deformability □ The Role of Next-Generation Ektacytometry. ○
- 19 Viscoelastic Properties of Zona Pellucida of Oocytes Characterized by Transient Electrical Impedance Spectroscopy. **2023**, 13, 442 ○
- 18 Nanotechnology and Medicine: The Interphase. **2023**, 1-31 ○
- 17 Synthesis and Ring-Opening Metathesis Polymerization of a Strained trans-Silacycloheptene and Single-Molecule Mechanics of Its Polymer. ○
- 16 Single molecule techniques. **2023**, 101-123 ○
- 15 Bibliography. **2023**, 215-239 ○
- 14 Insights in Cell Biomechanics through Atomic Force Microscopy. **2023**, 16, 2980 ○
- 13 Recent advances in the application of scanning probe microscopy in interfacial electroanalytical chemistry. **2023**, 938, 117443 ○
- 12 Recent advances in the application of atomic force microscopy to structural biology. **2023**, 215, 107963 ○
- 11 Colloidal interactions for a polystyrene particle and a smooth silicon surface: atomic force microscopy, XDLVO theory, and surface element integration.. **2023**, 131315 ○
- 10 Equivalent Electromechanical Model for Quartz Tuning Fork Used in Atomic Force Microscopy. **2023**, 23, 3923 ○
- 9 Recent Developments in Microscale Temperature Measurement Techniques. **2023**, ○
- 8 Combining AFM, XPS and chemical hydrolysis to understand the complexity and dynamics of *C. vulgaris* cell wall composition and architecture. **2023**, 72, 103102 ○
- 7 Progress in the applications of atomic force microscope (AFM) for mineralogical research. **2023**, 103460 ○

- 6 Atomic Force Microscopy and Its Spectroscopic Combinations for Studying Self-Assembled Nanostructures. **2023**, 823-844
- 5 Profilometry and atomic force microscopy for surface characterization. **2023**, 2, e9130017
- 4 Sensor principles and basic designs. **2023**, 17-43
- 3 Radio frequency cantilever-free scanning probe microscopy. **2023**, 133,
- 2 A monolithically integrated microcantilever biosensor based on partially depleted SOI CMOS technology. **2023**, 9,
- 1 Ionic liquids modified CNTs and graphene as additive in vegetable lubricating oil: A route for sustainable tribology. **2023**, 100119