Keiji Enpuku

List of Publications by Year
in descending order

60 papers	779 citations	567281 15 h-index	580821 25 g-index
60 all docs	60 docs citations	60 times ranked	518 citing authors

#	Article	IF	Citations
1	Dependence of hysteresis loss of immobilized magnetic nanoparticles on the easy-axis angle: Effect of easy-axis alignment. AIP Advances, 2022, 12, .	1.3	4
2	Determination of the effective anisotropy constant of magnetic nanoparticles â€" Comparison between two approaches. Journal of Magnetism and Magnetic Materials, 2021, 519, 167402.	2.3	10
3	AC Magnetization of Immobilized Magnetic Nanoparticles With Different Degrees of Parallel Alignment of Easy Axes. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	9
4	Effect of easy axis alignment on dynamic magnetization of immobilized and suspended magnetic nanoparticles. Journal of Applied Physics, 2021, 129, .	2.5	18
5	Difference in AC magnetization between suspended and immobilized magnetic nanoparticles in NÃ©el-relaxation dominant case: Effect of easy axis alignment in suspended nanoparticles. Journal of Applied Physics, 2021, 130, .	2.5	12
6	Evaluation of effective magnetic anisotropy constant of magnetic nanoparticles from coercive field of AC magnetization curve. Journal of Applied Physics, 2021, 130, .	2.5	6
7	Expression for hysteresis loss of immobilized magnetic nanoparticles in a wide range of particle parameters and excitation conditions: Parameter optimization for hyperthermia application. AIP Advances, 2021, 11, .	1.3	8
8	Effect of core size distribution on magnetic nanoparticle harmonics for thermometry. Japanese Journal of Applied Physics, 2020, 59, 010904.	1.5	6
9	Rectangular wave eddy current testing using for imaging of backside defects of steel plates. International Journal of Applied Electromagnetics and Mechanics, 2020, 64, 255-262.	0.6	5
10	Properties of magnetometer utilizing high-Tc superconducting coil and inductance modulation scheme. Journal of Magnetism and Magnetic Materials, 2020, 502, 166525.	2.3	0
11	Estimation of the effective magnetic anisotropy constant of multi-core based magnetic nanoparticles from the temperature dependence of the coercive field. Journal of Applied Physics, 2020, 127, .	2.5	13
12	Amplitude and phase of higher harmonic of magnetic nanoparticlesâ€™ magnetization under low frequency magnetic field. Journal of Magnetism and Magnetic Materials, 2020, 508, 166886.	2.3	0
13	Effect of viscosity on harmonics signals of magnetic nanoparticles for thermometry application. Journal of Magnetism and Magnetic Materials, 2019, 491, 165480.	2.3	8
14	Empirical expression for harmonics of AC magnetization of magnetic nanoparticles with core size distribution. Japanese Journal of Applied Physics, 2019, 58, 097003.	1.5	3
15	Magnetometer Using Inductance Modulation of High-Critical-Temperature Superconducting Coil for Low-Frequency Field Measurement in Presence of Excitation Fields. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	1
16	Three-dimensional detection of magnetic nanoparticles using a field-free line with weak field gradient and multiple pickup coils. Japanese Journal of Applied Physics, 2019, 58, 061001.	1.5	4
17	Optimal Frequency of Low-Frequency Eddy-Current Testing for Detecting Defects on the Backside of Thick Steel Plates. IEEE Transactions on Magnetics, 2019, 55, 1-5.	2.1	17
18	Magnetic parameters evaluation of magnetic nanoparticles for use in biomedical applications. Journal of Magnetism and Magnetic Materials, 2019, 474, 522-527.	2.3	30

#	Article	IF	Citations
19	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.	2.3	29
20	Effect of viscosity on the AC magnetization of magnetic nanoparticles under different AC excitation fields. Journal of Magnetism and Magnetic Materials, 2019, 471, 334-339.	2.3	13
21	Three-dimensional imaging of magnetic nanoparticles using multiple pickup coils and field-free line. Japanese Journal of Applied Physics, 2018, 57, 023002.	1.5	4
22	Empirical expression for DC magnetization curve of immobilized magnetic nanoparticles for use in biomedical applications. AIP Advances, 2018, 8, 056803.	1.3	10
23	Detection of Slit Defects on Backside of Steel Plate Using Low-Frequency Eddy-Current Testing. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	15
24	Improving Tip Position-Estimation Performance of Gastric Tube by Compensating Geomagnetic Field With Offset Coils. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	1
25	Low-noise magnetometer based on inductance modulation in high-critical-temperature superconductor coil. Japanese Journal of Applied Physics, 2018, 57, 060314.	1.5	2
26	A Gastric Tube Monitoring System for Clinical Applications. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	2
27	Magnetic Core-Size Distribution of Magnetic Nanoparticles Estimated From Magnetization, AC Susceptibility, and Relaxation Measurements. IEEE Transactions on Magnetics, 2017, 53, 1-5.	2.1	9
28	Biosensing utilizing magnetic markers and superconducting quantum interference devices. Superconductor Science and Technology, 2017, 30, 053002.	3.5	37
29	Eddy Current Testing System Using HTS-SQUID With External Pickup Coil Made of HTS Wire. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	13
30	Three-dimensional magnetic nanoparticle imaging using small field gradient and multiple pickup coils. Journal of Magnetism and Magnetic Materials, 2017, 427, 144-150.	2.3	17
31	Effect of alignment of easy axes on dynamic magnetization of immobilized magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2017, 427, 162-167.	2.3	45
32	Magnetometer exploiting inductance modulation in coils made of high-critical-temperature superconductor. Applied Physics Express, 2017, 10, 113101.	2.4	4
33	Improved Liquid-Phase Detection of Biological Targets Based on Magnetic Markers and High-Critical-Temperature Superconducting Quantum Interference Device. IEICE Transactions on Electronics, 2016, E99.C, 669-675.	0.6	6
34	Thickness Measurement of an Iron Plate Using Low-Frequency Eddy Current Testing With an HTS Coil. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	16
35	Measurement of Iron-Plate Thickness Using HTS Coil. , 2015, , .		1
36	Narrow-Band Magnetic Nanoparticle Imaging using Orthogonal Gradient Field. Journal of the Magnetics Society of Japan, 2015, 39, 216-219.	0.9	2

#	Article	IF	Citations
37	Hysteresis Loss of Fractionated Magnetic Nanoparticles for Hyperthermia Application. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	12
38	Effect of viscosity on harmonic signals from magnetic fluid. Journal of Magnetism and Magnetic Materials, 2015, 380, 105-110.	2.3	42
39	Application of Minimum Variance Beamformer for Estimation of Tip Position of a Nasogastric Tube. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	7
40	Liquid-Phase Detection of Biological Targets Using Magnetoresistive Sensor and Magnetic Markers. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	2
41	The effect of Neel relaxation on the properties of the third harmonic signal of magnetic nanoparticles for use in narrow-band magnetic nanoparticle imaging. Japanese Journal of Applied Physics, 2014, 53, 103002.	1.5	11
42	Magnetic Particle Imaging Utilizing Orthogonal Gradient Field and Third-Harmonic Signal Detection. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	6
43	Highly Sensitive Magnetic Nanoparticle Imaging Using Cooled-Cu/HTS-Superconductor Pickup Coils. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	11
44	Highly Sensitive Liquid-Phase Detection of Biological Targets With Magnetic Markers and High <inline-formula> <tex-math notation="TeX">$T_{m c}$</tex-math></inline-formula> SQUID. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.7	17
45	Characterization of Magnetic Markers for Liquid-Phase Detection of Biological Targets. IEEE Transactions on Magnetics, 2013, 49, 3456-3459.	2.1	11
46	Magnetic Nanoparticle Imaging Using Harmonic Signals. IEEE Transactions on Magnetics, 2012, 48, 3776-3779.	2.1	22
47	Characterization of Magnetic Markers and Sensors for Liquid-Phase Immunoassays Using Brownian Relaxation. IEEE Transactions on Magnetics, 2012, 48, 2838-2841.	2.1	12
48	Homogeneous Bioassays Based on the Manipulation of Magnetic Nanoparticles by Rotating and Alternating Magnetic Fieldsâ€”A Comparison. IEEE Transactions on Magnetics, 2012, 48, 3792-3795.	2.1	27
49	Performance of HTS SQUID using resonant coupling of cooled Cu pickup coil. Physica C: Superconductivity and Its Applications, 2011, 471, 1234-1237.	1.2	6
50	Liquid-Phase Immunoassays Using Brownian Relaxation of Magnetic Markers. IEEE Transactions on Magnetics, 2011, 47, 2867-2870.	2.1	7
51	Detection of Magnetic Nanoparticles Using the Second-Harmonic Signal. IEEE Transactions on Magnetics, 2011, 47, 2863-2866.	2.1	25
52	AC susceptibility of magnetic markers in suspension for liquid phase immunoassay. Journal of Magnetism and Magnetic Materials, 2009, 321, 1621-1624.	2.3	9
53	Simulation and Quantitative Clarification of AC Susceptibility of Magnetic Fluid in Nonlinear Brownian Relaxation Region. Japanese Journal of Applied Physics, 2009, 48, 127002.	1.5	107
54	Magnetometer utilizing SQUID pico-voltmeter and cooled normal pickup coil. Physica C: Superconductivity and Its Applications, 2005, 426-431, 1596-1600.	1.2	1

#	Article	IF	Citations
55	Detection of magnetic nanoparticles with ac susceptibility measurement. Physica C: Superconductivity and Its Applications, 2004, 412-414, 1496-1500.	1.2	15
56	SQUID magnetometer utilizing normal pickup coil and resonant-type coupling circuit. Physica C: Superconductivity and Its Applications, 2003, 392-396, 1396-1400.	1.2	14
57	High Tc Superconducting Quantum Interference Device Magnetometer Utilizing Cooled Copper Pickup Coil and Resonant Coupling Circuit. Japanese Journal of Applied Physics, 2002, 41, L1221-L1223.	1.5	11
58	Superconducting Electronics. SQUID Application. Development of SQUID Technology and System Application.. TEION KOGAKU (Journal of Cryogenics and Superconductivity Society of Japan), 1996, 31, 586-593.	0.1	0
59	Effect of Flux Creep on Current-Voltage Characteristics of Superconducting Y-Ba-Cu-O Thin Films. Japanese Journal of Applied Physics, 1989, 28, L991-L993.	1.5	24
60	Flux-Trapping Characteristics of Pb-alloy Superconducting Thin Films for Josephson Tunnel Junctions. Shinku/Journal of the Vacuum Society of Japan, 1984, 27, 667-677.	0.2	0