

Takuya Satoh

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/607761/publications.pdf>

Version: 2024-02-01

55
papers

1,623
citations

331670

21
h-index

289244

40
g-index

55
all docs

55
docs citations

55
times ranked

1767
citing authors

#	ARTICLE	IF	CITATIONS
1	Fast acquisition of spin-wave dispersion by compressed sensing. Applied Physics Express, 2021, 14, 033004.	2.4	2
2	Ultrafast Amplification and Nonlinear Magnetoelastic Coupling of Coherent Magnon Modes in an Antiferromagnet. Physical Review Letters, 2021, 127, 077202.	7.8	16
3	Ultrafast Optomagnonics in Ferrimagnetic Multi-Sublattice Garnets. Journal of the Physical Society of Japan, 2021, 90, 081008.	1.6	3
4	Efficient spin excitation via ultrafast damping-like torques in antiferromagnets. Nature Communications, 2020, 11, 6142.	12.8	5
5	Observation of terahertz magnon of Kaplan-Kittel exchange resonance in yttrium-iron garnet by Raman spectroscopy. Physical Review B, 2020, 102, .	3.2	7
6	Observation of evanescent spin waves in the magnetic dipole regime. Physical Review B, 2020, 101, .	3.2	9
7	Ultrafast light-driven simultaneous excitation of coherent terahertz magnons and phonons in multiferroic BiFeO_3 . Physical Review B, 2020, 101, .		16
8	Selective imaging of the terahertz electric field of the phonon-polariton in LiNbO_3 . Physical Review B, 2020, 102, .		
9	Tracking the ultrafast motion of an antiferromagnetic order parameter. Nature Communications, 2019, 10, 3995.	12.8	30
10	Excitation of coherent optical phonons in iron garnet by femtosecond laser pulses. Journal of Physics Condensed Matter, 2019, 31, 275402.	1.8	7
11	Two-dimensional THz Spectroscopy of Exchange Interactions in Rare-earth Doped Garnets. , 2019, , .		0
12	Surface Plasmon-Mediated Nanoscale Localization of Laser-Driven sub-Terahertz Spin Dynamics in Magnetic Dielectrics. Nano Letters, 2018, 18, 2970-2975.	9.1	39
13	Optical determination of the exchange stiffness constant in an iron garnet. Japanese Journal of Applied Physics, 2018, 57, 070308.	1.5	5
14	Excitation of multiple phonon modes in copper metaborate CuB_2O_4 via nonresonant impulsive stimulated Raman scattering. Physical Review B, 2018, 98, .	3.2	18
15	Unidirectional control of optically induced spin waves. Europhysics Letters, 2017, 117, 67001.	2.0	23
16	All-optical observation and reconstruction of spin wave dispersion. Nature Communications, 2017, 8, 15859.	12.8	80
17	Excitation of coupled spin-orbit dynamics in cobalt oxide by femtosecond laser pulses. Nature Communications, 2017, 8, 638.	12.8	39
18	Ultrafast optical excitation of coherent magnons in antiferromagnetic NiO. Physical Review B, 2017, 95, .	3.2	70

#	ARTICLE	IF	CITATIONS
19	Surface-plasmon enabled control over magnetization dynamics in hybrid magnetoplasmonic crystals. , 2017, , .		0
20	Non-thermal optical excitation of terahertz-spin precession in a magneto-optical insulator. Applied Physics Letters, 2016, 108, .	3.3	18
21	Crystallization and magnetic characterizations of DylG and HoIG nanopowders fabricated using citrate sol-gel. Journal of Science: Advanced Materials and Devices, 2016, 1, 193-199.	3.1	6
22	Writing and reading of an arbitrary optical polarization state in an antiferromagnet. Nature Photonics, 2015, 9, 25-29.	31.4	78
23	Excitation and Control of Spin Wave by Light Pulses. Springer Proceedings in Physics, 2015, , 80-82.	0.2	1
24	Magnetization Reversal and Magnetic Domain Structures in Gd ³⁺ Yb ³⁺ BIG Crystals. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	2
25	Development of Charge Sensitive Infrared Phototransistors for the Far-Infrared Wavelength. Journal of Low Temperature Physics, 2014, 176, 261-266.	1.4	2
26	Phase-controllable spin wave generation in iron garnet by linearly polarized light pulses. Journal of Applied Physics, 2014, 116, .	2.5	45
27	Magnetization and coercivity of nanocrystalline gadolinium iron garnet. Journal of Magnetism and Magnetic Materials, 2013, 332, 180-185.	2.3	29
28	Wide frequencies range of spin excitations in a rare-earth Bi-doped iron garnet with a giant Faraday rotation. Applied Physics Letters, 2013, 103, .	3.3	38
29	Temperature-dependent magnetic properties of yttrium iron garnet nanoparticles prepared by citrate sol-gel. Journal of Alloys and Compounds, 2012, 541, 18-22.	5.5	54
30	Directional control of spin-wave emission by spatially shaped light. Nature Photonics, 2012, 6, 662-666.	31.4	219
31	Spectral dependence of photoinduced spin precession in DyFeO ₃ . $\sqrt{3}$. Physical Review B, 2011, 84, .	3.2	91
32	Crystallization and magnetic behavior of nanosized nickel ferrite prepared by citrate precursor method. Journal of Alloys and Compounds, 2011, 509, 6621-6625.	5.5	52
33	Terahertz time-domain spectroscopy of antiferromagnetic resonance in orthoferrite. , 2011, , .		0
34	Generation of mid/far-infrared ultrashort pulses in organic crystals. Journal of Physics: Conference Series, 2010, 206, 012014.	0.4	3
35	Spin Oscillations in Antiferromagnetic NiO Triggered by Circularly Polarized Light. Physical Review Letters, 2010, 105, 077402.	7.8	217
36	Influence of laser pulse shaping on the ultrafast dynamics in antiferromagnetic NiO. Physical Review B, 2010, 82, .	3.2	13

#	ARTICLE	IF	CITATIONS
37	Measurement of inverse Faraday effect in NiO using ultrashort laser pulses. , 2010, , .		0
38	Photoinduced transient Faraday rotation in NiO. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1421.	2.1	11
39	Generation of mid- to far-infrared ultrashort pulses in 4-dimethylamino-N-methyl-4-stilbazolium tosylate crystal. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 2507.	2.1	9
40	Half-metallic spin dynamics at a single LaMnO_3 studied with nonlinear magneto-optical Kerr effect. Physical Review B, 2009, 80, .	3.2	12
41	Ultrafast magnetization dynamics of antiferromagnetic compounds. Journal Physics D: Applied Physics, 2008, 41, 164005.	2.8	69
42	Nonlinear optical detection of a ferromagnetic state at the single interface of an antiferromagnetic $\text{LaMnO}_3/\text{SrMnO}_3$ double layer. Physical Review B, 2008, 78, .	3.2	17
43	Ultrafast spin and lattice dynamics in antiferromagnetic Cr_2O_3 . Physical Review B, 2007, 75, .	3.2	40
44	Time-resolved demagnetization in by phase-sensitive second harmonic generation. Journal of Magnetism and Magnetic Materials, 2007, 310, 1604-1606.	2.3	4
45	Ultrafast and magnetoelectric phase transitions in antiferromagnets. Journal of Magnetism and Magnetic Materials, 2006, 300, e264-e269.	2.3	3
46	Coherent control of antiferromagnetism in NiO. Physical Review B, 2006, 74, .	3.2	23
47	Detection of spin and charge states in centrosymmetric materials by nonlinear optics. Journal of Applied Physics, 2005, 97, 10A914.	2.5	4
48	Interfacial charge transfer excitation with large optical nonlinearity in manganite heterostructure. Physical Review B, 2005, 72, .	3.2	12
49	Resonance-enhanced two-photon sum-frequency generation in NiO and KNiF_3 . Applied Physics B: Lasers and Optics, 2004, 79, 701-706.	2.2	5
50	Ultrafast Manipulation of Antiferromagnetism of NiO. Physical Review Letters, 2004, 93, 117402.	7.8	108
51	Irreversible photoinduced insulator-metal transition in the Na-doped manganite $\text{Pr}_{0.75}\text{Na}_{0.25}\text{MnO}_3$. Physical Review B, 2002, 65, .	3.2	32
52	Irreversible Photoinduced Insulator-Metal Transition in Charge Ordered $\text{Pr}_{0.75}\text{Na}_{0.25}\text{MnO}_3$. Phase Transitions, 2002, 75, 935-940.	1.3	1
53	Spectroscopic study of photoinduced charge-gap collapse in the correlated insulators $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$. Physical Review B, 2000, 62, 13903-13906.	3.2	14
54	Action spectra of the two-stage photoinduced insulator-metal transition in $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$. Physical Review B, 1999, 60, 7944-7949.	3.2	22

#	ARTICLE	IF	CITATIONS
55	Photoinduced and current-driven insulator/metal transition in manganites : A fluctuating route. European Physical Journal Special Topics, 1999, 09, Pr10-311-Pr10-314.	0.2	2