Photonic microstructures in lithium niobate by potassium hydroxide-assisted ion beam-enhanced etching
Reinhard Geiss, Juliane Brandt, Holger Hartung, Andreas Tünnermann, Thomas Pertsch, Ernst-Bernhard Kley and Frank Schrempel
J. Vac. Sci. Technol. B **33**, 010601 (2015); http://dx.doi.org/10.1116/1.4902087

+ VIEW DESCRIPTION

Effects of oxygen doping concentration on resistive switching in NiN-based resistive switching memory
Dong Su Jeon, Ju Hyun Park and Tae Geun Kim
J. Vac. Sci. Technol. B **33**, 010602 (2015); http://dx.doi.org/10.1116/1.4904209

+ VIEW DESCRIPTION

Microstructural and electrical investigation of Pd/Au ohmic contact on p-GaN
Sofiane Belahsene, Gilles Patriarche, David Troadec, Suresh Sundaram, Abdallah Ougazzaden, Anthony Martinez and Abderrahim Ramdane
J. Vac. Sci. Technol. B **33**, 010603 (2015); http://dx.doi.org/10.1116/1.4905793

+ VIEW DESCRIPTION

ELECTRONIC & OPTOELECTRONIC MATERIALS, DEVICES & PROCESSING

Study of millisecond laser annealing on recrystallization, activation, and mobility of laser annealed SOI doped via arsenic ion implantation
Tyler J. Michalak, Josh Herman, Adarsh Basavalingappa, Martin Rodgers, Dan França and Christopher Borst
J. Vac. Sci. Technol. B **33**, 011201 (2015); http://dx.doi.org/10.1116/1.4902020

+ VIEW DESCRIPTION

Asymmetrical degradation behaviors in amorphous InGaZnO thin-film transistors under various gate and drain bias stresses
Daeun Lee, Chan-Yong Jeong, Sang-Hun Song, Jin Xiao-Shi, Jong In Kim, Jong-Ho Lee and Hyuck-In Kwon
J. Vac. Sci. Technol. B **33**, 011202 (2015); http://dx.doi.org/10.1116/1.4903527

+ VIEW DESCRIPTION

Confocal sputtering of conformal α-β phase W films on etched Al features
John Mark Kreikebaum, Blas Cabrera, Jeffrey J. Yen, Paul L. Brink, Matt Cherry, Astrid Tomada and Betty A. Young
J. Vac. Sci. Technol. B **33**, 011203 (2015); http://dx.doi.org/10.1116/1.4904422

+ VIEW DESCRIPTION

Cyclopentadienyliron dicarbonyl dimer carbon nanotube synthesis
Andrew M. Zeidell, Nathanael D. Cox, Shawn M. Huston, Jamie E. Rossi, Brian J. Landi and Brad R. Conrad

J. Vac. Sci. Technol. B **33**, 011204 (2015); http://dx.doi.org/10.1116/1.4904743

+ VIEW DESCRIPTION

InGaN/silicon heterojunction based narrow band near-infrared detector

Rajeev Pillai, David Starikov, Jateen Gandhi, Ananya Debnath, Ruiteng Li, Christopher Boney and Abdelhak Bensaoula

J. Vac. Sci. Technol. B **33**, 011205 (2015); http://dx.doi.org/10.1116/1.4904760

+ VIEW DESCRIPTION

Determination of GaN polarity on periodically oriented surfaces

Josephus D. Ferguson, Michael A. Reshchikov, Alison A. Baski, Jennifer K. Hite, Michael A. Mastro and Charles R. Eddy Jr.

J. Vac. Sci. Technol. B **33**, 011206 (2015); http://dx.doi.org/10.1116/1.4904742

+ VIEW DESCRIPTION

Minority carrier lifetime of lattice-matched CdZnTe alloy grown on InSb substrates using molecular beam epitaxy

Shi Liu, Xin-Hao Zhao, Calli Campbell, Michael J. DiNezza, Yuan Zhao and Yong-Hang Zhang

J. Vac. Sci. Technol. B **33**, 011207 (2015); http://dx.doi.org/10.1116/1.4905289

+ VIEW DESCRIPTION

Control of InGaAs and InAs facets using metal modulation epitaxy

Mark A. Wistey, Ashish K. Baraskar, Uttam Singisetti, Greg J. Burek, Byungha Shin, Eunji Kim, Paul C. McIntyre, Arthur C. Gossard and Mark J. W. Rodwell

J. Vac. Sci. Technol. B **33**, 011208 (2015); http://dx.doi.org/10.1116/1.4905497

+ VIEW DESCRIPTION

Utilization of polarization-inverted AlInGaN or relatively thinner AlGaN electron blocking layer in InGaN-based blue–violet laser diodes

Lingcong Le, Degang Zhao, Desheng Jiang, Ping Chen, Zongshun Liu, Jianjun Zhu, Jing Yang, Xiaojing Li, Xiaoguang He, Jianping Liu, Shuming Zhang and Hui Yang

J. Vac. Sci. Technol. B **33**, 011209 (2015); http://dx.doi.org/10.1116/1.4905430

+ VIEW DESCRIPTION

LITHOGRAPHY

Investigation of resist filling profile evolution in microimprint lithography

Du Jun, Wei Zhengying, Chu Huali and Zhang Yubin

J. Vac. Sci. Technol. B **33**, 011601 (2015); http://dx.doi.org/10.1116/1.4906100

+ VIEW DESCRIPTION

NANOMETER SCIENCE & TECHNOLOGY

Dose accumulation and 3D imaging with He^+ ions
Lucille A. Giannuzzi
J. Vac. Sci. Technol. B **33**, 011801 (2015); http://dx.doi.org/10.1116/1.4905091

+ VIEW DESCRIPTION

Simple, effective fabrication of layered carbon nanotube/graphene hybrid field emitters by electrophoretic deposition
Xuda Hong, Yao Chen, Peter Z. Wu and Hairong Zheng
J. Vac. Sci. Technol. B **33**, 011802 (2015); http://dx.doi.org/10.1116/1.4906041

+ VIEW DESCRIPTION

MICROELECTRONIC & NANOELECTRONIC DEVICES

Quantitative characterization of field emission parameters: Application to statistical analysis of individual carbon nanotubes/nanofibers
Florian Andrianiazy, Jean-Paul Mazellier, Lucie Sabaut, Laurent Gangloff, Pierre Legagneux and Oliver Gröning
J. Vac. Sci. Technol. B **33**, 012201 (2015); http://dx.doi.org/10.1116/1.4902019

+ VIEW DESCRIPTION

Etching of Ag and Au films in CH_4-based plasmas at low temperature
Tae-Seop Choi and Dennis W. Hess
J. Vac. Sci. Technol. B **33**, 012202 (2015); http://dx.doi.org/10.1116/1.4902332

+ VIEW DESCRIPTION

Permittivity of SiO_2 for estimating capacitive delays in focused ion beam circuit edit
David W. Niles, James Stout, Richard Christensen and Richard Rodgers
J. Vac. Sci. Technol. B **33**, 012203 (2015); http://dx.doi.org/10.1116/1.4904757

+ VIEW DESCRIPTION

Field emission of MgO-coated graphene sheets prepared by electrophoretic deposition
Yaping Long, Baoqing Zeng, Jianlong Liu, Yun Yang, Nannan Li and Zhe Wu
J. Vac. Sci. Technol. B **33**, 012204 (2015); http://dx.doi.org/10.1116/1.4905094

+ VIEW DESCRIPTION

Active-matrix Spindt-type field emitter array with faster response time for image sensor with high-gain avalanche rushing amorphous photoconductor target
Yuki Honda, Masakazu Nanba, Kazunori Miyakawa, Misao Kubota and Norifumi Egami
J. Vac. Sci. Technol. B **33**, 012205 (2015); http://dx.doi.org/10.1116/1.4906103

+ VIEW DESCRIPTION

BRIEF REPORTS AND COMMENTS

Demonstration of NOx gas sensing for Pd/ZnO/GaN heterojunction diodes
Makoto Miyoshi, Shu Fujita and Takashi Egawa
J. Vac. Sci. Technol. B **33**, 013001 (2015); http://dx.doi.org/10.1116/1.4906032

+ VIEW DESCRIPTION

SHOP NOTES

Enhanced positioning precision and in situ macroscopic contacts for shadow-evaporated nanostructures
Dominik Stöffler and Regina Hoffmann-Vogel
J. Vac. Sci. Technol. B **33**, 013201 (2015); http://dx.doi.org/10.1116/1.4905092

+ VIEW DESCRIPTION

18TH WORKSHOP ON DIELECTRICS IN MICROELECTRONICS (18TH WODIM 2014)

Low-temperature plasma-enhanced atomic layer deposition of HfO_2/Al_2O_3nanolaminate structure on Si
Duo Cao, Xinhong Cheng, Li Zheng, Dawei Xu, Zhongjian Wang, Chao Xia, Lingyan Shen,Yuehui Yu and DaShen Shen
J. Vac. Sci. Technol. B **33**, 01A101 (2015); http://dx.doi.org/10.1116/1.4895010

+ VIEW DESCRIPTION

Modeling of the switching I-V characteristics in ultrathin (5 nm) atomic layer deposited HfO_2 films using the logistic hysteron
Julio Blasco, Peter Jančovič, Karol Fröhlich, Jordi Suñé and Enrique Miranda
J. Vac. Sci. Technol. B **33**, 01A102 (2015); http://dx.doi.org/10.1116/1.4900599

+ VIEW DESCRIPTION

Modeling of ion drift in 4H-SiC-based chemical MOSFET sensors
Tobias Erlbacher, Holger Schwarzmann, Anton J. Bauer, Gottfried H. Döhler, Martin Schreivogel, Theresa Lutz, Francesco H. Guillén, Jürgen Graf, Richard Fix and Lothar Frey
J. Vac. Sci. Technol. B **33**, 01A103 (2015); http://dx.doi.org/10.1116/1.4903054

+ VIEW DESCRIPTION

Hexagonal $LaLuO_3$ as high-κ dielectric
Anna Schäfer, Fabian Wendt, Siegfried Mantl, Hilde Hardtdegen, Martin Mikulics, Jürgen Schubert, Martina Luysberg, Astrid Besmehn, Gang Niu and Thomas Schroeder
J. Vac. Sci. Technol. B **33**, 01A104 (2015); http://dx.doi.org/10.1116/1.4904401

+ VIEW DESCRIPTION

Adjusting the forming step for resistive switching in Nb_2O_5 by ion irradiation
Helge Wylezich, Hannes Mähne, Anett Heinrich, Stefan Slesazeck, Jura Rensberg, Carsten

Ronning, Peter Zahn and Thomas Mikolajick
J. Vac. Sci. Technol. B **33**, 01A105 (2015); http://dx.doi.org/10.1116/1.4904969

+ VIEW DESCRIPTION

Impact of postdeposition annealing upon film properties of atomic layer deposition-grown Al_2O_3 on GaN
Annett Winzer, Nadine Szabó, Andre Wachowiak, Paul Matthias Jordan, Johannes Heitmann and Thomas Mikolajick
J. Vac. Sci. Technol. B **33**, 01A106 (2015); http://dx.doi.org/10.1116/1.4904968

+ VIEW DESCRIPTION

Role of the electrode metal, waveform geometry, temperature, and postdeposition treatment on SET and RESET of HfO_2-based resistive random access memory 1R-cells: Experimental aspects
Paolo Lorenzi, Rosario Rao and Fernanda Irrera
J. Vac. Sci. Technol. B **33**, 01A107 (2015); http://dx.doi.org/10.1116/1.4905426

+ VIEW DESCRIPTION

Resistive switching in nonplanar HfO_2-based structures with variable series resistance
Karol Čičo, Peter Jančovič, Jan Dérer, Vasilij Šmatko, Alica Rosová, Michal Blaho, Boris Hudec, Dagmar Gregušová and Karol Fröhlich
J. Vac. Sci. Technol. B **33**, 01A108 (2015); http://dx.doi.org/10.1116/1.4905727

+ VIEW DESCRIPTION

Graphene based electron field emitter
Christian Wenger, Julia Kitzmann, André Wolff, Mirko Fraschke, Christian Walczyk, Gregorz Lupina, Wolfgang Mehr, Marcel Junige, Matthias Albert and Johann W. Bartha
J. Vac. Sci. Technol. B **33**, 01A109 (2015); http://dx.doi.org/10.1116/1.4905937

+ VIEW DESCRIPTION

Direct growth of HfO_2 on graphene by CVD
Mindaugas Lukosius, Jarek Dabrowski, Andre Wolff, David Kaiser, Wolfgang Mehr andGrzegorz Lupina
J. Vac. Sci. Technol. B **33**, 01A110 (2015); http://dx.doi.org/10.1116/1.4905728

+ VIEW DESCRIPTION

III-As heterostructure field-effect transistors with recessed ex-situ gate oxide by O_2plasma-oxidized GaAs cap
Filip Gucmann, Róbert Kúdela, Peter Kordoš, Edmund Dobročka, Štefan Gaži, Ján Dérer,Jozef Liday, Peter Vogrinčič and Dagmar Gregušová
J. Vac. Sci. Technol. B **33**, 01A111 (2015); http://dx.doi.org/10.1116/1.4905938

+ VIEW DESCRIPTION

Silicon nitride, a high potential dielectric for 600 V integrated RC-snubber applications

Florian Krach, Holger Schwarzmann, Anton J. Bauer, Tobias Erlbacher and Lothar Frey
J. Vac. Sci. Technol. B **33**, 01A112 (2015); http://dx.doi.org/10.1116/1.4906082

+ VIEW DESCRIPTION

Reactive magnetron sputtered hafnium oxide layers for nonvolatile semiconductor memory devices

Robert Mroczyński, Magdalena Szymańska and Wojciech Głuszewski
J. Vac. Sci. Technol. B **33**, 01A113 (2015); http://dx.doi.org/10.1116/1.4906090

+ VIEW DESCRIPTION