

Tadatomo T Suga

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415
papers

5,868
citations

41
h-index

62
g-index

551
ext. papers

7,037
ext. citations

2.2
avg. IF

5.79
L-index

#	Paper	IF	Citations
415	Surface activated bonding of silicon wafers at room temperature. <i>Applied Physics Letters</i> , 1996 , 68, 2222-2224	3.4	310
414	Room temperature Cu/Cu direct bonding using surface activated bonding method. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003 , 21, 449-453	2.9	185
413	Effect of Surface Roughness on Room-Temperature Wafer Bonding by Ar Beam Surface Activation. <i>Japanese Journal of Applied Physics</i> , 1998 , 37, 4197-4203	1.4	128
412	Structure of AlAl and AlSi ₃ N ₄ interfaces bonded at room temperature by means of the surface activation method. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, S133-S137		128
411	Self-excited piezoelectric PZT microcantilevers for dynamic SFM with inherent sensing and actuating capabilities. <i>Sensors and Actuators A: Physical</i> , 1999 , 72, 179-188	3.9	110
410	Composite Parameters and Mechanical Compatibility of Material Joints. <i>Journal of Composite Materials</i> , 1988 , 22, 917-934	2.7	103
409	Development of a force sensor for atomic force microscopy using piezoelectric thin films. <i>Nanotechnology</i> , 1993 , 4, 218-224	3.4	94
408	Bumpless interconnect through ultrafine Cu electrodes by means of surface-activated bonding (SAB) method. <i>IEEE Transactions on Advanced Packaging</i> , 2006 , 29, 218-226		85
407	Low-temperature direct bonding of silicon and silicon dioxide by the surface activation method. <i>Sensors and Actuators A: Physical</i> , 1998 , 70, 164-170	3.9	74
406	Transmission Electron Microscope Observations of Si/Si Interface Bonded at Room Temperature by Ar Beam Surface Activation. <i>Japanese Journal of Applied Physics</i> , 1999 , 38, 1589-1594	1.4	74
405	Low-Temperature Bonding of Laser Diode Chips on Silicon Substrates Using Plasma Activation of Au Films. <i>IEEE Photonics Technology Letters</i> , 2007 , 19, 1994-1996	2.2	73
404	Structural characterization of the fullerene nanotubes prepared by the liquid-liquid interfacial precipitation method. <i>Journal of Materials Research</i> , 2005 , 20, 688-695	2.5	72
403	Room-temperature bonding of lithium niobate and silicon wafers by argon-beam surface activation. <i>Applied Physics Letters</i> , 1999 , 74, 2387-2389	3.4	72
402	Au/Au Surface-Activated Bonding and Its Application to Optical Microsensors With 3-D Structure. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2009 , 15, 1500-1505	3.8	70
401	Bonding of glass nanofluidic chips at room temperature by a one-step surface activation using an O ₂ /CF ₄ plasma treatment. <i>Lab on A Chip</i> , 2013 , 13, 1048-52	7.2	68
400	Deflection detection and feedback actuation using a self-excited piezoelectric Pb(Zr,Ti)O ₃ microcantilever for dynamic scanning force microscopy. <i>Applied Physics Letters</i> , 1996 , 69, 2036-2038	3.4	68
399	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	68

398	Low-temperature direct bonding of glass nanofluidic chips using a two-step plasma surface activation process. <i>Analytical and Bioanalytical Chemistry</i> , 2012 , 402, 1011-8	4.4	65
397	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	3.9	64
396	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	6.7	63
395	Room-temperature wafer bonding of Si to LiNbO ₃ , LiTaO ₃ and Gd ₃ Ga ₅ O ₁₂ by Ar-beam surface activation. <i>Journal of Micromechanics and Microengineering</i> , 2001 , 11, 348-352	2	63
394	Micromachined piezoelectric force sensors based on PZT thin films. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 1996 , 43, 553-559	3.2	63
393	Characterization of micromachined piezoelectric PZT force sensors for dynamic scanning force microscopy. <i>Review of Scientific Instruments</i> , 1997 , 68, 2091-2100	1.7	61
392	Structural investigation of the C60/C70 whiskers fabricated by forming liquid-liquid interfaces of toluene with dissolved C60/C70 and isopropyl alcohol. <i>Journal of Materials Research</i> , 2003 , 18, 1096-1103	3.5	60
391	Room-Temperature Bonding of Vertical-Cavity Surface-Emitting Laser Chips on Si Substrates Using Au Microbumps in Ambient Air. <i>Applied Physics Express</i> , 2008 , 1, 112201	2.4	56
390	Room temperature wafer level glass/glass bonding. <i>Sensors and Actuators A: Physical</i> , 2006 , 127, 31-36	3.9	56
389	Direct bonding of CMP-Cu films by surface activated bonding (SAB) method. <i>Journal of Materials Science</i> , 2005 , 40, 3149-3154	4.3	56
388	Wafer Level Surface Activated Bonding Tool for MEMS Packaging. <i>Journal of the Electrochemical Society</i> , 2004 , 151, G461	3.9	52
387	Interfacial Thermal Conductance across Room-Temperature-Bonded GaN/Diamond Interfaces for GaN-on-Diamond Devices. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 8376-8384	9.5	51
386	Morphology of C60 nanotubes fabricated by the liquid-liquid interfacial precipitation method. <i>Science and Technology of Advanced Materials</i> , 2005 , 6, 272-277	7.1	51
385	Development of a piezoelectric self-excitation and self-detection mechanism in PZT microcantilevers for dynamic scanning force microscopy in liquid. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1997 , 15, 1559		50
384	Room temperature GaN-diamond bonding for high-power GaN-on-diamond devices. <i>Scripta Materialia</i> , 2018 , 150, 148-151	5.6	48
383	Bumpless Interconnect of 6- μm -Pitch Cu Electrodes at Room Temperature. <i>IEEE Transactions on Advanced Packaging</i> , 2008 , 31, 473-478		48
382	Force sensing microcantilever using sputtered zinc oxide thin film. <i>Applied Physics Letters</i> , 1994 , 64, 37-39	3.4	47
381	Investigation of the bonding strength and interface current of p-Si/n-GaAs wafers bonded by surface activated bonding at room temperature. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2001 , 19, 2114		46

380	Room temperature GaAs/Si and InP/Si wafer direct bonding by the surface activated bonding method. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1997 , 121, 203-206	1.2	45
379	Room-temperature microfluidics packaging using sequential plasma activation process. <i>IEEE Transactions on Advanced Packaging</i> , 2006 , 29, 448-456		45
378	1.3 μm InGaAsP/InP lasers on GaAs substrate fabricated by the surface activated wafer bonding method at room temperature. <i>Applied Physics Letters</i> , 1998 , 72, 1565-1566	3-4	45
377	Electroplating Ni micro-cantilevers for low contact-force IC probing. <i>Sensors and Actuators A: Physical</i> , 2003 , 103, 116-121	3-9	44
376	Room temperature bonding of silicon and lithium niobate. <i>Applied Physics Letters</i> , 2006 , 89, 031914	3-4	42
375	High Thermal Boundary Conductance across Bonded Heterogeneous GaN-SiC Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 33428-33434	9-5	41
374	Single-Crystalline 3C-SiC anodically Bonded onto Glass: An Excellent Platform for High-Temperature Electronics and Bioapplications. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 27365-27371	9-5	41
373	Preparation and Properties of Piezoelectric Lead Zirconate Titanate Thin Films for Microsensors and Microactuators by Sol-Gel Processing. <i>Journal of the Ceramic Society of Japan</i> , 1996 , 104, 159-163		41
372	Characterization of the bonding strength and interface current of p-Si/n-InP wafers bonded by surface activated bonding method at room temperature. <i>Journal of Applied Physics</i> , 2002 , 91, 3062-3066	2-5	40
371	Isothermal Fatigue Properties of Sn-Ag-Cu Alloy Evaluated by Micro Size Specimen. <i>Materials Transactions</i> , 2005 , 46, 2309-2315	1-3	39
370	Atomic structure of Al/Al interface formed by surface activated bonding. <i>Journal of Materials Science</i> , 1999 , 34, 4133-4139	4-3	39
369	Novel multibrige-structured piezoelectric microdevice for scanning force microscopy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000 , 18, 3604		37
368	Si nanoadhesion layer for enhanced SiO ₂ /SiN wafer bonding. <i>Scripta Materialia</i> , 2011 , 65, 320-322	5-6	36
367	Thermal Transport across Ion-Cut Monocrystalline β -GaO Thin Films and Bonded β -GaO-SiC Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 44943-44951	9-5	36
366	Self-excited force-sensing microcantilevers with piezoelectric thin films for dynamic scanning force microscopy. <i>Sensors and Actuators A: Physical</i> , 1996 , 54, 477-481	3-9	35
365	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2011 , 17, 689-703	3-8	33
364	Low-temperature hermetic packaging for microsystems using Au/Au surface-activated bonding at atmospheric pressure. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 055026	2	31
363	Structural characterization of the C60[C(COOC ₂ H ₅) ₂] whiskers prepared by the liquid-liquid interfacial precipitation method. <i>Journal of Materials Research</i> , 2003 , 18, 2730-2735	2-5	31

362	Passive Alignment and Mounting of LiNbO ₃ 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	3.8	30
361	Piezoelectric Sensor for Detecting Force Gradients in Atomic Force Microscopy. <i>Japanese Journal of Applied Physics</i> , 1994 , 33, 334-340	1.4	29
360	A Combined Process of Formic Acid Pretreatment for Low-Temperature Bonding of Copper Electrodes. <i>ECS Journal of Solid State Science and Technology</i> , 2013 , 2, P271-P274	2	28
359	A Novel Bonding Method for Ionic Wafers. <i>IEEE Transactions on Advanced Packaging</i> , 2007 , 30, 598-604		27
358	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	1.4	26
357	Structural investigation of heat-treated fullerene nanotubes and nanowhiskers. <i>Diamond and Related Materials</i> , 2006 , 15, 1143-1146	3.5	26
356	Comparison of Argon and Oxygen Plasma Treatments for Ambient Room-Temperature Wafer-Scale Au/Au Bonding Using Ultrathin Au Films. <i>Micromachines</i> , 2019 , 10,	3.3	25
355	Direct wafer bonding of Ga ₂ O ₃ /SiC at room temperature. <i>Ceramics International</i> , 2019 , 45, 6552-6555	5.1	25
354	Air-gap structure between integrated LiNbO ₃ optical modulators and micromachined Si substrates. <i>Optics Express</i> , 2011 , 19, 15739-49	3.3	24
353	Interfacial Behavior of Surface Activated p-GaP/n-GaAs Bonded Wafers at Room Temperature. <i>Electrochemical and Solid-State Letters</i> , 2010 , 13, H61		24
352	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	6	24
351	Study on Sn–Ag Oxidation and Feasibility of Room Temperature Bonding of Sn–Ag–Cu Solder. <i>Materials Transactions</i> , 2005 , 46, 2431-2436	1.3	24
350	Surface activated bonding of LCP/Cu for electronic packaging. <i>Journal of Materials Science</i> , 2005 , 40, 3177-3184	4.3	24
349	Sol-gel derived PZT force sensor for scanning force microscopy. <i>Materials Chemistry and Physics</i> , 1996 , 44, 25-29	4.4	24
348	Piezoelectric force sensor for scanning force microscopy. <i>Sensors and Actuators A: Physical</i> , 1994 , 43, 305-310	3.9	24
347	GaN-Si direct wafer bonding at room temperature for thin GaN device transfer after epitaxial lift off. <i>Applied Surface Science</i> , 2017 , 416, 1007-1012	6.7	23
346	Role of Heating on Plasma-Activated Silicon Wafers Bonding. <i>Journal of the Electrochemical Society</i> , 2009 , 156, H846	3.9	23
345	Investigation of bonding strength and sealing behavior of aluminum/stainless steel bonded at room temperature. <i>Vacuum</i> , 2010 , 84, 1334-1340	3.7	23

344	Low-Temperature Process of Fine-Pitch AuSn Bump Bonding in Ambient Air. <i>Japanese Journal of Applied Physics</i> , 2007 , 46, 1961-1967	1.4	23
343	Transmission electron microscopy investigation of fullerene nanowhiskers and needle-like precipitates formed by using C60 and (η-C60)Pt(PPh3)2. <i>Journal of Materials Research</i> , 2004 , 19, 2410-2414	2.5	23
342	Transient liquid-phase sintering using silver and tin powder mixture for die bonding. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 04EC14	1.4	23
341	Room-temperature direct bonding of silicon and quartz glass wafers. <i>Applied Physics Letters</i> , 2017 , 110, 221602	3.4	22
340	Sequential Plasma Activated Process for Silicon Direct Bonding. <i>ECS Transactions</i> , 2006 , 3, 191-202	1	22
339	Reliability of Au bumpCu direct interconnections fabricated by means of surface activated bonding method. <i>Microelectronics Reliability</i> , 2003 , 43, 751-756	1.2	22
338	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	3.0	22
337	First Demonstration of Waferscale Heterogeneous Integration of Ga2O3 MOSFETs on SiC and Si Substrates by Ion-Cutting Process 2019 ,		22
336	Silicon carbide wafer bonding by modified surface activated bonding method. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 030214	1.4	21
335	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	0.4	21
334	Nanoadhesion layer for enhanced Si/Si and Si/SiN wafer bonding. <i>Microelectronics Reliability</i> , 2012 , 52, 342-346	1.2	21
333	Void-Free Room-Temperature Silicon Wafer Direct Bonding Using Sequential Plasma Activation. <i>Japanese Journal of Applied Physics</i> , 2008 , 47, 2526-2530	1.4	21
332	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	2	20
331	Investigation of fluorine containing plasma activation for room-temperature bonding of Si-based materials. <i>Microelectronics Reliability</i> , 2012 , 52, 347-351	1.2	20
330	Influence of ceramic surface treatment on peel-off strength between aluminum nitride and epoxy-modified polyaminobismaleimide adhesive. <i>IEEE Transactions on Advanced Packaging</i> , 2001 , 24, 104-112		20
329	Modified Diffusion Bonding of Chemical Mechanical Polishing Cu at 150 °C at Ambient Pressure. <i>Applied Physics Express</i> , 2009 , 2, 056501	2.4	19
328	Effect of the surface treatment on the room-temperature bonding of Al to Si and SiO2. <i>Journal of Materials Science</i> , 1998 , 33, 253-258	4.3	19
327	Characteristics of low force contact process for MEMS probe cards. <i>Sensors and Actuators A: Physical</i> , 2002 , 97-98, 462-467	3.9	19

326	A Comparative Study: Void Formation in Silicon Wafer Direct Bonding by Oxygen Plasma Activation with and without Fluorine. <i>ECS Journal of Solid State Science and Technology</i> , 2017 , 6, P7-P13	2	18
325	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	3.9	18
324	Broadband MEMS shunt switches using PZT/HfO ₂ multi-layered high k dielectrics for high switching isolation. <i>Sensors and Actuators A: Physical</i> , 2005 , 121, 275-281	3.9	18
323	Enhanced Cu/LCP adhesion by pre-sputter cleaning prior to Cu deposition. <i>IEEE Transactions on Advanced Packaging</i> , 2005 , 28, 495-502		18
322	Low-Temperature Au-to-Au Bonding for LiNbO ₃ /Si Structure Achieved in Ambient Air. <i>IEICE Transactions on Electronics</i> , 2007 , E90-C, 145-146	0.4	18
321	Vapor-Assisted Surface Activation Method for Homo- and Heterogeneous Bonding of Cu, SiO ₂ , and Polyimide at 150°C and Atmospheric Pressure. <i>Journal of Electronic Materials</i> , 2012 , 41, 2274-2280	1.9	17
320	Morphology and microstructure of the Ar ⁺ -ion sputtered (0001) Al ₂ O ₃ surface. <i>Applied Surface Science</i> , 2000 , 165, 159-165	6.7	17
319	Room-Temperature Bonding of Si Wafers to Pt Films on SiO ₂ or LiNbO ₃ Substrates Using Ar-Beam Surface Activation. <i>Japanese Journal of Applied Physics</i> , 1999 , 38, L1559-L1561	1.4	17
318	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	6.8	16
317	Sequential plasma activation methods for hydrophilic direct bonding at sub-200 °C. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 02BD03	1.4	16
316	Effect of Formic Acid Vapor In Situ Treatment Process on Cu Low-Temperature Bonding. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2014 , 4, 951-956	1.7	16
315	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	16
314	Transmission electron microscopy investigation of tubular and capsular needlelike crystals of C ₆₀ produced by the liquid-liquid interfacial precipitation method. <i>Journal of Materials Research</i> , 2004 , 19, 3145-3148	2.5	16
313	Low contact-force and compliant MEMS probe card utilizing fritting contact		16
312	Characteristics of fritting contacts utilized for micromachined wafer probe cards. <i>Review of Scientific Instruments</i> , 2000 , 71, 2224-2227	1.7	16
311	Haftfestigkeitsbestimmung an Keramik-Metall-Verbindungen mit Hilfe von Schichtverbundbiegeproben Teil 1. <i>Materialwissenschaft Und Werkstofftechnik</i> , 1985 , 16, 75-80	0.9	16
310	AlGa ₂ O ₃ MOSFETs on the Si substrate fabricated by the ion-cutting process. <i>Science China: Physics, Mechanics and Astronomy</i> , 2020 , 63, 1	3.6	15
309	Mechanisms for Room-Temperature Fluorine Containing Plasma Activated Bonding. <i>ECS Journal of Solid State Science and Technology</i> , 2017 , 6, P373-P378	2	15

308	Novel high vacuum scanning force microscope using a piezoelectric cantilever and the phase detection method. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1997 , 15, 1551		15
307	Review of Low-Temperature Bonding Technologies and Their Application in Optoelectronic Devices. <i>Electronics and Communications in Japan</i> , 2016 , 99, 63-71	0.4	14
306	Room-temperature transfer bonding of lithium niobate thin film on micromachined silicon substrate with Au microbumps. <i>Sensors and Actuators A: Physical</i> , 2017 , 264, 274-281	3.9	14
305	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	1.4	14
304	Room-Temperature Direct Bonding Using Fluorine Containing Plasma Activation. <i>Journal of the Electrochemical Society</i> , 2011 , 158, H525	3.9	14
303	Microstructure and strength of Al-sapphire interface by means of the surface activated bonding method. <i>Journal of Materials Research</i> , 1997 , 12, 852-856	2.5	14
302	Direct wafer bonding of GaN-SiC for high power GaN-on-SiC devices. <i>Materialia</i> , 2018 , 3, 12-14	3.2	14
301	Room-temperature wafer bonding of SiC _B i by modified surface activated bonding with sputtered Si nanolayer. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 04EC09	1.4	13
300	Cu-Cu Room Temperature Bonding - Current Status of Surface Activated Bonding(SAB) -. <i>ECS Transactions</i> , 2006 , 3, 155-163	1	13
299	Necessary load for room temperature vacuum sealing. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, S281-S285	2	13
298	Direct bonding of high dielectric oxides for high-performance transistor applications. <i>Scripta Materialia</i> , 2020 , 178, 307-312	5.6	13
297	A Scalable Clean Graphene Transfer Process Using Polymethylglutarimide as a Support Scaffold. <i>Journal of the Electrochemical Society</i> , 2016 , 163, E159-E161	3.9	13
296	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	2	12
295	The influence of surface profiles on leakage in room temperature seal-bonding. <i>Sensors and Actuators A: Physical</i> , 2008 , 144, 124-129	3.9	12
294	Low temperature bonded Cu/LCP materials for FPCs and their characteristics. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2005 , 28, 760-764		12
293	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		12
292	Room temperature vacuum sealing using surface activated bonding method		12
291	Surface activated bonding for new flip chip and bumpless interconnect systems		12

290	Development of a New Mechanochemical Polishing Method with a Polishing Film for Ceramic Round Bars. <i>CIRP Annals - Manufacturing Technology</i> , 1992 , 41, 339-342	4.9	12
289	Transmission Electron Microscopy of Bi(Pb)-Sr-Ca-Cu-O Superconductor Prepared by the Intermediate Pressing Process. <i>Japanese Journal of Applied Physics</i> , 1990 , 29, L2006-L2009	1.4	12
288	Optical Microsensors Integration Technologies for Biomedical Applications. <i>IEICE Transactions on Electronics</i> , 2009 , E92-C, 231-238	0.4	12
287	Reduction reaction analysis of nanoparticle copper oxide for copper direct bonding using formic acid. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 04CC01	1.4	11
286	Room-Temperature Gold-Gold Bonding Method Based on Argon and Hydrogen Gas Mixture Atmospheric-Pressure Plasma Treatment for Optoelectronic Device Integration. <i>IEICE Transactions on Electronics</i> , 2016 , E99.C, 339-345	0.4	11
285	Room-temperature Si-Si and Si-SiN wafer bonding 2010 ,		11
284	Low temperature Cu-Cu direct bonding using formic acid vapor pretreatment 2011 ,		11
283	Room temperature SiO ₂ wafer bonding by adhesion layer method 2011 ,		11
282	Low-Temperature Direct Bonding of Flip-Chip Mountable VCSELs with Au-Au Surface Activation. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2008 , 128, 266-270	0.2	11
281	Wafer level sealing characterization method using Si micro cantilevers. <i>Sensors and Actuators A: Physical</i> , 2008 , 147, 359-364	3.9	11
280	Bump-less interconnect for next generation system packaging		11
279	Microstructure of B ₄ C/TiB ₂ Composite Fabricated by Reaction Sintering of B ₄ C and TiC. <i>Journal of the Ceramic Society of Japan</i> , 1994 , 102, 321-325		11
278	Recycled low-temperature direct bonding of Si/glass and glass/glass chips for detachable micro/nanofluidic devices. <i>Journal of Materials Science and Technology</i> , 2020 , 46, 156-167	9.1	10
277	Investigation of anti-stiction coating for ohmic contact MEMS switches with thiophenol and 2-naphthalenethiol self-assembled monolayer. <i>Sensors and Actuators A: Physical</i> , 2011 , 172, 455-461	3.9	10
276	Surface activation-based nanobonding and interconnection at room temperature. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 025009	2	10
275	Materials science communication mechanism of the anodic bonding between pzt ceramics and silicon wafer. <i>Materials Chemistry and Physics</i> , 1997 , 51, 174-177	4.4	10
274	C3F8 plasma fluorination of lead free solders for fluxless soldering. <i>Applied Surface Science</i> , 2004 , 227, 81-86	6.7	10
273	Characterization of fullerene nanotubes prepared by the liquid-liquid interfacial precipitation method. <i>Science and Technology of Advanced Materials</i> , 2005 , 6, 388-393	7.1	10

272	Direct Cu to Cu Bonding and Other Alternative Bonding Techniques in 3D Packaging. <i>Springer Series in Advanced Microelectronics</i> , 2017 , 129-155	1	10
271	Combined surface activated bonding using H-containing HCOOH vapor treatment for Cu/Adhesive hybrid bonding at below 200 °C. <i>Applied Surface Science</i> , 2017 , 414, 163-170	6.7	9
270	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,	3.3	9
269	Low temperature Cu-Cu bonding by transient liquid phase sintering of mixed Cu nanoparticles and SnBi eutectic powders. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 16433-16443	2.1	9
268	Evaluation of surface microroughness for surface activated bonding 2010 ,		9
267	Moiré method for nanoprecision wafer-to-wafer alignment: Theory, simulation and application 2009 ,		9
266	Investigations on the Interface Microstructure of Stainless Steel/Aluminum Joints Created by the Surface Activated Bonding Method. <i>Journal of Materials Science</i> , 1997 , 5, 279-286		9
265	InGaAsP Lasers on GaAs Fabricated by the Surface Activated Wafer Direct Bonding Method at Room Temperature. <i>Japanese Journal of Applied Physics</i> , 1998 , 37, 1405-1407	1.4	9
264	. <i>Journal of Micromechanics and Microengineering</i> , 1995 , 5, 231-236	2	9
263	TEM Observation of the Al and Cu Interfaces Bonded at Room Temperature by Means of the Surface Activation Method. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1990 , 54, 713-719	0.4	9
262	Thermal Visualization of Buried Interfaces Enabled by Ratio Signal and Steady-State Heating of Time-Domain Thermoreflectance. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 31843-31851	9.5	9
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