LETTERS

Elaboration of high aspect ratio monocrystalline silicon suspended nanobridges by low temperature alkaline treatment of dry etched trenches
Thomas Defforge, Gaël Gautier, Thomas Tillocher, Rémi Dussart and François Tran-Van
J. Vac. Sci. Technol. A **30**, 010601 (2012); http://dx.doi.org/10.1116/1.3665217

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REVIEW ARTICLE

Atomic layer deposition for nanostructured Li-ion batteries
H. C. M. Knoops, M. E. Donders, M. C. M. van de Sanden, P. H. L. Notten and W. M. M. Kessels
J. Vac. Sci. Technol. A **30**, 010801 (2012); http://dx.doi.org/10.1116/1.3660699

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Spatial atomic layer deposition: A route towards further industrialization of atomic layer deposition
Paul Poodt, David C. Cameron, Eric Dickey, Steven M. George, Vladimir Kuznetsov,Gregory N. Parsons, Fred Roozeboom, Ganesh Sundaram and Ad Vermeer
J. Vac. Sci. Technol. A **30**, 010802 (2012); http://dx.doi.org/10.1116/1.3670745

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Atomic layer deposition for electrochemical energy generation and storage systems
Qing Peng, Jay S. Lewis, Paul G. Hoertz, Jeffrey T. Glass and Gregory N. Parsons
J. Vac. Sci. Technol. A **30**, 010803 (2012); http://dx.doi.org/10.1116/1.3672027

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Impact of CdSe/ZnS quantum dot spectrum converters on InGaP/GaAs/Ge multi-junction solar cells
Chun-Yuan Huang
J. Vac. Sci. Technol. A **30**, 011201 (2012); http://dx.doi.org/10.1116/1.3673784

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PLASMA SCIENCE AND TECHNOLOGY

Spatially resolved study of primary electron transport in magnetic cusps
Aimee A. Hubble and John E. Foster
J. Vac. Sci. Technol. A **30**, 011301 (2012); http://dx.doi.org/10.1116/1.3656742

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Power effect of ZnO:Al film as back reflector on the performance of thin-film solar cells
Yang-Shih Lin, Shui-Yang Lien, Chao-Chun Wang, Chueh-Yang Liu, Asheesh Nautiyal,Dong-Sing Wuu, Pi-Chuen Tsai, Chia-Fu Chen and Shuo-Jen Lee
J. Vac. Sci. Technol. A **30**, 011302 (2012); http://dx.doi.org/10.1116/1.3667109

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SURFACES

Substrate grain size and orientation of Cu and Cu–Ni foils used for the growth of graphene films
Zachary R. Robinson, Parul Tyagi, Thomas M. Murray, Carl A. Ventrice Jr., Shanshan Chen,Andrew Munson, Carl W. Magnuson and Rodney S. Ruoff
J. Vac. Sci. Technol. A **30**, 011401 (2012); http://dx.doi.org/10.1116/1.3663877

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Energy calibrations in the x-ray absorption spectroscopy of uranium dioxide
Sung Woo Yu, J. G. Tobin, Paul Olalde-Velasco, Wan Li Yang and Wigbert J. Siekhaus
J. Vac. Sci. Technol. A **30**, 011402 (2012); http://dx.doi.org/10.1116/1.3670402

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THIN FILMS

Probing compositional disorder in vanadium oxide thin films grown on atomic layer deposited hafnia on silicon by capacitance spectroscopy
Changhyun Ko, You Zhou and Shriram Ramanathan
J. Vac. Sci. Technol. A **30**, 011501 (2012); http://dx.doi.org/10.1116/1.3659020

+ VIEW DESCRIPTION

Deposition of novel nanocomposite films by a newly developed differential pumping co-sputtering system
Masateru Nose, Takeshi Kurimoto, Atsushi Saiki, Kenji Matsuda and Kiyoshi Terayama
J. Vac. Sci. Technol. A **30**, 011502 (2012); http://dx.doi.org/10.1116/1.3659704

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Compact tool for deposition of composition spread alloy films
Deepika Priyadarshini, Petro Kondratyuk, James B. Miller and Andrew J. Gellman
J. Vac. Sci. Technol. A **30**, 011503 (2012); http://dx.doi.org/10.1116/1.3664078

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Plasma etch characteristics of aluminum nitride mask layers grown by low-temperature plasma enhanced atomic layer deposition in SF_6 based plasmas
Alexander Perros, Markus Bosund, Timo Sajavaara, Mikko Laitinen, Lauri Sainiemi, Teppo Huhtio and Harri Lipsanen
J. Vac. Sci. Technol. A **30**, 011504 (2012); http://dx.doi.org/10.1116/1.3664306

+ VIEW DESCRIPTION

Comparison of wet and dry etching of zinc indium oxide for thin film transistors with an inverted gate structure

Michael A. Marrs, Bryan D. Vogt and Gregory B. Raupp

J. Vac. Sci. Technol. A **30**, 011505 (2012); http://dx.doi.org/10.1116/1.3668090

+ VIEW DESCRIPTION

Transparent polycrystalline monoclinic HfO_2 dielectrics prepared by plasma assisted pulsed laser deposition

Zhifeng Ying, Jian Sun, Zhigao Hu, Wenlei Yu, Ning Xu and Jiada Wu

J. Vac. Sci. Technol. A **30**, 011506 (2012); http://dx.doi.org/10.1116/1.3673783

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VACUUM SCIENCE AND TECHNOLOGY

Effects of $B_{18}H_x^+$ and $B_{18}H_x$ dimer ion implantations on crystallinity and retained B dose in silicon

Yoji Kawasaki and Kentaro Shibahara

J. Vac. Sci. Technol. A **30**, 011601 (2012); http://dx.doi.org/10.1116/1.3655892

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PERSPECTIVES

Thin-film electronics by atomic layer deposition

David H. Levy and Shelby F. Nelson

J. Vac. Sci. Technol. A **30**, 018501 (2012); http://dx.doi.org/10.1116/1.3670748

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ATOMIC LAYER DEPOSITION (ALD)

Reaction mechanisms of atomic layer deposition of TaN_x from $Ta(NMe_2)_5$ precursor and H_2-based plasmas

H. C. M. Knoops, E. Langereis, M. C. M. van de Sanden and W. M. M. Kessels

J. Vac. Sci. Technol. A **30**, 01A101 (2012); http://dx.doi.org/10.1116/1.3625565

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Nucleation delay in atomic layer deposition on a thin organic layer and the role of reaction thermochemistry

Kevin J. Hughes and James R. Engstrom

J. Vac. Sci. Technol. A **30**, 01A102 (2012); http://dx.doi.org/10.1116/1.3625564

+ VIEW DESCRIPTION

Scalability of plasma enhanced atomic layer deposited ruthenium films for interconnect applications

J. Swerts, S. Armini, L. Carbonell, A. Delabie, A. Franquet, S. Mertens, M. Popovici, M. Schaekers, T. Witters, Z. Tökei, G. Beyer, S. Van Elshocht, V. Gravey, A. Cockburn, K. Shah and J. Aubuchon

J. Vac. Sci. Technol. A **30**, 01A103 (2012); http://dx.doi.org/10.1116/1.3625566

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ATOMIC LAYER DEPOSITION (ALD)

Charge trapping characteristics of Au nanocrystals embedded in remote plasma atomic layer-deposited Al_2O_3 film as the tunnel and blocking oxides for nonvolatile memory applications
Jaesang Lee, Hyungchul Kim, Taeyong Park, Youngbin Ko, Jaehun Ryu, Heeyoung Jeon,Jingyu Park and Hyeongtag Jeon
J. Vac. Sci. Technol. A **30**, 01A104 (2012); http://dx.doi.org/10.1116/1.3639131

+ VIEW DESCRIPTION

Wetting properties induced in nano-composite POSS-MA polymer films by atomic layer deposited oxides
Kyle A. Vasquez, Anita J. Vincent-Johnson, W. Christopher Hughes, Brian H. Augustine,Kyoungmi Lee, Gregory N. Parsons and Giovanna Scarel
J. Vac. Sci. Technol. A **30**, 01A105 (2012); http://dx.doi.org/10.1116/1.3639134

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Study of amorphous lithium silicate thin films grown by atomic layer deposition
Jani Hämäläinen, Frans Munnik, Timo Hatanpää, Jani Holopainen, Mikko Ritala andMarkku Leskelä
J. Vac. Sci. Technol. A **30**, 01A106 (2012); http://dx.doi.org/10.1116/1.3643349

+ VIEW DESCRIPTION

Combination of characterization techniques for atomic layer deposition MoO_3 coatings: From the amorphous to the orthorhombic α-MoO_3 crystalline phase
Madeleine Diskus, Ola Nilsen, Helmer Fjellvåg, Spyros Diplas, Pablo Beato, Clare Harvey,Evelien van Schrojenstein Lantman and Bert M. Weckhuysen
J. Vac. Sci. Technol. A **30**, 01A107 (2012); http://dx.doi.org/10.1116/1.3643350

+ VIEW DESCRIPTION

Nanocoating zinc alkoxide (zincone) hybrid polymer films on particles using a fluidized bed reactor
Xinhua Liang, Ying-Bing Jiang and Alan W. Weimer
J. Vac. Sci. Technol. A **30**, 01A108 (2012); http://dx.doi.org/10.1116/1.3644952

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Plasma and vacuum ultraviolet induced charging of SiO_2 and HfO_2 patterned structures
J. L. Lauer, G. S. Upadhyaya, H. Sinha, J. B. Kruger, Y. Nishi and J. L. Shohet
J. Vac. Sci. Technol. A **30**, 01A109 (2012); http://dx.doi.org/10.1116/1.3654012

+ VIEW DESCRIPTION

Use of a high-flow diaphragm valve in the exhaust line of atomic layer deposition reactors
Neil P. Dasgupta, Orlando Trejo and Fritz B. Prinz
J. Vac. Sci. Technol. A **30**, 01A110 (2012); http://dx.doi.org/10.1116/1.3656945

+ VIEW DESCRIPTION

Temperature induced changes in a AgPt nanofilm on Ru(0001)
Jens Onsgaard, P. Jan Godowski and Zhe Shen Li
J. Vac. Sci. Technol. A **30**, 01A111 (2012); http://dx.doi.org/10.1116/1.3653986

+ VIEW DESCRIPTION

Thermal chemistry of $Mn_2(CO)_{10}$ during deposition of thin manganese films on silicon oxide and on copper surfaces
Xiangdong Qin, Huaxing Sun and Francisco Zaera
J. Vac. Sci. Technol. A **30**, 01A112 (2012); http://dx.doi.org/10.1116/1.3658373

+ VIEW DESCRIPTION

Impact of electrode roughness on metal-insulator-metal tunnel diodes with atomic layer deposited Al_2O_3 tunnel barriers
Nasir Alimardani, E. William Cowell III, John F. Wager, John F. Conley Jr., David R. Evans,Matthew Chin, Stephen J. Kilpatrick and Madan Dubey
J. Vac. Sci. Technol. A **30**, 01A113 (2012); http://dx.doi.org/10.1116/1.3658380

+ VIEW DESCRIPTION

Thermal chemistry of copper(I)-*N,N*'-di-*sec*-butylacetamidinate on Cu(110) single-crystal surfaces
Qiang Ma, Francisco Zaera and Roy G. Gordon
J. Vac. Sci. Technol. A **30**, 01A114 (2012); http://dx.doi.org/10.1116/1.3658381

+ VIEW DESCRIPTION

Conformality of remote plasma-enhanced atomic layer deposition processes: An experimental study
Maarit Kariniemi, Jaakko Niinistö, Marko Vehkamäki, Marianna Kemell, Mikko Ritala,Markku Leskelä and Matti Putkonen
J. Vac. Sci. Technol. A **30**, 01A115 (2012); http://dx.doi.org/10.1116/1.3659699

+ VIEW DESCRIPTION

Core-shell nanowire arrays of metal oxides fabricated by atomic layer deposition
M. A. Thomas and J. B. Cui
J. Vac. Sci. Technol. A **30**, 01A116 (2012); http://dx.doi.org/10.1116/1.3660389

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Paper deacidification and UV protection using ZnO atomic layer deposition
C. A. Hanson, C. J. Oldham and G. N. Parsons
J. Vac. Sci. Technol. A **30**, 01A117 (2012); http://dx.doi.org/10.1116/1.3656251

+ VIEW DESCRIPTION

Effect of pulsed deposition of Al_2O_3 for native oxides reduction of GaAs by atomic layer deposition technique

R. B. Konda, R. Mundle, O. Bamiduro, H. Dondapati, M. Bahoura, A. K. Pradhan and C. Donley
J. Vac. Sci. Technol. A **30**, 01A118 (2012); http://dx.doi.org/10.1116/1.3662862

+ VIEW DESCRIPTION

Evaluation of high thermal stability cyclopentadienyl Hf precursors with H_2O as a co-reactant for advanced gate logic applications
Steven Consiglio, Robert D. Clark, Genji Nakamura, Cory S. Wajda and Gert J. Leusink
J. Vac. Sci. Technol. A **30**, 01A119 (2012); http://dx.doi.org/10.1116/1.3664106

+ VIEW DESCRIPTION

Impact of precursor chemistry on atomic layer deposition of lutetium aluminates
Laura Nyns, Xiaoping Shi, Hilde Tielens, Sven Van Elshocht, Lucien Date and Robert Schreutelkamp
J. Vac. Sci. Technol. A **30**, 01A120 (2012); http://dx.doi.org/10.1116/1.3662838

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Molecular layer deposition of polyethylene terephthalate thin films
Tatyana V. Ivanova, Philipp S. Maydannik and David C. Cameron
J. Vac. Sci. Technol. A **30**, 01A121 (2012); http://dx.doi.org/10.1116/1.3662846

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Continuous atomic layer deposition: Explanation for anomalous growth rate effects
Philipp S. Maydannik, Tommi O. Kaariainen and David. C. Cameron
J. Vac. Sci. Technol. A **30**, 01A122 (2012); http://dx.doi.org/10.1116/1.3662861

+ VIEW DESCRIPTION

Atomic layer deposition of Al_2O_3 on V_2O_5 xerogel film for enhanced lithium-ion intercalation stability
Dawei Liu, Yanyi Liu, Stephanie L. Candelaria, Guozhong Cao, Jun Liu and Yoon-Ha Jeong
J. Vac. Sci. Technol. A **30**, 01A123 (2012); http://dx.doi.org/10.1116/1.3664115

+ VIEW DESCRIPTION

ATOMIC LAYER DEPOSITION (ALD)

Atomic layer deposition of GaN at low temperatures
Cagla Ozgit, Inci Donmez, Mustafa Alevli and Necmi Biyikli
J. Vac. Sci. Technol. A **30**, 01A124 (2012); http://dx.doi.org/10.1116/1.3664102

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Atomic layer deposition fabricated substoichiometric TiO_x nanorods as fuel cell catalyst supports
Richard Phillips, Paul Hansen and Eric Eisenbraun
J. Vac. Sci. Technol. A **30**, 01A125 (2012); http://dx.doi.org/10.1116/1.3664111

+ VIEW DESCRIPTION

Growth and electrical properties of silicon oxide grown by atomic layer deposition using Bis(ethyl-methyl-amino)silane and ozone
Seok-Jun Won, Hyung-Suk Jung, Sungin Suh, Yu Jin Choi, Nae-In Lee, Cheol Seong Hwang and Hyeong Joon Kim
J. Vac. Sci. Technol. A **30**, 01A126 (2012); http://dx.doi.org/10.1116/1.3664122

+ VIEW DESCRIPTION

Reaction mechanisms for atomic layer deposition of aluminum oxide on semiconductor substrates
Annelies Delabie, Sonja Sioncke, Jens Rip, Sven Van Elshocht, Geoffrey Pourtois, Matthias Mueller, Burkhard Beckhoff and Kristine Pierloot
J. Vac. Sci. Technol. A **30**, 01A127 (2012); http://dx.doi.org/10.1116/1.3664090

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Selective atomic layer deposition with electron-beam patterned self-assembled monolayers
Jie Huang, Mingun Lee and Jiyoung Kim
J. Vac. Sci. Technol. A **30**, 01A128 (2012); http://dx.doi.org/10.1116/1.3664282

+ VIEW DESCRIPTION

Atomic layer deposition of Pt growth template for orienting $PbZr_xTi_{1-x}O_3$ thin films
Daniel M. Potrepka, Luz M. Sanchez and Ronald G. Polcawich
J. Vac. Sci. Technol. A **30**, 01A129 (2012); http://dx.doi.org/10.1116/1.3664766

+ VIEW DESCRIPTION

Plasma-enhanced atomic layer deposition and etching of high-*k* gadolinium oxide
Steven A. Vitale, Peter W. Wyatt and Chris J. Hodson
J. Vac. Sci. Technol. A **30**, 01A130 (2012); http://dx.doi.org/10.1116/1.3664756

+ VIEW DESCRIPTION

Cathode encapsulation of organic light emitting diodes by atomic layer deposited

Al_2O_3 films and Al_2O_3/a-SiN_x:H stacks
W. Keuning, P. van de Weijer, H. Lifka, W. M. M. Kessels and M. Creatore
J. Vac. Sci. Technol. A **30**, 01A131 (2012); http://dx.doi.org/10.1116/1.3664762

+ VIEW DESCRIPTION

Nanoscratch testing of atomic layer deposition and magnetron sputtered TiO_2 and Al_2O_3 coatings on polymeric substrates
Tommi O. Kääriäinen, Peter J. Kelly, David C. Cameron, Ben Beake, Heqing Li, Paul M. Barker and Carolin F. Struller
J. Vac. Sci. Technol. A **30**, 01A132 (2012); http://dx.doi.org/10.1116/1.3665418

+ VIEW DESCRIPTION

Real-time spectroscopic ellipsometric investigation of adsorption and desorption in atomic layer deposition: A case study for the strontium bis(tri-isopropylcyclopentadienyl)/water process
Han Wang (王瀚), Xiaoqiang Jiang (蒋晓强) and Brian G. Willis
J. Vac. Sci. Technol. A **30**, 01A133 (2012); http://dx.doi.org/10.1116/1.3664757

+ VIEW DESCRIPTION

Atomic layer deposition of titanium phosphate on silica nanoparticles
Monika K. Wiedmann, David H. K. Jackson, Yomaira J. Pagan-Torres, Eunkyung Cho,James A. Dumesic and T. F. Kuech
J. Vac. Sci. Technol. A **30**, 01A134 (2012); http://dx.doi.org/10.1116/1.3664097

+ VIEW DESCRIPTION

Growth characteristics, material properties, and optical properties of zinc oxysulfide films deposited by atomic layer deposition
Jonathan R. Bakke, Jukka T. Tanskanen, Carl Hägglund, Tapani A. Pakkanen and Stacey F. Bent
J. Vac. Sci. Technol. A **30**, 01A135 (2012); http://dx.doi.org/10.1116/1.3664758

+ VIEW DESCRIPTION

Evaluating operating conditions for continuous atmospheric atomic layer deposition using a multiple slit gas source head
P. Ryan Fitzpatrick, Zachary M. Gibbs and Steven M. George
J. Vac. Sci. Technol. A **30**, 01A136 (2012); http://dx.doi.org/10.1116/1.3664765

+ VIEW DESCRIPTION

Initiation of atomic layer deposition of metal oxides on polymer substrates by water plasma pretreatment
E. Steven Brandt and Jeremy M. Grace
J. Vac. Sci. Technol. A **30**, 01A137 (2012); http://dx.doi.org/10.1116/1.3666026

+ VIEW DESCRIPTION

Atomic layer deposition of Al-doped ZnO films using ozone as the oxygen source: A comparison of two methods to deliver aluminum

Hai Yuan, Bing Luo, Dan Yu, An-jen Cheng, Stephen A. Campbell and Wayne L. Gladfelter
J. Vac. Sci. Technol. A **30**, 01A138 (2012); http://dx.doi.org/10.1116/1.3666030

+ VIEW DESCRIPTION

Effects of Ar plasma treatment for deposition of ruthenium film by remote plasma atomic layer deposition
Taeyong Park, Jaesang Lee, Jingyu Park, Heeyoung Jeon, Hyeongtag Jeon, Ki-Hoon Lee,Byung-Chul Cho, Moo-Sung Kim and Heui-Bok Ahn
J. Vac. Sci. Technol. A **30**, 01A139 (2012); http://dx.doi.org/10.1116/1.3666033

+ VIEW DESCRIPTION

Process study of gadolinium aluminate atomic layer deposition fromthegadolinium tris-di-isopropylacetamidinate precursor
Leonard N. J. Rodriguez, A. Franquet, B. Brijs, H. Tielens and C. Adelmann
J. Vac. Sci. Technol. A **30**, 01A140 (2012); http://dx.doi.org/10.1116/1.3666037

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Wide-angle antireflection ZnO films on bullet-like nanostructures of multi-crystalline silicon
Sheng-Hui Chen, Shao-Ze Tseng, Wei Chen, Wen-Hao Cho and Chia-Hua Chan
J. Vac. Sci. Technol. A **30**, 01A141 (2012); http://dx.doi.org/10.1116/1.3666040

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Low temperature and roll-to-roll spatial atomic layer deposition for flexible electronics
Paul Poodt, Raymond Knaapen, Andrea Illiberi, Fred Roozeboom and Almie van Asten
J. Vac. Sci. Technol. A **30**, 01A142 (2012); http://dx.doi.org/10.1116/1.3667113

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***In situ* study of the atomic layer deposition of HfO_2 on Si**
Krzysztof Kolanek, Massimo Tallarida, Marcel Michling and Dieter Schmeisser
J. Vac. Sci. Technol. A **30**, 01A143 (2012); http://dx.doi.org/10.1116/1.3668080

+ VIEW DESCRIPTION

ATOMIC LAYER DEPOSITION (ALD)

Hot-wire-assisted atomic layer deposition of a high quality cobalt film using cobaltocene: Elementary reaction analysis on NH_x radical formation
Hideharu Shimizu, Kaoru Sakoda, Takeshi Momose, Mitsuo Koshi and Yukihiro Shimogaki
J. Vac. Sci. Technol. A **30**, 01A144 (2012); http://dx.doi.org/10.1116/1.3666034

+ VIEW DESCRIPTION

Chemical passivation of GaSb-based surfaces by atomic layer deposited ZnS using diethylzinc and hydrogen sulfide
Runshen Xu and Christos G. Takoudis
J. Vac. Sci. Technol. A **30**, 01A145 (2012); http://dx.doi.org/10.1116/1.3669519

+ VIEW DESCRIPTION

Room temperature atomic layer deposition of Al_2O_3 and replication of butterfly wings for photovoltaic application
X. Tang, L. A. Francis, P. Simonis, M. Haslinger, R. Delamare, O. Deschaume, D. Flandre,P. Defrance, A. M. Jonas, J. P. Vigneron and J. P. Raskin
J. Vac. Sci. Technol. A **30**, 01A146 (2012); http://dx.doi.org/10.1116/1.3669521

+ VIEW DESCRIPTION

Low temperature growth of high-k Hf–La oxides by remote-plasma atomic layer deposition: Morphology, stoichiometry, and dielectric properties
Fu Tang, Chiyu Zhu, David J. Smith and Robert J. Nemanich
J. Vac. Sci. Technol. A **30**, 01A147 (2012); http://dx.doi.org/10.1116/1.3665419

+ VIEW DESCRIPTION

Resistive switching properties of plasma enhanced-ALD La_2O_3 for novel nonvolatile memory application
Lin Chen, Wen Yang, Ye Li, Qing-Qing Sun, Peng Zhou, Hong-Liang Lu, Shi-Jin Ding andDavid Wei Zhang
J. Vac. Sci. Technol. A **30**, 01A148 (2012); http://dx.doi.org/10.1116/1.3669516

+ VIEW DESCRIPTION

Atomic layer deposition of $ZnO/Al_2O_3/ZrO_2$ nanolaminates for improved thermal and wear resistance in carbon-carbon composites
H. Mohseni and T. W. Scharf
J. Vac. Sci. Technol. A **30**, 01A149 (2012); http://dx.doi.org/10.1116/1.3669518

+ VIEW DESCRIPTION

Role of surface intermediates in enhanced, uniform growth rates of TiO_2 atomic layer deposition thin films using titanium tetraisopropoxide and ozone
Erin R. Cleveland, Laurent Henn-Lecordier and Gary W. Rubloff
J. Vac. Sci. Technol. A **30**, 01A150 (2012); http://dx.doi.org/10.1116/1.3669522

+ VIEW DESCRIPTION

In-situ real-time ellipsometric investigations during the atomic layer deposition of ruthenium: A process development from [(ethylcyclopentadienyl)(pyrrolyl)ruthenium] and molecular oxygen
Martin Knaut, Marcel Junige, Matthias Albert and Johann W. Bartha
J. Vac. Sci. Technol. A **30**, 01A151 (2012); http://dx.doi.org/10.1116/1.3670405
+ VIEW DESCRIPTION

Plasma enhanced atomic layer batch processing of aluminum doped titanium dioxide
Wolfgang Lehnert, Guenther Ruhl and Alexander Gschwandtner
J. Vac. Sci. Technol. A **30**, 01A152 (2012); http://dx.doi.org/10.1116/1.3670876
+ VIEW DESCRIPTION

Mechanical masking of films deposited by atomic layer deposition
Michael C. Langston, Takane Usui and Fritz B. Prinz
J. Vac. Sci. Technol. A **30**, 01A153 (2012); http://dx.doi.org/10.1116/1.3669520
+ VIEW DESCRIPTION

Cycle time effects on growth and transistor characteristics of spatial atomic layer deposition of zinc oxide
Shelby F. Nelson, David H. Levy, Lee W. Tutt and Mitchell Burberry
J. Vac. Sci. Technol. A **30**, 01A154 (2012); http://dx.doi.org/10.1116/1.3670878
+ VIEW DESCRIPTION

Effect of temperature and gas velocity on growth per cycle during Al_2O_3 and ZnO atomic layer deposition at atmospheric pressure
Moataz Bellah M. Mousa, Christopher J. Oldham, Jesse S. Jur and Gregory N. Parsons
J. Vac. Sci. Technol. A **30**, 01A155 (2012); http://dx.doi.org/10.1116/1.3670961
+ VIEW DESCRIPTION

Hydrophilic mechanical buffer layers and stable hydrophilic finishes on polydimethylsiloxane using combined sequential vapor infiltration and atomic/molecular layer deposition
Bo Gong, Joseph C. Spagnola and Gregory N. Parsons
J. Vac. Sci. Technol. A **30**, 01A156 (2012); http://dx.doi.org/10.1116/1.3670963
+ VIEW DESCRIPTION

Effects of atomic layer deposited thin films on dye sensitized solar cell performance
Jonathan A. Campbell, Mervyn deBorniol, Attila J. Mozer, Peter J. Evans, Robert P. Burford and Gerry Triani
J. Vac. Sci. Technol. A **30**, 01A157 (2012); http://dx.doi.org/10.1116/1.3670397
+ VIEW DESCRIPTION

In situ diagnostics for studying gas-surface reactions during thermal and plasma-assisted atomic layer deposition
Vikrant R. Rai and Sumit Agarwal

J. Vac. Sci. Technol. A **30**, 01A158 (2012); http://dx.doi.org/10.1116/1.3670404

+ VIEW DESCRIPTION

Simple model for atomic layer deposition precursor reaction and transport in a viscous-flow tubular reactor

Angel Yanguas-Gil and Jeffrey W. Elam

J. Vac. Sci. Technol. A **30**, 01A159 (2012); http://dx.doi.org/10.1116/1.3670396

+ VIEW DESCRIPTION

Mechanical response of atomic layer deposition alumina coatings on stiff and compliant substrates

Steve J. Bull

J. Vac. Sci. Technol. A **30**, 01A160 (2012); http://dx.doi.org/10.1116/1.3670401

+ VIEW DESCRIPTION

Fluorine contamination in yttrium-doped barium zirconate film deposited by atomic layer deposition

Jihwan An, Young Beom Kim, Joong Sun Park, Joon Hyung Shim, Turgut M. Gür and Fritz B. Prinz

J. Vac. Sci. Technol. A **30**, 01A161 (2012); http://dx.doi.org/10.1116/1.3670750

+ VIEW DESCRIPTION

Atomic layer deposition of Ru onto organic monolayers: Shifting metal effective work function using monolayer structure

Kie Jin Park and Gregory N. Parsons

J. Vac. Sci. Technol. A **30**, 01A162 (2012); http://dx.doi.org/10.1116/1.3671938

+ VIEW DESCRIPTION

Mechanisms for hydrophilic/hydrophobic wetting transitions on cellulose cotton fibers coated using Al_2O_3 atomic layer deposition

Kyoungmi Lee, Jesse S. Jur, Do Han Kim and Gregory N. Parsons

J. Vac. Sci. Technol. A **30**, 01A163 (2012); http://dx.doi.org/10.1116/1.3671942

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