

LETTERS

Modulation of the work function of fullerenes C₆₀ and C₇₀ by alkaline earth metal adsorption: A theoretical study

Yue-Qiang Sun, Shun-Fu Xu, Wei-Hui Liu, Zeng-Sheng Li, Xin-Qing Zheng, Chun-E Sang, Xiu-Mei Zhu, Xiao-Chun Zhang, Chun Li, Guang Yuan and Hitenori Mimura
J. Vac. Sci. Technol. B **32**, 010601 (2014); <http://dx.doi.org/10.1116/1.4849095>

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Stability of amorphous InAlZnO thin-film transistors

Jie Zhang, Jianguo Lu, Qingjun Jiang, Bin Lu, Xinhua Pan, Lingxiang Chen, Zhizhen Ye, Xifeng Li, Peijun Guo and Nanjia Zhou
J. Vac. Sci. Technol. B **32**, 010602 (2014); <http://dx.doi.org/10.1116/1.4862150>

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Transfer free suspended graphene devices on silicon using electrodeposited copper

B. Krishna Bharadwaj, Rudra Pratap and Srinivasan Raghavan
J. Vac. Sci. Technol. B **32**, 010603 (2014); <http://dx.doi.org/10.1116/1.4862154>

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ELECTRONIC & OPTOELECTRONIC MATERIALS, DEVICES & PROCESSING

Microstructure of Ti/Al/Ni/Au ohmic contacts for N-polar GaN/AlGaIn high electron mobility transistor devices

Lin Zhou, Michael R. Johnson, David J. Smith, David J. Meyer, David F. Storm, Douglas Scott Katzer and Brian P. Downey
J. Vac. Sci. Technol. B **32**, 011201 (2014); <http://dx.doi.org/10.1116/1.4829878>

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Effect of sputter power on the photobias stability of zinc-tin-oxide field-effect transistors

Bong Seob Yang, Seungha Oh, Yoon Jang Kim, Sang Jin Han, Hong Woo Lee, Hyuk Jin Kim, Hui Kyung Park, Jae Kyeong Jeong, Jaeyeong Heo, Cheol Seong Hwang and Hyeong Joon Kim
J. Vac. Sci. Technol. B **32**, 011202 (2014); <http://dx.doi.org/10.1116/1.4832329>

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Band alignment of a HfO₂-VO₂-HfO₂ confined well structure on silicon

Chiyu Zhu, Sean L. Caudle, Jialing Yang, David J. Smith and Robert J. Nemanich
J. Vac. Sci. Technol. B **32**, 011203 (2014); <http://dx.doi.org/10.1116/1.4832341>

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Fabrication of high quality factor GaAs/InAsSb photonic crystal microcavities by inductively coupled plasma etching and fast wet etching

Iván Prieto González, Luis Enrique Muñoz Camuñez, Alfonso González Taboada, Carmen

Robles Urdiales, Jose María Ripalda Cobián and Pablo Aitor Postigo Resa
J. Vac. Sci. Technol. B **32**, 011204 (2014); <http://dx.doi.org/10.1116/1.4836517>

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Direct evidence for interface state annealing in the negative bias temperature instability response

Duc D. Nguyen, Camron Kouhestani, Kenneth E. Kambour and Roderick A. B. Devine
J. Vac. Sci. Technol. B **32**, 011205 (2014); <http://dx.doi.org/10.1116/1.4837436>

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Low-temperature (≤ 150 °C) chemical vapor deposition of pure cobalt thin films

Nigamananda Samal, Krishna B. Chetry, Katrina Rook, Alan Hayes and Adrian Devasahayam

J. Vac. Sci. Technol. B **32**, 011206 (2014); <http://dx.doi.org/10.1116/1.4836455>

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Microcathodoluminescence spectra evolution for planar and nanopillar multiquantum-well GaN-based structures as a function of electron irradiation dose

Eugene B. Yakimov, Paul S. Vergeles, Alexander Y. Polyakov, Han-Su Cho, Lee-Woon Jang and In-Hwan Lee

J. Vac. Sci. Technol. B **32**, 011207 (2014); <http://dx.doi.org/10.1116/1.4840255>

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White light emission from ultrathin tungsten metal oxide film

Chi-Chou Lin and Yue Kuo

J. Vac. Sci. Technol. B **32**, 011208 (2014); <http://dx.doi.org/10.1116/1.4843135>

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Low-temperature surface photovoltage in *p*-type GaN

Joy D. McNamara, Michael Foussekis, Alison A. Baski and Michael A. Reshchikov

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Selective area growth of InP on lithography-free, nanopatterned GaAs(001) by metalorganic chemical vapor deposition

Qi Wang, Zhiqiang Bian, Zhigang Jia, Zhihong Pan, Shiwei Cai, Yongqing Huang and Xiaomin Ren

J. Vac. Sci. Technol. B **32**, 011210 (2014); <http://dx.doi.org/10.1116/1.4855035>

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Macroscopic and nanometer scale stress measurement of Ni(Pt)Si silicide: Impact of thermal treatments ranging from millisecond to several hours

Pierre Francois Morin, Remi Beneyton, Magali Gregoire, Alexandre Pofelski, Laurent Clement, Shankar Muthukrishnan and Abhilash J. Mayur

J. Vac. Sci. Technol. B **32**, 011211 (2014); <http://dx.doi.org/10.1116/1.4855175>

[+ VIEW DESCRIPTION](#)**Schottky-diode hydrogen sensor based on InGaN/GaN multiple quantum wells**

Gang Chen, Anthony Hoi Wai Choi, Pui To Lai and Wing Man Tang

J. Vac. Sci. Technol. B **32**, 011212 (2014); <http://dx.doi.org/10.1116/1.4855057>[+ VIEW DESCRIPTION](#)**Optical studies of the effect of oxidation on GaN**

Gulten Karaoglan-Bebek, Jung Hwan Woo, Sergey Nikishin, Harlan Rusty Harris and Mark Holtz

J. Vac. Sci. Technol. B **32**, 011213 (2014); <http://dx.doi.org/10.1116/1.4858467>[+ VIEW DESCRIPTION](#)**Increasing the effective work function of multilayer graphene films using silver nanoparticles**

Si Jin Park, Haejin Park, Younjoo Lee, Yeonjin Yi and Seong Jun Kang

J. Vac. Sci. Technol. B **32**, 011214 (2014); <http://dx.doi.org/10.1116/1.4861372>[+ VIEW DESCRIPTION](#)**Microwave-induced nucleation of conducting graphitic domains on silicon carbide surfaces**

Thomas E. O'Loughlin, Sean W. Depner, Brian J. Schultz and Sarbajit Banerjee

J. Vac. Sci. Technol. B **32**, 011215 (2014); <http://dx.doi.org/10.1116/1.4861383>[+ VIEW DESCRIPTION](#)**Ti/Al/Ti/Ni/Au ohmic contacts on AlGaIn/GaN high electron mobility transistors with improved surface morphology and low contact resistance**

Yu-Sheng Chiu, Tai-Ming Lin, Hong-Quan Nguyen, Yu-Chen Weng, Chi-Lang Nguyen, Yueh-Chin Lin, Hung-Wei Yu, Edward Yi Chang and Ching-Ting Lee

J. Vac. Sci. Technol. B **32**, 011216 (2014); <http://dx.doi.org/10.1116/1.4862165>[+ VIEW DESCRIPTION](#)**X-ray photoelectron spectroscopy analysis and band offset determination of CeO₂ deposited on epitaxial (100), (110), and (111)Ge**

Yan Zhu, Nikhil Jain, Mantu K. Hudait, Deepam Maurya, Ronnie Varghese and Shashank Priya

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Thin films of carbon nanotubes via ultrasonic spraying of suspensions in *N*-methyl-2-pyrrolidone and *N*-cyclohexyl-2-pyrrolidone

Anthony D. Willey, Josh M. Holt, Brian A. Larsen, Jeffrey L. Blackburn, Steven Liddiard, Jonathan Abbott, Mallorie Coffin, Richard R. Vanfleet and Robert C. Davis
J. Vac. Sci. Technol. B **32**, 011218 (2014); <http://dx.doi.org/10.1116/1.4861370>

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X-ray photoelectron spectroscopy analysis of the effect of temperature upon surface composition of InP etched in Cl₂-based inductively coupled plasma

Romain Chanson, Sophie Bouchoule, Christophe Cardinaud, Camille Petit-Etienne, Edmond Cambuil, Ahmed Rhallabi, Stephane Guilet and Elisabeth Blanquet
J. Vac. Sci. Technol. B **32**, 011219 (2014); <http://dx.doi.org/10.1116/1.4862256>

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NANOMETER SCIENCE & TECHNOLOGY

Energy spacing between electronic resonances: A physical quantity correlating to diverse phases of the dense Pb overlayers on Si(111)

Wen-Yuan Chan, Hsu-Sheng Huang, Wei-Bin Su, Shin-Ming Lu, Germar Hoffmann and Chia-Seng Chang
J. Vac. Sci. Technol. B **32**, 011801 (2014); <http://dx.doi.org/10.1116/1.4832336>

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Fabrication of monodisperse particles by nanoimprinting using anodic porous alumina molds

Takashi Yanagishita, Midori Kawamoto, Kazuyuki Nishio and Hideki Masuda
J. Vac. Sci. Technol. B **32**, 011802 (2014); <http://dx.doi.org/10.1116/1.4837396>

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Nanoscale-resolved near-infrared photoabsorption spectroscopy and imaging of individual gallium antimonide quantum dots

Nobuyasu Naruse, Yoshiaki Nakamura, Yutaka Mera, Masakazu Ichikawa and Koji Maeda
J. Vac. Sci. Technol. B **32**, 011803 (2014); <http://dx.doi.org/10.1116/1.4843115>

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MICROELECTRONIC & NANOELECTRONIC DEVICES

Effect of 5 MeV proton radiation on DC performance and reliability of circular-shaped AlGaIn/GaN high electron mobility transistors

Yuyin Xi, Yueh-Ling Hsieh, Ya-Hsi Hwang, Shun Li, Fan Ren, Stephen J. Pearton, Erin Patrick, Mark E. Law, Gwangseok Yang, Hong-Yeol Kim, Jihyun Kim, Albert G. Baca, Andrew A. Allerman and Carlos A. Sanchez
J. Vac. Sci. Technol. B **32**, 012201 (2014); <http://dx.doi.org/10.1116/1.4836577>

