

Eiji Higurashi

List of Publications by Year in descending order

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237
papers

2,546
citations

257450

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237
docs citations

237
times ranked

1565
citing authors

#	ARTICLE	IF	CITATIONS
1	Bonding formation and gas absorption using Au/Pt/Ti layers for vacuum packaging. <i>Microsystems and Nanoengineering</i> , 2022, 8, 2.	7.0	3
2	Room temperature bonding of GaN and diamond substrates via atomic layer. <i>Scripta Materialia</i> , 2022, 215, 114725.	5.2	3
3	3-Layer Stacking Technology with Pixel-Wise Interconnections for Image Sensors Using Hybrid Bonding of Silicon-on-Insulator Wafers Mediated by Thin Si Layers. , 2022, , .		4
4	Low-temperature direct bonding of diamond (100) substrate on Si wafer under atmospheric conditions. <i>Scripta Materialia</i> , 2021, 191, 52-55.	5.2	19
5	Heterogeneous GaN-Si integration via plasma activation direct bonding. <i>Journal of Alloys and Compounds</i> , 2021, 852, 156933.	5.5	10
6	Application of thin Au/Ti double-layered films as both low-temperature bonding layer and residual gas gettering material for MEMS encapsulation. <i>Microelectronic Engineering</i> , 2021, 238, 111513.	2.4	11
7	Low-temperature direct bonding of InP and diamond substrates under atmospheric conditions. <i>Scientific Reports</i> , 2021, 11, 11109.	3.3	6
8	Direct bonding of diamond and Si substrates using NH ₃ /H ₂ O ₂ cleaning. , 2021, , .		0
9	Low-temperature direct bonding of SiC and Ga ₂ O ₃ substrates under atmospheric conditions. <i>Journal of Applied Physics</i> , 2021, 130, .	2.5	9
10	Surface smoothing of Au plated films by template stripping towards low-temperature bonding for 3D integration. , 2021, , .		1
11	Formation of smooth Au surfaces produced by multiple thin-film transfer process based on template stripping for low-temperature bonding. , 2020, , .		2
12	Room temperature bonding of aluminum nitride ceramic and semiconductor substrate. <i>Ceramics International</i> , 2020, 46, 25956-25963.	4.8	11
13	Demonstration of GaN/LiNbO ₃ Hybrid Wafer Using Room-Temperature Surface Activated Bonding. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 045005.	1.8	8
14	Effect of Au Film Thickness and Surface Roughness on Room-Temperature Wafer Bonding and Wafer-Scale Vacuum Sealing by Au-Au Surface Activated Bonding. <i>Micromachines</i> , 2020, 11, 454.	2.9	23
15	Room-temperature pressureless wafer-scale hermetic sealing in air and vacuum using surface activated bonding with ultrathin Au films. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SBBB01.	1.5	7
16	Heterogeneous direct bonding of diamond and semiconductor substrates using NH ₃ /H ₂ O ₂ cleaning. <i>Applied Physics Letters</i> , 2020, 117, 201601.	3.3	10
17	Fabrication of Multi-stacked Integrated Circuit for High-Performance Image Sensors. <i>Transactions of the Japan Institute of Electronics Packaging</i> , 2020, 13, E20-004-1-E20-004-3.	0.4	0
18	Gas Absorption in Package Using Au/Pt/Ti Bonding Layer. <i>ECS Transactions</i> , 2020, 98, 211-215.	0.5	3

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19	Ultrathin adhesive layer between LiNbO ₃ and SiO ₂ for bonded LNOI waveguide applications. Japanese Journal of Applied Physics, 2019, 58, SJJE06.	1.5	9
20	Room-Temperature Wafer Bonding with Titanium Thin Films Based on Formation of Ti/Si Amorphous Layers. , 2019, , .		0
21	Wafer-scale Au-Au surface activated bonding using atmospheric-pressure plasma. , 2019, , .		2
22	Room-temperature pressureless wafer sealing using ultrathin Au films activated by Ar plasma. , 2019, , .		1
23	Room temperature bonding of smooth Au surface of electroformed Cu substrate in atmospheric air. , 2019, , .		0
24	Triple-Stacked Au/SiO ₂ Hybrid Bonding With 6- μ m-Pitch Au Electrodes on Silicon-on-Insulator Substrates Using O ₂ Plasma Surface Activation for 3-D Integration. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1904-1911.	2.5	2
25	Surface activated bonding of Au/Cr, Au/Ta and Au/Pt/Ti films after degas annealing for Si/sapphire gas cell. Microelectronic Engineering, 2019, 214, 68-73.	2.4	12
26	Residual Stress in Lithium Niobate Film Layer of LNOI/Si Hybrid Wafer Fabricated Using Low-Temperature Bonding Method. Micromachines, 2019, 10, 136.	2.9	15
27	Optical evaluation of nanocomposite metamaterials fabricated by nano-printing technique utilizing silver nanoink. Microelectronic Engineering, 2019, 211, 44-49.	2.4	3
28	Comparison of Argon and Oxygen Plasma Treatments for Ambient Room-Temperature Wafer-Scale Au-Au Bonding Using Ultrathin Au Films. Micromachines, 2019, 10, 119.	2.9	42
29	Room-temperature bonding of organic films using ultrathin Au intermediate layers for organic integrated optical devices. , 2019, , .		1
30	Triple-Stacked Wafer-to-Wafer Hybrid Bonding for 3D Structured Image Sensors. , 2019, , .		0
31	Low Temperature Copper-Copper Bonding in Ambient Air Using Hydrogen Radical Pretreatment. , 2019, , .		0
32	Triple-Layering Technology for Pixel-Parallel CMOS Image Sensors Developed by Hybrid Bonding of SOI Wafers. , 2019, , .		1
33	De-bondable SiC/SiC wafer bonding via an intermediate Ni nano-film. Applied Surface Science, 2019, 465, 591-595.	6.1	12
34	Quarter Video Graphics Array Digital Pixel Image Sensing With a Linear and Wide-Dynamic-Range Response by Using Pixel-Wise 3-D Integration. IEEE Transactions on Electron Devices, 2019, 66, 969-975.	3.0	17
35	Growth Behavior of Au Films on SiO ₂ Film and Direct Transfer for Smoothing Au Surfaces. International Journal of Automation Technology, 2019, 13, 254-260.	1.0	3
36	X-ray Photoelectron Spectroscopy (XPS) Analysis of Oxidation Behavior of Hydrogen-radical-treated Cu Surfaces. IEJ Transactions on Sensors and Micromachines, 2019, 139, 38-39.	0.1	0

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37	Introduction to the Special Edition. Journal of Japan Institute of Electronics Packaging, 2019, 22, 139-139.	0.1	0
38	Investigation of Plasma Treatment Conditions for Wafer-Scale Room-Temperature Bonding Using Ultrathin Au Films in Ambient Air. IEEJ Transactions on Sensors and Micromachines, 2019, 139, 217-218.	0.1	0
39	A Thick-Film Nano-Printing Technique and Its Application Development. Journal of Japan Institute of Electronics Packaging, 2019, 22, 480-484.	0.1	0
40	Triple-Stacked Silicon-on-Insulator Integrated Circuits Using Au/SiO ₂ Hybrid Bonding. , 2019, , .		1
41	Low Temperature Bonding for 3D Integration. Japanese Journal of Applied Physics, 2018, 57, 02B001.	1.5	0
42	Evaluation of hydrogen radical treatment for indium surface oxide removal and analysis of re-oxidation behavior. Japanese Journal of Applied Physics, 2018, 57, 02BC01.	1.5	4
43	Properties of various plasma surface treatments for low-temperature Au-Au bonding. Japanese Journal of Applied Physics, 2018, 57, 04FC12.	1.5	13
44	Heterogeneous integration based on low-temperature bonding for advanced optoelectronic devices. Japanese Journal of Applied Physics, 2018, 57, 04FA02.	1.5	9
45	Pixel-Parallel 3D Integrated CMOS Image Sensors Developed by Direct Bonding of SOI Layers for Next-Generation Video Systems. , 2018, , .		0
46	Surface analysis of argon and oxygen plasma-treated gold for room temperature wafer scale gold-gold bonding. , 2018, , .		0
47	Surface Activated Bonding of LiNbO ₃ and GaN at Room Temperature. ECS Transactions, 2018, 86, 207-213.	0.5	4
48	Room-Temperature Wafer Bonding Using Smooth Au Thin Films for Integrated Plasmonic Devices. , 2018, , .		0
49	Quarter Video Graphics Array Full-Digital Image Sensing with Wide Dynamic Range and Linear Output Using Pixel-Wise 3D Integration. , 2018, , .		7
50	High-Speed InP/InGaAsSb DHBT on High-Thermal-Conductivity SiC Substrate. IEEE Electron Device Letters, 2018, 39, 807-810.	3.9	27
51	Blood flow sensor with built-in contact pressure and temperature sensor. , 2018, , .		0
52	Grasping Force Control for a Robotic Hand by Slip Detection Using Developed Micro Laser Doppler Velocimeter. Sensors, 2018, 18, 326.	3.8	26
53	(Invited) Pixel-Parallel 3-D Integrated CMOS Image Sensors for Next-Generation Video Systems. ECS Transactions, 2018, 85, 163-166.	0.5	0
54	Surface activated bonding of Au/Ta layers after degas annealing for MEMS packaging. , 2018, , .		3

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55	Room-temperature wafer bonding of LiNbO ₃ and SiO ₂ using a modified surface activated bonding method. Japanese Journal of Applied Physics, 2018, 57, 06HJ12.	1.5	23
56	Simultaneous Measurement of a Blood Flow and a Contact Pressure. , 2018, , .		2
57	Introduction to the Special Edition. Journal of Japan Institute of Electronics Packaging, 2018, 21, 474-474.	0.1	0
58	Progress and Perspective of Optical MEMS Packaging Technology. Journal of Japan Institute of Electronics Packaging, 2018, 21, 558-566.	0.1	0
59	Hematocrit-insensitive Absolute Blood Flow Rate Measurement in 0.5-mm-diameter Flow Channel Using MEMS-based Laser Doppler Velocimeter with Signal Modification for Detecting Beat Frequency from Broad Power Spectrum. Sensors and Materials, 2018, 30, 3009.	0.5	0
60	Three-Layered Stacking Process by Au/SiO ₂ Hybrid Bonding for 3D Structured Image Sensors. ECS Transactions, 2017, 80, 227-231.	0.5	1
61	Ar+H ₂ ; atmospheric-pressure plasma treatment for Au-Au bonding and influence of air exposure on surface contamination. , 2017, , .		1
62	Hydrogen radical treatment for indium surface oxide removal and re-oxidation behaviour. , 2017, , .		4
63	Hydrogen radical treatment for surface oxide removal from copper. , 2017, , .		3
64	Wafer bonding using smooth titanium thin films in air atmosphere. , 2017, , .		0
65	Room-temperature transfer bonding of lithium niobate thin film on micromachined silicon substrate with Au microbumps. Sensors and Actuators A: Physical, 2017, 264, 274-281.	4.1	16
66	Surface activated wafer bonding of LiNbO ₃ and SiO ₂ /Si for LNOI on Si. , 2017, , .		0
67	Fabrication and evaluation of molding and bonding tools for Au micromirror formation. , 2017, , .		0
68	3-Layered Au/SiO ₂ ; hybrid bonding with 6- μ m-pitch au electrodes for 3D structured image sensors. , 2017, , .		1
69	Hydrogen radical treatment of printed indium solder paste for bump formation. , 2017, , .		2
70	A new extremely small sensor for measuring a blood flow and a contact pressure simultaneously. , 2017, , .		0
71	Preparation of pine-like Cu-Ni-P coating and its application in 3D integration. , 2017, , .		0
72	Room-Temperature Bonding of Wafers with Smooth Au Thin Films in Ambient Air Using a Surface-Activated Bonding Method. IEICE Transactions on Electronics, 2017, E100.C, 156-160.	0.6	33

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73	Introduction to the Special Edition. Journal of Japan Institute of Electronics Packaging, 2017, 20, 371-371.	0.1	0
74	JIEP from the Viewpoint of Education Activity. Journal of Japan Institute of Electronics Packaging, 2017, 20, P6-P6.	0.1	0
75	Three-dimensional integration technology of separate SOI layers for photodetectors and signal processors of CMOS image sensors. , 2016, , .		1
76	Room-Temperature Wafer Bonding Using Al/Ti/Au Layers for Integrated Reflectors in the Ultraviolet Spectral Region. , 2016, , .		1
77	Al/Au multilayers with different diffusion barrier layers for application as wafer-bonded UV reflectors. , 2016, , .		0
78	(Invited) Pixel-Parallel CMOS Image Sensors with 16-Bit A/D Converters Developed by 3-D Integration of SOI Layers with Au/SiO ₂ Hybrid Bonding. ECS Transactions, 2016, 72, 3-6.	0.5	4
79	In-pixel A/D converters with 120-dB dynamic range using event-driven correlated double sampling for stacked SOI image sensors. , 2016, , .		4
80	Demonstration of ultraprecision ductile-mode cutting for lithium niobate microring waveguides. Japanese Journal of Applied Physics, 2016, 55, 110304.	1.5	5
81	Transient liquid-phase sintering using silver and tin powder mixture for die bonding. Japanese Journal of Applied Physics, 2016, 55, 04EC14.	1.5	25
82	Room-Temperature Gold-Gold Bonding Method Based on Argon and Hydrogen Gas Mixture Atmospheric-Pressure Plasma Treatment for Optoelectronic Device Integration. IEICE Transactions on Electronics, 2016, E99.C, 339-345.	0.6	22
83	Evaluation of local relative slip in a narrow space in hydrogen gas using MEMS optical encoder. , 2016, , .		1
84	Simultaneous molding and low-temperature bonding of Au microstructures for fabrication of micromirrors on non-silicon substrates. , 2016, , .		0
85	Au / SiO ₂ Hybrid Bonding with 6- μ m-Pitch Au Electrodes for 3D Structured Image Sensors. ECS Transactions, 2016, 75, 103-106.	0.5	5
86	Suppressed Self-Heating in Multi-Finger InP-Based DHBTs with Au Subcollector Fabricated on SiC Substrate by Surface-Activated Bonding. ECS Transactions, 2016, 75, 97-102.	0.5	5
87	Ultra-Small Micro Encoder and Its Application to Doppler Sensor. Journal of the Japan Society for Precision Engineering, 2016, 82, 778-782.	0.1	0
88	Room-temperature wafer bonding using smooth gold thin films for wafer-level MEMS packaging. , 2016, , .		1
89	Development and evaluation of a two-axial shearing force sensor consisting of an optical sensor chip and elastic gum frame. Precision Engineering, 2016, 45, 136-142.	3.4	12
90	Review of Low-Temperature Bonding Technologies and Their Application in Optoelectronic Devices. Electronics and Communications in Japan, 2016, 99, 63-71.	0.5	24

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91	Development of a Built-In Micro-Laser Doppler Velocimeter. Journal of Microelectromechanical Systems, 2016, 25, 380-387.	2.5	11
92	A Review of Low-temperature Sealing Technologies using Metal Thin Films and Solders for Sensors and MEMS. IEJ Transactions on Sensors and Micromachines, 2016, 136, 266-273.	0.1	3
93	Higurashi Laboratory, Department of Precision Engineering, School of Engineering, The University of Tokyo. Journal of Japan Institute of Electronics Packaging, 2016, 19, 197-197.	0.1	0
94	Introduction to the Special Edition. Journal of Japan Institute of Electronics Packaging, 2016, 19, 367-367.	0.1	0
95	Investigation of Thermal Resistance Reduction of InP-based Double Heterojunction Bipolar Transistors Fabricated by Wafer Bonding. IEJ Transactions on Electronics, Information and Systems, 2016, 136, 455-460.	0.2	0
96	Comparable Accuracy of Micro-Electromechanical Blood Flowmetry-Based Analysis vs. Electrocardiography-Based Analysis in Evaluating Heart Rate Variability. Circulation Journal, 2015, 79, 794-801.	1.6	6
97	Three-dimensional integrated circuits and stacked CMOS image sensors using direct bonding of SOI layers. , 2015, , .		3
98	Detection of Site-Specific Blood Flow Variation in Humans during Running by a Wearable Laser Doppler Flowmeter. Sensors, 2015, 15, 25507-25519.	3.8	27
99	Pixel-Parallel 3-D Integrated CMOS Image Sensors With Pulse Frequency Modulation A/D Converters Developed by Direct Bonding of SOI Layers. IEEE Transactions on Electron Devices, 2015, 62, 3530-3535.	3.0	18
100	Advances in Low-Temperature Bonding Technologies for 3D Integration. Japanese Journal of Applied Physics, 2015, 54, 030200.	1.5	0
101	Room-temperature direct bonding of germanium wafers by surface-activated bonding method. Japanese Journal of Applied Physics, 2015, 54, 030213.	1.5	19
102	Influence of atmospheric-pressure plasma treatment on surface and electrical properties of photodiode chips. , 2015, , .		0
103	Low temperature Au-Au surface-activated bonding using nitrogen atmospheric-pressure plasma treatment for optical microsystems. , 2015, , .		3
104	A micro laser Doppler velocimeter designed for a wafer-level packaging process. , 2015, , .		0
105	128 × 96 Pixel-parallel three-dimensional integrated CMOS image sensors with 16-bit A/D converters: By direct bonding with embedded Au electrodes. , 2015, , .		6
106	Contact pressure measurement device with a laser micro-displacement sensor. , 2015, , .		2
107	Influence of air exposure time on bonding strength in Au-Au surface activated wafer bonding. , 2015, , .		3
108	Development of a three-dimensional integrated image sensor with pixel-parallel signal processing architecture. , 2015, , .		0

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109	Surface activated bonding of GaAs and SiC wafers at room temperature for improved heat dissipation in high-power semiconductor lasers. Japanese Journal of Applied Physics, 2015, 54, 030207.	1.5	39
110	Development of a miniaturized laser Doppler velocimeter for use as a slip sensor for robot hand control. , 2015, , .		5
111	Thermal conductance of silicon interfaces directly bonded by room-temperature surface activation. Applied Physics Letters, 2015, 106, .	3.3	21
112	Shearing force measurement device with a built-in integrated micro displacement sensor. Sensors and Actuators A: Physical, 2015, 221, 1-8.	4.1	24
113	Room-Temperature Wafer Bonding for High-Heat Dissipation Structure in High-Power Semiconductor Devices. Journal of Japan Institute of Electronics Packaging, 2015, 18, 463-468.	0.1	0
114	Low-temperature gold-gold bonding using argon and hydrogen gas mixture atmospheric-pressure plasma treatment for optical microsystems. , 2014, , .		1
115	Miniaturized polarization sensors integrated with wire-grid polarizers. , 2014, , .		4
116	Three-Dimensional Integration of Fully Depleted Silicon-on-Insulator Transistor Substrates for CMOS Image Sensors Using Au/SiO ₂ Hybrid Bonding and XeF ₂ Etching. ECS Transactions, 2014, 64, 391-396.	0.5	2
117	(Invited) Development of Novel Three-Dimensional Structuring of Integrated Circuits by Using Low Temperature Direct Bonding for CMOS Image Sensors. ECS Transactions, 2014, 61, 87-90.	0.5	1
118	Lithium niobate ridged waveguides with smooth vertical sidewalls fabricated by an ultra-precision cutting method. Optics Express, 2014, 22, 27733.	3.4	40
119	Two axial shearing force measurement device with a micro displacement sensor. , 2014, , .		1
120	Low-Temperature Solid-State Bonding Using Hydrogen Radical Treated Solder for Optoelectronic and MEMS Packaging. ECS Transactions, 2014, 64, 267-274.	0.5	11
121	Electrical pumping Fabry-Pérot lasing of a III-V layer on a highly doped silicon micro rib. Laser Physics Letters, 2014, 11, 115807.	1.4	5
122	Low-temperature GaAs/SiC wafer bonding with Au thin film for high-power semiconductor lasers. , 2014, , .		5
123	Three-dimensional integrated CMOS image sensors with pixel-parallel A/D converters fabricated by direct bonding of SOI layers. , 2014, , .		19
124	Two axial shearing force measurement device with a built-in integrated micro displacement sensor. , 2014, , .		1
125	3-D Silicon-on-Insulator Integrated Circuits With NFET and PFET on Separate Layers Using Au/SiO ₂ Hybrid Bonding. IEEE Transactions on Electron Devices, 2014, 61, 2886-2892.	3.0	19
126	Room-temperature wafer bonding with smooth Au thin film in ambient air using Ar RF plasma activation. , 2014, , .		5

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127	Fabrication of miniaturized polarization sensors using flip-chip bonding with atmospheric-pressure plasma activation. , 2014, , .		0
128	Mechanical grinding of Au/SiO ₂ /Si hybrid-bonded substrates for 3D integrated image sensors. , 2014, , .		0
129	Review of Low-temperature Bonding Technologies and Their Application in Optoelectronic Devices. IEEJ Transactions on Sensors and Micromachines, 2014, 134, 159-165.	0.1	6
130	Application of nano-imprint technology to grating scale for a rotary microencoder. , 2013, , .		0
131	Three-dimensional integrated circuits with NFET and PFET on separate layers fabricated by low temperature Au/SiO ₂ hybrid bonding. , 2013, , .		5
132	Development of a Wireless Sensor for the Measurement of Chicken Blood Flow Using the Laser Doppler Blood Flow Meter Technique. IEEE Transactions on Biomedical Engineering, 2013, 60, 1645-1653.	4.2	22
133	InGaAsP optical device integration on SOI platform by Ar/O ₂ plasma assisted bonding. Proceedings of SPIE, 2013, , .	0.8	0
134	(Invited) Low-Temperature Bonding Technologies for Photonics Applications. ECS Transactions, 2013, 50, 351-362.	0.5	17
135	Low-Temperature Bonding Technologies Realizing High-Functional Optical Microsystems and Sensors. Journal of the Japan Society for Precision Engineering, 2013, 79, 719-724.	0.1	0
136	Low-temperature bonding of laser diode chips using atmospheric-pressure plasma activation of flat topped Au stud bumps with smooth surfaces. , 2012, , .		5
137	Low-temperature bonding of optical chips using coined Au stud bumps and its application to micro laser Doppler velocimeter. , 2012, , .		1
138	Electrical properties of Si-based junctions by SAB. , 2012, , .		12
139	InP/Si heterogeneous integration by low-temperature bonding using metallic interlayer. , 2012, , .		0
140	SOI platform and III-V integrated active photonic device by direct bonding for data communication. , 2012, , .		7
141	Useful method to monitor the physiological effects of alcohol ingestion by combination of micro-integrated laser Doppler blood flow meter and arm-raising test. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2012, 226, 759-765.	1.8	6
142	Low-temperature hermetic packaging for microsystems using Au-Au surface-activated bonding at atmospheric pressure. Journal of Micromechanics and Microengineering, 2012, 22, 055026.	2.6	42
143	Solid-state bonding using metallic cone layer for interconnection. , 2012, , .		1
144	Hybrid integration of LiNbO ₃ thin films on micromachined Si substrates using room-temperature transfer bonding. , 2012, , .		0

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145	Low-Temperature Bonding of GaN on Si Using a Nonalloyed Metal Ohmic Contact Layer for GaN-Based Heterogeneous Devices. IEEE Journal of Quantum Electronics, 2012, 48, 182-186.	1.9	13
146	Low-temperature Bonding Technologies and Their Application to Highly Functional Sensors. Journal of Smart Processing, 2012, 1, 106-113.	0.1	0
147	Air-gap structure between integrated LiNbO ₃ optical modulators and micromachined Si substrates. Optics Express, 2011, 19, 15739.	3.4	34
148	Passive Alignment and Mounting of LiNbO ₃ Waveguide Chips on Si Substrates by Low-Temperature Solid-State Bonding of Au. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 652-658.	2.9	37
149	Silicon/III-V material active layer heterointegrated vertical PIN waveguide photodiode by direct bonding. , 2011, , .		0
150	Low-temperature sealing for optical microsystem packages using Au-Au surface activated bonding in atmospheric pressure environment. , 2011, , .		1
151	Use of a simple arm-raising test with a portable laser Doppler blood flow meter to detect dehydration. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2011, 225, 411-419.	1.8	6
152	Integrated Laser Doppler Blood Flowmeter Designed to Enable Wafer-Level Packaging. IEEE Transactions on Biomedical Engineering, 2010, 57, 2026-2033.	4.2	22
153	Miniaturization of a Laser Doppler Blood Flow Sensor by System-in-a-Package Technology: Fusion of an Optical Microelectromechanical Systems Chip and Integrated Circuits. IEJ Transactions on Electrical and Electronic Engineering, 2010, 5, 137-142.	1.4	7
154	Evaluation of surface microroughness for surface activated bonding. , 2010, , .		9
155	Integrated micro laser Doppler velocimeter with 3-D structure. , 2010, , .		1
156	Electrical pumping to III-V layer from highly doped silicon micro wire to realize light emission by plasmaassisted bonding technology. , 2010, , .		3
157	Wafer-bonded Ge:Ga blocked-impurity-band far-infrared detectors. , 2010, , .		2
158	Influence of Alcohol Consumption on Blood Flow as Detected Using a Micro Integrated Laser Doppler Blood Flowmeter. , 2010, , .		2
159	Technology for MEMS Commercialization : Current Status and Future Prospects. Journal of the Japan Society for Precision Engineering, 2010, 76, 491-497.	0.1	0
160	Room-Temperature Bonding of GaN to Al Using Ar-Beam Surface Activation. IEJ Transactions on Sensors and Micromachines, 2010, 130, 369-372.	0.1	0
161	Residue-Free Solder Bumping Using Small AuSn Particles by Hydrogen Radicals. IEICE Transactions on Electronics, 2009, E92-C, 247-251.	0.6	6
162	A micro optical blood flow sensor and its application to detection of avian influenza. , 2009, , .		3

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163	Heterogeneous integration towards an ultra-compact and thin optical displacement microsensors. , 2009, , .		0
164	Development of a micro displacement sensor with monolithic-integrated two-dimensionally distributed photodiodes. , 2009, , .		5
165	Low-temperature bonding of photodiodes on glass substrate using Au stud bumps and its application to microsensors with three-dimensional structure. , 2009, , .		0
166	Au-Au Surface-Activated Bonding and Its Application to Optical Microsensors With 3-D Structure. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 1500-1505.	2.9	95
167	Low-temperature bonding of laser diode chips on Si substrates with oxygen and hydrogen atmospheric-pressure plasma activation. , 2009, , .		7
168	Semiconductive properties of heterointegration of INP/INGAAS on high doped silicon wire waveguide for silicon hybrid laser. , 2009, , .		3
169	Micro integrated laser Doppler blood flow sensor and its application to dehydration prevention. , 2009, , .		3
170	Optical Microsensors Integration Technologies for Biomedical Applications. IEICE Transactions on Electronics, 2009, E92-C, 231-238.	0.6	13
171	Three-dimensional integration of optical multi-chips using surface-activated bonding for high-density microsystems packaging. , 2008, , .		1
172	Vibrating sensing system based on optical excitation and detection using optical fiber. , 2008, , .		1
173	Low-power consumption integrated laser Doppler blood flowmeter with a built-in silicon microlens. , 2008, , .		8
174	Void-Free Room-Temperature Silicon Wafer Direct Bonding Using Sequential Plasma Activation. Japanese Journal of Applied Physics, 2008, 47, 2526.	1.5	30
175	Low-Temperature Direct Bonding of Flip-Chip Mountable VCSELs with Au-Au Surface Activation. IEEJ Transactions on Sensors and Micromachines, 2008, 128, 266-270.	0.1	17
176	Low Temperature Bonding for Optical Microsystems Applications. ECS Transactions, 2008, 16, 93-103.	0.5	2
177	Title is missing!. Journal of Japan Institute of Electronics Packaging, 2008, 11, 456-460.	0.1	2
178	Feasibility of SAB using Nano-adhesion Layer for Low Temperature GaN Wafer Bonding. , 2007, , .		1
179	Room temperature GaN-GaAs direct bonding by argon-beam surface activation. Proceedings of SPIE, 2007, , .	0.8	4
180	Combined Device of Optical Microdisplacement Sensor and PZT-Actuated Micromirror. , 2007, , .		4

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181	Development and Use of a Micro Optical Blood Flow Sensor Based on Systemin Package (SIP) Technology that Fuses Optical MEMS and Integrated Circuit to Detect Avian Influenza. , 2007, , .		2
182	Room Temperature Si/Si Wafer Direct Bonding in Air. , 2007, , .		4
183	Effect of SAB process on GaN surfaces for low temperature bonding. , 2007, , .		3
184	Silicon Wafer Bonding by Modified Surface Activated Bonding Methods. , 2007, , .		0
185	Low-Temperature Bonding of Laser Diode Chips on Silicon Substrates Using Plasma Activation of Au Films. IEEE Photonics Technology Letters, 2007, 19, 1994-1996.	2.5	108
186	Integration and Packaging Technologies for Small Biomedical Sensors. Journal of the Japan Society for Precision Engineering, 2007, 73, 1190-1194.	0.1	0
187	Integrated micro-displacement sensor that measures tilting angle and linear movement of an external mirror. Sensors and Actuators A: Physical, 2007, 138, 269-275.	4.1	43
188	An accelerometer incorporating a laser microencoder for a wide measurable range. Sensors and Actuators A: Physical, 2007, 136, 161-167.	4.1	14
189	Special Section on Microoptomechanics. IEICE Transactions on Electronics, 2007, E90-C, 1-2.	0.6	1
190	Low-Temperature Au-to-Au Bonding for LiNbO ₃ /Si Structure Achieved in Ambient Air. IEICE Transactions on Electronics, 2007, E90-C, 145-146.	0.6	19
191	Low temperature direct bonding of flip-chip mounting VCSEL to Si substrate. , 2006, , .		0
192	Low-temperature bonding of a LiNbO ₃ waveguide chip to a Si substrate in ambient air for hybrid-integrated optical devices. , 2006, 6376, 16.		3
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