

Peter Mascher

List of Publications by Year in descending order

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3270
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#	ARTICLE	IF	CITATIONS
1	Strain engineering in III-V photonic components through structuration of SiNx films. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2022, 40, .	1.2	6
2	Tunable emission from Eu:SiO _x N _y thin films prepared by integrated magnetron sputtering and plasma enhanced chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 043402.	2.1	0
3	(Invited) Nano Ontario - A Model for Regional Cooperation in Nanotechnology. ECS Meeting Abstracts, 2022, MA2022-01, 619-619.	0.0	0
4	PECVD Silicon Nitride-Based Multilayers with Optimized Mechanical Properties. ECS Meeting Abstracts, 2022, MA2022-01, 1052-1052.	0.0	1
5	Optical and Mechanical Properties of Europium-Doped Silicon Oxynitride Thin Films. ECS Meeting Abstracts, 2022, MA2022-01, 1093-1093.	0.0	0
6	Design and Fabrication of Multiple-Color-Generating Thin-Film Optical Filters for Photovoltaic Applications. ECS Meeting Abstracts, 2022, MA2022-01, 1064-1064.	0.0	0
7	Low-Temperature and Low-Pressure Silicon Nitride Deposition by ECR-PECVD for Optical Waveguides. Applied Sciences (Switzerland), 2021, 11, 2110.	2.5	8
8	Influence of Nitrogen on the Luminescence Properties of Ce-Doped SiO _x N _y . ECS Journal of Solid State Science and Technology, 2021, 10, 076005.	1.8	3
9	Low-loss GeO ₂ thin films deposited by ion-assisted alternating current reactive sputtering for waveguide applications. Thin Solid Films, 2020, 709, 138165.	1.8	11
10	X-ray Absorption Spectroscopy of Silicon Carbide Thin Films Improved by Nitrogen for All-Silicon Solar Cells. ECS Journal of Solid State Science and Technology, 2020, 9, 083002.	1.8	8
11	Subwavelength grating metamaterial waveguides functionalized with tellurium oxide cladding. Optics Express, 2020, 28, 18538.	3.4	10
12	Photoluminescence of silicon carbonitride thin films: The interdependence of post-deposition annealing and growth temperature. Journal of Luminescence, 2019, 214, 116563.	3.1	4
13	Process-dependent mechanical and optical properties of nanostructured silicon carbonitride thin films. Nanotechnology, 2019, 30, 314003.	2.6	11
14	Influence of Deposition Conditions on the Characteristics of Luminescent Silicon Carbonitride Thin Films. ECS Journal of Solid State Science and Technology, 2018, 7, N7-N14.	1.8	14
15	Integrated ECR-PECVD and magnetron sputtering system for rare-earth-doped Si-based materials. Surface and Coatings Technology, 2018, 336, 99-105.	4.8	9
16	On the origin of white light emission from nanostructured silicon carbonitride thin films. Journal of Luminescence, 2018, 196, 504-510.	3.1	10
17	Study on hybrid blue organic light emitting diodes with step controlled doping profiles in phosphorescent emitting layer. Optical Materials, 2018, 86, 498-504.	3.6	1
18	Excitation mechanism of Tb ³⁺ in a-Si ₃ N ₄ :H under sub-gap excitation. Journal of Luminescence, 2018, 202, 327-331.	3.1	5

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19	Unveiling the Far Infrared-to-Ultraviolet Optical Properties of Bismuth for Applications in Plasmonics and Nanophotonics. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3511-3521.	3.1	61
20	Experimental Demonstration of Tunable Directional Scattering of Visible Light from All-Dielectric Asymmetric Dimers. <i>ACS Photonics</i> , 2017, 4, 489-494.	6.6	78
21	Defect evolution and its impact on the ferromagnetism of Cu-doped ZnO nanocrystals upon thermal treatment: A positron annihilation study. <i>Journal of Applied Physics</i> , 2017, 121, 025703.	2.5	2
22	The influence of carbon on the structure and photoluminescence of amorphous silicon carbonitride thin films. <i>Thin Solid Films</i> , 2017, 622, 1-10.	1.8	29
23	Vacancy-Induced Ferromagnetic Behavior in Antiferromagnetic NiO Nanoparticles: A Positron Annihilation Study. <i>ECS Journal of Solid State Science and Technology</i> , 2017, 6, P798-P804.	1.8	16
24	Luminescence properties of Ce ³⁺ and Tb ³⁺ co-doped SiO _x N _y thin films: Prospects for color tunability in silicon-based hosts. <i>Journal of Applied Physics</i> , 2016, 119, .	2.5	15
25	Mechanism of enhanced photoluminescence of Tb ions in hydrogenated silicon-rich silicon oxide films. <i>Thin Solid Films</i> , 2016, 611, 62-67.	1.8	5
26	Hybrid Blue Organic Light Emitting Diodes with Fluorescent and Phosphorescent Emitters Along with an Interlayer. <i>Science of Advanced Materials</i> , 2016, 8, 301-306.	0.7	2
27	Raman scattering from confined acoustic phonons of silicon nanocrystals in silicon oxide matrix. <i>Physical Review B</i> , 2015, 91, .	3.2	5
28	Effect of hydrogen passivation on the photoluminescence of Tb ions in silicon rich silicon oxide films. <i>Journal of Applied Physics</i> , 2015, 118, .	2.5	6
29	Amorphous sub-nanometre Tb-doped SiO _x N _y /SiO ₂ superlattices for optoelectronics. <i>Nanotechnology</i> , 2015, 26, 085203.	2.6	10
30	On the photoluminescence of as-deposited Tb-doped silicon oxides and oxynitrides fabricated by ECR-PECVD. <i>Proceedings of SPIE</i> , 2014, , .	0.8	1
31	Structural and Optical Properties of Luminescent Silicon Carbonitride Thin Films. <i>ECS Transactions</i> , 2014, 61, 97-103.	0.5	3
32	Stress transition from compressive to tensile for silicon nanocrystals embedded in amorphous silica matrix. <i>Thin Solid Films</i> , 2014, 571, 18-22.	1.8	22
33	Excitation mechanism and thermal emission quenching of Tb ions in silicon rich silicon oxide thin films grown by plasma-enhanced chemical vapour deposition – Do we need silicon nanoclusters?. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	12
34	Luminescence characteristics of hybrid dual emitting layers in blue organic light-emitting diodes by controlling the fluorescent doping concentration. <i>Journal of Luminescence</i> , 2014, 148, 72-78.	3.1	12
35	Luminescence of Rubrene and DCJTb molecules in organic light-emitting devices. <i>Journal of Luminescence</i> , 2014, 146, 314-320.	3.1	15
36	On the origin of emission and thermal quenching of SRSO:Er ³⁺ films grown by ECR-PECVD. <i>Nanoscale Research Letters</i> , 2013, 8, 98.	5.7	18

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37	XANES and XES Studies of Luminescent Silicon Carbonitride Thin Films. ECS Transactions, 2013, 50, 49-56.	0.5	5
38	Characterization of Hybrid Dual Emitting Layers in Blue Organic Light-Emitting Diodes by Controlling the Fluorescent Doping Concentration. Materials Research Society Symposia Proceedings, 2013, 1567, 1.	0.1	0
39	Highly efficient blue organic light-emitting diodes using dual emissive layers with host-dopant system. Journal of Photonics for Energy, 2013, 3, 033598.	1.3	3
40	XANES and XEOL Investigation of Cerium and Terbium Co-Doped Silicon Oxide Films. ECS Transactions, 2012, 45, 43-48.	0.5	4
41	High contrast blue organic light-emitting diodes using inorganic multilayers of Al and ZnSe. Optics Letters, 2012, 37, 5235.	3.3	8
42	Green light emission from terbium doped silicon rich silicon oxide films obtained by plasma enhanced chemical vapor deposition. Nanotechnology, 2012, 23, 475707.	2.6	24
43	The Influence of Carbon on the Structure and Photoluminescence of Amorphous Silicon Carbonitride Thin Films. ECS Transactions, 2012, 45, 153-160.	0.5	1
44	Modeling of Spiking Analog Neural Circuits with Hebbian Learning, Using Amorphous Semiconductor Thin Film Transistors with Silicon Oxide Nitride Semiconductor Split Gates. Lecture Notes in Computer Science, 2012, , 89-96.	1.3	1
45	(Invited) Growing Si Nanocrystals within a-Si Nanoclusters Embedded in a-SiO ₂ : Evolution of Photoluminescence. ECS Transactions, 2012, 45, 11-19.	0.5	0
46	Quantum efficiency measurements of down-shifting using silicon nanocrystals for photovoltaic applications. , 2012, , .		4
47	Modeling of spiking analog neural circuits using organic semiconductor thin film transistors with silicon oxide nitride semiconductor gates. Organic Electronics, 2012, 13, 3254-3258.	2.6	6
48	Digital implementation of a neural network for imaging. , 2012, , .		0
49	Highly efficient blue organic light-emitting diodes using dual emissive layers with host-dopant system. , 2012, , .		0
50	Spectroscopic study of white organic light-emitting devices with various thicknesses of emissive layer. Journal of Applied Physics, 2012, 111, 014507.	2.5	9
51	Plasmonic Enhancement of Nonradiative Charge Carrier Relaxation and Proposed Effects from Enhanced Radiative Electronic Processes in SemiconductorâGold CoreâShell Nanorod Arrays. Journal of Physical Chemistry C, 2011, 115, 5578-5583.	3.1	14
52	Structural properties of near-stoichiometric composition of Ba(Ba ²⁺ _{1/3} Ba ³⁺ _{2/3})O ₃ (Ba ²⁺ = Mg, Co, or Zn and Ba ³⁺ = Nb or Ta) perovskites. Journal of Materials Research, 2011, 26, 1116-1125.	2.1	12
53	Gain flattening coatings for improved spectral performance of asymmetric multiple quantum well lasers. Applied Optics, 2011, 50, 975.	2.1	1
54	SOI back reflector for Tb-doped oxide electroluminescent devices. , 2011, , .		1

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55	The rapid prototyping of textured amorphous surfaces for the graphoepitaxial deposition of CdTe films using a focused ion beam lithography. Applied Physics A: Materials Science and Processing, 2011, 102, 259-264.	2.3	0
56	Effect of thermal treatment on the growth, structure and luminescence of nitride-passivated silicon nanoclusters. Nanoscale Research Letters, 2011, 6, 168.	5.7	25
57	Photoluminescence properties of Ba ₃ Ba ²⁺ Ba ³⁺ O ₉ (Ba ²⁺ =Mg, Co or Zn and Ba ³⁺ =Nb or Ta) ceramics with perovskite structure. Journal of Luminescence, 2011, 131, 1782-1788.	3.1	1
58	From amorphous to crystalline silicon nanoclusters: structural effects on exciton properties. Journal of Physics Condensed Matter, 2011, 23, 505302.	1.8	5
59	Structure and luminescence of rare earth-doped silicon oxides studied through their X-ray absorption near edge structure and X-ray excited optical luminescence. Physica Status Solidi (B): Basic Research, 2010, 247, 248-253.	1.5	12
60	Effect of Annealing Time on the Growth, Structure, and Luminescence of Nitride-Passivated Silicon Nanoclusters. ECS Transactions, 2010, 28, 51-59.	0.5	2
61	The role of quantum confinement and crystalline structure on excitonic lifetimes in silicon nanoclusters. Journal of Applied Physics, 2010, 108, 013105.	2.5	15
62	Application of positron annihilation and Raman spectroscopies to the study of perovskite type materials. Journal of Applied Physics, 2010, 108, 114109.	2.5	7
63	Semiconductor nanotechnology: novel materials and devices for electronics, photonics and renewable energy applications. Nanotechnology, 2010, 21, 130201.	2.6	9
64	Photoluminescence from Er-doped Si-rich Si oxides deposited by magnetron sputtering in Ar or Ar+H ₂ plasmas. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 101-108.	2.1	5
65	Structure and Luminescence of Rare Earth-doped Silicon Oxides Studied Through XANES and XEOL. ECS Transactions, 2009, 25, 213-222.	0.5	0
66	The Effects of Deposition and Processing Parameters on the Electronic Structure and Photoluminescence from Nitride-Passivated Silicon Nanoclusters. ECS Transactions, 2009, 16, 33-41.	0.5	1
67	Photoluminescence and positron annihilation spectroscopy of MeV Si ⁺ ion-irradiated Si _y O _{1+y/3} :Er thin films. Journal of Applied Physics, 2009, 105, 053517.	2.5	1
68	Photoluminescence and positron annihilation spectroscopy investigation of (Ge, Er) codoped Si oxides deposited by magnetron sputtering. Journal of Applied Physics, 2009, 105, 014312.	2.5	5
69	Atypical grain growth for (211) CdTe films deposited on surface reconstructed (100) SrTiO ₃ substrates. Applied Surface Science, 2009, 255, 5674-5681.	6.1	16
70	The role of substrate surface termination in the deposition of (111) CdTe on (0001) sapphire. Applied Physics A: Materials Science and Processing, 2009, 96, 429-433.	2.3	15
71	Observation of non-radiative de-excitation processes in silicon nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 969-972.	1.8	6
72	Study of the early stages of clustering in Al-Mg-Si alloys using the electrical resistivity measurements. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 525, 186-191.	5.6	87

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73	Low-Loss Perovskite Niobates $Ba(M_{1/3}^{2+}Nb_{2/3})O_3$: Composition, Structure, and Microwave Dielectric Properties. <i>Ferroelectrics</i> , 2009, 387, 36-45.	0.6	10
74	The Dependence of the Plasmon Field Induced Nonradiative Electronic Relaxation Mechanisms on the Gold Shell Thickness in Vertically Aligned CdTe~Au Core~Shell Nanorods. <i>Nano Letters</i> , 2009, 9, 3772-3779.	9.1	17
75	The Effect of Chemical Composition on the Structure and Dielectric Properties of the Columbites $A^{2+}Nb_2O_6$. <i>Journal of the Electrochemical Society</i> , 2009, 156, G206.	2.9	4
76	Exciton Lifetime Tuning by Changing the Plasmon Field Orientation with Respect to the Exciton Transition Moment Direction: CdTe-Au Core~Shell Nanorods. <i>Nano Letters</i> , 2009, 9, 1242-1248.	9.1	15
77	The formation of light emitting cerium silicates in cerium-doped silicon oxides. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	29
78	The Effect of Impurity Phases on the Structure and Properties of Microwave Dielectrics Based on Complex Perovskites $Ba(Co_{1/32}Nb_{2/3})O_3$. <i>Ferroelectrics</i> , 2009, 387, 189-196.	0.6	7
79	Epitaxially Driven Formation of Intricate Supported Gold Nanostructures on a Lattice-Matched Oxide Substrate. <i>Nano Letters</i> , 2009, 9, 4258-4263.	9.1	20
80	The Influence of Structural Ordering on Luminescence from Nitride- and Oxynitride-Passivated Silicon Nanoclusters. <i>ECS Transactions</i> , 2009, 19, 19-28.	0.5	1
81	Combined Super-STEM imaging, EEL and PL spectroscopy of un-doped and Er doped SRSO on Si. , 2008, , .		2
82	The role of substrate surface alteration in the fabrication of vertically aligned CdTe nanowires. <i>Nanotechnology</i> , 2008, 19, 185601.	2.6	26
83	X-ray spectroscopy studies of luminescent Si-based materials. , 2008, , .		0
84	Plasmon Field Effects on the Nonradiative Relaxation of Hot Electrons in an Electronically Quantized System: CdTe~Au Core~Shell Nanowires. <i>Nano Letters</i> , 2008, 8, 2410-2418.	9.1	50
85	Cadmium telluride: a silicon-compatible optical material as an alternative technology for building all-optical photonic devices. , 2008, , .		3
86	On the effects of double-step anneal treatments on light emission from Er-doped Si-rich silicon oxide. <i>Journal of Applied Physics</i> , 2008, 103, 024309.	2.5	8
87	Light Emission from Rare-Earth Doped Silicon Nanostructures. <i>Advances in Optical Technologies</i> , 2008, 2008, 1-10.	0.8	24
88	Photoluminescence Study of an Er-Doped Si-Rich SiO_x Film. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, K20.	2.2	3
89	Implantation profile of Na^{22} continuous energy spectrum positrons in silicon. <i>Journal of Applied Physics</i> , 2007, 101, 043702.	2.5	5
90	Influence of the annealing temperature and silicon concentration on the absorption and emission properties of Si nanocrystals. <i>Journal of Applied Physics</i> , 2007, 102, .	2.5	25

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91	Photoluminescence from Magnetron Sputtered SiO ₂ Films Co-doped with (Er, Ge) under Excitation of a 325 nm He-Cd Laser Line. ECS Transactions, 2007, 6, 549-559.	0.5	2
92	Luminescence from Si Nanoclusters Formed in Silicon Oxide and Silicon Nitride Based Materials. ECS Transactions, 2007, 6, 523-529.	0.5	1
93	Optically pumped Si nanocrystal emitter integrated with low loss silicon nitride waveguides. Optics Express, 2007, 15, 14679.	3.4	25
94	Vertically aligned wurtzite CdTe nanowires derived from a catalytically driven growth mode. Nanotechnology, 2007, 18, 275301.	2.6	67
95	Probing the indium clustering in InGaAs/GaAs quantum wells by room temperature contactless electroreflectance and photoluminescence spectroscopy. Journal of Applied Physics, 2007, 101, 116107.	2.5	9
96	Defect characterization of CdTe thin films using a slow positron beam. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 3659-3663.	0.8	3
97	Characterization of columbite ceramics A _{1-x} Nb ₂ O ₆ by positron annihilation spectroscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 3835-3838.	0.8	1
98	Light Emission From Hydrogenated and Unhydrogenated Si-Nanocrystal/Si Dioxide Composites Based on PECVD-Grown Si-Rich Si Oxide Films. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1561-1569.	2.9	21
99	X-ray-diffraction study of crystalline Si nanocluster formation in annealed silicon-rich silicon oxides. Journal of Applied Physics, 2006, 99, 023518.	2.5	74
100	Coupled luminescence centres in erbium-doped silicon rich silicon oxide thin films. , 2006, , .		0
101	1.54 μ m room temperature emission from Er-doped Si nanocrystals deposited by ECR-PECVD. Journal of Luminescence, 2006, 121, 230-232.	3.1	7
102	Probing point defects in Ba(O) ₃ by ESR, PAS and dielectric spectroscopy. Journal of the European Ceramic Society, 2006, 26, 1921-1924.	5.7	8
103	The role of lattice mismatch in the deposition of CdTe thin films. Journal of Electronic Materials, 2006, 35, 1224-1230.	2.2	28
104	Electrical conduction of silicon oxide containing silicon quantum dots. Journal of Physics Condensed Matter, 2006, 18, 9943-9950.	1.8	22
105	Evolution of wurtzite CdTe through the formation of cluster assembled films. Applied Physics Letters, 2006, 89, 133101.	3.3	14
106	Rapid thermal annealing of InAs/GaAs quantum dots with a low-temperature-grown InGaP cap layer. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 700-703.	2.1	8
107	Growth of CdTe/Si(100) thin films by pulsed laser deposition for photonic applications. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 606-611.	2.1	10
108	Optical attenuation in defect-engineered silicon rib waveguides. Journal of Applied Physics, 2006, 99, 073101.	2.5	36

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109	Photoreflectance investigations of quantum well intermixing processes in compressively strained InGaAsP-InGaAsP quantum well laser structures emitting at 1.55 μ m. Journal of Applied Physics, 2006, 100, 013111.	2.5	14
110	H-induced effects in luminescent silicon nanostructures obtained from plasma enhanced chemical vapor deposition grown Si _y O _{1-y} :H(y>1/3) thin films annealed in (Ar+5%H ₂). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 817-820.	2.1	8
111	Light emission from Si nanoclusters formed at low temperatures. Applied Physics Letters, 2006, 88, 103111.	3.3	20
112	Laser photoluminescence spectrometer based on charge-coupled device detection for silicon-based photonics. Review of Scientific Instruments, 2006, 77, 023907.	1.3	26
113	Formation of and Light Emission from Si Nanocrystals Embedded in Amorphous Silicon Oxides. ECS Transactions, 2006, 3, 3-8.	0.5	5
114	CdTe:Ge/Si (100) thin films grown by pulsed laser deposition (PLD) for photonic devices. , 2005, 5970, 259.		0
115	Erbium doped silicon rich silicon oxide luminescent thin films deposited by ECR-PECVD. , 2005, , .		0
116	Optical and microstructural characterization of the effects of rapid thermal annealing of CdTe thin films grown on Si (100) substrates. Journal of Electronic Materials, 2005, 34, 786-790.	2.2	11
117	Influence of the annealing temperature on the optical transitions of InGaAsP-based quantum well structures investigated by photoreflectance spectroscopy. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 1263-1269.	1.8	1
118	H-sensitive radiative recombination path in Si nanoclusters embedded in SiO ₂ . Applied Physics Letters, 2005, 87, 213110.	3.3	21
119	Formation and oxidation of Si nanoclusters in Er-doped Si-rich SiO _x . Journal of Applied Physics, 2005, 97, 096108.	2.5	25
120	Defect Characterization of CdTe Bulk Crystals Doped with Heavy Elements and Rare Earths. Materials Research Society Symposia Proceedings, 2005, 864, 4181.	0.1	11
121	The Impact of Deposition Parameters on the Optical and Compositional Properties of Er Doped SRSO Thin Films Deposited by ECR-PECVD. Materials Research Society Symposia Proceedings, 2005, 866, 155.	0.1	0
122	Spectral investigation of multimode fiber Bragg grating based external-cavity semiconductor lasers. IEEE Journal of Quantum Electronics, 2005, 41, 1492-1501.	1.9	12
123	Optical and compositional characterization of SiO _x N _y and SiO _x thin films deposited by electron cyclotron resonance plasma enhanced chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 883.	2.1	13
124	Applications of defect engineering to the fabrication of silicon-based photonic devices. , 2004, 5577, 683.		2
125	Study of the optical properties of SiO _x N _y thin films by effective medium theories. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 1115-1119.	2.1	15
126	Ultrashort Optical Pulse Generation With a Mode-Locked Long-Wavelength (1075-1085 nm) InGaAs-GaAs Semiconductor Laser. IEEE Photonics Technology Letters, 2004, 16, 1798-1800.	2.5	10

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127	External-Cavity Semiconductor Laser With Bragg Grating in Multimode Fiber. IEEE Photonics Technology Letters, 2004, 16, 2341-2343.	2.5	7
128	Silicon nanocrystal formation in silicon-rich silicon oxide thin films. , 2004, , .		6
129	Photoreflectance study of changes in the QW profile of 1.55-micrometer laser structure induced by SiO ₂ cap layers. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 101, 232-235.	3.5	2
130	Investigation of dielectric cap induced intermixing of In _x Ga _{1-x} As _y P _{1-y} /InP quantum well laser structures by photoreflectance and photoluminescence. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 101, 137-141.	3.5	5
131	Photoreflectance study of the interdiffusion effects in the InGaAsP-based quantum well laser structures. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 602-603.	2.7	3
132	Effects of annealing ambient on the formation of compensation defects in InP. Journal of Applied Physics, 2003, 93, 930-932.	2.5	12
133	Control of dielectric cap induced band-gap shift in 1.55 μm laser structures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 1076-1078.	2.1	6
134	Wavelength tunable ultrashort pulse generation from a passively mode-locked asymmetric-quantum-well semiconductor laser. Applied Physics Letters, 2002, 81, 2502-2504.	3.3	4
135	Induced Defects in ZnSe and ZnTe by Electron and Proton Irradiation and Defect-Annealing Behaviour. Physica Status Solidi (B): Basic Research, 2002, 229, 329-332.	1.5	3
136	Crystallization phenomena in $\hat{2}$ -Ga ₂ O ₃ investigated by positron annihilation spectroscopy and X-ray diffraction analysis. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 91-92, 541-544.	3.5	10
137	Fabrication of SiGe optical waveguides using VLSI processing techniques. Journal of Lightwave Technology, 2001, 19, 363-370.	4.6	4
138	Investigation of the defect structure in Cd _{1-x} Zn _x Te by positron lifetime spectroscopy. Physica B: Condensed Matter, 2001, 308-310, 924-927.	2.7	10
139	A comparative study of vacancies produced by proton implantation of silicon using positron annihilation and deep level transient spectroscopy. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 300-304.	1.4	3
140	Characterization of silicon oxynitride films using ion beam analysis techniques. Nuclear Instruments & Methods in Physics Research B, 2000, 170, 461-466.	1.4	12
141	Microstructural Evolution of Radiation-Induced Defects in Semi-Insulating SiC During Isochronal Annealing. Materials Science Forum, 2000, 338-342, 965-968.	0.3	4
142	Vacancy-Type Defects in Proton-Irradiated 6H- and 4H-SiC: A Systematic Study with Positron Annihilation Techniques. Materials Science Forum, 2000, 338-342, 969-972.	0.3	4
143	Application of in situ ellipsometry in the fabrication of thin-film optical coatings on semiconductors. Applied Optics, 2000, 39, 1053.	2.1	8
144	Refractive indices of InGaAsP lattice-matched to GaAs at wavelengths relevant to device design. Applied Physics Letters, 2000, 76, 2791-2793.	3.3	1

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145	Sulfur Passivation of InP/InGaAs Metal-Semiconductor-Metal Photodetectors. Journal of the Electrochemical Society, 1999, 146, 1946-1951.	2.9	13
146	Metal ion and oxygen vacancies in bulk and thin film $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$. Physical Review B, 1999, 59, 13365-13369.	3.2	27
147	Induced defects in ZnS by electron and proton irradiation and defect-annealing behavior. Physica B: Condensed Matter, 1999, 273-274, 898-901.	2.7	13
148	Point defect characterization of Zn- and Cd-based semiconductors using positron lifetime spectroscopy. Journal of Crystal Growth, 1999, 197, 581-585.	1.5	17
149	Defect Depth Profile in CdTe:Cl by Positron Annihilation. Electrochemical and Solid-State Letters, 1999, 3, 150.	2.2	5
150	Defect structure of carbon rich a-SiC:H films and the influence of gas and heat treatments. Journal of Applied Physics, 1998, 84, 786-795.	2.5	47
151	Vacancy-Type Defects in as-Grown and Proton-Irradiated 6H-SiC. Materials Research Society Symposia Proceedings, 1998, 512, 261.	0.1	0
152	Proton Irradiation Induced Defects in 6H- and 4H-SiC. Materials Research Society Symposia Proceedings, 1998, 540, 177.	0.1	7
153	Positron-annihilation study of vacancy defects in InAs. Physical Review B, 1997, 55, 9637-9641.	3.2	13
154	Removal of Titanium Oxide Grown on Titanium Nitride and Reduction of VIA Contact Resistance using a Modern Plasma Asher. Materials Research Society Symposia Proceedings, 1997, 495, 345.	0.1	0
155	Optical emission spectroscopy as a real time diagnostic tool for plasma-assisted deposition of TiN. Plasma Chemistry and Plasma Processing, 1997, 17, 181-192.	2.4	5
156	High performance MSM photodetector operating at 1.3-1.5 μm . Solid-State Electronics, 1996, 39, 1283-1287.	1.4	14
157	On the contribution of vacancy complexes to the saturation of the carrier concentration in zinc doped InP. Journal of Applied Physics, 1996, 80, 2712-2719.	2.5	17
158	Effect of annealing on the defect structure in a-SiC:H films. Journal of Applied Physics, 1996, 80, 2216-2223.	2.5	28
159	The Effects of Sintering on the Microstructure and the Luminescent Characteristics of Polycrystalline ZnS. Materials Research Society Symposia Proceedings, 1995, 378, 533.	0.1	0
160	Studies of Defects in ZnO by Positron Annihilation. Materials Research Society Symposia Proceedings, 1995, 378, 977.	0.1	5
161	Optical characterization of passivation for high-power Al _x Ga _{1-x} As-based lasers. , 1995, , .		1
162	An investigation of point defects in silicon carbide. Applied Physics A: Materials Science and Processing, 1995, 61, 55-58.	2.3	17

#	ARTICLE	IF	CITATIONS
163	Room temperature electron cyclotron resonance chemical vapor deposition of high quality TiN. Applied Physics Letters, 1995, 66, 302-304.	3.3	18
164	Low-temperature electron cyclotron resonance chemical vapor deposition of very low resistivity TiN for InP metallization using metalorganic precursors. Applied Physics Letters, 1995, 66, 2664-2666.	3.3	11
165	Positron Lifetime Spectroscopy and Cathodoluminescence of Polycrystalline Terbium-Doped Yttria. Journal of the Electrochemical Society, 1995, 142, 958-960.	2.9	7
166	Studies of Defects in Electron and Proton Irradiated ZnO by Positron Annihilation. Materials Science Forum, 1995, 196-201, 333-338.	0.3	16
167	The Effect of the Native Oxide on Mask Undercutting of Grooves Etched into (100) InP Surfaces Using an SiN _x Mask. Journal of the Electrochemical Society, 1995, 142, 593-596.	2.9	8
168	Deformation-Induced Defects in GaSb. Materials Science Forum, 1995, 196-201, 1449-1454.	0.3	11
169	Microstructural evolution of ZnS during sintering monitored by optical and positron annihilation techniques. Applied Physics A: Materials Science and Processing, 1995, 61, 217-220.	2.3	16
170	Low temperature radio frequency sputter deposition of TiN thin films using optical emission spectroscopy as process monitor. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 83-89.	2.1	28
171	Void formation at silicon nitride/silicon interfaces studied by variable-energy positrons. Surface and Interface Analysis, 1994, 21, 839-845.	1.8	1
172	Electron Cyclotron Resonance Plasma Chemical Vapour Deposition of Silicon Carbide Thin Films Using Ditertiary Butyl Selane. Materials Research Society Symposia Proceedings, 1994, 339, 381.	0.1	3
173	The Stability of Reactively Sputtered WN _x Thin Films on III-V Semiconductors. Materials Research Society Symposia Proceedings, 1994, 337, 343.	0.1	0
174	In-situ monitoring of electron cyclotron resonance plasma chemical vapour deposition of hydrogenated silicon nitride films. Surface and Coatings Technology, 1993, 59, 77-81.	4.8	8
175	The Influence of Processing Conditions on Point Defects and Luminescence Centers in ZnO. Journal of the Electrochemical Society, 1993, 140, 3644-3649.	2.9	122
176	Electron cyclotron resonance chemical vapor deposition of silicon oxynitrides using tris(dimethylamino)silane. Applied Physics Letters, 1993, 63, 3014-3016.	3.3	58
177	Annealing studies of vacancies in proton irradiated silicon. Journal of Applied Physics, 1993, 73, 3740-3743.	2.5	16
178	Positron lifetime studies of defects in MBE-grown silicon. Journal of Physics Condensed Matter, 1992, 4, 8511-8518.	1.8	7
179	<title>Optical emission spectroscopy as a process monitor for triod ion plating with TiN</title>. , 1992, 1594, 401.		1
180	Thermal Stability of Reactively Sputtered TiN on InP as a Diffusion Barrier. Materials Research Society Symposia Proceedings, 1992, 260, 561.	0.1	2

#	ARTICLE	IF	CITATIONS
181	Optical and electrical properties of electron cyclotron resonance chemical vapour-deposited SiN _x :H films. Canadian Journal of Physics, 1992, 70, 1104-1108.	1.1	7
182	Defect characterization in diamonds by means of positron annihilation. Diamond and Related Materials, 1992, 1, 407-410.	3.9	38
183	Point defects and luminescence centres in zinc oxide and zinc oxide doped with manganese. Journal of Luminescence, 1992, 54, 35-42.	3.1	667
184	Deformation-induced defects in GaAs. Journal of Applied Physics, 1991, 69, 4080-4091.	2.5	16
185	Heat-treatment-induced defects in low-resistivity silicon. Journal of Applied Physics, 1989, 66, 3526-3534.	2.5	8
186	Positron trapping rates and their temperature dependencies in electron-irradiated silicon. Physical Review B, 1989, 40, 11764-11771.	3.2	132
187	On the character of defects in GaAs. Journal of Physics Condensed Matter, 1989, 1, 3213-3238.	1.8	41
188	Low temperature investigations of e ⁻ -irradiated GaAs. Crystal Research and Technology, 1988, 23, 247-251.	1.3	3
189	Detrapping of positrons and thermal stability of phosphorus-vacancy pairs in silicon. Physical Review B, 1987, 35, 3043-3046.	3.2	18
190	Defect Characteristics in Different Crystallographic Directions in CzSi as a Function of Doping and Annealing. Physica Status Solidi A, 1987, 102, 527-531.	1.7	6
191	Comment on "Amorphous hydrogenated silicon studied by positron lifetime spectroscopy". Applied Physics A: Solids and Surfaces, 1987, 43, 91-92.	1.4	11
192	Vacancy complexes in Cr-doped GaAs. Journal of Crystal Growth, 1987, 85, 295-299.	1.5	5
193	Monovacancy Formation Enthalpy in Silicon. Physical Review Letters, 1986, 56, 2195-2198.	7.8	236
194	Evidence for trapping of positrons in thallium. Physics Letters, Section A: General, Atomic and Solid State Physics, 1985, 112, 90-92.	2.1	7
195	An investigation of the phase transitions in tin by positron lifetime measurements. Journal of Physics F: Metal Physics, 1984, 14, L231-L235.	1.6	5
196	Precise Positron Lifetime Measurements in Indium. Physica Status Solidi (B): Basic Research, 1983, 118, 799-803.	1.5	9
197	Vacancy Formation Enthalpy in Cadmium by Positron Lifetime Measurements. Physica Status Solidi (B): Basic Research, 1981, 104, 601-605.	1.5	5
198	A Novel Method for Bonding of Ionic Wafers. , 0, , .		1