

# Tadatomo T Suga

## List of Publications by Year in descending order

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546  
papers

7,973  
citations

57758

44  
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88630

70  
g-index

551  
all docs

551  
docs citations

551  
times ranked

3288  
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface activated bonding of silicon wafers at room temperature. Applied Physics Letters, 1996, 68, 2222-2224.	3.3	397
2	Room temperature Cu-Cu direct bonding using surface activated bonding method. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 449-453.	2.1	268
3	Structure of AlAl and AlSi <sub>3</sub> N <sub>4</sub> interfaces bonded at room temperature by means of the surface activation method. Acta Metallurgica Et Materialia, 1992, 40, S133-S137.	1.8	194
4	Effect of Surface Roughness on Room-Temperature Wafer Bonding by Ar Beam Surface Activation. Japanese Journal of Applied Physics, 1998, 37, 4197-4203.	1.5	169
5	Self-excited piezoelectric PZT microcantilevers for dynamic SFM with inherent sensing and actuating capabilities. Sensors and Actuators A: Physical, 1999, 72, 179-188.	4.1	122
6	Composite Parameters and Mechanical Compatibility of Material Joints. Journal of Composite Materials, 1988, 22, 917-934.	2.4	114
7	Development of a force sensor for atomic force microscopy using piezoelectric thin films. Nanotechnology, 1993, 4, 218-224.	2.6	113
8	Bumpless Interconnect Through Ultrafine Cu Electrodes by Means of Surface-Activated Bonding (SAB) Method. IEEE Transactions on Advanced Packaging, 2006, 29, 218-226.	1.6	111
9	Interfacial Thermal Conductance across Room-Temperature-Bonded GaN/Diamond Interfaces for GaN-on-Diamond Devices. ACS Applied Materials & Interfaces, 2020, 12, 8376-8384.	8.0	109
10	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
11	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
12	Low-temperature direct bonding of silicon and silicon dioxide by the surface activation method. Sensors and Actuators A: Physical, 1998, 70, 164-170.	4.1	91
13	Room-temperature bonding of lithium niobate and silicon wafers by argon-beam surface activation. Applied Physics Letters, 1999, 74, 2387-2389.	3.3	91
14	Transmission Electron Microscope Observations of Si/Si Interface Bonded at Room Temperature by Ar Beam Surface Activation. Japanese Journal of Applied Physics, 1999, 38, 1589-1594.	1.5	89
15	Structural characterization of the fullerene nanotubes prepared by the liquid-liquid interfacial precipitation method. Journal of Materials Research, 2005, 20, 688-695.	2.6	85
16	Room temperature GaN-diamond bonding for high-power GaN-on-diamond devices. Scripta Materialia, 2018, 150, 148-151.	5.2	84
17	High Thermal Boundary Conductance across Bonded Heterogeneous GaN-SiC Interfaces. ACS Applied Materials & Interfaces, 2019, 11, 33428-33434.	8.0	82
18	Bonding of glass nanofluidic chips at room temperature by a one-step surface activation using an O <sub>2</sub> /CF <sub>4</sub> plasma treatment. Lab on A Chip, 2013, 13, 1048.	6.0	81

#	ARTICLE	IF	CITATIONS
19	Wafer-scale spontaneous bonding of silicon wafers by argon-beam surface activation at room temperature. <i>Sensors and Actuators A: Physical</i> , 2003, 105, 98-102.	4.1	80
20	Low-temperature direct bonding of glass nanofluidic chips using a two-step plasma surface activation process. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 1011-1018.	3.7	80
21	Deflection detection and feedback actuation using a self-excited piezoelectric Pb(Zr,Ti)O <sub>3</sub> microcantilever for dynamic scanning force microscopy. <i>Applied Physics Letters</i> , 1996, 69, 2036-2038.	3.3	78
22	Direct bonding of CMP-Cu films by surface activated bonding (SAB) method. <i>Journal of Materials Science</i> , 2005, 40, 3149-3154.	3.7	78
23	Micromachined piezoelectric force sensors based on PZT thin films. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 1996, 43, 553-559.	3.0	77
24	Room-temperature wafer bonding of Si to LiNbO <sub>3</sub> , LiTaO <sub>3</sub> and Gd <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub> by Ar-beam surface activation. <i>Journal of Micromechanics and Microengineering</i> , 2001, 11, 348-352.	2.6	77
25	Mechanochemical Polishing of Silicon Carbide Single Crystal with Chromium(III) Oxide Abrasive. <i>Journal of the American Ceramic Society</i> , 1992, 75, 189-194.	3.8	76
26	Room-Temperature Bonding of Vertical-Cavity Surface-Emitting Laser Chips on Si Substrates Using Au Microbumps in Ambient Air. <i>Applied Physics Express</i> , 0, 1, 112201.	2.4	76
27	Characterization of micromachined piezoelectric PZT force sensors for dynamic scanning force microscopy. <i>Review of Scientific Instruments</i> , 1997, 68, 2091-2100.	1.3	73
28	Wafer direct bonding of compound semiconductors and silicon at room temperature by the surface activated bonding method. <i>Applied Surface Science</i> , 1997, 117-118, 808-812.	6.1	71
29	Room temperature wafer level glass/glass bonding. <i>Sensors and Actuators A: Physical</i> , 2006, 127, 31-36.	4.1	70
30	Structural investigation of the C <sub>60</sub> /C <sub>70</sub> whiskers fabricated by forming liquid-liquid interfaces of toluene with dissolved C <sub>60</sub> /C <sub>70</sub> and isopropyl alcohol. <i>Journal of Materials Research</i> , 2003, 18, 1096-1103.	2.6	68
31	Wafer Level Surface Activated Bonding Tool for MEMS Packaging. <i>Journal of the Electrochemical Society</i> , 2004, 151, G461.	2.9	67
32	Thermal Transport across Ion-Cut Monocrystalline $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> Thin Films and Bonded $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> -SiC Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 44943-44951.	8.0	66
33	Bumpless Interconnect of 6- $\mu$ m-Pitch Cu Electrodes at Room Temperature. <i>IEEE Transactions on Advanced Packaging</i> , 2008, 31, 473-478.	1.6	63
34	Room-Temperature Microfluidics Packaging Using Sequential Plasma Activation Process. <i>IEEE Transactions on Advanced Packaging</i> , 2006, 29, 448-456.	1.6	61
35	Force sensing microcantilever using sputtered zinc oxide thin film. <i>Applied Physics Letters</i> , 1994, 64, 37-39.	3.3	56
36	Morphology of C <sub>60</sub> nanotubes fabricated by the liquid-liquid interfacial precipitation method. <i>Science and Technology of Advanced Materials</i> , 2005, 6, 272-277.	6.1	56

#	ARTICLE	IF	CITATIONS
37	Room temperature GaAs <sup>+</sup> -Si and InP <sup>+</sup> -Si wafer direct bonding by the surface activated bonding method. Nuclear Instruments & Methods in Physics Research B, 1997, 121, 203-206.	1.4	54
38	Development of a piezoelectric self-excitation and self-detection mechanism in PZT microcantilevers for dynamic scanning force microscopy in liquid. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1559.	1.6	53
39	1.3 $\mu$ m InGaAsP/InP lasers on GaAs substrate fabricated by the surface activated wafer bonding method at room temperature. Applied Physics Letters, 1998, 72, 1565-1566.	3.3	53
40	Room temperature bonding of silicon and lithium niobate. Applied Physics Letters, 2006, 89, 031914.	3.3	53
41	Electroplating Ni micro-cantilevers for low contact-force IC probing. Sensors and Actuators A: Physical, 2003, 103, 116-121.	4.1	52
42	Investigation of the bonding strength and interface current of p-Si/n-GaAs wafers bonded by surface activated bonding at room temperature. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 2114.	1.6	49
43	Single-Crystalline 3C-SiC anodically Bonded onto Glass: An Excellent Platform for High-Temperature Electronics and Bioapplications. ACS Applied Materials & Interfaces, 2017, 9, 27365-27371.	8.0	49
44	Characterization of the bonding strength and interface current of p-Si/n-InP wafers bonded by surface activated bonding method at room temperature. Journal of Applied Physics, 2002, 91, 3062-3066.	2.5	48
45	Preparation and Properties of Piezoelectric Lead Zirconate Titanate Thin Films for Microsensors and Microactuators by Sol-Gel Processing. Journal of the Ceramic Society of Japan, 1996, 104, 159-163.	1.3	46
46	Atomic structure of Al/Al interface formed by surface activated bonding. Journal of Materials Science, 1999, 34, 4133-4139.	3.7	46
47	Isothermal Fatigue Properties of Sn-Ag-Cu Alloy Evaluated by Micro Size Specimen. Materials Transactions, 2005, 46, 2309-2315.	1.2	46
48	Si nanoadhesion layer for enhanced SiO <sub>2</sub> /SiN wafer bonding. Scripta Materialia, 2011, 65, 320-322.	5.2	46
49	Novel multibrige-structured piezoelectric microdevice for scanning force microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 3604.	1.6	43
50	A Combined Process of Formic Acid Pretreatment for Low-Temperature Bonding of Copper Electrodes. ECS Journal of Solid State Science and Technology, 2013, 2, P271-P274.	1.8	43
51	Self-excited force-sensing microcantilevers with piezoelectric thin films for dynamic scanning force microscopy. Sensors and Actuators A: Physical, 1996, 54, 477-481.	4.1	42
52	Low-temperature hermetic packaging for microsystems using Au <sup>+</sup> -Au surface-activated bonding at atmospheric pressure. Journal of Micromechanics and Microengineering, 2012, 22, 055026.	2.6	42
53	Comparison of Argon and Oxygen Plasma Treatments for Ambient Room-Temperature Wafer-Scale Au <sup>+</sup> -Au Bonding Using Ultrathin Au Films. Micromachines, 2019, 10, 119.	2.9	42
54	First Demonstration of Waferscale Heterogeneous Integration of Ga <sub>2</sub> O <sub>3</sub> MOSFETs on SiC and Si Substrates by Ion-Cutting Process. , 2019, , .		42

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55	Direct wafer bonding of Ga <sub>2</sub> O <sub>3</sub> –SiC at room temperature. <i>Ceramics International</i> , 2019, 45, 6552-6555.	4.8	40
56	Surface activated bonding of GaAs and SiC wafers at room temperature for improved heat dissipation in high-power semiconductor lasers. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 030207.	1.5	39
57	Nanobonding Technology Toward Electronic, Fluidic, and Photonic Systems Integration. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2011, 17, 689-703.	2.9	37
58	Passive Alignment and Mounting of LiNbO <sub>3</sub> Waveguide Chips on Si Substrates by Low-Temperature Solid-State Bonding of Au. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2011, 17, 652-658.	2.9	37
59	Structural characterization of the C <sub>60</sub> [C(COOC <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> ] whiskers prepared by the liquid–liquid interfacial precipitation method. <i>Journal of Materials Research</i> , 2003, 18, 2730-2735.	2.6	36
60	A Novel Bonding Method for Ionic Wafers. <i>IEEE Transactions on Advanced Packaging</i> , 2007, 30, 598-604.	1.6	36
61	Enhanced adhesion and anticorrosion of silk fibroin coated biodegradable Mg-Zn-Ca alloy via a two-step plasma activation. <i>Corrosion Science</i> , 2020, 168, 108466.	6.6	36
62	Low-Temperature Process of Fine-Pitch Au–Sn Bump Bonding in Ambient Air. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 1961-1967.	1.5	34
63	Air-gap structure between integrated LiNbO <sub>3</sub> optical modulators and micromachined Si substrates. <i>Optics Express</i> , 2011, 19, 15739.	3.4	34
64	<sup>125</sup> I-Ga <sub>2</sub> O <sub>3</sub> MOSFETs on the Si substrate fabricated by the ion-cutting process. <i>Science China: Physics, Mechanics and Astronomy</i> , 2020, 63, 1.	5.1	34
65	Room-Temperature Bonding of Wafers with Smooth Au Thin Films in Ambient Air Using a Surface-Activated Bonding Method. <i>IEICE Transactions on Electronics</i> , 2017, E100.C, 156-160.	0.6	33
66	Piezoelectric Sensor for Detecting Force Gradients in Atomic Force Microscopy. <i>Japanese Journal of Applied Physics</i> , 1994, 33, 334-340.	1.5	32
67	Silicon carbide wafer bonding by modified surface activated bonding method. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 030214.	1.5	32
68	Combined Surface Activated Bonding Technique for Low-Temperature Cu/Dielectric Hybrid Bonding. <i>ECS Journal of Solid State Science and Technology</i> , 2016, 5, P419-P424.	1.8	32
69	Sol-gel derived PZT force sensor for scanning force microscopy. <i>Materials Chemistry and Physics</i> , 1996, 44, 25-29.	4.0	30
70	Structure and electrical properties of heat-treated fullerene nanowhiskers as potential energy device materials. <i>Journal of the European Ceramic Society</i> , 2006, 26, 429-434.	5.7	30
71	Void-Free Room-Temperature Silicon Wafer Direct Bonding Using Sequential Plasma Activation. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 2526.	1.5	30
72	A comparison study: Direct wafer bonding of SiC–SiC by standard surface-activated bonding and modified surface-activated bonding with Si-containing Ar ion beam. <i>Applied Physics Express</i> , 2016, 9, 081302.	2.4	30

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73	Surface activated bonding of LCP/Cu for electronic packaging. Journal of Materials Science, 2005, 40, 3177-3184.	3.7	29
74	GaN-Si direct wafer bonding at room temperature for thin GaN device transfer after epitaxial lift off. Applied Surface Science, 2017, 416, 1007-1012.	6.1	29
75	Room-temperature direct bonding of silicon and quartz glass wafers. Applied Physics Letters, 2017, 110, .	3.3	29
76	Exploration of the enhanced performances for silk fibroin/sodium alginate composite coatings on biodegradable Mg <sup>2+</sup> Zn <sup>2+</sup> Ca alloy. Journal of Magnesium and Alloys, 2021, 9, 1578-1594.	11.9	29
77	Surface activated bonding for new flip chip and bumpless interconnect systems. , 0, , .		28
78	Study on Sn&ndash;Ag Oxidation and Feasibility of Room Temperature Bonding of Sn&ndash;Ag&ndash;Cu Solder. Materials Transactions, 2005, 46, 2431-2436.	1.2	27
79	Structural investigation of heat-treated fullerene nanotubes and nanowhiskers. Diamond and Related Materials, 2006, 15, 1143-1146.	3.9	27
80	Investigation of bonding strength and sealing behavior of aluminum/stainless steel bonded at room temperature. Vacuum, 2010, 84, 1334-1340.	3.5	27
81	Interfacial Behavior of Surface Activated p-GaP/n-GaAs Bonded Wafers at Room Temperature. Electrochemical and Solid-State Letters, 2010, 13, H61.	2.2	27
82	Characteristics of low force contact process for MEMS probe cards. Sensors and Actuators A: Physical, 2002, 97-98, 462-467.	4.1	26
83	Room-Temperature Direct Bonding Using Fluorine Containing Plasma Activation. Journal of the Electrochemical Society, 2011, 158, H525.	2.9	26
84	Transmission electron microscopy investigation of fullerene nanowhiskers and needle-like precipitates formed by using C60 and (1-2-C60)Pt(PPh3)2. Journal of Materials Research, 2004, 19, 2410-2414.	2.6	25
85	Role of Heating on Plasma-Activated Silicon Wafers Bonding. Journal of the Electrochemical Society, 2009, 156, H846.	2.9	25
86	Vapor-Assisted Surface Activation Method for Homo- and Heterogeneous Bonding of Cu, SiO <sub>2</sub> , and Polyimide at 150Å°C and Atmospheric Pressure. Journal of Electronic Materials, 2012, 41, 2274-2280.	2.2	25
87	Effect of Formic Acid Vapor &lt;italic&gt;In Situ&lt;/italic&gt; Treatment Process on Cu Low-Temperature Bonding. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 951-956.	2.5	25
88	Transient liquid-phase sintering using silver and tin powder mixture for die bonding. Japanese Journal of Applied Physics, 2016, 55, 04EC14.	1.5	25
89	A Comparative Study: Void Formation in Silicon Wafer Direct Bonding by Oxygen Plasma Activation with and without Fluorine. ECS Journal of Solid State Science and Technology, 2017, 6, P7-P13.	1.8	25
90	Piezoelectric force sensor for scanning force microscopy. Sensors and Actuators A: Physical, 1994, 43, 305-310.	4.1	24

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91	Reliability of Au bump&#x2013;Cu direct interconnections fabricated by means of surface activated bonding method. Microelectronics Reliability, 2003, 43, 751-756.	1.7	24
92	Sequential Plasma Activated Process for Silicon Direct Bonding. ECS Transactions, 2006, 3, 191-202.	0.5	24
93	Nanoadhesion layer for enhanced Si&#x2013;Si and Si&#x2013;SiN wafer bonding. Microelectronics Reliability, 2012, 52, 342-346.	1.7	24
94	Review of Low&#x2013;Temperature Bonding Technologies and Their Application in Optoelectronic Devices. Electronics and Communications in Japan, 2016, 99, 63-71.	0.5	24
95	Investigation of fluorine containing plasma activation for room-temperature bonding of Si-based materials. Microelectronics Reliability, 2012, 52, 347-351.	1.7	23
96	Effect of Au Film Thickness and Surface Roughness on Room-Temperature Wafer Bonding and Wafer-Scale Vacuum Sealing by Au-Au Surface Activated Bonding. Micromachines, 2020, 11, 454.	2.9	23
97	Effect of the surface treatment on the room-temperature bonding of Al to Si and SiO <sub>2</sub> . Journal of Materials Science, 1998, 33, 253-258.	3.7	22
98	Influence of ceramic surface treatment on peel-off strength between aluminum nitride and epoxy-modified polyaminobismaleimide adhesive. IEEE Transactions on Advanced Packaging, 2001, 24, 104-112.	1.6	22
99	Cu-Cu Room Temperature Bonding - Current Status of Surface Activated Bonding(SAB) - ECS Transactions, 2006, 3, 155-163.	0.5	22
100	Modified Diffusion Bonding of Chemical Mechanical Polishing Cu at 150 Â°C at Ambient Pressure. Applied Physics Express, 0, 2, 056501.	2.4	22
101	Room temperature SiO <sub>2</sub> ; wafer bonding by adhesion layer method. , 2011, , .		22
102	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
103	Low contact-force and compliant MEMS probe card utilizing fritting contact. , 0, , .		21
104	Recycled low-temperature direct bonding of Si/glass and glass/glass chips for detachable micro/nanofluidic devices. Journal of Materials Science and Technology, 2020, 46, 156-167.	10.7	21
105	Novel high vacuum scanning force microscope using a piezoelectric cantilever and the phase detection method. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1551.	1.6	20
106	Morphology and microstructure of the Ar <sup>+</sup> -ion sputtered (0001) $\pm$ -Al <sub>2</sub> O <sub>3</sub> surface. Applied Surface Science, 2000, 165, 159-165.	6.1	20
107	Bump-less interconnect for next generation system packaging. , 0, , .		20
108	Transmission electron microscopy investigation of tubular and capsular needlelike crystals of C <sub>60</sub> produced by the liquid&#x2013;liquid interfacial precipitation method. Journal of Materials Research, 2004, 19, 3145-3148.	2.6	20

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109	Broadband MEMS shunt switches using PZT/HfO <sub>2</sub> multi-layered high k dielectrics for high switching isolation. <i>Sensors and Actuators A: Physical</i> , 2005, 121, 275-281.	4.1	20
110	Low-cycle fatigue properties of eutectic solders at high temperatures. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2007, 30, 413-419.	3.4	20
111	Low temperature Cu-Cu direct bonding using formic acid vapor pretreatment. , 2011, , .		20
112	Room-temperature bonding method for polymer substrate of flexible electronics by surface activation using nano-adhesion layers. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 101602.	1.5	20
113	Direct Wafer Bonding of SiC-SiC by SAB for Monolithic Integration of SiC MEMS and Electronics. <i>ECS Journal of Solid State Science and Technology</i> , 2016, 5, P451-P456.	1.8	20
114	Sequential plasma activation methods for hydrophilic direct bonding at sub-200 Å°C. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 02BD03.	1.5	20
115	Direct wafer bonding of GaN-SiC for high power GaN-on-SiC devices. <i>Materialia</i> , 2018, 3, 12-14.	2.7	20
116	Efficient thermal dissipation in wafer-scale heterogeneous integration of single-crystalline $\hat{2}$ -Ga <sub>2</sub> O <sub>3</sub> thin film on SiC. <i>Fundamental Research</i> , 2021, 1, 691-696.	3.3	20
117	Enhanced Cu/LCP adhesion by pre-sputter cleaning prior to Cu deposition. <i>IEEE Transactions on Advanced Packaging</i> , 2005, 28, 495-502.	1.6	19
118	Room-temperature direct bonding of germanium wafers by surface-activated bonding method. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 030213.	1.5	19
119	A Scalable Clean Graphene Transfer Process Using Polymethylglutarimide as a Support Scaffold. <i>Journal of the Electrochemical Society</i> , 2016, 163, E159-E161.	2.9	19
120	Room-temperature wafer bonding of SiCâ€“Si by modified surface activated bonding with sputtered Si nanolayer. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 04EC09.	1.5	19
121	Direct Homo/Heterogeneous Bonding of Silicon and Glass Using Vacuum Ultraviolet Irradiation in Air. <i>Journal of the Electrochemical Society</i> , 2018, 165, H3093-H3098.	2.9	19
122	Thermal Visualization of Buried Interfaces Enabled by Ratio Signal and Steady-State Heating of Time-Domain Thermorefectance. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 31843-31851.	8.0	19
123	Low-Temperature Au-to-Au Bonding for LiNbO <sub>3</sub> /Si Structure Achieved in Ambient Air. <i>IEICE Transactions on Electronics</i> , 2007, E90-C, 145-146.	0.6	19
124	Room-Temperature Bonding of Si Wafers to Pt Films on SiO <sub>2</sub> or LiNbO <sub>3</sub> Substrates Using Ar-Beam Surface Activation. <i>Japanese Journal of Applied Physics</i> , 1999, 38, L1559-L1561.	1.5	18
125	Characteristics of fritting contacts utilized for micromachined wafer probe cards. <i>Review of Scientific Instruments</i> , 2000, 71, 2224-2227.	1.3	18
126	Characterization of fritting phenomena on Al electrode for low contact force probe card. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2003, 26, 382-387.	1.3	18



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127	Room temperature vacuum sealing using surface activated bonding method. , 0, , .		18
128	Direct bonding of high dielectric oxides for high-performance transistor applications. Scripta Materialia, 2020, 178, 307-312.	5.2	18
129	Silicate glass-to-glass hermetic bonding for encapsulation of next-generation optoelectronics: A review. Materials Today, 2021, 47, 131-155.	14.2	18
130	Necessary load for room temperature vacuum sealing. Journal of Micromechanics and Microengineering, 2005, 15, S281-S285.	2.6	17
131	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
132	Low temperature Cu-Cu bonding by transient liquid phase sintering of mixed Cu nanoparticles and Sn-Bi eutectic powders. Journal of Materials Science: Materials in Electronics, 2017, 28, 16433-16443.	2.2	17
133	Mechanisms for Room-Temperature Fluorine Containing Plasma Activated Bonding. ECS Journal of Solid State Science and Technology, 2017, 6, P373-P378.	1.8	17
134	Channel Properties of Ga <sub>0.5</sub> O <sub>1.5</sub> -on-SiC MOSFETs. IEEE Transactions on Electron Devices, 2021, 68, 1185-1189.	3.0	17
135	Haftfestigkeitsbestimmung an Keramik-Metall-Verbindungen mit Hilfe von Schichtverbundbiegeproben - Teil 1. Materialwissenschaft Und Werkstofftechnik, 1985, 16, 75-80.	0.9	16
136	Title is missing!. Journal of Micromechanics and Microengineering, 1995, 5, 231-236.	2.6	16
137	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
138	Fabrication of Ag@Ag <sub>2</sub> O-MnOx composite nanowires for high-efficient room-temperature removal of formaldehyde. Journal of Materials Science and Technology, 2021, 91, 5-16.	10.7	16
139	Direct Cu to Cu Bonding and Other Alternative Bonding Techniques in 3D Packaging. Springer Series in Advanced Microelectronics, 2017, , 129-155.	0.3	16
140	Development of a New Mechanochemical Polishing Method with a Polishing Film for Ceramic Round Bars. CIRP Annals - Manufacturing Technology, 1992, 41, 339-342.	3.6	15
141	Microstructure and strength of Al-sapphire interface by means of the surface activated bonding method. Journal of Materials Research, 1997, 12, 852-856.	2.6	15
142	C3F8 plasma fluorination of lead free solders for fluxless soldering. Applied Surface Science, 2004, 227, 81-86.	6.1	15
143	The influence of surface profiles on leakage in room temperature seal-bonding. Sensors and Actuators A: Physical, 2008, 144, 124-129.	4.1	15
144	Room-temperature Si-Si and Si-SiN wafer bonding. , 2010, , .		15

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145	Low temperature de-oxidation for copper surface by catalyzed formic acid vapor. Applied Surface Science, 2018, 456, 890-898.	6.1	15
146	Low temperature bonded Cu/LCP materials for FPCs and their characteristics. IEEE Transactions on Components and Packaging Technologies, 2005, 28, 760-764.	1.3	14
147	Reduction reaction analysis of nanoparticle copper oxide for copper direct bonding using formic acid. Japanese Journal of Applied Physics, 2017, 56, 04CC01.	1.5	14
148	Combined surface activated bonding using H-containing HCOOH vapor treatment for Cu/Adhesive hybrid bonding at below 200 Å°C. Applied Surface Science, 2017, 414, 163-170.	6.1	14
149	Low-temperature wafer direct bonding of silicon and quartz glass by a two-step wet chemical surface cleaning. Japanese Journal of Applied Physics, 2018, 57, 02BD02.	1.5	14
150	Room Temperature Wafer Bonding of Glass Using Aluminum Oxide Intermediate Layer. Advanced Materials Interfaces, 2021, 8, 2001741.	3.7	14
151	Microfabricated Dynamic Scanning Force Microscope Using a Three Dimensional Piezoelectric T-shape Actuator. Japanese Journal of Applied Physics, 1999, 38, 7180-7184.	1.5	13
152	Wafer level sealing characterization method using Si micro cantilevers. Sensors and Actuators A: Physical, 2008, 147, 359-364.	4.1	13
153	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
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