

# Shinji Koh

## List of Publications by Year in descending order

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104  
papers

1,530  
citations

331670

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105  
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105  
docs citations

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times ranked

958  
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization of epitaxial CVD graphene on Ir(111)/Al <sub>2</sub> O <sub>3</sub> (0001) by photoelectron momentum microscopy. Japanese Journal of Applied Physics, 2022, 61, SD1015.	1.5	4
2	Single-layer graphene as a transparent electrode for electrogenerated chemiluminescence biosensing. Electrochemistry Communications, 2022, 138, 107290.	4.7	2
3	Characterization of contact properties at interface between metal and graphene up to 15 GHz. Engineering Reports, 2021, 3, e12325.	1.7	4
4	Optically transparent antenna based on carrier-doped three-layer stacked graphene. AIP Advances, 2021, 11, .	1.3	19
5	Luminescence properties of Tm <sub>2</sub> O <sub>3</sub> -doped germanate glass phosphors for near-infrared wideband light-source. Journal of Materials Science: Materials in Electronics, 2021, 32, 14813-14822.	2.2	9
6	Development of poly (methyl methacrylate)-supported transfer technique of single-wall carbon nanotube conductive films for flexible devices. Thin Solid Films, 2021, 736, 138904.	1.8	4
7	CVD-Graphene-Based Optically Transparent Antennas. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2021, 72, 433-438.	0.2	0
8	Luminescence properties of PrF <sub>3</sub> -doped Sb <sub>2</sub> O <sub>3</sub> –ZnO–GeO <sub>2</sub> glass phosphors for near-infrared wideband light-source. Journal of Materials Science: Materials in Electronics, 2020, 31, 20824-20832.	2.2	5
9	Reusability of Ir(111)/Al <sub>2</sub> O <sub>3</sub> (0001) substrates in graphene chemical vapor deposition growth. Japanese Journal of Applied Physics, 2020, 59, SIID01.	1.5	4
10	Characterization of graphene grown by direct-liquid-injection chemical vapor deposition with cyclohexane precursor in N <sub>2</sub> ambient. Diamond and Related Materials, 2020, 104, 107717.	3.9	4
11	Electrochemical Characterization of CVD-Grown Graphene for Designing Electrode/Biomolecule Interfaces. Crystals, 2020, 10, 241.	2.2	4
12	A Real-Time Free Chlorine Monitoring by Graphene Field-Effect Transistor. , 2019, , .		2
13	Making graphene luminescent by adsorption of an amphiphilic europium complex. Applied Physics Letters, 2018, 112, .	3.3	7
14	Radiation properties of graphene-based optically transparent dipole antenna. Microwave and Optical Technology Letters, 2018, 60, 2992-2998.	1.4	13
15	Graphene-based optically transparent dipole antenna. Applied Physics Letters, 2017, 110, .	3.3	32
16	Epitaxial growth and electrochemical transfer of graphene on Ir(111)/Al <sub>2</sub> O <sub>3</sub> (0001) substrates. Applied Physics Letters, 2016, 109, .	3.3	17
17	Thermal reversibility in electrical characteristics of ultraviolet/ozone-treated graphene. Applied Physics Letters, 2013, 103, 063107.	3.3	14
18	Crystal growth of InGaAs/InAlAs quantum wells on InP(110) by MBE. Journal of Crystal Growth, 2013, 364, 95-100.	1.5	12

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19	Characterizing Edge and Stacking Structures of Exfoliated Graphene by Photoelectron Diffraction. Japanese Journal of Applied Physics, 2013, 52, 110110.	1.5	9
20	Hierarchical Silver Nanoparticle Micro-Clustering in Poly(methyl methacrylate) Matrix in Spin-Coatable Electrically Conductive Thermoplastics. Science of Advanced Materials, 2013, 5, 1546-1555.	0.7	2
21	Highly Flexible, Transparent and Electrically Conducting Silver Nanoparticles Films Enabled by Controlled Sedimentation. Materials Research Society Symposia Proceedings, 2012, 1436, 29.	0.1	0
22	Circularly polarized lasing over wide wavelength range in spin-controlled (110) vertical-cavity surface-emitting laser. Solid State Communications, 2012, 152, 1518-1521.	1.9	2
23	Characterization of graphene based field effect transistors using nano probing microscopy. , 2012, , .		0
24	All-Optical Flip-Flop Operation at 1-mA Bias Current in Polarization Bistable Vertical-Cavity Surface-Emitting Lasers With an Oxide Confinement Structure. IEEE Photonics Technology Letters, 2011, 23, 1811-1813.	2.5	11
25	All-optical flip-flop operation of polarization bistable VCSELs with an oxide confinement structure. , 2011, , .		0
26	Optically-pumped circularly polarized lasing in a (110) VCSEL with GaAs/AlGaAs QWs at room temperature. , 2011, , .		0
27	Correlation between morphology and electron spin relaxation time in GaAs/AlGaAs quantum wells on misoriented GaAs(110) substrates. Journal of Applied Physics, 2011, 110, 043516.	2.5	2
28	Room temperature circularly polarized lasing in an optically spin injected vertical-cavity surface-emitting laser with (110) GaAs quantum wells. Applied Physics Letters, 2011, 98, .	3.3	96
29	Spin-controlled switching of lasing circular polarizations in (110)-oriented VCSELs. , 2011, , .		0
30	Control of Electron Spin Relaxation Dynamics and Circularly Polarized Lasing in Semiconductor Lasers. Hyomen Kagaku, 2011, 32, 755-760.	0.0	0
31	Electron spin relaxation time in GaAs/AlGaAs multiple quantum wells grown on slightly misoriented GaAs(110) substrates. Applied Physics Letters, 2010, 97, 081111.	3.3	9
32	Room temperature gate modulation of electron spin relaxation time in (110)-oriented GaAs/AlGaAs quantum wells. Applied Physics Letters, 2010, 97, 202102.	3.3	10
33	Room temperature gate-controlled electron spin relaxation time in (110) GaAs/AlGaAs quantum wells. , 2010, , .		0
34	Carrier Lifetime and Electron Spin Relaxation Time in (110)-Oriented GaAs/AlGaAs Quantum-Well Micro-Posts. IEEE Photonics Technology Letters, 2010, 22, 1689-1691.	2.5	7
35	(110) quantum well based spin VCSELs. , 2010, , .		0
36	Correlation between electron spin relaxation time and hetero-interface roughness in (110)-oriented GaAs/AlGaAs multiple-quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 870-875.	2.7	18

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37	Circularly polarized lasing in a (110)-oriented quantum well vertical-cavity surface-emitting laser under optical spin injection. Applied Physics Letters, 2009, 94, .	3.3	50
38	Switching of Lasing Circular Polarizations in a (110)-VCSEL. IEEE Photonics Technology Letters, 2009, 21, 1350-1352.	2.5	24
39	Optically-pumped circularly-polarized lasing in a (110)-oriented VCSEL based on InGaAs/GaAs QWs. , 2009, , .		2
40	The effect of growth atmosphere and Ir contamination on electric properties of La <sub>3</sub> Ta <sub>0.5</sub> Ga <sub>5.5</sub> O <sub>14</sub> single crystal grown by the floating zone and Czochralski method. Journal of Electroceramics, 2008, 20, 73-80.	2.0	30
41	Acceptorlike Behavior of Defects in SiGe Alloys Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2008, 47, 4630.	1.5	20
42	Partitioning of ionic species and crystallization electromotive force during the melt growth of LiNbO <sub>3</sub> and Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub> . Journal of Crystal Growth, 2007, 306, 406-412.	1.5	12
43	Effect of an external electric field on the crystal growth process of YBCO superconductive oxide. Journal of Crystal Growth, 2007, 307, 432-439.	1.5	11
44	Temperature dependence of Raman scattering in Si crystals with heavy B and/or Ge doping. Materials Science in Semiconductor Processing, 2006, 9, 257-260.	4.0	4
45	The electric field-induced transformation of the melting state of langasite from incongruent into congruent. Journal of Crystal Growth, 2006, 292, 1-4.	1.5	13
46	In situ observation of crystal growth process of YBCO superconductive oxide with an external electric field. Journal of Crystal Growth, 2006, 294, 420-426.	1.5	14
47	Study of the mechanism of crystallization electromotive force during growth of congruent LiNbO <sub>3</sub> using a micro-pulling-down method. Journal of Crystal Growth, 2006, 297, 247-258.	1.5	20
48	Determination of lattice parameters of SiGe/Si(110) heterostructures. Thin Solid Films, 2006, 508, 132-135.	1.8	21
49	Reaction at the interface between Si melt and a Ba-doped silica crucible. Journal of Crystal Growth, 2005, 277, 154-161.	1.5	10
50	Transformation of the incongruent-melting state to the congruent-melting state via an external electric field for the growth of langasite. Journal of Crystal Growth, 2005, 281, 481-491.	1.5	31
51	Changes in elastic deformation of strained Si by microfabrication. Materials Science in Semiconductor Processing, 2005, 8, 181-185.	4.0	9
52	High-performance SiGe heterostructure FET grown on silicon-on-insulator. Materials Science in Semiconductor Processing, 2005, 8, 367-370.	4.0	4
53	Observation of strain field fluctuation in SiGe-relaxed buffer layers and its influence on overgrown structures. Materials Science in Semiconductor Processing, 2005, 8, 177-180.	4.0	9
54	Quantitative coverage and stability of hydrogen-passivation layers on HF-etched Si(1-x)Ge <sub>x</sub> surfaces. Journal of Applied Physics, 2005, 98, 023503.	2.5	10

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55	Temperature dependence of transport properties of high mobility holes in Ge quantum wells. Journal of Applied Physics, 2005, 97, 083701.	2.5	31
56	Fabrication of high-quality strain-relaxed thin SiGe layers on ion-implanted Si substrates. Applied Physics Letters, 2004, 85, 2514-2516.	3.3	43
57	Magneto-photoluminescence Studies of AlInAs/AlGaAs Self-assembled Quantum Dots with Type-II Band Alignment. Journal of the Physical Society of Japan, 2004, 73, 480-484.	1.6	0
58	Observation of dislocations in strain-relaxed silicon-germanium thin films with flat surfaces grown on ion-implanted silicon substrates. Materials Science in Semiconductor Processing, 2004, 7, 389-392.	4.0	2
59	Control of type-I and type-II band alignments in AlInAs/AlGaAs self-assembled quantum dots by changing AlGaAs compositions. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 308-311.	2.7	9
60	Small and high-density GeSiC dots stacked on buried Ge hut-clusters in Si. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 440-444.	2.7	4
61	Formation of thin SiGe virtual substrates by ion implantation into Si substrates. Applied Surface Science, 2004, 224, 99-103.	6.1	8
62	Influences of $\delta$ -Doping Position on the Characteristics of SiGe-Si DCFETs. IEEE Electron Device Letters, 2004, 25, 477-479.	3.9	1
63	Strain Relaxation and Induced Defects in SiGe Thin Films Grown on Ion-Implanted Si Substrates. Materials Transactions, 2004, 45, 2644-2646.	1.2	3
64	Randomized, double-blind study of pramipexole with placebo and bromocriptine in advanced Parkinson's disease. Movement Disorders, 2003, 18, 1149-1156.	3.9	74
65	Growth of SiGe/Ge/SiGe heterostructures with ultrahigh hole mobility and their device application. Journal of Crystal Growth, 2003, 251, 670-675.	1.5	14
66	Hole transport properties of B-doped relaxed SiGe epitaxial films grown by molecular beam epitaxy. Journal of Crystal Growth, 2003, 251, 689-692.	1.5	1
67	Planarization of SiGe virtual substrates by CMP and its application to strained Si modulation-doped structures. Journal of Crystal Growth, 2003, 251, 693-696.	1.5	7
68	Relaxation enhancement of SiGe thin layers by ion implantation into Si substrates. Journal of Crystal Growth, 2003, 251, 685-688.	1.5	14
69	Hole density dependence of effective mass, mobility and transport time in strained Ge channel modulation-doped heterostructures. Applied Physics Letters, 2003, 82, 1425-1427.	3.3	48
70	Surface Planarization of Strain-Relaxed SiGe Buffer Layers by CMP and Post Cleaning. Journal of the Electrochemical Society, 2003, 150, G376.	2.9	40
71	In-plane strain fluctuation in strained-Si/SiGe heterostructures. Applied Physics Letters, 2003, 83, 4339-4341.	3.3	61
72	Mobility enhancement in strained Si modulation-doped structures by chemical mechanical polishing. Applied Physics Letters, 2003, 82, 412-414.	3.3	29

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73	SiGe heterostructure field-effect transistor using V-shaped confining potential well. IEEE Electron Device Letters, 2003, 24, 69-71.	3.9	14
74	Study on Sublattice Reversal in a GaAs/Ge/GaAs(001) Crystal by X-ray Standing Waves. Japanese Journal of Applied Physics, 2003, 42, 2582-2586.	1.5	2
75	Observation of Band Alignment Transition from Type-I to Type-II in AlInAs/AlGaAs Self-assembled Quantum Dots. Journal of the Physical Society of Japan, 2003, 72, 3271-3275.	1.6	6
76	Three-Dimensional Reconstruction of Atoms in Surface X-Ray Diffraction. Japanese Journal of Applied Physics, 2003, 42, L189-L191.	1.5	15
77	Characterization of amorphous-Si/1ML-Ge/Si(001) Interface Structure by X-ray Standing Waves. Japanese Journal of Applied Physics, 2003, 42, 7050-7052.	1.5	3
78	P-Type Enhancement-Mode SiGe Doped-Channel Field-Effect Transistor. Japanese Journal of Applied Physics, 2003, 42, L1422-L1424.	1.5	1
79	Enhancement of Strain Relaxation of SiGe Thin Layers by Pre-Ion-Implantation into Si Substrates. Japanese Journal of Applied Physics, 2003, 42, L735-L737.	1.5	28
80	Optical properties of strain-balanced SiGe planar microcavities with Ge dots on Si substrates. Applied Physics Letters, 2002, 81, 817-819.	3.3	22
81	Ultrahigh room-temperature hole Hall and effective mobility in Si <sub>0.3</sub> Ge <sub>0.7</sub> /Ge/Si <sub>0.3</sub> Ge <sub>0.7</sub> heterostructures. Applied Physics Letters, 2002, 81, 847-849.	3.3	88
82	Optical Properties of Strain-Balanced Si <sub>0.73</sub> Ge <sub>0.27</sub> Planar Microcavities on Si Substrates. Japanese Journal of Applied Physics, 2002, 41, 2664-2667.	1.5	6
83	P-type delta-doped SiGe <sup>+</sup> -Si heterostructure field effect transistors. Electronics Letters, 2002, 38, 1289.	1.0	1
84	A Novel Triple $\delta$ -Doped SiGe Heterostructure Field-Effect Transistor. Japanese Journal of Applied Physics, 2002, 41, L1212-L1214.	1.5	1
85	Extremely high room-temperature two-dimensional hole gas mobility in Ge/Si <sub>0.33</sub> Ge <sub>0.67</sub> /Si(001)p-type modulation-doped heterostructures. Applied Physics Letters, 2002, 80, 3117-3119.	3.3	60
86	Size reduction of the Ge islands by utilizing the strain fields from the lower-temperature-grown hut-clusters buried in the Si matrix. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 89, 58-61.	3.5	5
87	Surface smoothing of SiGe strain-relaxed buffer layers by chemical mechanical polishing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 89, 406-409.	3.5	25
88	Fabrication of strain-balanced Si <sub>0.73</sub> Ge <sub>0.27</sub> /Si-distributed Bragg reflectors on Si substrates for optical device applications. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 1051-1054.	2.7	5
89	GaAs/Ge/GaAs sublattice reversal epitaxy and its application to nonlinear optical devices. Journal of Crystal Growth, 2001, 227-228, 183-192.	1.5	65
90	Molecular beam epitaxy of GaAs on nearly lattice-matched SiGe substrates grown by the multicomponent zone-melting method. Semiconductor Science and Technology, 2001, 16, 699-703.	2.0	7

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91	Fabrication of strain-balanced Si <sub>0.73</sub> Ge <sub>0.27</sub> /Si distributed Bragg reflectors on Si substrates. Applied Physics Letters, 2001, 79, 476-478.	3.3	9
92	Characterization of sublattice-reversed GaAs by reflection high energy electron diffraction and transmission electron microscopy. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 876-880.	2.7	11
93	Study of sublattice inversion in GaAs/Ge/GaAs(001) crystal by X-ray diffraction. Applied Surface Science, 2000, 159-160, 256-259.	6.1	4
94	SiGe bulk crystal as a lattice-matched substrate to GaAs for solar cell applications. Applied Physics Letters, 2000, 77, 3565-3567.	3.3	15
95	Sublattice reversal epitaxy: a novel technique for fabricating domain-inverted compound semiconductor structures. Science and Technology of Advanced Materials, 2000, 1, 173-179.	6.1	8
96	Periodically Domain-Inverted AlGaAs Quasi-Phase-Matched Frequency-Conversion Waveguides. , 2000, , .		0
97	GaAs/Ge/GaAs Sublattice Reversal Epitaxy on GaAs (100) and (111) Substrates for Nonlinear Optical Devices. Japanese Journal of Applied Physics, 1999, 38, L508-L511.	1.5	77
98	Sublattice Reversal in GaAs/Si/GaAs (100) Heterostructures by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1998, 37, L1493-L1496.	1.5	46
99	Growth of ultrahigh mobility SiGe/Ge/SiGe heterostructures with very small parallel conduction and their device application. , 0, , .		0
100	Planarization of SiGe virtual substrates by CMP and its application to strained Si modulation-doped structures. , 0, , .		0
101	Relaxation enhancement of SiGe thin layers by ion implantation into Si substrates. , 0, , .		0
102	Hole transport properties of B-doped relaxed Si/sub 0.7/Ge/sub 0.3/ epitaxial films grown by MBE. , 0, , .		0
103	Fabrication of high-Ge fraction relaxed SiGe-On-Insulator virtual substrate by MBE growth and thermal annealing. , 0, , .		0
104	Fabrication of periodically-inverted GaAs waveguides for quasi-phase-matching nonlinear optical devices. , 0, , .		0