Shinobu Ohya

List of Publications by Year in Descending Order

73 papers	1,243 citations	19 h-index	32 g-index
82 ext. papers	1,397 ext. citations	5.5 avg, IF	4.52 L-index

#	Paper	IF	Citations
73	Theoretical analysis of the inverse Edelstein effect at the LaAlO3/SrTiO3 interface with an effective tight-binding model: important role of the second d xy subband. *Applied Physics Express*, **2022**, 15, 013005	2.4	0
72	Spin–orbit torque magnetization switching in a perpendicularly magnetized full Heusler alloy Co2FeSi. *AIP Advances*, **2021**, 11, 115014	1.5	0
71	Thickness-dependent quantum transport of Weyl fermions in ultra-high-quality SrRuO3 films. *Applied Physics Letters*, **2021**, 118, 092408	3.4	9
70	Structural and transport properties of highly Ru-deficient SrRu0.7O3 thin films prepared by molecular beam epitaxy: Comparison with stoichiometric SrRuO3. *AIP Advances*, **2021**, 11, 035226	1.5	5
69	Unconventional bias dependence of tunnel magnetoresistance induced by the Coulomb blockade effect. *AIP Advances*, **2021**, 11, 125029	1.5	
68	Suppression of the field-like torque for efficient magnetization switching in a spin–orbit ferromagnet. *Nature Electronics*, **2020**, 3, 751-756	28.4	9
67	High-Mobility 2D Hole Gas at a SrTiO Interface. *Advanced Materials*, **2020**, 32, e1906003	24	10
66	Temperature dependence of magnetic anisotropy in heavily Fe-doped ferromagnetic semiconductor (Ga,Fe)Sb. *Journal of Applied Physics*, **2020**, 127, 023904	2.5	3
65	Efficient intrinsic spin-to-charge current conversion in an all-epitaxial single-crystal perovskite-oxide heterostructure of La0.67Sr0.33MnO3/LaAlO3/SrTiO3. *Physical Review Research*, **2020**, 2,	3.9	14
64	Room-temperature perpendicular magnetic anisotropy of Pt/Co/AlOx trilayers on SrTiO3 (001). *AIP Advances*, **2020**, 10, 105010	1.5	
63	Direct observation of the magnetic ordering process in the ferromagnetic semiconductor Ga1−xMnxAs via soft x-ray magnetic circular dichroism. *Journal of Applied Physics*, **2020**, 128, 213902	2.5	1
62	Large tunnel magnetoresistance in a fully epitaxial double-barrier magnetic tunnel junction of Fe/MgO/Fe/δ-Al2O3/Nb-doped SrTiO3. *AIP Advances*, **2020**, 10, 085115	1.5	3
61	Enhancement of the Spin Hall Angle by Interdiffusion of Atoms in Co2FeAl0.5Si0.5/n-Ge Heterostructures. *Physical Review Applied*, **2020**, 14,	4.3	3
60	Ferromagnetic resonance and control of magnetic anisotropy by epitaxial strain in the ferromagnetic semiconductor (Ga0.8,Fe0.2)Sb at room temperature. *Physical Review B*, **2019**, 99,	3.3	17
59	Efficient full spin-orbit torque switching in a single layer of a perpendicularly magnetized single-crystalline ferromagnet. *Nature Communications*, **2019**, 10, 2590	17.4	35
58	Evidence for Spin-Triplet Electron Pairing in the Proximity-Induced Superconducting State of an Fe-Doped InAs Semiconductor. *Physical Review Letters*, **2019**, 122, 107001	7.4	6
57	Room-temperature side-gate-induced current modulation in a magnetic tunnel junction with an oxide-semiconductor barrier for vertical spin MOSFET operation. *Applied Physics Express*, **2019**, 12, 023009	2.4	4

56	Large terahertz magnetization response in ferromagnetic nanoparticles. *Applied Physics Letters*, **2019**, 114, 062402	3.4	4
55	In-plane to perpendicular magnetic anisotropy switching in heavily-Fe-doped ferromagnetic semiconductor (Ga,Fe)Sb with high Curie temperature. *Physical Review Materials*, **2019**, 3,	3.2	10
54	Quantum size effect in an Fe quantum well detected by resonant tunneling carriers injected from a p-type Ge semiconductor electrode. *Applied Physics Letters*, **2018**, 112, 152402	3.4	4
53	Large spin-valve effect in a lateral spin-valve device based on ferromagnetic semiconductor GaMnAs. *Applied Physics Express*, **2018**, 11, 033003	2.4	3
52	Improved performance of a GaMnAs-based vertical spin electric double-layer transistor. *Japanese Journal of Applied Physics*, **2018**, 57, 090301	1.4	2
51	Intrinsic transmission magnetic circular dichroism spectra of GaMnAs. *AIP Advances*, **2018**, 8, 035009	1.5	2
50	Large current modulation and tunneling magnetoresistance change by a side-gate electric field in a GaMnAs-based vertical spin metal-oxide-semiconductor field-effect transistor. *Scientific Reports*, **2018**, 8, 7195	4.9	6
49	Ultrafast magnetization modulation induced by the electric field component of a terahertz pulse in a ferromagnetic-semiconductor thin film. *Scientific Reports*, **2018**, 8, 6901	4.9	4
48	Proximity-Induced Superconductivity in a Ferromagnetic Semiconductor (In,Fe)As. *Journal of Physics: Conference Series*, **2018**, 969, 012036	0.3	3
47	Artificial control of the bias-voltage dependence of tunnelling-anisotropic magnetoresistance using quantization in a single-crystal ferromagnet. *Nature Communications*, **2017**, 8, 15387	17.4	8
46	Origin of the large positive magnetoresistance of Ge1−xMnx granular thin films. *Physical Review B*, **2017**, 95,	3.3	8
45	Observation of the inverse spin Hall effect in the topological crystalline insulator SnTe using spin pumping. *Physical Review B*, **2017**, 96,	3.3	8
44	Hidden peculiar magnetic anisotropy at the interface in a ferromagnetic perovskite-oxide heterostructure. *Scientific Reports*, **2017**, 7, 8715	4.9	4
43	Magnetic anisotropy control by applying an electric field to the side surface of ferromagnetic films. *Scientific Reports*, **2017**, 7, 5618	4.9	14
42	Reduction of the magnetic dead layer and observation of tunneling magnetoresistance in La0.67Sr0.33MnO3-based heterostructures with a LaMnO3 layer. *Applied Physics Letters*, **2017**, 110, 212406	3.4	8
41	Fe concentration dependence of tunneling magnetoresistance in magnetic tunnel junctions using group-IV ferromagnetic semiconductor GeFe. *AIP Advances*, **2017**, 7, 105202	1.5	1
40	Tunneling magnetoresistance in trilayer structures composed of group-IV-based ferromagnetic semiconductor Ge1−xFex, MgO, and Fe. *Applied Physics Express*, **2016**, 9, 123001	2.4	3
39	Electronic structure near the Fermi level in the ferromagnetic semiconductor GaMnAs studied by ultrafast time-resolved light-induced reflectivity measurements. *Physical Review B*, **2016**, 93,	3.3	8

38	Spin-dependent transport and current modulation in a current-in-plane spin-valve field-effect transistor. *Applied Physics Letters*, **2016**, 109, 152403	3.4	2
37	Sudden restoration of the band ordering associated with the ferromagnetic phase transition in a semiconductor. *Nature Communications*, **2016**, 7, 12013	17.4	14
36	Room-temperature local ferromagnetism and its nanoscale expansion in the ferromagnetic semiconductor Ge(1-x)Fex. *Scientific Reports*, **2016**, 6, 23295	4.9	14
35	Intrinsic magneto-optical spectra of GaMnAs. *Applied Physics Letters*, **2015**, 106, 222406	3.4	6
34	Spin-dependent transport properties of a GaMnAs-based vertical spin metal-oxide-semiconductor field-effect transistor structure. *Applied Physics Letters*, **2015**, 107, 242401	3.4	20
33	Electronic excitations of a magnetic impurity state in the diluted magnetic semiconductor (Ga,Mn)As. *Physical Review Letters*, **2014**, 112, 107203	7.4	16
32	Unveiling the impurity band induced ferromagnetism in the magnetic semiconductor (Ga,Mn)As. *Physical Review B*, **2014**, 89,	3.3	63
31	Recent progress in III-V based ferromagnetic semiconductors: Band structure, Fermi level, and tunneling transport. *Applied Physics Reviews*, **2014**, 1, 011102	17.3	77
30	Annealing-induced enhancement of ferromagnetism and nanoparticle formation in the ferromagnetic semiconductor GeFe. *Physical Review B*, **2014**, 90,	3.3	13
29	Important role of the non-uniform Fe distribution for the ferromagnetism in group-IV-based ferromagnetic semiconductor GeFe. *Journal of Applied Physics*, **2014**, 116, 173906	2.5	9
28	Anomalous Fermi level behavior in GaMnAs at the onset of ferromagnetism. *Applied Physics Letters*, **2013**, 103, 032411	3.4	15
27	Magnetoresistance enhanced by inelastic cotunneling in a ferromagnetic MnAs nanoparticle sandwiched by nonmagnetic electrodes. *Journal of Applied Physics*, **2012**, 111, 063716	2.5	2
26	Valence-band structure of ferromagnetic semiconductor (In,Ga,Mn)As. *Physical Review B*, **2012**, 86,	3.3	19
25	Spin-dependent tunneling transport in a ferromagnetic GaMnAs and un-doped GaAs double-quantum-well heterostructure. *Applied Physics Letters*, **2012**, 100, 162409	3.4	8
24	Nearly non-magnetic valence band of the ferromagnetic semiconductor GaMnAs. *Nature Physics*, **2011**, 7, 342-347	16.2	107
23	Long spin-relaxation time in a single metal nanoparticle. *Nature Nanotechnology*, **2010**, 5, 593-6	28.7	44
22	Quantum-level control in a III-V-based ferromagnetic-semiconductor heterostructure with a GaMnAs quantum well and double barriers. *Applied Physics Letters*, **2010**, 96, 052505	3.4	14
21	Valence-band structure of the ferromagnetic semiconductor GaMnAs studied by spin-dependent resonant tunneling spectroscopy. *Physical Review Letters*, **2010**, 104, 167204	7.4	40

20	Single-Crystalline Ferromagnetic Alloy Semiconductor Ge1-xMnxGrown on Ge(111). *Applied Physics Express*, **2010**, 3, 123002	2.4	7
19	In-Plane Uniaxial Magnetic Anisotropy of [(InyGa1-y)1-xMnx]As Characterized by Planar Hall Effect. *Japanese Journal of Applied Physics*, **2009**, 48, 023001	1.4	
18	Electromotive force and huge magnetoresistance in magnetic tunnel junctions. *Nature*, **2009**, 458, 489-92	30.4	146
17	GaMnAs-based magnetic tunnel junctions with an AlMnAs barrier. *Applied Physics Letters*, **2009**, 95, 242503	3.4	26
16	Chapter 11 Properties and Functionalities of MnAs/III-V Hybrid and Composite Structures. *Semiconductors and Semimetals*, **2008**, 82, 455-485	0.6	
15	Spin-valve effect by ballistic transport in ferromagnetic metal (MnAs)/semiconductor (GaAs) hybrid heterostructures. *Physical Review B*, **2008**, 77,	3.3	16
14	Nature of magnetic coupling between Mn ions in As-grown Ga1-xMnxAs studied by X-ray magnetic circular dichroism. *Physical Review Letters*, **2008**, 100, 247202	7.4	38
13	Planar Hall Effect and Magnetic Anisotropy in a Mn-doped GaAs/p-AlGaAs Heterostructure. *IEEJ Transactions on Electrical and Electronic Engineering*, **2008**, 3, 394-398	1	
12	Magnetic properties of MnAs nanoclusters embedded in a GaAs semiconductor matrix. *Journal of Magnetism and Magnetic Materials*, **2007**, 310, 1932-1934	2.8	23
11	Properties of Heavily Mn-doped GaMnAs with Curie Temperature of 172.5 K. *Journal of Superconductivity and Novel Magnetism*, **2007**, 20, 417-420	1.5	10
10	Magneto-optical and magnetotransport properties of heavily Mn-doped GaMnAs. *Applied Physics Letters*, **2007**, 90, 112503	3.4	56
9	Quantum size effect and tunneling magnetoresistance in ferromagnetic-semiconductor quantum heterostructures. *Physical Review B*, **2007**, 75,	3.3	56
8	Spin-dependent transport properties in GaMnAs-based spin hot-carrier transistors. *Applied Physics Letters*, **2007**, 90, 162505	3.4	18
7	Tunneling magnetoresistance of MnAs thin film/GaAs/AlAs/GaAs:MnAs nanoclusters and its AlAs barrier thickness dependence. *Applied Physics Letters*, **2006**, 89, 242106	3.4	21
6	Resonant tunneling effect and tunneling magnetoresistance in GaMnAs quantum-well double-barrier heterostructures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 4184-4187	9	
5	Spin polarized tunneling in III-V-based heterostructures with a ferromagnetic MnAs thin film and GaAs:MnAs nanoclusters. *Physica E: Low-Dimensional Systems and Nanostructures*, **2006**, 32, 416-418	3	19
4	Tunneling magnetoresistance in GaMnAs/AlAs/InGaAs/AlAs/GaMnAs double-barrier magnetic tunnel junctions. *Applied Physics Letters*, **2005**, 87, 012105	3.4	29
3	Magneto-optical properties and Curie temperature of heavily Mn-doped quaternary alloy ferromagnetic semiconductor (InGaMn)As grown on InP. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 21, 975-977	3	

2	Magnetic properties of heavily Mn-doped quaternary alloy ferromagnetic semiconductor (InGaMn)As grown on InP. *Applied Physics Letters*, **2003**, 83, 2175-2177	3.4	41
1	Growth and Properties of Quaternary Alloy Magnetic Semiconductor (InGaMn)As. *Japanese Journal of Applied Physics*, **2002**, 41, L24-L27	1.4	21