Thomas Walther

List of Publications by Year
in descending order

118	1,837	218592	315616
papers	citations	26 h-index	38 g-index

120	120	120	1450
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Toward lasing without inversion in the ultraviolet regime: Doppler-free three-photon coherence effects in mercury vapor. Physical Review A, 2022, 105, .	1.0	2
2	Advancing Radiation-Detected Resonance Ionization towards Heavier Elements and More Exotic Nuclides. Atoms, 2022, 10, 41.	0.7	3
3	Scalable Network for Simultaneous Pairwise Quantum Key Distribution via Entanglement-Based Time-Bin Coding. PRX Quantum, 2022, 3, .	3.5	19
4	The Status of Quantum-Key-Distribution-Based Long-Term Secure Internet Communication. IEEE Transactions on Sustainable Computing, 2021, 6, 19-29.	2.2	20
5	Cache-Side-Channel Quantification and Mitigation for Quantum Cryptography. Lecture Notes in Computer Science, 2021, , 235-256.	1.0	0
6	Triplet state solvation dynamics: extending the accessible timescale by using indole as local probe. Physical Chemistry Chemical Physics, 2021, 23, 683-693.	1.3	3
7	Identity of the local and macroscopic dynamic elastic responses in supercooled 1-propanol. Physical Chemistry Chemical Physics, 2021, 23, 16537-16541.	1.3	7
8	Spectral characterization of SPDC-based single-photon sources for quantum key distribution. European Physical Journal: Special Topics, 2021, 230, 1073-1080.	1.2	2
9	Generic Structural Relaxation in Supercooled Liquids. Journal of Physical Chemistry Letters, 2021, 12, 3685-3690.	2.1	50
10	A gas-jet apparatus for high-resolution laser spectroscopy on the heaviest elements at SHIP. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 272-276.	0.6	15
11	High average power transform limited picosecond laser with flexible repetition rate and pulse duration. Optics Letters, 2020, 45, 4488.	1.7	3
12	A Brillouin LIDAR For Remote Sensing the Temperature Profile in the Mixed Layer. , 2020, , .		0
13	Fiber formation and properties of polyester/lignin blends. Journal of Applied Polymer Science, 2019, 136, 48257.	1.3	7
14	Optical feedback stabilization of a self-mode-locked quantum dot laser. Materials Today: Proceedings, 2019, 7, 912-915.	0.9	0
15	Evolutionary algorithm-assisted design of a UV SHG cavity with elliptical focusing to avoid crystal degradation. Applied Physics B: Lasers and Optics, 2019, 125, 1.	1.1	2
16	Dynamic Intermode Beat Frequency Control of an Optical Frequency Comb Single Section Quantum Dot Laser by Dual-Cavity Optical Self-Injection. IEEE Photonics Journal, 2019, 11, 1-8.	1.0	1
17	Laser cooling and precision laser spectroscopy of highly charged ions at the storage ring CSRe and the future HIAF. Hyperfine Interactions, 2019, 240, 1.	0.2	8
18	Non-degrading CW UV generation in Î²-barium borate at 257â€‰nm using an elliptical focusing enhancement cavity. Laser Physics Letters, 2019, 16, 075403.	0.6	2

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19	Towards a versatile point-of-care system combining femtosecond laser generated microfluidic channels and direct laser written microneedle arrays. Microsystems and Nanoengineering, 2019, 5, 6.	3.4	67
20	Local dielectric response in 1-propanol: Î±-relaxation versus relaxation of mesoscale structures. Physical Chemistry Chemical Physics, 2019, 21, 24778-24786.	1.3	16
21	Evolutionary Algorithm Assisted Design of an Elliptical Focusing Build-up Cavity Avoiding the Degradation Problem in BBO. , 2019, , .		0
22	Triplet Solvation Dynamics of Hydrogen Bonding Liquids in Confinement. Zeitschrift Fur Physikalische Chemie, 2018, 232, 1017-1039.	1.4	10
23	Quantum Dot Frequency Comb Laser Stabilization. , 2018, , .		0
24	Ultrafast Semiconductor Lasers: Pulse Generation and Stabilization. , 2018, , .		0
25	Two-photon polymerization based large scaffolds for adhesion and proliferation studies of human primary fibroblasts. Optics and Laser Technology, 2018, 106, 474-480.	2.2	35
26	Precision Measurement of the First Ionization Potential of Nobelium. Physical Review Letters, 2018, 120, 263003.	2.9	56
27	Probing Sizes and Shapes of Nobelium Isotopes by Laser Spectroscopy. Physical Review Letters, 2018, 120, 232503.	2.9	63
28	Large 3D direct laser written scaffolds for tissue engineering applications. , 2018, , .		1
29	Rubidium traced etalon wavelength calibrators: towards deployment at observatories. , 2018, , .		2
30	Scaffolds in a shellâ€“a new approach combining one-photon and two-photon polymerization. Optics Express, 2018, 26, 29659.	1.7	14
31	Investigation of the First Ionization Potential of Ytterbium in Argon Buffer Gas. Acta Physica Polonica B, 2018, 49, 599.	0.3	2
32	Picosecond Ultraviolet Pulses at 257 nm with Variable Transform Limited Linewidth and Flexible Repetition Rate. , 2018, , .		0
33	Optical feedback stabilization of a frequency comb generated by a self-mode-locked quantum dot laser emitting at 1255 nm. , 2018, , .		0
34	Improved signal recovery for flow cytometry based on â€˜spatially modulated emissionâ€™. Methods and Applications in Fluorescence, 2017, 5, 035002.	1.1	2
35	Impact of buffer gas quenching on the 1S0Ââ†'Â1P1 ground-state atomic transition in nobelium. European Physical Journal D, 2017, 71, 1.	0.6	10
36	Measurement of the lifetime and the proportion of 12 C 3+ ions in stored relativistic ion beams as a preparation for laser cooling experiments at the CSRe. Nuclear Instruments & Methods in Physics Research B, 2017, 408, 280-284.	0.6	5

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37	Efficient continuous wave second harmonic generation of 872â€‰nm diode laser radiation using KNbO3 with high stability. Laser Physics Letters, 2017, 14, 095001.	0.6	4
38	Frequency stabilized diode laser with variable linewidth at a wavelength of 4047â€‰â€‰nm. Optics Letters, 2017, 42, 1508.	1.7	5
39	Impact of long external fiber cavities on the pulse train stabilization of a passively mode-locked quantum dot laser emitting at 1250 nm. , 2017, , .		1
40	Glycerol in micellar confinement with tunable rigidity. Journal of Chemical Physics, 2016, 145, 234511.	1.2	7
41	Solid-state-based laser system as a replacement for Ar^+ lasers. Optics Letters, 2016, 41, 4186.	1.7	11
42	Developments for resonance ionization laser spectroscopy of the heaviest elements at SHIP. Nuclear Instruments & Methods in Physics Research B, 2016, 383, 115-122.	0.6	26
43	Atom-at-a-time laser resonance ionization spectroscopy of nobelium. Nature, 2016, 538, 495-498.	13.7	103
44	A nanosecond regenerative Ti:Sapphire amplifier for the simultaneous generation of 940 nm and of 320 nm pulses. Applied Physics B: Lasers and Optics, 2016, 122, 1.	1.1	9
45	Optics in Remote Sensing. , 2016, , 201-222.		2
46	Stabilizing a Fabryâ€“Perot Etalon Peak to 3ÂcmÂs⁻¹for Spectrograph Calibration. Publications of the Astronomical Society of the Pacific, 2015, 127, 880-889.	1.0	49
47	Cell Size Discrimination Based on the Measurement of the Equilibrium Velocity in Rectangular Microchannels. Micromachines, 2015, 6, 634-647.	1.4	1
48	Towards Lasing Without Inversion in Neutral Mercury. Journal of Physics: Conference Series, 2015, 594, 012007.	0.3	1
49	Master Oscillator Power Amplifier Systems for Ion Beam Cooling. , 2015, , .		0
50	Combining Photonic Crystal and Optical Monte Carlo Simulations: Implementation, Validation and Application in a Positron Emission Tomography Detector. IEEE Transactions on Nuclear Science, 2014, 61, 3618-3626.	1.2	0
51	Dynamics of water-alcohol mixtures: Insights from nuclear magnetic resonance, broadband dielectric spectroscopy, and triplet solvation dynamics. Journal of Chemical Physics, 2014, 140, 114503.	1.2	28
52	Perspectives for laser spectroscopy of the element nobelium. Hyperfine Interactions, 2014, 227, 69-75.	0.2	14
53	Laboratory demonstration of a Brillouin lidar to remotely measure temperature profiles of the ocean. Optical Engineering, 2014, 53, 051407.	0.5	37
54	Feasibility of UV lasing without inversion in mercury vapor. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1964.	0.9	9

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55	On laser spectroscopy of the element nobelium (ZÂ=Â102). European Physical Journal D, 2014, 68, 1.	0.6	18
56	The equilibrium velocity of spherical particles in rectangular microfluidic channels for size measurement. Lab on A Chip, 2014, 14, 2319-2326.	3.1	11
57	A laser locked Fabry-Perot etalon with 3 cm/s stability for spectrograph calibration. , 2014, , .		4
58	Laser cooling of stored relativistic ion beams with large momentum spreads using a laser system with a wide scanning range. Journal of Physics: Conference Series, 2014, 488, 122005.	0.3	5
59	An all-solid-state Argon ion laser replacement. , 2013, , .		2
60	Towards Lasing Without Inversion in mercury at 253.7 nm. , 2013, , .		0
61	High-transmission excited-state Faraday anomalous dispersion optical filter edge filter based on a Halbach cylinder magnetic-field configuration. Optics Letters, 2012, 37, 4477.	1.7	28
62	Control and active stabilization of the linewidth of an ECDL. Applied Physics B: Lasers and Optics, 2012, 108, 249-253.	1.1	10
63	Linewidth of a quantum-cascade laser assessed from its frequency noise spectrum and impact of the current driver. Applied Physics B: Lasers and Optics, 2012, 109, 407-414.	1.1	37
64	A Brillouin lidar for remote sensing of the temperature profile in the ocean: Towards the laboratory demonstration. , 2012, , .		0
65	A Brillouin-lidar for remote sensing of the temperature profile in the ocean: Progress towards the implementation. , 2011, , .		3
66	Model for tuning an external-cavity diode laser by polarization locking. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 508.	0.9	13
67	Precise measurement of LandÃ© g-factors in the region of the 10V-band of 12CS2. Journal of Molecular Spectroscopy, 2011, 269, 86-91.	0.4	1
68	Magneto-optical trapping of neutral mercury. European Physical Journal D, 2011, 65, 251-255.	0.6	28
69	On an ESFADOF edge-filter for a range resolved Brillouin-lidar: The high vapor density and high pump intensity regime. Applied Physics B: Lasers and Optics, 2010, 98, 667-675.	1.1	38
70	Cooling and Trapping of Neutral Mercury Atoms in a Magneto-Optical Trap. , 2010, , .		0
71	A pulsed laser system with large spectral coverage extended byÂnon-linear frequency conversion. Applied Physics B: Lasers and Optics, 2009, 97, 583-589.	1.1	2
72	Depth-resolved temperature measurements of water using theÂBrillouin lidar technique. Applied Physics B: Lasers and Optics, 2009, 97, 931-934.	1.1	29

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73	A high spectral brightness Fourier-transform limited nanosecond Yb-doped fiber amplifier. Applied Physics B: Lasers and Optics, 2009, 97, 591-597.	1.1	11
74	Actively Controlled Tuning of an External Cavity Diode Laser by Polarization Spectroscopy. Optics Express, 2009, 17, 4991.	1.7	31
75	Photonic Properties of Inverse Opals Fabricated from Lanthanide-Doped LaPO4 Nanocrystals. Chemistry of Materials, 2009, 21, 3883-3888.	3.2	29
76	Actively Controlled Tuning of an External Cavity Diode Laser by Polarization Spectroscopy. , 2009, , .		0
77	Remote Water Temperature Measurements Based on Brillouin Scattering with a Frequency Doubled Pulsed Yb:doped Fiber Amplifier. Sensors, 2008, 8, 5820-5831.	2.1	28
78	Extension of the mode-hop-free tuning range of an external cavity diode laser based on a model of the mode-hop dynamics. Optics Letters, 2008, 33, 372.	1.7	27
79	Novel approaches to tunable lasers: Extending mode-hop-free tuning range and spectral coverage. Frequenz, 2008, 62, .	0.6	1
80	Alumni Profiles. Chimia, 2008, 62, 157-161.	0.3	0
81	Fourier-transform limited ns-Pulses Tunable Over a Wide Spectral Range Using a Ti:Sapphire Laser and Non-Linear Frequency Conversion Processes. , 2007, , .		0
82	Prospects of trapping neutral mercury. Journal of Modern Optics, 2007, 54, 2523-2532.	0.6	8
83	A fiber amplifier and an ESFADOF: Developments for a transceiver in a Brillouin lidar. Laser Physics, 2007, 17, 975-982.	0.6	12
84	Application of a difference-frequency-mixing based diode-laser sensor for carbon monoxide detection in the 4.4â€“4.8ÂÎ¼m spectral region. Applied Physics B: Lasers and Optics, 2006, 85, 185-197.	1.1	19
85	Narrow-linewidth, multi-Watt Yb-doped fiber amplifier at 10148 nm. Applied Optics, 2006, 45, 7908.	2.1	19
86	On an excited state Faraday anomalous dispersion optical filter at moderate pump powers for a Brillouin-lidar receiver system. Optics Communications, 2006, 264, 475-481.	1.0	35
87	An injection-locked, single-mode, continuous wave Ti:Sapphire laser. Laser Physics Letters, 2006, 3, 75-78.	0.6	5
88	Microstructural analysis of lignocellulosic fiber networks. , 2006, 6318, 341.		14
89	Towards a Brillouin-LIDAR for remote sensing of the temperature profile in the ocean. , 2006, , .		1
90	A. Interactions in Trapped Atomic Gases. , 2005, , 377-406.		0

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91	Combustion exhaust measurements of nitric oxide with an ultraviolet diode-laser-based absorption sensor. Applied Optics, 2005, 44, 1491.	2.1	21
92	A novel approach to a Brillouinâ€“LIDAR for remote sensing of the ocean temperature. Applied Physics B: Lasers and Optics, 2004, 79, 955-961.	1.1	40
93	Independent storage of the two components of an entangled state. Journal of Modern Optics, 2003, 50, 2341-2350.	0.6	1
94	Diode-Laser-Based Sensor Measurements of Nitric Oxide and Carbon Monoxide in Combustion Exhaust Streams. , 2003, , .		0
95	Mercury$mdash$the Rosetta stone of physics?. Journal of Optics B: Quantum and Semiclassical Optics, 2002, 4, S376-S383.	1.4	4
96	Temperature dependence of the Brillouin linewidth in water. Journal of Modern Optics, 2002, 49, 411-418.	0.6	49
97	Diode-laser-based ultraviolet absorption sensor for nitric oxide. Applied Physics B: Lasers and Optics, 2002, 75, 113-117.	1.1	25
98	Atom Based Tests of the Bell Inequalities â€" the Legacy of John Bell Continues .... , 2002, , 103-117.		3
99	Generation of near-Fourier-transform-limited high-energy pulses in a chain of fiberâ€“bulk amplifiers. Optics Letters, 2001, 26, 13.	1.7	12
100	OH sensor based on ultraviolet, continuous-wave absorption spectroscopy utilizing a frequency-quadrupled, fiber-amplified external-cavity diode laser. Optics Letters, 2001, 26, 1870.	1.7	15
101	Generation of Fourier-transform-limited 35-ns pulses with a ramp-hold-fire seeding technique in a Ti:sapphire laser. Applied Optics, 2001, 40, 3046.	2.1	38
102	Four-level atomic coherence and cw VUV lasers. Optics Communications, 2000, 179, 499-504.	1.0	36
103	Fundamental Tests of Quantum Mechanics. Advances in Atomic, Molecular and Optical Physics, 2000, 42, 1-27.	2.3	21
104	The microwave spectrum and ground-state structure of H2Oâ‹¯HI. Chemical Physics Letters, 1999, 314, 57-64.	1.2	16
105	Angle-tuned type II external-cavity frequency doubling without temperature stabilization. Applied Optics, 1999, 38, 972.	2.1	4
106	Ultranarrow-linewidth, efficient amplification of low-power seed sources by a fiber amplifier. Applied Optics, 1999, 38, 1784.	2.1	12
107	Synchronous, dual-wavelength, injection-seeded amplification of 5-ns pulses in a flash-lamp-pumped Ti:sapphire laser. Optics Letters, 1999, 24, 1496.	1.7	16
108	Lasing Without Inversion Via Interference of Double-Dark Resonances in Atomic and Quantum Well Systems. , 1999, , 63-72.		1

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109	Comment on â€œUnidirectional radiation of widely tunable THz wave using a prism coupler under noncollinear phase matching conditionâ€•[Appl. Phys. Lett. 71, 753 (1997)]. Applied Physics Letters, 1998, 73, 3610-3611.	1.5	7
110	The Einstein?Podolsky?Rosen debate: on the way to a final answer. Physica Scripta, 1998, T76, 47.	1.2	4
111	An Experimental Realization of Bohmâ€™s Spin-1/2 Particle EPR Gedanken Experiment. , 1997, , 431-439.		0
112	On Some Aspects of an Hg Based EPR Experiment. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1997, 52, 20-24.	0.7	2
113	Nuclear quadrupole quantum beat spectroscopy in the electronic ground state of a polyatomic molecule by an IR-UV double resonance method. Chemical Physics Letters, 1995, 240, 79-83.	1.2	3
114	Proposal for a loophole-free test of the Bell inequalities. Physical Review A, 1995, 52, 4381-4395.	1.0	163
115	UV-IR double-resonance spectroscopy of jet-cooled propynal detected by the fluorescence dip method. Chemical Physics Letters, 1994, 231, 64-69.	1.2	34
116	High-resolution quantum beat spectroscopy in the electronic ground state of a polyatomic molecule by IRâ€”UV pumpâ€”probe method. Chemical Physics Letters, 1993, 209, 455-458.	1.2	10
117	Preparation of a pure number state and measurement of the photon statistics in a high-Qmicromaser. Physical Review A, 1989, 39, 1915-1921.	1.0	95
118	Time-dependent POVM reconstruction for single-photon avalanche photo diodes using adaptive regularization. New Journal of Physics, 0, , .	1.2	2