

Ernie Hill

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2113584/ernie-hill-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

110
papers

15,799
citations

29
h-index

114
g-index

114
ext. papers

17,229
ext. citations

5.4
avg, IF

6.08
L-index

#	Paper	IF	Citations
110	Detection of individual gas molecules adsorbed on graphene. <i>Nature Materials</i> , 2007 , 6, 652-5	27	6263
109	Chaotic Dirac billiard in graphene quantum dots. <i>Science</i> , 2008 , 320, 356-8	33.3	1811
108	Making graphene visible. <i>Applied Physics Letters</i> , 2007 , 91, 063124	3.4	1453
107	Graphene-based liquid crystal device. <i>Nano Letters</i> , 2008 , 8, 1704-8	11.5	1319
106	Hunting for monolayer boron nitride: optical and Raman signatures. <i>Small</i> , 2011 , 7, 465-8	11	791
105	Macroscopic graphene membranes and their extraordinary stiffness. <i>Nano Letters</i> , 2008 , 8, 2442-6	11.5	528
104	Proton transport through one-atom-thick crystals. <i>Nature</i> , 2014 , 516, 227-30	50.4	505
103	Tunable metal-insulator transition in double-layer graphene heterostructures. <i>Nature Physics</i> , 2011 , 7, 958-961	16.2	417
102	Effect of a high-kappa environment on charge carrier mobility in graphene. <i>Physical Review Letters</i> , 2009 , 102, 206603	7.4	304
101	Graphene Sensors. <i>IEEE Sensors Journal</i> , 2011 , 11, 3161-3170	4	290
100	Electronic properties of graphene. <i>Physica Status Solidi (B): Basic Research</i> , 2007 , 244, 4106-4111	1.3	229
99	On resonant scatterers as a factor limiting carrier mobility in graphene. <i>Nano Letters</i> , 2010 , 10, 3868-72	11.5	220
98	Electron transfer kinetics on mono- and multilayer graphene. <i>ACS Nano</i> , 2014 , 8, 10089-100	16.7	132
97	Electrochemical behavior of monolayer and bilayer graphene. <i>ACS Nano</i> , 2011 , 5, 8809-15	16.7	131
96	Designing implant surface topography for improved biocompatibility. <i>Expert Review of Medical Devices</i> , 2013 , 10, 257-67	3.5	87
95	Subatomic movements of a domain wall in the Peierls potential. <i>Nature</i> , 2003 , 426, 812-6	50.4	85
94	Magnetic materials for MEMS applications. <i>Journal Physics D: Applied Physics</i> , 2004 , 37, R237-R244	3	75

93	Terahertz Detection and Imaging Using Graphene Ballistic Rectifiers. <i>Nano Letters</i> , 2017 , 17, 7015-7020	11.5	66
92	Development and functional evaluation of biomimetic silicone surfaces with hierarchical micro/nano-topographical features demonstrates favourable in vitro foreign body response of breast-derived fibroblasts. <i>Biomaterials</i> , 2015 , 52, 88-102	15.6	60
91	Ultralow secondary electron emission of graphene. <i>ACS Nano</i> , 2011 , 5, 1047-55	16.7	54
90	Graphene in Multilayered CPP Spin Valves. <i>IEEE Transactions on Magnetics</i> , 2008 , 44, 2624-2627	2	54
89	Functional biocompatibility testing of silicone breast implants and a novel classification system based on surface roughness. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 75, 75-81	4.1	50
88	Electron transfer kinetics on natural crystals of MoS ₂ and graphite. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 17844-53	3.6	50
87	Graphene ballistic nano-rectifier with very high responsivity. <i>Nature Communications</i> , 2016 , 7, 11670	17.4	47
86	Magnetic properties of stoichiometric and nonstoichiometric ultrathin Fe ₃ O ₄ (111) films on Al ₂ O ₃ (0001). <i>Journal of Applied Physics</i> , 2004 , 96, 1165-1169	2.5	46
85	Electrochemistry in a drop: a study of the electrochemical behaviour of mechanically exfoliated graphene on photoresist coated silicon substrate. <i>Chemical Science</i> , 2014 , 5, 582-589	9.4	43
84	Development of a scanning laser microscope for magneto-optic studies of thin magnetic films. <i>Journal of Magnetism and Magnetic Materials</i> , 1991 , 95, 49-57	2.8	37
83	Reciprocity in magnetic force microscopy. <i>Applied Physics Letters</i> , 1995 , 67, 433-435	3.4	35
82	Graphene based ballistic rectifiers. <i>Carbon</i> , 2015 , 84, 124-129	10.4	32
81	Electrochemical investigation of chemical vapour deposition monolayer and bilayer graphene on the microscale. <i>Electrochimica Acta</i> , 2013 , 110, 9-15	6.7	29
80	Magnetic-domain-wall pinning by regions of weak exchange or anisotropy. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1974 , 48, 157-158	2.3	28
79	Towards substrate engineering of graphene-silicon Schottky diode photodetectors. <i>Nanoscale</i> , 2018 , 10, 3399-3409	7.7	27
78	Micron-sized atom traps made from magneto-optical thin films. <i>Applied Physics B: Lasers and Optics</i> , 2004 , 79, 811-816	1.9	26
77	The role of dipole coupling in multilayers. <i>Journal of Applied Physics</i> , 1993 , 73, 5978-5980	2.5	25
76	The performance of magnetoresistive vector magnetometers with optimised conductor and anisotropy axis angles. <i>IEEE Transactions on Magnetics</i> , 1983 , 19, 2139-2141	2	25

75	Surface, interface and bulk studies of NiFe nanometer films for magnetoresistive heads. <i>Journal of Applied Physics</i> , 2003 , 93, 8737-8739	2.5	24
74	Reciprocity based transfer function analysis in magnetic force microscopy. <i>Applied Physics Letters</i> , 1996 , 68, 1726-1728	3.4	20
73	Modelling the perturbative effect of MFM tips on soft magnetic thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 1996 , 161, 385-396	2.8	18
72	Domain wall calculations for SmCo5. <i>IEEE Transactions on Magnetics</i> , 1975 , 11, 1379-1381	2	17
71	Development, fabrication and evaluation of a novel biomimetic human breast tissue derived breast implant surface. <i>Acta Biomaterialia</i> , 2017 , 49, 260-271	10.8	16
70	Graphene-silicon-on-insulator (GSOI) Schottky diode photodetectors. <i>Nanoscale</i> , 2018 , 10, 18926-18935	7.7	16
69	Graphene Triangular Ballistic Rectifier: Fabrication and Characterisation. <i>Journal of Electronic Materials</i> , 2017 , 46, 3942-3948	1.9	14
68	High resolution magnetic force microscopy study of e-beam lithography patterned CoPt nanodots. <i>Journal of Applied Physics</i> , 2007 , 101, 09F517	2.5	14
67	A giant magnetoresistive magnetometer. <i>Sensors and Actuators A: Physical</i> , 1997 , 59, 30-37	3.9	13
66	Controlled magnetic roughness in a multilayer that has been patterned using a nanosphere array. <i>Physical Review B</i> , 2006 , 74,	3.3	13
65	Estimation of intrinsic and extrinsic capacitances of graphene self-switching diode using conformal mapping technique. <i>2D Materials</i> , 2018 , 5, 035023	5.9	12
64	Spatial sensitivity mapping of Hall crosses using patterned magnetic nanostructures. <i>Journal of Applied Physics</i> , 2010 , 108, 043920	2.5	12
63	Temperature Dependent Remanence Loops of Ion-Milled Bit Patterned Media. <i>IEEE Transactions on Magnetics</i> , 2008 , 44, 3468-3471	2	11
62	Annealing effects on GMR multilayer films. <i>Sensors and Actuators A: Physical</i> , 2000 , 81, 40-43	3.9	10
61	A comparison of GMR multilayer and spin-valve sensors for vector field sensing. <i>IEEE Transactions on Magnetics</i> , 2000 , 36, 2785-2787	2	10
60	The limit of fluxgate sensitivity due to Barkhausen noise for single layer and bi-layer permalloy thin film cores. <i>IEEE Transactions on Magnetics</i> , 1995 , 31, 4050-4052	2	10
59	Novel Proteomic Assay of Breast Implants Reveals Proteins With Significant Binding Differences: Implications for Surface Coating and Biocompatibility. <i>Aesthetic Surgery Journal</i> , 2018 , 38, 962-969	2.4	9
58	Noise in NiFeCo/Cu spin valve sensors. <i>Sensors and Actuators A: Physical</i> , 2000 , 81, 67-70	3.9	9

57	Geometry effects on low frequency noise in giant magnetoresistance (GMR) sensors. <i>IEEE Transactions on Magnetics</i> , 1998 , 34, 1327-1329	2	9
56	Observations of magnetisation distribution in narrow permalloy strips. <i>Journal of Magnetism and Magnetic Materials</i> , 1990 , 83, 323-325	2.8	9
55	A highly versatile scanning laser microscope for magneto-optic observation of micromagnetic structure. <i>Journal of Magnetism and Magnetic Materials</i> , 1990 , 83, 535-536	2.8	9
54	Chemical bath deposition of cadmium sulphide on silicon nitride: Influence of surface treatment on film growth. <i>Materials Letters</i> , 2007 , 61, 284-287	3.3	8
53	Photoemission electron microscopy and atomic force microscopy of epitaxial iron oxide films on $\text{BaAl}_2\text{O}_3(0001)$. <i>Journal of Applied Physics</i> , 2004 , 95, 7450-7452	2.5	8
52	Susceptibility of the Namchi and Kapsiki cattle of Cameroon to trypanosome infection. <i>Tropical Animal Health and Production</i> , 1997 , 29, 219-26	1.7	7
51	. <i>IEEE Transactions on Magnetics</i> , 1991 , 27, 4698-4700	2	7
50	Noise power spectral density in single-strip NiFeCo-Cu GMR sensors. <i>IEEE Transactions on Magnetics</i> , 2002 , 38, 2697-2699	2	6
49	Noise in spin-valve sensors. <i>IEEE Transactions on Magnetics</i> , 2001 , 37, 2031-2033	2	6
48	TRANSVERSE SPIN TRANSPORT IN GRAPHENE. <i>International Journal of Modern Physics B</i> , 2009 , 23, 2641-2646	2.646	5
47	Fabrication of patterned Pt/Co multilayers for high-density probe storage. <i>IET Science, Measurement and Technology</i> , 2003 , 150, 227-231		5
46	A microstructural study of PtCo thin films. <i>IEEE Transactions on Magnetics</i> , 1996 , 32, 3831-3833	2	5
45	A reciprocity-based approach to understanding magnetic force microscopy. <i>IEEE Transactions on Magnetics</i> , 1996 , 32, 4144-4146	2	5
44	A study of PtCo films used for longitudinal recording. <i>Journal of Magnetism and Magnetic Materials</i> , 1996 , 155, 348-351	2.8	5
43	. <i>IEEE Transactions on Magnetics</i> , 1990 , 26, 1662-1664	2	5
42	Magnetic and structural properties of permalloy-tantalum multilayer thin films. <i>Journal of Applied Physics</i> , 1991 , 69, 4526-4528	2.5	5
41	Investigating the suitability of electrohydrodynamic lithography for the fabrication of cell substrates. <i>Journal of Materials Science</i> , 2014 , 49, 4045-4057	4.3	4
40	Intrinsic Pinning of a Ferromagnetic Domain Wall in Yttrium Iron Garnet Films with Strong Uniaxial Anisotropy. <i>Journal of Low Temperature Physics</i> , 2005 , 139, 65-72	1.3	4

39	An intelligent instrument for giant magnetoresistance sensor evaluation. <i>Sensors and Actuators A: Physical</i> , 2000 , 81, 385-388	3.9	4
38	Modelling damaged MFM tips using triangular charge sheets. <i>IEEE Transactions on Magnetism</i> , 1995 , 31, 3355-3357	2	4
37	The effect of deposition process on the magnetic properties of coupled permalloy thin films. <i>Journal of Applied Physics</i> , 1993 , 73, 6365-6367	2.5	4
36	Analysis of magnetoresistors with high coercivity biasing films. <i>IEEE Transactions on Magnetism</i> , 1986 , 22, 683-685	2	4
35	Sputtered permanent magnet arrays for MR sensor bias. <i>IEEE Transactions on Magnetism</i> , 1987 , 23, 2419-2421		4
34	Fabrication and electrochemical response of pristine graphene ultramicroelectrodes. <i>Carbon</i> , 2021 , 177, 207-215	10.4	4
33	Magnetization distributions in thin film Permalloy strips. <i>Journal of Applied Physics</i> , 1991 , 69, 5862-5864	2.5	3
32	Compensating temperature-induced sensitivity changes in thin film NiFeCo magnetoresistive magnetometers. <i>IEEE Transactions on Magnetism</i> , 1986 , 22, 949-951	2	3
31	. <i>IEEE Transactions on Magnetism</i> , 1988 , 24, 1707-1709	2	3
30	Thin film magnetoresistive vector sensors with submicron gap width. <i>IEEE Transactions on Magnetism</i> , 1984 , 20, 957-959	2	3
29	Graphene reconfigurable coplanar waveguide (CPW)-fed circular slot antenna 2015 ,		2
28	TEM studies of magnetisation processes in CoPt alloys. <i>IEEE Transactions on Magnetism</i> , 1997 , 33, 4071-4073		2
27	A study of the initial growth of Pt _x Co(1-x) thin films on Si ₃ N ₄ . <i>Journal of Microscopy</i> , 1997 , 185, 117-121	1.9	2
26	Chapter Six Magnetic Microelectromechanical Systems: MagMEMS. <i>Handbook of Magnetic Materials</i> , 2007 , 457-526	1.3	2
25	Microscopic view on a single domain wall moving through ups and downs of an atomic washboard potential. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004 , 22, 406-409	3	2
24	Intrinsic pinning of a ferromagnetic domain wall in yttrium iron garnet films with strong uniaxial anisotropy. <i>Journal of Low Temperature Physics</i> , 2005 , 139, 65-72	1.3	2
23	Optimisation of spin-valves on rough substrates. <i>Sensors and Actuators A: Physical</i> , 2000 , 81, 32-36	3.9	2
22	Effects of impurities and annealing on AMR and GMR of evaporated multilayer films. <i>Journal of Magnetism and Magnetic Materials</i> , 1999 , 198-199, 85-88	2.8	2

21	Barkhausen transitions in single layer and bilayer thin permalloy films. <i>Journal of Applied Physics</i> , 1994 , 75, 6997-6999	2.5	2
20	Graphene Based Spin Valve Devices 2006 ,		1
19	Ferromagnetic domain wall on nanometer scale. <i>Journal of Physics: Conference Series</i> , 2005 , 17, 101-107	0.3	1
18	Dependence of signal-to-noise ratio on excitation current and signal frequency in spin valve sensors. <i>Journal of Applied Physics</i> , 2003 , 93, 8391-8393	2.5	1
17	A versatile vibrating reed and magneto-optic magnetometer. <i>IEEE Transactions on Magnetics</i> , 1996 , 32, 4899-4901	2	1
16	The effects of pinning magnetization with geometrical features in thin permalloy films. <i>Journal of Applied Physics</i> , 1993 , 73, 6519-6521	2.5	1
15	Multilayered magnetic materials. <i>Endeavour</i> , 1993 , 17, 154-159	0.5	1
14	. <i>IEEE Transactions on Magnetics</i> , 1989 , 25, 3836-3838	2	1
13	Modelling multiple MR elements for compound read heads. <i>Journal of Magnetism and Magnetic Materials</i> , 1990 , 83, 39-40	2.8	1
12	Automated magnetization measurements. <i>Journal of Applied Physics</i> , 1987 , 61, 3208-3210	2.5	1
11	Teaching in Silicon. <i>International Journal of Electrical Engineering and Education</i> , 1985 , 22, 5-11	0.6	1
10	Effects of external white noise on spin valve sensors. <i>Sensors and Actuators A: Physical</i> , 2006 , 129, 260-264	2.5	1
9	The novel use of a memory layer in a giant magnetoresistive position sensor design. <i>IEEE Transactions on Magnetics</i> , 2000 , 36, 2779-2781	2	
8	Time dependence studies on giant magnetoresistive Co/Cu multilayers. <i>IEEE Transactions on Magnetics</i> , 2000 , 36, 2847-2849	2	
7	A study of recorded bit patterns using TEM and MFM. <i>Journal of Magnetism and Magnetic Materials</i> , 1999 , 193, 470-473	2.8	
6	The effect of a hard axis bias field on the switching field in single layer and bi-layer thin permalloy films. <i>IEEE Transactions on Magnetics</i> , 1995 , 31, 4041-4043	2	
5	Combined scanning optical and force microscope using interferometric detection 1994 , 2004, 324		
4	Essential Cadmat [An Integrated Approach to A Foundation Course for Electronic Engineering Undergraduates. <i>International Journal of Electrical Engineering and Education</i> , 1992 , 29, 35-41	0.6	

- 3 A Modified Area Based Local Stereo Correspondence Algorithm for Occlusions. *Lecture Notes in Computer Science*, **2005**, 611-619 0.9
- 2 The Equivalence of Perpendicular Magnetic Recording and Magnetic Force Microscopy. *Journal of the Magnetics Society of Japan*, **1997**, 21, S2_237-240
- 1 Fabrication and modelling of fractal, biomimetic, micro and nano-topographical surfaces. *Bioinspiration and Biomimetics*, **2016**, 11, 046009 2.6