Yasushi Takemura

List of Publications by Year in Descending Order

129 papers	1,777 citations	23 h-index	36 g-index
146 ext. papers	2,051 ext. citations	2.7 avg, IF	4.89 L-index

#	Paper	IF	Citations
129	Evaluation of harmonic signals derived from multiple spatially separated samples for magnetic particle imaging. *IEEE Transactions on Magnetics*, **2022**, 1-1	2	
128	AC and DC magnetic softness enhanced dual-doped □Fe2O3 nanoparticles for highly efficient cancer theranostics. *Applied Materials Today*, **2022**, 28, 101533	6.6	0
127	Pseudo-single domain colloidal superparamagnetic nanoparticles designed at a physiologically tolerable AC magnetic field for clinically safe hyperthermia. *Nanoscale*, **2021**, 13, 19484-19492	7.7	1
126	pH- and thermoresponsive aggregation behavior of polymer-grafted magnetic nanoparticles. *Polymer Journal*, **2021**, 53, 1011-1018	2.7	2
125	Power dissipation in magnetic nanoparticles evaluated using the AC susceptibility of their linear and nonlinear responses. *Journal of Magnetism and Magnetic Materials*, **2021**, 517, 167401	2.8	8
124	. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 1-1	5.6	0
123	Magnetic particle imaging using linear magnetization response-driven harmonic signal of magnetoresistive sensor. *Applied Physics Express*, **2021**, 14, 095001	2.4	2
122	Self-Oscillating Boost Converter of Wiegand Pulse Voltage for Self-Powered Modules. *Energies*, **2021**, 14, 5373	3.1	1
121	Effective N□el relaxation time constant and intrinsic dipolar magnetism in a multicore magnetic nanoparticle system. *Journal of Applied Physics*, **2021**, 130, 064302	2.5	3
120	Quantitation method of loss powers using commercial magnetic nanoparticles based on superparamagnetic behavior influenced by anisotropy for hyperthermia. *Journal of Magnetism and Magnetic Materials*, **2021**, 538, 168313	2.8	7
119	Empirical and simulated evaluations of easy-axis dynamics of magnetic nanoparticles based on their magnetization response in alternating magnetic field. *Journal of Magnetism and Magnetic Materials*, **2021**, 539, 168354	2.8	3
118	Improvement of Pulse Voltage Generated by Wiegand Sensor Through Magnetic-Flux Guidance. *Sensors*, **2020**, 20,	3.8	2
117	Magneto-plasmonic nanostars for image-guided and NIR-triggered drug delivery. *Scientific Reports*, **2020**, 10, 10115	4.9	27
116	Second harmonic response of magnetic nanoparticles under parallel static field and perpendicular oscillating field for magnetic particle imaging. *AIP Advances*, **2020**, 10, 015007	1.5	2
115	High-Frequency N□el Relaxation Response for Submillimeter Magnetic Particle Imaging Under Low Field Gradient. *Physical Review Applied*, **2020**, 14,	4.3	4
114	Single-Bit, Self-Powered Digital Counter Using a Wiegand Sensor for Rotary Applications. *Sensors*, **2020**, 20,	3.8	1
113	Characterization of N□el and Brownian Relaxations Isolated from Complex Dynamics Influenced by Dipole Interactions in Magnetic Nanoparticles. *Journal of Physical Chemistry C*, **2019**, 123, 28859-28866	3.8	44

112	Modulating relaxation responses of magnetic nanotracers for submillimeter imaging. *Applied Physics Letters*, **2019**, 115, 123101	3.4	4
111	Circuit Parameters of a Receiver Coil Using a Wiegand Sensor for Wireless Power Transmission. *Sensors*, **2019**, 19,	3.8	6
110	High intrinsic loss power of multicore magnetic nanoparticles with blood-pooling property for hyperthermia. *AIP Advances*, **2019**, 9, 035347	1.5	7
109	Output Characteristics and Circuit Modeling of Wiegand Sensor. *Sensors*, **2019**, 19,	3.8	7
108	Magnetoliposomes in Controlled-Release Drug Delivery Systems. *Critical Reviews in Biomedical Engineering*, **2019**, 47, 495-505	1.1	5
107	Magnetic Relaxation of Intracellular Magnetic Nanoparticles for Hyperthermia. *Critical Reviews in Biomedical Engineering*, **2019**, 47, 489-494	1.1	2
106	Dynamic magnetic characterization and magnetic particle imaging enhancement of magnetic-gold core-shell nanoparticles. *Nanoscale*, **2019**, 11, 6489-6496	7.7	23
105	Dipolar field-induced asymmetric magnetization hysteresis of immobile superparamagnetic nanoclusters. *Journal of Magnetism and Magnetic Materials*, **2019**, 480, 132-137	2.8	5
104	Effects of size and anisotropy of magnetic nanoparticles associated with dynamics of easy axis for magnetic particle imaging. *Journal of Magnetism and Magnetic Materials*, **2019**, 474, 311-318	2.8	17
103	Enhanced specific loss power from Resovist achieved by aligning magnetic easy axes of nanoparticles for hyperthermia. *Journal of Magnetism and Magnetic Materials*, **2019**, 473, 148-154	2.8	25
102	Harmonic decomposition of magneto-optical signal from suspensions of superparamagnetic nanoparticles. *Journal of Magnetism and Magnetic Materials*, **2018**, 451, 248-253	2.8	6
101	Giant Magnetic Heat Induction of Magnesium-Doped Fe O Superparamagnetic Nanoparticles for Completely Killing Tumors. *Advanced Materials*, **2018**, 30, 1704362	24	64
100	Complex Magnetization Harmonics of Polydispersive Magnetic Nanoclusters. *Nanomaterials*, **2018**, 8,	5.4	5
99	Two-step relaxation process of colloidal magnetic nanoclusters under pulsed fields. *Applied Physics Express*, **2018**, 11, 075001	2.4	17
98	Hyperthermia and chemotherapy using Fe(Salen) nanoparticles might impact glioblastoma treatment. *Scientific Reports*, **2017**, 7, 42783	4.9	37
97	Preparation of a Magnetic-responsive Polycation with a Tetrachloroferrate Anion. *Chemistry Letters* , **2017**, 46, 1473-1475	1.7	
96	Evaluation of easy-axis dynamics in a magnetic fluid by measurement and analysis of the magnetization curve in an alternating magnetic field. *Applied Physics Express*, **2017**, 10, 085001	2.4	15
95	Image-Guided Therapy **2017**, 41-55		1

94	Batteryless Hall Sensor Operated by Energy Harvesting From a Single Wiegand Pulse. *IEEE Transactions on Magnetics*, **2017**, 53, 1-6	2	8
93	Development of magneto-plasmonic nanoparticles for multimodal image-guided therapy to the brain. *Nanoscale*, **2017**, 9, 764-773	7.7	49
92	Layer-by-layer assembled magnetic prednisolone microcapsules (MPC) for controlled and targeted drug release at rheumatoid arthritic joints. *Journal of Magnetism and Magnetic Materials*, **2017**, 427, 258-267	2.8	13
91	Specific Loss Power of Magnetic Particles for Hyperthermia Excited by Pancake-type Applicator. *IEEJ Transactions on Fundamentals and Materials*, **2017**, 137, 476-480	0.2	2
90	Chapter 7:Magnetic Nanogel-enabled Image-guided Therapy. *RSC Smart Materials*, **2017**, 109-127	0.6	
89	Hybrid magneto-plasmonic liposomes for multimodal image-guided and brain-targeted HIV treatment. *Nanoscale*, **2017**, 10, 184-194	7.7	43
88	Rotation of Magnetization Derived from Brownian Relaxation in Magnetic Fluids of Different Viscosity Evaluated by Dynamic Hysteresis Measurements over a Wide Frequency Range. *Nanomaterials*, **2016**, 6,	5.4	26
87	Cell imaging using GaInAsP semiconductor photoluminescence. *Optics Express*, **2016**, 24, 11232-8	3.3	7
86	Living-cell imaging using a photonic crystal nanolaser array. *Optics Express*, **2015**, 23, 17056-66	3.3	16
85	Magnetization Reversal and Specific Loss Power of Magnetic Nanoparticles in Cellular Environment Evaluated by AC Hysteresis Measurement. *Journal of Nanomaterials*, **2015**, 2015, 1-8	3.2	17
84	Dipole-dipole interaction and its concentration dependence of magnetic fluid evaluated by alternating current hysteresis measurement. *Journal of Applied Physics*, **2015**, 117, 17D713	2.5	24
83	Variation of Magnetic Particle Imaging Tracer Performance With Amplitude and Frequency of the Applied Magnetic Field. *IEEE Transactions on Magnetics*, **2015**, 51,	2	9
82	Pleiotropic functions of magnetic nanoparticles for ex vivo gene transfer. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2014**, 10, 1165-74	6	17
81	Eddy Current Defect Detection of Side Transverse Crack in Railhead by Integrating Experiment with Simulation. *Advanced Materials Research*, **2014**, 875-877, 593-598	0.5	1
80	Hyperthermia Using Antibody-Conjugated Magnetic Nanoparticles and Its Enhanced Effect with Cryptotanshinone. *Nanomaterials*, **2014**, 4, 319-330	5.4	19
79	Transfection efficiency influenced by aggregation of DNA/polyethylenimine max/magnetic nanoparticle complexes. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	12
78	. *IEEE Nanotechnology Magazine*, **2013**, 12, 314-322	2.6	14
77	Self-Heating Temperature and AC Hysteresis of Magnetic Iron Oxide Nanoparticles and Their Dependence on Secondary Particle Size. *IEEE Transactions on Magnetics*, **2013**, 49, 240-243	2	17

76	Label-free imaging of live cell using large-scale photonic crystal nanolaser array **2013**,		1
75	Heat Control of Resonant Circuit using Ferrite-core for Hyperthermia Implant. *IEEJ Transactions on Fundamentals and Materials*, **2013**, 133, 362-365	0.2	1
74	Study on increase in temperature of Co□i ferrite nanoparticles for magnetic hyperthermia treatment. *Thermochimica Acta*, **2012**, 532, 123-126	2.9	18
73	Physical limits of pure superparamagnetic Fe3O4 nanoparticles for a local hyperthermia agent in nanomedicine. *Applied Physics Letters*, **2012**, 100, 092406	3.4	57
72	Heat dissipation and magnetic properties of surface-coated Fe3O4 nanoparticles for biomedical applications. *Journal of Magnetism and Magnetic Materials*, **2012**, 324, 3437-3442	2.8	36
71	Magnetic Nanoparticle Hyperthermia Using Pluronic-Coated Nanoparticles: AnIn VitroStudy. *Journal of Nanomaterials*, **2012**, 2012, 1-5	3.2	24
70	Quantitative Analysis of Transverse Cracking of Rail Using Eddy Current Non-Destructive Testing. *Applied Mechanics and Materials*, **2012**, 249-250, 70-75	0.3	
69	Magnetic Relaxation of Magnetic Nanoparticles Dispersed in Solution under High Frequency Magnetic Field. *IEEJ Transactions on Fundamentals and Materials*, **2012**, 132, 813-817	0.2	
68	Resonant circuit as magnetic device for cancer therapy. *Journal of Physics: Conference Series*, **2011**, 263, 012001	0.3	
67	Effective excitation by single magnet in rotation sensor and domain wall displacement of FeCoV wire. *Journal of Applied Physics*, **2011**, 109, 07E531	2.5	7
66	Self-Heating Property of Magnetite Nanoparticles Dispersed in Solution. *IEEE Transactions on Magnetics*, **2011**, 47, 4151-4154	2	16
65	Hyperthermia Implant Consisting of Resonant Circuit Delivered to Tumor Through 18 G Needle. *IEEE Transactions on Magnetics*, **2011**, 47, 2887-2889	2	3
64	Magnetic characterization of surface-coated magnetic nanoparticles for biomedical application. *Journal of Magnetism and Magnetic Materials*, **2011**, 323, 1398-1403	2.8	65
63	Fabrication of ferromagnetic nanoconstriction using atomic force microscopy nanoscratching. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 10945-8	1.3	4
62	Evaluation of Magnetic and Thermal Properties of Ferrite Nanoparticles for Biomedical Applications. *Journal of Magnetics*, **2011**, 16, 164-168	1.9	22
61	Effects of Mn concentration on the ac magnetically induced heating characteristics of superparamagnetic MnxZn1□Fe2O4 nanoparticles for hyperthermia. *Applied Physics Letters*, **2010**, 96, 202511	3.4	21
60	Magnetization and self-heating temperature of NiFe2O4nanoparticles measured by applying ac magnetic field. *Journal of Physics: Conference Series*, **2010**, 200, 122010	0.3	23
59	Local oxidation using scanning probe microscope for fabricating magnetic nanostructures. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 4528-32	1.3	

58	Improvement of scanning probe microscopy local oxidation nanolithography. *Journal of Vacuum Science & Technology B*, **2009**, 27, 948		4
57	Biocompatibility of various ferrite nanoparticles evaluated by in vitro cytotoxicity assays using HeLa cells. *Journal of Magnetism and Magnetic Materials*, **2009**, 321, 1482-1484	2.8	99
56	Effects of particle dipole interaction on the ac magnetically induced heating characteristics of ferrite nanoparticles for hyperthermia. *Applied Physics Letters*, **2009**, 95, 082501	3.4	77
55	AC Magnetic-Field-Induced Heating and Physical Properties of Ferrite Nanoparticles for a Hyperthermia Agent in Medicine. *IEEE Nanotechnology Magazine*, **2009**, 8, 86-94	2.6	67
54	Evaluation of equal error rate in document authentication system using magnetic fiber **2009**,		2
53	Implant hyperthermia resonant circuit produces heat in response to MRI unit radiofrequency pulses. *British Journal of Radiology*, **2008**, 81, 69-72	3.4	6
52	Local Oxidation of Si Surfaces by Tapping-Mode Scanning Probe Microscopy: Size Dependence of Oxide Wires on Dynamic Properties of Cantilever. *Japanese Journal of Applied Physics*, **2008**, 47, 718-720	1.4	5
51	Measurement of Reaction Current during Atomic Force Microscope Local Oxidation of Conductive Surfaces Capped with Insulating Layers. *Japanese Journal of Applied Physics*, **2008**, 47, 768-770	1.4	
50	Dependence of the LC Parameter on the Temperature Rise of a Resonant Circuit for Hyperthermia Implant. *IEEJ Transactions on Electrical and Electronic Engineering*, **2008**, 3, 334-337	1	1
49	AFM Nano-oxidation of NiFe Thin Films Capped with Al-Oxide Layers for Planar-type Tunnel Junction. *IEEJ Transactions on Electrical and Electronic Engineering*, **2008**, 3, 382-385	1	1
48	Magnetization Switching of Magnetic Submicron Structure Fabricated by Atomic Force Microscope. *IEEJ Transactions on Electrical and Electronic Engineering*, **2008**, 3, 386-389	1	
47	Planar-type ferromagnetic tunnel junctions fabricated by SPM local oxidation. *Journal of Magnetism and Magnetic Materials*, **2007**, 310, e641-e643	2.8	7
46	Self-heating characteristics of cobalt ferrite nanoparticles for hyperthermia application. *Journal of Magnetism and Magnetic Materials*, **2007**, 310, 2868-2870	2.8	93
45	Constant Velocity of Domain Wall Propagation Independent of Applied Field Strength in Vicalloy Wire. *IEEE Transactions on Magnetics*, **2007**, 43, 2397-2399	2	7
44	Measurement of faradaic current during AFM local oxidation of magnetic metal thin films. *Journal of Physics: Conference Series*, **2007**, 61, 1147-1151	0.3	4
43	Magnetic Properties, Self-Temperature Rising Characteristics, and Biocompatibility of NiFe$_2$O$_4$Nanoparticles for Hyperthermia Applications. *IEEE Transactions on Magnetics*, **2006**, 42, 2833-2835	2	12
42	Dependence of Frequency and Magnetic Field on Self-Heating Characteristics of NiFe$_2$O$_4$Nanoparticles for Hyperthermia. *IEEE Transactions on Magnetics*, **2006**, 42, 3566-3568	2	40
41	Control of Demagnetizing Field and Magnetostatic Coupling in FeCoV Wires for Zero-Speed Sensor. *IEEE Transactions on Magnetics*, **2006**, 42, 3300-3302	2	6

40	A possibility of hyperthermia treatment using MRI equipment. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2006**, 2006, 6373-5		1
39	Output Properties of Zero-Speed Sensors Using FeCoV Wire and NiFe/CoFe Multilayer Thin Film. *IEEE Sensors Journal*, **2006**, 6, 1186-1190	4	4
38	Applications of NiFe2O4 nanoparticles for a hyperthermia agent in biomedicine. *Applied Physics Letters*, **2006**, 89, 252503	3.4	70
37	Magnetoresistance effect of planar-type ferromagnetic tunnel junctions. *Journal of Applied Physics*, **2006**, 99, 08T312	2.5	10
36	AFM lithography for fabrication of magnetic nanostructures and devices. *Journal of Magnetism and Magnetic Materials*, **2006**, 304, 19-22	2.8	8
35	Analysis of Document Authentication Technique using Soft Magnetic Fibers. *IEEJ Transactions on Fundamentals and Materials*, **2006**, 126, 269-275	0.2	
34	Magnetization reversal with domain-wall pinning in (Ga, Mn)As wire. *IEEE Transactions on Magnetics*, **2005**, 41, 2742-2744	2	3
33	Resonant circuits for hyperthermia excited by RF magnetic field of MRI. *IEEE Transactions on Magnetics*, **2005**, 41, 3673-3675	2	11
32	Direct Modification of Magnetic Domains in Co Nanostructures by Atomic Force Microscope Lithography. *Japanese Journal of Applied Physics*, **2005**, 44, L285-L287	1.4	6
31	Magnetoresistance of patterned NiFe thin films with structures modified by atomic force microscope nanolithography. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2005**, 23, 2390		5
30	Ferromagnetic Ultra-Small Tunnel Junction Devices Fabricated by Scanning Probe Microscope (SPM) Local Oxidation. *IEEE Transactions on Magnetics*, **2004**, 40, 2640-2642	2	17
29	Fabrication of zero-speed sensor using weakly coupled NiFe/CoFe multilayer films. *IEEE Transactions on Magnetics*, **2004**, 40, 2667-2669	2	8
28	SPM fabrication of nanometerscale ferromagnetic metal-oxide devices. *Journal of Magnetism and Magnetic Materials*, **2004**, 272-276, 1581-1583	2.8	6
27	Magnetic nanostructures fabricated by the atomic force microscopy nano-lithography technique. *Nanotechnology*, **2004**, 15, S566-S569	3.4	20
26	RC-coupled ferromagnetic single-electron transistors. *Journal of Applied Physics*, **2003**, 93, 6873-6875	2.5	5
25	Applied voltage dependence of nano-oxidation of ferromagnetic thin films using atomic force microscope. *Journal of Applied Physics*, **2003**, 93, 7346-7348	2.5	11
24	Theoretical Study on Tunnel Magnetoresistance Oscillation Due to Coulomb Blockade in Nanoscale Magnetic Tunnel Junction. *Materials Research Society Symposia Proceedings*, **2003**, 776, 11181		
23	Resistively coupled ferromagnetic single-electron transistors. *Journal of Applied Physics*, **2002**, 91, 7442	2.5	4

22	Ferromagnetic Single-Electron Transistor with RC Gate. *Materials Research Society Symposia Proceedings*, **2002**, 746, 1		
21	Planar-type Ferromagnetic Tunnel Junctions Fabricated by Atomic Force Microscope for Nonvolatile Memory. *Japanese Journal of Applied Physics*, **2001**, 40, 128-129	1.4	6
20	Frequency dependence of output voltage generated from bundled compound magnetic wires. *IEEE Transactions on Magnetics*, **2001**, 37, 2862-2864	2	7
19	Tunnel magnetoresistance on ferromagnetic single-electron transistors with multiple tunnel junction. *Journal of Applied Physics*, **2001**, 89, 7365-7367	2.5	12
18	Generation and detection of magnetoelastic waves in partially annealed amorphous wires. *IEEE Transactions on Magnetics*, **2000**, 36, 3627-3629	2	
17	NiFe-Based Nanostructures Fabricated Using an Atomic Force Microscope. *Japanese Journal of Applied Physics*, **2000**, 39, L1292-L1293	1.4	11
16	Structural and magnetic properties of FexSey thin films during their selenization process. *Journal of Applied Physics*, **1998**, 83, 6533-6535	2.5	11
15	A novel behaviour of dynamic magnetization process in gold-plated CoFeSiB amorphous wires. *IEEE Transactions on Magnetics*, **1997**, 33, 3361-3363	2	2
14	Dependence of magnetization dynamics and magneto-impedance effect in FeSiB amorphous wire on annealing conditions. *IEEE Transactions on Magnetics*, **1996**, 32, 4947-4949	2	8
13	Dynamic magnetization process in FeCoSiB amorphous wire under trigonal magnetic field. *IEEE Transactions on Magnetics*, **1996**, 32, 4992-4994	2	1
12	Multiple signal transmission in wide-range position sensor using magnetoelastic wave in FeSiB amorphous wire. *IEEE Transactions on Magnetics*, **1995**, 31, 3155-3157	2	7
11	Characterization of galvanomagnetic electromotive force effect in NiFe thin films. *IEEJ Transactions on Fundamentals and Materials*, **1994**, 114, 780-784	0.2	
10	Lattice vibration in alternating monolayers of ZnSe and ZnTe. *Applied Physics Letters*, **1993**, 63, 3176-3178	3.4	2
9	Atomic layer epitaxy of nitrogen-doped ZnSe. *Journal of Electronic Materials*, **1993**, 22, 437-440	1.9	5
8	Structural Analysis of ZnSe-ZnTe Short-Period Superlattice by Raman Scattering Spectroscopy. *IEEJ Transactions on Fundamentals and Materials*, **1993**, 113, 749-754	0.2	
7	Self-limiting growth with 0.5 monolayer per cycle in atomic layer epitaxy of ZnTe. *Journal of Crystal Growth*, **1992**, 117, 144-147	1.6	8
6	(ZnSe)m-(ZnTe)n short-period strained layer superlattices prepared by atomic layer epitaxy. *Journal of Crystal Growth*, **1991**, 111, 802-806	1.6	7
5	Self-Limiting Growth in Atomic Layer Epitaxy of ZnTe. *Japanese Journal of Applied Physics*, **1991**, 30, L246-L248	1.4	14

4	Optical properties of ZnSe?ZnTe strained layer superlattices prepared by atomic layer epitaxy. *Journal of Crystal Growth*, **1990**, 101, 81-85	1.6	13
3	Atomic layer epitaxial growth of ZnSe, ZnTe, and ZnSe-ZnTe strained-layer superlattices. *Journal of Applied Physics*, **1989**, 66, 2597-2602	2.5	43
2	Atomic layer epitaxy of ZnSe-ZnTe strained layer superlattices. *Journal of Crystal Growth*, **1989**, 95, 580-583	1.6	25
1	Wide bandgap II-VI compound semiconductor superlattices grown by metalorganic molecular beam epitaxy. *Journal of Crystal Growth*, **1988**, 93, 720-725	1.6	20