

LETTERS

Structure and interfacial analysis of nanoscale TiNi thin film prepared by biased target ion beam deposition

Huilong Hou, Reginald F. Hamilton and Mark W. Horn

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Suboxide/subnitride formation on Ta masks during magnetic material etching by reactive plasmas

Hu Li, Yu Muraki, Kazuhiro Karahashi and Satoshi Hamaguchi

J. Vac. Sci. Technol. A **33**, 040602 (2015); <http://dx.doi.org/10.1116/1.4919925>

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Influence of oxygen on characteristics of Zn(O,S) thin films deposited by RF magnetron sputtering

Ji Hyun Choi, Adrian Adalberto Garay, Su Min Hwang and Chee Won Chung

J. Vac. Sci. Technol. A **33**, 040603 (2015); <http://dx.doi.org/10.1116/1.4922580>

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INTERFACES

Atomic layer deposition precursor step repetition and surface plasma pretreatment influence on semiconductor–insulator–semiconductor heterojunction solar cell

Florian Talkenberg, Stefan Illhardt, György Zoltán Radnóczy, Béla Pécz, Gabriele Schmidl, Alexander Schleusener, Kadyrjan Dikhanbayev, Gauhar Mussabek, Alexander Gudovskikh and Vladimir Sivakov

J. Vac. Sci. Technol. A **33**, 041101 (2015); <http://dx.doi.org/10.1116/1.4921726>

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PHOTOVOLTAICS AND ENERGY

Molybdenum oxide and molybdenum oxide-nitride back contacts for CdTe solar cells

Jennifer A. Drayton, Desiree D. Williams, Russell M. Geisthardt, Corson L. Cramer, John D. Williams and James R. Sites

J. Vac. Sci. Technol. A **33**, 041201 (2015); <http://dx.doi.org/10.1116/1.4922576>

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PLASMA SCIENCE AND TECHNOLOGY

Chamber wall interactions with HBr/Cl₂/O₂ plasmas

Ashutosh K. Srivastava, Tomohiro Ohashi and Vincent M. Donnelly

J. Vac. Sci. Technol. A **33**, 041301 (2015); <http://dx.doi.org/10.1116/1.4920933>

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Determination of the number density of excited and ground Zn atoms during rf magnetron sputtering of ZnO target

L. Maaloul, R. K. Gangwar and L. Stafford

J. Vac. Sci. Technol. A **33**, 041302 (2015); <http://dx.doi.org/10.1116/1.4921225>

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Particle formation and its control in dual frequency plasma etching reactors

Munsu Kim, Hee-Woon Cheong and Ki-Woong Whang

J. Vac. Sci. Technol. A **33**, 041303 (2015); <http://dx.doi.org/10.1116/1.4922033>

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Study on spatial distribution of plasma parameters in a magnetized inductively coupled plasma

Hee-Woon Cheong, Woohyun Lee, Ji-Won Kim, Ki-Woong Whang, Hyuk Kim and Wanjae Park

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SURFACES

Evaluation of electropolished stainless steel electrodes for use in DC high voltage photoelectron guns

Mahzad BastaniNejad, Abdelmageed A. Elmustafa, Eric Forman, Steven Covert, John Hansknecht, Carlos Hernandez-Garcia, Matthew Poelker, Lopa Das, Michael Kelley and Phillip Williams

J. Vac. Sci. Technol. A **33**, 041401 (2015); <http://dx.doi.org/10.1116/1.4920984>

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Effects of H₂ plasma treatment on the electrical properties of titanium-doped indium oxide films prepared by polymer-assisted deposition

Joo-Sang Hwang, Ji-Myon Lee, Sujaya Kumar Vishwanath and Jihoon Kim

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Combined wet and dry cleaning of SiGe(001)

Sang Wook Park, Tobin Kaufman-Osborn, Hyonwoong Kim, Shariq Siddiqui, Bhagawan Sahu, Naomi Yoshida, Adam Brandt and Andrew C. Kummel

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THIN FILMS

Enhanced light trapping and plasmonic properties of aluminum nanorods fabricated by glancing angle deposition

Rosure Borhanalden Abdulrahman, Hilal Cansizoglu, Mehmet F. Cansizoglu, Joseph B. Herzog and Tansel Karabacak

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Cathodic cage plasma deposition of TiN and TiO₂ thin films on silicon substrates

Romulo R. M. de Sousa, Patricia S. Sato, Bartolomeu C. Viana, Clodomiro Alves Jr., Akio Nishimoto and Pedro A. P. Nascente

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Nanostructured thin films for hydrogen-permeation barrier

Motonori Tamura and Takashi Eguchi

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Resputtering effect during MgO buffer layer deposition by magnetron sputtering for superconducting coated conductors

Shaozhu Xiao, Feng Feng, Kai Shi, Shutong Deng, Timing Qu, Yuping Zhu, Hongyuan Lu, Rongxia Huang and Zhenghe Han

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Tailoring the crystal structure of TiO₂ thin films from the anatase to rutile phase

Haruka Kotake, Junjun Jia, Shin-ichi Nakamura, Toshihiro Okajima and Yuzo Shigesato

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Stress engineering in GaN structures grown on Si(111) substrates by SiN masking layer application

Tomasz Szymański, Mateusz Wośko, Bogdan Paszkiewicz, Regina Paszkiewicz and Milan Drzik

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Production and characterization of thin film group IIIB, IVB and rare earth hydrides by reactive evaporation

James L. Provo

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β -(Al_xGa_{1-x})₂O₃/Ga₂O₃ (010) heterostructures grown on β -Ga₂O₃ (010) substrates by plasma-assisted molecular beam epitaxy

Stephen W. Kaun, Feng Wu and James S. Speck

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Growth of c-axis oriented AlN thin films on titanium alloy substrate by middle frequency magnetron sputtering

Jiaying Jiang, Bin Peng, Wanli Zhang, Yu Wang, Lin Shu and Rui Wang

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Effects of cation stoichiometry on electronic and structural properties of LaNiO₃

Cole R. Smith, Andrew C. Lang, Vaithiyalingam Shutthanandan, Mitra L. Taheri and Steven J. May

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Fabrication of ion conductive tin oxide-phosphate amorphous thin films by atomic layer deposition

Suk Won Park, Dong Young Jang, Jun Woo Kim and Joon Hyung Shim

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Low temperature temporal and spatial atomic layer deposition of TiO₂ films

Morteza Aghaee, Philipp S. Maydannik, Petri Johansson, Jurkka Kuusipalo, Mariadriana Creatore, Tomáš Homola and David C. Cameron

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Local structure study of (In_{0.95-x}Fe_xCu_{0.05})₂O₃ thin films using x-ray absorption spectroscopy

Yuan Ren, Yaya Xing, Guanxiong Ma, Xingliang Zhao, Shiqi Wang, Yukai An and Jiwen Liu

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Modeling of photocurrent and lag signals in amorphous selenium x-ray detectors

Sinchita Siddiquee and M. Z. Kabir

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Observation of ultraslow stress release in silicon nitride films on CaF₂

Tianyi Guo, M. Jamal Deen, Changqing Xu, Qiyin Fang, P. Ravi Selvaganapathy and Haiying Zhang

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Composition gradient effects on strain relaxation in Sr-doped LaMnO₃ epitaxial thin films

Yishu Wang and Efstathios I. Meletis

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BRIEF REPORTS AND COMMENTS

Photoluminescence from nanocrystalline silicon nc-Si, nc-Si/SiO₂ nanocomposites, and nc-Si oxidized in O₂ and treated in H₂O

Stan Veprek and Maritza G. J. Veprek-Heijman

J. Vac. Sci. Technol. A **33**, 043001 (2015); <http://dx.doi.org/10.1116/1.4921555>

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Ar⁺-irradiation-induced damage in hydride vapor-phase epitaxy GaN films

Yoshitaka Nakano, Daisuke Ogawa, Keiji Nakamura, Retsuo Kawakami and Masahito Niibe

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SHOP NOTES

Novel method for in-situ and simultaneous nanofriction and nanowear characterization of materials

Esteban Broitman and Francisco J. Flores-Ruiz

J. Vac. Sci. Technol. A **33**, 043201 (2015); <http://dx.doi.org/10.1116/1.4921584>

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