

John F Mcgilp

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5127637/publications.pdf>

Version: 2024-02-01

105
papers

2,391
citations

201674

27
h-index

233421

45
g-index

107
all docs

107
docs citations

107
times ranked

1435
citing authors

#	ARTICLE	IF	CITATIONS
1	Fibre optic oxygen sensor based on fluorescence quenching of evanescent-wave excited ruthenium complexes in sol-gel derived porous coatings. <i>Analyst</i> , The, 1993, 118, 385-388.	3.5	226
2	Optical characterisation of semiconductor surfaces and interfaces. <i>Progress in Surface Science</i> , 1995, 49, 1-106.	8.3	163
3	Epioptics: linear and non-linear optical spectroscopy of surfaces and interfaces. <i>Journal of Physics Condensed Matter</i> , 1990, 2, 7985-8006.	1.8	87
4	A structural study of the sol-gel process by optical fluorescence and decay time spectroscopy. <i>Journal of Non-Crystalline Solids</i> , 1991, 135, 8-14.	3.1	87
5	Spontaneous emission of dye molecules, semiconductor nanocrystals, and rare-earth ions in opal-based photonic crystals. <i>Journal of Lightwave Technology</i> , 1999, 17, 2128-2137.	4.6	80
6	A review of optical second-harmonic and sum-frequency generation at surfaces and interfaces. <i>Journal Physics D: Applied Physics</i> , 1996, 29, 1812-1821.	2.8	78
7	Development of a LED-based phase fluorimetric oxygen sensor using evanescent wave excitation of a sol-gel immobilized dye. <i>Sensors and Actuators B: Chemical</i> , 1995, 29, 226-230.	7.8	76
8	Optical Second-Harmonic Generation as a Semiconductor Surface and Interface Probe. <i>Physica Status Solidi A</i> , 1999, 175, 153-167.	1.7	66
9	Nucleation and evolution of the Au-induced $5\sqrt{2}$ structure on vicinal Si(111). <i>Physical Review B</i> , 1994, 49, 2527-2535.	3.2	62
10	Resonant Optical Second Harmonic Generation at the Steps of Vicinal Si(001). <i>Physical Review Letters</i> , 1995, 75, 1138-1141.	7.8	58
11	Angle-resolved photoemission from an unusual quasi-one-dimensional metallic system: a single domain Au-induced $5\sqrt{2}$ reconstruction of Si(111). <i>Surface Science</i> , 1995, 325, 45-49.	1.9	57
12	The N _{6,7O4,5O4.5} Auger spectra of thallium, lead and bismuth. <i>Journal of Physics C: Solid State Physics</i> , 1977, 10, 3445-3460.	1.5	55
13	On predicting the chemical reactivity of metal-semiconductor interfaces. <i>Journal of Physics C: Solid State Physics</i> , 1984, 17, 2249-2254.	1.5	52
14	Phonon and polarized reflectance spectra from Si(111)-(4 $\sqrt{2}$ -1)In: Evidence for a charge-density-wave driven phase transition. <i>Physical Review B</i> , 2003, 67, .	3.2	48
15	Structure of Si(111)-In Nanowires Determined from the Midinfrared Optical Response. <i>Physical Review Letters</i> , 2009, 102, 226805.	7.8	46
16	Fibre optic chemical sensors based on evanescent wave interactions in sol-gel-derived porous coatings. <i>Journal of Sol-Gel Science and Technology</i> , 1994, 2, 661-665.	2.4	45
17	Probing the buried metal-semiconductor interface by optical second harmonic generation: Au on Si(1 1) Tj ETQq1	1.9	44
18	Radiation damage in some platinum(IV) complexes produced during soft X-ray photoelectron spectroscopic studies. <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1975, 71, 177.	1.1	40

#	ARTICLE	IF	CITATIONS
19	Solid-state effects in the quasiatomic L _{2,3} M _{4,5} M _{4,5} Auger spectra of zinc. Journal of Physics C: Solid State Physics, 1976, 9, L585-L590.	1.5	39
20	The L _{2,3} M _{4,5} M _{4,5} Auger and photoelectron spectra of germanium. Journal of Physics C: Solid State Physics, 1976, 9, 3541-3555.	1.5	36
21	SECOND-HARMONIC GENERATION AT SEMICONDUCTOR AND METAL SURFACES. Surface Review and Letters, 1999, 06, 529-558.	1.1	32
22	Control of terrace width and atomic step distribution on vicinal Si(111) surfaces by thermal processing. Semiconductor Science and Technology, 1993, 8, 495-501.	2.0	31
23	Bond calculation of optical second-harmonic generation at gallium- and arsenic-terminated Si(111) surfaces. Journal of Physics Condensed Matter, 1992, 4, 4017-4037.	1.8	29
24	The L ₃ M _{2,3} M _{4,5} , L _{2,3} M _{2,3} M _{2,3} and L ₃ M ₁ M _{4,5} Auger spectra of Cu, Zn and Ge. Journal of Physics C: Solid State Physics, 1978, 11, 643-650.	1.5	28
25	Optical second-harmonic generation for studying surfaces and interfaces. Journal of Physics Condensed Matter, 1989, 1, SB85-SB92.	1.8	28
26	Surface phonons of the Si(111) surface. Physical Review B, 2007, 76, 041401.	1.2	28
27	Optical Fingerprints of Si Honeycomb Chains and Atomic Gold Wires on the Si(111) Surface. Surface Review and Letters, 2013, 111, 087401.	7.8	28
28	Probing the out-of-plane optical response of plasmonic nanostructures using spectroscopic ellipsometry. Physical Review B, 2011, 84, .	3.2	25
29	Determining metal-semiconductor interface structure by optical second-harmonic generation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 1442-1446.	2.1	24
30	Probing surface and interface structure using optics. Journal of Physics Condensed Matter, 2010, 22, 084018.	1.8	23
31	Soft X-ray photoemission spectroscopy of chemical reactivity at metal-GaSe interfaces. Vacuum, 1983, 33, 607-612.	3.5	22
32	Controlled in situ growth of tunable plasmonic self-assembled nanoparticle arrays. Nanotechnology, 2012, 23, 035606.	2.6	22
33	In situ characterization of one-dimensional plasmonic Ag nanocluster arrays. Physical Review B, 2011, 83, .	3.2	21
34	Electrical characteristics of an X-ray photoelectron spectrometer. Journal of Electron Spectroscopy and Related Phenomena, 1975, 6, 397-409.	1.7	20
35	Measurement of gas flux distributions from single capillaries using a modified, uhv-compatible ion gauge, and comparison with theory. Vacuum, 1986, 36, 227-232.	3.5	19
36	N _{6,7} O _{4,5} O _{4,5} Auger spectrum of metallic Au. Physical Review B, 1991, 43, 9550-9557.	3.2	19

#	ARTICLE	IF	CITATIONS
37	New evidence for the influence of step morphology on the formation of Au atomic chains on vicinal Si(111) surfaces. <i>Europhysics Letters</i> , 2010, 92, 67008.	2.0	19
38	General approach to the analysis of plasmonic structures using spectroscopic ellipsometry. <i>Physical Review B</i> , 2013, 87, .	3.2	19
39	A simple semiquantitative model for classifying metal–compound semiconductor interface reactivity. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1985, 3, 1641.	1.6	18
40	Probing semiconductor interfaces using nonlinear optical spectroscopy. <i>Optical Engineering</i> , 1994, 33, 3895.	1.0	18
41	Effect of adlayer dimer orientation on the optical anisotropy of single domain Si(001). <i>Applied Physics Letters</i> , 1996, 69, 176-178.	3.3	18
42	Schottky contacts to cleaved GaAs (110) surfaces. II. Thermodynamic aspects. <i>Journal of Physics C: Solid State Physics</i> , 1988, 21, 807-818.	1.5	16
43	Spectroscopic optical second-harmonic generation from semiconductor interfaces. <i>Applied Physics A: Solids and Surfaces</i> , 1994, 59, 401-405.	1.4	16
44	Erbium and Terbium Luminescence from Sol–Gel Derived In ₂ O ₃ Films on Porous Silicon. <i>Physica Status Solidi A</i> , 1998, 165, 131-134.	1.7	16
45	Spectroscopic Investigations of Borosilicate Glass and Its Application as a Dopant Source for Shallow Junctions. <i>Journal of the Electrochemical Society</i> , 2000, 147, 3100.	2.9	16
46	Atomic indium nanowires on Si(111): the (4 Å– 1)–(8 Å– 2) phase transition studied with reflectance anisotropy spectroscopy. <i>Applied Surface Science</i> , 2004, 234, 302-306.	6.1	15
47	Determining metal-semiconductor interface structure by optical second-harmonic generation. <i>Semiconductor Science and Technology</i> , 1987, 2, 102-107.	2.0	14
48	Resonant optical second-harmonic generation from mixed liquid crystal-stearic acid monolayers. <i>Journal of Physics Condensed Matter</i> , 1992, 4, 7965-7972.	1.8	14
49	Alloying and entropy effects in predicting metal/compound–semiconductor interface reactivity. <i>Journal of Materials Research</i> , 1987, 2, 516-523.	2.6	13
50	The spatial distribution of flux produced by single capillary gas dosers. <i>Vacuum</i> , 1988, 38, 341-344.	3.5	13
51	The angular distribution of thermal molecular beams formed by single capillaries in the molecular flow regime. <i>Vacuum</i> , 1988, 38, 463-467.	3.5	13
52	Using steps at the Si–SiO ₂ interface to test simple bond models of the optical second-harmonic response. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 016006.	1.8	13
53	Reflectance anisotropy spectroscopy of the Si–Au surface. <i>Physical Review B</i> , 2016, 94, .	3.2	13
54	Calculation of the electron binding energies of atomic Zn, Cd and Hg: evidence of a many-electron shift in the gas phase X-ray photoemission spectra of core levels. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1980, 13, 1953-1960.	1.6	12

#	ARTICLE	IF	CITATIONS
55	The effect of the local field on the optical second-harmonic response of mixed liquid crystal-stearic acid monolayers. <i>Journal of Physics Condensed Matter</i> , 1993, 5, 3791-3800.	1.8	12
56	Optical second-harmonic generation studies of the structure of porous silicon surfaces. <i>Thin Solid Films</i> , 1995, 255, 146-148.	1.8	12
57	Optical reflectance anisotropy of buried Fe nanostructures on vicinal W(110). <i>Journal of Physics Condensed Matter</i> , 2007, 19, 266003.	1.8	12
58	Manipulating and probing the growth of plasmonic nanoparticle arrays using light. <i>Nanoscale</i> , 2013, 5, 4923.	5.6	12
59	Simplification of the N6.7O4.5O4.5Auger spectrum of Au. <i>Journal of Physics Condensed Matter</i> , 1990, 2, 195-200.	1.8	11
60	Optical and electronic properties of Ag nanodots on Si(111). <i>Journal of Physics Condensed Matter</i> , 2006, 18, 6979-6986.	1.8	11
61	Metal-insulator transition in Si(111)-(4 \times 4 $\sqrt{3}$)/-(8 \times 8 $\sqrt{3}$) studied by optical spectroscopy. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 2033-2039.	1.5	11
62	Optical and phonon excitations of modified Pandey chains at the Si(111)-2 $\sqrt{3}\times\sqrt{3}$ surface. <i>Physical Review B</i> , 2011, 84, .	3.2	11
63	Resonance and local-field effects in the characterization of molecular monolayers by optical second-harmonic generation. <i>Synthetic Metals</i> , 1993, 61, 181-184.	3.9	10
64	Optical characterization of gold chains and steps on the vicinal Si(557) surface: Theory and experiment. <i>Physica Status Solidi (B): Basic Research</i> , 2012, 249, 1095-1104.	1.5	10
65	Free-electron response in reflectance anisotropy spectra. <i>Physical Review B</i> , 2006, 74, .	3.2	8
66	Extracting the hysteresis loops of magnetic interfaces from optical second-harmonic intensity measurements. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 396002.	1.8	8
67	Chiral second-harmonic generation from small organic molecules at surfaces. <i>Physica Status Solidi (B): Basic Research</i> , 2012, 249, 1155-1159.	1.5	8
68	In situ optical spectroscopy of surfaces and interfaces with submonolayer resolution. <i>Applied Surface Science</i> , 1993, 63, 99-105.	6.1	7
69	Magnetic second-harmonic generation from the terraces and steps of aligned magnetic nanostructures grown on low symmetry interfaces. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 265002.	1.8	7
70	Using surface and interface optics to probe the capping, with amorphous Si, of Au atom chains grown on vicinal Si(111). <i>Journal of Physics Condensed Matter</i> , 2009, 21, 474208.	1.8	7
71	Magnetic second-harmonic generation from interfaces and nanostructures. <i>Journal of Magnetism and Magnetic Materials</i> , 2010, 322, 1488-1493.	2.3	7
72	Reflectance anisotropy spectroscopy of Si(111)-(1 \times 1 $\sqrt{3}$) and Ag surfaces. <i>Physical Review B</i> , 2013, 87, .	3.2	7

#	ARTICLE	IF	CITATIONS
73	Reflectance anisotropy spectroscopy of magnetite (110) surfaces. Physical Review B, 2014, 89, .	3.2	7
74	Optical Second Harmonic Generation Studies of Indium Deposited on Vicinal Si(111). Physica Status Solidi A, 1999, 175, 189-193.	1.7	6
75	Phenomenology of magnetic second harmonic generation from low symmetry surfaces and interfaces. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 3046-3049.	0.8	6
76	Optical properties of indium nanowires - an adsorption study. Physica Status Solidi (B): Basic Research, 2005, 242, 2655-2663.	1.5	6
77	Using reflectance anisotropy spectroscopy to characterize capped silver nanostructures grown on silicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2556-2560.	0.8	6
78	Reflectance anisotropy spectroscopy of clean and Sb covered Ge(001) surfaces and comparison with clean Si(001) surfaces. Physica Status Solidi (B): Basic Research, 2015, 252, 78-86.	1.5	6
79	Metal adatoms on oxidised silicon surfaces. Semiconductor Science and Technology, 1988, 3, 937-942.	2.0	5
80	Epiptic studies of vicinal Si(001)-Ga. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1998, 20, 1019-1024.	0.4	5
81	Optical and magnetic properties of europium sulphide thin films grown by pulsed laser deposition. Thin Solid Films, 2005, 488, 200-203.	1.8	5
82	X-ray magnetic circular dichroism and reflection anisotropy spectroscopy Kerr effect studies of capped magnetic nanowires. Physica Status Solidi (B): Basic Research, 2010, 247, 2108-2112.	1.5	5
83	An analytic approach to modeling the optical response of anisotropic nanoparticle arrays at surfaces and interfaces. Journal of Physics Condensed Matter, 2014, 26, 145302.	1.8	5
84	Optical characterisation of plasmonic nanostructures on planar substrates using second-harmonic generation. Optics Express, 2015, 23, 26486.	3.4	5
85	Bond hyperpolarizabilities SHG simplified?. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 3060-6064.	0.8	4
86	Optical second-harmonic generation studies of Si(111)-Ag and Si(111)-Ag grown on vicinal Si(111). Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2649-2652.	0.8	4
87	The linear and nonlinear optical response of native oxide covered rippled Si templates with nanoscale periodicity. Physica Status Solidi (B): Basic Research, 2012, 249, 1173-1177.	1.5	4
88	Optical response of Ag-induced reconstructions on vicinal Si(111). Physica Status Solidi (B): Basic Research, 2005, 242, 3017-3021.	1.5	3
89	Reflectance anisotropy studies of 5-2-Au structures grown on Si(111) surfaces with different step formations. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2569-2572.	0.8	3
90	Probing chiral monolayers of cysteine on Au(110) using reflection anisotropy spectroscopy and second-harmonic generation. Physica Status Solidi (B): Basic Research, 2015, 252, 95-99.	1.5	3

#	ARTICLE	IF	CITATIONS
91	Optical reflectance anisotropy studies of Fe nanostructures grown on vicinal W(110). Physica Status Solidi (B): Basic Research, 2005, 242, 2650-2654.	1.5	2
92	Electronic Properties of Ag Reconstructions on Si(111): Coulomb Blockade Behavior at Room Temperature. Physica Status Solidi (B): Basic Research, 2018, 255, 1700494.	1.5	2
93	Characterization of the Si(111)-Ga interface using optical second-harmonic generation. Journal of Physics Condensed Matter, 1991, 3, S193-S198.	1.8	1
94	Optimizing the magnetic contrast in the optical second-harmonic response of capped magnetic nanostructures grown on vicinal surfaces. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2645-2648.	0.8	1
95	Determining magnetization curves using optical second-harmonic generation. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2653-2656.	0.8	1
96	Optical anisotropy of Si(111) $\sqrt{4 \times 4}$ / $\sqrt{8 \times 8}$ nanowires calculated from <i>first-principles</i> . Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 133-136.	0.8	1
97	Anisotropic optical response of elongated Pb islands in the infrared spectral region. Physica Status Solidi (B): Basic Research, 2012, 249, 1105-1109.	1.5	1
98	Group V adsorbate structures on vicinal Ge(001) surfaces determined from the optical spectrum. Applied Physics Letters, 2017, 110, 233903.	3.3	1
99	Optical Techniques for Probing Semiconductor Surfaces and Interfaces. , 1996, , 163-167.		1
100	Second Harmonic and Sum Frequency Generation. , 1995, , 183-206.		1
101	Development of an intrinsic phase fluorimetric oxygen sensor using a high-intensity blue LED. , 1994, 2360, 461.		0
102	Anisotropic second harmonic generation from Si(111)-4x1-In. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 3050-3054.	0.8	0
103	Bulk and interface contributions to the optical second-harmonic response of native-oxide-covered vicinal Si(111). Physica Status Solidi (B): Basic Research, 2005, 242, 3012-3016.	1.5	0
104	Temperature-dependent magnetic second-harmonic generation from Fe nanostructures grown on vicinal W(110). Physical Review B, 2011, 83, .	3.2	0
105	Temperature dependent studies of capped magnetic nanowires using XMCD. Physica Status Solidi (B): Basic Research, 2016, 253, 241-246.	1.5	0