Marc Meuris

List of Publications by Year in descending order

203 papers	5,706 citations	81743 39 h-index	106150 65 g-index
203 all docs	203 docs citations	203 times ranked	3870 citing authors

#	Article	IF	Citations
1	On the Correct Extraction of Interface Trap Density of MOS Devices With High-Mobility Semiconductor Substrates. IEEE Transactions on Electron Devices, 2008, 55, 547-556.	1.6	339
2	Germanium MOSFET Devices: Advances in Materials Understanding, Process Development, and Electrical Performance. Journal of the Electrochemical Society, 2008, 155, H552.	1.3	230
3	Characterization of defects in 9.7% efficient Cu2ZnSnSe4-CdS-ZnO solar cells. Applied Physics Letters, 2013, 103, .	1.5	199
4	Diffusion, activation, and recrystallization of boron implanted in preamorphized and crystalline germanium. Applied Physics Letters, 2005, 87, 172109.	1.5	130
5	Capacitance-voltage characterization of GaAsâ€“Al2O3 interfaces. Applied Physics Letters, 2008, 93, 183504.	1.5	109
6	Ion-implantation issues in the formation of shallow junctions in germanium. Materials Science in Semiconductor Processing, 2006, 9, 634-639.	1.9	108
7	Deposition of HfO2 on germanium and the impact of surface pretreatments. Applied Physics Letters, 2004, 85, 3824-3826.	1.5	104
8	Ge dangling bonds at the (100)Ge/GeO2 interface and the viscoelastic properties of GeO2. Applied Physics Letters, 2008, 93, .	1.5	103
9	On the interface state density at In0.53Ga0.47As/oxide interfaces. Applied Physics Letters, 2009, 95, .	1.5	99
10	Electrical study of sulfur passivated In0.53Ga0.47As MOS capacitor and transistor with ALD Al2O3 as gate insulator. Microelectronic Engineering, 2009, 86, 1554-1557.	1.1	98
11	A Combined Interface and Border Trap Model for High-Mobility Substrate Metalâ€“Oxideâ€“Semiconductor Devices Applied to $hbox{In}_{0.53} hbox{Ga}_{0.47}hbox{As}$ and InP Capacitors. IEEE Transactions on Electron Devices, 2011, 58, 3890-3897.	1.6	96
12	Characteristic trapping lifetime and capacitance-voltage measurements of GaAs metal-oxide-semiconductor structures. Applied Physics Letters, 2007, 91, 133510.	1.5	94
13	Optimisation of a thin epitaxial Si layer as Ge passivation layer to demonstrate deep sub-micron n- and p-FETs on Ge-On-Insulator substrates. Microelectronic Engineering, 2005, 80, 26-29.	1.1	92
14	Electrical TCAD Simulations of a Germanium pMOSFET Technology. IEEE Transactions on Electron Devices, 2010, 57, 2539-2546.	1.6	92
15	Diffusion, activation, and regrowth behavior of high dose P implants in Ge. Applied Physics Letters, 2006, 88, 162118.	1.5	91
16	High-Performance Deep Submicron Ge pMOSFETs With Halo Implants. IEEE Transactions on Electron Devices, 2007, 54, 2503-2511.	1.6	88
17	Crystalline thinâ€foil silicon solar cells: where crystalline quality meets thinâ€film processing. Progress in Photovoltaics: Research and Applications, 2012, 20, 770-784.	4.4	74
18	Shallow Junction Ion Implantation in Ge and Associated Defect Control. Journal of the Electrochemical Society, 2006, 153, G229.	1.3	72

#	Article	IF	Citations
19	New interface state density extraction method applicable to peaked and high-density distributions for Ge MOSFET development. IEEE Electron Device Letters, 2006, 27, 405-408.	2.2	69
20	Impact of Donor Concentration, Electric Field, and Temperature Effects on the Leakage Current in Germanium p $+/$n Junctions. IEEE Transactions on Electron Devices, 2008, 55, 2287-2296.	1.6	69
21	HfO2 as gate dielectric on Ge: Interfaces and deposition techniques. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 135, 256-260.	1.7	68
22	First-principles study of the structural and electronic properties of (100)Geâ^•Ge(M)O2 interfaces (M=Al,) Tj ETQq0 0 0 rgBT /Overlock 1	1.5	68
23	Electrical Properties of III-V/Oxide Interfaces. ECS Transactions, 2009, 19, 375-386.	0.3	68
24	Effect of hafnium germanate formation on the interface of HfO2/germanium metal oxide semiconductor devices. Applied Physics Letters, 2006, 88, 141904.	1.5	67
25	Effective reduction of interfacial traps in Al2O3/GaAs (001) gate stacks using surface engineering and thermal annealing. Applied Physics Letters, 2010, 97, 112901.	1.5	66
26	KCN Chemical Etch for Interface Engineering in Cu₂ZnSnSe₄ Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 14690-14698.	4.0	62
27	Capacitanceâ€“Voltage Characterization of GaAsâ€“Oxide Interfaces. Journal of the Electrochemical Society, 2008, 155, H945.	1.3	55
28	Physical and electrical characterization of high-performance Cu 2 ZnSnSe 4 based thin film solar cells. Thin Solid Films, 2015, 582, 224-228.	0.8	55
29	Thin epitaxial Si films as a passivation method for Ge(100): Influence of deposition temperature on Ge surface segregation and the high-k/Ge interface quality. Materials Science in Semiconductor Processing, 2006, 9, 679-684.	1.9	52
30	Effect of different alkali (Li, Na, K, Rb, Cs) metals on Cu 2 ZnSnSe 4 solar cells. Thin Solid Films, 2017, 633, 156-161.	0.8	52
31	The Fermi-level efficiency method and its applications on high interface trap density oxide-semiconductor interfaces. Applied Physics Letters, 2009, 94, .	1.5	50
32	High FET Performance for a Future CMOS $hbox{GeO}_{2}$ -Based Technology. IEEE Electron Device Letters, 2010, 31, 402-404.	2.2	50
33	Impact of Organic Contamination on Thin Gate Oxide Quality. Japanese Journal of Applied Physics, 1998, 37, 4649-4655.	0.8	49
34	Interfaces of high-k dielectrics on GaAs: Their common features and the relationship with Fermi level pinning (Invited Paper). Microelectronic Engineering, 2009, 86, 1529-1535.	1.1	49
35	Determination of the angle of incidence in a Cameca IMS-4f SIMS instrument. Surface and Interface Analysis, 1989, 14, 739-743.	0.8	47
36	Dielectric-Based Rear Surface Passivation Approaches for Cu(In,Ga)Se2 Solar Cellsâ€”A Review. Applied Sciences (Switzerland), 2019, 9, 677.	1.3	46

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37	Cost-effective cleaning and high-quality thin gate oxides. IBM Journal of Research and Development, 1999, 43, 339-350.	3.2	43
38	High Mobility Strained Ge pMOSFETs With High-$kappa$ /Metal Gate. IEEE Electron Device Letters, 2007, 28, 825-827.	2.2	40
39	Integration of InGaAs Channel n-MOS Devices on 200mm Si Wafers Using the Aspect-Ratio-Trapping Technique. ECS Transactions, 2012, 45, 115-128.	0.3	39
40	Electronic properties of (100)Ge/Ge(Hf)O2 interfaces: A first-principles study. Surface Science, 2008, 602, L25-L28.	0.8	38
41	Germanium MOSFETs With $hbox{CeO}_{2}/hbox{HfO}_{2}/ hbox{TiN}$ Gate Stacks. IEEE Transactions on Electron Devices, 2007, 54, 1425-1430.	1.6	37
42	The Relationship of the Silicon Surface Roughness and Gate Oxide Integrity in NH4OH/H2O2Mixtures. Japanese Journal of Applied Physics, 1992, 31, L1514-L1517.	0.8	36
43	H2O2Decomposition and Its Impact on Silicon Surface Roughening and Gate Oxide Integrity. Japanese Journal of Applied Physics, 1995, 34, 727-731.	0.8	36
44	Surface Cleaning and Passivation Using (NH₄)₂S Treatment for Cu(In,Ga)Se₂ Solar Cells: A Safe Alternative to KCN. Advanced Energy Materials, 2015, 5, 1401689.	10.2	36
45	Surface Passivation of CIGS Solar Cells Using Gallium Oxide. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700826.	0.8	36
46	Impact of the Electrochemical Properties of Silicon Wafer Surfaces on Copper Outplating from HF Solutions. Journal of the Electrochemical Society, 1996, 143, 3323-3327.	1.3	35
47	Electrical and reliability characterization of metal-gate/HfO2/Ge FETâ€™s with Si passivation. Microelectronic Engineering, 2007, 84, 2067-2070.	1.1	35
48	Atomic Layer Deposition of Hafnium Oxide on Ge and GaAs Substrates: Precursors and Surface Preparation. Journal of the Electrochemical Society, 2008, 155, H937.	1.3	35
49	Germanium: The Past and Possibly a Future Material for Microelectronics. ECS Transactions, 2007, 11, 479-493.	0.3	33
50	Adsorption of molecular oxygen on the reconstructed Î²2(2Ã—4)-GaAs(001) surface: A first-principles study. Surface Science, 2009, 603, 203-208.	0.8	33
51	Spectral currentâ€“voltage analysis of kesterite solar cells. Journal Physics D: Applied Physics, 2014, 47, 175101.	1.3	33
52	H2S exposure of a (100)Ge surface: Evidences for a (2Ã—1) electrically passivated surface. Applied Physics Letters, 2007, 90, 222105.	1.5	32
53	Sn Substitution by Ge: Strategies to Overcome the Open-Circuit Voltage Deficit of Kesterite Solar Cells. ACS Applied Energy Materials, 2020, 3, 5830-5839.	2.5	32
54	A theoretical study of the initial oxidation of the GaAs(001)-Î²2(2Ã—4) surface. Applied Physics Letters, 2009, 95, .	1.5	31

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55	H[sub 2]O- and O[sub 3]-Based Atomic Layer Deposition of High-Î¹ Dielectric Films on GeO[sub 2] Passivation Layers. Journal of the Electrochemical Society, 2009, 156, G163.	1.3	31
56	Physical characterization of Cu2ZnGeSe4 thin films from annealing of Cuâ€“Znâ€“Ge precursor layers. Thin Solid Films, 2015, 582, 171-175.	0.8	31
57	Wear-out of ultra-thin gate oxides during high-field electron tunnelling. Semiconductor Science and Technology, 1995, 10, 753-758.	1.0	30
58	High-Hole-Mobility Silicon Germanium on Insulator Substrates with High Crystalline Quality Obtained by the Germanium Condensation Technique. Journal of the Electrochemical Society, 2009, 156, H208.	1.3	30
59	GaAs on Ge for CMOS. Thin Solid Films, 2008, 517, 148-151.	0.8	29
60	Benefits and side effects of high temperature anneal used to reduce threading dislocation defects in epitaxial Ge layers on Si substrates. Thin Solid Films, 2008, 517, 172-177.	0.8	29
61	Quantification of Drain Extension Leakage in a Scaled Bulk Germanium PMOS Technology. IEEE Transactions on Electron Devices, 2009, 56, 3115-3122.	1.6	29
62	Calculation of the electron mobility in III-V inversion layers with high-Î¹ dielectrics. Journal of Applied Physics, 2010, 108, 103705.	1.1	29
63	Mass and energy dependence of depth resolution in secondaryâ€ion mass spectrometry experiments with iodine, oxygen, and cesium beams on AlGaAs/GaAs multilayer structures. Applied Physics Letters, 1989, 54, 1531-1533.	1.5	28
64	Selective Area Growth of InP in Shallow-Trench-Isolated Structures on Off-Axis Si(001) Substrates. Journal of the Electrochemical Society, 2010, 157, H1023.	1.3	28
65	Impact of the Cd²⁺ treatment on the electrical properties of Cu₂ZnSnSe₄ and Cu(In,Ga)Se₂ solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 1608-1620.	4.4	28
66	High Ge content SGOI substrates obtained by the Ge condensation technique: A template for growth of strained epitaxial Ge. Thin Solid Films, 2008, 517, 23-26.	0.8	27
67	Electrical characterization of Cu2ZnSnSe4 solar cells from selenization of sputtered metal layers. Thin Solid Films, 2013, 535, 348-352.	0.8	27
68	Sensitive Light Scattering as a Semiquantitative Method for Studying Photoresist Stripping. Journal of the Electrochemical Society, 1995, 142, 211-216.	1.3	26
69	Ammonium sulfide vapor passivation of In0.53Ga0.47As and InP surfaces. Applied Physics Letters, 2011, 99, .	1.5	26
70	A deep-level transient spectroscopy study of transition metals in n-type germanium. Materials Science in Semiconductor Processing, 2006, 9, 559-563.	1.9	25
71	Implantation, Diffusion, Activation, and Recrystallization of Gallium Implanted in Preamorphized and Crystalline Germanium. Electrochemical and Solid-State Letters, 2009, 12, H417.	2.2	25
72	Electrical characteristics of Ge/GeOx(N)/HfO2 gate stacks. Journal of Non-Crystalline Solids, 2005, 351, 1902-1905.	1.5	24

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73	Oxide Trapping in the InGaAsâ€“$hbox{Al}_{2} hbox{O}_{3}$ System and the Role of Sulfur in Reducing the $ hbox{Al}_{2}hbox{O}_{3}$ Trap Density. IEEE Electron Device Letters, 2012, 33, 1544-1546.	2.2	23
74	Innovative and industrially viable approach to fabricate AlOx rear passivated ultra-thin Cu(In, Ga)Se2 (CIGS) solar cells. Solar Energy, 2020, 207, 1002-1008.	2.9	23
75	A Static Model for Scratches Generated during Aluminum Chemical-Mechanical Polishing Process: Orbital Technology. Japanese Journal of Applied Physics, 1999, 38, 1932-1938.	0.8	22
76	High V_{oc} upon KF Post-Deposition Treatment for Ultrathin Single-Stage Coevaporated Cu(In, Ga)Se₂ Solar Cells. ACS Applied Energy Materials, 2019, 2, 6102-6111.	2.5	22
77	Germanium FETs and capacitors with rare earth CeO2/HfO2 gates. Solid-State Electronics, 2007, 51, 1508-1514.	0.8	21
78	Fabrication of high quality Ge virtual substrates by selective epitaxial growth in shallow trench isolated Si (001) trenches. Thin Solid Films, 2010, 518, 2538-2541.	0.8	21
79	Characterization of Threading Dislocations in Thin Germanium Layers by Defect Etching: Toward Chromium and HF-Free Solution. Journal of the Electrochemical Society, 2008, 155, H677.	1.3	20
80	Silicon and selenium implantation and activation in In0.53Ga0.47As under low thermal budget conditions. Microelectronic Engineering, 2011, 88, 155-158.	1.1	20
81	Investigation of Properties Limiting Efficiency in Cu₂ZnSnSe₄-Based Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 649-655.	1.5	20
82	Migration of Si in molecularâ€beam epitaxial growth of Î´â€doped GaAs and Al0.25Ga0.75As. Journal of Applied Physics, 1990, 68, 3766-3768.	1.1	19
83	Ge substrates made by Ge-condensation technique: Challenges and current understanding. Materials Science in Semiconductor Processing, 2006, 9, 449-453.	1.9	19
84	Experimental and theoretical study of Ge surface passivation. Microelectronic Engineering, 2007, 84, 2267-2273.	1.1	19
85	Si versus Ge for future microelectronics. Thin Solid Films, 2010, 518, 2301-2306.	0.8	19
86	Low-Frequency Noise Characterization of Strained Germanium pMOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 3132-3139.	1.6	19
87	Microstructural analysis of 9.7% efficient Cu2ZnSnSe4 thin film solar cells. Applied Physics Letters, 2014, 105, .	1.5	19
88	Doping of Cu2ZnSnSe4 solar cells with Na+ or K+ alkali ions. Journal of Materials Chemistry A, 2018, 6, 2653-2663.	5.2	19
89	Wide band gap kesterite absorbers for thin film solar cells: potential and challenges for their deployment in tandem devices. Sustainable Energy and Fuels, 2019, 3, 2246-2259.	2.5	19
90	The future of high-K on pure germanium and its importance for Ge CMOS. Materials Science in Semiconductor Processing, 2005, 8, 203-207.	1.9	18

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91	Impact of germanium surface passivation on the leakage current of shallow planar pâ€“n junctions. Materials Science in Semiconductor Processing, 2006, 9, 716-720.	1.9	18
92	Epitaxy solutions for Ge MOS technology. Thin Solid Films, 2006, 508, 292-296.	0.8	18
93	Study of CVD high-k gate oxides on high-mobility Ge and Ge/Si substrates. Thin Solid Films, 2006, 508, 1-5.	0.8	18
94	Determining weak Fermi-level pinning in MOS devices by conductance and capacitance analysis and application to GaAs MOS devices. Solid-State Electronics, 2007, 51, 1101-1108.	0.8	18
95	Valence band energy in confined Si1âˆ’xGex (0.28<x<0.93) layers. Applied Physics Letters, 2009, 94, 172106.	1.5	18
96	A first-principles study of the structural and electronic properties of IIIâ€“V/thermal oxide interfaces. Microelectronic Engineering, 2009, 86, 1747-1750.	1.1	18
97	Atomic Layer Deposition of High-Î² Dielectrics on Sulphur-Passivated Germanium. Journal of the Electrochemical Society, 2011, 158, H687.	1.3	18
98	A study to improve light confinement and rear-surface passivation in a thin-Cu(In, Ga)Se2 solar cell. Thin Solid Films, 2019, 669, 399-403.	0.8	18
99	Cleaning technology for improved gate oxide integrity. Microelectronic Engineering, 1993, 22, 21-28.	1.1	17
100	Thermal and Plasma Enhanced Atomic Layer Deposition of Al[sub 2]O[sub 3] on GaAs Substrates. Journal of the Electrochemical Society, 2009, 156, H255.	1.3	17
101	Molecular beam epitaxy passivation studies of Ge and IIIâ€“V semiconductors for advanced CMOS. Microelectronic Engineering, 2009, 86, 1592-1595.	1.1	17
102	Electronic properties of Ge dangling bond centers at Si1âˆ’xGex/SiO2 interfaces. Applied Physics Letters, 2009, 95, 222106.	1.5	17
103	Growth of high quality InP layers in STI trenches on miscut Si (001) substrates. Journal of Crystal Growth, 2011, 315, 32-36.	0.7	17
104	Rear surface passivation of ultra-thin CIGS solar cells using atomic layer deposited HfO_x. EPJ Photovoltaics, 2020, 11, 10.	0.8	17
105	Surface recombination velocity in GaAs and In0.15Ga0.85As thin films. Applied Physics Letters, 2007, 90, 134102.	1.5	16
106	Lifetime and leakage current considerations in metal-doped germanium. Journal of Materials Science: Materials in Electronics, 2007, 18, 799-804.	1.1	16
107	(Invited) Exploring the ALD Al₂O₃/In_{0.53}Ga_{0.47}As and Al₂O₃/Ge Interface Properties: A Common Gate Stack Approach for Advanced III-V/Ge CMOS. ECS Transactions, 2010, 28, 173-183.	0.3	16
108	Effects of surface passivation during atomic layer deposition of Al2O3 on In0.53Ga0.47As substrates. Microelectronic Engineering, 2011, 88, 431-434.	1.1	16

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109	Integration of Cu and low-k dielectrics: effect of hard mask and dry etch on electrical performance of damascene structures. Microelectronic Engineering, 2001, 55, 277-283.	1.1	15
110	Electrical Properties of Atomic-Beam Deposited GeO[sub 1âˆ’x]N[sub x]âˆ•HfO[sub 2] Gate Stacks on Ge. Journal of the Electrochemical Society, 2006, 153, G1112.	1.3	15
111	Effects of Halo Doping and Si Capping Layer Thickness on Total-Dose Effects in Ge p-MOSFETs. IEEE Transactions on Nuclear Science, 2010, 57, 1933-1939.	1.2	15
112	Point of Use HF Purification for Silicon Surface Preparation by Ion Exchange. Journal of the Electrochemical Society, 1997, 144, 2189-2196.	1.3	14
113	Inclusion of Water in Cu(In, Ga)Se2 Absorber Material During Accelerated Lifetime Testing. ACS Applied Energy Materials, 2020, 3, 5120-5125.	2.5	14
114	The Influence of the Epitaxial Growth Process Parameters on Layer Characteristics and Device Performance in Si-passivated Ge pMOSFETs. ECS Transactions, 2009, 19, 183-194.	0.3	13
115	Selective Epitaxial Growth of InP in STI Trenches on Off-Axis Si (001) Substrates. ECS Transactions, 2010, 27, 959-964.	0.3	13
116	Adsorption of O₂ on Ge(100): Atomic Geometry and Site-Specific Electronic Structure. Journal of Physical Chemistry C, 2012, 116, 9925-9929.	1.5	13
117	Impact of ammonium sulfide solution on electronic properties and ambient stability of germanium surfaces: towards Ge-based microelectronic devices. Journal of Materials Chemistry C, 2013, 1, 4105.	2.7	13
118	Fabrication of high band gap kesterite solar cell absorber materials for tandem applications. Thin Solid Films, 2018, 660, 247-252.	0.8	13
119	Alkali treatment for single-stage co-evaporated thin CuIn0.7Ga0.3Se2 solar cells. Thin Solid Films, 2019, 671, 44-48.	0.8	13
120	Bias-Dependent Admittance Spectroscopy of Thin-Film Solar Cells: Experiment and Simulation. IEEE Journal of Photovoltaics, 2020, 10, 1102-1111.	1.5	13
121	A Wet chemical Method for the Determination of Thickness of SiO2 Layers below the Nanometer Level. Journal of the Electrochemical Society, 1999, 146, 1873-1878.	1.3	12
122	A Fast and Accurate Method to Study the Impact of Interface Traps on Germanium MOS Performance. IEEE Transactions on Electron Devices, 2011, 58, 938-944.	1.6	12
123	Towards Passivation of Ge(100) Surfaces by Sulfur Adsorption from a (NH4)2S Solution: A Combined NEXAFS, STM and LEED Study. Journal of the Electrochemical Society, 2011, 158, H589.	1.3	12
124	Synthesis and characterization of (Cd,Zn)S buffer layer for Cu2ZnSnSe4solar cells. Journal Physics D: Applied Physics, 2017, 50, 285501.	1.3	12
125	Surface passivation and microroughness of (100) silicon etched in aqueous hydrogen halide (HF, HCl,) Tj ETQq1 1 0.784314 rgBT /Ov	1.1	11
126	P+/n junction leakage in thin selectively grown Ge-in-STI substrates. Thin Solid Films, 2010, 518, 2489-2492.	0.8	11

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127	Design and analysis of the As implant-free quantum-well device structure. Microelectronic Engineering, 2011, 88, 358-361.	1.1	11
128	Selenization of printed Cuâ€“Inâ€“Se alloy nanopowder layers for fabrication of CuInSe2 thin film solar cells. Thin Solid Films, 2015, 582, 18-22.	0.8	11
129	Pâ€“N Junction Passivation in Kesterite Solar Cells by Use of Solution-Processed TiO2 Layer. IEEE Journal of Photovoltaics, 2017, 7, 1130-1135.	1.5	11
130	First-principles study of the electronic properties of Ge dangling bonds at (100)Si1âˆ’xGex/SiO2 interfaces. Applied Physics Letters, 2009, 95, .	1.5	10
131	Defect density reduction of the Al2O3/GaAs(001) interface by using H2S molecular beam passivation. Surface Science, 2011, 605, 1778-1783.	0.8	10
132	InGaAs MOS Transistors Fabricated through a Digital-Etch Gate-Recess Process and the Influence of Forming Gas Anneal on Their Electrical Behavior. ECS Journal of Solid State Science and Technology, 2012, 1, P310-P314.	0.9	10
133	18% Efficiency IBC Cell With Rear-Surface Processed on Quartz. IEEE Journal of Photovoltaics, 2013, 3, 684-689.	1.5	10
134	Mechanical synthesis of high purity Cuâ€“Inâ€“Se alloy nanopowder as precursor for printed CISe thin film solar cells. Advanced Powder Technology, 2014, 25, 1254-1261.	2.0	10
135	Crystallization properties of Cu2ZnGeSe4. Thin Solid Films, 2019, 670, 76-79.	0.8	10
136	Processing Factors Impacting the Leakage Current and Flicker Noise of Germanium p[sup +]-n Junctions on Silicon Substrates. Journal of the Electrochemical Society, 2008, 155, H145.	1.3	9
137	Structure and interface bonding of GeO2âˆ•Geâˆ•In0.15Ga0.85As heterostructures. Applied Physics Letters, 2008, 93, 133504.	1.5	9
138	(Invited) Selective Epitaxial Growth of III-V Semiconductor Heterostructures on Si Substrates for Logic Applications. ECS Transactions, 2010, 33, 933-939.	0.3	9
139	Effect of Binder Content in Cuâ€“Inâ€“Se Precursor Ink on the Physical and Electrical Properties of Printed CuInSe₂ Solar Cells. Journal of Physical Chemistry C, 2014, 118, 27201-27209.	1.5	9
140	Effect of selenium content of CuInSex alloy nanopowder precursors on recrystallization of printed CuInSe2 absorber layers during selenization heat treatment. Thin Solid Films, 2015, 582, 11-17.	0.8	9
141	Impact of photovoltaic technology and feeder voltage level on the efficiency of faÃ§ade building-integrated photovoltaic systems. Applied Energy, 2020, 269, 115039.	5.1	9
142	Advanced cleaning for the growth of ultrathin gate oxide. Microelectronic Engineering, 1999, 48, 199-206.	1.1	8
143	Applicability of Charge Pumping on Germanium MOSFETs. IEEE Electron Device Letters, 2008, 29, 1364-1366.	2.2	8
144	H2S molecular beam passivation of Ge(001). Microelectronic Engineering, 2011, 88, 399-402.	1.1	8

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145	The implant-free quantum well field-effect transistor: Harnessing the power of heterostructures. Thin Solid Films, 2012, 520, 3326-3331.	0.8	8
146	Effect of Cu content and temperature on the properties of Cu₂ZnSnSe₄solar cells. EPJ Photovoltaics, 2016, 7, 70304.	0.8	8
147	Effect of Sn/Zn/Cu precursor stack thickness on two-step processed kesterite solar cells. Thin Solid Films, 2017, 633, 127-130.	0.8	8
148	Device assessment of the electrical activity of threading dislocations in strained Ge epitaxial layers. Materials Science in Semiconductor Processing, 2008, 11, 364-367.	1.9	7
149	Influence of passivating interlayer on Ge/HfO2 and Ge/Al2O3 interface band diagrams. Materials Science in Semiconductor Processing, 2008, 11, 230-235.	1.9	7
150	Shallow boron implantations in Ge and the role of the pre-amorphization depth. Materials Science in Semiconductor Processing, 2008, 11, 368-371.	1.9	7
151	Simulation Study of Performance for a 20-nm Gate Length In$_{f 0.53}$Ga$_{f 0.47}$As Implant Free Quantum Well MOSFET. IEEE Nanotechnology Magazine, 2012, 11, 808-817.	1.1	7
152	Effect of ammonium sulfide treatments on the surface properties of Cu2ZnSnSe4 thin films. Thin Solid Films, 2017, 633, 135-140.	0.8	7
153	Low temperature mobility in hafnium-oxide gated germanium p-channel metal-oxide-semiconductor field-effect transistors. Applied Physics Letters, 2007, 91, 263512.	1.5	6
154	Electrical Passivation of the (100)Ge Surface by Its Thermal Oxide. ECS Transactions, 2007, 11, 451-459.	0.3	6
155	On the characterisation of grown-in defects in Czochralski-grown Si and Ge. Journal of Materials Science: Materials in Electronics, 2008, 19, 24-31.	1.1	6
156	Interface analysis of Ge ultra thin layers intercalated between GaAs substrates and oxide stacks. Thin Solid Films, 2010, 518, S123-S127.	0.8	6
157	Liquid-Phase Adsorption of Sulfur on Germanium: Reaction Mechanism and Atomic Geometry. Journal of Physical Chemistry C, 2013, 117, 7451-7458.	1.5	6
158	Fabrication and characterization of ternary Cu8SiS6 and Cu8SiSe6 thin film layers for optoelectronic applications. Thin Solid Films, 2016, 616, 649-654.	0.8	6
159	Characterization of the TiWâ€GaAs interface after rapid thermal annealing. Journal of Applied Physics, 1989, 66, 4775-4779.	1.1	5
160	Comparing GaAs and In0.15Ga0.85As as channel material for alternative substrate CMOS. Microelectronic Engineering, 2007, 84, 2154-2157.	1.1	5
161	Short-channel epitaxial germanium pMOS transistors. Thin Solid Films, 2010, 518, S88-S91.	0.8	5
162	Self-Affine Surface Roughness of Chemically and Thermally Cleaned Ge(100) Surfaces. Journal of the Electrochemical Society, 2011, 158, H1090.	1.3	5

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163	Heterogeneous Integration and Fabrication of III-V MOS Devices in a 200mm Processing Environment. ECS Transactions, 2011, 35, 299-309.	0.3	5
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