

Greg Hughes

List of Publications by Citations

Source: <https://exaly.com/author-pdf/3045989/greg-hughes-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.

73
papers

1,757
citations

20
h-index

40
g-index

76
ext. papers

1,856
ext. citations

3.6
avg, IF

4
L-index

#	Paper	IF	Citations
73	GaAs interfacial self-cleaning by atomic layer deposition. <i>Applied Physics Letters</i> , 2008 , 92, 071901	3.4	332
72	Detection of Ga suboxides and their impact on III-V passivation and Fermi-level pinning. <i>Applied Physics Letters</i> , 2009 , 94, 162101	3.4	236
71	An X-ray photoelectron spectroscopy study of the HF etching of native oxides on Ge(111) and Ge(100) surfaces. <i>Applied Surface Science</i> , 1998 , 123-124, 66-70	6.7	101
70	Air sensitivity of MoS ₂ , MoSe ₂ , MoTe ₂ , HfS ₂ , and HfSe ₂ . <i>Journal of Applied Physics</i> , 2016 , 120, 125102	2.5	91
69	Frequency dispersion reduction and bond conversion on n-type GaAs by in situ surface oxide removal and passivation. <i>Applied Physics Letters</i> , 2007 , 91, 163512	3.4	81
68	Roughening transition of a stepped Cu(113) surface: A synchrotron x-ray-scattering study. <i>Physical Review Letters</i> , 1987 , 59, 2447-2450	7.4	77
67	Indium stability on InGaAs during atomic H surface cleaning. <i>Applied Physics Letters</i> , 2008 , 92, 171906	3.4	59
66	Metal-GaSe and metal-InP interfaces: Schottky barrier formation and interfacial reactions. <i>Journal of Vacuum Science and Technology</i> , 1982 , 21, 594-598		54
65	Metal-gallium selenide interfaces-observation of the true Schottky limit. <i>Journal of Physics C: Solid State Physics</i> , 1982 , 15, L159-L164		49
64	Neutron reflectivity study of block copolymers adsorbed from solution. <i>Macromolecules</i> , 1990 , 23, 3860-3864	3.864	45
63	Core level photoemission and scanning tunneling microscopy study of the interaction of pentacene with the Si(100) surface. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002 , 20, 1620		43
62	Long-term stability of mechanically exfoliated MoS ₂ flakes. <i>MRS Communications</i> , 2017 , 7, 813-818	2.7	38
61	Metal contacts on semiconductors: The adsorption of Sb, Sn, and Ga on InP(110) cleaved surfaces. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1984 , 2, 561		38
60	UPS investigation of poorly crystallized MoS ₂ . <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1984 , 2, 991-994	2.9	29
59	Spin coating of hydrophilic polymeric films for enhanced centrifugal flow control by serial siphoning. <i>Microfluidics and Nanofluidics</i> , 2014 , 16, 691-699	2.8	27
58	Synchrotron radiation photoemission study of in situ manganese silicate formation on SiO ₂ for barrier layer applications. <i>Applied Physics Letters</i> , 2011 , 98, 113508	3.4	26
57	Aluminium overlayers on (110) indium phosphide: microscopic aspects of interface formation. <i>Journal of Physics C: Solid State Physics</i> , 1982 , 15, 7049-7063		26

56	In Situ XPS Chemical Analysis of MnSiO ₃ Copper Diffusion Barrier Layer Formation and Simultaneous Fabrication of Metal Oxide Semiconductor Electrical Test MOS Structures. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 2470-7	9.5	24
55	Electronic structure of thin film silicon oxynitrides measured using soft x-ray emission and absorption. <i>Journal of Applied Physics</i> , 2003 , 94, 3919-3922	2.5	20
54	Atomically clean semiconductor surfaces prepared by laser irradiation. <i>Journal Physics D: Applied Physics</i> , 1980 , 13, L193-L197	3	20
53	Atomic resolved material displacement on graphite surfaces by scanning tunnelling microscopy. <i>Applied Physics Letters</i> , 1992 , 60, 2338-2340	3.4	19
52	Electronic structure of the organic semiconductor copper tetraphenylporphyrin (CuTPP). <i>Applied Surface Science</i> , 2009 , 256, 720-725	6.7	18
51	A combined hard x-ray photoelectron spectroscopy and electrical characterisation study of metal/SiO ₂ /Si(100) metal-oxide-semiconductor structures. <i>Applied Physics Letters</i> , 2012 , 101, 241602	3.4	14
50	Interfacial analysis of InP surface preparation using atomic hydrogen cleaning and Si interfacial control layers prior to MgO deposition. <i>Applied Surface Science</i> , 2010 , 256, 7530-7534	6.7	14
49	Photoemission study of the SiO ₂ conversion mechanism to magnesium silicate. <i>Journal of Applied Physics</i> , 2010 , 107, 074107	2.5	13
48	Chemical and structural investigations of the interactions of Cu with MnSiO ₃ diffusion barrier layers. <i>Journal of Applied Physics</i> , 2012 , 112, 064507	2.5	13
47	Structural study of the Cu _{1-x} Al _x (2 × 2)-Sb surface alloy using low energy electron diffraction. <i>Surface Science</i> , 2004 , 566-568, 52-57	1.8	13
46	Reliability of HfSiON gate dielectrics. <i>Semiconductor Science and Technology</i> , 2005 , 20, 68-71	1.8	13
45	Low voltage stress-induced leakage current in 1.4 × 1 nm SiON and HfSiON gate dielectric layers. <i>Semiconductor Science and Technology</i> , 2005 , 20, 668-672	1.8	13
44	Low-angle misorientation dependence of the optical properties of InGaAs/InAlAs quantum wells. <i>Journal of Crystal Growth</i> , 2010 , 312, 1546-1550	1.6	12
43	Nickel and copper on cleaved indium phosphide: structure, metallurgy and electronic properties. <i>Journal of Physics C: Solid State Physics</i> , 1983 , 16, 2391-2405		12
42	Degradation and breakdown characteristics of thin MgO dielectric layers. <i>Journal of Applied Physics</i> , 2010 , 107, 024501	2.5	11
41	Weibull slope and voltage acceleration of ultra-thin (1.1 × 1.45 nm EOT) oxynitrides. <i>Microelectronic Engineering</i> , 2004 , 72, 61-65	2.5	11
40	Growth of isotopically enriched ZnO nanorods of excellent optical quality. <i>Journal of Crystal Growth</i> , 2015 , 429, 6-12	1.6	10
39	Photoemission studies of the initial interface formation of ultrathin MgO dielectric layers on the Si(111) surface. <i>Thin Solid Films</i> , 2010 , 518, 1980-1984	2.2	10

38	Density of ultrathin amorphous silicon and germanium sublayers in periodic amorphous multilayers. <i>Physical Review B</i> , 1991 , 44, 11381-11385	3.3	10
37	Electronic structures of cluster compounds of molybdenum sulfide (MoS ₄ ²⁻ , Mo ₃ S ₉ ²⁻) and nickel molybdenum sulfide (Ni(MoS ₄) ₂ ²⁻) by XPS studies. <i>Inorganic Chemistry</i> , 1987 , 26, 1422-1425	5.1	10
36	Hard x-ray photoelectron spectroscopy and electrical characterization study of the surface potential in metal/Al ₂ O ₃ /GaAs(100) metal-oxide-semiconductor structures. <i>Physical Review B</i> , 2013 , 88,	3.3	9
35	Ni-(In,Ga)As Alloy Formation Investigated by Hard-X-Ray Photoelectron Spectroscopy and X-Ray Absorption Spectroscopy. <i>Physical Review Applied</i> , 2014 , 2,	4.3	9
34	Soft x-ray photoemission study of the thermal stability of the Al ₂ O ₃ /Ge (100) interface as a function of surface preparation. <i>Journal of Applied Physics</i> , 2013 , 114, 084312	2.5	8
33	In Situ Investigations into the Mechanism of Oxygen Catalysis on Ruthenium/Manganese Surfaces and the Thermodynamic Stability of Ru/Mn-Based Copper Diffusion Barrier Layers. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 16136-16143	3.8	7
32	Synchrotron radiation photoemission study of the thermal annealing and atomic hydrogen cleaning of native oxide covered InAs(100) surfaces. <i>Applied Surface Science</i> , 2013 , 276, 609-612	6.7	6
31	(NH ₄) ₂ S Passivation of High-k/In _{0.53} Ga _{0.47} As Interfaces: A Systematic Study of (NH ₄) ₂ S Concentration. <i>ECS Transactions</i> , 2010 , 28, 231-238	1	6
30	Time-Dependent Dielectric Breakdown and Stress-Induced Leakage Current Characteristics of 0.7-nm-EOT HfO ₂ pFETs. <i>IEEE Transactions on Device and Materials Reliability</i> , 2011 , 11, 290-294	1.6	6
29	High resolution synchrotron radiation based photoemission study of the in situ deposition of molecular sulphur on the atomically clean InGaAs surface. <i>Journal of Applied Physics</i> , 2012 , 111, 114512	2.5	6
28	High temperature thermal stability of the HfO ₂ /Ge (100) interface as a function of surface preparation studied by synchrotron radiation core level photoemission. <i>Applied Surface Science</i> , 2014 , 292, 345-349	6.7	5
27	Reliability of thin ZrO ₂ gate dielectric layers. <i>Microelectronics Reliability</i> , 2011 , 51, 1118-1122	1.2	5
26	High resolution photoemission study of the formation and thermal stability of Mg silicide on silicon. <i>Thin Solid Films</i> , 2011 , 519, 1861-1865	2.2	5
25	Charge trapping in MOSFETs with HfSiON dielectrics during electrical stressing. <i>Microelectronic Engineering</i> , 2005 , 77, 302-309	2.5	5
24	Growth and characterization of thin manganese oxide corrosion barrier layers for silicon photoanode protection during water oxidation. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 136, 64-69	6.4	4
23	Surface characterization of poly-2-vinylpyridine polymer for area selective deposition techniques. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019 , 37, 050601	2.9	4
22	High resolution photoemission study of SiO _x /Si(111) interface disruption following in situ HfO ₂ deposition. <i>Applied Physics Letters</i> , 2009 , 95, 072903	3.4	4
21	Sulphur overlayers on the Au(110) surface: LEED and TPD study. <i>Surface Science</i> , 2007 , 601, 3506-3511	1.8	4

20	Progressive breakdown in ultrathin SiON dielectrics and its effect on transistor performance. <i>Microelectronics Reliability</i> , 2005 , 45, 869-874	1.2	4
19	Obtaining and processing data from laboratory instruments. <i>TrAC - Trends in Analytical Chemistry</i> , 1993 , 12, 1-3	14.6	4
18	Investigation of the thermal stability of Mo-In _{0.45} Ga _{0.47} As for applications as source/drain contacts. <i>Journal of Applied Physics</i> , 2016 , 120, 135303	2.5	3
17	Nitrogen reactive ion etch processes for the selective removal of poly-(4-vinylpyridine) in block copolymer films. <i>Nanotechnology</i> , 2018 , 29, 355302	3.4	3
16	High temperature thermal stability investigations of ammonium sulphide passivated InGaAs and interface formation with Al ₂ O ₃ studied by synchrotron radiation based photoemission. <i>Applied Surface Science</i> , 2014 , 317, 696-700	6.7	3
15	Atomic hydrogen cleaning of In _{0.53} Ga _{0.47} As studied using synchrotron radiation photoelectron spectroscopy. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013 , 7, 989-992	2.5	2
14	High-resolution photoemission comparison study of interface formation between MgO and the atomically clean and Se-passivated Ge(100) surfaces. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013 , 7, 590-592	2.5	2
13	Thermal stability studies on atomically clean and sulphur passivated InGaAs surfaces. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013 , 210, 519-522	1.6	2
12	Temperature-accelerated breakdown in ultra-thin SiON dielectrics. <i>Semiconductor Science and Technology</i> , 2004 , 19, 1254-1258	1.8	2
11	A spectroscopic method for the evaluation of surface passivation treatments on metal/oxide/semiconductor structures. <i>Applied Surface Science</i> , 2014 , 301, 40-45	6.7	1
10	High resolution photoemission study of interface formation between MgO and the selenium passivated InAs (100) surface. <i>Applied Surface Science</i> , 2013 , 285, 153-156	6.7	1
9	High-temperature thermal stability study of 1 nm Al ₂ O ₃ deposited on InAs surfaces investigated by synchrotron radiation based photoemission spectroscopy. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 055107	3	1
8	A combined capacitance-voltage and hard x-ray photoelectron spectroscopy characterisation of metal/Al ₂ O ₃ /In _{0.53} Ga _{0.47} As capacitor structures. <i>Journal of Applied Physics</i> , 2014 , 116, 024104	2.5	1
7	Obtaining and processing data from laboratory instruments. <i>TrAC - Trends in Analytical Chemistry</i> , 1993 , 12, 37-40	14.6	1
6	Summary Abstract: The step roughening transition of a Cu(113) surface studied by surface x-ray scattering. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1988 , 6, 654-655	2.9	1
5	A photoemission study of the effectiveness of nickel, manganese, and cobalt based corrosion barriers for silicon photo-anodes during water oxidation. <i>Journal of Applied Physics</i> , 2016 , 119, 195301	2.5	1
4	The effect of a post processing thermal anneal on pre-existing and stress induced electrically active defects in ultra-thin SiON dielectric layers. <i>Microelectronics Reliability</i> , 2011 , 51, 524-528	1.2	0
3	High temperature thermal stability studies of ultrathin Al ₂ O ₃ layers deposited on native oxide and sulphur passivated InGaAs surfaces. <i>Microelectronic Engineering</i> , 2015 , 147, 249-253	2.5	

- 2 Synchrotron radiation study of metallic titanium deposited on dielectric substrates. *Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics*, **2018**, 36, 040602 1.3
- 1 Synchrotron radiation photoemission study of interface formation between MgO and the atomically clean In_{0.53}Ga_{0.47}As surface. *Physica Status Solidi - Rapid Research Letters*, **2014**, 8, 167-171 2.5