Tadatomo T Suga

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

5,868 62 41 415 h-index g-index citations papers 2.2 7,037 5.79 551 L-index ext. citations avg, IF ext. papers

#	Paper	IF	Citations
415	A novel strategy for GaN-on-diamond device with a high thermal boundary conductance. <i>Journal of Alloys and Compounds</i> , 2022 , 905, 164076	5.7	4
414	Hydrophilic nanoporous copper surface prepared by modified formic acid vapor treatment. <i>Surfaces and Interfaces</i> , 2022 , 28, 101620	4.1	O
413	Thermodynamics of Ion-Cutting of EGa2O3 and Wafer-Scale Heterogeneous Integration of a EGa2O3 Thin Film onto a Highly Thermal Conductive SiC Substrate. <i>ACS Applied Electronic Materials</i> , 2022 , 4, 494-502	4	4
412	Direct Cu to Cu Bonding and Alternative Bonding Techniques in 3D Packaging. <i>Springer Series in Advanced Microelectronics</i> , 2021 , 201-231	1	O
411	Efficient thermal dissipation in wafer-scale heterogeneous integration of single-crystalline EGa2O3 thin film on SiC. <i>Fundamental Research</i> , 2021 , 1, 691-691		4
410	Channel Properties of GaDEbn-SiC MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 1185-1189	2.9	6
409	Evidence for intermolecular forces involved in ladybird beetle tarsal setae adhesion. <i>Scientific Reports</i> , 2021 , 11, 7729	4.9	4
408	A Novel Preparation of Ag Agglomerates Paste with Unique Sintering Behavior at Low Temperature. <i>Micromachines</i> , 2021 , 12,	3.3	1
407	Sequential Plasma Activation for Low Temperature Bonding of Aluminosilicate Glass. <i>ECS Journal of Solid State Science and Technology</i> , 2021 , 10, 054007	2	O
406	Enhancement and Mechanism of Copper Nanoparticle Sintering in Activated Formic Acid Atmosphere at Low Temperature. <i>ECS Journal of Solid State Science and Technology</i> , 2021 , 10, 054004	2	2
405	Thermal Visualization of Buried Interfaces Enabled by Ratio Signal and Steady-State Heating of Time-Domain Thermoreflectance. <i>ACS Applied Materials & Domain Thermoreflectance</i> . <i>ACS Applied Materials & Domain Thermoreflectance</i> .	9.5	9
404	Heterogeneous GaN-Si integration via plasma activation direct bonding. <i>Journal of Alloys and Compounds</i> , 2021 , 852, 156933	5.7	5
403	Room Temperature Wafer Bonding of Glass Using Aluminum Oxide Intermediate Layer. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2001741	4.6	3
402	Transfer of Ferroelectric Thin Film Capacitor Using Internal Stress of Plated Film. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2021 , 141, 39-43	0.2	
401	Silicate glass-to-glass hermetic bonding for encapsulation of next-generation optoelectronics: A review. <i>Materials Today</i> , 2021 , 47, 131-155	21.8	2
400	Demonstration of high thermal performance GaN-on-graphite composite bonded substrate for application in III-V nitride electronics. <i>Applied Physics Express</i> , 2021 , 14, 091002	2.4	1
399	Fabrication of Ag@Ag2O-MnOx composite nanowires for high-efficient room-temperature removal of formaldehyde. <i>Journal of Materials Science and Technology</i> , 2021 , 91, 5-16	9.1	4

(2019-2020)

398	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
397	Rapid pressureless and low-temperature bonding of large-area power chips by sintering two-step activated Ag paste. <i>Journal of Materials Science: Materials in Electronics</i> , 2020 , 31, 6497-6505	2.1	5
396	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	1.4	2
395	Robust Ag-Cu Sintering Bonding at 160 °C via Combining Ag2O Microparticle Paste and Pt-Catalyzed Formic Acid Vapor. <i>Metals</i> , 2020 , 10, 315	2.3	6
394	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
393	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
392	Interfacial Thermal Conductance across Room-Temperature-Bonded GaN/Diamond Interfaces for GaN-on-Diamond Devices. <i>ACS Applied Materials & Samp; Interfaces</i> , 2020 , 12, 8376-8384	9.5	51
391	EGa2O3 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
390	Emerging wafer bonding technologies 2020 , 627-639		
389	Direct bonding of high dielectric oxides for high-performance transistor applications. <i>Scripta Materialia</i> , 2020 , 178, 307-312	5.6	13
388	Exploration of the enhanced performances for silk fibroin/sodium alginate composite coatings on biodegradable MgInIIa alloy. <i>Journal of Magnesium and Alloys</i> , 2020 , 9, 1578-1578	8.8	8
387	Direct Bonding of GaN to Diamond Substrate at Room Temperature 2020 ,		1
386	Thermal Transport across Ion-Cut Monocrystalline EGaO Thin Films and Bonded EGaO-SiC Interfaces. <i>ACS Applied Materials & Discrete Sciences</i> , 2020 , 12, 44943-44951	9.5	36
385	Wafer-scale Au-Au surface activated bonding using atmospheric-pressure plasma 2019,		O
384	2019,		0
383	Wafer Bonding of SiC-AlN at Room Temperature for All-SiC Capacitive Pressure Sensor. <i>Micromachines</i> , 2019 , 10,	3.3	2
382	Moir Based Alignment Using Centrosymmetric Grating Marks for High-Precision Wafer Bonding. <i>Micromachines</i> , 2019 , 10,	3.3	2
381	High Thermal Boundary Conductance across Bonded Heterogeneous GaN-SiC Interfaces. <i>ACS Applied Materials & Discrete Amp; Interfaces</i> , 2019 , 11, 33428-33434	9.5	41

380	Low temperature Cu bonding with large tolerance of surface oxidation. <i>AIP Advances</i> , 2019 , 9, 055127	1.5	5
379	Growth Behavior of Au Films on SiO2Film and Direct Transfer for Smoothing Au Surfaces. <i>International Journal of Automation Technology</i> , 2019 , 13, 254-260	0.8	2
378	X-ray Photoelectron Spectroscopy (XPS) Analysis of Oxidation Behavior of Hydrogen-radical-treated Cu Surfaces. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2019 , 139, 38-39) ^{O.2}	
377	Investigation of Plasma Treatment Conditions for Wafer-Scale Room-Temperature Bonding Using Ultrathin Au Films in Ambient Air. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2019 , 139, 217-218	0.2	
376	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
375	First Demonstration of Waferscale Heterogeneous Integration of Ga2O3 MOSFETs on SiC and Si Substrates by Ion-Cutting Process 2019 ,		22
374	De-bondable SiC SiC wafer bonding via an intermediate Ni nano-film. <i>Applied Surface Science</i> , 2019 , 465, 591-595	6.7	8
373	Direct wafer bonding of Ga2O3BiC at room temperature. <i>Ceramics International</i> , 2019 , 45, 6552-6555	5.1	25
372	Room temperature bonding and debonding of polyimide film and glass substrate based on surface activate bonding method. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 02BB05	1.4	2
371	Graphene transfer by surface activated bonding with poly(methyl glutarimide). <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 02BB02	1.4	1
370	Evaluation of hydrogen radical treatment for indium surface oxide removal and analysis of re-oxidation behavior. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 02BC01	1.4	2
369	Bonding and transferring of carbon nanotube bumps using magnetron sputtering. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 02BC02	1.4	
368	Study of Cu Film Surface Treatment Using Formic Acid Vapor/Solution for Low Temperature Bonding. <i>Journal of the Electrochemical Society</i> , 2018 , 165, H3080-H3084	3.9	7
367	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
366	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
365	Mechanism of bonding and debonding using surface activated bonding method with Si intermediate layer. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 04FC11	1.4	4
364	Properties of various plasma surface treatments for low-temperature AuAu bonding. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 04FC12	1.4	8
363	Room temperature GaN-diamond bonding for high-power GaN-on-diamond devices. <i>Scripta Materialia</i> , 2018 , 150, 148-151	5.6	48

362	Low-temperature wafer direct bonding of silicon and quartz glass by a two-step wet chemical surface cleaning. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 02BD02	1.4	8	
361	Surface Activated Bonding Method for Low Temperature Bonding 2018,		2	
360	Strain Effect in Highly-Doped n-Type 3C-SiC-on-Glass Substrate for Mechanical Sensors and Mobility Enhancement. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1800288	1.6	4	
359	Direct wafer bonding of GaN-SiC for high power GaN-on-SiC devices. <i>Materialia</i> , 2018 , 3, 12-14	3.2	14	
358	(Invited) Room Temperature Wafer Bonding of Wide Bandgap Semiconductors. <i>ECS Transactions</i> , 2018 , 86, 3-21	1	1	
357	Room temperature GaN bonding by surface activated bonding methods 2018 ,		1	
356	Low temperature de-oxidation for copper surface by catalyzed formic acid vapor. <i>Applied Surface Science</i> , 2018 , 456, 890-898	6.7	6	
355	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	
354	Room Temperature SiC-SiO2Wafer Bonding Enhanced by Using an Intermediate Si Nano Layer. <i>ECS Journal of Solid State Science and Technology</i> , 2017 , 6, P227-P230	2	7	
353	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	
352	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	
351	Room temperature bonding and debonding of PI film and glass substrate based on SAB method 2017 ,		1	
350	Room-temperature direct bonding of silicon and quartz glass wafers. <i>Applied Physics Letters</i> , 2017 , 110, 221602	3.4	22	
349	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	
348	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	
347	Ar+H2 atmospheric-pressure plasma treatment for Au-Au bonding and influence of air exposure on surface contamination 2017 ,		1	
346	Low temperature Cu I u bonding by transient liquid phase sintering of mixed Cu nanoparticles and Sn B i eutectic powders. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 16433-16443	2.1	9	
345	Hydrogen radical treatment for indium surface oxide removal and re-oxidation behaviour 2017 ,		3	

Single-Crystalline 3C-SiC anodically Bonded onto Glass: An Excellent Platform for 344 High-Temperature Electronics and Bioapplications. ACS Applied Materials & Therfaces, 2017, 9, 27365-273741 Room-temperature transfer bonding of lithium niobate thin film on micromachined silicon 343 3.9 14 substrate with Au microbumps. Sensors and Actuators A: Physical, 2017, 264, 274-281 2D material transfer using room temperature bonding 2017, 342 1 Room Temperature Bonding with Polymethylglutarimide Using the Surface Activated Bonding 341 Method for a Layer Transfer Platform. ECS Journal of Solid State Science and Technology, 2017, 6, P512-P516 Introduction to the innovative interface bonding technology 2017, 340 1 Novel sequential plasma activation method for direct glass bonding 2017, 339 2 Mechanisms for Room-Temperature Fluorine Containing Plasma Activated Bonding. ECS Journal of 338 15 Solid State Science and Technology, **2017**, 6, P373-P378 Hydrogen radical treatment of printed indium solder paste for bump formation 2017, 337 Cu/Adhesive Hybrid Bonding at 180 °C in H-Containing HCOOH Vapor Ambient for 2.5D/3D 336 2 Integration 2017, Room Temperature Temporary Bonding of Glass Substrates Based on SAB Method Using Si Intermediate Layer. IEEE Transactions on Components, Packaging and Manufacturing Technology, 8 1.7 335 **2017**, 7, 1713-1720 Direct Cu to Cu Bonding and Other Alternative Bonding Techniques in 3D Packaging. Springer Series 10 334 in Advanced Microelectronics, 2017, 129-155 Surface Activated Bonding and Debonding of Polymer Films and Glasses Using Si Nano-Adhesion 333 Layer. *Hyomen Kagaku*, **2017**, 38, 67-71 Room-Temperature Gold-Gold Bonding Method Based on Argon and Hydrogen Gas Mixture Atmospheric-Pressure Plasma Treatment for Optoelectronic Device Integration. IEICE Transactions 332 0.4 11 on Electronics, 2016, E99.C, 339-345 Direct Wafer Bonding of SiC-SiC by SAB for Monolithic Integration of SiC MEMS and Electronics. ECS 2 12 331 Journal of Solid State Science and Technology, 2016, 5, P451-P456 Combined Surface Activated Bonding Technique for Hydrophilic SiO2-SiO2 and Cu-Cu Bonding. ECS 1 330 4 Transactions, **2016**, 75, 117-128 Combined Surface Activated Bonding Technique for Low-Temperature Cu/Dielectric Hybrid 329 20 Bonding. ECS Journal of Solid State Science and Technology, 2016, 5, P419-P424 The study of Cu-Cu low temperature bonding using formic acid treatment with/without Pt catalyst 328 2 2016, Room-temperature wafer bonding of SiCBi by modified surface activated bonding with sputtered 1.4 13 Si nanolayer. Japanese Journal of Applied Physics, 2016, 55, 04EC09

(2015-2016)

326	Surface Activation and Planarization with Gas Cluster Ion Beam for Wafer Bonding. <i>ECS Transactions</i> , 2016 , 75, 9-13	1	3	
325	Modified Surface Activated Bonding Using Si Intermediate Layer for Bonding and Debonding of Glass Substrates. <i>ECS Transactions</i> , 2016 , 75, 185-189	1	4	
324	Nanomechanical Analysis of Polydimethylglutarimide Based Lift Off Resist Used for Temporary Bonding and Film Transfers. <i>ECS Transactions</i> , 2016 , 75, 191-196	1		
323	Communication Eluorinated Plasma Treatments Using PTFE Substrates for Room-Temperature Silicon Wafer Direct Bonding. <i>ECS Journal of Solid State Science and Technology</i> , 2016 , 5, P393-P395	2	4	
322	Room-temperature wafer bonding using smooth gold thin films for wafer-level MEMS packaging 2016 ,		1	
321	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	
320	A Review of Low-temperature Sealing Technologies using Metal Thin Films and Solders for Sensors and MEMS. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2016 , 136, 266-273	0.2	3	
319	Contact Behavior among Vertically Aligned Carbon Nanotube Bumps under Compression for Flexible Multilayer Substrates. <i>ECS Journal of Solid State Science and Technology</i> , 2016 , 5, M83-M87	2	1	
318	Combined surface-activated bonding technique for low-temperature hydrophilic direct wafer bonding. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 04EC02	1.4	7	
317	Direct Wafer Bonding of SiC-SiC at Room Temperature by SAB Method. <i>ECS Transactions</i> , 2016 , 75, 77-	83 <u>í</u>	3	
316	A Scalable Clean Graphene Transfer Process Using Polymethylglutarimide as a Support Scaffold. Journal of the Electrochemical Society, 2016 , 163, E159-E161	3.9	13	
315	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	
314	Room Temperature Bonding and Debonding of Ultra-Thin Glass Substrates for Fabrication of LCD 2016 ,		2	
313	A comparison study: Direct wafer bonding of SiCBiC by standard surface-activated bonding and modified surface-activated bonding with Si-containing Ar ion beam. <i>Applied Physics Express</i> , 2016 , 9, 08	1302	22	
312	Direct bonding for dissimilar metals assisted by carboxylic acid vapor. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 030217	1.4	3	
311	Silicon carbide wafer bonding by modified surface activated bonding method. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 030214	1.4	21	
310	Novel hydrophilic SiO2wafer bonding using combined surface-activated bonding technique. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 030218	1.4	5	
309	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	

308	Fabrication of carbon nanotube bump interconnects for flexible multilayer substrates. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 030205	1.4	1
307	Fast atom bombardment onto vertically aligned multi-walled carbon nanotube bumps to achieve low interconnect resistance with Au layer. <i>Microelectronics Reliability</i> , 2015 , 55, 2560-2564	1.2	4
306	Effect of ion species for the surface activated bonding of GaAs wafers on the characteristics of the bonded interfaces 2015 ,		1
305	Surface activated bonding between bulk single crystal diamond and bulk aluminum. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 081301	1.4	4
304	Room temperature direct bonding and debonding of polymer film on glass wafer for fabrication of flexible electronic devices 2015 ,		2
303	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
302	Dielectric Spectroscopic Detection of Early Failures in 3-D Integrated Circuits. <i>ECS Transactions</i> , 2015 , 69, 79-88	1	1
301	Room Temperate Bonding of Al2O3 Layers by Atomic Layer Deposition on Polyimide Substrates. <i>ECS Transactions</i> , 2015 , 69, 99-105	1	2
300	Process parameters for formic acid treatment with Pt catalyst for Cu direct bonding 2015,		3
299	Nanobonding: A key technology for emerging applications in health and environmental sciences. Japanese Journal of Applied Physics, 2015 , 54, 030201	1.4	6
298	Room-temperature direct bonding of germanium wafers by surface-activated bonding method. Japanese Journal of Applied Physics, 2015 , 54, 030213	1.4	8
297	Low temperature Au-Au surface-activated bonding using nitrogen atmospheric-pressure plasma treatment for optical microsystems 2015 ,		3
296	Influence of air exposure time on bonding strength in Au-Au surface activated wafer bonding 2015,		2
295	Room-Temperature Wafer Bonding for High-Heat Dissipation Structure in High-Power Semiconductor Devices. <i>Journal of Japan Institute of Electronics Packaging</i> , 2015 , 18, 463-468	0.1	
294	Low temperature bonding for 3D 2014 ,		1
293	SiC wafer bonding by modified suface activated bonding method 2014 ,		1
292	Formic acid treatment with Pt catalyst for Cu direct and hybrid bonding at low temperature 2014,		2
291	Room-temperature wafer bonding with smooth Au thin film in ambient air using Ar RF plasma activation 2014 ,		3

290	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
289	Low Temperature Bonding for 3D Integration-Surface Activated Bonding (SAB). <i>Hyomen Kagaku</i> , 2014 , 35, 262-266		
288	Miniaturized polarization sensors integrated with wire-grid polarizers 2014,		2
287	Room temperature bonding method for polymer films by surface activated bonding method using Al intermediate layer 2014 ,		3
286	Surface activated Ge/GaAs wafer bonding for multi-junction solar cells 2014,		2
285	Formic acid treatment with Pt catalyst for Cu direct bonding at low temperature 2014,		2
284	Combined Surface-Activated Bonding (SAB) Technologies for New Approach to Low Temperature Wafer Bonding. <i>ECS Transactions</i> , 2014 , 64, 83-93	1	
283	Plasma assisted bonding of copper and silver substrates 2014 ,		1
282	Low-Temperature Solid-State Bonding Using Hydrogen Radical Treated Solder for Optoelectronic and MEMS Packaging. <i>ECS Transactions</i> , 2014 , 64, 267-274	1	7
281	Contact Behavior among Vertical Aligned Carbon Nanotube Bumps under Compression for Flexible Multilayer Substrates. <i>ECS Transactions</i> , 2014 , 64, 21-26	1	1
280	Novel sealing technology for organic EL display and lighting by means of modified surface activated bonding method 2014 ,		1
279	Low-temperature GaAs/SiC wafer bonding with Au thin film for high-power semiconductor lasers 2014 ,		4
278	Review of Low-temperature Bonding Technologies and Their Application in Optoelectronic Devices. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2014 , 134, 159-165	0.2	4
277	Spalling Technology of PZT Thin Film Capacitor using Internal Stress. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2014 , 134, 85-89	0.2	
276	Direct bonding of PEN at room temperature by means of surface activated bonding method using nano-adhesion layer 2013 ,		7
275	Bonding of glass nanofluidic chips at room temperature by a one-step surface activation using an O2/CF4 plasma treatment. <i>Lab on A Chip</i> , 2013 , 13, 1048-52	7.2	68
274	A New Combined Process of Formic Acid Pretreatment for Low-temperature Bonding of Copper Electrodes. <i>ECS Transactions</i> , 2013 , 50, 133-138	1	2
273	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

272	Room Temperature Bonding of Polymer to Glass Wafers Using Surface Activated Bonding (SAB) Method. <i>ECS Transactions</i> , 2013 , 50, 297-302	1	6
271	Relationship between Diffusion and Adhesion Properties of Ferroelectric Thin-Film Structure on Releasable Substrate. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 06GL16	1.4	5
270	Study on Homogeneous Wafer Level Dielectric Film Preparation Using Chemical Solution Deposition Method. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 06GL09	1.4	3
269	The Third Generation on Bonding Technologies for Design and Manufacturing. <i>Journal of the Japan Society for Precision Engineering</i> , 2013 , 79, 705-709	0.1	3
268	Fabrication of PZT Thin Film on a Detachable Board and Its Adhesion Property. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2013 , 133, B320-B325	0.2	
267	Homogenizing Dielectric Film using Chemical Solution Deposition Method and Application to Wafer Level Film Preparation. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2013 , 133, 303-308	0.2	
266	Low-Temperature Bonding Technologies Realizing High-Functional Optical Microsystems and Sensors. <i>Journal of the Japan Society for Precision Engineering</i> , 2013 , 79, 719-724	0.1	
265	Molecular Level Study of Negative Thick-Film Resist in MEMS by Employing a Coarse-Grained Molecular Dynamics Simulation. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2013 , 133, 320-329	0.2	
264	Nanoadhesion layer for enhanced SiBi and SiBiN wafer bonding. <i>Microelectronics Reliability</i> , 2012 , 52, 342-346	1.2	21
263	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
262	Low-Temperature Bonding of GaN on Si Using a Nonalloyed Metal Ohmic Contact Layer for GaN-Based Heterogeneous Devices. <i>IEEE Journal of Quantum Electronics</i> , 2012 , 48, 182-186	2	7
261	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
260	Behaviors of flexible vertically aligned carbon nanotube bumps under compression 2012,		2
259	Low-temperature hermetic packaging for microsystems using AuAu surface-activated bonding at atmospheric pressure. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 055026	2	31
258	Formic acid with Pt catalyst combined treatment process for Cu low temperature bonding 2012,		1
257	Surface activated bonding and transfer of Carbon Nanotube bumps to Au substrates 2012,		2
256	Low temperature bonding for 3D integration [A review of the surface activated bonding (SAB) 2012 ,		2
255	Vapor-Assisted Surface Activation Method for Homo- and Heterogeneous Bonding of Cu, SiO2, and Polyimide at 150°C and Atmospheric Pressure. <i>Journal of Electronic Materials</i> , 2012 , 41, 2274-2280	1.9	17

254	Low-temperature bonding of laser diode chips using atmospheric-pressure plasma activation of flat topped Au stud bumps with smooth surfaces 2012 ,		2	
253	2012,		1	
252	Status of bonding technology for hybrid integration - A review of the surface activated bonding (SAB) 2012 ,		1	
251	Direct bonding of polymer to glass wafers using surface activated bonding (SAB) method at room temperature 2012 ,		5	
250	Low temperature bonding for 3D interconnects 2012 ,		2	
249	Recent Developments in Bonding Technology for Inorganic and Organic Materials. <i>Journal of the Vacuum Society of Japan</i> , 2012 , 55, 487-492		2	
248	Theory and Experiment for Capillary Condensation of Water on Metal Oxide Films in a Humid Environment Studied by Atomic Force Microscope. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2012 , 132, 397-406	0.2		
247	Homogenizing and Applying Dielectric Film to Wafer-Level Film Preparation. <i>Transactions of the Japan Institute of Electronics Packaging</i> , 2012 , 5, 92-98	0.3	2	
246	Anti-Stiction Coatings for MEMS Switches Based on Quantitative Evaluation of Adhesion Forces. Journal of Japan Institute of Electronics Packaging, 2012 , 15, 49-58	0.1		
245	Low-temperature Bonding Technologies and Their Application to Highly Functional Sensors. <i>Journal of Smart Processing</i> , 2012 , 1, 106-113	0.2		
244	Long Life and Low Consumption System for Sustainable Development 2012 , 1040-1043			
243	Fabrication and Characterization of Ferroelectric PZT and BaTiO3 Thin Films on Releasable Electrode Structures. <i>Transactions of the Japan Institute of Electronics Packaging</i> , 2012 , 5, 34-40	0.3	1	
242	Air-gap structure between integrated LiNbO3 optical modulators and micromachined Si substrates. <i>Optics Express</i> , 2011 , 19, 15739-49	3.3	24	
241	Si nanoadhesion layer for enhanced SiO2BiN wafer bonding. <i>Scripta Materialia</i> , 2011 , 65, 320-322	5.6	36	
240	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	
239	. IEEE Journal of Selected Topics in Quantum Electronics, 2011 , 17, 689-703	3.8	33	
238	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	
237	2011,		4	

236	Surface activated bonding of copper through silicon vias and gold stud bumps at room temperature. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 02100	07 ^{2.9}	8
235	Formic acid vapor treated Cu-Cu direct bonding at low temperature 2011 ,		3
234	Low temperature Cu-Cu direct bonding using formic acid vapor pretreatment 2011,		11
233	Room-Temperature Direct Bonding Using Fluorine Containing Plasma Activation. <i>Journal of the Electrochemical Society</i> , 2011 , 158, H525	3.9	14
232	Surface activation-based nanobonding and interconnection at room temperature. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 025009	2	10
231	Room temperature SiO2 wafer bonding by adhesion layer method 2011 ,		11
230	An Electrode Structure for Ferroelectric Thin Films and Its Application to the Nanotransfer Method. <i>Transactions of the Japan Institute of Electronics Packaging</i> , 2011 , 4, 40-43	0.3	3
229	Comparative annealing effect on bonded wafers in air and ultrahigh vacuum for microelectromechanical systems/microfluidics packaging. <i>Journal of Micro/ Nanolithography, MEMS, and MOEMS</i> , 2010 , 9, 041107	0.7	4
228	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
227	Evaluation of surface microroughness for surface activated bonding 2010,		9
227	Evaluation of surface microroughness for surface activated bonding 2010, 2010,		9
226	2010, A novel room-temperature wafer direct bonding method by fluorine containing plasma activation		1
226	2010, A novel room-temperature wafer direct bonding method by fluorine containing plasma activation 2010,	1.4	1 2
226 225 224	2010, A novel room-temperature wafer direct bonding method by fluorine containing plasma activation 2010, Room-temperature Si-Si and Si-SiN wafer bonding 2010, Micromachined Silicon Disk Resonator Transduced by Piezoelectric Lead Zirconate Titanate Thin	1.4	1 2 11
226 225 224 223	2010, A novel room-temperature wafer direct bonding method by fluorine containing plasma activation 2010, Room-temperature Si-Si and Si-SiN wafer bonding 2010, Micromachined Silicon Disk Resonator Transduced by Piezoelectric Lead Zirconate Titanate Thin Films. Japanese Journal of Applied Physics, 2010, 49, 06GN17	1.4	1 2 11 7
226 225 224 223	2010, A novel room-temperature wafer direct bonding method by fluorine containing plasma activation 2010, Room-temperature Si-Si and Si-SiN wafer bonding 2010, Micromachined Silicon Disk Resonator Transduced by Piezoelectric Lead Zirconate Titanate Thin Films. Japanese Journal of Applied Physics, 2010, 49, 06GN17 Influence of bonding atmosphere on low-temperature wafer bonding 2010,	1.4	1 2 11 7

(2009-2010)

218	Room-Temperature Bonding of GaN to Al Using Ar-Beam Surface Activation. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2010 , 130, 369-372	0.2	
217	Pressure Dependence of Resonant Characteristics of Lateral Comb Drive Resonators in the Free-Molecule Regime. <i>Applied Physics Express</i> , 2009 , 2, 096501	2.4	2
216	Residue-Free Solder Bumping Using Small AuSn Particles by Hydrogen Radicals. <i>IEICE Transactions on Electronics</i> , 2009 , E92-C, 247-251	0.4	5
215	Fine pitch and high density Sn bump fabrication 2009 ,		1
214	Low-temperature wafer bonding using gold layers 2009,		8
213	A novel moir If ringe assisted method for nanoprecision alignment in wafer bonding 2009,		6
212	Surface activated bonding of 8 in. Si wafers for MEMS and microfluidic packaging 2009,		1
211	Modified diffusion bond process for chemical mechanical polishing (CMP)-Cu at 150°C in ambient air 2009 ,		4
210	Role of Heating on Plasma-Activated Silicon Wafers Bonding. <i>Journal of the Electrochemical Society</i> , 2009 , 156, H846	3.9	23
209	Transfer Technology of Ferroelectric Films onto the Polymer Substrate for the Application of High Density Capacitor. <i>Advanced Materials Research</i> , 2009 , 74, 311-314	0.5	
208	Aulau 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
207	Moir Imethod for nanoprecision wafer-to-wafer alignment: Theory, simulation and application 2009 ,		9
206	Low-temperature bonding of laser diode chips on Si substrates with oxygen and hydrogen atmospheric-pressure plasma activation 2009 ,		7
205	High-Precision Alignment for Low-Temperature Wafer Bonding. <i>Journal of the Electrochemical Society</i> , 2009 , 156, H197	3.9	4
204	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
203	Optical Microsensors Integration Technologies for Biomedical Applications. <i>IEICE Transactions on Electronics</i> , 2009 , E92-C, 231-238	0.4	12
202	Effects of Surface Profiles of As-Sputtered Au Thin Films on Room Temperature Seal-Bonding. Journal of Japan Institute of Electronics Packaging, 2009 , 12, 534-541	0.1	1
201	Development of the Dedicated Device for Characterization of Vacuum Sealing Using SCREAM Method. <i>Journal of Japan Institute of Electronics Packaging</i> , 2009 , 12, 526-533	0.1	

200	P-MNS-07 NANOTRANSFER METHOD FOR THE FERROELECTRIC FILMS ONTO THE POLYMER SUBSTRATE(Micro/Nanosystem Science and Technology, Technical Program of Poster Session). Proceedings of JSME-IIP/ASME-ISPS Joint Conference on Micromechatronics for Information and		
199	Precision Equipment IIP/ISPS Joint MIPE, 2009, 2009, 429-430 Room temperature wafer bonding using surface activated bonding method 2008,		6
198	20-fh-pitch Au micro-bump interconnection at room temperature in ambient air 2008 ,		7
197	Bumpless Interconnect of 6- \$mu\$m-Pitch Cu Electrodes at Room Temperature. <i>IEEE Transactions on Advanced Packaging</i> , 2008 , 31, 473-478		48
196	2008,		2
195	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
194	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
193	Low-Temperature Bumpless Bonding for Surface Acoustic Wave Components. <i>Japanese Journal of Applied Physics</i> , 2008 , 47, 2521-2525	1.4	
192	Effect of Surface Contamination on Solid-State Bondability of Sn-Ag-Cu Bumps in Ambient Air. <i>Materials Transactions</i> , 2008 , 49, 1508-1512	1.3	6
191	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
190	Wafer level sealing characterization method using Si micro cantilevers. <i>Sensors and Actuators A: Physical</i> , 2008 , 147, 359-364	3.9	11
189	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
188	Effect of SAB process on GaN surfaces for low temperature bonding 2007,		3
187	Surface Activated Bonding Method for Flexible Lamination 2007,		1
186	Finite Element Analysis of the Effect of Surface Roughness on Nanometer-scale Contact 2007,		3
185	Low-Force Electric Contact Processes on Cu Electrodes. <i>IEEE Transactions on Electronics Packaging Manufacturing</i> , 2007 , 30, 194-199		
184	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
183	Integration and Packaging Technologies for Small Biomedical Sensors. <i>Journal of the Japan Society for Precision Engineering</i> , 2007 , 73, 1190-1194	0.1	

(2006-2007)

182	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
181	Measurement of Alignment Accuracy for Wafer Bonding by MoirlMethod. <i>Japanese Journal of Applied Physics</i> , 2007 , 46, 1989-1993	1.4	3
180	Room temperature GaN-GaAs direct bonding by argon-beam surface activation 2007,		3
179	Low-Temperature Process of Fine-Pitch Außn Bump Bonding in Ambient Air. <i>Japanese Journal of Applied Physics</i> , 2007 , 46, 1961-1967	1.4	23
178	Microstructure Fabrication with Conductive Paste Dispensing 2007,		4
177	A Novel Bonding Method for Ionic Wafers. <i>IEEE Transactions on Advanced Packaging</i> , 2007 , 30, 598-604		27
176	Investigation of Anti-Stiction Coating for MEMS Switch using Atomic Force Microscope 2007,		2
175	Room Temperature Si/Si Wafer Direct Bonding in Air 2007 ,		3
174	UHV-Bonding and Reversible Interconnection. <i>Transactions of the Japan Society for Aeronautical and Space Sciences</i> , 2007 , 49, 197-202	0.8	2
173	3D Integration and Cu Direct Bonding. Journal of Japan Institute of Electronics Packaging, 2007, 10, 408-	-41. 4	
172	Low-Temperature Au-to-Au Bonding for LiNbO3/Si Structure Achieved in Ambient Air. <i>IEICE Transactions on Electronics</i> , 2007 , E90-C, 145-146	0.4	18
171	Bumpless interconnect of ultrafine Cu electrodes by surface activated bonding (SAB) method. <i>Electronics and Communications in Japan</i> , 2006 , 89, 34-42		6
170	Low-temperature bonding of a LiNbO 3 waveguide chip to a Si substrate in ambient air for hybrid-integrated optical devices 2006 , 6376, 16		2
169	Room temperature bonding of silicon and lithium niobate. <i>Applied Physics Letters</i> , 2006 , 89, 031914	3.4	42
168	Sequential Plasma Activated Process for Silicon Direct Bonding. ECS Transactions, 2006, 3, 191-202	1	22
167	Structural investigation of heat-treated fullerene nanotubes and nanowhiskers. <i>Diamond and Related Materials</i> , 2006 , 15, 1143-1146	3.5	26
166	Cu-Cu Room Temperature Bonding - Current Status of Surface Activated Bonding(SAB) <i>ECS Transactions</i> , 2006 , 3, 155-163	1	13
165	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

164	Room/Low Temperature Interconnection Technique on Micro-bump/Film for COC and COF System 2006 ,		2
163	Room-temperature microfluidics packaging using sequential plasma activation process. <i>IEEE Transactions on Advanced Packaging</i> , 2006 , 29, 448-456		45
162	Surface-Activated Bonding of Aluminum/Stainless Steel and Its Seal Characteristics. <i>Journal of the Japan Society for Technology of Plasticity</i> , 2006 , 47, 596-600	0.3	
161	Room temperature wafer level glass/glass bonding. Sensors and Actuators A: Physical, 2006, 127, 31-36	3.9	56
160	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
159	Effect of Exposure to Vacuum Condition in Room-Temperature Direct Bonding of CMP-Cu Thin Films by Surface Activated Bonding (SAB) Method. <i>Journal of Japan Institute of Electronics Packaging</i> , 2006 , 9, 278-281	0.1	
158	Low Cycle Fatigue Properties of Solder Alloys Evaluated by Micro Bulk Specimen 2005 , 1827		3
157	Low temperature bonding of LiNbO 3 waveguide chips to Si substrates in air 2005 , 6050, 288		
156	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
155	Low-temperature LD direct bonding for highly functional optical MEMS 2005,		1
154	Structural characterization of the fullerene nanotubes prepared by the liquid II quid interfacial precipitation method. <i>Journal of Materials Research</i> , 2005 , 20, 688-695	2.5	72
153	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
152	Isothermal Fatigue Properties of Sn–Ag–Cu Alloy Evaluated by Micro Size Specimen. <i>Materials Transactions</i> , 2005 , 46, 2309-2315	1.3	39
151	Broadband MEMS shunt switches using PZT/HfO2 multi-layered high k dielectrics for high switching isolation. <i>Sensors and Actuators A: Physical</i> , 2005 , 121, 275-281	3.9	18
150	Electroplated Ni microcantilever probe with electrostatic actuation. <i>Sensors and Actuators A: Physical</i> , 2005 , 123-124, 490-496	3.9	7
149	Morphology of C60 nanotubes fabricated by the liquid I quid interfacial precipitation method. Science and Technology of Advanced Materials, 2005, 6, 272-277	7.1	51
148	Characterization of fullerene nanotubes prepared by the liquid interfacial precipitation method. <i>Science and Technology of Advanced Materials</i> , 2005 , 6, 388-393	7.1	10
147	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

146	Surface activated bonding of LCP/Cu for electronic packaging. <i>Journal of Materials Science</i> , 2005 , 40, 3177-3184	4.3	24
145	Surface Activated Flip-Chip Bonding of Laser Chips 2005 , 793		
144	Mechanical properties of lead-free solder alloys evaluated by miniature size specimen 2005 , 5852, 297		8
143	Necessary load for room temperature vacuum sealing. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, S281-S285	2	13
142	Enhanced Cu/LCP adhesion by pre-sputter cleaning prior to Cu deposition. <i>IEEE Transactions on Advanced Packaging</i> , 2005 , 28, 495-502		18
141	Characterization of high-pressure sintered C60 nanowhiskers and C60 powder. <i>Journal of Materials Research</i> , 2005 , 20, 742-746	2.5	7
140	Structure and properties of fullerene nanowhiskers prepared by the liquid-liquid interfacial precipitation method 2004 , 5648, 224		5
139	Transmission electron microscopy investigation of fullerene nanowhiskers and needle-like precipitates formed by using C60 and (\(\mathbb{Z}\)-C60)Pt(PPh3)2. <i>Journal of Materials Research</i> , 2004 , 19, 2410-2	474	23
138	Transmission electron microscopy investigation of tubular and capsular needlelike crystals of C60 produced by the liquid interfacial precipitation method. <i>Journal of Materials Research</i> , 2004 , 19, 3145-3148	2.5	16
137	Wafer Level Surface Activated Bonding Tool for MEMS Packaging. <i>Journal of the Electrochemical Society</i> , 2004 , 151, G461	3.9	52
136	C3F8 plasma fluorination of lead free solders for fluxless soldering. <i>Applied Surface Science</i> , 2004 , 227, 81-86	6.7	10
135	Light emission during negative heavy ion implantation into lithium niobate and sapphire. <i>Vacuum</i> , 2004 , 74, 367-371	3.7	6
134	Hybrid integration technologies for optical micro-systems 2004 , 5604, 67		
133	Structural investigation of the C60/C70 whiskers fabricated by forming liquid interfaces of toluene with dissolved C60/C70 and isopropyl alcohol. <i>Journal of Materials Research</i> , 2003 , 18, 1096-110	0 3 .5	60
132	Characterizing high-pressure compressed C60 whiskers and C60 powder. <i>Journal of Materials Research</i> , 2003 , 18, 166-172	2.5	6
131	Nanoparticles formation in insulators induced by Auland Au2lion implantation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 206, 606-609	1.2	8
130	Radiation effects in diamond induced by negative gold ions. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003 , 206, 947-951	1.2	3
129	Reliability of Au bump t u direct interconnections fabricated by means of surface activated bonding method. <i>Microelectronics Reliability</i> , 2003 , 43, 751-756	1.2	22

128	Electroplating Ni micro-cantilevers for low contact-force IC probing. <i>Sensors and Actuators A: Physical</i> , 2003 , 103, 116-121	3.9	44
127	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
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		12
125	Room temperature Cullu 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
124	Structural characterization of the C60[C(COOC2H5)2] whiskers prepared by the liquid liquid interfacial precipitation method. <i>Journal of Materials Research</i> , 2003 , 18, 2730-2735	2.5	31
123	Evaluation of Environmental Burden of Lead-Free Solders A Case of Sn-Zn Solder. <i>Journal of Japan Institute of Electronics Packaging</i> , 2003 , 6, 375-379	0.1	
122	The Influence of the Heat after Bonding on the Separability at Gold Wire Bonding Area <i>Journal of Japan Institute of Electronics Packaging</i> , 2003 , 6, 68-72	0.1	
121	Technological Tendency of Bonding for MEMS Device by Japanese Patent Research. <i>Journal of Japan Institute of Electronics Packaging</i> , 2003 , 6, 602-609	0.1	
120	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
119	Resonant-typed microscanners fabricated by hybrid PZT deposition process on SOI wafers 2002 , 4936, 215		5
118	Room-Temperature Wafer Bonding of Silicon and Lithium Niobate by Means of Argon-Beam Surface Activation. <i>Integrated Ferroelectrics</i> , 2002 , 50, 53-59	0.8	3
117	A new bumping process using lead-free solder paste. <i>IEEE Transactions on Electronics Packaging Manufacturing</i> , 2002 , 25, 253-256		5
116	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, 3062-306	6 ^{2.5}	40
115	The effect of prebonding heat treatment on the separability of Au wire from Ag-plated Cu alloy substrate. <i>IEEE Transactions on Electronics Packaging Manufacturing</i> , 2002 , 25, 5-12		
114	Development of Mems IC Probe Card Utilizing Fritting Contact 2002, 314-318		
113	Microsensors and actuator arrays based on Pb(Zr,Ti)O 3 thin film for AFM data storage 2001 ,		4
112	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
111	Room-temperature wafer bonding of Si to LiNbO3, LiTaO3and Gd3Ga5O12by Ar-beam surface activation. <i>Journal of Micromechanics and Microengineering</i> , 2001 , 11, 348-352	2	63

(2000-2001)

110	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
109	Separable Wire Bonding and Application to the Interposer-Less CSP <i>Journal of Japan Institute of Electronics Packaging</i> , 2001 , 4, 207-212	0.1	
108	An 8-inch Wafer Bonding Apparatus with Ultra-High Alignment Accuracy Using Surface Activated Bonding (SAB) Concept 2001 , 222-225		
107	Forecasting the Next Electronic System-Integration Researching Phase I-Recent Activities of Electronic Packaging Consortium Imsi. <i>Journal of Japan Institute of Electronics Packaging</i> , 2001 , 4, 181-1	84 ¹	1
106	Lead-free soldering - future aspects of toxicity, energy and resource consumption 2001,		4
105	Characteristics of Low Force Contact Process for MEMS Probe Cards 2001 , 1394-1397		2
104	MEMS IC test probe utilizing fritting contacts 2000 , 4019, 244		3
103	Morphology and microstructure of the Ar+-ion sputtered (0001) ⊞Al2O3 surface. <i>Applied Surface Science</i> , 2000 , 165, 159-165	6.7	17
102	Influence of Substrate Surface Shape on Peel-off Strength between Aluminum Nitride Substrates and an Epoxy Modified Polyimide Adhesive <i>Journal of Japan Institute of Electronics Packaging</i> , 2000 , 3, 494-500	0.1	2
101	Effect of Heat Treatment and Residual Stress due to Contact Deformation on Fracture Behavior of Al/Sapphire Joint Fabricated by SAB. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2000 , 64, 691-697	0.4	
100	Tensile Properties and Analysis of Growth of Interfacial Defects by Finite Element Method in Al/Sapphire Joint Fabricated by SAB Process. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2000 , 64, 684-690	0.4	1
99	Fracture Mechanical Approach to the Growth of Interfacial Defects in Al/Sapphire Joint Fabricated by SAB: Tearing-Off Test and Analysis by Finite Element Method. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2000 , 64, 444-450	0.4	1
98	Characteristics of fritting contacts utilized for micromachined wafer probe cards. <i>Review of Scientific Instruments</i> , 2000 , 71, 2224-2227	1.7	16
97	Novel multibridge-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
96	1 ????????????????????????????????????	0.1	
95	A New Ara of System Integration and Packaging. <i>Journal of Japan Institute of Electronics Packaging</i> , 2000 , 3, 621-626	0.1	2
94	Roadmap for Commercialization of Lead-Free Solder. <i>Journal of Japan Institute of Electronics Packaging</i> , 2000 , 3, 422-425	0.1	
93	Union of Ecodesigners. <i>Journal of Japan Institute of Electronics Packaging</i> , 2000 , 3, 376-377	0.1	

92	Room-Temperature Bonding of Si Wafers to Pt Films on SiO2 or LiNbO3 Substrates Using Ar-Beam Surface Activation. <i>Japanese Journal of Applied Physics</i> , 1999 , 38, L1559-L1561	1.4	17
91	Microfabricated Dynamic Scanning Force Microscope Using a Three Dimensional Piezoelectric T-shape Actuator. <i>Japanese Journal of Applied Physics</i> , 1999 , 38, 7180-7184	1.4	7
90	Tip-Scanning Dynamic Force Microscope Using Piezoelectric Cantilever for Full Wafer Inspection. <i>Japanese Journal of Applied Physics</i> , 1999 , 38, 7155-7158	1.4	5
89	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
88	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
87	Reversible interconnection by control of interface reactions 1999,		1
86	Disassemblability assessment for IM 1999 ,		4
85	Self-excited piezoelectric PZT microcantilevers for dynamic SFMWith inherent sensing and actuating capabilities. <i>Sensors and Actuators A: Physical</i> , 1999 , 72, 179-188	3.9	110
84	Atomic structure of Al/Al interface formed by surface activated bonding. <i>Journal of Materials Science</i> , 1999 , 34, 4133-4139	4.3	39
83	Active disassembly of bonded wafers 1999 ,		3
82	Environmentally Conscious Engineering-EcoDesign. Eco-Design and Sustainable Development <i>Journal of Japan Institute of Electronics Packaging</i> , 1999 , 2, 571-575	0.1	
81	Relation between Plasticity of Al and Bonded Area Fraction in Al/Sapphire Joint Fabricated by SAB. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1999 , 63, 1485-1489	0.4	
8o	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
79	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
78	Si/Si Interface Bonded at Room Temperature by Ar Beam Surface Activation. <i>Materials Science Forum</i> , 1998 , 294-296, 341-344	0.4	4
77	Microstructure of Al/HAl2O3 Interface Fabricated by Surface Activated Bonding at Room Temperature. <i>Materials Science Forum</i> , 1998 , 294-296, 329-332	0.4	1
76	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
	1.3 th InGaAsP/InP lasers on GaAs substrate fabricated by the surface activated wafer bonding		

74	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
73	Design Concept of the Latest System Packaging. Electronic System Integration-An Interim Report from the Advisory Committee of MITI <i>Journal of Japan Institute of Electronics Packaging</i> , 1998 , 1, 104-	107 ¹	
72	Frequency modulation detection high vacuum scanning force microscope with a self-oscillating piezoelectric cantilever. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1997 , 15, 1647		8
71	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
70	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</i>		50
69	Phenomena, 1997, 15, 1559 Characterization of micromachined piezoelectric PZT force sensors for dynamic scanning force microscopy. Review of Scientific Instruments, 1997, 68, 2091-2100	1.7	61
68	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
67	Pressureless Silicon Direct Bonding at Room Temperature by Argon Beam Etching. <i>IEEJ Transactions on Sensors and Micromachines</i> , 1997 , 117, 420-425	0.2	1
66	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
65	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
64	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
63	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
62	Solgel derived PNNZT thin films for micromachined piezoelectric force sensors. <i>Thin Solid Films</i> , 1997 , 299, 88-93	2.2	6
61	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
60	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
59	Deflection detection and feedback actuation using a self-excited piezoelectric Pb(Zr,Ti)O3 microcantilever for dynamic scanning force microscopy. <i>Applied Physics Letters</i> , 1996 , 69, 2036-2038	3.4	68
58	Sol-gel derived PZT force sensor for scanning force microscopy. <i>Materials Chemistry and Physics</i> , 1996 , 44, 25-29	4.4	24
57	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

56 Surface activated bonding of silicon wafers at room temperature. Applied Physics Letters, 1996, 68, 2222-2224 310 Fabrication of 10-Nanometer-scale GaAs Dot Structures by In Situ Selective Gas Etching with 55 1.4 Self-Assembled InAs Dots as a Mask. Japanese Journal of Applied Physics, 1995, 34, L1198-L1201 . Journal of Micromechanics and Microengineering, **1995**, 5, 231-236 54 2 9 Piezoelectric Sensor for Detecting Force Gradients in Atomic Force Microscopy. Japanese Journal of 1.4 29 53 Applied Physics, 1994, 33, 334-340 Piezoelectric force sensor for scanning force microscopy. Sensors and Actuators A: Physical, 1994, 52 3.9 24 43.305-310 Determination of residual stresses in bimaterials. Journal of Materials Science, 1994, 29, 1441-1448 8 51 4.3 Force sensing microcantilever using sputtered zinc oxide thin film. Applied Physics Letters, 1994, 64, 37-39.4 50 47 Electronic Process of Joining Metal and Ceramic by Burface Activated Bonding Materials Research 49 Society Symposia Proceedings, 1994, 337, 727 Microstructure of B4C/TiB2 Composite Fabricated by Reaction Sintering of B4C and TiC. Journal of 48 11 the Ceramic Society of Japan, 1994, 102, 321-325 Development of a force sensor for atomic force microscopy using piezoelectric thin films. 47 3.4 94 Nanotechnology, 1993, 4, 218-224 Special Issue on Nanometer-scale Machining and Processing Technology - From the Viewpoint of Chemical/Physical Reaction on Surfaces. Nanometer-scale Assembly Technology.. Journal of the 46 0.1 Japan Society for Precision Engineering, 1993, 59, 572-576 Structure of AlAl and AlSi3N4 interfaces bonded at room temperature by means of the surface 128 45 activation method. Acta Metallurgica Et Materialia, 1992, 40, S133-S137 Designing structural defects to releive thermal stress. Acta Metallurgica Et Materialia, 1992, 40, S289-S293 44 7 Mechanochemical Polishing of Silicon Carbide Single Crystal with Chromium(III) Oxide Abrasive. 68 3.8 43 Journal of the American Ceramic Society, 1992, 75, 189-194 Development of a New Mechanochemical Polishing Method with a Polishing Film for Ceramic 42 4.9 12 Round Bars. CIRP Annals - Manufacturing Technology, 1992, 41, 339-342 The Feasibility of Room Temperature Joining.. Yosetsu Gakkai Shi/Journal of the Japan Welding 0.1 41 Society, 1992, 61, 98-106 Low Resistivity Junction between YBa2Cu3O7-x Superconductor and Metals by Evaporation 40 O Method. Journal of the Ceramic Society of Japan, 1991, 99, 427-430 Transmission Electron Microscopy of Surface Damages Resulting from Wet Polishing in a 39 Polycrystalline Aluminum Nitride Substrate. Journal of the Ceramic Society of Japan, 1991, 99, 613-619

38	CHEMICAL RELIEF OF THERMAL STRESS AT METAL/CERAMIC JOINED INTERFACE. <i>Analytical Sciences</i> , 1991 , 7, 1231-1234	1.7	1
37	Environmental Effects on Structural, Mechanical and Electrical Properties of Al/Al Interfaces Joined at Room Temperature. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1991 , 55, 1002	2-9 0 10	7
36	A Computer-Aided Method for the Analysis of Crystal Orientations from Transmission Electron Diffraction Patterns Obtained Using a Single-Tilting Stage. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1991 , 55, 605-606	0.4	
35	High Resolution Electron Microscopy of Al/Si and Al/Si3N4 Interfaces Prepared by Room Temperature Bonding Method. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1991 , 55, 907-908	0.4	
34	Resistivity of Sintered YBa2Cu3O7-x at Large Current Density. <i>Journal of the Ceramic Society of Japan</i> , 1990 , 98, 1361-1364		1
33	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
32	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
31	Structural features to relax thermal stress at metal/ceramic joined interface <i>ISIJ International</i> , 1990 , 30, 1041-1045	1.7	3
30	Functional processing for materials. Materials interconnection <i>Journal of the Japan Society for Precision Engineering</i> , 1990 , 56, 989-994	0.1	1
29	TEM Observation of Al/Al Interface Prepared in an Ultrahigh Vacuum at Room Temperature. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1990 , 54, 741-742	0.4	
28	Mechanochemical polishing of sintered silicon nitride <i>Journal of the Japan Society for Precision Engineering</i> , 1989 , 55, 2247-2253	0.1	3
27	Solid State Bonding of Si3N4 and Ni. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 170, 99		
26	High Resolution Electron Microscopy of Alumina/Niobium Joined Interface and Analysis of the Joining Process. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1989 , 53, 429-438	0.4	2
25	Composite Parameters and Mechanical Compatibility of Material Joints. <i>Journal of Composite Materials</i> , 1988 , 22, 917-934	2.7	103
24	An analysis of weak-beam Fringes formed by systematic diffractions. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1988 , 58, 825-832		5
23	Bond strength of vacuum brazed Mg-PSZ/steel joints. <i>Materials Research Bulletin</i> , 1987 , 22, 1187-1193	5.1	3
22	Haftfestigkeitsbestimmung an Keramik-Metall-Verbindungen mit Hilfe von Schichtverbundbiegeproben Teil 1. <i>Materialwissenschaft Und Werkstofftechnik</i> , 1985 , 16, 75-80	0.9	16
21	Haftfestigkeitsbestimmung an Keramik-Metall-Verbindungen mit Hilfe von Schichtverbundbiegeproben [Teil 2. <i>Materialwissenschaft Und Werkstofftechnik</i> , 1985 , 16, 122-128	0.9	4

20	Fracture energy measurements of Ceramic Thermal Barrier Coatings. <i>Materialwissenschaft Und Werkstofftechnik</i> , 1984 , 15, 371-377	0.9	7
19	Bumpless interconnect of Cu electrodes in millions-pins level		4
18	A Novel Approach to Disassembly of Joined Interface		4
17	Customization of The Toxic Potential Indicator for Japanese Regulation		1
16	Room temperature vacuum sealing using surfaced activated bonding with Au thin films [microresonator example]		6
15	Behavior of surface oxide and intermetallic compounds in interconnections of micro Sn-Ag solder bum	ps	1
14	Design and fabrication of an electrostatically actuated MEMS probe card		5
13	Room temperature vacuum sealing using surface activated bonding method		12
12	Surface Activated Bonding High Density Packaging Solution for Advanced Microelectronic System		1
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2 Low temperature direct Cu-Cu bonding with low energy ion activation method

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Low-temperature bonding of surface-activated polyimide to Cu Foil in Pt-catalyzed formic acid atmosphere. *Journal of Materials Science: Materials in Electronics*,1