Guido Groeseneken

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

838	18,822	62	104
papers	citations	h-index	g-index

914	21,940	2.6	6.3
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
838	ESD HBM Discharge Model in RF GaN-on-Si (MIS)HEMTs. *IEEE Transactions on Electron Devices*, **2022**, 1-8	2.9	
837	LaSiOx- and AlO-Inserted Low-Temperature Gate-Stacks for Improved BTI Reliability in 3-D Sequential Integration. *IEEE Transactions on Electron Devices*, **2022**, 1-7	2.9	
836	ESD Failures of GaN-on-Si D-Mode AlGaN/GaN MIS-HEMT and HEMT Devices for 5G Telecommunications **2021**,		1
835	Impact of ambient temperature on the switching of voltage-controlled perpendicular magnetic tunnel junction. *Applied Physics Letters*, **2021**, 118, 122404	3.4	4
834	. *IEEE Transactions on Electron Devices*, **2021**, 68, 2107-2115	2.9	3
833	Modeling of Repeated FET Hot-Carrier Stress and Anneal Cycles Using SiH Bond Dissociation/Passivation Energy Distributions. *IEEE Transactions on Electron Devices*, **2021**, 68, 1454-1460	2.9	3
832	Investigating the Current Collapse Mechanisms of p-GaN Gate HEMTs by Different Passivation Dielectrics. *IEEE Transactions on Power Electronics*, **2021**, 36, 4927-4930	7.2	8
831	Effects of Back-Gate Bias on the Mobility and Reliability of Junction-Less FDSOI Transistors for 3-D Sequential Integration. *IEEE Transactions on Electron Devices*, **2021**, 68, 464-470	2.9	1
830	Integration of GaN analog building blocks on p-GaN wafers for GaN ICs. *Journal of Semiconductors*, **2021**, 42, 024103	2.3	5
829	Reliability of p-GaN Gate HEMTs in Reverse Conduction. *IEEE Transactions on Electron Devices*, **2021**, 68, 645-652	2.9	1
828	Investigation of the Impact of Hot-Carrier-Induced Interface State Generation on Carrier Mobility in nMOSFET. *IEEE Transactions on Electron Devices*, **2021**, 68, 3246-3253	2.9	3
827	ESD HBM Discharge Model in RF GaN-on-Si (MIS)HEMTs **2021**,		1
826	Extensive assessment of the charge-trapping kinetics in InGaAs MOS gate-stacks for the demonstration of improved BTI reliability. *Microelectronics Reliability*, **2020**, 115, 113996	1.2	1
825	RF/High-Speed I/O ESD Protection: Co-optimizing Strategy Between BEOL Capacitance and HBM Immunity in Advanced CMOS Process. *IEEE Transactions on Electron Devices*, **2020**, 67, 2752-2759	2.9	5
824	Observation of Dynamic VTH of p-GaN Gate HEMTs by Fast Sweeping Characterization. *IEEE Electron Device Letters*, **2020**, 41, 577-580	4.4	24
823	Study of precessional switching speed control in voltage-controlled perpendicular magnetic tunnel junction. *AIP Advances*, **2020**, 10, 035123	1.5	2
822	Electronic voltage control of magnetic anisotropy at room temperature in high-SrTiO3/Co/Pt trilayer. *Physical Review Materials*, **2020**, 4,	3.2	2

821	MoS2/MoTe2 Heterostructure Tunnel FETs Using Gated Schottky Contacts. *Advanced Functional Materials*, **2020**, 30, 1905970	15.6	21
820	Signature of Ballistic Band-Tail Tunneling Current in Tunnel FET. *IEEE Transactions on Electron Devices*, **2020**, 67, 3486-3491	2.9	4
819	The Influence of Gate Bias on the Anneal of Hot-Carrier Degradation **2020**,		3
818	Integration of 650 V GaN Power ICs on 200 mm Engineered Substrates. *IEEE Transactions on Semiconductor Manufacturing*, **2020**, 33, 534-538	2.6	6
817	Ferroelectric Control of Magnetism in Ultrathin HfOCoPt Layers. *ACS Applied Materials & Interfaces*, **2019**, 11, 34385-34393	9.5	6
816	Full ($V_{mathrm{g}}, V_{mathrm{d}}$) Bias Space Modeling of Hot-Carrier Degradation in Nanowire FETs **2019**,		3
815	Large Variation in Temperature Dependence of Band-to-Band Tunneling Current in Tunnel Devices. *IEEE Electron Device Letters*, **2019**, 40, 1864-1867	4.4	5
814	Accelerated Capture and Emission (ACE) Measurement Pattern for Efficient BTI Characterization and Modeling **2019**,		1
813	On the Impact of the Gate Work-Function Metal on the Charge Trapping Component of NBTI and PBTI. *IEEE Transactions on Device and Materials Reliability*, **2019**, 19, 268-274	1.6	8
812	Improved PBTI Reliability in Junction-Less FET Fabricated at Low Thermal Budget for 3-D Sequential Integration. *IEEE Transactions on Device and Materials Reliability*, **2019**, 19, 262-267	1.6	2
811	Demonstration of GaN Integrated Half-Bridge With On-Chip Drivers on 200-mm Engineered Substrates. *IEEE Electron Device Letters*, **2019**, 40, 1499-1502	4.4	33
810	. *IEEE Transactions on Electron Devices*, **2019**, 66, 2802-2808	2.9	0
809	GaN-on-SOI: Monolithically Integrated All-GaN ICs for Power Conversion **2019**,		27
808	Physical Insights on Steep Slope FEFETs including Nucleation-Propagation and Charge Trapping **2019**,		6
807	A physics-aware compact modeling framework for transistor aging in the entire bias space **2019**,		5
806	Buffer Vertical Leakage Mechanism and Reliability of 200-mm GaN-on-SOI. *IEEE Transactions on Electron Devices*, **2019**, 66, 553-560	2.9	11
805	Phonon-assisted tunneling in direct-bandgap semiconductors. *Journal of Applied Physics*, **2019**, 125, 015701	2.5	3
804	Thermal stability analysis and modelling of advanced perpendicular magnetic tunnel junctions. *AIP Advances*, **2018**, 8, 055909	1.5	14

803	Tunneling Transistors Based on MoS2/MoTe2 Van der Waals Heterostructures. *IEEE Journal of the Electron Devices Society*, **2018**, 6, 1048-1055	2.3	26
802	Investigation on Carrier Transport Through AlN Nucleation Layer From Differently Doped Si(111) Substrates. *IEEE Transactions on Electron Devices*, **2018**, 65, 1721-1727	2.9	23
801	On the Apparent Non-Arrhenius Temperature Dependence of Charge Trapping in IIIV/High- ${k}$ MOS Stack. *IEEE Transactions on Electron Devices*, **2018**, 65, 3689-3696	2.9	8
800	Investigation of the endurance of FE-HfO2 devices by means of TDDB studies **2018**,		4
799	Modeling of Edge Scattering in Graphene Interconnects. *IEEE Electron Device Letters*, **2018**, 39, 1085-1088	4.4	3
798	Suppression of the Backgating Effect of Enhancement-Mode p-GaN HEMTs on 200-mm GaN-on-SOI for Monolithic Integration. *IEEE Electron Device Letters*, **2018**, 39, 999-1002	4.4	31
797	Impact of calibrated band-tails on the subthreshold swing of pocketed TFETs **2018**,		1
796	Vertical Ferroelectric HfO2 FET based on 3-D NAND Architecture: Towards Dense Low-Power Memory **2018**,		24
795	BTI Reliability Improvement Strategies in Low Thermal Budget Gate Stacks for 3D Sequential Integration **2018**,		13
794	Distribution Function Based Simulations of Hot-Carrier Degradation in Nanowire FETs **2018**,		2
793	Self-consistent procedure including envelope function normalization for full-zone Schr�dinger-Poisson problems with transmitting boundary conditions. *Journal of Applied Physics*, **2018**, 124, 204501	2.5	1
792	Impact of operating temperature on the electrical and magnetic properties of the bottom-pinned perpendicular magnetic tunnel junctions. *Applied Physics Letters*, **2018**, 113, 142405	3.4	4
791	Built-In Sheet Charge As an Alternative to Dopant Pockets in Tunnel Field-Effect Transistors'. *IEEE Journal of the Electron Devices Society*, **2018**, 6, 658-663	2.3	3
790	Band-Tails Tunneling Resolving the Theory-Experiment Discrepancy in Esaki Diodes. *IEEE Journal of the Electron Devices Society*, **2018**, 6, 633-641	2.3	11
789	A multi-bit/cell PUF using analog breakdown positions in CMOS **2018**,		7
788	Probing Local Potentials inside Metallic Nanopores with SERS and Bipolar Electrochemistry. *Advanced Optical Materials*, **2017**, 5, 1600907	8.1	9
787	Time-Dependent Breakdown Mechanisms and Reliability Improvement in Edge Terminated AlGaN/GaN Schottky Diodes Under HTRB Tests. *IEEE Electron Device Letters*, **2017**, 38, 371-374	4.4	20
786	200 V Enhancement-Mode p-GaN HEMTs Fabricated on 200 mm GaN-on-SOI With Trench Isolation for Monolithic Integration. *IEEE Electron Device Letters*, **2017**, 38, 918-921	4.4	62

785	BTI reliability of InGaAs nMOS gate-stack: On the impact of shallow and deep defect bands on the operating voltage range of III-V technology **2017**,		4
784	Characteristics improvement of top-gate self-aligned amorphous indium gallium zinc oxide thin-film transistors using a dual-gate control. *Journal of the Society for Information Display*, **2017**, 25, 349-355	2.1	16
783	Understanding ferroelectric Al:HfO2 thin films with Si-based electrodes for 3D applications. *Journal of Applied Physics*, **2017**, 121, 204103	2.5	49
782	Reliable Time Exponents for Long Term Prediction of Negative Bias Temperature Instability by Extrapolation. *IEEE Transactions on Electron Devices*, **2017**, 64, 1467-1473	2.9	24
781	. *IEEE Transactions on Electron Devices*, **2017**, 64, 4011-4017	2.9	11
780	A fully-integrated method for RTN parameter extraction **2017**,		2
779	Will Chips of the Future Learn How to Feel Pain and Cure Themselves?. *IEEE Design and Test*, **2017**, 34, 80-87	1.4	1
778	Interaction between hot carrier aging and PBTI degradation in nMOSFETs: Characterization, modelling and lifetime prediction **2017**,		9
777	ESD ballasting of Ge FinFET ggNMOS devices **2017**,		1
776	Latchup in bulk FinFET technology **2017**,		9
775	Limitations on Lateral Nanowire Scaling Beyond 7-nm Node. *IEEE Electron Device Letters*, **2017**, 38, 9-11	4.4	18
774	Reliability Study of Ferroelectric Al:HfO2 Thin Films for DRAM and NAND Applications. *IEEE Transactions on Electron Devices*, **2017**, 64, 4091-4098	2.9	46
773	First demonstration of vertically stacked ferroelectric Al doped HfO2 devices for NAND applications **2017**,		22
772	Perpendicular magnetic anisotropy of CoFeBTa bilayers on ALD HfO2. *AIP Advances*, **2017**, 7, 055933	1.5	6
771	vfTLP characteristics of ESD diodes in bulk si gate-all-around vertically stacked horizontal nanowire technology **2017**,		1
770	Tunneling transistors based on MoS2/MoTe2 Van der Waals heterostructures **2017**,		1
769	From planar to vertical capacitors: A step towards ferroelectric V-FeFET integration **2017**,		2
768	ESD characterisation of a-IGZO TFTs on Si and foil substrates **2017**,		2

767	Characterization of oxide defects in InGaAs MOS gate stacks for high-mobility n-channel MOSFETs (invited) **2017**,		6
766	Physically unclonable function using CMOS breakdown position **2017**,		14
765	Towards optimal ESD diodes in next generation bulk FinFET and GAA NW technology nodes **2017**,		2
764	Impact of processing and stack optimization on the reliability of perpendicular STT-MRAM **2017**,		5
763	. *IEEE Transactions on Electron Devices*, **2016**, 63, 3451-3458	2.9	32
762	Process Options Impact on ESD Diode Performance in Bulk FinFET Technology. *IEEE Transactions on Electron Devices*, **2016**, 63, 3424-3431	2.9	2
761	The defect-centric perspective of device and circuit reliabilityFrom gate oxide defects to circuits. *Solid-State Electronics*, **2016**, 125, 52-62	1.7	10
760	Hot-carrier analysis on nMOS Si FinFETs with solid source doped junction **2016**,		7
759	NBTI in Replacement Metal Gate SiGe core FinFETs: Impact of Ge concentration, fin width, fin rotation and interface passivation by high pressure anneals **2016**,		16
758	Non-uniform strain in lattice-mismatched heterostructure tunnel field-effect transistors **2016**,		3
757	Modeling of graphene for interconnect applications **2016**,		2
756	Understanding charge traps for optimizing Si-passivated Ge nMOSFETs **2016**,		10
755	RTN-based defect tracking technique: Experimentally probing the spatial and energy profile of the critical filament region and its correlation with HfO2RRAM switching operation and failure mechanism **2016**,		14
754	Semi-empirical interconnect resistance model for advanced technology nodes: A model apt for materials selection based upon test line resistance measurements **2016**,		6
753	Leakage and trapping characteristics in Au-free AlGaN/GaN Schottky barrier diodes fabricated on C-doped buffer layers. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 1229-1235	1.6	3
752	Impact of Wire Geometry on Interconnect RC and Circuit Delay. *IEEE Transactions on Electron Devices*, **2016**, 63, 2488-2496	2.9	54
751	Asymmetric plasmonic induced ionic noise in metallic nanopores. *Nanoscale*, **2016**, 8, 12324-9	7.7	7
750	Uniform Strain in Heterostructure Tunnel Field-Effect Transistors. *IEEE Electron Device Letters*, **2016** , 37, 337-340	4.4	13

No.	Publication	IF	Citations
749	Conduction mechanism in amorphous InGaZnO thin film transistors. *Japanese Journal of Applied Physics*, **2016**, 55, 014301	1.4	10
748	Impact of Hot Carrier Aging on Random Telegraph Noise and Within a Device Fluctuation. *IEEE Journal of the Electron Devices Society*, **2016**, 4, 15-21	2.3	5
747	Performance Optimization of Au-Free Lateral AlGaN/GaN Schottky Barrier Diode With Gated Edge Termination on 200-mm Silicon Substrate. *IEEE Transactions on Electron Devices*, **2016**, 63, 997-1004	2.9	82
746	On the Identification of Buffer Trapping for Bias-Dependent Dynamic $R_{mathrm{scriptscriptstyle ON}}$ of AlGaN/GaN Schottky Barrier Diode With AlGaN:C Back Barrier. *IEEE Electron Device Letters*, **2016**, 37, 310-313	4.4	22
745	Low-current operation of novel Gd2O3-based RRAM cells with large memory window. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 320-324	1.6	4
744	Doped Gd-O Based RRAM for Embedded Application **2016**,		5
743	ESD diodes in a bulk Si gate-all-around vertically stacked horizontal nanowire technology **2016**,		3
742	Bias Temperature Instability (BTI) in high-mobility channel devices with high-k dielectric stacks: SiGe, Ge, and InGaAs. *MRS Advances*, **2016**, 1, 3329-3340	0.7	3
741	Electric-field induced quantum broadening of the characteristic energy level of traps in semiconductors and oxides. *Journal of Applied Physics*, **2016**, 120, 245704	2.5	7
740	Perpendicular magnetic anisotropy of CoPt bilayers on ALD HfO2. *Journal of Applied Physics*, **2016**, 120, 163903	2.5	7
739	Comparative experimental analysis of time-dependent variability using a transistor test array **2016**,		6
738	Statistical investigation of the impact of program history and oxide-metal interface on OxRRAM retention **2016**,		7
737	**2016**,		2
736	Self-heating in FinFET and GAA-NW using Si, Ge and III/V channels **2016**,		16
735	**2016**,		9
734	Predictive As-grown-Generation (A-G) model for BTI-induced device/circuit level variations in nanoscale technology nodes **2016**,		11
733	Stack optimization of oxide-based RRAM for fast write speed (. *Solid-State Electronics*, **2016**, 125, 198-203	1.7	7
732	Toward Understanding Positive Bias Temperature Instability in Fully Recessed-Gate GaN MISFETs. *IEEE Transactions on Electron Devices*, **2016**, 63, 1853-1860	2.9	45

731	Novel Flexible and Cost-Effective Retention Assessment Method for TMO-Based RRAM. *IEEE Electron Device Letters*, **2016**, 37, 1112-1115	4.4	8
730	The impact of process variation and stochastic aging in nanoscale VLSI **2016**,		9
729	Demonstration of an InGaAs gate stack with sufficient PBTI reliability by thermal budget optimization, nitridation, high-k material choice, and interface dipole **2016**,		8
728	Voltage acceleration and pulse dependence of barrier breakdown in MgO based magnetic tunnel junctions **2016**,		5
727	Positive bias temperature instability evaluation in fully recessed gate GaN MIS-FETs **2016**,		4
726	Low-temperature formation of source�drain contacts in self-aligned amorphous oxide thin-film transistors. *Journal of Information Display*, **2015**, 16, 111-117	4.1	22
725	The relationship between border traps characterized by AC admittance and BTI in III-V MOS devices **2015**,		3
724	Impact of the Low Temperature Gate Dielectrics on Device Performance and Bias-Stress Stabilities of a-IGZO Thin-Film Transistors. *ECS Journal of Solid State Science and Technology*, **2015**, 4, N99-N102	2	14
723	Endurance degradation mechanisms in TiNTa2O5Ta resistive random-access memory cells. *Applied Physics Letters*, **2015**, 106, 053501	3.4	34
722	On the Optimal ON/OFF Resistance Ratio for Resistive Switching Element in One-Selector One-Resistor Crosspoint Arrays. *IEEE Electron Device Letters*, **2015**, 36, 570-572	4.4	18
721	Investigation of constant voltage off-state stress on Au-free AlGaN/GaN Schottky barrier diodes. *Japanese Journal of Applied Physics*, **2015**, 54, 04DF07	1.4	5
720	Extraction of the Random Component of Time-Dependent Variability Using Matched Pairs. *IEEE Electron Device Letters*, **2015**, 36, 300-302	4.4	19
719	Current transient spectroscopy for trapping analysis on Au-free AlGaN/GaN Schottky barrier diode. *Applied Physics Letters*, **2015**, 106, 083502	3.4	19
718	Medium Frequency Physical Vapor Deposited Al2O3and SiO2as Etch-Stop-Layers for Amorphous Indium-Gallium-Zinc-Oxide Thin-Film-Transistors. *ECS Journal of Solid State Science and Technology*, **2015**, 4, Q38-Q42	2	10
717	Forward Bias Gate Breakdown Mechanism in Enhancement-Mode p-GaN Gate AlGaN/GaN High-Electron Mobility Transistors. *IEEE Electron Device Letters*, **2015**, 36, 1001-1003	4.4	116
716	Cell Variability Impact on the One-Selector One-Resistor Cross-Point Array Performance. *IEEE Transactions on Electron Devices*, **2015**, 62, 3490-3497	2.9	15
715	Characterization of time-dependent variability using 32k transistor arrays in an advanced HK/MG technology **2015**,		19
714	Origins and implications of increased channel hot carrier variability in nFinFETs **2015**,		13

713	Time dependent dielectric breakdown (TDDB) evaluation of PE-ALD SiN gate dielectrics on AlGaN/GaN recessed gate D-mode MIS-HEMTs and E-mode MIS-FETs **2015**,		20
712	One-Selector One-Resistor Cross-Point Array With Threshold Switching Selector. *IEEE Transactions on Electron Devices*, **2015**, 62, 3250-3257	2.9	39
711	The impact of the gate dielectric quality in developing Au-free D-mode and E-mode recessed gate AlGaN/GaN transistors on a 200mm Si substrate **2015**,		14
710	Analysis of slow de-trapping phenomena after a positive gate bias on AlGaN/GaN MIS-HEMTs with in-situ Si3N4/Al2O3 bilayer gate dielectrics. *Solid-State Electronics*, **2015**, 103, 127-130	1.7	13
709	ESD characterization of gate-all-around (GAA) Si nanowire devices **2015**,		3
708	Defect-centric perspective of combined BTI and RTN time-dependent variability **2015**,		6
707	Advanced MOSFET variability and reliability characterization array **2015**,		9
706	Characterization and simulation methodology for time-dependent variability in advanced technologies **2015**,		5
705	Full-zone spectral envelope function formalism for the optimization of line and point tunnel field-effect transistors. *Journal of Applied Physics*, **2015**, 118, 134502	2.5	11
704	Correlation of interface states/border traps and threshold voltage shift on AlGaN/GaN metal-insulator-semiconductor high-electron-mobility transistors. *Applied Physics Letters*, **2015**, 107, 093507	3.4	39
703	Four point probe ramped voltage stress as an efficient method to understand breakdown of STT-MRAM MgO tunnel junctions **2015**,		6
702	Statistical poly-Si grain boundary model with discrete charging defects and its 2D and 3D implementation for vertical 3D NAND channels **2015**,		15
701	Smart-array for pipelined BTI characterization **2015**,		5
700	Hot carrier aging and its variation under use-bias: Kinetics, prediction, impact on Vdd and SRAM **2015**,		12
699	P-6: Impact of Buffer Layers on the Self-Aligned Top-Gate a-IGZO TFT Characteristics. *Digest of Technical Papers SID International Symposium*, **2015**, 46, 1139-1142	0.5	4
698	Impact of source/drain contacts formation of self-aligned amorphous-IGZO TFTs on their negative-bias-illumination-stress stabilities. *Journal of the Society for Information Display*, **2015**, 23, 397-402	2.1	1
697	Channel Hot Carrier Degradation and Self-Heating Effects in FinFETs **2015**, 287-307		3
696	Programming-conditions solutions towards suppression of retention tails of scaled oxide-based RRAM **2015**,		18

695	A test-proven As-grown-Generation (A-G) model for predicting NBTI under use-bias **2015**,		7
694	Characterization of self-heating in high-mobility Ge FinFET pMOS devices **2015**,		15
693	15-band spectral envelope function formalism applied to broken gap tunnel field-effect transistors **2015**,		2
692	An Investigation on Border Traps in III�V MOSFETs With an In0.53Ga0.47As Channel. *IEEE Transactions on Electron Devices*, **2015**, 62, 3633-3639	2.9	30
691	**2015**,		2
690	The defect-centric perspective of device and circuit reliability �From individual defects to circuits **2015**,		10
689	Impact of time-dependent variability on the yield and performance of 6T SRAM cells in an advanced HK/MG technology **2015**,		1
688	Analysis of frequency dispersion in amorphous In�Ga�Zn�O thin-film transistors. *Journal of Information Display*, **2015**, 16, 31-36	4.1	10
687	Self-heating on bulk FinFET from 14nm down to 7nm node **2015**,		23
686	Comparison of NBTI aging on adder architectures and ring oscillators in the downscaling technology nodes. *Microprocessors and Microsystems*, **2015**, 39, 1039-1051	2.4	
685	Photoresistance switching of plasmonic nanopores. *Nano Letters*, **2015**, 15, 776-82	11.5	35
684	Recent Trends in Bias Temperature Instability **2015**, 5-19		
683	System-Level ESD Protection Design Using On-Wafer Characterization and Transient Simulations. *IEEE Transactions on Device and Materials Reliability*, **2014**, 14, 104-111	1.6	8
682	Determination of energy and spatial distribution of oxide border traps in In0.53Ga0.47As MOS capacitors from capacitance�voltage characteristics measured at various temperatures. *Microelectronics Reliability*, **2014**, 54, 746-754	1.2	22
681	Fabrication and Analysis of a ${rm Si}/{rm Si}_{0.55}{rm Ge}_{0.45}$ Heterojunction Line Tunnel FET. *IEEE Transactions on Electron Devices*, **2014**, 61, 707-715	2.9	76
680	Energy Distribution of Positive Charges in ${rm Al}_{2}{rm O}_{3}{rm GeO}_{2}/{rm Ge}$ pMOSFETs. *IEEE Electron Device Letters*, **2014**, 35, 160-162	4.4	11
679	Reliability of High Mobility SiGe Channel MOSFETs for Future CMOS Applications. *Springer Series in Advanced Microelectronics*, **2014**,	1	14
678	Scaling of BTI reliability in presence of time-zero variability **2014**,		6

677	Non-Monte-Carlo methodology for high-sigma simulations of circuits under workload-dependent BTI degradationApplication to 6T SRAM **2014**,		11
676	Improved Channel Hot-Carrier Reliability in p -FinFETs With Replacement Metal Gate by a Nitrogen Postdeposition Anneal Process. *IEEE Transactions on Device and Materials Reliability*, **2014**, 14, 408-412	1.6	5
675	Ultrathin Metal/Amorphous-Silicon/Metal Diode for Bipolar RRAM Selector Applications. *IEEE Electron Device Letters*, **2014**, 35, 199-201	4.4	36
674	Energy distribution of positive charges in high-k dielectric. *Microelectronics Reliability*, **2014**, 54, 2329-2333	1.2	3
673	Physical origin of current collapse in Au-free AlGaN/GaN Schottky Barrier Diodes. *Microelectronics Reliability*, **2014**, 54, 2196-2199	1.2	16
672	Guidelines for reducing NBTI based on its correlation with effective work function studied by CV-BTI on high-k first MOS capacitors with slant-etched SiO2 **2014**,		2
671	Degradation analysis of datapath logic subblocks under NBTI aging in FinFET technology **2014**,		14
670	Suitability of high-k gate oxides for IIIV devices: A PBTI study in In0.53Ga0.47As devices with Al2O3 **2014**,		12
669	Stability evaluation of Au-free Ohmic contacts on AlGaN/GaN HEMTs under a constant current stress. *Microelectronics Reliability*, **2014**, 54, 2232-2236	1.2	5
668	Maximizing reliable performance of advanced CMOS circuitsA case study **2014**,		15
667	Study of (correlated) trap sites in SILC, BTI and RTN in SiON and HKMG devices **2014**,		9
666	InGaAs tunnel diodes for the calibration of semi-classical and quantum mechanical band-to-band tunneling models. *Journal of Applied Physics*, **2014**, 115, 184503	2.5	38
665	Hourglass concept for RRAM: A dynamic and statistical device model **2014**,		29
664	. *IEEE Transactions on Device and Materials Reliability*, **2014**, 14, 182-193	1.6	34
663	Quantum mechanical solver for confined heterostructure tunnel field-effect transistors. *Journal of Applied Physics*, **2014**, 115, 053706	2.5	19
662	Can p-channel tunnel field-effect transistors perform as good as n-channel?. *Applied Physics Letters*, **2014**, 105, 043103	3.4	10
661	Leakage-current reduction and improved on-state performance of Au-free AlGaN/GaN-on-Si Schottky diode by embedding the edge terminations in the anode region. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 862-865		22
660	Poly-Si heaters for ultra-fast local temperature control of on-wafer test structures. *Microelectronic Engineering*, **2014**, 114, 47-51	2.5	11

659	Impact of etch stop layer on negative bias illumination stress of amorphous Indium Gallium Zinc Oxide transistors **2014**,		2
658	Quantifying the Aggregation Factor in Carbon Nanotube Dispersions by Absorption Spectroscopy. *Journal of Nanoscience*, **2014**, 2014, 1-13		6
657	NBTI Aging on 32-Bit Adders in the Downscaling Planar FET Technology Nodes **2014**,		7
656	Back-channel-etch amorphous indium�gallium�zinc oxide thin-film transistors: The impact of source/drain metal etch and final passivation. *Japanese Journal of Applied Physics*, **2014**, 53, 111401	1.4	19
655	High-drive current (>1MA/cm2) and highly nonlinear (>103) TiN/amorphous-Silicon/TiN scalable bidirectional selector with excellent reliability and its variability impact on the 1S1R array performance **2014**,		8
654	Comparative study of source�drain contact metals for amorphous InGaZnO thin-film transistors. *Journal of the Society for Information Display*, **2014**, 22, 310-315	2.1	4
653	Development of a Technique for Characterizing Bias Temperature Instability-Induced Device-to-Device Variation at SRAM-Relevant Conditions. *IEEE Transactions on Electron Devices*, **2014**, 61, 3081-3089	2.9	15
652	. *IEEE Transactions on Electron Devices*, **2014**, 61, 1307-1315	2.9	8
651	Degradation Mechanisms. *Springer Series in Advanced Microelectronics*, **2014**, 19-66	1	2
650	Perspective of tunnel-FET for future low-power technology nodes **2014**,		15
649	Design and simulation of on-chip circuits for parallel characterization of ultrascaled transistors for BTI reliability **2014**,		8
648	Gated and STI defined ESD diodes in advanced bulk FinFET technologies **2014**,		6
647	NBTI of Ge pMOSFETs: Understanding defects and enabling lifetime prediction **2014**,		2
646	RTN and PBTI-induced time-dependent variability of replacement metal-gate high-k InGaAs FinFETs **2014**,		24
645	Improved source design for p-type tunnel field-effect transistors: Towards truly complementary logic. *Applied Physics Letters*, **2014**, 105, 243506	3.4	12
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