Pieter J Van Der Zaag

List of Publications by Year
in descending order

71 papers	3,372 citations	147801 31 h-index	138484 58 g-index
73 all docs	73 docs citations	73 times ranked	3772 citing authors

#	Article	IF	Citations
1	Difference between Blocking and NÃ©el Temperatures in the Exchange BiasedFe3O4/CoOSystem. Physical Review Letters, 2000, 84, 6102-6105.	7.8	226
2	Targeted enrichment of genomic DNA regions for next-generation sequencing. Briefings in Functional Genomics, 2011, 10, 374-386.	2.7	219
3	Perpendicular Coupling in Exchange-BiasedFe3O4/CoOSuperlattices. Physical Review Letters, 1998, 80, 608-611.	7.8	181
4	Optical and magneto-optical polar Kerr spectra ofFe3O4andMg2+- orAl3+-substitutedFe3O4. Physical Review B, 1997, 56, 5432-5442.	3.2	164
5	A consistent interpretation of the magneto-optical spectra of spinel type ferrites (invited). Journal of Applied Physics, 1999, 85, 5100-5105.	2.5	148
6	A domain size effect in the magnetic hysteresis of NiZnâ€ferrites. Applied Physics Letters, 1996, 69, 2927-2929.	3.3	136
7	The Effect of Temperature and Dot Size on the Spectral Properties of Colloidal InP/ZnS Coreâ^'Shell Quantum Dots. ACS Nano, 2009, 3, 2539-2546.	14.6	135
8	Exchange biasing in MBE grown Fe3O4/CoO bilayers: The antiferromagnetic layer thickness dependence. Journal of Applied Physics, 1996, 79, 5103.	2.5	130
9	Anti-phase domains and magnetism in epitaxial magnetite layers. Journal of Applied Physics, 1999, 85, 5291-5293.	2.5	126
10	On the construction of an Fe3O4-based all-oxide spin valve. Journal of Magnetism and Magnetic Materials, 2000, 211, 301-308.	2.3	120
11	Fe L2,3 linear and circular magnetic dichroism of Fe3O4. Journal of Electron Spectroscopy and Related Phenomena, 1997, 86, 107-113.	1.7	118
12	New views on the dissipation in soft magnetic ferrites. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 315-319.	2.3	110
13	A study of the magnitude of exchange biasing in [111] Fe3O4/CoO bilayers. Journal of Magnetism and Magnetic Materials, 1995, 148, 346-348.	2.3	98
14	Thermally assisted reversal of exchange biasing in NiO and FeMn based systems. Applied Physics Letters, 1998, 72, 492-494.	3.3	97
15	The initial permeability of polycrystalline MnZn ferrites: The influence of domain and microstructure. Journal of Applied Physics, 1993, 74, 4085-4095.	2.5	87
16	Temperature Dependence of the Photoluminescence of InP/ZnS Quantum Dots. Journal of Physical Chemistry C, 2008, 112, 6775-6780.	3.1	86
17	Exchange biasing in MBE-grown Ni80Fe20/Fe50Mn50 bilayers. Journal of Magnetism and Magnetic Materials, 1995, 148, 300-306.	2.3	82
18	Comment on â€˜â€˜Size-dependent Curie temperature in nanoscaleMnFe2O4particlesâ€™â€™. Physical Review Letters, 1992, 68, 3112-3112.	7.8	79

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19	Accurate SNP and mutation detection by targeted custom microarray-based genomic enrichment of short-fragment sequencing libraries. Nucleic Acids Research, 2010, 38, e116-e116.	14.5	79
20	Comment on â€˜â€˜Particle-size effects on the value ofTCofMnFe2O4: Evidence for finite-size scalingâ€™â€™. Physical Review B, 1995, 51, 12009-12011.	3.2	64
21	Interlayer coupling betweenFe3O4layers separated by an insulating nonmagnetic MgO layer. Physical Review B, 1997, 55, 11569-11575.	3.2	63
22	Link between Perpendicular Coupling and Exchange Biasing in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Fe</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub><mml:mo>/</mml:mo><mml:mi>CoO</mml:mi></mml:math>N Physical Review Letters, 2007, 99, 147201.	7.8	55
23	Explanation for the leakage current in polycrystalline-silicon thin-film transistors made by Ni-silicide mediated crystallization. Applied Physics Letters, 2002, 81, 3404-3406.	3.3	49
24	The effect of intragranular domain walls in MgMnZn-ferrite. Journal of Applied Physics, 1998, 83, 6870-6872.	2.5	43
25	A study of the magneto-optical Kerr spectra of bulk and ultrathin Fe3O4. Journal of Applied Physics, 1996, 79, 5936.	2.5	42
26	Magnetic interface anisotropy of MBE-grown ultra-thin (001) Fe3O4 layers. Journal of Magnetism and Magnetic Materials, 1996, 159, L293-L298.	2.3	42
27	Intraoperative imaging in pathology-assisted surgery. Nature Biomedical Engineering, 2022, 6, 503-514.	22.5	39
28	In search of spectral diffusion in glasses. A time-resolved transient hole-burning study of porphins in polyethylene. Chemical Physics Letters, 1990, 166, 263-271.	2.6	36
29	Relation between grain size and domain size in MnZn ferrite studied by neutron depolarisation. Journal of Magnetism and Magnetic Materials, 1991, 99, L1-L6.	2.3	36
30	On the origin of the magneto-optical effects in Li, Mg, Ni, and Co ferrite. Journal of Applied Physics, 1998, 83, 6765-6767.	2.5	33
31	Influences on relaxation of exchange biasing in NiO/Ni66Co18Fe16 bilayers. Journal of Applied Physics, 1998, 83, 7207-7209.	2.5	32
32	Investigation of the stoichiometry of MBE-grown Fe3O4 layers by magneto-optical Kerr spectroscopy. Thin Solid Films, 1997, 292, 270-276.	1.8	31
33	Polarized neutron reflectometry study of an exchange biased Fe3O4/NiO multilayer. Applied Physics Letters, 1996, 69, 1489-1491.	3.3	25
34	Dynamics of glasses doped with rare earth ions: A study by permanent and transient hole-burning. Journal of Luminescence, 1990, 45, 80-82.	3.1	24
35	The grain boundary influence on the coercivity of polycrystalline MnZn-ferrites. Journal of Magnetism and Magnetic Materials, 1994, 129, L137-L140.	2.3	22
36	MBE Growth of CoO and Fe₃O₄ films and CoO/Fe₃O₄ multilayers. Materials Research Society Symposia Proceedings, 1994, 341, 23.	0.1	21

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37	Role of the antiferromagnet in exchange-biased Fe3O4/CoO superlattices (invited). Journal of Applied Physics, 1998, 83, 6882-6887.	2.5	21
38	Polarized neutron reflectometry studies of magnetic oxidic Fe3O4/NiO and Fe3O4/CoO multilayers. Physica B: Condensed Matter, 1996, 221, 388-392.	2.7	18
39	New options in thin film recording heads through ferrite layers. Philips Journal of Research, 1998, 51, 173-195.	0.9	18
40	Magnetic and Structural Properties of MBE-grown Oxidic Multilayers. Materials Research Society Symposia Proceedings, 1995, 401, 485.	0.1	17
41	Polarized neutron reflectometry study of an exchange biased Fe3O4/NiO multilayer. Applied Physics Letters, 1996, 69, 583-585.	3.3	17
42	Domain structure in polycrystalline MnZn ferrite imaged by magnetic force microscopy. Journal of Applied Physics, 1999, 85, 7302-7309.	2.5	17
43	High-performance poly-Si TFTs made by Ni-mediated crystallization through low-shot laser annealing. IEEE Electron Device Letters, 2003, 24, 22-24.	3.9	17
44	Complete sequence-based pathway analysis by differential on-chip DNA and RNA extraction from a single cell. Scientific Reports, 2017, 7, 11030.	3.3	16
45	Neutron reflectometry on an exchange biased Ni80Fe20/Fe50Mn50 bilayer. Journal of Magnetism and Magnetic Materials, 1995, 148, 46-48.	2.3	13
46	Comparison of a stoichiometric analysis of Fe3â˜ÎŐ4 layers by magneto-optical Kerr spectroscopy with MÃ¶ssbauer results. Journal of Magnetism and Magnetic Materials, 1997, 165, 401-404.	2.3	13
47	Sequencing of human genomes extracted from single cancer cells isolated in a valveless microfluidic device. Lab on A Chip, 2018, 18, 1891-1902.	6.0	13
48	The permeability of plated ferrite films. IEEE Transactions on Magnetics, 1999, 35, 3436-3438.	2.1	12
49	Sensitive detection of mitochondrial DNA variants for analysis of mitochondrial DNA-enriched extracts from frozen tumor tissue. Scientific Reports, 2018, 8, 2261.	3.3	12
50	Magnetic permeability and intra-granular domain structure in polycrystalline ferrites. Journal of Magnetism and Magnetic Materials, 1992, 104-107, 421-422.	2.3	11
51	New technologies for DNA analysis â€“ a review of the READNA Project. New Biotechnology, 2016, 33, 311-330.	4.4	10
52	Letâ€™s embrace optical imaging: a growing branch on the clinical molecular imaging tree. European Journal of Nuclear Medicine and Molecular Imaging, 2021, 48, 4120-4128.	6.4	10
53	Magnetic Properties of Epitaxial Mbe-Grown thin Fe³O⁴ Films on MgO (100). Materials Research Society Symposia Proceedings, 1995, 384, 27.	0.1	9
54	The blocking and NÃ©el temperature in exchange-biased Fe3O4/CoO multilayers. Physica B: Condensed Matter, 2000, 276-278, 638-639.	2.7	8

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55	Influence of the experimental parameters on time-resolved transient hole-burning. Chemical Physics Letters, 1990, 174, 467-475.	2.6	7
56	Optical dephasing of organic glassy systems studied by hole-burning: relation with excited-state lifetimes. Chemical Physics Letters, 1991, 180, 387-397.	2.6	5
57	Improving DNA capture on microarrays by integrated repeated denaturing. Lab on A Chip, 2012, 12, 4992.	6.0	5
58	Clearing-induced tisssue shrinkage: A novel observation of a thickness size effect. PLoS ONE, 2021, 16, e0261417.	2.5	5
59	Using a priori knowledge to align sequencing reads to their exact genomic position. Nucleic Acids Research, 2012, 40, e125-e125.	14.5	4
60	Combined transmission, dark field and fluorescence microscopy for intact, 3D tissue analysis of biopsies. Journal of Biomedical Optics, 2020, 25, .	2.6	3
61	Photoreactive Disordered Systems Studied by Permanent and Transient Hole-Burning. Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics, 1990, 183, 105-118.	0.3	2
62	Ferrites. , 2021, , 217-224.		2
63	An explanation for the â€œweakâ€•fluence broadening of spectral holes in glasses. Optics Communications, 1992, 87, 228-230.	2.1	1
64	Ferrites. , 2001, , 3033-3037.		1
65	Waveguide structures for efficient evanescent field coupling to zero mode waveguides. Journal of the European Optical Society-Rapid Publications, 0, 9, .	1.9	1
66	(Keynote Paper) Mono-Domain Ferrites and Their Implications. IEEE Transactions on Magnetics, 2020, 56, 1-7.	2.1	1
67	Magnetite Fe_{3-î´}O₄ : a Stoichiometry and Structure Analysis of MBE Grown Thin Films Using NO₂ as the Oxidising Source. European Physical Journal Special Topics, 1997, 07, C1-601-C1-602.	0.2	1
68	On the Mechanism of the Initial Permeability in MgMnZn-Ferrite. European Physical Journal Special Topics, 1997, 07, C1-195-C1-196.	0.2	1
69	Combined transmission, dark field and fluorescence microscopy for intact, 3D tissue analysis of biopsies. Journal of Biomedical Optics, 2020, 25, .	2.6	1
70	Spectral hole-burning on inorganic glasses doped with the rare-earth ions Pr3+and Eu3+. Radiation Effects and Defects in Solids, 1991, 119-121, 361-362.	1.2	0
71	Hysteresis in the hopping current of secondary electrons over MgO: the role of CO2 and surface cleanness. Vacuum, 2001, 60, 241-245.	3.5	0