Keisuke Takano

List of Publications by Year in Descending Order

81 papers	1,120 citations	17 h-index	31 g-index
112 ext. papers	1,538 ext. citations	2.6 avg, IF	3.98 L-index

#	Paper	IF	Citations
81	Time-domain measurement of coherent transition radiation using a photoconductive antenna with micro-structured electrodes. *AIP Advances*, **2021**, 11, 125319	1.5	0
80	Shape-dependent infrared reflectance properties of CNT forest metamaterial arrays. *Optics Express* , **2020**, 28, 607-625	3.3	7
79	Terahertz emission from gold nanorods irradiated by ultrashort laser pulses of different wavelengths. *Scientific Reports*, **2019**, 9, 3280	4.9	9
78	Efficient Optical Modulation of Terahertz Metamaterials Utilizing Organic/Inorganic Semiconductor Hybrid Systems. *Springer Series in Materials Science*, **2019**, 117-127	0.9	
77	Development and Applications of Metasurfaces for Terahertz Waves. *Springer Series in Materials Science*, **2019**, 99-116	0.9	
76	Marked effects of lateral displacement on the optical transmission properties of stacked artificial dielectric systems composed of metallic sub-wavelength slit arrays. *Japanese Journal of Applied Physics*, **2019**, 58, 122004	1.4	1
75	Optical reflectance of patterned frost column-like CNT forest for metamaterial applications. *Diamond and Related Materials*, **2018**, 83, 196-203	3.5	2
74	Quantized conductance observed during sintering of silver nanoparticles by intense terahertz pulses. *Applied Physics Letters*, **2018**, 112, 163102	3.4	3
73	Significant Volume Expansion as a Precursor to Ablation and Micropattern Formation in Phase Change Material Induced by Intense Terahertz Pulses. *Scientific Reports*, **2018**, 8, 2914	4.9	12
72	Enhancing terahertz magnetic near field induced by a micro-split-ring resonator with a tapered waveguide. *Optics Letters*, **2018**, 43, 1658-1661	3	11
71	Visible Measurement of Terahertz Power Based on Capsulized Cholesteric Liquid Crystal Film. *Applied Sciences (Switzerland)*, **2018**, 8, 2580	2.6	4
70	Insertion effects of natural dielectric between artificial dielectrics formed by metallic sub-wavelength slit arrays. *AIP Advances*, **2018**, 8, 095305	1.5	2
69	Waveguide resonance mode response of stacked structures of metallic sub-wavelength slit arrays. *Journal of Applied Physics*, **2018**, 123, 183102	2.5	3
68	Quasi-dielectric characteristics of stacked metallic metamaterials. *Japanese Journal of Applied Physics*, **2017**, 56, 030306	1.4	
67	Optical damage assessment and recovery investigation of hydrogen-ion and deuterium-ion plasma-irradiated bulk ZnO single crystals. *Journal of Applied Physics*, **2017**, 121, 175102	2.5	5
66	The influence of the inner structure of CNT forest metamaterials in the infrared regime. *Diamond and Related Materials*, **2017**, 80, 99-107	3.5	4
65	Strong yellow emission of high-conductivity bulk ZnO single crystals irradiated with high-power gyrotron beam. *Applied Physics Letters*, **2017**, 111, 031108	3.4	9

64	Energy loss of terahertz electromagnetic waves by nano-sized connections in near-self-complementary metallic checkerboard patterns. *Journal of Applied Physics*, **2017**, 122, 063101	2.5	6
63	Influence of Distance Between Metal Squares in Checkerboard Patterns on Transmittance Characteristics in the Infrared Region. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2017**, 38, 1098-1106	2.2	1
62	Multiple intersection properties of optical resonance modes in metallic metamaterials. *AIP Advances*, **2017**, 7, 035209	1.5	4
61	Terahertz Wave Emission from Spontaneously Formed Complex Nanostructures on Silver Ink. *The Review of Laser Engineering*, **2017**, 45, 153	0	
60	THz Pulse Detection by Multilayered GeTe/SbTe. *ACS Applied Materials & Interfaces*, **2016**, 8, 32408-32413	7.5	13
59	LiteBIRD: lite satellite for the study of B-mode polarization and inflation from cosmic microwave background radiation detection **2016**,		16
58	LiteBIRD: Mission Overview and Focal Plane Layout. *Journal of Low Temperature Physics*, **2016**, 184, 824-831	1.3	58
57	Crossing behaviors of optical resonance modes in metallic metamaterials. *Applied Physics Express*, **2016**, 9, 032201	2.4	7
56	Efficient optical terahertz-transmission modulation in solution-processable organic semiconductor thin films on silicon substrate. *Japanese Journal of Applied Physics*, **2016**, 55, 03DC12	1.4	16
55	Optical transmittance investigation of 1-keV ion-irradiated sapphire crystals as potential VUV to NIR window materials of fusion reactors. *AIP Advances*, **2016**, 6, 105108	1.5	1
54	ZnO crystal as a potential damage-recoverable window material for fusion reactors. *Optical Materials*, **2016**, 62, 646-650	3.3	4
53	Terahertz wave emission from plasmonic chiral metasurfaces. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	6
52	Terahertz wave generation from spontaneously formed nanostructures in silver nanoparticle ink. *Optics Letters*, **2016**, 41, 2125-8	3	10
51	Application of Terahertz Field Enhancement Effect in Metal Microstructures. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2016**, 37, 1199-1212	2.2	13
50	Terahertz path-length lens composed of oblique metal slit array. *Applied Physics A: Materials Science and Processing*, **2015**, 118, 397-402	2.6	2
49	Characteristics of H-shaped fractal antenna having VOx absorber for multi-band microbolometer **2015**,		1
48	Terahertz laminated-structure polarizer with high extinction ratio and transmission power. *Applied Physics Express*, **2015**, 8, 032201	2.4	17
47	Trapping waves with terahertz metamaterial absorber based on isotropic Mie resonators. *Optics Letters*, **2015**, 40, 3197-200	3	48

46	Dispersion, spatial growth rate, and start current of a Cherenkov free-electron laser with negative-index material. *Physics of Plasmas*, **2015**, 22, 083111	2.1	3
45	Measurement of beam profiles by terahertz sensor card with cholesteric liquid crystals. *Optics Letters*, **2015**, 40, 4456-9	3	14
44	Influence of metal resistivity on transmittance of checkerboard patterns in infrared region **2015**,		1
43	Parallel plate lens with metal hole array for terahertz wave band. *Applied Physics A: Materials Science and Processing*, **2014**, 115, 403-408	2.6	2
42	Terahertz metamolecules deposited on thin flexible polymer: design, fabrication and experimental characterization. *Journal of Optics (United Kingdom)*, **2014**, 16, 094014	1.7	20
41	Spirulina-templated metal microcoils with controlled helical structures for THz electromagnetic responses. *Scientific Reports*, **2014**, 4, 4919	4.9	44
40	Crossover from capacitive to inductive electromagnetic responses in near self-complementary metallic checkerboard patterns. *Optics Express*, **2014**, 22, 24787-95	3.3	24
39	Investigation of fade-out mechanism of resonance modes in optical transmission using stacked metallic sub-wavelength slit arrays. *Journal of Applied Physics*, **2014**, 115, 243104	2.5	8
38	Electromagnetic wave absorption characteristics of H-shaped fractal antenna for dual-band microbolometer and study on the influence of bias line resistivity on microbolometer characteristics. *Micro and Nano Letters*, **2014**, 9, 639-643	0.9	3
37	Design of H-shaped fractal antenna for microbolometer and its thermal performance estimation. *Electronics Letters*, **2014**, 50, 1410-1412	1.1	3
36	Focusing effect measurements of artificial dielectric multilayer lens with metal rectangular chips for terahertz wave band. *Applied Physics A: Materials Science and Processing*, **2014**, 115, 501-508	2.6	4
35	Analysis and design of concave lens with metallic slit array for terahertz wave band. *Applied Physics A: Materials Science and Processing*, **2014**, 115, 495-500	2.6	3
34	Batch fabrication of a double-layer metamaterial resonator using scalloping structures. *Journal of Micromechanics and Microengineering*, **2013**, 23, 085006	2	4
33	Fabrication and Performance of $hbox{TiO}_{2}$-Ceramic-Based Metamaterials for Terahertz Frequency Range. *IEEE Transactions on Terahertz Science and Technology*, **2013**, 3, 812-819	3.4	13
32	Polarization property of terahertz wave emission from gammadion-type photoconductive antennas. *Applied Physics Letters*, **2013**, 103, 111106	3.4	7
31	Radially polarized terahertz waves from a photoconductive antenna with microstructures. *Applied Physics Letters*, **2013**, 102, 221118	3.4	17
30	Mechanism of optical terahertz-transmission modulation in an organic/inorganic semiconductor interface and its application to active metamaterials. *Optics Letters*, **2013**, 38, 4632-5	3	31
29	Extraordinary optical transmission through incommensurate metal hole arrays in the terahertz region. *Journal of the Optical Society of America B: Optical Physics*, **2013**, 30, 2476	1.7	5

28	Tuning the effective refractive index of a thin air gap region sandwiched by metallic metamaterials by lateral displacements. *Journal of Applied Physics*, **2013**, 113, 243103	2.5	7
27	Spectroscopic Functions of Multi-Stacked Metallic Plates with Modulated Slit Arrays. *Applied Physics Express*, **2013**, 6, 062602	2.4	9
26	Analysis and design of planar dipole array for terahertz magnetic surface wave propagation **2013**,		1
25	Asymmetric transmission of planar chiral THz metamaterials for circularly polarized light **2013**,		2
24	Design of terahertz wire-grid polarizer of laminated parallel plates on cyclo olefin polymer films for high extinction ratio less than 10 **2013**,		1
23	Proposal and analysis of artificial dielectric lens with metallic corrugated structures for terahertz wave band. *Applied Physics A: Materials Science and Processing*, **2012**, 109, 1103-1108	2.6	5
22	Analysis of artificial dielectric lens with metallic rectangular chips for terahertz wave band and physical explanation by periodic model. *Applied Physics A: Materials Science and Processing*, **2012**, 109, 825-830	2.6	4
21	Optical Phased Array Functions in Double-Layered Metallic Plate Systems with Artificially Modulated Slit Arrays. *Applied Physics Express*, **2012**, 5, 042502	2.4	12
20	Remarkable transmission characteristics of optical waves through modulated double-layered metallic slit arrays. *AIP Advances*, **2012**, 2, 042112	1.5	7
19	Application of Metamaterials and Meta-Atoms to Terahertz Devices. *The Review of Laser Engineering*, **2012**, 40, 508	0	
18	Fabrication and characterization of THz metamaterials **2011**,		1
17	Wire-grid polarizer sheet in the terahertz region fabricated by nanoimprint technology. *Optics Letters*, **2011**, 36, 2665-7	3	52
16	Smith-Purcell radiation from a grating of negative-index material. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2011**, 637, 135-137	1.2	9
15	Sub-terahertz spectroscopic system using a continuous-wave broad-area laser diode and a spatial filter. *Journal of Applied Physics*, **2011**, 110, 063107	2.5	14
14	Electron density measurement of inductively coupled plasmas by terahertz time-domain spectroscopy (THz-TDS). *Journal of Applied Physics*, **2011**, 110, 073303	2.5	12
13	Optical switching of terahertz radiation from meta-atom-loaded photoconductive antennas. *Applied Physics Letters*, **2011**, 99, 161114	3.4	21
12	A metal-to-insulator transition in cut-wire-grid metamaterials in the terahertz region. *Journal of Applied Physics*, **2010**, 107, 024907	2.5	21
11	Three-dimensional bulk metamaterials operating in the terahertz range. *Applied Physics Letters*, **2010**, 96, 081105	3.4	42

10	Characteristics and generation process of surface waves excited on a perfect conductor surface. *Optics Express*, **2010**, 18, 17576-83	3.3	12
9	Optical transmission anomalies in a double-layered metallic slit array. *Optics Express*, **2010**, 18, 17876-82	3.3	25
8	Fabrication of Terahertz Planar Metamaterials Using a Super-Fine Ink-Jet Printer. *Applied Physics Express*, **2010**, 3, 016701	2.4	51
7	Electron density measurement for plasmas by terahertz time-domain spectroscopy. *Journal of Physics: Conference Series*, **2010**, 227, 012016	0.3	3
6	Terahertz wire-grid polarizers with micrometer-pitch Al gratings. *Optics Letters*, **2009**, 34, 274-6	3	132
5	Terahertz absorption spectra of original and generic ceftazidime. *Analytical Sciences*, **2009**, 25, 1483-5	1.7	7
4	Application of partial least square on quantitative analysis of L-, D-, and DL-tartaric acid by terahertz absorption spectra. *Chemical and Pharmaceutical Bulletin*, **2008**, 56, 305-7	1.9	45
3	Applications of Terahertz Time-Domain Reflectometry. *IEEJ Transactions on Fundamentals and Materials*, **2007**, 127, 391-396	0.2	
2	Terahertz spectroscopic imaging of paraffin-embedded liver cancer samples **2007**,		2
1	Amyloid fibrils from the viewpoint of protein folding. *Cellular and Molecular Life Sciences*, **2004**, 61, 511-524	12.3	119