

Letters

FullJuly 2018

Enhanced temperature and light stability of amorphous indium-gallium-zinc oxide thin film transistors by interface nitrogen doping

Xiaoming Huang, Dong Zhou, Weizong Xu, and Yongjin Wang

Journal of Vacuum Science & Technology B **36**, 040601 (2018); <https://doi.org/10.1116/1.5031471>

SHOW ABSTRACT

FullJuly 2018

Synchrotron radiation study of metallic titanium deposited on dielectric substrates

Justin Bogan, Venkateswaran Selvaraju, Anita Brady-Boyd, Greg Hughes, and Robert O'Connor

Journal of Vacuum Science & Technology B **36**, 040602 (2018); <https://doi.org/10.1116/1.5036943>

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Electronic & Optoelectronic Materials, Devices & Processing

FullJuly 2018

Dry etch damage in n-type crystalline silicon wafers assessed by deep-level transient spectroscopy and minority carrier lifetime

Eddy Simoen, Hariharsudan Sivaramakrishnan Radhakrishnan, Md. Gius Uddin, Ivan Gordon, Jef Poortmans, Chong Wang, and Wei Li

Journal of Vacuum Science & Technology B **36**, 041201 (2018); <https://doi.org/10.1116/1.5026529>

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FullJuly 2018

High temperature capacitors using AlN grown by MBE as the dielectric

Pijush K. Ghosh, Mirsaeid Sarollahi, Chen Li, Thomas White, Desalegn T. Debu, Qigeng Yan, Andrian Kuchuk, Rahul Kumar, Satish Shetty, Gregory J. Salamo, and Morgan E. Ware

Journal of Vacuum Science & Technology B **36**, 041202 (2018); <https://doi.org/10.1116/1.5033931>

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FullJuly 2018

Effect of alpha-particle irradiation dose on SiN_x/AlGaN/GaN metal–insulator semiconductor high electron mobility transistors

Chaker Fares, Fan Ren, Stephen J. Pearton, Gwangseok Yang, Jihyun Kim, Chien-Fong Lo, and J. Wayne Johnson

Journal of Vacuum Science & Technology B **36**, 041203 (2018); <https://doi.org/10.1116/1.5042261>

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FullJuly 2018

Growth of well-oriented InN nanodots by magnetron sputtering with varying sputtering temperature

Hui Wang, Yang Zhao, Xinzhong Li, Jingjie Li, Ziming Zhang, Shuai Wan, Weizhao Gu, and Fan Yang

Journal of Vacuum Science & Technology B **36**, 041204 (2018); <https://doi.org/10.1116/1.5028165>

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Lithography

FullJuly 2018

Near-infrared light absorption enhancement in Ge nanostructures prepared by nanosphere lithography

Wenyi Shao, Jun Xu, Jiaming Chen, Xiaoxiang Wu, and Kunji Chen

Journal of Vacuum Science & Technology B **36**, 041601 (2018); <https://doi.org/10.1116/1.5029435>

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Nanometer Science & Technology

FullJuly 2018

Kinetically controlled dewetting of thin GaAs cap from an ErAs/GaAs nanoparticle composite layer

Yuanchang Zhang, Kurt G. Eyink, Brittany Urwin, Krishnamurthy Mahalingam, Madelyn R. Hill, and Larry Grazulis

Journal of Vacuum Science & Technology B **36**, 041801 (2018); <https://doi.org/10.1116/1.5030864>

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FullJuly 2018

Energy dissipation contributed on the machined depth via dynamic plowing lithography of atomic force microscopy

Yang He, Yongda Yan, Yanquan Geng, and Zhuo Fang

Journal of Vacuum Science & Technology B **36**, 041802 (2018); <https://doi.org/10.1116/1.5034168>

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FullJuly 2018

Block copolymer selectivity: A new dry etch approach for cylindrical applications

Aurelien Sarrazin, Nicolas Posseme, Patricia Pimenta-Barros, Sebastien Barnola, Ahmed Gharbi, Maxime Argoud, Raluca Tiron, and Christophe Cardinaud

Journal of Vacuum Science & Technology B **36**, 041803 (2018); <https://doi.org/10.1116/1.5034133>

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Microelectronic & Nanoelectronic Devices

FullJuly 2018

Degradation of AlGaN/GaN metal–insulator–semiconductor high electron mobility transistors under off-state electrical stress

Liang Song, Kai Fu, Jie Zhao, Guohao Yu, Ronghui Hao, Yaming Fan, Yong Cai, and Baoshun Zhang

Journal of Vacuum Science & Technology B **36**, 042201 (2018); <https://doi.org/10.1116/1.5023844>

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Plasmonics

FullJuly 2018

Fabrication of long range surface plasmon waveguide biosensors in a low-index fluoropolymer

Pengshuai Ren, Oleksiy Krupin, Pierre Berini, and R. Niall Tait

Journal of Vacuum Science & Technology B **36**, 042601 (2018); <https://doi.org/10.1116/1.5027859>

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Measurement and Characterization

FullJuly 2018

Comprehension of peculiar local emission behavior of InGaAs quantum well by colocalized nanocharacterization combining cathodoluminescence and electron microscopy techniques

Joyce Roque, Georges Beainy, Névine Rochat, Nicolas Bernier, Sylvain David, Jérémy Moeyaert, Mickael Martin, Thierry Baron, and Jean-Luc Rouvière

Journal of Vacuum Science & Technology B **36**, 042901 (2018); <https://doi.org/10.1116/1.5033363>

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FullJuly 2018

Germanium out diffusion in SiGe-based HfO₂ gate stacks

Eugenie Martinez, Emmanuel Nolot, Jean-Paul Barnes, Yann Mazel, Nicolas Bernier, Raja Muthinti, Hemanth Jagannathan, Choonghyun Lee, and Narciso Gambacorti

Journal of Vacuum Science & Technology B **36**, 042902 (2018); <https://doi.org/10.1116/1.5027072>

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FullJuly 2018

In situ voltage-application system for active voltage contrast imaging in helium ion microscope

Chikako Sakai, Nobuyuki Ishida, Shoko Nagano, Keiko Onishi, and Daisuke Fujita

Journal of Vacuum Science & Technology B **36**, 042903 (2018); <https://doi.org/10.1116/1.5031086>

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Perspectives

OpenJuly 2018

Beyond equilibrium thermodynamics in the low temperature plasma processor

Elijah Thimsen

Journal of Vacuum Science & Technology B **36**, 048501 (2018); <https://doi.org/10.1116/1.5022470>

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Papers from the International Conference on Thin Films 2017

FullJuly 2018

Preparation and characterization of Al₂O₃film deposited by RF sputtering and plasma enhanced atomic layer deposition

Prashant Singh, Rajesh Kumar Jha, Rajat Kumar Singh, and Babu Ram Singh

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FullJuly 2018

Influence of growth temperature on structural and optical properties of laser MBE grown epitaxial thin GaN films on a-plane sapphire

Chodipilli Ramesh, Prashant Tyagi, Sandeep Singh, Preetam Singh, Govind Gupta, Kamlesh Kumar Maurya, Kuchibhotla Murali Krishna Srivatsa, Muthusamy Senthil Kumar, and Sunil Singh Kushvaha

Journal of Vacuum Science & Technology B **36**, 04G102 (2018); <https://doi.org/10.1116/1.5025126>

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FullJuly 2018

Heteroepitaxial growth of self-assembled BaTiO₃-Fe₂O₃ nanostructures

Shekhar Tyagi, Gaurav Sharma, Vivek Dwij, Binoy Krishna De, Vasant G. Sathe, Varimalla R. Reddy, Ram J. Choudhary, Deodatta M. Phase, and Vedachalaiyer Ganesan

Journal of Vacuum Science & Technology B **36**, 04G103 (2018); <https://doi.org/10.1116/1.5026069>

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FullJuly 2018

Highly efficient fluorescence quenching with chemically exfoliated reduced graphene oxide

Shubhda Srivastava, Thanikachalam Devarajan Senguttuvan, and Bipin Kumar Gupta

Journal of Vacuum Science & Technology B **36**, 04G104 (2018); <https://doi.org/10.1116/1.5026170>

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FullJuly 2018

Numerical simulations of perovskite thin-film solar cells using a CdS hole blocking layer

Nisha Devi, Khursheed A. Parrey, Anver Aziz, and Shouvik Datta

Journal of Vacuum Science & Technology B **36**, 04G105 (2018); <https://doi.org/10.1116/1.5026163>

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Papers from the 45th Conference on the Physics and Chemistry of Surfaces and Interfaces

FullJuly 2018

Temperature dependence of photoinduced hydrogen production and simultaneous separation in TiO₂ nanotubes/palladium bilayer membrane

Junki Asai, and Kei Noda

Journal of Vacuum Science & Technology B **36**, 04H101 (2018); <https://doi.org/10.1116/1.5029281>

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FullJuly 2018

Real-space pseudopotential calculations for simulating noncontact atomic force microscopy images

Dingxin Fan, Yuki Sakai, and James R. Chelikowsky

Journal of Vacuum Science & Technology B **36**, 04H102 (2018); <https://doi.org/10.1116/1.5029827>

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FullJuly 2018

Influence of anisotropic Si(111)-(4 × 1)-In surface on growth of nanoscale In islands

Sandhya Chandola, and Norbert Esser

Journal of Vacuum Science & Technology B **36**, 04H103 (2018); <https://doi.org/10.1116/1.5031228>

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FullJuly 2018

Dark and photo-induced charge transport across molecular spacers

Nirit Kantor-Uriel, Partha Roy, Keti Lerman, Chaim N. Sukenik, and Hagai Cohen

Journal of Vacuum Science & Technology B **36**, 04H104 (2018); <https://doi.org/10.1116/1.5037219>

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Papers from the 2nd International Symposium of the Vacuum Society of the Philippines

FullJuly 2018

Effects of RF plasma modification on the thermal and mechanical properties of electrospun chitosan/poly(vinyl alcohol) nanofiber mats

Glenn V. Latag, and Magdaleno R. Vasquez Jr.

Journal of Vacuum Science & Technology B **36**, 04I101 (2018); <https://doi.org/10.1116/1.5030507>

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FullJuly 2018

Plasma polymerization of styrene using an argon-fed atmospheric pressure plasma jet

Paolo Edward C. Tan, Christian Lorenz S. Mahinay, Ivan B. Culaba, Oliver Kevin M. Streeter, and Miguel Ricardo A. Hilario

Journal of Vacuum Science & Technology B **36**, 04I102 (2018); <https://doi.org/10.1116/1.5030840>

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