Yoshizo Kawaguchi

List of Publications by Year
in descending order

104	1,360	304743	377865
papers	citations	22 h-index	34 g-index

104	104	104	653
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigation of the factors affecting the limit of detection of laser-induced breakdown spectroscopy for surface inspection. Plasma Science and Technology, 2019, 21, 034021.	1.5	5
2	Pre-bond surface inspection using laser-induced breakdown spectroscopy for the adhesive bonding of multiple materials. International Journal of Adhesion and Adhesives, 2019, 93, 102320.	2.9	4
3	Detection of trace substances adhered to a metal surface by laser-induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2017, 32, 609-615.	3.0	11
4	Surface Microstructuring of Glass Materials by Laser-Induced Backside Wet Etching. The Review of Laser Engineering, 2017, 45, 273.	0.0	0
5	Effects of pn Doping in Thiophene/Phenylene Co-oligomers Thin Films. Molecular Crystals and Liquid Crystals, 2015, 620, 153-158.	0.9	5
6	Large gain for crystalline thin films of thiophene/phenylene co-oligomer by photopumping with femtosecond laser pulses. Journal of Luminescence, 2014, 155, 338-342.	3.1	4
7	Laser cutting of carbon fiber reinforced thermo-plastics (CFRTP) by single-mode fiber laser irradiation. , 2014, , .		0
8	On-Demand Deposition of Functional Oxide Microdots by Double-Pulse Laser-Induced Dot Transfer. Journal of Laser Micro Nanoengineering, 2014, 9, 10-14.	0.1	13
9	Laser Ablation of Carbon Fiber Reinforced Plastics: Laser-Ionization TOF Mass Spectrometric Study. Journal of Laser Micro Nanoengineering, 2014, 9, 59-63.	0.1	3
10	Laser Cutting of Carbon Fiber Reinforced Thermo-Plastic (CFRTP) by IR Laser Irradiation. Journal of Laser Micro Nanoengineering, 2014, 9, 180-186.	0.1	1
11	Laser cutting of carbon fiber reinforced plastics (CFRP) by 1kW cw fiber laser irradiation. Proceedings of SPIE, 2013, , .	0.8	7
12	Electronic states of thiophene/phenylene co-oligomers: Extreme-ultra violet excited photoelectron spectroscopy observations and density functional theory calculations. Journal of Applied Physics, 2013, 113, 083710.	2.5	14
13	Laser cutting of carbon fiber reinforced plastics (CFRP) by fiber laser irradiation. , 2013, , .		2
14	Evaluation of amplified spontaneous emission from photopumped thiophene/phenylene co-oligomers in polycrystalline states. Proceedings of SPIE, 2012, , .	0.8	1
15	Optimization of thermal treatment of vapor-deposited thiophene/phenylene co-oligomer films. Journal of Crystal Growth, 2012, 345, 39-43.	1.5	11
16	On-Demand Preparation of Microdot Patterns by Laser-Induced Dot Transfer. Journal of Laser Micro Nanoengineering, 2012, 7, 77-80.	0.1	2
17	Variation in the Etch Rate of LIBWE Fabricating Deep Microtrenches. Journal of Laser Micro Nanoengineering, 2012, 7, 81-86.	0.1	6
18	Surface Microstructuring of Glasses by Laser-Induced Backside Wet Etching. The Review of Laser Engineering, 2012, 40, 106.	0.0	0

#	Article	IF	Citations
19	Laser-Induced Backside Wet Etching Employing Green DPSS Laser and Liquid Metallic Absorber. Journal of Laser Micro Nanoengineering, 2011, 6, 204-208.	0.1	8
20	Flexible 3D deep microstructures of silica glass byÂlaser-induced backside wet etching. Applied Physics A: Materials Science and Processing, 2010, 101, 319-323.	2.3	15
21	Flexible fabrication of deep microstructures by laser-induced backside wet etching. , 2010, , .		2
22	Fabrication of Multiple Slanted Microstructures on Silica Glass by Laser-Induced Backside Wet Etching. Journal of Laser Micro Nanoengineering, 2010, 5, 256-262.	0.1	7
23	Progress in laser-induced backside wet etching. , 2010, , .		0
24	Nano- and microdot array formation by laser-induced dot transfer. Applied Surface Science, 2009, 255, 9703-9706.	6.1	17
25	Fabrication of deep microtrenches with inclined parts by laser-induced backside wet etching. , 2009, , .		0
26	Deep trenches fabricated by laser-induced backside wet etching for guiding light. Proceedings of SPIE, 2009, , .	0.8	0
27	Nano- and Microdot Array Formation of FeSi2by Nanosecond Excimer Laser-Induced Forward Transfer. Applied Physics Express, 2008, 1, 057001.	2.4	43
28	Surface microstructures of silica glass by laser-induced backside wet etching. Proceedings of SPIE, 2008, , .	0.8	7
29	Synthesis and Photolysis of Biphenylenetetracarboxylic Dianhydride in Low-temperature Neon Matrixes. Chemistry Letters, 2008, 37, 334-335.	1.3	2
30	Surface Micro-Structuring of Silica Glass by Laser-induced Backside Wet Etching. The Review of Laser Engineering, 2008, 36, 1246-1249.	0.0	0
31	Microfluidic Bead Array Device Using Laser-Machined Surface Microstructures on Silica Glass. , 2007, , .		2
32	Laser-induced backside wet etching of silica glass with ns-pulsed DPSS UV laser at the repetition rate of 40 kHz. Journal of Physics: Conference Series, 2007, 59, 539-542.	0.4	10
33	Laser direct-write and crystallization of FeSi 2 micro-dot array for NIR light-emitting device application. , 2007, , .		0
34	Laser-induced formation of photocatalytic TiO 2 micro networks on a UV-absorbing glass surface. , 2007, , .		0
35	A deep micro-trench on silica glass fabricated by laserinduced backside wet etching (LIBWE). Journal of Physics: Conference Series, 2007, 59, 380-383.	0.4	17
36	Fabrication of a microfluidic bioarray device using laser-machined surface microstructures. , 2007, , .		5

#	Article	IF	Citations
37	Surface microstructuring of silica glass by laser-induced backside wet etching with a DPSS UV laser. Applied Surface Science, 2007, 253, 8287-8291.	6.1	22
38	Fabrication of a Novel Microfluidic Device Incorporating 2-D Array of Microbeads. Chemistry Letters, 2006, 35, 218-219.	1.3	19
39	Laser ablation of toluene liquid for surface micro-structuring of silica glass. Applied Surface Science, 2006, 252, 4387-4391.	6.1	37
40	Rapid prototyping of silica glass microstructures by the LIBWE method: Fabrication of deep microtrenches. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 182, 319-324.	3.9	22
41	Surface microfabrication of silica glass by LIBWE using DPSS-UV laser. , 2005, , .		0
42	Transient pressure induced by laser ablation of toluene, a highly laser-absorbing liquid. Applied Physics A: Materials Science and Processing, 2005, 80, 275-281.	2.3	57
43	Formation of a TiO2 Micronetwork on a UV-Absorbing SiO2-Based Glass Surface by Excimer Laser Irradiation. Chemistry of Materials, 2005, 17, 6651-6655.	6.7	16
44	Etching a Micro-Trench with a Maximum Aspect Ratio of 60 on Silica Glass byLaser-Induced Backside Wet Etching(LIBWE). Japanese Journal of Applied Physics, 2005, 44, L176-L178.	1.5	38
45	Effect of Annealing on the Tolerance of LiCaAlF6Single Crystals against F2Laser Irradiation. Japanese Journal of Applied Physics, 2004, 43, 6168-6169.	1.5	0
46	Preferential Crystallization of Î²-FeSi2 from Micro-droplets Generated by Laser Ablation.. Materials Research Society Symposia Proceedings, 2004, 848, 245.	0.1	0
47	Transient pressure induced by laser ablation of liquid toluene: toward the understanding of laser-induced backside wet etching. Applied Physics A: Materials Science and Processing, 2004, 79, 883-885.	2.3	30
48	Imprinting by hot embossing in polymer substrates using a template of silica glass surface-structured by the ablation of LIBWE method. Applied Physics A: Materials Science and Processing, 2004, 79, 827-828.	2.3	24
49	Preparation of carbon nitride film by cryogenic laser processing. Applied Physics A: Materials Science and Processing, 2004, 79, 1477-1479.	2.3	13
50	Initial stage of laser ablation of LiCaAlF6 single crystal under F2 laser irradiation. Applied Physics A: Materials Science and Processing, 2004, 79, 1579-1581.	2.3	1
51	Micron- and submicron-sized surface patterning of silica glass by LIBWE method. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 166, 129-133.	3.9	51
52	Generation and Photoreactions of 2,4,6-Trinitreno-1,3,5-triazine, a Septet Trinitrene. Journal of the American Chemical Society, 2004, 126, 7846-7852.	13.7	51
53	Fabrication of Microarrays on Fused Silica Plates Using the Laser-Induced Backside Wet Etching Method. Langmuir, 2004, 20, 9769-9774.	3.5	32
54	<title>F<formula><inf><roman>2</roman></inf></formula>-laser-induced damage on transparent fluoride crystals</title>. , 2004, , .		0

#	Article	IF	Citations
55	Surface microfabrication of fused silica glass by UV laser irradiation. , 2004, 5339, 112.		9
56	<title>Surface micro-structuring of silica glass by laser-induced backside wet etching using ns-pulsed UV lasers: application into micropatterning of functional materials using self-assembled monolayers</title>. , 2004, , .		1
57	<title>Room-temperature fabrication of Î²-FeSi<formula><inf><roman>2</roman></inf></formula> microprecipitates by pulsed laser deposition</title>. , 2004, 5662, 400.		0
58	Dicyanocarbodiimide and Trinitreno-s-triazine Generated by Consecutive Photolysis of Triazido-s-triazine in a Low-Temperature Nitrogen Matrix. Angewandte Chemie - International Edition, 2003, 42, 5206-5209.	13.8	30
59	Plume dynamics of iron disilicide studied by time-of-flight mass spectroscopy. Applied Surface Science, 2003, 208-209, 52-56.	6.1	8
60	Surface micro-fabrication of silica glass by excimer laser irradiation of organic solvent. Journal of Photochemistry and Photobiology A: Chemistry, 2003, 158, 179-182.	3.9	79
61	Effect of VUV F 2 laser irradiation on fluoride crystal. , 2003, , .		2
62	Surface microstructuring of transparent materials by laser-induced backside wet etching using excimer laser. , 2003, , .		2
63	Site-selective dye deposition on microstructures of fused silica fabricated using the LIBWE method. Chemical Communications, 2003, , 2168.	4.1	21
64	Laser ablation plume of FeSi 2 alloy target studied by TOF mass and optical emission spectroscopies. , 2003, , .		0
65	Room-temperature preparation of Î²-FeSi2 microprecipitates by the KrF excimer laser ablation of an iron disilicide alloy target. Applied Physics Letters, 2003, 83, 3078-3080.	3.3	12
66	Laser-Induced Backside Wet Etching of Sapphire. Japanese Journal of Applied Physics, 2003, 42, L176-L178.	1.5	44
67	Resistance of LiCaAlF6Single Crystals against F2Laser Irradiation. Japanese Journal of Applied Physics, 2003, 42, L1015-L1017.	1.5	2
68	Site-selective dye deposition onto micropatterns of fused silica fabricated with laser-induced backside wet etching (LIBWE). , 2003, , .		0
69	Fabrication of 1 Î¼m patterns on fused silica plates by laser-induced backside wet etching (LIBWE). , 2003, , .		7
70	Surface microfabrication of silica glass by excimer laser irradiation of toluene solution. , 2003, 4977, 269.		5
71	Time-resolved monitoring of ZnO plume by ArF laser ablation: influence of surrounding gas. , 2003, 4830, 132.		0
72	Microfabrication of Transparent Materials by Laser Processing. , 2003, , 339-357.		0

#	Article	IF	Citations
73	Improvement in Electrical Conductivity of Indium Tin Oxide Films Prepared via Pulsed Laser Deposition on Electric-Field-Applied Substrates. Japanese Journal of Applied Physics, 2002, 41, 3760-3761.	1.5	3
74	Laser ablation of nitrogen-solid films by UV ps-laser irradiation: surface modification of materials by fragments in laser ablation plume. , 2002, , .		0
75	Onset of laser ablation in CaF 2 crystal under excimer laser irradiation. , 2002, 4637, 13.		1
76	Laser-induced high-quality etching of fused silica using a novel aqueous medium. Applied Physics A: Materials Science and Processing, 2002, 75, 641-645.	2.3	56
77	Laser-induced back-side wet etching of fused silica with an aqueous solution containing organic molecules. Applied Physics A: Materials Science and Processing, 2002, 75, 437-440.	2.3	40
78	The onset of optical breakdown in KrF-laser-irradiated silica glass surfaces. Applied Surface Science, 2002, 197-198, 50-55.	6.1	3
79	Pulsed laser deposition of semiconductor-ITO composite films on electric-field-applied substrates. Applied Surface Science, 2002, 197-198, 438-441.	6.1	12
80	Plume dynamics in ZnO under ArF laser radiation. Applied Surface Science, 2002, 197-198, 268-272.	6.1	5
81	Microetching of fused silica by laser ablation of organic solution with XeCl excimer laser. Applied Surface Science, 2002, 186, 552-555.	6.1	47
82	Laser ablation and photo-dissociation of solid-nitrogen film by UV ps-laser irradiation. Applied Surface Science, 2002, 197-198, 67-71.	6.1	8
83	<title>Plume formation and optical breakdown on KrF excimer laser-irradiated silica glass</title>. , 2001, , .		1
84	Interaction of wide band gap single crystals with 248 nm excimer laser irradiation. VII. Localized plasma formation on NaCl single crystal surfaces. Journal of Applied Physics, 2001, 89, 2370-2378.	2.5	17
85	<title>Onset of laser plume formation at 248 nm on cleaved-single crystal NaCl: evidence for highly localized emissions</title>. , 2000, 3935, 38.		2
86	Luminescence spectra at bending fracture of single crystal MgO. Solid State Communications, 2000, 117, 17-20.	1.9	46
87	Consequences of combining laser irradiation with other stimuli on laser desorption and ablation from wide bandgap insulators. Applied Surface Science, 2000, 154-155, 291-304.	6.1	7
88	<title>Laser ablation process of quartz material using F<formula><inf><roman>2</roman></inf></formula> laser</title>. , 2000, , .		3
89	Characteristics of Excimer-Laser-Induced Luminescence of the Ground Surface of Silica Glass. Japanese Journal of Applied Physics, 2000, 39, 180-185.	1.5	3
90	Interaction of wide band gap single crystals with 248 nm excimer laser irradiation. VI. The influence of thermal pretreatment on laser desorption of positive ions from a water-containing ionic crystal (CaHPO4â‹…2H2O). Journal of Applied Physics, 2000, 88, 647-656.	2.5	2

#	Article	IF	Citations
91	Investigations of laser desorption from modified surfaces of ionic single crystals. , 2000, , .		0
92	Laser-induced positive ion and neutral atom/molecule emission from single-crystal CaHPO 4 Â·2 H 2 O: The role of electron-beam-induced defects. Applied Physics A: Materials Science and Processing, 1999, 69, S547-S552.	2.3	6
93	Effect of heat treatment on UV-laser-induced positive ion desorption in CaHPO 4 Â·2H 2 O. Applied Physics A: Materials Science and Processing, 1999, 69, S621-S624.	2.3	2
94	Fractoluminescence in minerals. Radiation Effects and Defects in Solids, 1999, 149, 131-135.	1.2	5
95	Charged Particle Emission and Luminescence upon Bending Fracture of Granite. Japanese Journal of Applied Physics, 1998, 37, 3495-3499.	1.5	25
96	Fractoluminescence Spectra in Crystalline Quartz. Japanese Journal of Applied Physics, 1998, 37, 1892-1896.	1.5	46
97	Failure and relaxations of carbon fibre-reinforced plastic tested by exoemission and luminescence methods. International Journal of Adhesion and Adhesives, 1997, 17, 75-78.	2.9	4
98	OH-content dependence of fractoluminescence spectra in silica glass. Physical Review B, 1996, 54, 9721-9725.	3.2	30
99	Characteristics of Î³â€rayâ€induced absorption bands in oxygen deficient silica. Journal of Applied Physics, 1996, 80, 5633-5638.	2.5	19
100	Time-resolved fractoluminescence spectra of silica glass in a vacuum and nitrogen atmosphere. Physical Review B, 1995, 52, 9224-9228.	3.2	82
101	Temperature dependence of resonant secondary emission in NaNO2: Spectral behavior. Solid State Communications, 1990, 74, 419-423.	1.9	5
102	Phonon Sidebands of Î½00Line in Absorption and Luminescence Spectra of NaNO2: Spatial Dispersion of Î½00Exciton. Journal of the Physical Society of Japan, 1989, 58, 4620-4625.	1.6	15
103	Reflection Spectra of Vibronic Excitons in NaNO2. Journal of the Physical Society of Japan, 1988, 57, 3613-3620.	1.6	3
104	Spectral and temporal behavior of resonant secondary emission in NaNO2. Journal of Luminescence, 1987, 38, 225-229.	3.1	3