Arie van Houselt

List of Publications by Year
in descending order

110 papers	3,657 citations	172457 29 h-index	138484 58 g-index
112 all docs	112 docs citations	112 times ranked	4022 citing authors

#	Article	IF	Citations
1	A Self-Aligned Wafer-Scale Gate-All-Around Aperture Definition Method for Silicon Nanostructures. , 2022, , .		1
2	Transition in the growth mode of plasmonic bubbles in binary liquids. Soft Matter, 2022, 18, 4136-4145.	2.7	1
3	Droplet dissolution driven by emerging thermal gradients and Marangoni flow. Physical Review Fluids, 2022, 7, .	2.5	0
4	Microscopic Study of the Spinodal Decomposition of Supported Eutectic Droplets During Cooling: PtGe/Ge{110}. Journal of Physical Chemistry C, 2022, 126, 11285-11297.	3.1	2
5	Determination of the Fermi velocity of graphene on MoS2 using dual mode scanning tunneling spectroscopy. Applied Physics Letters, 2021, 118, 163103.	3.3	6
6	Confined Friedel oscillations on Au(111) terraces probed by thermovoltage scanning tunneling microscopy. Physical Review B, 2021, 103, .	3.2	3
7	Dual modulation STM: Simultaneous high-resolution mapping of the differential conductivity and local tunnel barrier height demonstrated on Au(111). Journal of Applied Physics, 2021, 129, 225301.	2.5	0
8	Non-conventional bell-shaped diffuse scattering in low-energy electron diffraction from high-quality epitaxial 2D-materials. Applied Physics Letters, 2021, 118, .	3.3	5
9	Periodic bouncing of a plasmonic bubble in a binary liquid by competing solutal and thermal Marangoni forces. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	15
10	Containerless metal single-crystal growth via electromagnetic levitation. Review of Scientific Instruments, 2021, 92, 105105.	1.3	2
11	Detailed characterization of supported eutectic droplets using photoemission electron microscopy. Physical Review Materials, 2021, 5, .	2.4	4
12	3D modeling of electromagnetic levitation coils. Current Applied Physics, 2021, 32, 45-49.	2.4	7
13	Shining new light on the motion of eutectic droplets across surfaces: A PEEM study of PtGe on Ge(110). Physical Review Materials, 2021, 5, .	2.4	3
14	On the mystery of the absence of a spin-orbit gap in scanning tunneling microscopy spectra of germanene. Journal of Semiconductors, 2020, 41, 082003.	3.7	5
15	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mtext>Germanium</mml:mtext><mml:mo>/</mml:mo><mml:msub><mml:m : Competition between the growth of germanene and intercalation. Physical Review B, 2020, 102, .	3.2	9
16	Structural Stability of Physisorbed Air-Oxidized Decanethiols on Au(111). Journal of Physical Chemistry C, 2020, 124, 11977-11984.	3.1	9
17	Hansen solubility parameters obtained via molecular dynamics simulations as a route to predict siloxane surfactant adsorption. Journal of Colloid and Interface Science, 2020, 575, 326-336.	9.4	14
18	Image potential states of germanene. 2D Materials, 2020, 7, 035021.	4.4	25

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19	Marangoni puffs: dramatically enhanced dissolution of droplets with an entrapped bubble. Soft Matter, 2020, 16, 4520-4527.	2.7	4
20	Evaporation of Dilute Sodium Dodecyl Sulfate Droplets on a Hydrophobic Substrate. Langmuir, 2019, 35, 10453-10460.	3.5	17
21	Stoichiometric edges during the intrinsic growth of hexagonal boron nitride on Ir(111). New Journal of Physics, 2019, 21, 092001.	2.9	5
22	Tuning the Friction of Graphene on Mica by Alcohol Intercalation. Langmuir, 2019, 35, 4886-4892.	3.5	10
23	Polar edges and their consequences for the structure and shape of hBN islands. 2D Materials, 2019, 6, 035010.	4.4	7
24	Quantum size stabilization of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ge</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> nanofilms on Ge(001). Physical Review Materials, 2019, 3, .	2.3	2
25	Bandgap opening in hydrogenated germanene. Applied Physics Letters, 2018, 112, .	3.3	26
26	Local Conduction in Mo_xW_{1â€“x}Se₂: The Role of Stacking Faults, Defects, and Alloying. ACS Applied Materials & Interfaces, 2018, 10, 13218-13225.	8.0	24
27	Ordering of Air-Oxidized Decanethiols on Au(111). Journal of Physical Chemistry C, 2018, 122, 8430-8436.	3.1	12
28	Ge2Pt hut clusters: A substrate for germanene. Journal of Applied Physics, 2018, 124, .	2.5	12
29	Critical vacancy density for melting in two-dimensions: the case of high density Bi on Cu(111). New Journal of Physics, 2018, 20, 083045.	2.9	0
30	Combined I(V) and dI(V)/dz scanning tunneling spectroscopy. AIP Advances, 2018, 8, 075013.	1.3	5
31	Graphene Visualizes the Ion Distribution on Air-Cleaved Mica. Scientific Reports, 2017, 7, 43451.	3.3	30
32	Ordinary and supernumerary resonant scattering of low energy electrons from the BiCu2(111) surface alloy. New Journal of Physics, 2017, 19, 013024.	2.9	2
33	Segregation in dissolving binary-component sessile droplets. Journal of Fluid Mechanics, 2017, 812, 349-369.	3.4	15
34	Charge Induced Dynamics of Water in a Grapheneâ€“Mica Slit Pore. Langmuir, 2017, 33, 11977-11985.	3.5	15
35	Pressure-Induced Melting of Confined Ice. ACS Nano, 2017, 11, 12723-12731.	14.6	38
36	Spatially resolved electronic structure of twisted graphene. Physical Review B, 2017, 95, .	3.2	5

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37	Chemical vapor deposition growth of bilayer graphene in between molybdenum disulfide sheets. Journal of Colloid and Interface Science, 2017, 505, 776-782.	9.4	8
38	Intercalation of Si between MoS₂ layers. Beilstein Journal of Nanotechnology, 2017, 8, 1952-1960.	2.8	27
39	Determining the energetics of vicinal perovskite oxide surfaces. AIP Advances, 2017, 7, 055302.	1.3	1
40	Self-organizing atom chains. , 2017, , .		0
41	Scanning tunneling spectroscopy study of the Dirac spectrum of germanene. Journal of Physics Condensed Matter, 2016, 28, 284006.	1.8	16
42	Structural and electronic properties of Pt induced nanowires on Ge(110). Applied Surface Science, 2016, 387, 766-770.	6.1	6
43	Growth of silicon on tungsten diselenide. Applied Physics Letters, 2016, 109, 243105.	3.3	7
44	A method to measure the thermovoltage with a high spatial resolution. Applied Physics Letters, 2016, 108, .	3.3	4
45	Coarsening dynamics of ice crystals intercalated between graphene and supporting mica. Applied Physics Letters, 2016, 108, .	3.3	17
46	Role of natural convection in the dissolution of sessile droplets. Journal of Fluid Mechanics, 2016, 794, 45-67.	3.4	46
47	Structural and Electronic Properties of Germanene on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2016, 116, 256804.	7.8	329
48	Hydrophobic Ice Confined between Graphene and MoS₂. Journal of Physical Chemistry C, 2016, 120, 27079-27084.	3.1	71
49	Structure and Dynamics of Confined Alcoholâ€“Water Mixtures. ACS Nano, 2016, 10, 6762-6768.	14.6	36
50	Visualization of steps and surface reconstructions in Helium Ion Microscopy with atomic precision. Ultramicroscopy, 2016, 162, 17-24.	1.9	9
51	Electrochemically Induced Nanobubbles between Graphene and Mica. Langmuir, 2016, 32, 6582-6590.	3.5	17
52	Latent heat induced rotation limited aggregation in 2D ice nanocrystals. Journal of Chemical Physics, 2015, 143, 034702.	3.0	30
53	Dynamics of copper-phthalocyanine molecules on Au/Ge(001). Journal of Chemical Physics, 2015, 143, 134303.	3.0	8
54	Closed-loop conductance scanning tunneling spectroscopy: demonstrating the equivalence to the open-loop alternative. Beilstein Journal of Nanotechnology, 2015, 6, 1116-1124.	2.8	2

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55	A new ATR-IR microreactor to study electric field-driven processes. Sensors and Actuators B: Chemical, 2015, 220, 13-21.	7.8	14
56	CO Adsorption on Pt Nanoparticles in Low E-Fields Studied by ATR-IR Spectroscopy in a Microreactor. Journal of Physical Chemistry C, 2015, 119, 24887-24894.	3.1	8
57	Mixed mode of dissolving immersed nanodroplets at a solidâ€“water interface. Soft Matter, 2015, 11, 1889-1900.	2.7	65
58	Evaporative gold nanorod assembly on chemically stripe-patterned gradient surfaces. Journal of Colloid and Interface Science, 2015, 449, 261-269.	9.4	11
59	Two-dimensional Dirac signature of germanene. Applied Physics Letters, 2015, 107, .	3.3	67
60	Germanene: the germanium analogue of graphene. Journal of Physics Condensed Matter, 2015, 27, 443002.	1.8	304
61	Germanene termination of Ge₂Pt crystals on Ge(110). Journal of Physics Condensed Matter, 2014, 26, 442001.	1.8	145
62	Spinodal decomposition driven formation of Pt-nanowires on Ge(001). New Journal of Physics, 2014, 16, 113052.	2.9	6
63	The Leidenfrost temperature increase for impacting droplets on carbon-nanofiber surfaces. Soft Matter, 2014, 10, 2102-2109.	2.7	78
64	Transition voltage spectroscopy of scanning tunneling microscopy vacuum junctions. RSC Advances, 2014, 4, 32438.	3.6	17
65	Research Update: Molecular electronics: The single-molecule switch and transistor. APL Materials, 2014, 2, 010701.	5.1	32
66	One-step sculpting of silicon microstructures from pillars to needles for water and oil repelling surfaces. Journal of Micromechanics and Microengineering, 2013, 23, 025004.	2.6	18
67	Temperature Dependence of the 1727 cm^{â€“1} Interstitial Oxygen Absorption Band Studied by Attenuated Total Internal Reflection Infrared Spectroscopy in a Newly Developed Microreactor. Journal of Physical Chemistry C, 2013, 117, 21936-21942.	3.1	9
68	Physics in one dimension. Journal of Physics Condensed Matter, 2013, 25, 010301.	1.8	2
69	Evidence of wettability variation on carbon nanofiber layers grown on oxidized silicon substrates. Chemical Engineering Journal, 2013, 227, 56-65.	12.7	6
70	Droplet impact on superheated micro-structured surfaces. Soft Matter, 2013, 9, 3272.	2.7	216
71	Dynamics of Decanethiol Self-Assembled Monolayers on Au(111) Studied by Time-Resolved Scanning Tunneling Microscopy. Langmuir, 2013, 29, 2250-2257.	3.5	25
72	Interfering Bloch waves in a 1D electron system. Journal of Physics Condensed Matter, 2013, 25, 014014.	1.8	4

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73	Decoupling of the copper core in a single copperphthalocyanine molecule. Journal of Chemical Physics, 2013, 138, 114302.	3.0	3
74	Manipulating transport through a single-molecule junction. Journal of Chemical Physics, 2013, 139, 214709.	3.0	13
75	Dynamics of the wetting-induced nanowire reconstruction of Au/Ge(001). Physical Review B, 2013, 88, .	3.2	15
76	Determining the local density of states in the constant current STM mode. Physical Review B, 2013, 88, .	3.2	14
77	Local probing of coupled interfaces between two-dimensional electron and hole gases in oxide heterostructures by variable-temperature scanning tunneling spectroscopy. Physical Review B, 2012, 86, .	3.2	13
78	Building microscopic soccer balls with evaporating colloidal fakir drops. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16455-16458.	7.1	113
79	Absence of an evaporation-driven wetting transition on omniphobic surfaces. Soft Matter, 2012, 8, 9765.	2.7	43
80	How water droplets evaporate on a superhydrophobic substrate. Physical Review E, 2011, 83, 026306.	2.1	159
81	Molecular Bridges. Journal of Physical Chemistry C, 2011, 115, 2268-2272.	3.1	14
82	Embedded Co islands on Ge(001). Surface Science, 2011, 605, 1129-1132.	1.9	8
83	Publisherâ€™s Note: How water droplets evaporate on a superhydrophobic substrate [Phys. Rev. E83, 026306 (2011)]. Physical Review E, 2011, 83, .	2.1	1
84	Quantum Size Effect Driven Structure Modifications of Bi Films on Ni(111). Physical Review Letters, 2011, 107, 176102.	7.8	16
85	Quantum size effects on surfaces without a projected bandgap: Pb/Ni(111). New Journal of Physics, 2011, 13, 103025.	2.9	9
86	Colloquium: Time-resolved scanning tunneling microscopy. Reviews of Modern Physics, 2010, 82, 1593-1605.	45.6	60
87	Atomic seesaws. Journal of Physics Condensed Matter, 2010, 22, 264004.	1.8	2
88	Adsorption of Cu phthalocyanine on Pt modified Ge(001): A scanning tunneling microscopy study. Physical Review B, 2010, 82, .	3.2	5
89	Comment on â€œNew Model System for a One-Dimensional Electron Liquid: Self-OrganizedAtomic Gold Chains on Ge(001)â€• Physical Review Letters, 2009, 103, 209701; discussion 209702.	7.8	18
90	Self-lacing atom chains. Journal of Physics Condensed Matter, 2009, 21, 474207.	1.8	14

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91	Scanning Tunneling Spectroscopy. Annual Review of Analytical Chemistry, 2009, 2, 37-55.	5.4	85
92	Structural and Electronic Properties of Au Induced Nanowires on Ge(001). Journal of Physical Chemistry C, 2009, 113, 17156-17159.	3.1	25
93	Playing Pinball with Atoms. Nano Letters, 2009, 9, 1733-1736.	9.1	31
94	Peierls instability in Pt chains on Ge(001). Surface Science, 2008, 602, 1731-1735.	1.9	53
95	Giant missing row reconstruction of Au on Ge(001). Physical Review B, 2008, 78, .	3.2	55
96	Spatial mapping of the inverse decay length using scanning tunneling microscopy. Applied Physics Letters, 2008, 92, 174101.	3.3	13
97	Controlled damaging and repair of self-organized nanostructures by atom manipulation at room temperature. Nanotechnology, 2007, 18, 365305.	2.6	8
98	Formation of atomic Pt chains on Ge(001) studied by scanning tunneling microscopy. Physical Review B, 2007, 76, .	3.2	29
99	Spatial Mapping of the Electronic States of a One-Dimensional System. Nano Letters, 2006, 6, 1439-1442.	9.1	27
100	Influence of dimer buckling on dimer diffusion: A scanning tunneling microscopy study. Physical Review B, 2006, 73, .	3.2	4
101	Dynamics and Energetics of Ge(001) Dimers. Physical Review Letters, 2006, 97, 266104.	7.8	36
102	Quantum Confinement between Self-Organized Pt Nanowires on Ge(001). Physical Review Letters, 2005, 95, 116801.	7.8	98
103	Electronic Properties of(2Ã—1)andc(4Ã—2)Domains on Ge(001) Studied by Scanning Tunneling Spectroscopy. Physical Review Letters, 2004, 93, 066101.	7.8	64
104	Initial stages ofPtgrowth onGe(001)studied by scanning tunneling microscopy and density functional theory. Physical Review B, 2004, 70, .	3.2	26
105	Temperature Antiquenching of the Luminescence from Capped CdSe Quantum Dots. Angewandte Chemie - International Edition, 2004, 43, 3029-3033.	13.8	135
106	(2Ã—1)â^'(1Ã—1)Phase Transition on Ge(001): Dimer Breakup and Surface Roughening. Physical Review Letters, 2003, 91, 116102.	7.8	18
107	Self-organized, one-dimensional Pt nanowires on Ge(001). Applied Physics Letters, 2003, 83, 4610-4612.	3.3	139
108	Energetics of Si(001). Reviews of Modern Physics, 2000, 72, 593-602.	45.6	140

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109	Fluctuations of monatomic steps on Si(001). Physical Review B, 1995, 51, 5465-5468.	3.2	22
110	Equilibrium structure of monatomic steps on vicinal Si(001). Physical Review B, 1992, 45, 5965-5968.	3.2	89