

H Kumar Wickramasinghe

List of Publications by Citations

Source: <https://exaly.com/author-pdf/435935/h-kumar-wickramasinghe-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

118
papers

10,070
citations

40
h-index

100
g-index

122
ext. papers

10,960
ext. citations

5.2
avg, IF

5.93
L-index

#	Paper	IF	Citations
118	Kelvin probe force microscopy. <i>Applied Physics Letters</i> , 1991 , 58, 2921-2923	3.4	1855
117	Atomic force microscope force mapping and profiling on a sub 100-Å scale. <i>Journal of Applied Physics</i> , 1987 , 61, 4723-4729	2.5	1180
116	Magnetic imaging by force microscopy with 1000 Å resolution. <i>Applied Physics Letters</i> , 1987 , 50, 1455-1457	3.4	952
115	High-resolution capacitance measurement and potentiometry by force microscopy. <i>Applied Physics Letters</i> , 1988 , 52, 1103-1105	3.4	612
114	Scanning interferometric apertureless microscopy: optical imaging at 10 angstrom resolution. <i>Science</i> , 1995 , 269, 1083-5	33.3	559
113	Apertureless near-field optical microscope. <i>Applied Physics Letters</i> , 1994 , 65, 1623-1625	3.4	475
112	Scanning thermal profiler. <i>Applied Physics Letters</i> , 1986 , 49, 1587-1589	3.4	330
111	Ultra-high-density phase-change storage and memory. <i>Nature Materials</i> , 2006 , 5, 383-7	27	276
110	Acoustic microscopy with mechanical scanning: A review. <i>Proceedings of the IEEE</i> , 1979 , 67, 1092-1114	14.3	203
109	Strength of the electric field in apertureless near-field optical microscopy. <i>Journal of Applied Physics</i> , 2001 , 89, 5774-5778	2.5	191
108	High-resolution magnetic imaging of domains in TbFe by force microscopy. <i>Applied Physics Letters</i> , 1988 , 52, 244-246	3.4	171
107	Nanoscale chemical imaging by photoinduced force microscopy. <i>Science Advances</i> , 2016 , 2, e1501571	14.3	158
106	Scanning probe microscopy of thermal conductivity and subsurface properties. <i>Applied Physics Letters</i> , 1992 , 61, 168-170	3.4	149
105	Method for imaging sidewalls by atomic force microscopy. <i>Applied Physics Letters</i> , 1994 , 64, 2498-2500	3.4	142
104	Lateral dopant profiling with 200 nm resolution by scanning capacitance microscopy. <i>Applied Physics Letters</i> , 1989 , 55, 1662-1664	3.4	137
103	Scanned-Probe Microscopes. <i>Scientific American</i> , 1989 , 261, 98-105	0.5	122
102	Image force microscopy of molecular resonance: A microscope principle. <i>Applied Physics Letters</i> , 2010 , 97,	3.4	102

101	Phase imaging in reflection with the acoustic microscope. <i>Applied Physics Letters</i> , 1977 , 31, 791-793	3.4	95
100	Microscopy of chemical-potential variations on an atomic scale. <i>Nature</i> , 1990 , 344, 317-319	50.4	91
99	Optical absorption microscopy and spectroscopy with nanometre resolution. <i>Nature</i> , 1989 , 342, 783-785	50.4	88
98	Photoacoustics on a microscopic scale. <i>Applied Physics Letters</i> , 1978 , 33, 923-925	3.4	87
97	Surface investigations with a Kelvin probe force microscope. <i>Ultramicroscopy</i> , 1992 , 42-44, 268-273	3.1	86
96	Linear and Nonlinear Optical Spectroscopy at the Nanoscale with Photoinduced Force Microscopy. <i>Accounts of Chemical Research</i> , 2015 , 48, 2671-9	24.3	84
95	Lateral dopant profiling in semiconductors by force microscopy using capacitive detection. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1991 , 9, 703		80
94	Optical data storage read out at 256 Gbits/in.2. <i>Applied Physics Letters</i> , 1997 , 71, 1-3	3.4	74
93	Gradient and scattering forces in photoinduced force microscopy. <i>Physical Review B</i> , 2014 , 90,	3.3	72
92	Semiconductor characterization by scanning force microscope surface photovoltage microscopy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1991 , 9, 1562		65
91	Scanning probe microscopy: Current status and future trends. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1990 , 8, 363-368	2.9	64
90	Progress in scanning probe microscopy. <i>Acta Materialia</i> , 2000 , 48, 347-358	8.4	60
89	Scattering spectroscopy of molecules at nanometer resolution. <i>Applied Physics Letters</i> , 1996 , 68, 2475-2477	3.7	60
88	Optical ranging by wavelength multiplexed interferometry. <i>Journal of Applied Physics</i> , 1986 , 60, 1900-1903	3	59
87	Raman spectroscopy and microscopy based on mechanical force detection. <i>Applied Physics Letters</i> , 2011 , 99, 161103-1611033	3.4	58
86	Contrast and imaging performance in the scanning acoustic microscope. <i>Journal of Applied Physics</i> , 1979 , 50, 664-672	2.5	57
85	Measurement of in-plane magnetization by force microscopy. <i>Applied Physics Letters</i> , 1988 , 53, 1446-1448	3.4	55
84	Billion-fold increase in tip-enhanced Raman signal. <i>ACS Nano</i> , 2014 , 8, 3421-6	16.7	53

83	Ultrafast pump-probe force microscopy with nanoscale resolution. <i>Applied Physics Letters</i> , 2015 , 106, 083113	3.4	53
82	Thermally assisted recording beyond traditional limits. <i>Applied Physics Letters</i> , 2004 , 84, 810-812	3.4	53
81	Imaging Nanoscale Electromagnetic Near-Field Distributions Using Optical Forces. <i>Scientific Reports</i> , 2015 , 5, 10610	4.9	50
80	Magnetic force microscopy with 25 nm resolution. <i>Applied Physics Letters</i> , 1989 , 55, 2357-2359	3.4	50
79	Scattering matrix approach to thermal wave propagation in layered structures. <i>Journal of Applied Physics</i> , 1985 , 58, 122-131	2.5	50
78	Giant Circular Dichroism at Visible Frequencies Enabled by Plasmonic Ramp-Shaped Nanostructures. <i>ACS Photonics</i> , 2019 , 6, 924-931	6.3	40
77	Scanning differential phase contrast optical microscope: application to surface studies. <i>Applied Optics</i> , 1985 , 24, 2373-9	1.7	35
76	Noise reduction technique for scanning tunneling microscopy. <i>Applied Physics Letters</i> , 1988 , 53, 1503-1505	3.4	34
75	Lateral dopant profiling on a 100 nm scale by scanning capacitance microscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1990 , 8, 895-898	2.9	32
74	Nonlinear photothermal imaging. <i>Applied Physics Letters</i> , 1986 , 48, 218-220	3.4	32
73	Contrast in reflection acoustic microscopy. <i>Electronics Letters</i> , 1978 , 14, 305	1.1	32
72	Absolute optical ranging with 200-nm resolution. <i>Optics Letters</i> , 1989 , 14, 542-4	3	31
71	In situ mRNA isolation from a microfluidic single-cell array using an external AFM nanoprobe. <i>Lab on A Chip</i> , 2017 , 17, 1635-1644	7.2	29
70	Selective probing of mRNA expression levels within a living cell. <i>Applied Physics Letters</i> , 2009 , 95, 83117	3.4	29
69	Atomic force microscopy of work functions on the nanometer scale. <i>Applied Physics Letters</i> , 1999 , 74, 2641-2642	3.4	29
68	Scanning acoustic microscopy: a review. <i>Journal of Microscopy</i> , 1983 , 129, 63-73	1.9	26
67	Toward accurate metrology with scanning force microscopes. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1995 , 13, 2335		25
66	A Fabry-Perot acoustic surface vibration detector - application to acoustic holography. <i>Journal Physics D: Applied Physics</i> , 1973 , 6, 677-687	3	25

65	Near-field nanoprobng using Si tip-Au nanoparticle photoinduced force microscopy with 120:1 signal-to-noise ratio, sub-6-nm resolution. <i>Optics Express</i> , 2018 , 26, 26365-26376	3.3	23
64	Confocal surface acoustic wave microscopy. <i>Applied Physics Letters</i> , 1983 , 42, 411-413	3.4	22
63	Sharply Focused Azimuthally Polarized Beams with Magnetic Dominance: Near-Field Characterization at Nanoscale by Photoinduced Force Microscopy. <i>ACS Photonics</i> , 2018 , 5, 390-397	6.3	20
62	Localized electroporation and molecular delivery into single living cells by atomic force microscopy. <i>Applied Physics Letters</i> , 2008 , 93, 153111	3.4	19
61	Contrast and imaging performance in photo induced force microscopy. <i>Optics Express</i> , 2017 , 25, 26923-26938	6.3	18
60	Exclusive Magnetic Excitation Enabled by Structured Light Illumination in a Nanoscale Mie Resonator. <i>ACS Nano</i> , 2018 , 12, 12159-12168	16.7	18
59	Ultrafast molecule sorting and delivery by atomic force microscopy. <i>Applied Physics Letters</i> , 2006 , 88, 183105	3.4	17
58	Optical absorption spectroscopy by scanning force microscopy. <i>Ultramicroscopy</i> , 1992 , 42-44, 351-354	3.1	17
57	Phase imaging with the scanning acoustic microscope. <i>Electronics Letters</i> , 1976 , 12, 637	1.1	17
56	SAW attenuation measurement in the acoustic microscope. <i>Electronics Letters</i> , 1982 , 18, 955	1.1	16
55	Acoustic microscopy in gases. <i>Electronics Letters</i> , 1980 , 16, 9	1.1	16
54	Photoinduced magnetic force between nanostructures. <i>Physical Review B</i> , 2015 , 92,	3.3	15
53	Photothermal Imaging with Sub-100-nm Spatial Resolution. <i>Springer Series in Optical Sciences</i> , 1988 , 364-369	3.69	15
52	Differential phase contrast optical microscope with 1 A -depth resolution. <i>Electronics Letters</i> , 1982 , 18, 973	1.1	14
51	Resolution test for apertureless near-field optical microscopy. <i>Journal of Applied Physics</i> , 2002 , 91, 3363-3368	3.68	13
50	Scanning chemical potential microscope: A new technique for atomic scale surface investigation. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1991 , 9, 537		13
49	Thermodisplacement imaging of current in thin-film circuits. <i>Electronics Letters</i> , 1982 , 18, 700	1.1	13
48	Acoustic microscopy of the human retina and pigment epithelium. <i>Investigative Ophthalmology and Visual Science</i> , 1977 , 16, 660-6		13

47	Unscrambling Structured Chirality with Structured Light at the Nanoscale Using Photoinduced Force. <i>ACS Photonics</i> , 2018 , 5, 4360-4370	6.3	13
46	Targeted messenger RNA profiling of transfected breast cancer gene in a living cell. <i>Analytical Biochemistry</i> , 2011 , 408, 342-4	3.1	12
45	Nonlinear imaging of an edge in the scanning acoustic microscope. <i>Journal of Applied Physics</i> , 1977 , 48, 4951-4954	2.5	11
44	Coaxial atomic force microscope probes for dielectrophoresis of DNA under different buffer conditions. <i>Applied Physics Letters</i> , 2017 , 110, 073701	3.4	10
43	Study of dynamic current distribution in logic circuits by Joule displacement microscopy. <i>Applied Physics Letters</i> , 1987 , 50, 167-168	3.4	10
42	Nanoscale quantitative stress mapping with atomic force microscopy. <i>Applied Physics Letters</i> , 2007 , 90, 113111	3.4	9
41	Image enhancement in the scanning acoustic microscope using analogue filters. <i>Electronics Letters</i> , 1977 , 13, 776	1.1	9
40	Stimulated Raman spectroscopy and nanoscopy of molecules using near field photon induced forces without resonant electronic enhancement gain. <i>Applied Physics Letters</i> , 2016 , 108, 233107	3.4	9
39	Measurement of laterally induced optical forces at the nanoscale. <i>Applied Physics Letters</i> , 2017 , 110, 063103	3.4	8
38	Differential Laser Heterodyne Micrometrology. <i>Optical Engineering</i> , 1985 , 24, 926	1.1	8
37	Mechanically scanned B-scan system for acoustic microscopy of solids. <i>Applied Physics Letters</i> , 1981 , 39, 305-307	3.4	8
36	Integrated Electrowetting Nanoinjector for Single Cell Transfection. <i>Scientific Reports</i> , 2016 , 6, 29051	4.9	8
35	Differential scanning tunnelling microscopy. <i>Journal of Microscopy</i> , 1988 , 152, 599-604	1.9	7
34	Observation of nanoscale opto-mechanical molecular damping as the origin of spectroscopic contrast in photo induced force microscopy. <i>Nature Communications</i> , 2020 , 11, 5691	17.4	7
33	Measurement of trench depth by infrared interferometry. <i>Optics Letters</i> , 1999 , 24, 1702-4	3	6
32	Detection of high- and low-frequency vibrations using a feedback- stabilized differential fiber optic interferometer. <i>Optical Engineering</i> , 1993 , 32, 1879	1.1	6
31	Attractive mode force microscopy using a feedback-controlled fiber interferometer. <i>Review of Scientific Instruments</i> , 1992 , 63, 5373-5376	1.7	6
30	Acoustic microscopy: present and future. <i>IEE Proceedings A: Physical Science Measurement and Instrumentation Management and Education Reviews</i> , 1984 , 131, 282		6

29	High-resolution force microscopy of in-plane magnetization. <i>Journal of Microscopy</i> , 1988 , 152, 863-869	1.9	5
28	OPTICAL HETERODYNE TECHNIQUES FOR PHOTOACOUSTIC AND PHOTOTHERMAL DETECTION. <i>Journal De Physique Colloque</i> , 1983 , 44, C6-191-C6-196		5
27	In pursuit of photo-induced magnetic and chiral microscopy. <i>EPJ Applied Metamaterials</i> , 2018 , 5, 7	0.8	5
26	Scanned Probes Old and New. <i>AIP Conference Proceedings</i> , 1991 ,	0	4
25	Acoustic-jet plating of gold and copper at 7.5 MHz. <i>Applied Physics Letters</i> , 1987 , 50, 383-385	3.4	4
24	Differential phase contrast in the acoustic microscope. <i>Electronics Letters</i> , 1982 , 18, 92	1.1	4
23	Recent developments in scanning acoustic microscopy. <i>Radio and Electronic Engineer</i> , 1982 , 52, 479		4
22	Simultaneous scanning optical and acoustic microscopy. <i>Electronics Letters</i> , 1983 , 19, 159	1.1	3
21	Detecting stimulated Raman responses of molecules in plasmonic gap using photon induced forces. <i>Optics Express</i> , 2018 , 26, 31439-31453	3.3	3
20	Related Scanning Techniques. <i>Springer Series in Surface Sciences</i> , 1992 , 209-231	0.4	3
19	Protein fishing from single live cells. <i>Journal of Nanobiotechnology</i> , 2018 , 16, 67	9.4	3
18	Unveiling magnetic and chiral nanoscale properties using structured light and nanoantennas 2017 ,		2
17	Thermal proximity imaging of hard-disk substrates. <i>IEEE Transactions on Magnetics</i> , 2000 , 36, 3997-4004	2	2
16	High-resolution magnetic imaging by force microscopy (invited) (abstract). <i>Journal of Applied Physics</i> , 1988 , 63, 2948-2948	2.5	2
15	Dichromatic Differential Phase Contrast Microscopy. <i>IEEE Transactions on Sonics and Ultrasonics</i> , 1982 , 29, 321-326		2
14	Acoustic microscopy in biophysics. <i>Advances in Biological and Medical Physics</i> , 1980 , 17, 325-64		2
13	High Frequency Acoustic Holography in Solids 1974 , 121-132		2
12	Photo-induced force vs power in chiral scatterers 2017 ,		1

11	Experimental and Theoretical Study of the New Image Force Microscopy Principle (Invited Paper). <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1318, 1		1
10	Force microscopy with actively stabilized differential fiber detection mechanism. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993 , 11, 758-762	2.9	1
9	EXTENSIONS OF STM 1993 , 77-94		1
8	Scanning Interferometric Apertureless Microscopy at 10 Angstrom Resoultion 1996 , 131-141		1
7	NDE of Solids with a Mechanically BScanned Acoustic Microscope. <i>Acoustical Imaging</i> , 1982 , 113-123		0
6	3. Extensions of STM. <i>Methods in Experimental Physics</i> , 1993 , 77-94		
5	Recent progress in scanning acoustic microscopy. <i>Physics in Technology</i> , 1981 , 12, 111-113		
4	Background subtraction in surface-wave holography. <i>Electronics Letters</i> , 1975 , 11, 526		1.1
3	High-resolution force microscopy of in-plane magnetization. <i>Perspectives in Condensed Matter Physics</i> , 1988 , 219-225		
2	Related Scanning Techniques. <i>Springer Series in Surface Sciences</i> , 1995 , 209-231		0.4
1	Tunneling based ten attomolar DNA biosensor. <i>AIP Advances</i> , 2021 , 11, 065226		1.5