

# Heiko Wolf

## List of Publications by Year in descending order

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67  
papers

5,549  
citations

94269

37  
h-index

133063

59  
g-index

67  
all docs

67  
docs citations

67  
times ranked

5688  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal Scanning Probe Lithography (t-SPL) for Nano-Fabrication. , 2019, , .		2
2	Programmable Assembly of Hybrid Nanoclusters. Langmuir, 2018, 34, 2481-2488.	1.6	33
3	Capillary assembly as a tool for the heterogeneous integration of micro- and nanoscale objects. Soft Matter, 2018, 14, 2978-2995.	1.2	77
4	Explaining the Transition from Diffusion Limited to Reaction Limited Surface Assembly of Molecular Species through Spatial Variations. Langmuir, 2018, 34, 73-80.	1.6	11
5	Conversion of a Patterned Organic Resist into a High Performance Inorganic Hard Mask for High Resolution Pattern Transfer. ACS Nano, 2018, 12, 11152-11160.	7.3	16
6	Hybrid colloidal microswimmers through sequential capillary assembly. Soft Matter, 2017, 13, 4252-4259.	1.2	52
7	Enhanced Second-Harmonic Generation from Sequential Capillarity-Assisted Particle Assembly of Hybrid Nanodimers. Nano Letters, 2017, 17, 5381-5388.	4.5	70
8	Testing the Equivalence between Spatial Averaging and Temporal Averaging in Highly Dilute Solutions. Langmuir, 2017, 33, 14539-14547.	1.6	3
9	Sub-10 Nanometer Feature Size in Silicon Using Thermal Scanning Probe Lithography. ACS Nano, 2017, 11, 11890-11897.	7.3	76
10	Hybrid Colloids Produced by Sequential Capillarity-assisted Particle Assembly: A New Path for Complex Microparticles. Chimia, 2017, 71, 349.	0.3	2
11	Understanding How Charged Nanoparticles Electrostatically Assemble and Distribute in 1-D. Langmuir, 2016, 32, 13600-13610.	1.6	9
12	Programmable colloidal molecules from sequential capillarity-assisted particle assembly. Science Advances, 2016, 2, e1501779.	4.7	109
13	Accurate Location and Manipulation of Nanoscaled Objects Buried under Spin-Coated Films. ACS Nano, 2015, 9, 6188-6195.	7.3	24
14	Capillary assembly of cross-gradient particle arrays using a microfluidic chip. Microelectronic Engineering, 2015, 141, 12-16.	1.1	9
15	Sub-20nm silicon patterning and metal lift-off using thermal scanning probe lithography. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2015, 33, .	0.6	40
16	Insights into mechanisms of capillary assembly. Faraday Discussions, 2015, 181, 225-242.	1.6	60
17	Thermal probe nanolithography for novel photonic devices. , 2015, , .		1
18	Cascaded Assembly of Complex Multiparticle Patterns. Langmuir, 2014, 30, 90-95.	1.6	30

#	ARTICLE	IF	CITATIONS
19	Enhanced Electrical and Thermal Interconnects by the Self-Assembly of Nanoparticle Necks Utilizing Capillary Bridging. Journal of Electronic Packaging, Transactions of the ASME, 2014, 136, .	1.2	6
20	Deterministic assembly of linear gold nanorod chains as a platform for nanoscale applications. Nanoscale, 2013, 5, 8680.	2.8	36
21	Enhanced Electrical and Thermal Interconnects by the Self-Assembly of Nanoparticle Necks Utilizing Capillary Bridging. , 2013, , .		1
22	Note: A microfluidic chip setup for capillarity-assisted particle assembly. Review of Scientific Instruments, 2012, 83, 086109.	0.6	9
23	Enhanced centrifugal percolating thermal underfills based on neck formation by capillary bridging. , 2012, , .		8
24	Directed self-assembly of nanoparticles for novel electrical interconnects. , 2012, , .		1
25	Oriented Assembly of Gold Nanorods on the Single Particle Level. Advanced Functional Materials, 2012, 22, 702-708.	7.8	140
26	Formulation of Percolating Thermal Underfills Using Hierarchical Self-Assembly of Microparticles and Nanoparticles by Centrifugal Forces and Capillary Bridging. Journal of Microelectronics and Electronic Packaging, 2012, 9, 149-159.	0.8	21
27	Precise Placement of Gold Nanorods by Capillary Assembly. Langmuir, 2011, 27, 6305-6310.	1.6	54
28	Directed Placement of Gold Nanorods Using a Removable Template for Guided Assembly. Nano Letters, 2011, 11, 3957-3962.	4.5	72
29	High-grade optical polydimethylsiloxane for microfluidic applications. Biomedical Microdevices, 2011, 13, 1027-1032.	1.4	9
30	Direct write 3-dimensional nanopatterning using probes. , 2010, , .		1
31	Selective Assembly of Sub Micrometer Polymer Particles. Advanced Materials, 2010, 22, 2804-2808.	11.1	16
32	Nanoscale Three-Dimensional Patterning of Molecular Resists by Scanning Probes. Science, 2010, 328, 732-735.	6.0	304
33	Precision Patterning with Luminescent Nanocrystal-Functionalized Beads. Langmuir, 2010, 26, 14294-14300.	1.6	11
34	Templated Self-Assembly of Particles. , 2010, , 187-210.		6
35	Matrix effects on the surface plasmon resonance of dry supported gold nanocrystals. Optics Letters, 2008, 33, 806.	1.7	4
36	An in Situ Study of the Adsorption Behavior of Functionalized Particles on Self-Assembled Monolayers via Different Chemical Interactions. Langmuir, 2007, 23, 9990-9999.	1.6	39

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37	Controlled Particle Placement through Convective and Capillary Assembly. <i>Langmuir</i> , 2007, 23, 11513-11521.	1.6	332
38	Nanoparticle printing with single-particle resolution. <i>Nature Nanotechnology</i> , 2007, 2, 570-576.	15.6	410
39	High-Speed Microcontact Printing. <i>Journal of the American Chemical Society</i> , 2006, 128, 9296-9297.	6.6	38
40	Closing the Gap Between Self-Assembly and Microsystems Using Self-Assembly, Transfer, and Integration of Particles. <i>Advanced Materials</i> , 2005, 17, 2438-2442.	11.1	73
41	Diffusion of Alkanethiols in PDMS and Its Implications on Microcontact Printing ( $\frac{1}{4}$ CP). <i>Langmuir</i> , 2005, 21, 622-632.	1.6	61
42	Printing Chemical Gradients. <i>Langmuir</i> , 2005, 21, 7796-7804.	1.6	85
43	Thermal stability of SrRuO <sub>3</sub> epitaxial layers under forming-gas anneal. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 109, 113-116.	1.7	14
44	Preparation of Metallic Films on Elastomeric Stamps and Their Application for Contact Processing and Contact Printing. <i>Advanced Functional Materials</i> , 2003, 13, 145-153.	7.8	141
45	Fabrication of Metal Nanowires Using Microcontact Printing. <i>Langmuir</i> , 2003, 19, 6301-6311.	1.6	126
46	Electroless Deposition of NiB on 15 Inch Glass Substrates for the Fabrication of Transistor Gates for Liquid Crystal Displays. <i>Langmuir</i> , 2003, 19, 5923-5935.	1.6	38
47	Microcontact Printing Using Poly(dimethylsiloxane) Stamps Hydrophilized by Poly(ethylene oxide) Silanes. <i>Langmuir</i> , 2003, 19, 8749-8758.	1.6	150
48	Positive Microcontact Printing. <i>Journal of the American Chemical Society</i> , 2002, 124, 3834-3835.	6.6	62
49	Autonomous Microfluidic Capillary System. <i>Analytical Chemistry</i> , 2002, 74, 6139-6144.	3.2	372
50	Printing meets lithography: Soft approaches to high-resolution patterning. <i>IBM Journal of Research and Development</i> , 2001, 45, 697-719.	3.2	450
51	Photoswitching of Azobenzene Derivatives Formed on Planar and Colloidal Gold Surfaces. <i>Langmuir</i> , 1998, 14, 6436-6440.	1.6	203
52	Two-Dimensional Structure of Disulfides and Thiols on Gold(111). <i>Langmuir</i> , 1998, 14, 808-815.	1.6	71
53	Immobilization of Antibodies on a Photoactive Self-Assembled Monolayer on Gold. <i>Langmuir</i> , 1996, 12, 1997-2006.	1.6	158
54	Self-Assembled Monolayers of Discotic Liquid Crystalline Thioethers, Discoid Disulfides, and Thiols on Gold: A Molecular Engineering of Ordered Surfaces. <i>Journal of the American Chemical Society</i> , 1996, 118, 13051-13057.	6.6	83

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55	Structure of Alkyl and Perfluoroalkyl Disulfide and Azobenzenethiol Monolayers on Gold(111) Revealed by Atomic Force Microscopy. The Journal of Physical Chemistry, 1996, 100, 2290-2301.	2.9	99
56	Recognition of Individual Tail Groups in Self-Assembled Monolayers. Langmuir, 1995, 11, 3876-3881.	1.6	99
57	End-Group-Dominated Molecular Order in Self-Assembled Monolayers. The Journal of Physical Chemistry, 1995, 99, 7102-7107.	2.9	140
58	Domain and Molecular Superlattice Structure of Dodecanethiol Self-Assembled on Au(111). Europhysics Letters, 1994, 27, 365-370.	0.7	86
59	Self-Assembled Disulfide-Functionalized Amphiphilic Copolymers on Gold. Langmuir, 1994, 10, 1246-1250.	1.6	74
60	Real-Space Observation of Nanoscale Molecular Domains in Self-Assembled Monolayers. Langmuir, 1994, 10, 2869-2871.	1.6	262
61	Self-Assembled Monolayers containing Polydiacetylenes. Journal of the American Chemical Society, 1994, 116, 1050-1053.	6.6	172
62	Structure of Hydrophilic Self-Assembled Monolayers: A Combined Scanning Tunneling Microscopy and Computer Simulation Study. Langmuir, 1994, 10, 4116-4130.	1.6	128
63	Deformation-Free Topography from Combined Scanning Force and Tunnelling Experiments. Europhysics Letters, 1993, 23, 421-426.	0.7	20
64	Scanning surface harmonic microscopy of self-assembled monolayers on gold. Applied Physics Letters, 1993, 63, 147-149.	1.5	18
65	Polymer-supported bilayer on a solid substrate. Biophysical Journal, 1992, 63, 1667-1671.	0.2	198
66	PH-Responsive release of fluorophore from homocysteine-carrying polymerized liposomes. Macromolecules, 1990, 23, 1958-1961.	2.2	24
67	Etch transfer into silicon of patterns with a half-pitch of under 20nm. SPIE Newsroom, 0, , .	0.1	0