

# Xue-Sen Wang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5033871/publications.pdf>

Version: 2024-02-01

83  
papers

1,864  
citations

257450

24  
h-index

276875

41  
g-index

83  
all docs

83  
docs citations

83  
times ranked

1768  
citing authors

#	ARTICLE	IF	CITATIONS
1	Topological Properties Determined by Atomic Buckling in Self-Assembled Ultrathin Bi(110). Nano Letters, 2015, 15, 80-87.	9.1	191
2	Terrace-width distributions on vicinal Si(111). Physical Review Letters, 1990, 65, 2430-2433.	7.8	167
3	Fabrication and structural analysis of Al, Ga, and In nanocluster crystals. Physical Review B, 2002, 66, .	3.2	104
4	The charge transfer mechanism of Bi modified TiO <sub>2</sub> nanotube arrays: TiO <sub>2</sub> serving as a charge-transfer-bridge. Nano Energy, 2017, 31, 96-104.	16.0	103
5	Adsorption of acetylene on the Si(100)-(2 $\times$ 1) surface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 2250-2254.	2.1	78
6	C <sub>60</sub> Molecular Chains on Hexathiophene Nanostripes. Small, 2007, 3, 2015-2018.	10.0	63
7	Multiple unpinned Dirac points in group-Va single-layers with phosphorene structure. Npj Computational Materials, 2016, 2, .	8.7	57
8	Crystalline Si <sub>3</sub> N <sub>4</sub> thin films on Si(111) and the 4 $\times$ 4 reconstruction on Si <sub>3</sub> N <sub>4</sub> (0001). Physical Review B, 1999, 60, R2146-R2149.	3.2	51
9	Step-height mixtures on vicinal Si(111) surfaces. Physical Review Letters, 1992, 68, 3885-3888.	7.8	50
10	Reactive Co magic cluster formation on Si(111)-(7 $\times$ 7). Physical Review B, 2005, 72, .	3.2	45
11	Quantization of terrace widths on vicinal Si(111). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 1868-1873.	2.1	40
12	Interactions of Br with Si(111)-(7 $\times$ 7): Chemisorption, step retreat, and terrace etching. Physical Review B, 1995, 52, 11412-11423.	3.2	38
13	Evolution of Topological Surface States in Antimony Ultra-Thin Films. Scientific Reports, 2013, 3, 2010.	3.3	38
14	Conformal oxides on Si surfaces. Applied Physics Letters, 1997, 71, 1495-1497.	3.3	37
15	Formation of ordered two-dimensional nanostructures of Cu on the Si(1)-(7 $\times$ 7) surface. Surface Science, 2003, 531, L378-L382.	1.9	35
16	Scanning tunneling microscopy of the filled and empty arsenic states on the GaAs(001)-(2 $\times$ 4) surface. Surface Science, 1992, 278, L147-L151.	1.9	33
17	Observation of a surface alloying-to-dealloying transition during growth of Bi on Ag(111). Physical Review B, 2011, 83, .	3.2	33
18	Nitridation of Si(). Surface Science, 2001, 494, 83-94.	1.9	30

#	ARTICLE	IF	CITATIONS
19	Structural model of sulfur on GaAs(100). Journal of Applied Physics, 1994, 75, 2715-2717.	2.5	27
20	Ion sputtering of GaAs(110): From individual bombardment events to multilayer removal. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1995, 13, 2031.	1.6	27
21	Vacancy kinetics and sputtering of GaAs(110). Physical Review B, 1995, 51, 10929-10936.	3.2	27
22	Growth of well-aligned Bi nanowire on Ag(111). Applied Surface Science, 2009, 256, 460-464.	6.1	26
23	Self-assembly of antimony nanowires on graphite. Applied Physics Letters, 2006, 88, 233105.	3.3	25
24	Interaction of 300–5000 eV ions with GaAs(110). Applied Physics Letters, 1994, 65, 2818-2820.	3.3	24
25	Surface structure of Si(112). Surface Science, 1994, 314, 71-78.	1.9	24
26	Growth mode of Ge on GaAs(100). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 1920-1923.	2.1	23
27	Electronic structure of Co-induced magic clusters grown on Si(111)-(7 $\times$ 7): Scanning tunneling microscopy and spectroscopy and real-space multiple-scattering calculations. Physical Review B, 2006, 73, .	3.2	23
28	Zigzag C60 chain arrays. Applied Physics Letters, 2008, 92, 023105.	3.3	21
29	Surface height correlation functions of vicinal Si(111) surfaces using scanning tunneling microscopy. Surface Science, 1991, 249, L285-L292.	1.9	20
30	Surface structures of silicon nitride thin films on Si(111). Thin Solid Films, 2000, 366, 121-128.	1.8	20
31	Terrace width dependence of cobalt silicide nucleation on Si(111)-(7 $\times$ 7). Applied Physics Letters, 2006, 88, 023121.	3.3	20
32	Evolution of surface morphology of vicinal Si(111) surfaces after aluminum deposition. Surface Science, 1998, 418, 22-31.	1.9	19
33	The precipitation of kinks on stepped Si(111) surfaces. Journal of Chemical Physics, 1991, 94, 8384-8389.	3.0	18
34	Scanning tunneling microscopy of flat and vicinal molecular-beam epitaxy grown GaAs(001)-(2 $\times$ 4) surfaces: The effect of growth rate. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1993, 11, 1374.	1.6	18
35	Self-assembly of one-dimensional molecular nanostructures on the Ge-covered Si(100) surface. Applied Physics Letters, 2004, 84, 401-403.	3.3	18
36	Synthesis and magnetic properties of MnSb nanoparticles on Si-based substrates. Applied Physics Letters, 2007, 90, 202503.	3.3	17

#	ARTICLE	IF	CITATIONS
37	Initial stages of Ge/GaAs(100) interface formation. <i>Physical Review B</i> , 1994, 49, 4775-4779.	3.2	16
38	Performance of an ultrahigh vacuum sample transfer system for investigation of molecular beam epitaxy grown semiconductor surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993, 11, 2860-2862.	2.1	15
39	Effect of growth rate on the surface morphology of MBE-grown GaAs(001)-(2 Å <sup>-1</sup> × 4). <i>Surface Science</i> , 1994, 302, L269-L274.	1.9	15
40	Trends in surface roughening: analysis of ion-sputtered GaAs(110). <i>Surface Science</i> , 1996, 364, L511-L518.	1.9	15
41	Step structures on Br-chemisorbed vicinal Si(111). <i>Surface Science</i> , 1998, 400, 220-231.	1.9	15
42	Scanning Tunneling Microscopy of Endohedral Metallofullerene Tb@C82 on C60 Film and Si(100) 2 Å <sup>-1</sup> × 1 Surface. <i>Journal of Physical Chemistry B</i> , 2001, 105, 11414-11418.	2.6	12
43	Surface morphology of MBE-grown GaAs(001)-(2 Å <sup>-1</sup> × 4) and GaAs(001)-faceted surfaces investigated by scanning tunneling microscopy. <i>Surface Science</i> , 1993, 287-288, 514-519.	1.9	11
44	Film growth of germanium on Ru(0001) studied by scanning tunneling microscopy. <i>Physical Review B</i> , 2004, 70, .	3.2	11
45	Self-assembled Ge, Sb and Al nanostructures on graphite: comparative STM studies. <i>Nanotechnology</i> , 2007, 18, 145501.	2.6	11
46	An atomic structural model of (111) reconstruction proposed for 3C-SiC(111) crystallized islands on Si(111) by C60 precursor. <i>Surface Science</i> , 2001, 476, 1-8.	1.9	9
47	Realization of Dirac Cones in Few Bilayer Sb(111) Films by Surface Modification. <i>Nanoscale Research Letters</i> , 2015, 10, 1043.	5.7	9
48	Electron-beam-induced degradation of halide-perovskite-related semiconductor nanomaterials. <i>Chinese Optics Letters</i> , 2021, 19, 030002.	2.9	8
49	Analysis of GaAs(100) surfaces prepared with various wet and in situ sample treatments. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993, 11, 1089-1093.	2.1	7
50	Shape, orientation and surface structure of Si and Ge nano-particles grown on SiN. <i>Nanotechnology</i> , 2002, 13, 714-719.	2.6	7
51	Surface morphology of crystalline antimony islands on graphite at room temperature. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 3425-3434.	1.8	7
52	Quantitative analysis of Si mass transport during formation of Cu-Si(111)-(5 Å <sup>-1</sup> × 5) from scanning tunneling microscopy. <i>Physical Review B</i> , 2007, 75, .	3.2	7
53	Different-dimensional structures of antimony formed selectively on graphite. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 88, 299-307.	2.3	7
54	Effect of ion sputtering on Ge epitaxy on GaAs(110). <i>Applied Physics Letters</i> , 1996, 68, 1660-1662.	3.3	6

#	ARTICLE	IF	CITATIONS
55	Self-assembled growth of cubic silicon carbide nano-islands on silicon. Journal of Crystal Growth, 2001, 224, 83-88.	1.5	6
56	Characterization of Silicon Nitride Thin Films on Si and Overlayer Growth of Si and Ge. Japanese Journal of Applied Physics, 2001, 40, 4292-4298.	1.5	6
57	Morphology, surface structures, and magnetic properties of MnSb thin films and nanocrystallites grown on graphite. Journal of Applied Physics, 2007, 102, 023906.	2.5	5
58	Growth of self-assembled Mn, Sb and MnSb nanostructures on highly oriented pyrolytic graphite. Thin Solid Films, 2012, 520, 6909-6915.	1.8	5
59	Size-tunable Au nanoparticles on MoS <sub>2</sub> (0001). Nanotechnology, 2012, 23, 375603.	2.6	5
60	Scanning tunneling microscopy of endohedral metallofullerene Lu@C <sub>82</sub> on C <sub>60</sub> film. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 2388.	1.6	4
61	Ge islanding growth on nitridized Si and the effect of Sb surfactant. Journal of Physics Condensed Matter, 2002, 14, 8939-8946.	1.8	4
62	Investigation of Si and Ge growth on Si <sub>3</sub> N <sub>4</sub> /Si. Materials Characterization, 2002, 48, 189-194.	4.4	4
63	Formation of order molecular nanostructures on the Si(111)-(7 $\times$ 7) surface by patterned assembly. Applied Physics Letters, 2004, 85, 2926-2928.	3.3	4
64	Formation of copper clusters on a thiophene mediated Si(111)-(7 $\times$ 7) surface via molecular anchors. Applied Physics Letters, 2006, 88, 123106.	3.3	4
65	DIFFERENT GROWTH BEHAVIOR OF Ge, Al AND Sb ON GRAPHITE. Surface Review and Letters, 2006, 13, 287-296.	1.1	4
66	Nucleation and growth of aluminum on an inert substrate of graphite. Journal of Physics Condensed Matter, 2008, 20, 225002.	1.8	4
67	Growth of zirconium silicide nanostructures on vicinal and flat Si(111)-7 $\times$ 7 surfaces. Journal of Physics Condensed Matter, 2008, 20, 225015.	1.8	4
68	Transformation and degradation of metal halide perovskites induced by energetic electrons and their practical implications. Nano Futures, 2021, 5, 032001.	2.2	4
69	Scanning tunneling microscopy studies of Ge/GaAs(100) interface formation. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1993, 11, 1477.	1.6	3
70	IN SITU STM INVESTIGATION OF Ge NANOSTRUCTURES WITH AND WITHOUT Sb ON GRAPHITE. Surface Review and Letters, 2006, 13, 241-249.	1.1	3
71	Interaction of copper with sulfur on the sulfur-terminated Si(111)-(7 $\times$ 7) surface. Applied Surface Science, 2011, 257, 2038-2041.	6.1	3
72	Epitaxial growth of black phosphorene enabled on black-phosphorene-like group IV-VI substrates. Physical Review B, 2021, 104, .	3.2	3

#	ARTICLE	IF	CITATIONS
73	Characterization of structures fabricated by atomic force microscope lithography. Surface Science, 1999, 438, 58-67.	1.9	2
74	Selective Attachment of 1,4-Benzenedimethanethiol on the Copper Mediated Si(111)-(7 $\times$ 7) Surface through S <sup>2-</sup> Cu Linkage. Journal of Physical Chemistry B, 2005, 109, 13843-13846.	2.6	2
75	Scanning tunneling microscopy investigation of growth of self-assembled indium and aluminum nanostructures on inert substrates. Thin Solid Films, 2009, 517, 4540-4547.	1.8	2
76	Enhanced epitaxial growth on substrates modified by ion sputtering: Ge on GaAs(110). Physical Review B, 1996, 53, 11170-11175.	3.2	1
77	Step-edge energetics of the Ge/GaAs(001)-(1 $\times$ 2) superstructure. Surface Science, 1998, 398, 1-10.	1.9	1
78	EVOLUTION AND ORDERING OF MULTILAYER Ge QUANTUM DOTS ON Si(001). International Journal of Nanoscience, 2004, 03, 579-587.	0.7	1
79	Shape-Controlled Growth of Indium and Aluminum Nanostructures on MoS <sub>2</sub> (0001). Journal of Nanoscience and Nanotechnology, 2008, 8, 2707-2712.	0.9	1
80	Scanning tunneling microscopy study of higher-order Si(100)-(8 $\times$ 8) surface reconstruction. Journal of Physics Condensed Matter, 2008, 20, 395003.	1.8	1
81	Strain-Mediated Uniform Islands in Stacked Ge/Si(001) Layers. Japanese Journal of Applied Physics, 2004, 43, 7411-7414.	1.5	0
82	Molecular anchor Cu <sup>2+</sup> S formed on a thiophene mediated Si(111)-(7 $\times$ 7) surface. Journal of Chemical Physics, 2008, 128, 044706.	3.0	0
83	Nanoparticles, Nanorods, and Other Nanostructures Assembled on Inert Substrates. , 2007, , 118-153.		0