John F Mcgilp

List of Publications by Year
in descending order

105	2,391	201674 27	233421 45
papers	citations	h-index	g-index

107	107	107	1435
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Group V adsorbate structures on vicinal Ge(001) surfaces determined from the optical spectrum. Applied Physics Letters, 2017, 110, 233903.	3.3	1
3	Reflectance anisotropy spectroscopy of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">Si</mml:mi><mml:mo>(</mml:mo><mml:mn>111</mml:mn><mml:mo>)</mml:mo><mml:mtext>â˜’</mml:mtext><mml:mi mathvariant="normal">Au</mml:mi></mml:math> surface. Physical Review B, 2016, 94, .	3.2	13
4	Temperature dependent studies of capped magnetic nanowires using XMCD. Physica Status Solidi (B): Basic Research, 2016, 253, 241-246.	1.5	0
5	Optical characterisation of plasmonic nanostructures on planar substrates using secondâ€“harmonic generation. Optics Express, 2015, 23, 26486.	3.4	5
6	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
7	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
8	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
9	Reflectance anisotropy spectroscopy of magnetite (110) surfaces. Physical Review B, 2014, 89, .	3.2	7
10	Manipulating and probing the growth of plasmonic nanoparticle arrays using light. Nanoscale, 2013, 5, 4923.	5.6	12
11	Reflectance anisotropy spectroscopy of Si(111)-(<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 352 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">Si</mml:mi><mml:mo>(</mml:mo><mml:mn>111</mml:mn><mml:mo>)</mml:mo><mml:mtext>â˜’</mml:mtext><mml:mi mathvariant="normal">Ag</mml:mi></mml:math> surfaces. Physical Review B, 2013, 87, .	3.2	7
12	General approach to the analysis of plasmonic structures using spectroscopic ellipsometry. Physical Review B, 2013, 87, .	3.2	19
13	Optical Fingerprints of Si Honeycomb Chains and Atomic Gold Wires on the Si(111)-(<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 352 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">Si</mml:mi><mml:mo>(</mml:mo><mml:mn>111</mml:mn><mml:mo>)</mml:mo><mml:mtext>â˜’</mml:mtext><mml:mi mathvariant="normal">Au</mml:mi></mml:math> Surface. Physical Review Letters, 2013, 111, 087401.	7.8	28
14	Controlledin situgrowth of tunable plasmonic self-assembled nanoparticle arrays. Nanotechnology, 2012, 23, 035606.	2.6	22
15	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
16	The linear and nonlinear optical response of nativeâ€oxide covered rippled Si templates with nanoscale periodicity. Physica Status Solidi (B): Basic Research, 2012, 249, 1173-1177.	1.5	4
17	Chiral secondâ€harmonic generation from small organic molecules at surfaces. Physica Status Solidi (B): Basic Research, 2012, 249, 1155-1159.	1.5	8
18	Optical characterization of gold chains and steps on the vicinal Si(557) surface: Theory and experiment. Physica Status Solidi (B): Basic Research, 2012, 249, 1095-1104.	1.5	10

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19	Temperature-dependent magnetic second-harmonic generation from Fe nanostructures grown on vicinal W(110). Physical Review B, 2011, 83, .	3.2	0
20	Optical and phonon excitations of modified Pandey chains at the Si(111)-2Ã—1 surface. Physical Review B, 2011, 84, .	3.2	11
21	Probing the out-of-plane optical response of plasmonic nanostructures using spectroscopic ellipsometry. Physical Review B, 2011, 84, .	3.2	25
22	In situcharacterization of one-dimensional plasmonic Ag nanocluster arrays. Physical Review B, 2011, 83, .	3.2	21
23	Magnetic second-harmonic generation from interfaces and nanostructures. Journal of Magnetism and Magnetic Materials, 2010, 322, 1488-1493.	2.3	7
24	Xâ€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
25	Metalâ€“insulator transition in Si(111)â€(4â€‰Ã—â€‰1)/(8â€‰Ã—â€‰2)â€In studied by optical spectroscopy. Physica Status Solidi (B): Basic Research, 2010, 247, 2033-2039.	1.5	11
26	Optical anisotropy of Si(111)â€(4 Ã— 1)/(8 Ã— 2)â€In nanowires calculated from firstâ€principles. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 133-136.	0.8	1
27	New evidence for the influence of step morphology on the formation of Au atomic chains on vicinal Si(111) surfaces. Europhysics Letters, 2010, 92, 67008.	2.0	19
28	Probing surface and interface structure using optics. Journal of Physics Condensed Matter, 2010, 22, 084018.	1.8	23
29	Structure of Si(111)-In Nanowires Determined from the Midinfrared Optical Response. Physical Review Letters, 2009, 102, 226805.	7.8	46
30	Using surface and interface optics to probe the capping, with amorphous Si, of Au atom chains grown on vicinal Si(111). Journal of Physics Condensed Matter, 2009, 21, 474208.	1.8	7
31	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
32	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
33	Optical secondâ€harmonic generation studies of Si(111)â€âˆš3Ã—âˆš3â€Ag and Si(111)â€3Ã—1â€Ag grown on vicinal Si(111). Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2649-2652.	0.8	4
34	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
35	Reflectance anisotropy studies of 5Ã—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
36	Magnetic second-harmonic generation from the terraces and steps of aligned magnetic nanostructures grown on low symmetry interfaces. Journal of Physics Condensed Matter, 2008, 20, 265002.	1.8	7

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37	Optical reflectance anisotropy of buried Fe nanostructures on vicinal W(110). Journal of Physics Condensed Matter, 2007, 19, 266003.	1.8	12
38	Using steps at the Siâ€“SiO2interface to test simple bond models of the optical second-harmonic response. Journal of Physics Condensed Matter, 2007, 19, 016006.	1.8	13
39	Extracting the hysteresis loops of magnetic interfaces from optical second-harmonic intensity measurements. Journal of Physics Condensed Matter, 2007, 19, 396002.	1.8	8
40	Surface phonons of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Si</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mn>111</mml:mn><mml:mo>)</mml:mo></mml:mrow><mml:mi mathvariant="normal">In</mml:mi><mml:mtext>â˜’</mml:mtext><mml:mrow><mml:mo>(</mml:mo><mml:mn>4</mml:mn><mml:mo xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inlin. Physical Review B, 2007, 76, .	3.2	28
41	Optical and electronic properties of Ag nanodots on Si(111). Journal of Physics Condensed Matter, 2006, 18, 6979-6986.	1.8	11
42	Free-electron response in reflectance anisotropy spectra. Physical Review B, 2006, 74, .	3.2	8
43	Optical and magnetic properties of europium sulphide thin films grown by pulsed laser deposition. Thin Solid Films, 2005, 488, 200-203.	1.8	5
44	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
45	Optical properties of indium nanowires - an adsorption study. Physica Status Solidi (B): Basic Research, 2005, 242, 2655-2663.	1.5	6
46	Optical response of Ag-induced reconstructions on vicinal Si(111). Physica Status Solidi (B): Basic Research, 2005, 242, 3017-3021.	1.5	3
47	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
48	Atomic indium nanowires on Si(111): the (4 Ã— 1)â€“(8 Ã— 2) phase transition studied with reflectance anisotropy spectroscopy. Applied Surface Science, 2004, 234, 302-306.	6.1	15
49	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
50	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
51	Bond hyperpolarizabilitiesâ€“ SHG simplified?. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 3060-6064.	0.8	4
52	Phonon and polarized reflectance spectra fromSi(111)â˜’(4Ã—1)In:â€‚â€‚Evidence for a charge-density-wave driven phase transition. Physical Review B, 2003, 67, .	3.2	48
53	Spectroscopic Investigations of Borosilicate Glass and Its Application as a Dopant Source for Shallow Junctions. Journal of the Electrochemical Society, 2000, 147, 3100.	2.9	16
54	Optical Second-Harmonic Generation as a Semiconductor Surface and Interface Probe. Physica Status Solidi A, 1999, 175, 153-167.	1.7	66

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55	Optical Second Harmonic Generation Studies of Indium Deposited on Vicinal Si(111). Physica Status Solidi A, 1999, 175, 189-193.	1.7	6
56	SECOND-HARMONIC GENERATION AT SEMICONDUCTOR AND METAL SURFACES. Surface Review and Letters, 1999, 06, 529-558.	1.1	32
57	Spontaneous emission of dye molecules, semiconductor nanocrystals, and rare-earth ions in opal-based photonic crystals. Journal of Lightwave Technology, 1999, 17, 2128-2137.	4.6	80
58	Erbium and Terbium Luminescence from Solâ€“Gel Derived In2O3 Films on Porous Silicon. Physica Status Solidi A, 1998, 165, 131-134.	1.7	16
59	Epioptic studies of vicinalSi(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
60	A review of optical second-harmonic and sum-frequency generation at surfaces and interfaces. Journal Physics D: Applied Physics, 1996, 29, 1812-1821.	2.8	78
61	Effect of adlayer dimer orientation on the optical anisotropy of single domain Si(001). Applied Physics Letters, 1996, 69, 176-178.	3.3	18
62	Optical Techniques for Probing Semiconductor Surfaces and Interfaces. , 1996, , 163-167.		1
63	Optical second-harmonic generation studies of the structure of porous silicon surfaces. Thin Solid Films, 1995, 255, 146-148.	1.8	12
64	Development of a LED-based phase fluorimetric oxygen sensor using evanescent wave excitation of a sol-gel immobilized dye. Sensors and Actuators B: Chemical, 1995, 29, 226-230.	7.8	76
65	Optical characterisation of semiconductor surfaces and interfaces. Progress in Surface Science, 1995, 49, 1-106.	8.3	163
66	Resonant Optical Second Harmonic Generation at the Steps of Vicinal Si(001). Physical Review Letters, 1995, 75, 1138-1141.	7.8	58
67	Angle-resolved photoemission from an unusual quasi-one-dimensional metallic system: a single domain Au-induced 5 Ã— 2 reconstruction of Si(111). Surface Science, 1995, 325, 45-49.	1.9	57
68	Second Harmonic and Sum Frequency Generation. , 1995, , 183-206.		1
69	Nucleation and evolution of the Au-induced 5Ã—2 structure on vicinal Si(111). Physical Review B, 1994, 49, 2527-2535.	3.2	62
70	Spectroscopic optical second-harmonic generation from semiconductor interfaces. Applied Physics A: Solids and Surfaces, 1994, 59, 401-405.	1.4	16
71	Fibre optic chemical sensors based on evanescent wave interactions in sol-gel-derived porous coatings. Journal of Sol-Gel Science and Technology, 1994, 2, 661-665.	2.4	45
72	Probing semiconductor interfaces using nonlinear optical spectroscopy. Optical Engineering, 1994, 33, 3895.	1.0	18

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73	Development of an intrinsic phase fluorimetric oxygen sensor using a high-intensity blue LED. , 1994, 2360, 461.		0
74	In situ optical spectroscopy of surfaces and interfaces with submonolayer resolution. Applied Surface Science, 1993, 63, 99-105.	6.1	7
75	Fibre optic oxygen sensor based on fluorescence quenching of evanescent-wave excited ruthenium complexes in solâ€“gel derived porous coatings. Analyst, The, 1993, 118, 385-388.	3.5	226
76	Resonance and local-field effects in the characterization of molecular monolayers by optical second-harmonic generation. Synthetic Metals, 1993, 61, 181-184.	3.9	10
77	The effect of the local field on the optical second-harmonic response of mixed liquid crystal-stearic acid monolayers. Journal of Physics Condensed Matter, 1993, 5, 3791-3800.	1.8	12
78	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
79	Resonant optical second-harmonic generation from mixed liquid crystal-stearic acid monolayers. Journal of Physics Condensed Matter, 1992, 4, 7965-7972.	1.8	14
80	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
81	A structural study of the sol-gel process by optical fluorescence and decay time spectroscopy. Journal of Non-Crystalline Solids, 1991, 135, 8-14.	3.1	87
82	Characterization of the Si(111)-Ga interface using optical second-harmonic generation. Journal of Physics Condensed Matter, 1991, 3, S193-S198.	1.8	1
83	N6,7O4,5O4,5Auger spectrum of metallic Au. Physical Review B, 1991, 43, 9550-9557.	3.2	19
84	Simplification of the N6.7O4.5O4.5Auger spectrum of Au. Journal of Physics Condensed Matter, 1990, 2, 195-200.	1.8	11
85	Epioptics: linear and non-linear optical spectroscopy of surfaces and interfaces. Journal of Physics Condensed Matter, 1990, 2, 7985-8006.	1.8	87
86	Optical second-harmonic generation for studying surfaces and interfaces. Journal of Physics Condensed Matter, 1989, 1, SB85-SB92.	1.8	28
87	The spatial distribution of flux produced by single capillary gas dosers. Vacuum, 1988, 38, 341-344.	3.5	13
88	The angular distribution of thermal molecular beams formed by single capillaries in the molecular flow regime. Vacuum, 1988, 38, 463-467.	3.5	13
89	Schottky contacts to cleaved GaAs (110) surfaces. II. Thermodynamic aspects. Journal of Physics C: Solid State Physics, 1988, 21, 807-818.	1.5	16
90	Metal adatoms on oxidised silicon surfaces. Semiconductor Science and Technology, 1988, 3, 937-942.	2.0	5

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91	Alloying and entropy effects in predicting metal/compoundâ€“semiconductor interface reactivity. Journal of Materials Research, 1987, 2, 516-523.	2.6	13
92	Determining metal-semiconductor interface structure by optical second-harmonic generation. Semiconductor Science and Technology, 1987, 2, 102-107.	2.0	14
93	Determining metalâ€“semiconductor interface structure by optical secondâ€harmonic generation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 1442-1446.	2.1	24
94	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
95	Probing the buried metal-semiconductor interface by optical second harmonic generation: Au on Si(1 1) Tj ETQq1 1 0.784314 rgBT /Ove	1.9	44
96	A simple semiquantitative model for classifying metalâ€“compound semiconductor interface reactivity. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1985, 3, 1641.	1.6	18
97	On predicting the chemical reactivity of metal-semiconductor interfaces. Journal of Physics C: Solid State Physics, 1984, 17, 2249-2254.	1.5	52
98	Soft X-ray photoemission spectroscopy of chemical reactivity at metal-GaSe interfaces. Vacuum, 1983, 33, 607-612.	3.5	22
99	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. Journal of Physics B: Atomic and Molecular Physics, 1980, 13, 1953-1960.	1.6	12
100	The L3M2,3M4,5, L2,3M2,3M2,3and L3M1M4,5Auger spectra of Cu, Zn and Ge. Journal of Physics C: Solid State Physics, 1978, 11, 643-650.	1.5	28
101	The N6,7O4,5O4.5Auger spectra of thallium, lead and bismuth. Journal of Physics C: Solid State Physics, 1977, 10, 3445-3460.	1.5	55
102	The L2,3M4,5M4,5Auger and photoelectron spectra of germanium. Journal of Physics C: Solid State Physics, 1976, 9, 3541-3555.	1.5	36
103	Solid-state effects in the quasiatomic L2,3M4,5M4,5Auger spectra of zinc. Journal of Physics C: Solid State Physics, 1976, 9, L585-L590.	1.5	39
104	Electrical characteristics of an X-ray photoelectron spectrometer. Journal of Electron Spectroscopy and Related Phenomena, 1975, 6, 397-409.	1.7	20
105	Radiation damage in some platinum(IV) complexes produced during soft X-ray photoelectron spectroscopic studies. Journal of the Chemical Society, Faraday Transactions 2, 1975, 71, 177.	1.1	40