Christer Johansson

List of Publications by Year
in descending order

99 papers	3,549 citations	117453 34 h-index	143772 57 g-index
100 all docs	100 docs citations	100 times ranked	4573 citing authors

#	Article	IF	Citations
1	New materials for micro-scale sensors and actuators. Materials Science and Engineering Reports, 2007, 56, 1-129.	14.8	438
2	Characterisation of DynabeadsÂ® by magnetization measurements and MÃ¶ssbauer spectroscopy. Journal of Magnetism and Magnetic Materials, 2005, 293, 41-47.	1.0	244
3	Biomolecular reactions studied using changes in Brownian rotation dynamics of magnetic particles. Biosensors and Bioelectronics, 2004, 19, 945-951.	5.3	161
4	Crystal size and properties of superparamagnetic iron oxide (SPIO) particles. Magnetic Resonance Imaging, 1997, 15, 55-67.	1.0	128
5	Poling and characterization of piezoelectric polymer fibers for use in textile sensors. Sensors and Actuators A: Physical, 2013, 201, 477-486.	2.0	110
6	Relating Magnetic Properties and High Hyperthermia Performance of Iron Oxide Nanoflowers. Journal of Physical Chemistry C, 2018, 122, 3068-3077.	1.5	107
7	Tailored Magnetic Nanoparticles for Direct and Sensitive Detection of Biomolecules in Biological Samples. Nano Letters, 2008, 8, 3423-3428.	4.5	99
8	Synthesis methods to prepare single- and multi-core iron oxide nanoparticles for biomedical applications. Dalton Transactions, 2015, 44, 2943-2952.	1.6	96
9	Attomolar Zika virus oligonucleotide detection based on loop-mediated isothermal amplification and AC susceptometry. Biosensors and Bioelectronics, 2016, 86, 420-425.	5.3	79
10	Whither Magnetic Hyperthermia? A Tentative Roadmap. Materials, 2021, 14, 706.	1.3	76
11	Motion of nanometer sized magnetic particles in a magnetic field gradient. Journal of Applied Physics, 2008, 104, .	1.1	72
12	Colloidal Flowerâ€shaped Iron Oxide Nanoparticles: Synthesis Strategies and Coatings. Particle and Particle Systems Characterization, 2017, 34, 1700094.	1.2	71
13	Magnetic characterization of iron oxides for magnetic resonance imaging. Magnetic Resonance in Medicine, 1994, 31, 268-272.	1.9	62
14	Monte Carlo simulation of magnetic multi-core nanoparticles. Journal of Magnetism and Magnetic Materials, 2009, 321, 1400-1403.	1.0	60
15	Detection of rolling circle amplified DNA molecules using probe-tagged magnetic nanobeads in a portable AC susceptometer. Biosensors and Bioelectronics, 2011, 29, 195-199.	5.3	59
16	Classification of Magnetic Nanoparticle Systemsâ€”Synthesis, Standardization and Analysis Methods in the NanoMag Project. International Journal of Molecular Sciences, 2015, 16, 20308-20325.	1.8	59
17	Magnetic properties of two-dimensional arrays of epitaxial Fe (001) submicron particles. Journal of Applied Physics, 1999, 85, 2793-2799.	1.1	58
18	Standardisation of magnetic nanoparticles in liquid suspension. Journal Physics D: Applied Physics, 2017, 50, 383003.	1.3	56

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19	Ferromagnetism of the Me3(Fe(CN)6)2.H2O compounds, where Me=Ni and Co. Journal of Physics Condensed Matter, 1994, 6, 5697-5706.	0.7	51
20	Effective magnetic moment of magnetic multicore nanoparticles. Physical Review B, 2009, 80, .	1.1	50
21	The influence of magnetic anisotropy on the magnetization of small ferromagnetic particles. Journal of Physics Condensed Matter, 1993, 5, 725-732.	0.7	47
22	The influence of particle size and interactions on the magnetization and susceptibility of nanometre-size particles. Journal of Physics Condensed Matter, 1995, 7, 9269-9277.	0.7	47
23	A new approach for bioassays based on frequency- and time-domain measurements of magnetic nanoparticles. Biosensors and Bioelectronics, 2010, 25, 1008-1013.	5.3	46
24	Size-Dependent Relaxation Properties of Monodisperse Magnetite Nanoparticles Measured Over Seven Decades of Frequency by AC Susceptometry. IEEE Transactions on Magnetics, 2013, 49, 3441-3444.	1.2	45
25	Preparation of iron oxide nanocrystals by surfactant-free or oleic acid-assisted thermal decomposition of a Fe(III) alkoxide. Journal of Magnetism and Magnetic Materials, 2008, 320, 781-787.	1.0	42
26	Distribution functions of magnetic nanoparticles determined by a numerical inversion method. New Journal of Physics, 2017, 19, 073012.	1.2	42
27	The magnetization of magnetic liquids containing amorphous Fe1â^'xCx particles. Journal of Magnetism and Magnetic Materials, 1993, 122, 125-128.	1.0	41
28	Piezoelectric polymeric bicomponent fibers produced by melt spinning. Journal of Applied Polymer Science, 2012, 126, 490-500.	1.3	41
29	Structural and magnetic properties of multi-core nanoparticles analysed using a generalised numerical inversion method. Scientific Reports, 2017, 7, 45990.	1.6	41
30	Effective particle magnetic moment of multi-core particles. Journal of Magnetism and Magnetic Materials, 2015, 380, 221-226.	1.0	40
31	Sensitive High Frequency AC Susceptometry in Magnetic Nanoparticle Applications. AIP Conference Proceedings, 2010, , .	0.3	39
32	Combined Magnetoliposome Formation and Drug Loading in One Step for Efficient Alternating Current-Magnetic Field Remote-Controlled Drug Release. ACS Applied Materials & Interfaces, 2020, 12, 4295-4307.	4.0	39
33	Dipolar-coupled moment correlations in clusters of magnetic nanoparticles. Physical Review B, 2018, 98, .	1.1	37
34	Magnetic hyperthermia with Îµ-Fe₂O₃ nanoparticles. RSC Advances, 2020, 10, 28786-28797.	1.7	36
35	Magnetic response of thermally blocked magnetic nanoparticles in a pulsed magnetic field. Journal of Magnetism and Magnetic Materials, 2007, 311, 166-170.	1.0	34
36	Functionalized magnetic particles for water treatment. Heliyon, 2019, 5, e02325.	1.4	34

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37	Zero-field cooled magnetization of amorphous Fe1-xCxparticles-field dependence of the maximum. Journal of Physics Condensed Matter, 1995, 7, 9263-9268.	0.7	32
38	Magnetic tracer-particle tracking in a fluid dynamically down-scaled bubbling fluidized bed. Fuel Processing Technology, 2015, 138, 368-377.	3.7	32
39	Influence of clustering on the magnetic properties and hyperthermia performance of iron oxide nanoparticles. Nanotechnology, 2018, 29, 425705.	1.3	31
40	Evolution of Structural and Magnetic Properties of Magnetite Nanoparticles for Biomedical Applications. Crystal Growth and Design, 2010, 10, 2278-2284.	1.4	30
41	Modelling the effect of different core sizes and magnetic interactions inside magnetic nanoparticles on hyperthermia performance. Journal of Magnetism and Magnetic Materials, 2019, 477, 198-202.	1.0	30
42	Characterization of fine particles using optomagnetic measurements. Physical Chemistry Chemical Physics, 2017, 19, 8802-8814.	1.3	29
43	Magnetic properties of magnetic liquids with iron-oxide particles â€" The influence of anisotropy and interactions. Journal of Magnetism and Magnetic Materials, 1997, 173, 5-14.	1.0	28
44	Lanthanide-based susceptibility contrast agents: Assessment of the magnetic properties. Magnetic Resonance in Medicine, 1996, 35, 201-206.	1.9	26
45	Analysis of AC Susceptibility Spectra for the Characterization of Magnetic Nanoparticles. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	24
46	Size analysis of single-core magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2017, 427, 19-24.	1.0	23
47	Experimental mixtures of superparamagnetic and singleâ€domain magnetite with respect to Dayâ€Dunlop plots. Geochemistry, Geophysics, Geosystems, 2015, 16, 1739-1752.	1.0	20
48	Encapsulation of methotrexate loaded magnetic microcapsules for magnetic drug targeting and controlled drug release. Journal of Magnetism and Magnetic Materials, 2015, 380, 285-294.	1.0	20
49	Particle interaction effects in systems of ultrafine iron oxide particles. Nuclear Instruments & Methods in Physics Research B, 1993, 76, 138-139.	0.6	18
50	Fast and Sensitive Measurement of Specific Antigen-Antibody Binding Reactions With Magnetic Nanoparticles and HTS SQUID. IEEE Transactions on Applied Superconductivity, 2009, 19, 848-852.	1.1	18
51	Polymer/Iron Oxide Nanoparticle Compositesâ€"A Straight Forward and Scalable Synthesis Approach. International Journal of Molecular Sciences, 2015, 16, 19752-19768.	1.8	18
52	Colossal Anisotropy of the Dynamic Magnetic Susceptibility in Low-Dimensional Nanocube Assemblies. ACS Nano, 2018, 12, 1403-1412.	7.3	18
53	Magnetic properties of nanoparticles as a function of their spatial distribution on liposomes and cells. Physical Chemistry Chemical Physics, 2018, 20, 17829-17838.	1.3	18
54	Chip-Based Measurements of Brownian Relaxation of Magnetic Beads Using a Planar Hall Effect Magnetic Field Sensor. AIP Conference Proceedings, 2010, , .	0.3	17

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55	Particle size- and concentration-dependent separation of magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2017, 427, 320-324.	1.0	17
56	Magnetic and mechanical coupling between ultrafine maghemite particles. Journal of Magnetism and Magnetic Materials, 1995, 140-144, 409-410.	1.0	16
57	Brownian motion of aggregating nanoparticles studied by photon correlation spectroscopy and measurements of dynamic magnetic properties. Analytica Chimica Acta, 2006, 573-574, 138-146.	2.6	16
58	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.	1.0	16
59	Optical Spin-Ice States with a Fast Monopole Hopping Rate in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CdEr</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn>		

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73	Structural and magnetic properties of Me2[Fe(CN)6] compounds, where Me are 3d transition metals. Journal of Magnetism and Magnetic Materials, 1994, 138, 281-286.	1.0	8
74	Development of a Sensitive Induction-Based Magnetic Nanoparticle Biodetection Method. Nanomaterials, 2018, 8, 887.	1.9	8
75	Interaction effects in the dynamic response of magnetic liquids. Journal of Magnetism and Magnetic Materials, 1991, 101, 45-46.	1.0	7
76	High-field magnetization of magnetic liquids containing amorphous iron-carbon particles. Journal of Magnetism and Magnetic Materials, 1994, 134, 25-28.	1.0	7
77	High magnetoelectric coupling of Metglas and P(VDF-TrFE) laminates. Scientific Reports, 2022, 12, 5233.	1.6	7
78	Deposited nano-metre sized iron clusters. Scripta Materialia, 1999, 12, 287-290.	0.5	6
79	Magnetic properties of Cr2[Ni2(CN)4]3. Journal of Magnetism and Magnetic Materials, 1994, 136, 45-48.	1.0	5
80	Field-induced magnetic moments in a metastable iron-mercury alloy. Journal of Magnetism and Magnetic Materials, 1996, 164, 327-334.	1.0	5
81	Nanorheological studies of xanthan/water solutions using magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2019, 473, 268-271.	1.0	5
82	European Research on Magnetic Nanoparticles for Biomedical Applications: Standardisation Aspects. Advances in Intelligent Systems and Computing, 2020, , 316-326.	0.5	5
83	Tunable spring balanced magnetic energy harvester for low frequencies and small displacements. Energy Conversion and Management, 2022, 259, 115568.	4.4	5
84	Influence of sample geometry in a vibrating sample magnetometer. IEEE Transactions on Magnetics, 1994, 30, 1064-1066.	1.2	4
85	The need for stable, mono-dispersed, and biofunctional magnetic nanoparticles for one-step magnetic immunoassays. Journal of Physics: Conference Series, 2010, 200, 122006.	0.3	4
86	Identifying the presence of magnetite in an ensemble of iron-oxide nanoparticles: a comparative neutron diffraction study between bulk and nanoscale. Nanoscale Advances, 2021, 3, 3491-3496.	2.2	4
87	Material Selection Methodology for an Induction Welding Magnetic Susceptor Based on Hysteresis Losses. Advanced Engineering Materials, 2022, 24, .	1.6	4
88	Magnetic interaction between ultrafine amorphous Fe1-xCx alloy particles in ferrofluids. Hyperfine Interactions, 1994, 93, 1433-1437.	0.2	3
89	The effect of dipolar interactions in clusters of magnetic nanocrystals. Journal of Physics: Conference Series, 2010, 200, 072085.	0.3	3
90	Determination of Nanocrystal Size Distribution in Magnetic Multicore Particles Including Dipole-Dipole Interactions and Magnetic Anisotropy: a Monte Carlo Study. AIP Conference Proceedings, 2010, , .	0.3	3

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91	AC susceptometry and magnetorelaxometry for magnetic nanoparticle based biomolecule detection. IFMBE Proceedings, 2009, , 2317-2321.	0.2	3
92	Magnetic and structural properties of Meâ€² [Meâ€³(CN)] Â· mH2O compounds, where Meâ€² are 3d transition metals. Journal of Magnetism and Magnetic Materials, 1996, 157-158, 499-500.	1.0	2
93	Field-induced anisotropy in a magnetic liquid. Journal of Magnetism and Magnetic Materials, 1996, 157-158, 599-600.	1.0	2
94	Preparation and characterisation of a sensing system for wireless pH measurements in vivo, in a rumen of a cow. Sensors and Actuators B: Chemical, 2017, 242, 637-644.	4.0	2
95	Characterization of Binding of Magnetic Nanoparticles to Rolling Circle Amplification Products by Turn-On Magnetic Assay. Biosensors, 2019, 9, 109.	2.3	2
96	Noncollinear spin structure in Zn0.825Cu0.175Cr2Se4. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 192, 429-434.	0.9	1
97	Cast Iron Components with Intelligence. Materials Science Forum, 0, 925, 512-519.	0.3	1
98	Revealing a masked Verwey transition in nanoparticles of coexisting Fe-oxide phases. RSC Advances, 2021, 11, 390-396.	1.7	1
99	A magnetic phase transition studied with high-Tc SQUIDs. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 519-520.	1.0	0