David E Aspnes

List of Publications by Year
in descending order

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218 papers	17,463 citations	19608 61 h-index	13338 130 g-index
219 all docs	219 docs citations	219 times ranked	8810 citing authors

#	Article	IF	Citations
1	Dielectric functions and optical parameters of Si, Ge, GaP, GaAs, GaSb, InP, InAs, and InSb from 1.5 to 6.0 eV. Physical Review B, 1983, 27, 985-1009.	1.1	3,499
2	Investigation of effective-medium models of microscopic surface roughness by spectroscopic ellipsometry. Physical Review B, 1979, 20, 3292-3302.	1.1	948
3	Optical properties of AlxGa1â^'xAs. Journal of Applied Physics, 1986, 60, 754-767.	1.1	830
4	Localâ€field effects and effectiveâ€medium theory: A microscopic perspective. American Journal of Physics, 1982, 50, 704-709.	0.3	643
5	Schottky-Barrier Electroreflectance: Application to GaAs. Physical Review B, 1973, 7, 4605-4625.	1.1	570
6	High Precision Scanning Ellipsometer. Applied Optics, 1975, 14, 220.	2.1	530
7	Application of reflectance difference spectroscopy to molecularâ€beam epitaxy growth of GaAs and AlAs. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1988, 6, 1327-1332.	0.9	499
8	Anisotropies in the Aboveâ€"Band-Gap Optical Spectra of Cubic Semiconductors. Physical Review Letters, 1985, 54, 1956-1959.	2.9	404
9	Reflectance-difference spectroscopy of (001) GaAs surfaces in ultrahigh vacuum. Physical Review B, 1992, 46, 15894-15904.	1.1	326
10	Dielectric properties of heavily doped crystalline and amorphous silicon from 1.5 to 6.0 eV. Physical Review B, 1984, 29, 768-779.	1.1	316
11	Electric-Field Effects on Optical Absorption near Thresholds in Solids. Physical Review, 1966, 147, 554-566.	2.7	309
12	Electric Field Effects on the Dielectric Constant of Solids. Physical Review, 1967, 153, 972-982.	2.7	291
13	Optical properties of Au: Sample effects. Physical Review B, 1980, 21, 3290-3299.	1.1	282
14	Spectroscopic Analysis of the Interface Between Si and Its Thermally Grown Oxide. Journal of the Electrochemical Society, 1980, 127, 1359-1365.	1.3	239
15	Approximate solution of ellipsometric equations for optically biaxial crystals. Journal of the Optical Society of America, 1980, 70, 1275.	1.2	229
16	Chemical etching and cleaning procedures for Si, Ge, and some IIIâ€V compound semiconductors. Applied Physics Letters, 1981, 39, 316-318.	1.5	227
17	Surface science at atmospheric pressure: Reconstructions on (001) GaAs in organometallic chemical vapor deposition. Physical Review Letters, 1992, 68, 627-630.	2.9	223
18	Optical reflectance and electron diffraction studies of molecular-beam-epitaxy growth transients on GaAs(001). Physical Review Letters, 1987, 59, 1687-1690.	2.9	215

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19	Precision Bounds to Ellipsometer Systems. Applied Optics, 1975, 14, 1131.	2.1	212
20	Optical properties and damage analysis of GaAs single crystals partly amorphized by ion implantation. Journal of Applied Physics, 1984, 56, 2664-2671.	1.1	207
21	Resonant Nonlinear Optical Susceptibility: Electroreflectance in the Low-Field Limit. Physical Review B, 1972, 5, 4022-4030.	1.1	163
22	Exciton-dominated Dielectric Function of Atomically Thin MoS2 Films. Scientific Reports, 2015, 5, 16996.	1.6	155
23	Dependence of plasmon polaritons on the thickness of indium tin oxide thin films. Journal of Applied Physics, 2008, 103, .	1.1	149
24	Band nonparabolicities, broadening, and internal field distributions: The spectroscopy of Franz-Keldysh oscillations. Physical Review B, 1974, 10, 4228-4238.	1.1	146
25	Optimizing precision of rotating-analyzer ellipsometers. Journal of the Optical Society of America, 1974, 64, 639.	1.2	143
26	Effects of component optical activity in data reduction and calibration of rotating-analyzer ellipsometers. Journal of the Optical Society of America, 1974, 64, 812.	1.2	138
27	Kinetic Limits of Monolayer Growth on (001) Gaas by Organometallic Chemical-vapor Deposition. Physical Review Letters, 1988, 61, 2782-2785.	2.9	137
28	Minimal-data approaches for determining outer-layer dielectric responses of films from kinetic reflectometric and ellipsometric measurements. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1993, 10, 974.	0.8	126
29	Methods for drift stabilization and photomultiplier linearization for photometric ellipsometers and polarimeters. Review of Scientific Instruments, 1978, 49, 291-297.	0.6	123
30	Electro-Absorption Effects at the Band Edges of Silicon and Germanium. Physical Review, 1966, 145, 575-583.	2.7	122
31	Growth of AlxGa1â^'xAs parabolic quantum wells by realâ€time feedback control of composition. Applied Physics Letters, 1992, 60, 1244-1246.	1.5	116
32	Shallow acceptor complexes in p-type ZnO. Applied Physics Letters, 2013, 102, .	1.5	116
33	Application of ellipsometry to crystal growth by organometallic molecular beam epitaxy. Applied Physics Letters, 1990, 56, 2569-2571.	1.5	114
34	Surface-Induced Optical Anisotropies of Single-Domain(2Ã—1)Reconstructed (001) Si and Ge Surfaces. Physical Review Letters, 1995, 74, 3431-3434.	2.9	114
35	Optical Properties of GaAs and Its Electrochemically Grown Anodic Oxide from 1.5 to 6.0 eV. Journal of the Electrochemical Society, 1981, 128, 590-597.	1.3	113
36	Electroreflectance and ellipsometry of silicon from 3 to 6 eV. Physical Review B, 1978, 18, 1824-1839.	1.1	110

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37	Optical Properties of the Interface between Si and Its Thermally Grown Oxide. Physical Review Letters, 1979, 43, 1046-1050.	2.9	109
38	Direct optical measurement of surface dielectric responses: Interrupted growth on (001) GaAs. Physical Review Letters, 1990, 64, 192-195.	2.9	108
39	Plasmonic phenomena in indium tin oxide and ITO-Au hybrid films. Optics Letters, 2009, 34, 2867.	1.7	103
40	Optical properties ofIn1âˆ’xGaxAsyP1âˆ’yfrom 1.5 to 6.0 eV determined by spectroscopic ellipsometry. Physical Review B, 1982, 26, 6669-6681.	1.1	102
41	Growth, Doping and Characterization of Al_xGa_{1âˆ’x}N Thin Film Alloys on 6H-SiC(0001) Substrates. MRS Internet Journal of Nitride Semiconductor Research, 1996, 1, 1.	1.0	101
42	Oxygen-deficiency-induced localized optical excitations inYBa2Cu3Ox. Physical Review B, 1988, 38, 870-873.	1.1	100
43	Nondestructive analysis of Hg1âˆ’xCdxTe (x=0.00, 0.20, 0.29, and 1.00) by spectroscopic ellipsometry. II. Substrate, oxide, and interface properties. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1984, 2, 1316-1323.	0.9	99
44	Optical properties of copper-oxygen planes in superconducting oxides and related materials. Physical Review B, 1989, 40, 6797-6805.	1.1	98
45	Schottky-barrier electroreflectance of Ge: Nondegenerate and orbitally degenerate critical points. Physical Review B, 1975, 12, 2297-2310.	1.1	95
46	Interband Dielectric Properties of Solids in an Electric Field. Physical Review, 1968, 166, 921-933.	2.7	94
47	Direct Verification of the Third-Derivative Nature of Electroreflectance Spectra. Physical Review Letters, 1972, 28, 168-171.	2.9	92
48	Nondestructive analysis of Hg1âˆ’xCdxTe (x=0.00, 0.20, 0.29, and 1.00) by spectroscopic ellipsometry. I. Chemical oxidation and etching. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1984, 2, 1309-1315.	0.9	87
49	Insitudetermination of freeâ€carrier concentrations by reflectance difference spectroscopy. Applied Physics Letters, 1991, 59, 3443-3445.	1.5	86
50	Optical properties of anodically grown native oxides on some Gaâ€V compounds from 1.5 to 6.0 eV. Journal of Applied Physics, 1977, 48, 3510-3513.	1.1	83
51	Direct Determination of Sizes of Excitations from Optical Measurements on Ion-Implanted GaAs. Physical Review Letters, 1982, 48, 1863-1866.	2.9	82
52	Electro-Optic Measurements of PbS, PbSe, and PbTe. Physical Review, 1968, 173, 714-728.	2.7	78
53	Dielectric function and surface microroughness measurements of InSb by spectroscopic ellipsometry. Journal of Vacuum Science and Technology, 1980, 17, 1057-1060.	1.9	78
54	Optical-standard surfaces of single-crystal silicon for calibrating ellipsometers and reflectometers. Applied Optics, 1994, 33, 7435.	2.1	77

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55	Optical anisotropy of singular and vicinal Siâ€"SiO2 interfaces and Hâ€terminated Si surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 1152-1157.	0.9	76
56	Optical control of growth of AlxGa1â^'xAs by organometallic molecular beam epitaxy. Applied Physics Letters, 1990, 57, 2707-2709.	1.5	74
57	Correlation of dopant-induced optical transitions with superconductivity inLa2â^'xSrxCuO4â^'Î´. Physical Review B, 1988, 37, 3396-3399.	1.1	73
58	Lowâ€retardance fusedâ€quartz window for realâ€time optical applications in ultrahigh vacuum. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1989, 7, 3291-3294.	0.9	73
59	Optical anisotropy ofYBa2Cu3O7â^'x. Physical Review B, 1988, 38, 5077-5080.	1.1	72
60	Simplified bond-hyperpolarizability model of second harmonic generation. Physical Review B, 2002, 65, .	1.1	69
61	Interband Masses of Higher Interband Critical Points in Ge. Physical Review Letters, 1973, 31, 230-233.	2.9	65
62	Semiconductor topography in aqueous environments: Tunneling microscopy of chemomechanically polished (001)â€‰GaAs. Applied Physics Letters, 1987, 50, 1742-1744.	1.5	61
63	Realâ€time assessment of overlayer removal on GaN, AlN, and AlGaN surfaces using spectroscopic ellipsometry. Applied Physics Letters, 1996, 69, 2065-2067.	1.5	58
64	Transverse electroreflectance in semi-insulating silicon and gallium arsenide. Journal of Physics and Chemistry of Solids, 1970, 31, 227-246.	1.9	54
65	Electroreflectance of GaSb from 0.6 to 26 eV. Physical Review B, 1976, 14, 4450-4458.	1.1	52
66	Study of strain and disorder of InxGa1â^'xP/(GaAs, graded GaP) (0.25â‰¤xâ‰¤0.8) using spectroscopic ellipsometry and Raman spectroscopy. Journal of Applied Physics, 1994, 75, 5040-5051.	1.1	52
67	Variation of GaN valence bands with biaxial stress and quantification of residual stress. Applied Physics Letters, 1997, 70, 2001-2003.	1.5	51
68	Optical spectra and electronic structure of crystalline and glassy Ge(S,Se)2. Physical Review B, 1981, 23, 816-822.	1.1	49
69	Measurement and Correction of First-Order Errors in Ellipsometry. Journal of the Optical Society of America, 1971, 61, 1077.	1.2	47
70	Dielectric functions ofInxGa1â^'xAsalloys. Physical Review B, 2003, 68, .	1.1	43
71	Real-Time Observation of Atomic Ordering in (001)In0.53Ga0.47AsEpitaxial Layers. Physical Review Letters, 1995, 74, 3640-3643.	2.9	42
72	Liquid gallium and the eutectic gallium indium (EGaIn) alloy: Dielectric functions from 1.24 to 3.1 eV by electrochemical reduction of surface oxides. Applied Physics Letters, 2016, 109, .	1.5	42

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73	Trends in residual stress for GaN/AlN/6Hâ€"SiC heterostructures. Applied Physics Letters, 1998, 73, 2808-2810.	1.5	41
74	Properties of Hg0.71Cd0.29Te and some native oxides by spectroscopic ellipsometry. Journal of Applied Physics, 1983, 54, 7132-7138.	1.1	39
75	Photometric ellipsometer for measuring partially polarized light. Journal of the Optical Society of America, 1975, 65, 1274.	1.2	38
76	Optical approaches to determine nearâ€surface compositions during epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 960-966.	0.9	37
77	Spectroscopic ellipsometric characterization of undoped ZnTe films grown on GaAs. Applied Physics Letters, 1997, 70, 610-612.	1.5	34
78	Microstructurally engineered, optically transmissive, electrically conductive metal films. Journal of Applied Physics, 1986, 60, 3028-3034.	1.1	33
79	Investigation of the relationship between reflectance difference spectroscopy and surface structure using grazing incidence X-ray scattering. Physica Status Solidi A, 1995, 152, 9-21.	1.7	33
80	Isotopic effects on the dielectric response of Si around theE1gap. Physical Review B, 2000, 61, 12946-12951.	1.1	32
81	Optimizing precision of rotating-analyzer and rotating-compensator ellipsometers. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2004, 21, 403.	0.8	32
82	Minimalâ€data approaches for determining outerâ€layer dielectric responses of films from kinetic reflectometric and ellipsometric measurements. Applied Physics Letters, 1993, 62, 343-345.	1.5	30
83	Spectroscopic ellipsometryâ€"A perspective. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	0.9	29
84	Optical properties of InSb and its electrochemically grown anodic oxide. Physical Review B, 1981, 23, 1896-1901.	1.1	27
85	Polarimetry of Specular and Non-Multiple-Scattered Electromagnetic Radiation from Selectively Roughened Si Surfaces. Physical Review Letters, 1978, 41, 1667-1670.	2.9	26
86	Experiment and theory of â€˜transparentâ€™ metal films. Nature, 1985, 313, 664-666.	13.7	26
87	Optical study of (AlxGa1âˆ'x)0.5In0.5P/GaAs semiconductor alloys by spectroscopic ellipsometry. Journal of Applied Physics, 1993, 73, 400-406.	1.1	26
88	Optical properties of AlxGa1âˆ'xPâ€,(0â©½xâ©½0.52) alloys. Journal of Applied Physics, 2000, 87, 1287-1290.	1.1	26
89	Elimination of endpoint-discontinuity artifacts in the analysis of spectra in reciprocal space. Journal of Applied Physics, 2001, 89, 8183-8192.	1.1	26
90	Differences Between Charge Trapping States in Irradiated Nano-Crystalline HfO$_{2}$ and Non-Crystalline Hf Silicates. IEEE Transactions on Nuclear Science, 2006, 53, 3644-3648.	1.2	26

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91	Evidence of near-surface localization of excited electronic states in crystalline Si. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1196.	1.6	25
92	Surface and interface effects on ellipsometric spectra of crystalline Si. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1205.	1.6	25
93	Ordinary and extraordinary dielectric functions of 4Hâ€“ and 6Hâ€“SiC from 3.5 to 9.0 eV. Applied Physics Letters, 2001, 78, 2715-2717.	1.5	25
94	Comment on â€œAb InitioCalculation of Excitonic Effects in the Optical Spectra of Semiconductorsâ€. Physical Review Letters, 1999, 83, 3970-3970.	2.9	24
95	Interband transitions of InAsxSb1âˆ’x alloy films. Applied Physics Letters, 2009, 95, 111902.	1.5	24
96	Ellipsometric studies of Cd1âˆ’xMgxTe (0â©½xâ©½0.5) alloys. Applied Physics Letters, 1997, 71, 249-251.	1.5	23
97	Application of the anisotropic bond model to second-harmonic generation from amorphous media. Physical Review B, 2008, 77, .	1.1	23
98	<title>Optical Detection And Minimization Of Surface Overlayers On Semiconductors Using Spectroscopic Ellipsometry</title>. Proceedings of SPIE, 1981, 0276, 227.	0.8	22
99	Analytic representations of the dielectric functions of crystalline and amorphous Si and crystalline Ge for very large scale integrated device and structural modeling. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 1654-1657.	0.9	22
100	Visible-near ultraviolet ellipsometric study of Zn1âˆ’xMgxSe and Zn1âˆ’xBexSe alloys. Journal of Applied Physics, 2000, 88, 878-882.	1.1	21
101	Optical and structural characterization of epitaxial graphene on vicinal 6H-SiC(0001)â€“Si by spectroscopic ellipsometry, Auger spectroscopy, and STM. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	0.6	21
102	Simplified bond-hyperpolarizability model of second harmonic generation: Application to Si-dielectric interfaces. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 1699.	1.6	20
103	Extended spectroscopy with high-resolution scanning ellipsometry. Physical Review B, 1975, 12, 4008-4011.	1.1	19
104	Effect of surface and nonuniform fields in electroreflectance: Application to Ge. Physical Review B, 1978, 17, 3310-3317.	1.1	19
105	Nondestructive Measurement of a Glass Transition Temperature at Spin-Cast Semicrystalline Polymer Surfaces. Macromolecules, 2001, 34, 2395-2397.	2.2	19
106	Grain-size effects in the parallel-band absorption spectrum of aluminum. Physical Review B, 1986, 33, 5363-5367.	1.1	18
107	Measurement and control of in-plane surface chemistry during the oxidation of H-terminated (111) Si. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17503-17508.	3.3	18
108	Combined interpolation, scale change, and noise reduction in spectral analysis. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 052903.	0.6	18

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109	Analysis of optical spectra by Fourier methods: filtering and least-squares regression in reciprocal space. Journal of the Optical Society of America, 1983, 73, 1759.	1.2	17
110	Multiple determination of the optical constants of thin-film coating materials: a Rh sequel. Applied Optics, 1986, 25, 1299.	2.1	17
111	Optical dielectric response of PdO. Physical Review B, 1992, 46, 15085-15091.	1.1	17
112	As capture and the growth of ultrathin InAs layers on InP. Applied Physics Letters, 1994, 64, 3279-3281.	1.5	17
113	Effect of Ar+ ion beam in the process of plasma surface modification of PET films. Journal of Applied Polymer Science, 2000, 77, 1679-1683.	1.3	17
114	Relative bulk and interface contributions to optical second-harmonic generation in silicon. Physical Review B, 2005, 72, .	1.1	17
115	Summary Abstract: Preparation of highâ€quality surfaces on semiconductors by selective chemical etching. Journal of Vacuum Science and Technology, 1982, 20, 488-489.	1.9	16
116	Real-time optical characterization of heteroepitaxy by organometallic chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1184-1189.	0.9	16
117	Dielectric functions and electronic structure of InAsxP1â^'x films on InP. Applied Physics Letters, 2007, 91, .	1.5	16
118	Reflectance difference spectroscopy spectra of clean (3Ã—2), (2Ã—1), and c(2Ã—2)â€‰3C-SiC(001) surfaces: New evidence for surface state contributions to optical anisotropy spectra. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 2355.	1.6	15
119	Combined beam profile reflectometry, beam profile ellipsometry and ultraviolet-visible spectrophotometry for the characterization of ultrathin oxide-nitride-oxide films on silicon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 380-384.	0.9	15
120	Analytic determination of n, Îº, and d of an absorbing film from polarimetric data in the thin-film limit. Journal of Applied Physics, 2007, 101, 033109.	1.1	15
121	Effect of overlayers on critical-point parameters in the analysis of ellipsometric spectra. Applied Physics Letters, 2007, 91, 121903.	1.5	15
122	Realâ€time optical diagnostics for epitaxial growth. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 870-875.	0.9	14
123	Photon-induced localization and final-state correlation effects in optically absorbing materials. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 2367.	1.6	14
124	Surface-induced optical anisotropy of Si and Ge. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 2229.	1.6	14
125	Calculation of bulk third-harmonic generation from crystalline Si with the simplified bond hyperpolarizability model. Physical Review B, 2004, 70, .	1.1	14
126	Optical properties of InxAl1â^'xAs alloy films. Applied Physics Letters, 2008, 92, 151907.	1.5	14

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127	Electroreflectance: A Status Report. Physica Status Solidi (B): Basic Research, 1973, 55, 9-32.	0.7	13
128	Model dielectric functions for AlxGa1âˆ’xAs alloys of arbitrary compositions. Journal of Applied Physics, 2008, 104, 013515.	1.1	13
129	Ellipsometric study of single-crystal Î³-InSe from 1.5 to 9.2 eV. Applied Physics Letters, 2010, 96, 181902.	1.5	13
130	Optical properties of Cd1âˆ’xMgxTe (x=0.00, 0.23, 0.31, and 0.43) alloy films. Applied Physics Letters, 2004, 84, 693-695.	1.5	12
131	Linear and nonlinear filtering of spectra. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 051205.	0.6	12
132	Spectroscopic ellipsometric and He backscattering analyses of crystalline Siâ€SiO2mixtures grown by molecular beam epitaxy. Applied Physics Letters, 1984, 44, 517-519.	1.5	11
133	Dielectric function of epitaxial ZnSe films. Applied Physics Letters, 2000, 77, 3364-3366.	1.5	11
134	Digital data smoothing utilizing Chebyshev polynomials. Analytical Chemistry, 1975, 47, 1181-1183.	3.2	10
135	As capture and the growth of ultrathin InAs layers on InP. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 1180-1185.	0.9	10
136	Above-band-gap dielectric functions of ZnGeAs<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>: Ellipsometric measurements and quasiparticle self-consistent<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvarian	1.1	10
137	Simple Method of Ratio Recording. Review of Scientific Instruments, 1967, 38, 1663-1665.	0.6	9
138	Optical characterization of a native oxide anodically grown on gallium antimonide. Applied Physics Letters, 1976, 28, 631-632.	1.5	9
139	<title>Photomultiplier Linearization And System Stabilization For Photometric Ellipsometers And Polarimeters</title>. Proceedings of SPIE, 1977, 0112, 62.	0.8	9
140	Band Structure and Optical Properties of In_{1-x}Ga_xAs_yP_{1-y}. Japanese Journal of Applied Physics, 1980, 19, 327.	0.8	9
141	Optical investigations of surface processes in GaP heteroepitaxy on silicon under pulsed chemical beam epitaxy conditions. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 3040.	1.6	9
142	Pseudodielectric functions of InGaAs alloy films grown on InP. Applied Physics Letters, 2002, 81, 2367-2369.	1.5	9
143	Application of the simplified bond-hyperpolarizability model to fourth-harmonic generation. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1798.	1.6	9
144	Extended Gaussian Filtering for Noise Reduction in Spectral Analysis. Journal of the Korean Physical Society, 2020, 77, 819-823.	0.3	9

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145	Performance capabilities of reflectometers and ellipsometers for compositional analysis during AlxGa1âˆ’xAs epitaxy. Applied Physics Letters, 1995, 66, 1617-1619.	1.5	8
146	Bond models in linear and nonlinear optics. Physica Status Solidi (B): Basic Research, 2010, 247, 1873-1880.	0.7	8
147	Bond-specific reaction kinetics during the oxidation of (111) Si: Effect of n-type doping. Applied Physics Letters, 2011, 98, .	1.5	8
148	Effect of strain on bond-specific reaction kinetics during the oxidation of H-terminated (111) Si. Applied Physics Letters, 2011, 98, 121912.	1.5	8
149	Maximum-entropy revisited: Optimal filtering of spectra. Journal of Applied Physics, 2021, 129, .	1.1	8
150	Analysis of Strain in GaN on Al₂O₃ and 6H-SiC: Near-Bandedge Phenomena. Materials Research Society Symposia Proceedings, 1995, 395, 405.	0.1	7
151	New approach to preparing smooth Si(100) surfaces: Characterization by spectroellipsometry and validation of Si/SiO2 interfaces properties in metal-oxide-semiconductor devices. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 2812.	1.6	7
152	High-Resolution Spectroscopy with Reciprocal-Space Analysis. Physica Status Solidi (B): Basic Research, 1999, 215, 715-723.	0.7	7
153	Systematic approach for analyzing reflectance-difference spectra: Application to silicon-dielectric interfaces. Applied Physics Letters, 2006, 88, 202112.	1.5	7
154	Initial stages of GaP heteroepitaxy on nanoscopically roughened (001)Si. Journal of Vacuum Science & Technology B, 2007, 25, 1448.	1.3	7
155	Investigation of effective-medium approximation, alloy, average-composition, and graded-composition models for interface analysis by spectroscopic ellipsometry. Journal of Applied Physics, 2007, 102, 063512.	1.1	7
156	Quantitative assessment of linear noise-reduction filters for spectroscopy. Optics Express, 2020, 28, 38917.	1.7	7
157	Optical Reflectance and Rheed Transients During Mbe Growth on (001) GaAs. Materials Research Society Symposia Proceedings, 1987, 91, 57.	0.1	6
158	Dielectric functions and interband transitions of In1âˆ’xAlxSb alloys. Applied Physics Letters, 2010, 97, .	1.5	6
159	Interband transitions and dielectric functions of InGaSb alloys. Applied Physics Letters, 2013, 102, .	1.5	6
160	Geometrically Exact Monochromator Alignment. Review of Scientific Instruments, 1970, 41, 966-968.	0.6	5
161	Formation of The Interface between InP and Arsenic Based Alloys by Chemical Beam Epitaxy. Materials Research Society Symposia Proceedings, 1992, 263, 267.	0.1	5
162	Real-time diagnostics for metalorganic vapor phase epitaxy. Physica Status Solidi (B): Basic Research, 2005, 242, 2551-2560.	0.7	5

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163	Toward nî°d spectroscopy: Analytic solution of the three-phase model of polarimetry in the thin-film limit. Applied Physics Letters, 2006, 88, 201107.	1.5	5
164	Note on Collision Broadening of Franzâ€Keldysh Effect. Physica Status Solidi (B): Basic Research, 1967, 23, K79.	0.7	4
165	Real-Time Surface and Near-Surface Optical Diagnostics for Epitaxial Growth. Materials Research Society Symposia Proceedings, 1993, 324, 3.	0.1	4
166	Reciprocalâ€space analysis of photoluminescence and photoluminescence excitation spectra. Applied Physics Letters, 1996, 68, 3230-3232.	1.5	4
167	Analysis of high-index Si(001) surfaces by reflectance difference spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 1652-1656.	0.9	4
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