Akihiro Ohtake

List of Publications by Year
in descending order

91	1,725	331670 21	330143 37
papers	citations	h-index	g-index

93	93	93	1304
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structure and morphology of 2H-MoTe2 monolayer on GaAs(111)B grown by molecular-beam epitaxy. Npj 2D Materials and Applications, 2022, 6, .	7.9	4
2	Polarization Anisotropies in Strain-Free, Asymmetric, and Symmetric Quantum Dots Grown by Droplet Epitaxy. Nanomaterials, 2021, 11, 443.	4.1	5
3	Annealing-Induced Structural Evolution of InAs Quantum Dots on InP (111)A Formed by Droplet Epitaxy. Crystal Growth and Design, 2021, 21, 3947-3953.	3.0	3
4	Two-Dimensional WSe₂/MoSe₂ Heterostructures Grown by Molecular-Beam Epitaxy. Journal of Physical Chemistry C, 2021, 125, 11257-11261.	3.1	15
5	Strain relaxation in InAs heteroepitaxy on lattice-mismatched substrates. Scientific Reports, 2020, 10, 4606.	3.3	27
6	Effect of Substrate Orientation on MoSe₂/GaAs Heteroepitaxy. Journal of Physical Chemistry C, 2020, 124, 5196-5203.	3.1	12
7	Heteroepitaxy of MoSe2 on Si(111) substrates: Role of surface passivation. Applied Physics Letters, 2019, 114, .	3.3	6
8	Atomic structure and passivated nature of the Se-treated GaAs(111)B surface. Scientific Reports, 2018, 8, 1220.	3.3	14
9	Strain Relaxation in GaSb/GaAs(111)A Heteroepitaxy Using Thin InAs Interlayers. ACS Omega, 2018, 3, 15592-15597.	3.5	4
10	Evolution of Surface and Interface Structures in Molecular-Beam Epitaxy of MoSe2 on GaAs(111)A and (111)B. Crystal Growth and Design, 2017, 17, 363-367.	3.0	10
11	First-principles study of locally disordered structures of Mn-induced GaAs(001)-(2 Ã— 2) surface. Japanese Journal of Applied Physics, 2016, 55, 08NB21.	1.5	0
12	Growth of Metamorphic InGaAs on GaAs (111)A: Counteracting Lattice Mismatch by Inserting a Thin InAs Interlayer. Crystal Growth and Design, 2016, 16, 5412-5417.	3.0	15
13	Mn-Induced Surface Reconstructions on GaAs(001). Journal of Physical Chemistry C, 2016, 120, 6050-6062.	3.1	3
14	Size-dependent line broadening in the emission spectra of single GaAs quantum dots: Impact of surface charge on spectral diffusion. Physical Review B, 2015, 92, .	3.2	33
15	Extremely High- and Low-Density of Ga Droplets on GaAs{111}A,B: Surface-Polarity Dependence. Crystal Growth and Design, 2015, 15, 485-488.	3.0	18
16	Overcoming metal-induced fluorescence quenching on plasmo-photonic metasurfaces coated by a self-assembled monolayer. Chemical Communications, 2015, 51, 11470-11473.	4.1	35
17	Droplet epitaxy growth of telecom InAs quantum dots on metamorphic InAlAs/GaAs(111)A. Japanese Journal of Applied Physics, 2015, 54, 04DH07.	1.5	13
18	Electrical characteristics and thermal stability of HfO2 metal-oxide-semiconductor capacitors fabricated on clean reconstructed GaSb surfaces. Applied Physics Letters, 2014, 104, .	3.3	20

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19	Heteroepitaxy of GaSb on Si(111) and fabrication of HfO2/GaSb metal-oxide-semiconductor capacitors. Applied Physics Letters, 2014, 104, .	3.3	11
20	Self-Assembled Growth of Ga Droplets on GaAs(001): Role of Surface Reconstructions. Crystal Growth and Design, 2014, 14, 3110-3115.	3.0	10
21	Controlled incorporation of Mn in GaAs: Role of surface reconstructions. Physical Review B, 2013, 87, .	3.2	13
22	Controlling Anion Composition at Metalâ€“Insulatorâ€“Semiconductor Interfaces on IIIâ€“V Channels by Plasma Processing. Japanese Journal of Applied Physics, 2012, 51, 065701.	1.5	2
23	As-rich (2Ã—2) surface reconstruction on GaAs(111)A. Surface Science, 2012, 606, 1864-1870.	1.9	10
24	Cation-anion mixed-dimer structure of Al-induced (2Ã—4) reconstruction on InAs(001). Surface Science, 2012, 606, 1886-1891.	1.9	0
25	Impact of Cation Surface Termination on the Electrical Characteristics of HfO$_{2}$/InGaAs(001) Metalâ€“Oxideâ€“Semiconductor Capacitors. Japanese Journal of Applied Physics, 2011, 50, 10PD01.	1.5	2
26	Polarity controlled InAs{111} films grown on Si(111). Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	1.2	20
27	Atomic-scale characterization of the N incorporation on GaAs(001). Journal of Applied Physics, 2011, 110, 033506.	2.5	5
28	Impact of Cation Surface Termination on the Electrical Characteristics of HfO₂/InGaAs(001) Metalâ€“Oxideâ€“Semiconductor Capacitors. Japanese Journal of Applied Physics, 2011, 50, 10PD01.	1.5	2
29	Self-Assembly of Symmetric GaAs Quantum Dots on (111)A Substrates: Suppression of Fine-Structure Splitting. Applied Physics Express, 2010, 3, 065203.	2.4	77
30	Effect of Interface Oxidation on the Electrical Characteristics of HfO₂/Ultrathin-Epitaxial-Ge/GaAs(100) Structures. Applied Physics Express, 2010, 3, 035701.	2.4	2
31	Variable stoichiometry in Sb-induced(2Ã—4)reconstructions on GaAs(001). Physical Review B, 2009, 80, .	3.2	4
32	Relationships between Interface Structures and Electrical Properties in the High-k/IIIâ€“V System. Materials Research Society Symposia Proceedings, 2009, 1194, 68.	0.1	2
33	Anisotropic kinetics on growing Ge(0 0 1) surfaces. Surface Science, 2009, 603, 826-830.	1.9	6
34	Influence of initial surface reconstruction on the interface structure of HfO2/GaAs. Applied Surface Science, 2008, 254, 7565-7568.	6.1	16
35	Surface reconstructions on GaAs(001). Surface Science Reports, 2008, 63, 295-327.	7.2	157
36	Ge-induced<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo>(</mml:mo><mml:mn>1</mml:mn><mml:mo>Ã—</mml:mo><mml:mn>2</mml:mn></mml:mrow></mml:math>reconstruction on GaAs(001): A precursor to As segregation. Physical Review B, 2008, 77, .	3.2	2

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37	Structure and composition of Ga-rich(6Ã—6)reconstructions on GaAs(001). Physical Review B, 2007, 75, .	3.2	15
38	Ga-richGaAs(001)surface fromab initiocalculations: Atomic structure of the(4Ã—6)and(6Ã—6)reconstructions. Physical Review B, 2006, 73, .	3.2	19
39	Structures of the As-deficient phase onGaAs(001)â^'(2Ã—4). Physical Review B, 2006, 74, .	3.2	14
40	Self-assembled growth of ordered GaAs nanostructures. Applied Physics Letters, 2006, 89, 083108.	3.3	10
41	Atomic structure of the Ga nanoclusters onSi(111)â^'(7Ã—7). Physical Review B, 2006, 73, .	3.2	18
42	Proposal of Selective Growth Technique Using Periodic Strain Field Caused by Misfit Dislocations. Japanese Journal of Applied Physics, 2004, 43, L1422-L1424.	1.5	3
43	Ga-Rich Limit of Surface Reconstructions on GaAs(001): Atomic Structure of the(4Ã—6)Phase. Physical Review Letters, 2004, 93, 266101.	7.8	57
44	Structural features of Ga-rich GaAs(001) surfaces:â€ƒScanning tunneling microscopy study. Physical Review B, 2004, 70, .	3.2	22
45	Kinetics in Surface Reconstructions on GaAs(001). Physical Review Letters, 2004, 92, 236105.	7.8	75
46	Gaâ€“As dimer structure for the GaAs(001)-c(4Ã—4) surface. Surface Science, 2004, 566-568, 58-62.	1.9	10
47	Two types of structures for the GaAs(001)-c(4Ã—4) surface. Applied Physics Letters, 2003, 83, 5193-5195.	3.3	52
48	Ga-rich GaAs(001) surfaces observed by STM during high-temperature annealing in MBE. Journal of Crystal Growth, 2003, 251, 46-50.	1.5	17
49	Structure of Ga-stabilized GaAs(0 0 1) surfaces at high temperatures. Applied Surface Science, 2003, 212-213, 146-150.	6.1	5
50	Gallium-rich reconstructions on GaAs(001). Physica Status Solidi (B): Basic Research, 2003, 240, 91-98.	1.5	27
51	Large anisotropy in thermal atomic vibrations at theInSb(111)Aâ^'(2Ã—2)surface. Physical Review B, 2003, 68, .	3.2	2
52	RHEED Studies of GaAs Surface Structure. Hyomen Kagaku, 2003, 24, 136-144.	0.0	0
53	Strain-induced surface segregation in In0.5Ga0.5As/GaAs heteroepitaxy. Applied Physics Letters, 2002, 80, 3931-3933.	3.3	7
54	Structure analysis of the Ga-stabilizedGaAs(001)â^'c(8Ã—2)surface at high temperatures. Physical Review B, 2002, 65, .	3.2	28

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55	Growth mode ofInxGa1â^'xAs(0<~x<~0.5)on GaAs(001) under As-deficient conditions. Physical Review B, 2002, 65, .	3.2	9
56	New Structure Model for theGaAs(001)â^'c(4Ã—4)Surface. Physical Review Letters, 2002, 89, 206102.	7.8	110
57	Indium supply from triisopropylindium onto a GaAs(001) surface at room temperature. Applied Physics Letters, 2002, 81, 4058-4060.	3.3	1
58	Atomic structure of theGaAs(001)â^'(2Ã—4)surface under As flux. Physical Review B, 2002, 65, .	3.2	60
59	Surface structures ofGaAs{111}A,Bâ^'(2Ã—2). Physical Review B, 2001, 64, .	3.2	81
60	Wurtziteâ€“zinc-blende polytypism in ZnSe onGaAs(111)A. Physical Review B, 2001, 63, .	3.2	12
61	In situ observation of surface processes in InAs/GaAs(001) heteroepitaxy: The role of As on the growth mode. Applied Physics Letters, 2001, 78, 431-433.	3.3	34
62	Adsorption processes of Se on the GaAs(111)Aâ€“(2x2) surface. Applied Surface Science, 2000, 162-163, 419-424.	6.1	2
63	Strain Relaxation inInAs/GaAs(111)AHeteroepitaxy. Physical Review Letters, 2000, 84, 4665-4668.	7.8	48
64	Structure and composition of the ZnSe(001) surface during atomic-layer epitaxy. Physical Review B, 1999, 60, 8326-8332.	3.2	35
65	In situobservation of strain-induced optical anisotropy ofZnSxSe1â^'x/GaAs(110)during molecular-beam epitaxy. Physical Review B, 1999, 60, 8909-8914.	3.2	8
66	Real-time analysis of adsorption processes of Zn on theGaAs(001)â^'(2Ã—4)surface. Physical Review B, 1999, 60, 8713-8718.	3.2	18
67	X-ray reflectivity from ZnSe/GaAs heterostructures. Journal of Applied Physics, 1999, 85, 1520-1523.	2.5	10
68	Adsorption of Zn on the GaAs(001)-(2Ã—4) surface. Applied Physics Letters, 1999, 74, 2975-2977.	3.3	10
69	Self-assembled formation of ZnCdSe quantum dots on atomically smooth ZnSe surfaces on GaAs(001) by molecular beam epitaxy. Thin Solid Films, 1999, 357, 1-7.	1.8	11
70	Atomic layer epitaxy processes of ZnSe on GaAs(001) as observed by beam-rocking reflection high-energy electron diffraction (RHEED) and total-reflection-angle X-ray spectroscopy (TRAXS). Journal of Crystal Growth, 1999, 201-202, 490-493.	1.5	7
71	Structure of Se-adsorbed GaAs(111)A-(23Ã—23)-R30Â° surface. Physical Review B, 1999, 59, 8032-8036.	3.2	17
72	Atomic nitrogen doping in p-ZnSe with high activation ratio using a high-power plasma source. Journal of Crystal Growth, 1998, 184-185, 411-414.	1.5	8

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73	Characterization and control of IIâ€“VI/IIIâ€“V heterovalent interfaces. Journal of Crystal Growth, 1998, 184-185, 163-172.	1.5	26
74	Polar surface dependence of epitaxy processes: ZnSe on GaAs{111}A, B-(2Ã—2). Applied Surface Science, 1998, 130-132, 398-402.	6.1	5
75	Reflection high-energy electron diffraction analysis of the InSb{111}A,B-(2 Ã— 2) surfaces. Surface Science, 1998, 396, 394-399.	1.9	17
76	In situ determination of in-plane strain anisotropy in ZnSe(001)/GaAs layers using reflectance difference spectroscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 2342.	1.6	14
77	The role of zinc pre-exposure in low-defect ZnSe growth on As-stabilized GaAs (001). Applied Physics Letters, 1998, 73, 939-941.	3.3	25
78	Defect generation in layer-by-layer-grown ZnSe films on Te-terminated GaAs(001) surfaces. Physical Review B, 1998, 57, 1410-1413.	3.2	9
79	Non-Contact and Non-Destructive Measurement of Carrier Concentration of Nitrogen-Doped ZnSe by Reflectance Difference Spectroscopy. Japanese Journal of Applied Physics, 1997, 36, 6638-6644.	1.5	14
80	Growth mode and defect generation in ZnSe heteroepitaxy on Te-terminated GaAs(001) surfaces. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1254.	1.6	9
81	Reflectance-difference studies of interface-formation and initial-growth processes in ZnSe/GaAs(001) heteroepitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1212.	1.6	8
82	Atomic nitrogen doping in p-ZnSe molecular beam epitaxial growth with almost 100% activation ratio. Applied Physics Letters, 1997, 71, 1077-1079.	3.3	9
83	Nature and origins of stacking faults from a ZnSe/GaAs interface. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1241.	1.6	30
84	Surface processes during heteroepitaxy of ZnSe onGaAs(111)Aas observed by reflection high-energy electron diffraction. Physical Review B, 1997, 56, 14909-14912.	3.2	11
85	ZnSe epitaxy on a GaAs(110) surface. Applied Physics Letters, 1997, 71, 1192-1194.	3.3	10
86	Initial growth processes of Ag on polar and non-polar semiconductor substrates. Surface Science, 1997, 380, L437-L440.	1.9	2
87	Molecular beam epitaxial growth of P-ZnSe:N using a novel plasma source. Journal of Electronic Materials, 1997, 26, 705-709.	2.2	1
88	Dependence of defect generation and structure on interface chemistry in ZnSe/GaAs. Applied Surface Science, 1997, 117-118, 495-502.	6.1	11
89	Heterovalent ZnSe/GaAs Interfaces. Physica Status Solidi (B): Basic Research, 1997, 202, 657-668.	1.5	3
90	Geometry and lattice formation of surface layers of Sn growing on InSb{111}A,B. Physical Review B, 1996, 54, 10358-10361.	3.2	10

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91	Surface phase transition and interface interaction in the Î±-Sn/InSb{111} system. Physical Review B, 1994, 50, 7567-7572.	3.2	60