Tommaso Baldacchini

List of Publications by Year in descending order

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69 papers 3,417 citations

218677 26 h-index 53 g-index

75 all docs

75 docs citations

75 times ranked 3644 citing authors

#	Article	IF	CITATIONS
1	Multiphoton Fabrication. Angewandte Chemie - International Edition, 2007, 46, 6238-6258.	13.8	541
2	Superhydrophobic Surfaces Prepared by Microstructuring of Silicon Using a Femtosecond Laser. Langmuir, 2006, 22, 4917-4919.	3.5	411
3	Field-emission studies on thin films of zinc oxide nanowires. Applied Physics Letters, 2003, 83, 4821-4823.	3. 3	269
4	3D Cellâ€Migration Studies using Twoâ€Photon Engineered Polymer Scaffolds. Advanced Materials, 2008, 20, 4494-4498.	21.0	222
5	Acrylic-based resin with favorable properties for three-dimensional two-photon polymerization. Journal of Applied Physics, 2004, 95, 6072-6076.	2.5	184
6	Simultaneous additive and subtractive three-dimensional nanofabrication using integrated two-photon polymerization and multiphoton ablation. Light: Science and Applications, 2012, 1, e6-e6.	16.6	158
7	Multiphoton laser direct writing of two-dimensional silver structures. Optics Express, 2005, 13, 1275.	3.4	119
8	Mesoscale laser 3D printing. Optics Express, 2019, 27, 15205.	3.4	116
9	Two-photon polymerization: investigation of chemical and mechanical properties of resins using Raman microspectroscopy. Optics Letters, 2014, 39, 3034.	3.3	112
10	Replication of Two-Photon-Polymerized Structures with Extremely High Aspect Ratios and Large Overhangs. Journal of Physical Chemistry B, 2004, 108, 11256-11258.	2.6	96
11	Effect of excitation wavelength on penetration depth in nonlinear optical microscopy of turbid media. Journal of Biomedical Optics, 2009, 14, 010508.	2.6	81
12	Two-Photon Polymerization Metrology: Characterization Methods of Mechanisms and Microstructures. Micromachines, 2017, 8, 101.	2.9	73
13	Polymerization mechanisms initiated by spatio-temporally confined light. Nanophotonics, 2021, 10, 1211-1242.	6.0	71
14	Programmable Mechanical Properties of Twoâ€Photon Polymerized Materials: From Nanowires to Bulk. Advanced Materials Technologies, 2019, 4, 1900146.	5.8	65
15	Two-photon absorption spectrum of the photoinitiator Lucirin TPO-L. Applied Physics A: Materials Science and Processing, 2008, 90, 633-636.	2.3	61
16	Polymer microcantilevers fabricated via multiphoton absorption polymerization. Applied Physics Letters, 2005, 86, 064105.	3.3	57
17	Characterization of Microstructures Fabricated by Two-Photon Polymerization Using Coherent Anti-Stokes Raman Scattering Microscopy. Journal of Physical Chemistry B, 2009, 113, 12663-12668.	2.6	55
18	Coherent anti-Stokes Raman scattering and spontaneous Raman spectroscopy and microscopy of microalgae with nitrogen depletion. Biomedical Optics Express, 2012, 3, 2896.	2.9	54

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19	Two-photon polymerization with variable repetition rate bursts of femtosecond laser pulses. Optics Express, 2012, 20, 29890.	3.4	51
20	Performance comparison of acrylic and thiol-acrylic resins in two-photon polymerization. Optics Express, 2016, 24, 13687.	3.4	50
21	Direct Laser Patterning of Conductive Wires on Three-Dimensional Polymeric Microstructures. Chemistry of Materials, 2006, 18, 2038-2042.	6.7	49
22	Femtosecond laser waveguide micromachining of PMMA films with azoaromatic chromophores. Optics Express, 2008, 16, 200.	3.4	47
23	Effect of the resin viscosity on the writing properties of two-photon polymerization. Optical Materials Express, 2019, 9, 2601.	3.0	44
24	In situ and real time monitoring of two-photon polymerization using broadband coherent anti-Stokes Raman scattering microscopy. Optics Express, 2010, 18, 19219.	3.4	36
25	Laser-based micro/nanofabrication in one, two and three dimensions. Frontiers of Optoelectronics, 2015, 8, 351-378.	3.7	36
26	Rayleigh scattering and luminescence blue shift in tris(8-hydroxyquinoline)aluminum films. Journal of Luminescence, 2006, 119-120, 111-115.	3.1	26
27	Reversible birefringence in microstructures fabricated by two-photon absorption polymerization. Journal of Applied Physics, 2007, 102, .	2.5	26
28	Optical damage thresholds of microstructures made by laser three-dimensional nanolithography. Optics Letters, 2020, 45, 13.	3.3	24
29	Thermal post-curing as an efficient strategy to eliminate process parameter sensitivity in the mechanical properties of two-photon polymerized materials. Optics Express, 2020, 28, 20362.	3.4	20
30	Emission Intensity and Degradation Processes of Alq[sub 3] Films. Electrochemical and Solid-State Letters, 2005, 8, J24.	2.2	18
31	Effects of Chemical and Physical Agents on the Emission Properties of Alq[sub 3] Films. Journal of the Electrochemical Society, 2004, 151, H11.	2.9	15
32	Improvement of environmental stability of aluminum tris(8-hydroxyquinoline) thin films. Thin Solid Films, 2002, 417, 72-74.	1.8	14
33	Photoluminescence and Morphology of Alq[sub 3] Films and Four-Components Model. Journal of the Electrochemical Society, 2007, 154, J217.	2.9	14
34	Morphological phase transitions in films. Journal of Luminescence, 2009, 129, 1831-1834.	3.1	12
35	Elucidating complex triplet-state dynamics in the model system isopropylthioxanthone. IScience, 2022, 25, 103600.	4.1	12
36	Photoluminescence of Alq[sub 3] Stabilized by a Phenolic Compound. Electrochemical and Solid-State Letters, 2002, 5, H14.	2.2	10

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37	Rapid chemically selective 3D imaging in the mid-infrared. Optica, 2021, 8, 995.	9.3	10
38	Role of Humid Air Annealing on Emission Stability of Alq[sub 3]. Journal of the Electrochemical Society, 2004, 151 , H93.	2.9	9
39	Translation of laser-based three-dimensional printing technologies. MRS Bulletin, 2021, 46, 174-185.	3.5	9
40	Steric effect on the axial substitution of bis(dimethyl sulphoxide)phthalocyaninatoiron(II) by substituted imidazoles. Inorganica Chimica Acta, 1999, 295, 200-208.	2.4	8
41	Efficient multiphoton polymerization for the fabrication of 3-dimensional microstructures. Synthetic Metals, 2003, 135-136, 11-12.	3.9	8
42	Cover Picture: Multiphoton Fabrication (Angew. Chem. Int. Ed. 33/2007). Angewandte Chemie - International Edition, 2007, 46, 6201-6201.	13.8	8
43	Time evolution of the emission band of Alq3 films in open atmosphere. Journal of Luminescence, 2007, 122-123, 234-236.	3.1	8
44	Chemical mapping of three-dimensional microstructures fabricated by two-photon polymerization using CARS microscopy., 2009,,.		7
45	Enhanced adhesion in two-photon polymerization direct laser writing. AIP Advances, 2020, 10, .	1.3	6
46	Microfabrication of three-dimensional filters for liposome extrusion. Proceedings of SPIE, 2015, , .	0.8	5
47	Laser additive manufacturing using nanofabrication byÂintegrated two-photon polymerization and multiphoton ablation., 2017,, 237-256.		4
48	Metrology and process control. , 2020, , 197-228.		4
49	Nanoscale investigation of two-photon polymerized microstructures with tip-enhanced Raman spectroscopy. JPhys Photonics, 2021, 3, 024001.	4.6	3
50	Module for multiphoton high-resolution hyperspectral imaging and spectroscopy. , 2018, , .		3
51	An Investigation of Integrated Multiscale Three-Dimensional Printing for Hierarchical Structures Fabrication. Journal of Micro and Nano-Manufacturing, 2021, 9, .	0.7	3
52	Multiphoton photopolymerization with a Ti:sapphire oscillator., 2002,,.		2
53	Novel ZnO nanostructures., 2003, 5219, 99.		1
54	A novel photoinitiator for microfabrication via two-photon polymerization. , 2006, , .		1

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55	CARS Microspectrometer with a Suppressed Nonresonant Background. Springer Series in Chemical Physics, 2009, , 997-999.	0.2	1
56	CARS module for multimodal microscopy. Proceedings of SPIE, 2011, , .	0.8	1
57	Three-dimensional micro/nano-fabrication by integration of additive and subtractive femtosecond-laser direct writing processes. , 2012, , .		1
58	Characterization of two-photon polymerization process using Raman microspectroscopy. Proceedings of SPIE, 2014, , .	0.8	1
59	Compact fixed wavelength femtosecond oscillators for multi-photon imaging. Proceedings of SPIE, 2015, , .	0.8	1
60	Polymer-Based 3D Micro-/Nanofabrication by Laser Direct Writing. , 2016, , 3349-3361.		1
61	Three-Dimensional Micro- and Nanofabrication with Multiphoton Absorption. Materials Research Society Symposia Proceedings, 2004, 850, 19.	0.1	0
62	Reversible birefringence in microstructures fabricated by two-photon polymerization. , 2006, , .		0
63	Three-dimensional sub-wavelength fabrication by integration of additive and subtractive femtosecond-laser direct writing. Materials Research Society Symposia Proceedings, 2013, 1499, 1.	0.1	0
64	Multimodal microscopy with high resolution spectral focusing CARS. Proceedings of SPIE, 2014, , .	0.8	0
65	A Collection of Microsculptures. , 2016, , 257-267.		0
66	Visualizing TPP structures with coherent Raman scattering microscopy. , 2020, , 229-249.		0
67	Toward the Fabrication of Hybrid Polymer/Metal Three-Dimensional Microstructures. Springer Series in Chemical Physics, 2005, , 807-809.	0.2	0
68	In Situ Monitoring of Two-Photon Polymerization Using Broadband CARS Microscopy. , 2010, , .		0
69	Multiphoton Absorption: Three-Dimensional Nanofabrication., 0,, 2821-2830.		0