Thierry Conard

List of Publications by Year
in descending order

197 papers	4,126 citations	136950 32 h-index	161849 54 g-index
198 all docs	198 docs citations	198 times ranked	4232 citing authors

#	Article	IF	Citations
1	Nucleation and growth of atomic layer deposited HfO2 gate dielectric layers on chemical oxide (Siâ€“Oâ€“H) and thermal oxide (SiO2 or Siâ€“Oâ€“N) underlayers. Journal of Applied Physics, 2002, 92, 7168-7174.	2.5	268
2	High-k dielectrics for future generation memory devices (Invited Paper). Microelectronic Engineering, 2009, 86, 1789-1795.	2.4	218
3	Characterization of ALCVD-Al2O3 and ZrO2 layer using X-ray photoelectron spectroscopy. Journal of Non-Crystalline Solids, 2002, 303, 83-87.	3.1	163
4	Island growth in the atomic layer deposition of zirconium oxide and aluminum oxide on hydrogen-terminated silicon: Growth mode modeling and transmission electron microscopy. Journal of Applied Physics, 2004, 96, 4878-4889.	2.5	132
5	Deposition of HfO2 on germanium and the impact of surface pretreatments. Applied Physics Letters, 2004, 85, 3824-3826.	3.3	104
6	Atomic layer deposition of hafnium oxide on germanium substrates. Journal of Applied Physics, 2005, 97, 064104.	2.5	95
7	Characterisation of ALCVD Al2O3â€“ZrO2 nanolaminates, link between electrical and structural properties. Journal of Non-Crystalline Solids, 2002, 303, 123-133.	3.1	92
8	Interface engineering for Ge metal-oxideâ€“semiconductor devices. Thin Solid Films, 2007, 515, 6337-6343.	1.8	87
9	Dielectric properties of dysprosium- and scandium-doped hafnium dioxide thin films. Applied Physics Letters, 2007, 91, .	3.3	79
10	Plasma-Enhanced Atomic Layer Deposition of Two-Dimensional WS₂ from WF₆, H₂ Plasma, and H₂S. Chemistry of Materials, 2017, 29, 2927-2938.	6.7	74
11	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.	3.5	68
12	Effect of hafnium germanate formation on the interface of HfO2/germanium metal oxide semiconductor devices. Applied Physics Letters, 2006, 88, 141904.	3.3	67
13	Design of Mixed PEO/PAA Brushes with Switchable Properties Toward Protein Adsorption. Biomacromolecules, 2013, 14, 215-225.	5.4	66
14	Interfacial properties of ZrO2 on silicon. Journal of Applied Physics, 2003, 93, 5945-5952.	2.5	64
15	Complex admittance analysis for La2Hf2O7/SiO2 high-Îº dielectric stacks. Applied Physics Letters, 2004, 84, 260-262.	3.3	61
16	Multilayer MoS₂ growth by metal and metal oxide sulfurization. Journal of Materials Chemistry C, 2016, 4, 1295-1304.	5.5	57
17	Two-Dimensional Crystal Grain Size Tuning in WS₂ Atomic Layer Deposition: An Insight in the Nucleation Mechanism. Chemistry of Materials, 2018, 30, 7648-7663.	6.7	57
18	Surface preparation and interfacial stability of high-k dielectrics deposited by atomic layer chemical vapor deposition. Microelectronic Engineering, 2003, 65, 259-272.	2.4	48

#	Article	IF	Citations
19	Process Study and Characterization of VO₂Thin Films Synthesized by ALD Using TEMAV and O₃Precursors. ECS Journal of Solid State Science and Technology, 2012, 1, P169-P174.	1.8	48
20	Evaluation of the electrical contact area in contact-mode scanning probe microscopy. Journal of Applied Physics, 2015, 117, .	2.5	46
21	Scaling to Sub-1â€‚nm Equivalent Oxide Thickness with Hafnium Oxide Deposited by Atomic Layer Deposition. Journal of the Electrochemical Society, 2006, 153, F180.	2.9	45
22	X-ray photoelectron spectroscopy characterisation of high-k dielectric Al2O3 and HfO2 layers deposited on SiO2/Si surface. Applied Surface Science, 2004, 235, 21-25.	6.1	43
23	Factors affecting an efficient sealing of porous low-kdielectrics by physical vapor deposition Ta(N) thin films. Journal of Applied Physics, 2002, 92, 1548-1554.	2.5	41
24	Nucleation and growth mechanisms of Al2O3 atomic layer deposition on synthetic polycrystalline MoS2. Journal of Chemical Physics, 2017, 146, 052810.	3.0	41
25	Lightâ€‐Induced Degradation of Polymer:Fullerene Photovoltaic Devices: An Intrinsic or Materialâ€Dependent Failure Mechanism?. Advanced Energy Materials, 2014, 4, 1400848.	19.5	40
26	MBE lanthanum-based high-k gate dielectrics as candidates for SiO2 gate oxide replacement. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 85-88.	3.5	37
27	Material-Selective Doping of 2D TMDC through Al_xO_y Encapsulation. ACS Applied Materials & Interfaces, 2019, 11, 42697-42707.	8.0	37
28	Achieving Conduction Band-Edge Effective Work Functions by $hbox{La}_{2}hbox{O}_{3}$ Capping of Hafnium Silicates. IEEE Electron Device Letters, 2007, 28, 486-488.	3.9	36
29	Removal of Submicrometer Particles from Silicon Wafer Surfaces Using HF-Based Cleaning Mixtures. Journal of the Electrochemical Society, 2001, 148, G683.	2.9	35
30	The use of angle resolved XPS to measure the fractional coverage of high-k dielectric materials on silicon and silicon dioxide surfaces. Applied Surface Science, 2006, 252, 8270-8276.	6.1	35
31	Atomic Layer Deposition of Hafnium Oxide on Ge and GaAs Substrates: Precursors and Surface Preparation. Journal of the Electrochemical Society, 2008, 155, H937.	2.9	35
32	Transition metal contacts to graphene. Applied Physics Letters, 2015, 107, .	3.3	34
33	Surface Chemistry and Interface Formation during the Atomic Layer Deposition of Alumina from Trimethylaluminum and Water on Indium Phosphide. Chemistry of Materials, 2013, 25, 1078-1091.	6.7	33
34	H2S exposure of a (100)Ge surface: Evidences for a (2Ã—1) electrically passivated surface. Applied Physics Letters, 2007, 90, 222105.	3.3	32
35	Impact of SiO₂ surface composition on trimethylsilane passivation for area-selective deposition. Journal of Materials Chemistry C, 2019, 7, 11911-11918.	5.5	32
36	Composition and Growth Kinetics of the Interfacial Layer for MOCVD HfO[sub 2] Layers on Si Substrates. Journal of the Electrochemical Society, 2004, 151, F77.	2.9	31

#	Article	IF	Citations
37	H[sub 2]O- and O[sub 3]-Based Atomic Layer Deposition of High-Î² Dielectric Films on GeO[sub 2] Passivation Layers. Journal of the Electrochemical Society, 2009, 156, G163.	2.9	31
38	Phase of reflection high-energy electron diffraction oscillations during (Ba,Sr)O epitaxy on Si(100): A marker of Sr barrier integrity. Applied Physics Letters, 2005, 87, 262905.	3.3	30
39	Nucleation mechanism during WS2 plasma enhanced atomic layer deposition on amorphous Al2O3 and sapphire substrates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	2.1	30
40	Effective work function modulation by controlled dielectric monolayer deposition. Applied Physics Letters, 2006, 89, 113505.	3.3	29
41	Removal of post-etch photoresist and sidewall residues using organic solvent and additive combined with physical forces. Microelectronic Engineering, 2009, 86, 181-185.	2.4	29
42	Root-Cause Failure Analysis of Photocurrent Loss in Polythiophene:Fullerene-Based Inverted Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 618-623.	8.0	28
43	Thermal stability of dysprosium scandate thin films. Applied Physics Letters, 2008, 92, .	3.3	27
44	MoS₂ Functionalization with a Sub-nm Thin SiO₂ Layer for Atomic Layer Deposition of High-Î² Dielectrics. Chemistry of Materials, 2017, 29, 6772-6780.	6.7	27
45	Enhancement of ALCVDâ„¢ TiN growth on Siâ€“Oâ€“C and Î±-SiC:H films by O2-based plasma treatments. Microelectronic Engineering, 2002, 60, 59-69.	2.4	26
46	MoS2 synthesis by gas source MBE for transition metal dichalcogenides integration on large scale substrates. Journal of Applied Physics, 2018, 123, .	2.5	26
47	Growth of Dysprosiumâ€, Scandiumâ€, and Hafniumâ€based Third Generation Highâ€Î² Dielectrics by Atomic Vapor Deposition. Chemical Vapor Deposition, 2007, 13, 567-573.	1.3	25
48	Study of InP Surfaces after Wet Chemical Treatments. ECS Journal of Solid State Science and Technology, 2014, 3, N3016-N3022.	1.8	25
49	Nucleation and Growth Behavior of Atomic Layer Deposited HfO[sub 2] Films on Silicon Oxide Starting Surfaces. Journal of the Electrochemical Society, 2006, 153, F205.	2.9	24
50	Impact of Process Optimizations on the Electrical Performance of High-k Layers Deposited by Aqueous Chemical Solution Deposition. Journal of the Electrochemical Society, 2008, 155, G91.	2.9	24
51	Si passivation for Ge pMOSFETs: Impact of Si cap growth conditions. Solid-State Electronics, 2011, 60, 116-121.	1.4	24
52	Pore sealing of k 2.0 dielectrics assisted by self-assembled monolayers deposited from vapor phase. Microelectronic Engineering, 2014, 120, 240-245.	2.4	24
53	Aqueous solutionâ€“gel preparation of ultrathin ZrO2 films for gate dielectric application. Thin Solid Films, 2008, 516, 8343-8351.	1.8	23
54	Density and Capture Cross-Section of Interface Traps in GeSnO₂ and GeO₂ Grown on Heteroepitaxial GeSn. ACS Applied Materials & Interfaces, 2016, 8, 13181-13186.	8.0	23

#	Article	IF	Citations
55	Copper/oxide interface formation: a vibrational and electronic investigation by electron spectroscopies. Surface Science, 1992, 265, 31-38.	1.9	22
56	Improved EOT and leakage current for metalâ€“insulatorâ€“metal capacitor stacks with rutile TiO2. Microelectronic Engineering, 2011, 88, 1517-1520.	2.4	22
57	Self Focusing SIMS: Probing thin film composition in very confined volumes. Applied Surface Science, 2016, 365, 143-152.	6.1	22
58	Chemical Vapor Deposition of Azidoalkylsilane Monolayer Films. Langmuir, 2018, 34, 1400-1409.	3.5	22
59	Impurity Incorporation during Copper Electrodeposition in the Curvature-Enhanced Accelerator Coverage Regime. Electrochemical and Solid-State Letters, 2005, 8, C95.	2.2	21
60	Evaluation of Time-of-Flight Secondary Ion Mass Spectrometry for Metal Contamination Monitoring on Si Wafer Surfaces. Journal of the Electrochemical Society, 2000, 147, 1915.	2.9	20
61	Aqueous chemical solution deposition of ultrathin lanthanide oxide dielectric films. Journal of Materials Research, 2007, 22, 3484-3493.	2.6	20
62	Sacrificial Self-Assembled Monolayers for the Passivation of GaAs (100) Surfaces and Interfaces. Chemistry of Materials, 2016, 28, 5689-5701.	6.7	20
63	Remediation for TXRF saturation effects on microdroplet residues from preconcentration methods on semiconductor wafers. Journal of Analytical Atomic Spectrometry, 2005, 20, 652.	3.0	19
64	Influence of elastic scattering of photoelectrons on angle-resolved x-ray photoelectron spectroscopy. Applied Physics Letters, 2007, 91, .	3.3	19
65	Ion-bombardment artifact in TOF-SIMS analysis of ZrO2/SiO2/Si stacks. Applied Surface Science, 2003, 203-204, 523-526.	6.1	18
66	The future of high-K on pure germanium and its importance for Ge CMOS. Materials Science in Semiconductor Processing, 2005, 8, 203-207.	4.0	18
67	Metallorganic Chemical Vapor Deposition of Dysprosium Scandate High-k Layers Using mmp-Type Precursors. Journal of the Electrochemical Society, 2006, 153, F219.	2.9	18
68	Epitaxy solutions for Ge MOS technology. Thin Solid Films, 2006, 508, 292-296.	1.8	18
69	Study of CVD high-k gate oxides on high-mobility Ge and Ge/Si substrates. Thin Solid Films, 2006, 508, 1-5.	1.8	18
70	Atomic Layer Deposition of High-Î¤ Dielectrics on Sulphur-Passivated Germanium. Journal of the Electrochemical Society, 2011, 158, H687.	2.9	18
71	Electron spectroscopy study of the interface. Surface Science, 1996, 359, 82-92.	1.9	17
72	Controlled Deposition of Organic Contamination and Removal with Ozone-Based Cleanings. Journal of the Electrochemical Society, 2001, 148, G118.	2.9	17

#	Article	IF	Citations
73	Grazing Incidence-X-ray Fluorescence Spectrometry for the Compositional Analysis of Nanometer-Thin High-.KAPPA. Dielectric HfO2 Layers. Analytical Sciences, 2005, 21, 845-850.	1.6	17
74	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.	2.9	17
75	Structural and Optical Properties of Amorphous and Crystalline GeSn Layers on Si. ECS Journal of Solid State Science and Technology, 2014, 3, P403-P408.	1.8	17
76	Al₂O₃/InGaAs Metal-Oxide-Semiconductor Interface Properties: Impact of Gd₂O₃and Sc₂O₃Interfacial Layers by Atomic Layer Deposition. ECS Journal of Solid State Science and Technology, 2014, 3, N133-N141.	1.8	17
77	Peculiar alignment and strain of 2D WSe₂ grown by van der Waals epitaxy on reconstructed sapphire surfaces. Nanotechnology, 2019, 30, 465601.	2.6	17
78	Bulk Properties of MOCVD-Deposited HfO[sub 2] Layers for High k Dielectric Applications. Journal of the Electrochemical Society, 2004, 151, F228.	2.9	16
79	Aqueous Chemical Solution Deposition. Electrochemical and Solid-State Letters, 2007, 10, G15.	2.2	16
80	Cesium near-surface concentration in low energy, negative mode dynamic SIMS. Applied Surface Science, 2008, 255, 1316-1319.	6.1	16
81	(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.	0.5	16
82	TOF-SIMS as a rapid diagnostic tool to monitor the growth mode of thin (high k) films. Applied Surface Science, 2003, 203-204, 400-403.	6.1	15
83	Electrical Properties of Atomic-Beam Deposited GeO[sub 1âˆ’x]N[sub x]â•HfO[sub 2] Gate Stacks on Ge. Journal of the Electrochemical Society, 2006, 153, G1112.	2.9	15
84	Materials characterization of WNxCy, WNx and WCx films for advanced barriers. Microelectronic Engineering, 2007, 84, 2460-2465.	2.4	15
85	Effects of $hbox{Al}_{2}hbox{O}_{3}$ Dielectric Cap and Nitridation on Device Performance, Scalability, and Reliability for Advanced High- $kappa$/Metal Gate pMOSFET Applications. IEEE Transactions on Electron Devices, 2007, 54, 2738-2749.	3.0	15
86	Properties of ultrathin molybdenum films for interconnect applications. Materialia, 2022, 24, 101511.	2.7	15
87	On the reliability of SIMS depth profiles through HfO2-stacks. Applied Surface Science, 2004, 231-232, 569-573.	6.1	14
88	Electrical Characterization of Capacitors with AVD-Deposited Hafnium Silicates as High-k Gate Dielectric. Journal of the Electrochemical Society, 2005, 152, F185.	2.9	14
89	Challenges with Respect to High-k/Metal Gate Stack Etching and Cleaning. ECS Transactions, 2007, 11, 275-283.	0.5	14
90	Mechanism of Modification of Fluorocarbon Polymer by Ultraviolet Irradiation in Oxygen Atmosphere. ECS Journal of Solid State Science and Technology, 2013, 2, N93-N98.	1.8	14

#	Article	IF	Citations
91	The Impact of Stacked Cap Layers on Effective Work Function With HfSiON and SiON Gate Dielectrics. IEEE Electron Device Letters, 2008, 29, 743-745.	3.9	13
92	A quantitative adhesion study between contacting materials in Cu damascene structures. Applied Surface Science, 2002, 201, 20-34.	6.1	12
93	Plasma Modification of Porous Low-k Dielectrics. Electrochemical and Solid-State Letters, 2004, 7, F49.	2.2	12
94	Evaluation of Atomic Layer Deposited NbN and NbSiN as Metal Gate Materials. Journal of the Electrochemical Society, 2006, 153, G437.	2.9	12
95	Fundamental aspects of Ar_n⁺ SIMS profiling of common organic semiconductors. Surface and Interface Analysis, 2014, 46, 54-57.	1.8	12
96	Understanding the EOTâ€“Jg degradation in Ru/SrTiOx/Ru metalâ€“insulatorâ€“metal capacitors formed with Ru atomic layer deposition. Microelectronic Engineering, 2015, 147, 108-112.	2.4	12
97	The band structure of ALCVD AlZr- and AlHf-oxides as measured by XPS. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 56-59.	3.5	11
98	Deposition of O atomic layers on Si(100) substrates for epitaxial Si-O superlattices: investigation of the surface chemistry. Applied Surface Science, 2015, 324, 251-257.	6.1	11
99	A Correlative ToF-SIMS/SPM Methodology for Probing 3D Devices. Analytical Chemistry, 2020, 92, 11413-11419.	6.5	11
100	Postdeposition-Anneal Effect on Negative Bias Temperature Instability in HfSiON Gate Stacks. IEEE Transactions on Device and Materials Reliability, 2007, 7, 146-151.	2.0	10
101	Depth-profiling of vertical sidewall nanolayers on structured wafers by grazing incidence X-ray flourescence. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 1359-1364.	2.9	10
102	Wet Chemical Cleaning of InP and InGaAs. Solid State Phenomena, 0, 187, 27-31.	0.3	10
103	Thin layer composition profiling with angular resolved x-ray photoemission spectroscopy: Factors affecting quantitative results. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	10
104	Epitaxial Chemical Vapor Deposition of Silicon on an Oxygen Monolayer on Si(100) Substrates. ECS Solid State Letters, 2013, 2, P104-P106.	1.4	10
105	Nanoscale electrochemical response of lithium-ion cathodes: a combined study using C-AFM and SIMS. Beilstein Journal of Nanotechnology, 2018, 9, 1623-1628.	2.8	10
106	Self-focusing SIMS: A metrology solution to area selective deposition. Applied Surface Science, 2019, 476, 594-599.	6.1	10
107	Nanoscale etching of III-V semiconductors in acidic hydrogen peroxide solution: GaAs and InP, a striking contrast in surface chemistry. Applied Surface Science, 2019, 465, 596-606.	6.1	10
108	The Importance of Moisture Control for EOT Scaling of Hf-Based Dielectrics. Journal of the Electrochemical Society, 2009, 156, H416.	2.9	9

#	Article	IF	Citations
109	Crystallization resistance of barium titanate zirconate ultrathin films from aqueous CSD: a study of cause and effect. Journal of Materials Chemistry, 2009, 19, 1115.	6.7	9
110	Degradation of 248 nm Deep UV Photoresist by Ion Implantation. Journal of the Electrochemical Society, 2011, 158, H785.	2.9	9
111	Characterization of Porous Structures in Advanced Low-kFilms with Thin TaN Layers Using Monoenergetic Positron Beams. Japanese Journal of Applied Physics, 2013, 52, 106501.	1.5	9
112	The conversion mechanism of amorphous silicon to stoichiometric WS₂. Journal of Materials Chemistry C, 2018, 6, 4122-4130.	5.5	9
113	Analyses of Post Metal Etch Cleaning in Downstream â€‰Hâ€‰2â€‰Oâ€‰â€‰â€â€‰Based Plasma Followed by a Wet Chemistry. Journal of the Electrochemical Society, 1999, 146, 3843-3851.	2.9	8
114	Characterization of 248nm Deep Ultraviolet (DUV) Photoresist after Ion Implantation. ECS Transactions, 2009, 25, 187-194.	0.5	8
115	Barrier and seed repair performance of thin RuTa films for Cu interconnects. Microelectronic Engineering, 2011, 88, 690-693.	2.4	8
116	Si cap passivation for Ge nMOS applications. Microelectronic Engineering, 2013, 109, 46-49.	2.4	8
117	Inorganic material profiling using Arn+ cluster: Can we achieve high quality profiles?. Applied Surface Science, 2018, 444, 633-641.	6.1	8
118	Achieving reproducible data: Examples from surface analysis in semiconductor technology. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	8
119	Chemical and Electrical Characterization of the Interaction of BCl3â€‰/â€‰Cl2 Etching and â€‰CFâ€‰4â€‰/â€‰â€‰Hâ€‰2â€ Stripping Plasmas with Aluminum Surfaces. Journal of the Electrochemical Society, 1999, 146, 4230-4235.	2.9	7
120	Characterization of the Post Dryâ€Etch Cleaning of Silicon for Tiâ€Selfâ€Aligned Silicide Technology. Journal of the Electrochemical Society, 1999, 146, 1549-1556.	2.9	7
121	Nitrogen analysis in high-k stack layers: a challenge. Applied Surface Science, 2004, 231-232, 581-584.	6.1	7
122	Effective attenuation length of Al KÎ±-excited Si2p photoelectrons in SiO2, Al2O3 and HfO2 thin films. Journal of Electron Spectroscopy and Related Phenomena, 2005, 149, 37-44.	1.7	7
123	Interpretation of TOFâ€“SIMSâ€‰depthâ€‰profilesâ€‰from ultrashallow high-k dielectric stacks assisted by hybrid collisional computer simulation. Applied Physics A: Materials Science and Processing, 2005, 81, 71-77.	2.3	7
124	Analysis of Ultra-Thin HfO2/SiOn/Si(001): Comparison of Three Different Techniques. Analytical Sciences, 2010, 26, 223-226.	1.6	7
125	Lanthanide Aluminates as Dielectrics for Non-Volatile Memory Applications: Material Aspects. Journal of the Electrochemical Society, 2011, 158, H778-H784.	2.9	7
126	The Effects of Plasma Treatments and Subsequent Atomic Layer Deposition on the Pore Structure of a k = 2.0 Low-k Material. ECS Journal of Solid State Science and Technology, 2013, 2, N103-N109.	1.8	7

#	Article	IF	Citations
127	Study of Wet Surface Activation Routes to Enable the Deposition of Monomolecular Organic Thin Films on k 2.0 Porous Dielectrics. ECS Journal of Solid State Science and Technology, 2014, 3, N3106-N3111.	1.8	7
128	Nanomechanical Characterization of Organic Surface Passivation Films on 50 nm Patterns during Area-Selective Deposition. ACS Applied Electronic Materials, 2021, 3, 2622-2630.	4.3	7
129	Comparison of electric properties of ultra-thin thermal and plasma nitrided silicon oxides with different post-deposition treatments using C-AFM. Microelectronic Engineering, 2005, 80, 436-439.	2.4	6
130	Growth Studies and Reaction Mechanism of the Atomic Layer Deposition of Hafnium Oxide. ECS Transactions, 2006, 1, 433-446.	0.5	6
131	Electrical Passivation of the (100)Ge Surface by Its Thermal Oxide. ECS Transactions, 2007, 11, 451-459.	0.5	6
132	Screening of High-k Layers in MIS and MIM Capacitors Using Aqueous Chemical Solution Deposition. ECS Transactions, 2007, 11, 299-310.	0.5	6
133	Nitrogen Incorporation in HfSiO(N)/TaN Gate Stacks: Impact on Performances and NBTI. IEEE Electron Device Letters, 2007, 28, 613-615.	3.9	6
134	Performance improvement in narrow MuGFETs by gate work function and source/drain implant engineering. Solid-State Electronics, 2009, 53, 760-766.	1.4	6
135	Atomic layer deposition of tantalum oxide and tantalum silicate from TaCl5, SiCl4, and O3: growth behaviour and film characteristics. Journal of Materials Chemistry C, 2013, 1, 5981.	5.5	6
136	Ozoneâ€Based Atomic Layer Deposition of Gd₂O₃ from Tris(isopropylâ€cyclopentadienyl)gadolinium: Growth Characteristics and Surface Chemistry. Chemical Vapor Deposition, 2015, 21, 352-359.	1.3	6
137	Understanding Physico-Chemical Aspects in the Depth Profiling of Polymer:Fullerene Layers. Journal of Physical Chemistry C, 2016, 120, 28074-28082.	3.1	6
138	Insights into the nanoscale lateral and vertical phase separation in organic bulk heterojunctions via scanning probe microscopy. Nanoscale, 2016, 8, 3629-3637.	5.6	6
139	Optimization and upscaling of spin coating with organosilane monolayers for low-k pore sealing. Microelectronic Engineering, 2017, 167, 32-36.	2.4	6
140	Effects of Low-Thermal-Budget Treatments on the Porous Si Material Properties. Journal of Porous Materials, 2000, 7, 67-71.	2.6	5
141	Effect of Postdeposition Anneal Conditions on Defect Density of HfO[sub 2] Layers Measured by Wet Etching. Journal of the Electrochemical Society, 2004, 151, F269.	2.9	5
142	Observation and characterization of defects in HfO2 high-K gate dielectric layers. Microelectronics Reliability, 2005, 45, 798-801.	1.7	5
143	AVD and MOCVD TaCN-based Films for Gate Metal Applications on High k Gate Dielectrics. ECS Transactions, 2007, 11, 557-567.	0.5	5
144	Selective Protein Immobilization onto Gold Nanoparticles Deposited under Vacuum on a Protein-Repellent Self-Assembled Monolayer. Langmuir, 2013, 29, 15328-15335.	3.5	5

#	Article	IF	Citations
145	Medium energy ion scattering for the high depth resolution characterisation of high-k dielectric layers of nanometer thickness. Applied Surface Science, 2013, 281, 8-16.	6.1	5
146	Growth mechanisms for Si epitaxy on O atomic layers: Impact of O-content and surface structure. Applied Surface Science, 2016, 384, 152-160.	6.1	5
147	Direct imaging and manipulation of ionic diffusion in mixed electronicâ€“ionic conductors. Nanoscale, 2018, 10, 12564-12572.	5.6	5
148	A chemical role of refractory metal caps in Co silicidation: Evidence of SiO₂ reduction by Ti cap. Journal of Materials Research, 1999, 14, 4402-4408.	2.6	4
149	Depth profiling of ZrO2/SiO2/Si stacksâ€”a TOF-SIMS and computer simulation study. Applied Surface Science, 2004, 231-232, 603-608.	6.1	4
150	Characterization of post-etched photoresist and residues by various analytical techniques. Applied Surface Science, 2008, 255, 1408-1411.	6.1	4
151	ToFâ€“SIMS and XPS study of ion implanted 248nm deep ultraviolet (DUV) photoresist. Microelectronic Engineering, 2011, 88, 677-679.	2.4	4
152	Characterization of organic solar cell materials by Gâ€SIMS. Surface and Interface Analysis, 2013, 45, 430-433.	1.8	4
153	Record Gm_{SAT}/SS_{SAT} and PBTI Reliability in Si-Passivated Ge nFinFETs by Improved Gate-Stack Surface Preparation. IEEE Transactions on Electron Devices, 2019, 66, 5387-5392.	3.0	4
154	Surface analysis in the semiconductor industry: Present use and future possibilities. Surface and Interface Analysis, 2020, 52, 786-791.	1.8	4
155	Engineering high quality and conformal ultrathin SiNx films by PEALD for downscaled and advanced CMOS nodes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	4
156	High-energy x-ray photoelectron spectroscopy spectra of SiO2 measured by Cr KÎ±. Surface Science Spectra, 2022, 29, .	1.3	4
157	ToF-SIMS profiling of HfO2/Si stacks: influence of sputtering condition of profile shape. Applied Surface Science, 2004, 231-232, 574-580.	6.1	3
158	Mechanism of O2-anneal induced Vfb shifts of Ru gated stacks. Microelectronics Reliability, 2007, 47, 518-520.	1.7	3
159	Characterisation of High-k Containing Nanolayers by Reference-Free X-Ray Fluorescence Analysis with Synchrotron Radiation. ECS Transactions, 2009, 25, 293-300.	0.5	3
160	Scaling the Ge Gate Stack: Toward Sub 1 nm EOT. ECS Journal of Solid State Science and Technology, 2012, 1, P127-P132.	1.8	3
161	Degradation of deep ultraviolet photoresist by As-implantation studied by Ar-cluster beam profiling. Surface and Interface Analysis, 2013, 45, 406-408.	1.8	3
162	Comparison and complementarity of QUASES-Tougaard and SESSA software. Applied Surface Science, 2022, 585, 152758.	6.1	3

#	Article	IF	Citations
163	Photoemission study of the BiCuO interface. Surface Science, 1996, 369, 177-184.	1.9	2
164	Optimization of HfSiON using a design of experiment (DOE) approach on 0.45V Vt Ni-FUSI CMOS transistors. Microelectronics Reliability, 2007, 47, 521-524.	1.7	2
165	Cleaning and Surface Preparation for SiGe and Ge Channel Device. Solid State Phenomena, 2012, 187, 19-22.	0.3	2
166	Characterization of Patterned Porous Low-kDielectrics: Surface Sealing and Residue Removal by Wet Processing/Cleaning. ECS Journal of Solid State Science and Technology, 2016, 5, N5-N9.	1.8	2
167	HAXPES on SiO2 with Ga KÎ± photons. Surface Science Spectra, 2022, 29, .	1.3	2
168	High-energy x-ray photoelectron spectroscopy spectra of TiO2 measured by Cr KÎ±. Surface Science Spectra, 2022, 29, 014017.	1.3	2
169	Interaction of a Ti-capped Co thin film with Si3N4. Applied Physics Letters, 2000, 77, 4307-4309.	3.3	1
170	Evaluation of Nb(Si)N as Metal Gate Material. ECS Transactions, 2006, 1, 495-506.	0.5	1
171	Wet Etch Characteristics of Hafnium Silicate Layers. ECS Transactions, 2006, 1, 633-644.	0.5	1
172	Comparison oF Electrical Measurements with Structural Analysis oF Thin High-k Hafnium-based Films. ECS Transactions, 2009, 25, 363-372.	0.5	1
173	Atomic-Layer Deposition of Lutetium Aluminate Thin Films for Non-Volatile Memory Applications. ECS Transactions, 2011, 34, 473-478.	0.5	1
174	The Impact of Dummy Gate Processing on Si-Cap-Free SiGe Passivation: A Physical Characterization Study on Strained SiGe 25% and 45%. ECS Transactions, 2017, 80, 155-162.	0.5	1
175	Nanoscale Etching of GaAs and InP in Acidic H₂O₂ Solution: A Striking Contrast in Kinetics and Surface Chemistry. Solid State Phenomena, 2018, 282, 48-51.	0.3	1
176	Spin-on-diffussants for doping in transition metal dichalcogenide semiconductors. Applied Physics Letters, 2019, 114, 212102.	3.3	1
177	Impact of Ge-Oxide-Scavenging on Low-T Steam Oxidation and Passivation of Bi-Axially Strained Si0.75Ge0.25. ECS Transactions, 2019, 93, 71-72.	0.5	1
178	Photoanodic oxidation of InP in acid solution and its surface chemistry: On the interplay of photons, protons and hydrodynamics. Electrochimica Acta, 2020, 360, 136872.	5.2	1
179	HAXPES of GaN film on Si with Cr KÎ± photons. Surface Science Spectra, 2021, 28, 014006.	1.3	1
180	Interfacial control of SrTiO3/Si(0 0 1) epitaxy and its effect on physical and optical properties. Journal of Crystal Growth, 2022, 582, 126524.	1.5	1

#	Article	IF	Citations
181	High-energy x-ray photoelectron spectroscopy spectra of InP measured by Cr KÎ±. Surface Science Spectra, 2022, 29, 014018.	1.3	1
182	High-energy x-ray photoelectron spectroscopy spectra of Al2O3 measured by Cr KÎ±. Surface Science Spectra, 2022, 29, 014021.	1.3	1
183	High-energy x-ray photoelectron spectroscopy spectra of HfO2 measured by Cr KÎ±. Surface Science Spectra, 2022, 29, 014019.	1.3	1
184	High energy x-ray photoelectron spectroscopy spectra of Si3N4 measured by Cr KÎ±. Surface Science Spectra, 2022, 29, 014013.	1.3	1
185	High-energy x-ray photoelectron spectroscopy on Si3N4 with Ga KÎ± photons. Surface Science Spectra, 2022, 29, .	1.3	1
186	High-energy x-ray photoelectron spectroscopy spectra of TiN measured by Cr KÎ±. Surface Science Spectra, 2022, 29, 014016.	1.3	1
187	HAXPES spectra of NaCl measured by Cr KÎ±. Surface Science Spectra, 2022, 29, 014022.	1.3	1
188	HAXPES spectra of GaAs measured by Cr KÎ±. Surface Science Spectra, 2022, 29, 014023.	1.3	1
189	Nitrogen analysis in high-k stack layers: a challenge. Applied Surface Science, 2004, 231-232, 581-581.	6.1	0
190	ToF-SIMS profiling of HfO2/Si stacks: influence of sputtering condition of profile shape. Applied Surface Science, 2004, 231-232, 574-574.	6.1	0
191	Physico-chemical Characterization of Thin Oxide Films: Difficulties and Solutions. Materials Research Society Symposia Proceedings, 2008, 1073, 1.	0.1	0
192	Combination of High-Resolution RBS and Angle-Resolved XPS: Accurate Depth Profiling of Chemical States. Journal of Surface Analysis (Online), 2009, 15, 225-228.	0.1	0
193	Modification of Post-Etch Residues by UV for Wet Removal. Solid State Phenomena, 0, 187, 207-210.	0.3	0
194	Gâ€šIMS analysis of organic solar cell materials. Surface and Interface Analysis, 2014, 46, 96-99.	1.8	0
195	Characterization of Etch Residues Generated on Damascene Structures. Solid State Phenomena, 0, 255, 227-231.	0.3	0
196	A Multi-Technique Approach for a Complete Thin Film Characterisation. Journal of Surface Analysis (Online), 2019, 26, 184-185.	0.1	0
197	Advanced Material Characterization by TOFSIMS in Microelectronic. , 2005, , 437-447.		0