Masaaki Ashida

List of Publications by Citations

75 papers	781 citations	15 h-index	26 g-index
114 ext. papers	959 ext. citations	4.3 avg, IF	3.92 L-index

#	Paper	IF	Citations
75	Capture of a terahertz wave in a photonic-crystal slab. *Nature Photonics*, **2014**, 8, 657-663	33.9	104
74	Ultrabroadband coherent electric field from far infrared to 200 THz using air plasma induced by 10 fs pulses. *Applied Physics Letters*, **2012**, 101, 011105	3.4	71
73	Efficient carrier multiplication in CsPbI perovskite nanocrystals. *Nature Communications*, **2018**, 9, 4199	17.4	67
72	Optical manipulation of CuCl nanoparticles under an excitonic resonance condition in superfluid helium. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3829-3833	1.3	51
71	Longitudinal Optical Phonons Modified by Organic Molecular Cation Motions in Organic-Inorganic Hybrid Perovskites. *Physical Review Letters*, **2018**, 121, 145506	7.4	38
70	Correlative near-infrared light and cathodoluminescence microscopy using Y2O3:Ln, Yb (Ln = Tm, Er) nanophosphors for multiscale, multicolour bioimaging. *Scientific Reports*, **2016**, 6, 25950	4.9	34
69	Ultrabroadband terahertz generation using 4-N,N-dimethylamino-4?-N?-methyl-stilbazolium tosylate single crystals. *Applied Physics Letters*, **2010**, 97, 021105	3.4	32
68	Fabrication of single-crystalline microspheres with high sphericity from anisotropic materials. *Scientific Reports*, **2014**, 4, 5186	4.9	29
67	Observation of superradiance by nonlocal wave coupling of light and excitons in CuCl thin films. *Physical Review Letters*, **2009**, 103, 257401	7.4	28
66	Hardening of the ferroelectric soft mode in SrTiO3 thin films. *Applied Physics Letters*, **2008**, 93, 132903	3.4	27
65	Y2O3:Tm,Yb nanophosphors for correlative upconversion luminescence and cathodoluminescence imaging. *Micron*, **2014**, 67, 90-95	2.3	24
64	Ultrafast free-carrier dynamics in Cu2ZnSnS4 single crystals studied using femtosecond time-resolved optical spectroscopy. *Applied Physics Letters*, **2014**, 105, 231902	3.4	21
63	Free-carrier dynamics and band tails in Cu2ZnSn(SxSe1−x)4: Evaluation of factors determining solar cell efficiency. *Physical Review B*, **2015**, 92,	3.3	17
62	Identification of Giant Mott Phase Transition of Single Electric Nanodomain in Manganite Nanowall Wire. *Nano Letters*, **2015**, 15, 4322-8	11.5	17
61	Microscopic ion migration in solid electrolytes revealed by terahertz time-domain spectroscopy. *Nature Communications*, **2019**, 10, 2662	17.4	16
60	Excitation Efficiency and Limitations of the Luminescence of Eu3+ Ions in GaN. *Physical Review Applied*, **2020**, 13,	4.3	13
59	Generation and Detection of THz Pulses With a Bandwidth Extending Beyond 4 THz Using a Subpicosecond Yb-Doped Fiber Laser System. *IEEE Transactions on Terahertz Science and Technology*, **2014**, 4, 440-446	3.4	13

58	Photocarrier dynamics in undoped and Na-doped Cu2ZnSnS4single crystals revealed by ultrafast time-resolved terahertz spectroscopy. *Applied Physics Express*, **2015**, 8, 062303	2.4	11
57	Theory of Superfluorescence in Highly Inhomogeneous Quantum Systems. *Journal of the Physical Society of Japan*, **2016**, 85, 034703	1.5	10
56	Inner structure of ZnO microspheres fabricated via laser ablation in superfluid helium. *Optics Express*, **2017**, 25, 10449-10455	3.3	10
55	Ultrafast degenerate four-wave mixing in CuCl ultrathin films. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3800-3805	1.3	10
54	Sensitive monitoring of photocarrier densities in the active layer of a photovoltaic device with time-resolved terahertz reflection spectroscopy. *Applied Physics Letters*, **2017**, 110, 071108	3.4	8
53	Self-polarized terahertz magnon absorption in a single crystal of BiFeO3. *Physical Review B*, **2016**, 94,	3.3	8
52	Ultrafast emission under two-photon excitation of biexcitons in CuCl quantum dots. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3795-3799	1.3	8
51	Room temperature degenerate four-wave mixing in CuCl thin films. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 456-459	1.3	7
50	Multiple light-coupling modes of confined excitons observable in photoluminescence spectra of high-quality CuCl thin films. *Physical Review B*, **2012**, 86,	3.3	7
49	Ultrabroadband THz spectroscopy using rapid scanning method. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 3484-3487		7
48	Carrier dynamics and excitation of Eu3+ ions in GaN. *Physical Review B*, **2020**, 101,	3.3	6
47	Estimation of dc transport dynamics in strongly correlated (La,Pr,Ca)MnO3 film using an insulator-metal composite model for terahertz conductivity. *Applied Physics Letters*, **2014**, 105, 023502	3.4	6
46	Intrinsic carrier multiplication efficiency in bulk Si crystals evaluated by optical-pump/terahertz-probe spectroscopy. *Applied Physics Letters*, **2014**, 105, 231118	3.4	5
45	Biexcitonic superfluorescence from CuCl quantum dots under resonant two-photon excitation. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 209-212		5
44	High-density selective excitation effect on excitons in semimagnetic semiconductor CdMnTe. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3806-3811	1.3	5
43	Quantitative study of energy-transfer mechanism in Eu,O-codoped GaN by time-resolved photoluminescence spectroscopy. *Journal of Applied Physics*, **2018**, 123, 161419	2.5	4
42	Time-Domain Magnetic Field-Difference Spectroscopy for Semiconductors Using Circularly Polarized Terahertz Pulses. *IEEE Transactions on Terahertz Science and Technology*, **2020**, 10, 51-57	3.4	4
41	Electrical transport properties of (La,Pr,Ca)MnO3 nanowires investigated using terahertz time domain spectroscopy. *Journal of Applied Physics*, **2016**, 119, 125102	2.5	4

40	Effects of c/a Anisotropy and Local Crystal Structure on Superconductivity in AFe2(As1−xPx)2 (A = Ba1−ySry, Sr1−yCay and Eu). *Journal of the Physical Society of Japan*, **2016**, 85, 063705	1.5	4
39	Synergetic Enhancement of Light-Matter Interaction by Nonlocality and Band Degeneracy in ZnO Thin Films. *Physical Review Letters*, **2019**, 122, 157401	7.4	3
38	Intermolecular THz Vibrations Relevant to Optically and Thermally Induced Magnetic Phase Transitions in the Strongly Correlated Organic Radical TTTA. *Journal of the Physical Society of Japan*, **2014**, 83, 014713	1.5	3
37	Single-particle photoluminescence from cadmium selenide quantum dots fabricated via laser ablation in superfluid helium. *Journal of Nanophotonics*, **2018**, 13, 1	1.1	3
36	Enhanced Red Emission of Eu,O-Codoped GaN Embedded in a Photonic Crystal Nanocavity with Hexagonal Air Holes. *Physical Review Applied*, **2021**, 15,	4.3	3
35	Evaluation of complex conductivity in a circularly polarized field by terahertz time-domain reflection spectroscopy with a phase shifter. *Applied Physics Express*, **2016**, 9, 022402	2.4	3
34	Ablation of organic crystals using picosecond THz free electron laser pulses **2014**,		2
33	Optical Fabrication of Semiconductor Single-Crystalline Microspheres in Superfluid Helium. *Materials Research Society Symposia Proceedings*, **2014**, 1635, 103-108		2
32	Magnetic-field induced broadband THz absorption change in a multiferroic hexaferrite at room temperature **2011**,		2
31	Optical fabrication of wide-gap semiconductor nanoparticles in superfluid helium. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, 217-220		2
30	Electric field detection of coherent synchrotron radiation in a storage ring generated using laser bunch slicing. *Applied Physics Letters*, **2012**, 100, 111112	3.4	2
29	Ultrabroadband THz field detection beyond 170THz with a photoconductive antenna **2008**,		2
28	Free exciton luminescence of ZnO:Zn microcrystals under electron beam excitation. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 1189-1192		2
27	Optical trapping of nanoparticles in superfluid helium. *Optica*, **2022**, 9, 139	8.6	2
26	Direct Visualization and Determination of the Multiple Exciton Generation Rate. *ACS Omega*, **2020**, 5, 21506-21512	3.9	2
25	Quantitative monitoring of the internal field in the depletion layer of a GaAs-based solar cell with terahertz radiation. *Applied Physics Letters*, **2018**, 113, 163501	3.4	2
24	Correlative cathodoluminescence and near-infrared fluorescence imaging for bridging from nanometer to millimeter scale bioimaging. *Microscopy (Oxford, England)*, **2014**, 63 Suppl 1, i29	1.3	1
23	Excitation frequency dependence of the desorption of hydrogen-bonded solids using picosecond THz free electron laser pulses **2017**,		1

22	Ultrabroadband electric field generation and detection from far infrared to optical communication frequency **2010**,		1
21	Polarization memory effect on nonlinear photoluminescence of semimagnetic semiconductor Cd0.8Mn0.2Te. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, 34-37		1
20	Infrared transient absorption spectra for excited transition of excitons and biexcitons in CuCl. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, 296-299		1
19	High-efficiency terahertz pulse generation via optical rectification by suppressing stimulated Raman scattering process **2012**,		1
18	Ultrabroadband THz wave detection using photoconductive antenna **2008**,		1
17	Observation of Soft-Mode Hardening and Broadening in SrTiO3 Thin Films by Broadband Terahertz Time-Domain Spectroscopy **2007**,		1
16	Cathodoluminescence properties of GaAs/AlGaAs pyramidal cap structures with high spatial resolution. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 3553-3556		1
15	Synthesis of submicron-sized CdS particles using reverse micelles. *Journal of Nanophotonics*, **2020**, 14, 1	1.1	1
14	Impact of alkali doping on carrier transport in Cu2ZnSn(S, Se)4 thin films for solar cell applications **2016**,		1
13	Assessing the atomic structure of the defect complex in a solid electrolyte by photoluminescence measurements. *Japanese Journal of Applied Physics*, **2021**, 60, 032004	1.4	1
12	Visualization of quantized vortex reconnection enabled by laser ablation.. *Science Advances*, **2022**, 8, eabn1143	14.3	1
11	Numerical study of terahertz quantum cascade lasers subjected to near-infrared optical pulse injection. *Journal of Computational Electronics*, **2017**, 16, 382-391	1.8	0
10	Enhanced Magneto-Optical Kerr Effect of GaAs-Based P-N Junctions in the Terahertz Range. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2021**, 42, 325-337	2.2	0
9	Ultrafast thermal-free photoluminescence of coherently extended single quantum states. *Scientific Reports*, **2019**, 9, 8453	4.9	
8	Fabrication and Lasing Properties of Single-Crystalline Semiconductor Microspheres with Anisotropic Crystal Structures. *Materials Research Society Symposia Proceedings*, **2015**, 1736, 70		
7	C6-P-04Tri-modal imaging techniques Cathodoluminescence (CL) - Near Infrared (NIR) and Magnetic resonance imaging (MRI) with lanthanides doped Gd2O3. *Microscopy (Oxford, England)*, **2015**, 64, i142.1-i142	1.3	
6	C6-P-01 Rare-earth doped Y 2 O 3 nano-phosphor probes for correlative cathodoluminescence and near-infrared optical bio-imaging. *Microscopy (Oxford, England)*, **2015**, 64, i140.2-i140	1.3	
5	Photoluminescence dynamics in CuCl thin films under high-dense one- and two-photon excitations. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 2493-2496		

4	Superfluorescent Pulsed Emission from Biexcitons in an Ensemble of CuCl Quantum Dots. *Materials Research Society Symposia Proceedings*, **2009**, 1208, 1	
3	Temperature dependences of photoluminescence intensities observed from AgInGaS and AgInGaS/GaSx core□shell nanoparticles. *Journal of Nanophotonics*, **2020**, 14, 1	1.1
2	Special Section Guest Editorial: Optical Manipulation and Structured Materials. *Journal of Nanophotonics*, **2019**, 13, 1	1.1
1	Optical Transportation of Semiconductor Nanoparticles. *The Review of Laser Engineering*, **2014**, 42, 771	0