Michel Houssa

List of Publications by Year
in descending order

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341 papers	10,520 citations	44069 48 h-index	43889 91 g-index
348 all docs	348 docs citations	348 times ranked	8408 citing authors

#	Article	IF	Citations
1	Buckled two-dimensional Xene sheets. Nature Materials, 2017, 16, 163-169.	27.5	641
2	Strain-induced semiconductor to metal transition in the two-dimensional honeycomb structure of MoS2. Nano Research, 2012, 5, 43-48.	10.4	620
3	Electronic properties of hydrogenated silicene and germanene. Applied Physics Letters, 2011, 98, .	3.3	399
4	Trap-assisted tunneling in high permittivity gate dielectric stacks. Journal of Applied Physics, 2000, 87, 8615-8620.	2.5	320
5	Twoâ€Dimensional Si Nanosheets with Local Hexagonal Structure on a MoS₂ Surface. Advanced Materials, 2014, 26, 2096-2101.	21.0	311
6	Effective electrical passivation of Ge(100) for high-k gate dielectric layers using germanium oxide. Applied Physics Letters, 2007, 91, .	3.3	254
7	Electrical properties of high-Î° gate dielectrics: Challenges, current issues, and possible solutions. Materials Science and Engineering Reports, 2006, 51, 37-85.	31.8	241
8	Germanium MOSFET Devices: Advances in Materials Understanding, Process Development, and Electrical Performance. Journal of the Electrochemical Society, 2008, 155, H552.	2.9	230
9	Can silicon behave like graphene? A first-principles study. Applied Physics Letters, 2010, 97, .	3.3	208
10	Band alignments in metalâ€“oxideâ€“silicon structures with atomic-layer deposited Al2O3 and ZrO2. Journal of Applied Physics, 2002, 91, 3079-3084.	2.5	190
11	Variation in the fixed charge density of SiO[sub x]/ZrO[sub 2] gate dielectric stacks during postdeposition oxidation. Applied Physics Letters, 2000, 77, 1885.	3.3	182
12	Silicene: a review of recent experimental and theoretical investigations. Journal of Physics Condensed Matter, 2015, 27, 253002.	1.8	180
13	Getting through the Nature of Silicene: An sp²â€“sp³ Two-Dimensional Silicon Nanosheet. Journal of Physical Chemistry C, 2013, 117, 16719-16724.	3.1	163
14	Polarity effect on the temperature dependence of leakage current through HfO2/SiO2 gate dielectric stacks. Applied Physics Letters, 2002, 80, 1975-1977.	3.3	157
15	HfO2 high-Î° gate dielectrics on Ge (100) by atomic oxygen beam deposition. Applied Physics Letters, 2005, 86, 032908.	3.3	144
16	Vibrational properties of silicene and germanene. Nano Research, 2013, 6, 19-28.	10.4	144
17	Electron energy barriers between (100)Si and ultrathin stacks of SiO2, Al2O3, and ZrO2 insulators. Applied Physics Letters, 2001, 78, 3073-3075.	3.3	127
18	First-principles study of strained 2D MoS2. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 56, 416-421.	2.7	119

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19	Electronic properties of two-dimensional hexagonal germanium. Applied Physics Letters, 2010, 96, .	3.3	114
20	Passivation of Ge(100)â^•GeO[sub 2]â^•high-Î º Gate Stacks Using Thermal Oxide Treatments. Journal of the Electrochemical Society, 2008, 155, G33.	2.9	112
21	Model for the currentâ€“voltage characteristics of ultrathin gate oxides after soft breakdown. Journal of Applied Physics, 1998, 84, 4351-4355.	2.5	110
22	Molecular Dynamics Study of the Structure and Thermophysical Properties of Model sI Clathrate Hydrates. Journal of Physical Chemistry B, 2002, 106, 442-451.	2.6	109
23	Two-dimensional hexagonal tin: ab initio geometry, stability, electronic structure and functionalization. 2D Materials, 2014, 1, 021004.	4.4	107
24	Ge dangling bonds at the (100)Ge/GeO2 interface and the viscoelastic properties of GeO2. Applied Physics Letters, 2008, 93, .	3.3	103
25	Interface control of high-k gate dielectrics on Ge. Applied Surface Science, 2008, 254, 6094-6099.	6.1	95
26	Soft breakdown in ultrathin gate oxides: Correlation with the percolation theory of nonlinear conductors. Applied Physics Letters, 1998, 73, 514-516.	3.3	92
27	Interface engineering for Ge metal-oxideâ€“semiconductor devices. Thin Solid Films, 2007, 515, 6337-6343.	1.8	87
28	An electric field tunable energy band gap at silicene/(0001) ZnS interfaces. Physical Chemistry Chemical Physics, 2013, 15, 3702.	2.8	86
29	Surface Defects and Passivation of Ge and IIIâ€“V Interfaces. MRS Bulletin, 2009, 34, 504-513.	3.5	82
30	A Thermally Stable and High-Performance 90-nm ${m Al}_{2}{m O}_{3}ackslash{m Cu}$-Based 1T1R CBRAM Cell. IEEE Transactions on Electron Devices, 2013, 60, 3690-3695.	3.0	80
31	Charge trapping in very thin high-permittivity gate dielectric layers. Applied Physics Letters, 2000, 77, 1381-1383.	3.3	74
32	Non-Gaussian behavior and anticorrelations in ultrathin gate oxides after soft breakdown. Applied Physics Letters, 1999, 74, 1579-1581.	3.3	72
33	Effect of O2post-deposition anneals on the properties of ultra-thin SiOx/ZrO2gate dielectric stacks. Semiconductor Science and Technology, 2001, 16, 31-38.	2.0	72
34	First-principles electronic functionalization of silicene and germanene by adatom chemisorption. Applied Surface Science, 2014, 291, 104-108.	6.1	69
35	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
36	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	3.3	68

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37	Effect of hafnium germanate formation on the interface of HfO2/germanium metal oxide semiconductor devices. Applied Physics Letters, 2006, 88, 141904.	3.3	67
38	Constant voltage stress induced degradation in HfO2/SiO2 gate dielectric stacks. Journal of Applied Physics, 2002, 91, 10127-10129.	2.5	63
39	Frequency characterization and modeling of interface traps in HfSixOy/HfO2 gate dielectric stack from a capacitance point-of-view. Applied Physics Letters, 2002, 81, 3392-3394.	3.3	62
40	Electronic structure of GeO2-passivated interfaces of (100)Ge with Al2O3 and HfO2. Applied Physics Letters, 2008, 92, 022109.	3.3	62
41	Model for interface defect and positive charge generation in ultrathin SiO2/ZrO2 gate dielectric stacks. Applied Physics Letters, 2002, 81, 709-711.	3.3	57
42	Engineering the electronic properties of silicene by tuning the composition of MoX ₂ and GaX (X = S,Se,Te) chalchogenide templates. 2D Materials, 2014, 1, 011010.	4.4	53
43	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.	4.0	52
44	Electron energy band alignment at interfaces of (100)Ge with rare-earth oxide insulators. Applied Physics Letters, 2006, 88, 132111.	3.3	52
45	Reaction-dispersive proton transport model for negative bias temperature instabilities. Applied Physics Letters, 2005, 86, 093506.	3.3	51
46	High FET Performance for a Future CMOS $hbox{GeO}_{2}$ -Based Technology. IEEE Electron Device Letters, 2010, 31, 402-404.	3.9	50
47	Influence of Al₂O₃ crystallization on band offsets at interfaces with Si and TiN_x. Applied Physics Letters, 2011, 99, 072103.	3.3	50
48	High-temperature series expansion of the spin correlation functions in B-spinel lattice. Journal of Physics Condensed Matter, 1998, 10, 3611-3623.	1.8	49
49	Vibrational properties of epitaxial silicene layers on (111) Ag. Applied Surface Science, 2014, 291, 113-117.	6.1	49
50	Electrical properties of thin SiON/Ta2O5 gate dielectric stacks. Journal of Applied Physics, 1999, 86, 6462-6467.	2.5	48
51	Materials and electrical characterization of molecular beam deposited CeO2 and CeO2/HfO2 bilayers on germanium. Journal of Applied Physics, 2007, 102, .	2.5	48
52	Effect of dipolar interactions on the phase behavior of the Gayâ€“Berne liquid crystal model. Journal of Chemical Physics, 1998, 109, 9529-9542.	3.0	46
53	Intrinsic electron traps in atomic-layer deposited HfO2 insulators. Applied Physics Letters, 2016, 108, .	3.3	44
54	In-plane electronic thermal conductivity of layered d-wave high-Tc superconductors. Physica C: Superconductivity and Its Applications, 1996, 257, 321-331.	1.2	43

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55	Advancing CMOS beyond the Si roadmap with Ge and III/V devices. , 2011, , .		43
56	Semiconducting-like filament formation in TiN/HfO2/TiN resistive switching random access memories. Applied Physics Letters, 2012, 100, .	3.3	43
57	Electronic Properties of Silicene: Insights from First-Principles Modeling. Journal of the Electrochemical Society, 2011, 158, H107.	2.9	42
58	Hole-Doped 2D InSe for Spintronic Applications. ACS Applied Nano Materials, 2018, 1, 6656-6665.	5.0	41
59	Electronic properties of (100)Ge/Ge(Hf)O2 interfaces: A first-principles study. Surface Science, 2008, 602, L25-L28.	1.9	38
60	Intrinsic point defects in buckled and puckered arsenene: a first-principles study. Physical Chemistry Chemical Physics, 2017, 19, 9862-9871.	2.8	38
61	Germanium MOSFETs With $hbox{CeO}_{2}/hbox{HfO}_{2}/ hbox{TiN}$ Gate Stacks. IEEE Transactions on Electron Devices, 2007, 54, 1425-1430.	3.0	37
62	Ge 3d core-level shifts at (100)Geâˆ•Ge(Hf)O2 interfaces: A first-principles investigation. Applied Physics Letters, 2008, 92, .	3.3	37
63	Reaction field and Ewald summation study of mesophase formation in dipolar Gay-Berne model. Molecular Physics, 1998, 94, 439-446.	1.7	37
64	Stress-induced leakage current in ultrathin SiO2 layers and the hydrogen dispersive transport model. Applied Physics Letters, 2001, 78, 3289-3291.	3.3	36
65	Positive Bias Temperature Instability in nMOSFETs with ultra-thin Hf-silicate gate dielectrics. Microelectronic Engineering, 2005, 80, 130-133.	2.4	36
66	Thermal conductivity of superconductingBi2Sr2CaCu2O8andYBa2Cu3O7âˆ’y. Physical Review B, 1995, 51, 9372-9374.	3.2	35
67	Thermostability of amorphous zirconium aluminate high-k layers. Journal of Non-Crystalline Solids, 2002, 303, 144-149.	3.1	35
68	Electrical and reliability characterization of metal-gate/HfO2/Ge FETâ€™s with Si passivation. Microelectronic Engineering, 2007, 84, 2067-2070.	2.4	35
69	Role of hydrogen on negative bias temperature instability in HfO2-based hole channel field-effect transistors. Applied Physics Letters, 2004, 85, 2101-2103.	3.3	34
70	Effect of extreme surface roughness on the electrical characteristics of ultra-thin gate oxides. Solid-State Electronics, 1999, 43, 159-167.	1.4	33
71	Polarity dependence of defect generation in ultrathin SiO2/ZrO2 gate dielectric stacks. Applied Physics Letters, 2001, 79, 3134-3136.	3.3	33
72	Defect generation in high Îº gate dielectric stacks under electrical stress: the impact of hydrogen. Journal of Physics Condensed Matter, 2005, 17, S2075-S2088.	1.8	33

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73	Germanium: The Past and Possibly a Future Material for Microelectronics. ECS Transactions, 2007, 11, 479-493.	0.5	33
74	Adsorption of molecular oxygen on the reconstructed Î²2(2Ã—4)-GaAs(001) surface: A first-principles study. Surface Science, 2009, 603, 203-208.	1.9	33
75	Origin of the current discretization in deep reset states of an Al2O3/Cu-based conductive-bridging memory, and impact on state level and variability. Applied Physics Letters, 2014, 104, .	3.3	33
76	Model for the charge trapping in high permittivity gate dielectric stacks. Journal of Applied Physics, 2001, 89, 792-794.	2.5	32
77	Electrical characteristics of 8-/spl Aring/ EOT HfO/sub 2//TaN low thermal-budget n-channel FETs with solid-phase epitaxially regrown junctions. IEEE Transactions on Electron Devices, 2006, 53, 1657-1668.	3.0	32
78	H2S exposure of a (100)Ge surface: Evidences for a (2Ã—1) electrically passivated surface. Applied Physics Letters, 2007, 90, 222105.	3.3	32
79	Topological to trivial insulating phase transition in stanene. Nano Research, 2016, 9, 774-778.	10.4	32
80	Relation between stress-induced leakage current and time-dependent dielectric breakdown in ultra-thin gate oxides. Semiconductor Science and Technology, 1999, 14, 892-896.	2.0	31
81	A theoretical study of the initial oxidation of the GaAs(001)-Î²2(2Ã—4) surface. Applied Physics Letters, 2009, 95, .	3.3	31
82	Band alignment at interfaces of few-monolayer MoS2 with SiO2 and HfO2. Microelectronic Engineering, 2015, 147, 294-297.	2.4	31
83	Silicene on non-metallic substrates: Recent theoretical and experimental advances. Nano Research, 2018, 11, 1169-1182.	10.4	31
84	In situ crystallisation in ZrO2 thin films during high temperature X-ray diffraction. Microelectronics Reliability, 2001, 41, 995-998.	1.7	30
85	Operating-Current Dependence of the Cu-Mobility Requirements in Oxide-Based Conductive-Bridge RAM. IEEE Electron Device Letters, 2015, 36, 775-777.	3.9	30
86	Thermal conductivity of unconventional superconductors: a probe of the order parameter symmetry. Superconductor Science and Technology, 1999, 12, R103-R114.	3.5	29
87	Band alignment at the interfaces of Al2O3 and ZrO2-based insulators with metals and Si. Journal of Non-Crystalline Solids, 2002, 303, 69-77.	3.1	28
88	Nature of the filament formed in HfO2-based resistive random access memory. Thin Solid Films, 2013, 533, 15-18.	1.8	28
89	Influence of Van Hove singularities on the thermal conductivity of high-Tcsuperconductors. Physical Review B, 1996, 54, 6126-6128.	3.2	26
90	Analysis of the Excellent Memory Disturb Characteristics of a Hourglass-Shaped Filament in Al₂O₃/Cu-Based CBRAM Devices. IEEE Transactions on Electron Devices, 2015, 62, 2007-2013.	3.0	26

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91	Thermal conductivity of an untwinned YBa2Cu3O7â^Ï´ single crystal. Physica C: Superconductivity and Its Applications, 1993, 218, 15-18.	1.2	25
92	Impact of point defects on the electronic and transport properties of silicene nanoribbons. Journal of Physics Condensed Matter, 2016, 28, 035302.	1.8	25
93	Bi-based 2223 superconducting polycrystalline materials prepared by either a solid state route or a glassy â€˜matrixâ€™ precursor method: Chemical analysis as well as electrical and thermal transport properties. Physica C: Superconductivity and Its Applications, 1994, 231, 259-270.	1.2	24
94	Electrical characteristics of Ge/GeOx(N)/HfO2 gate stacks. Journal of Non-Crystalline Solids, 2005, 351, 1902-1905.	3.1	24
95	Advanced DFTâ€“NEGF Transport Techniques for Novel 2-D Material and Device Exploration Including HfS₂/WSe₂ van der Waals Heterojunction TFET and WTe₂/WS₂ Metal/Semiconductor Contact. IEEE Transactions on Electron Devices, 2021, 68, 5372-5379.	3.0	24
96	Thermal conductivity of high-Tc superconductors: effect of Van Hove singularities. Physica C: Superconductivity and Its Applications, 1996, 265, 258-266.	1.2	23
97	Model for the trap-assisted tunnelling current through very thin SiO2/ZrO2gate dielectric stacks. Semiconductor Science and Technology, 2001, 16, 427-432.	2.0	23
98	Threshold voltage shifts in Si passivated (100)Ge p-channel field effect transistors: Insights from first-principles modeling. Applied Physics Letters, 2007, 91, 023506.	3.3	23
99	Theoretical aspects of graphene-like group IV semiconductors. Applied Surface Science, 2014, 291, 98-103.	6.1	23
100	Magneto-thermal conductivity of high-Tcsuperconductors: electron-vortex scattering contribution. Journal of Physics Condensed Matter, 1995, 7, L193-L199.	1.8	22
101	Magnetic Properties and Critical Behaviour of the B-Spinel CdCr2xIn2?2xS4 (0.9 ? x ? 1). Physica Status Solidi (B): Basic Research, 1999, 214, 403-409.	1.5	22
102	Energy barriers between (100)Si and Al2O3 and ZrO2-based dielectric stacks: internal electron photoemission measurements. Microelectronic Engineering, 2001, 59, 335-339.	2.4	22
103	Insights on the physical mechanism behind negative bias temperature instabilities. Applied Physics Letters, 2007, 90, 043505.	3.3	22
104	Ferromagnetism in two-dimensional hole-doped SnO. AIP Advances, 2018, 8, .	1.3	22
105	On the van der Waals Epitaxy of Homo-/Heterostructures of Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2020, 12, 27508-27517.	8.0	22
106	Germanium FETs and capacitors with rare earth CeO2/HfO2 gates. Solid-State Electronics, 2007, 51, 1508-1514.	1.4	21
107	The electronic contribution to the thermal conductivity of layered high- materials. Journal of Physics Condensed Matter, 1996, 8, 2043-2052.	1.8	20
108	Transitivity of band offsets between semiconductor heterojunctions and oxide insulators. Applied Physics Letters, 2011, 99, .	3.3	20

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109	Toward an Understanding of the Electric Field-Induced Electrostatic Doping in van der Waals Heterostructures: A First-Principles Study. ACS Applied Materials & Interfaces, 2017, 9, 7725-7734.	8.0	20
110	Magnetic properties and percolation threshold in diluted B-spinel ZnCr2xAl2â^'2xS4: a study through high-temperature expansions. Physica B: Condensed Matter, 1999, 270, 384-390.	2.7	19
111	Experimental and theoretical study of Ge surface passivation. Microelectronic Engineering, 2007, 84, 2267-2273.	2.4	19
112	Contact Resistance at MoS₂-Based 2D Metal/Semiconductor Lateral Heterojunctions. ACS Applied Nano Materials, 2019, 2, 760-766.	5.0	19
113	Superconductivity fluctuation effects on the thermal conductivity ofBi2Sr2CaCu2O8. Physical Review B, 1996, 54, R6885-R6888.	3.2	18
114	Superconducting fluctuations in the thermal conductivity ofBi2Sr2CaCu2O8andDyBa2Cu3O7â^'xmaterials. Physical Review B, 1997, 56, 802-808.	3.2	18
115	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
116	Impact of germanium surface passivation on the leakage current of shallow planar pâ€“n junctions. Materials Science in Semiconductor Processing, 2006, 9, 716-720.	4.0	18
117	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
118	Extrinsic interface formation of HfO2 and Al2O3â•GeOx gate stacks on Ge (100) substrates. Journal of Applied Physics, 2009, 106, .	2.5	18
119	A first-principles study of the structural and electronic properties of IIIâ€“V/thermal oxide interfaces. Microelectronic Engineering, 2009, 86, 1747-1750.	2.4	18
120	Oxidation of the GaAs(001) surface: Insights from first-principles calculations. Physical Review B, 2012, 85, .	3.2	18
121	90nm WAl<inf>2</inf>O<inf>3</inf>TiWCu 1T1R CBRAM cell showing low-power, fast and disturb-free operation. , 2013, , .		18
122	Functional silicene and stanene nanoribbons compared to graphene: electronic structure and transport. 2D Materials, 2016, 3, 015001.	4.4	18
123	On the electrostatic control achieved in transistors based on multilayered MoS2: A first-principles study. Journal of Applied Physics, 2017, 121, .	2.5	18
124	Signature of thed-wave gap parameter in the field dependence of the electrothermal conductivity of high-Tcsuperconductors up toTc. Physical Review B, 1996, 54, R12713-R12716.	3.2	17
125	Low-temperature behaviour of the thermal conductivity of high- T c superconductors: likeliness of wave pairing. Europhysics Letters, 1996, 33, 695-700.	2.0	17
126	Influence of a magnetic field on the thermal conductivity of d-wave high- superconductors. Journal of Physics Condensed Matter, 1997, 9, 201-210.	1.8	17

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127	Defect generation in Si/SiO2/ZrO2/TiN structures: the possible role of hydrogen. Semiconductor Science and Technology, 2001, 16, L93-L96.	2.0	17
128	A simulation analysis of FIBL in decananometer Double-Gate MOSFETs with high-Îº gate dielectrics. Journal of Non-Crystalline Solids, 2005, 351, 1897-1901.	3.1	17
129	Molecular beam epitaxy passivation studies of Ge and IIIâ€“V semiconductors for advanced CMOS. Microelectronic Engineering, 2009, 86, 1592-1595.	2.4	17
130	Electronic properties of Ge dangling bond centers at Si1âˆ’xGex/SiO2 interfaces. Applied Physics Letters, 2009, 95, 222106.	3.3	17
131	Band alignment at interfaces of synthetic few-monolayer MoS2 with SiO2 from internal photoemission. APL Materials, 2018, 6, .	5.1	17
132	A systematic study of various 2D materials in the light of defect formation and oxidation. Physical Chemistry Chemical Physics, 2019, 21, 1089-1099.	2.8	17
133	(Invited) Spectroscopy of Deep Gap States in High-k Insulators. ECS Transactions, 2014, 64, 17-22.	0.5	16
134	Impact of Layer Alignment on the Behavior of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Tunnel Field-Effect Transistors: An AbÂInitio Study. Physical Review Applied, 2017, 8, .	3.8	16
135	Magneto-transport study of a Bi2223 superconductor produced by a high-pressure method. Superconductor Science and Technology, 1996, 9, 644-652.	3.5	15
136	Comment on â€œElectronic thermal conductivity and the Wiedemann-Franz law for unconventional superconductorsâ€• Physical Review B, 1997, 56, 953-954.	3.2	15
137	Characterization of silicon oxynitride films by grazing-emission X-ray fluorescence spectrometry. Thin Solid Films, 2000, 359, 197-202.	1.8	15
138	Impact of Nitrogen Incorporation in SiOx/HfSiO Gate Stacks on Negative Bias Temperature Instabilities. , 2006, , .		15
139	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.	2.9	15
140	Investigation of capacitanceâ€“voltage characteristics in Ge /high-Îº MOS devices. Journal of Non-Crystalline Solids, 2009, 355, 1171-1175.	3.1	15
141	Control of metal/oxide electron barriers in CBRAM cells by low work-function liners. Microelectronic Engineering, 2013, 109, 156-159.	2.4	15
142	High-resolution electron spin resonance analysis of ion bombardment induced defects in advanced low-Îº insulators (Îºâ€‰=â€‰2.0-2.5). Applied Physics Letters, 2013, 102, .	3.3	15
143	Point defects in MoS 2 : Comparison between first-principles simulations and electron spin resonance experiments. Applied Surface Science, 2017, 416, 853-857.	6.1	15
144	Graphene based Van der Waals contacts on MoS₂ field effect transistors. 2D Materials, 2021, 8, 015003.	4.4	15

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145	Ferromagnetism and half-metallicity in two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>M</mml:mi><mml:mi mathvariant="normal">O</mml:mi><mml:mo>Â</mml:mo><mml:mo>(</mml:mo><mml:mi>M</mml:mi><mml:mo>=</mml:mo><mml: monolayers induced by hole doping. Physical Review Materials, 2020, 4, .	2.4	15
146	Thermal conductivity of pure or iron-doped YBa2Cu3O7- deltawith or without an excess of CuO. Journal of Physics Condensed Matter, 1994, 6, 6305-6316.	1.8	14
147	Thermal conductivity ofYBa2(Cu1âˆ'xZnx)3O7âˆ'Î´:Relation betweenxand Î´. Physical Review B, 1997, 56, 6226-6230.	3.2	14
148	Model for defect generation at the (1 0 0)Si/SiO2 interface during electron injection in MOS structures. Applied Surface Science, 2003, 212-213, 749-752.	6.1	14
149	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
150	Collapse of the low temperature insulating state in Cr-doped V2O3 thin films. Applied Physics Letters, 2015, 107, .	3.3	14
151	Internal Photoemission Metrology of Inhomogeneous Interface Barriers. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700865.	1.8	14
152	Contact resistance at graphene/MoS2 lateral heterostructures. Applied Physics Letters, 2019, 114, .	3.3	14
153	Efficient Direct Band-Gap Transition in Germanium by Three-Dimensional Strain. ACS Applied Materials & Interfaces, 2021, 13, 30941-30949.	8.0	14
154	Influence of a Van Hove singularity on the electronic specific heat of high-Tc superconductors. Physica C: Superconductivity and Its Applications, 1996, 267, 24-30.	1.2	13
155	Modeling negative bias temperature instabilities in hole channel metalâ€“oxideâ€“semiconductor field effect transistors with ultrathin gate oxide layers. Journal of Applied Physics, 2004, 95, 2786-2791.	2.5	13
156	Contribution of fast and slow states to Negative Bias Temperature Instabilities in HfxSi(1-x)ON/TaN based pMOSFETs. Microelectronic Engineering, 2005, 80, 134-137.	2.4	13
157	Noninvasive embedding of single Co atoms in Ge(111)2â€‰<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mo>Ã—</mml:mo></mml:math>â€‰1 surfaces. Physical Review B, 2012, 85, .	3.2	13
158	Excellent R_{off}/R_{on} ratio and short programming time in Cu/Al₂O₃â€based conductiveâ€bridging RAM under lowâ€current (10â€‰Î¼A) operation. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 302-305.	1.8	13
159	Evidence of d-wave pairing in the thermal conductivity of YBa2Cu3O7â”d and Bi2Sr2CaCu2O8 single crystals. Zeitschrift FÃ¼r Physik B-Condensed Matter, 1997, 101, 353-357.	1.1	12
160	Negative bias temperature instabilities in HfSiON/TaN-based pMOSFETs. , 0, , .		12
161	Interface Properties Improvement of Ge/Al2O3 and Ge/GeO2/Al2O3 Gate Stacks using Molecular Beam Deposition. ECS Transactions, 2008, 16, 411-422.	0.5	12
162	Current-voltage characteristics of armchair Sn nanoribbons. Physica Status Solidi - Rapid Research Letters, 2014, 8, 931-934.	2.4	12

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163	(Invited) Internal Photoemission of Electrons from 2-Dimensional Semiconductors. ECS Transactions, 2017, 80, 191-201.	0.5	12
164	Structural characterization of SnS crystals formed by chemical vapour deposition. Journal of Microscopy, 2017, 268, 276-287.	1.8	12
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