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Synthesis of Zirconia and Hafnia Tubes by Atomic Layer Deposition (ALD) Template Method	1891
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Two Step Annealing of Iridium Thin Films prepared by Plasma-Enhanced Atomic Layer Deposition	1901
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<i>E. Langereis, M. Bouman, J. Keijmel, R. van de Sanden, E. Kessels</i>	
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<i>L. Nyns, A. Delabie, M. Heyns, G. Pourtois, S. Van Elshocht, C. Vinckier, S. De Gendt, J. Swerts, J. Maes</i>	
Comparison of Nanomechanical Behavior of the Amorphous and Crystalline Phases of ALD HfO₂	1915
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Effect of Impurities Doping on the GST Film by ALD Method for PCRAM Applications	1916
<i>K. Lee, J. Lee, J. Park, D. You, T. Seo</i>	
Carboxylic Acids as Oxygen Supplying Agents for Atomic Layer Deposition of High-k Thin Films	1917
<i>E. Rauwel, F. Ducroquet, P. Rauwel, M. Willinger, I. Matko, D. Kiselev, N. Pinna</i>	
High-K Gate Dielectric Structures by Atomic Layer Deposition for the 32nm and Beyond Nodes	1918
<i>R. D. Clark, S. Consiglio, C. Wajda, G. Leusink, T. Sugawara, H. Nakabayashi, H. Jagannathan, L. F. Edge, P. Jamison, V. Paruchuri, R. Iijima, M. Takayanagi, B. Linder, J. Bruley, M. Copel, V. Narayanan</i>	
Work Function and Effective Oxide Thickness Engineering via Alloying of Metal Gate Electrodes	1919
<i>J. Schaeffer, M. Raymond, D. Gilmer, R. Gregory, B. Taylor, J. Jiang, D. Triyoso, R. Hegde, S. Samavedam</i>	
Single Metal/Dual High-k CMISFETs without High-k-induced V_{th} Variation by MgO or Al₂O₃Incorporation	1920
<i>N. Mise, T. Morooka, T. Eimori, T. Ono, Y. Nara, Y. Ohji</i>	
Engineering High Dielectric Constant Materials for Band-Edge CMOS Applications	1921
<i>H. Jagannathan, V. Narayanan, S. Brown</i>	
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<i>H. Watanabe, S. Yoshida, Y. Kita, T. Hosoi, T. Shimura, K. Shiraishi, Y. Nara, K. Yamada</i>	
Universal Correlation Between Mobility and NBTI on Advanced High-k/Metal Gate Stacks	1923
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Hot Carrier Reliability of ALD HfSiON Gated MOSFETs with Different Compositions	1925
<i>H. Chen, S. Chen, C. Liu, F. Chiu, H. Huang</i>	
Inversion Layer Mobility in High-k Dielectric MOSFETs - Intrinsic Mobility Degradation by Electric Dipoles at High-k/SiO₂ Interface -	1926
<i>H. Ota, A. Hirano, Y. Watanabe, N. Yashuda, K. Iwamoto, K. Okada, S. Migita, T. Nabatame, A. Toriumi</i>	
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<i>L. Pantisano, M. zahid, R. Degraeve, G. Groeseneken</i>	

Interface Engineering of a Metal/ High-k/ Ge Layered Structure by Water Vapor Discharge	1928
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<i>C. Gaumer, E. Martinez, S. Lhostis, C. Wiemer, M. Perego</i>	
Extraction of Trap Parameters for High-Gate Dielectric Stacks	1930
<i>S. Rawat, S. Kar</i>	
Dielectric and Interface Properties of TiO₂/HfSiO/SiO₂ Layered Structures Fabricated by in situ PVD Method	1931
<i>H. Arimura, Y. Naitou, N. Kitano, Y. Oku, N. Yamaguchi, M. Kosuda, T. Hosoi, T. Shimura, H. Watanabe</i>	
Interfacial and Electrical Characterization of HfO₂-Gated MOSCs and MOSFETs by C-V and Gated-Diode Method	1932
<i>S. Chen, H. Chen, F. Chiu, C. Liu, Z. Hsieh, H. Huang, H. Hwang</i>	
Application of X-ray Metrology for Rapid Development of High-k Dielectrics	1933
<i>P. Hung, T. Böscke, M. Wormington, K. Bowen, P. Lysaght, P. Kirsch, H. Tseng, R. Jammy</i>	
Electric Properties of CeO_x /La₂O₃ Stack as Gate Dielectric in Advanced MOSFET Technology	1934
<i>M. Kouda, K. Tachi, K. Kakushima, P. Ahmet, K. Tsutsui, N. Sugii, A. Chandorkar, T. Hattori, H. Iwai</i>	
Electrical and Chemical Properties of the HfO₂/SiO₂/Si stack: Impact of HfO₂ Thickness and Thermal Budget	1935
<i>E. Martinez, C. Leroux, N. Benedetto, C. Gaumer, M. Charbonnier, C. Licitra, S. Lhostis, F. Fillot</i>	
Annealing-temperature Dependence of Compositional Depth Profile and Chemical Structures of LaOx/ScOx/Si and ScOx/LaOx/Si Interfacial Transition Layer	1936
<i>H. Nohira, Y. Takenaga, K. Kakushima, P. Ahmet, K. Tsutsui, H. Iwai</i>	
Characterization of High-k Gate Dielectric Stacks on Silicon and High Mobility Substrates	1937
<i>S. Stemmer</i>	
Study of Kinetic Behaviors of GeO in GeO₂/Ge Stacks	1938
<i>K. Kita, C. Lee, T. Nishimura, K. Nagashio, A. Toriumi</i>	
Atomic Layer Deposition of High-k/metal Gate Stack MOSFET-devices on Strained Silicon-on-Insulator Substrates	1939
<i>C. Henkel, S. Abermann, O. Bethge, M. Reiche, E. Bertagnolli</i>	
0.5 nm EOT MOS Structure with TaSix/W Stacked Gate Electrode	1940
<i>K. Okamoto, K. Kakushima, P. Ahmet, K. Tsutsui, N. Sugii, A. Chandorkar, T. Hattori, H. Iwai</i>	
Growth and Characterization of Alternative Gate Dielectrics by Molecular-Beam Epitaxy	1941
<i>L. F. Edge, W. Tian, V. Vaithyanathan, T. Heeg, D. Schlom, D. Klenov, S. Stemmer, J. Wang, M. J. Kim</i>	
High-k Dielectrics for CMOS Beyond 22nm	1942
<i>R. M. Wallace</i>	
Atomic Layer Deposited Lanthanum-(Zirconate/Aluminate) Based High-K Dielectric Stacks For Future CMOS-Technology	1943
<i>S. Abermann, C. Henkel, O. Bethge, E. Bertagnolli</i>	
Effect of Ultrathin Si Passivation Layer for Ge MOS Structure with La₂O₃ Gate Dielectric	1944
<i>J. Song, K. Kakushima, P. Ahmet, K. Tsutsui, N. Sugii, T. Hattori, H. Iwai</i>	
Gate Dielectrics on High Mobility Semiconductors	1945
<i>A. Dimoulas, Y. Panayiotatos, G. Mavrou, S. Galata, P. Tsipas, A. Sotiropoulos, C. Rossel, D. Webb, C. Andersson, M. Sousa, C. Marchiori, J. Fompeyrine</i>	

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<i>P. TZENG, T. Wu, C. Wang, C. Lin, L. Lee</i>	
Organic Mask Removal Assessment for 32nm Fully Depleted SOI Technology with TiN-metal Gate on HfO₂.....	1948
<i>L. Lachal, J. Chiaroni, E. Lajoinie, O. Louveau, P. Lavios</i>	
Charge Re-trapping Process in Oxide-Nitride-Al₂O₃ (ONA) Structures.....	1949
<i>D. Kim, W. Cho, D. Kwak, J. Oh, W. Kim, H. Cho</i>	
Improved Lower Electrode Oxidation of High-k TiCeO Metal-Insulator-Metal Capacitors by Using Dual Plasma Treatment	1950
<i>C. Cheng, H. Hsu, A. Chin, C. Chou</i>	
Evaluation of MOCVD Grown Niobium Nitride Films as Gate Electrode for Advanced CMOS Technology	1951
<i>T. Thiede, H. Parala, K. Reuter, G. Passing, S. Kirchmeyer, J. Hinz, M. Lemberger, A. Bauer, R. Fischer</i>	
MOCVD of Niobium Nitrides and Oxy-Nitrides using an All-Nitrogen-Coordinated Precursor: Thin-film Deposition and Mechanistic Study.....	1952
<i>D. Bekermann, D. Barreca, A. Devi, A. Gasparotto, R. Fischer</i>	
Novel Highly Volatile MOCVD Precursors for Ta₂O₅ and Nb₂O₅ Thin Films.....	1953
<i>T. Yotsuya, H. Chiba, T. Furukawa, T. Yamamoto, K. Inaba, K. Tada, T. Suzuki, K. Fujimoto, H. Funakubo, T. Yamakawa, N. Oshima</i>	
Dielectric Properties of SrTiO₃ Thin Films on SrRuO₃ Seed Prepared by Plasma-enhanced Atomic Layer Deposition.....	1954
<i>J. Ahn, J. Kim, J. Kim, J. Roh, S. Kang</i>	
A Simple Solution of the WSix Peeling Issue in SRCAT (Sphere-shaped Recess-Channel-Array Transistor)	1955
<i>H. Chae, S. Lee, T. Park, H. Lee, K. Lee, J. Seo, K. Choi</i>	
High Performance Ir/TiPrO/TaN Capacitors for Analog ICs Application.....	1956
<i>C. C. Huang, C. Cheng, A. Chin, C. Chou</i>	
Fabrication of High-k/Si Structure using Metal Deposition followed by Oxidation	1957
<i>K. Kuroiwa, T. Ueno, M. Hasumi, Y. Iwazaki, Y. Oniki</i>	
Al₂O₃/ZrO₂/Al₂O₃ High-k Dielectric Stacks on Germanium Substrates Grown by Atomic Layer Deposition at High and Low Temperatures.....	1958
<i>O. Bethge, S. Abermann, C. Henkel, E. Bertagnolli</i>	
Comparison between Direct-Contact HfO₂/Ge and HfO₂/GeO₂/Ge Stack Structures.....	1959
<i>Y. Abe, N. Miyata, T. Yasuda</i>	
Plasma Nitridation of HfO₂Gate Dielectric on p-GaAs Substrates.....	1960
<i>G. K. Dalapati, A. Sridhara, A. S. Wong, C. Chia, D. Chi</i>	
Identifying Performance-Critical Defects in the High-k/Metal Gate Stacks	1961
<i>G. Bersuker</i>	
Interface Properties Improvement of Ge/Al₂O₃ and Ge/GeO₂/Al₂O₃Gate Stacks using Molecular Beam Deposition	1962
<i>F. Bellenger, C. Merckling, J. Penaud, M. Houssa, M. Caymax, M. Meuris, K. De Meyer, M. Heyns</i>	
Interface Characterization of CeO₂-Gated MOSFETs Using Gated Diode Method and Charge Pumping Technique.....	1963
<i>F. Chiu, H. Chen, C. Liu, S. Chen, H. Huang</i>	

Physical Characterization of the Metal/High-κ Layer Interaction upon Annealing	1964
<i>T. Conard, A. Franquet, W. Vandervorst, M. Reading, J. Van den Berg, S. Van Elschocht1, T. Schram, C. Adelman, S. De Gendt</i>	
Modelling of Dielectrics and Traps in High-κ Gate Dielectric Stacks and Equivalent Circuit Representation	1965
<i>S. Kar, S. Rawat</i>	
Electrical Characterization of Metal Gate/ High-κ Dielectrics on GaAs Substrate	1966
<i>V. Budhreja, N. Rahim, D. Misra</i>	
Bonding and Electronic Structure at the Oxide/III-V Semiconductor Interface	1967
<i>J. Shen, A. C. Kummel</i>	
Effects of Low Temperature O₂ Treatment on the Electrical Characteristics of Amorphous LaAlO₃ Films by Atomic Layer Deposition	1968
<i>Y. Liu, H. Kim, J. Wang, H. Li, R. G. Gordon</i>	
Impact of High Pressure O₂ Annealing on Amorphous LaLuO₃/Ge MIS Capacitors	1969
<i>T. Tabata, C. Lee, K. Kita, A. Toriumi</i>	
Tuning of Material and Electrical Properties of Strontium Titanates using Process Chemistry and Composition	1970
<i>R. Katamreddy, V. Omarjee, B. Feist, C. Dussarrat, M. Singh, C. Takoudis</i>	
Effect of Rare-Earth Doping and Nitrogen Passivation Treatments on the Properties of Ultra-thin Hafnia Films	1971
<i>S. Ramanathan, A. Karthikeyan, S. Govindarajan, P. Kirsch</i>	
Capacitance-Voltage (CV) Characterization of GaAs/ High-κ Oxide Interfaces	1972
<i>G. Brammertz, H. Lin, K. Martens, C. Merckling, J. Penaud, A. Alian, S. Sioncke, W. Wang, M. Meuris, M. Caymax, M. Heyns</i>	
Application of Micro Corona-Kelvin Technique to Non-contact Monitoring of High-κ MOS Capacitors	1973
<i>A. Belyaev, M. Wilson, J. Lagowski, L. Jastrzebski, A. Findlay, J. Price, C. Park, M. Hussain, G. Bersuker, P. Lysaght</i>	
Simulation of Leakage Currents Through Thin Dielectrics	1974
<i>G. Kozłowski, J. Dębrowski, G. Lupina, H.-J. Müssig</i>	
Annealing Effect on Electronic Characteristics of HfSiON Films Fabricated by Damascene Gate Process	1975
<i>K. Yamabe, K. Murata, T. Hayashi, C. Tamura, M. Sato, A. Uedono, K. Shiraishi, N. Umezawa, T. Chikyow, H. Watanabe, Y. Nara, Y. Ohji, S. Miyazaki, K. Yamada, R. Hasunuma</i>	
450 mm Silicon Wafers Challenges - Wafer Thickness Scaling	1976
<i>M. Goldstein, M. Watanabe</i>	
Uphill Drift of Vacancies and Self-Interstitials in Silicon Crystal Growth	1977
<i>V. Voronkov, R. Falster</i>	
Electromagnetic Pumping of a Silicon Melt	1978
<i>H. Korb</i>	
The Development of Semi-insulating Silicon Substrates for Microwave Devices	1979
<i>D. M. Jordan, H. Haslam, R. Falster, K. Mallik, P. R. Wilshaw</i>	
Improvement of Surface Roughness in SOI Wafer Fabrication Using Low-Angle Forward-Reflected Neutral Beam Etching	1980
<i>T. Min, B. Park, S. Kim, S. Kang, J. Park, W. Lim, G. Yeom, J. Bae, C. Yi</i>	
A Theoretical and Experimental Study of Stresses Responsible for the SOI Wafer Warpage	1981
<i>S. Dhumal, S. Kommu</i>	
Epitaxial CVD Film Deposition Fluid-Dynamics Simulation Incorporating Detailed Reactor Geometry	1982
<i>J. A. Pitney, S. Kommu</i>	

Imaging Techniques for the Analysis of Silicon Wafers and Solar Cells	1983
<i>K. Bothe, K. Ramspeck, D. Hinken, R. Brendel</i>	
Solid Phase Crystallization (SPC) of a-Si Thin Film Induced by a Novel Approach for Photovoltaic Devices	1984
<i>T. Kim, P. Kumar, K. Siebein, R. Singh</i>	
Texturization of Large Area Crystalline Silicon Solar Cells Using Electrochemical Method	1985
<i>C. Gao, M. Chang, B. Yang, W. Sun, C. Qu</i>	
Ab-Initio Modeling of Point Defects, Impurities and Diffusion in Silicon	1986
<i>W. Windl</i>	
Di-interstitial in Silicon: Electronic Properties and Interaction with Oxygen	1987
<i>V. Markevich, A. Peaker, S. Lastovskii, L. Murin, L. Dobaczewski</i>	
Analysis of the Nucleation Kinetics of Oxide Precipitates in Czochralski Silicon	1988
<i>G. Kissinger, D. Kot, J. Dabrowski, V. Akhmetov, A. Sattler, W. von Ammon</i>	
Vacancy-Phosphorous Defect Complex in as-grown, Ultra Pure, Float Zone Single Crystal Silicon	1989
<i>P. Viscor, O. Andersen, T. Clausen, P. A. Ellsmore, L. Jensen</i>	
What do We Know About Hydrogen-Induced Thermal Donors?	1990
<i>E. R. Simoen, Y. Huang, Y. Ma, J. Lauwaert, P. Clauws, J. Rafi, A. Ulyashin, C. Claeys</i>	
Formation and Annihilation of Hydrogen Related Donor States in Proton Implanted and Subsequently Plasma Hydrogenated N-Type Float Zone Silicon	1991
<i>R. Job, F. Niedernostheide, H. Schulze, H. Schulze</i>	
Hydrogen and Helium implantation in Silicon and Germanium	1992
<i>M. David, J. Barbot, F. Pailloux, D. Babonneau, S. Rousselet, L. Pizzagalli, M. Beaufort, M. Drouet, E. Simoen, C. Claeys</i>	
Cathodoluminescence Assessment of Annealed Silicon and a Novel Technique for Estimating Minority Carrier Lifetime in Silicon	1993
<i>K. Fraser, R. Falster, P. R. Wilshaw</i>	
Metallic Impurities in Mono and Multi-crystalline Silicon and Their Gettering by Phosphorus Diffusion	1994
<i>M. B. shabani, T. Yamashita, E. Morita</i>	
Nickel Contamination in Silicon: Electrical Activity Study and Microscopy Analysis	1995
<i>M. Polignano, D. Codegoni, A. Riva, D. Caputo, V. Privitera</i>	
Electrical Properties of Lightly Contaminated Copper in Pure Silicon	1996
<i>X. Yu, J. Lu, G. Rozgonyi</i>	
The Role of Vacancies and Oxygen for Setting up an Efficient Getter for Cu and Ni in Silicon Wafers	1997
<i>D. Kot, G. Kissinger, W. Haeckl, A. Sattler, W. von Ammon</i>	
Copper Precipitation in Germanium-Doped Czochralski Silicon	1998
<i>W. Wang, D. Yang, X. Ma, Y. Zeng, D. Que</i>	
Failure Mechanism by Organic Contaminants in Si Device Fabrication	1999
<i>K. Kim, J. Kim, K. Lee, H. Kang, B. Lee, S. Park</i>	
Study of Organic Contaminants Analysis using TD-GCMS on Silicon Wafer Surfaces	2000
<i>T. Taira, Y. Shiramizu, M. Watanabe, N. Kawai</i>	
Measurements of Nitrogen Diffusion at Low Temperatures and Its Interaction with Dislocations in Silicon	2001
<i>C. Alpass, J. Murphy, P. R. Wilshaw</i>	
Theoretical Analysis of Thermally Induced Structural Deformation and Relaxation of Silicon Wafer	2002
<i>H. Kumar, S. Roy, J. A. Pitney, T. Torack, S. Dhumal, S. Kommu</i>	

An investigation of Material Design for Gettering	2003
<i>K. Matsukawa, K. Shirai, H. Katayama-Yoshida</i>	
Vacancy Dynamics in Growing Czochralski Germanium Crystals	2004
<i>P. Spiewak, K. Kurzydowski, J. Vanhellefont, I. Romandic</i>	
Quantum Properties of Defects in Silicon Films	2005
<i>D. E. Milovzorov</i>	
Gas-filled Rod-shaped Cavity Formation Along the C-axis in Helium Implanted Gallium Nitride	2006
<i>J. Barbot, F. Pailloux, M. David, L. Pizzagalli, E. Oliviero, G. Lucas</i>	
Digital SPV Diffusion Length Metrology (E8-Fe) for Ultra-High Purity Silicon Wafers	2007
<i>M. Wilson, A. Savtchouk, I. Tasarov, J. D'Amico, P. Edelman, J. Lagowski</i>	
300mm Wafer Stain Formation by Spin Etching	2008
<i>K. Sato, S. Mashimoto, M. Watanabe</i>	
Chromium(VI)-free Defect Etching Solutions for Application on Engineered Silicon Substrates	2009
<i>J. Maehliß, A. Abbadie, F. Brunier, B. Kolbesen</i>	
EIS Characterization of Ultra High Purity, Float Zone Single Crystal Silicon	2010
<i>P. Viscor, O. Andersen, T. Clausen, P. A. Ellsmore, L. Jensen, J. Schiotz</i>	
New Yield-Impacting Polishing Induced Defects (PID) and A Method to Identify Them for Polished Si Substrates	2011
<i>H. Suh, B. Moon, K. Kim, J. Kim, S. Venkat, S. Lee, W. Shen, Y. Shin, J. Park, J. An, S. Seo, S. Park</i>	
Estimation of Radiation-Induced Complex Concentration in CZ-Si by IR Absorption Spectroscopy	2012
<i>Y. Yonezawa, N. Inoue, Y. Takubo, Y. Goto, T. Sugiyama, Y. Kawamura</i>	
The Way of Making Monoisotopic FZ-Si Crystals for the New kg Mass Unit Standard and for Basic Research	2013
<i>H. P. Riemann, N. Abrosimov, B. Hallmann-Seiffert, A. Kaliteevski, O. Godisov, A. Gusev, A. Bulanov, H. Pohl, P. Becker</i>	
Photoresist Removal from Si Wafer Using Boron-Doped -Diamond Anode Advanced Oxidation Process	2014
<i>C. Gao, M. Chang, B. Yang, W. Sun, C. Qu</i>	
Optical Imaging through Blood	2015
<i>W. S. Grundfest, D. Amundson, J. Hanlin, L. Blankenship</i>	
Digital Imagery Reconstruction Applied to Histopathology	2016
<i>R. Lieberman, W. Li, S. Venkataraman, S. Nie, Y. Xie, A. Whitesell, M. Eldred, J. Oyama</i>	
Computer Aided Diagnosis Algorithms for Cervical Cancer Digital Imagery	2017
<i>W. Li, S. Venkataraman, S. Park, U. Gustafsson, G. Hager</i>	
Standard GI Imaging Technologies: What You See Is What You Get	2018
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New GI Imaging Technologies: Seeing the Bowel from a New Angle	2019
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The Digital Colposcope and the Next Generation of Colposcopic Instruments	2020
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