Shoji Maruo

List of Publications by Year
in descending order

97 papers	4,194 citations	279798 23 h-index	149698 56 g-index
98 all docs	98 docs citations	98 times ranked	3200 citing authors

#	Article	IF	Citations
1	Effects of suspension processing conditions on the multi-scale structural changes of photocured SiO2 bodies during sintering process: An operando observation using optical coherence tomography. Advanced Powder Technology, 2022, 33, 103533.	4.1	2
2	3D structuring of dense alumina ceramics using fiber-based stereolithography with interparticle photo-cross-linkable slurry. Advanced Powder Technology, 2021, 32, 72-79.	4.1	12
3	Stereolithography and Two-Photon Polymerization. , 2021, , 1-25.		3
4	Development of Micromanipulators using Stereolithography. Journal of the Robotics Society of Japan, 2021, 39, 306-309.	0.1	0
5	3D-Printed Micro-Tweezers with a Compliant Mechanism Designed Using Topology Optimization. Micromachines, 2021, 12, 579.	2.9	13
6	Progress in 3D-Printed Micromachines. Journal of the Japan Society for Precision Engineering, 2021, 87, 734-739.	0.1	0
7	Multi-scale micro-stereolithography using optical fibers with a photocurable ceramic slurry. Optical Materials Express, 2021, 11, 105.	3.0	6
8	Stereolithography and Two-Photon Polymerization. , 2021, , 1375-1399.		0
9	3D Helical Micromixer Fabricated by Micro Lostâ€Wax Casting. Advanced Materials Technologies, 2020, 5, 1900794.	5.8	12
10	Remotely driven micromachines produced by two-photon microfabrication. , 2020, , 475-492.		1
11	Liquidâ€State Optoelectronics Using Liquid Metal. Advanced Electronic Materials, 2020, 6, 1901135.	5.1	14
12	Additive Manufacturing of Micromanipulator Mounted on a Glass Capillary for Biological Applications. Micromachines, 2020, 11, 174.	2.9	12
13	Rapid three-dimensional structuring of transparent SiO2 glass using interparticle photo-cross-linkable suspensions. Communications Materials, 2020, 1, .	6.9	32
14	Multi-scale laser direct writing of conductive metal microstructures using a 405-nm blue laser. Optics Express, 2020, 28, 8363.	3.4	15
15	Simple autofocusing method by image processing using transmission images for large-scale two-photon lithography. Optics Express, 2020, 28, 12342.	3.4	13
16	Multi-material microstereolithography using a palette with multicolor photocurable resins. Optical Materials Express, 2020, 10, 2522.	3.0	25
17	3D printing enabled by light and enabling the manipulation of light: feature issue introduction. Optical Materials Express, 2020, 10, 3414.	3.0	4
18	3D printing enabled by light and enabling the manipulation of light: feature issue introduction. Optical Materials Express, 2020, 10, 3414.	3.0	0

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19	Simple autofocusing method by image processing for two-photon lithography. , 2020, , .		0
20	Additive Manufacturing for 3D Electronic Applications. Journal of Japan Institute of Electronics Packaging, 2020, 23, 452-458.	0.1	0
21	Micro Stereolithography and Molding Techniques for the Production of 3D Microstructures. Vacuum and Surface Science, 2020, 63, 598-603.	0.1	0
22	Tailored cell sheet engineering using microstereolithography and electrochemical cell transfer. Scientific Reports, 2019, 9, 10415.	3.3	22
23	Preparation of hair beads and hair follicle germs for regenerative medicine. Biomaterials, 2019, 212, 55-63.	11.4	54
24	Spontaneous hair follicle germ (HFG) formation inÂvitro, enabling the large-scale production of HFGs for regenerative medicine. Biomaterials, 2018, 154, 291-300.	11.4	52
25	3D Shape Reconstruction of 3D Printed Transparent Microscopic Objects from Multiple Photographic Images Using Ultraviolet Illumination. Micromachines, 2018, 9, 261.	2.9	3
26	Fabrication of Functional Ceramic Devices Produced by Three-Dimensional Molding Using Microstereolithography. , 2018, , 759-763.		2
27	Multi-scale, multi-depth lithography using optical fibers for microfluidic applications. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	11
28	Development of a High-Density Microplasma Emission Source for a Micro Total Analysis System. Analytical Sciences, 2017, 33, 505-509.	1.6	5
29	A 3D block printer using toy bricks for various models. , 2017, , .		1
30	Magnetically Driven Micromachines Created by Two-Photon Microfabrication and Selective Electroless Magnetite Plating for Lab-on-a-Chip Applications. Micromachines, 2017, 8, 35.	2.9	20
31	From CAD models to toy brick sculptures: A 3D block printer. , 2016, , .		4
32	Femtosecond laser direct writing in transparent materials based on nonlinear absorption. MRS Bulletin, 2016, 41, 975-983.	3.5	23
33	Remotely Driven Micromachines Produced by Two-Photon Microfabrication. , 2016, , 293-309.		1
34	Development of Functional Devices Using Three-dimensional Micro/nano Stereolithography. Journal of Smart Processing, 2014, 3, 175-181.	0.1	0
35	Three-dimensional ceramic molding process based on microstereolithography for the production of piezoelectric energy harvesters. Proceedings of SPIE, 2014, , .	0.8	0
36	Advanced Micro/Nano Stereolithography. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2014, 83, 254-257.	0.1	0

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37	Optically driven microfluidic devices produced by two-photon microfabrication. , 2014, , .		0
38	Three-dimensional manipulation of a silver nanowire using optical vortex for nanobiotechnology. , 2013, , .		0
39	Functional lab-on-a-chip devices produced by two-photon microfabrication. , 2013, , .		0
40	Three-dimensional vibration energy harvester using a spiral piezoelectric element. , 2013, , .		1
41	Three-dimensional ceramic molding based on microstereolithography for the production of piezoelectric energy harvesters. Sensors and Actuators A: Physical, 2013, 200, 31-36.	4.1	25
42	Formation of three-dimensional carbon microstructures via two-photon microfabrication and microtransfer molding. Optical Materials Express, 2013, 3, 875.	3.0	43
43	Development of Optically-Driven Metallic Microrotors Using Two-Photon Microfabrication. Journal of Laser Micro Nanoengineering, 2013, 8, 6-10.	0.1	27
44	Fabrication of Three-Dimensional Metalized Movable Microstructures by the Combination of Two-Photon Microfabrication and Electroless Plating. Japanese Journal of Applied Physics, 2012, 51, 06FL17.	1.5	19
45	Three-dimensional molding processes based on one- and two-photon microfabrication. , 2012, , .		1
46	Fabrication of Three-Dimensional Metalized Movable Microstructures by the Combination of Two-Photon Microfabrication and Electroless Plating. Japanese Journal of Applied Physics, 2012, 51, 06FL17.	1.5	11
47	Optically Driven Microfluidic Devices Produced by Multiphoton Microfabrication. , 2012, , 307-331.		2
48	Three-Dimensional Molding Based on Microstereolithography Using Beta-Tricalcium Phosphate Slurry for the Production of Bioceramic Scaffolds. Japanese Journal of Applied Physics, 2011, 50, 06GL15.	1.5	7
49	Evanescent-Wave-Driven Microrotors Produced by Two-Photon Microfabrication. Japanese Journal of Applied Physics, 2011, 50, 06GM16.	1.5	2
50	Polymeric micromachines driven by laser-induced negative dielectrophoresis. , 2011, , .		1
51	Three-Dimensional Molding Based on Microstereolithography Using Beta-Tricalcium Phosphate Slurry for the Production of Bioceramic Scaffolds. Japanese Journal of Applied Physics, 2011, 50, 06GL15.	1.5	4
52	Evanescent-Wave-Driven Microrotors Produced by Two-Photon Microfabrication. Japanese Journal of Applied Physics, 2011, 50, 06GM16.	1.5	1
53	Demonstration of muscle-powered autonomous micro mobile gel. , 2010, , .		1
54	Autonomous beating and fluid pumping gel by cardiomycytes drug stimulation. , 2009, , .		1

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55	Femtosecond laser stereolithography and replication technique for MEMS application. , 2009, , .		0
56	Development of a soft actuator using a photocurable ionic gel. Journal of Micromechanics and Microengineering, 2009, 19, 035005.	2.6	30
57	Fabrication of Three-Dimensional Transparent SiO2Microstructures by Microstereolithographic Molding. Japanese Journal of Applied Physics, 2009, 48, 06FK01.	1.5	16
58	Replication of Three-Dimensional Rotary Micromechanism by Membrane-Assisted Transfer Molding. Japanese Journal of Applied Physics, 2009, 48, 06FH05.	1.5	25
59	Micromolding for three-dimensional metal microstructures using stereolithography of photopolymerized resin. Microelectronic Engineering, 2009, 86, 1169-1172.	2.4	10
60	Optically driven micropump with a twin spiral microrotor. Optics Express, 2009, 17, 18525.	3.4	109
61	Single-anchor support and supercritical CO_2 drying enable high-precision microfabrication of three-dimensional structures. Optics Express, 2009, 17, 20945.	3.4	51
62	A viscous micropump using a spinning microrotor driven by a Laguerre-Gaussian beam. , 2009, , .		0
63	Recent progress in multiphoton microfabrication. Laser and Photonics Reviews, 2008, 2, 100-111.	8.7	353
64	Femtosecond laser direct writing of metallic microstructures by photoreduction of silver nitrate in a polymer matrix. Optics Express, 2008, 16, 1174.	3.4	108
65	Development of microactuators using photopatternable ionic gel. , 2008, , .		0
66	Ferrite and Copper Electroless Plating of Photopolymerized Resin for Micromolding of Three-Dimensional Structures. Japanese Journal of Applied Physics, 2008, 47, 3232-3235.	1.5	11
67	Electroless and Electrolytic Plating of Ni, Cu, and CoxFe2-xO4 for the Application of Three-Dimensional Micro-Molding. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2008, 21, 53-58.	0.3	8
68	Micromolding of Three-Dimensional Metal Structures by Electroless Plating of Photopolymerized Resin. Japanese Journal of Applied Physics, 2007, 46, 2761-2763.	1.5	13
69	Electroless and Electrolytic Plating of Photopolymerized Resin for Use in the Micro-Molding of Three-Dimensional Nickel Structures. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2007, 20, 285-290.	0.3	7
70	Optically driven viscous micropump using a rotating microdisk. Applied Physics Letters, 2007, 91, .	3.3	85
71	Micro and Nanostereolithography for Production of Lab-on-a-Chip Devices. , 2007, , .		0
72	Two-photon microfabrication with a supercritical CO2 drying process toward replication of three-dimensional microstructures. , 2007, , .		1

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73	Laser-driven viscous micropump using a spining rotor. , 2007, , .		3
74	Manipulation of Microobjects by Optical Tweezers. , 2007, , 275-314.		2
75	Optically Driven Micromanipulators with Rotating Arms. Journal of Robotics and Mechatronics, 2007, 19, 565-568.	1.0	12
76	Optically Driven Micropump. Kobunshi, 2007, 56, 511-511.	0.0	0
77	Development of All Optically Controlled Biochips. Journal of the Robotics Society of Japan, 2007, 25, 212-213.	0.1	0
78	Three-dimensional Microstructuring of PDMS by Two-photon Microstereolithography. , 2006, , .		2
79	Optically driven micropump produced by three-dimensional two-photon microfabrication. Applied Physics Letters, 2006, 89, 144101.	3.3	214
80	Development of Optically Driven Microgears by Using Two-photon Microstereolithography. IEEJ Transactions on Sensors and Micromachines, 2006, 126, 216-221.	0.1	5
81	Development of Optically Controlled Micromanipulation Systems by using Two-photon Microstereolithography. IEEJ Transactions on Sensors and Micromachines, 2005, 125, 473-478.	0.1	7
82	Light-drive biomedical micro-tools and biochemical IC chips fabricated by 3D micro/nano stereolithography. , 2004, , .		3
83	<title>Laser-driven multi-degrees-of-freedom nanomanipulators produced by two-photon microstereolithography</title>. , 2004, , .		3
84	Force-controllable, optically driven micromachines fabricated by single-step two-photon microstereolithography. Journal of Microelectromechanical Systems, 2003, 12, 533-539.	2.5	140
85	Submicron manipulation tools driven by light in a liquid. Applied Physics Letters, 2003, 82, 133-135.	3.3	215
86	Recent Progress in Three-Dimensional Microstereolithography.. The Review of Laser Engineering, 2003, 31, 122-128.	0.0	3
87	Optically Driven Micromanipulation Tools Fabricated by Two-photon Microstereolithography. Materials Research Society Symposia Proceedings, 2002, 739, 941.	0.1	0
88	Biochemical IC Chips Fabricated by Hybrid Microstereolithography. Materials Research Society Symposia Proceedings, 2002, 758, 561.	0.1	2
89	Submicron stereolithography for the production of freely movable mechanisms by using single-photon polymerization. Sensors and Actuators A: Physical, 2002, 100, 70-76.	4.1	121
90	Direct Nanomanipulation Tools for Biological Samples. , 2002, , 937-939.		3

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91	<title>Microstereolithography and its application to biochemical IC chip</title>. , 2001, 4274, 360.		1
92	<title>Fabrication of freely movable microstructures by using two-photon three-dimensional microfabrication</title>. , 2000, 3937, 106.		21
93	Three-dimensional microfabrication by use of single-photon-absorbed polymerization. Applied Physics Letters, 2000, 76, 2656-2658.	3.3	143
94	Advanced Micro Stereolithography with Multi UV polymers. IEEJ Transactions on Sensors and Micromachines, 2000, 120, 370-374.	0.1	1
95	Two-photon-absorbed near-infrared photopolymerization for three-dimensional microfabrication. Journal of Microelectromechanical Systems, 1998, 7, 411-415.	2.5	182
96	Evanescent-wave holography by use of surface-plasmon resonance. Applied Optics, 1997, 36, 2343.	2.1	39
97	Three-dimensional microfabrication with two-photon-absorbed photopolymerization. Optics Letters, 1997, 22, 132.	3.3	1,735