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Dielectric barrier characteristics of Si-rich silicon nitride films deposited by plasma enhanced atomic layer deposition

Hwanwoo Kim, Hyoseok Song, Changhee Shin, Kangsoo Kim, Woochool Jang more...

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Sonam D. Sherpa, and Alok Ranjan

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Atomic layer etching of SiO₂ by alternating an O₂ plasma with fluorocarbon film deposition

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Anomalously high alumina atomic layer deposition growth per cycle during trimethylaluminum under-dosing conditions

Hosseini Salami, Andrew Poissant, and Raymond A. Adomaitis

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Selective deposition of Ta₂O₅ by adding plasma etching super-cycles in plasma enhanced atomic layer deposition steps

Rémi Vallat, Rémy Gassilloud, Brice Eychenne, and Christophe Vallée

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Effects of GaSb surface preparation on the characteristics of HfO₂/Al₂O₃/GaSb metal-oxide-semiconductor capacitors prepared by atomic layer deposition

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Deposition of an organic–inorganic hybrid material onto carbon fibers via the introduction of furfuryl alcohol into the atomic layer deposition process of titania and subsequent pyrolysis

Christian Militzer, Stefan Knohl, Volodymyr Dzhagan, Dietrich R. T. Zahn, and Werner A. Goedel

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Vapor deposition of copper(I) bromide films via a two-step conversion process

Rachel Heasley, Christina M. Chang, Luke M. Davis, Kathy Liu, and Roy G. Gordon

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Characterization of Al₂O₃ and ZnO multilayer thin films deposited by low temperature thermal atomic layer deposition on transparent polyimide

Seung Hak Song, Myoung Youb Lee, Gyeong Beom Lee, and Byoung-Ho Choi

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Plasma enhanced atomic layer deposition of zinc sulfide thin films

Jakob Kuhs, Thomas Dobbelaere, Zeger Hens, and Christophe Detavernier

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***Ab initio* study of the trimethylaluminum atomic layer deposition process on carbon nanotubes—An alternative initial step**

Anja Förster, Christian Wagner, Jörg Schuster, and Joachim Friedrich

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As₂S₃ thin films deposited by atomic layer deposition

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Simulation of atomic layer deposition on nanoparticle agglomerates

Wenjie Jin, Chris R. Kleijn, and J. Ruud van Ommen

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Alumina films as gas barrier layers grown by spatial atomic layer deposition with trimethylaluminum and different oxygen sources

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Temperature dependence of the sticking coefficients of bis-diethyl aminosilane and trimethylaluminum in atomic layer deposition

Matthias C. Schwille, Timo Schössler, Florian Schön, Martin Oettel, and Johann W. Bartha

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Fabrication of nanopower generators using thin atomic layer deposited films

Robert Parker Given, Kyle S. Wenger, Virginia D. Wheeler, Brian C. Utter, and Giovanna Scarel

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Room temperature atomic layer deposition of TiO₂ on gold nanoparticles

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Al₂O₃/SiO₂ nanolaminate for a gate oxide in a GaN-based MOS device

Daigo Kikuta (菊田 大悟), Kenji Itoh (伊藤 健治), Tetsuo Narita (成田 哲生), and Tomohiko Mori (森 朋彦)

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Atomic layer deposited single-crystal hexagonal perovskite

YAIO₃ epitaxially on GaAs(111)A

Lawrence Boyu Young, Chao-Kai Cheng, Guan-Jie Lu, Keng-Yung Lin, Yen-Hsun Lin more...

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Activation of the dimers and tetramers of metal amidinate atomic layer deposition precursors upon adsorption on silicon oxide surfaces

Bo Chen, Yichen Duan, Yunxi Yao, Qiang Ma, Jason P. Coyle more...

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Localized defect states and charge trapping in atomic layer deposited-Al₂O₃ films

Karsten Henkel, Malgorzata Kot, and Dieter Schmeißer

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Microstructure-dependent thermoelectric properties of polycrystalline InGaO₃(ZnO)₂superlattice films

Sung Woon Cho, Seung Ki Baek, Da Eun Kim, Yunseok Kim, and Hyung Koun Cho

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Deposition temperature dependence and long-term stability of the conductivity of undoped ZnO grown by atomic layer deposition

Holger Beh, Daniel Hiller, Jan Laube, Sebastian Gutsch, and Margit Zacharias

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Tris(dimethylamido)aluminum(III): An overlooked atomic layer deposition precursor

Sydney C. Buttera, David J. Mandia, and Seán T. Barry

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Plasma-assisted atomic layer deposition of HfN_x: Tailoring the film properties by the plasma gas composition

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Atomic layer deposition of HfO₂ using HfCp(NMe₂)₃ and O₂ plasma

Akhil Sharma, Valentino Longo, Marcel A. Verheijen, Ageeth A. Bol, and W. M. M. (Erwin) Kessels

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Low-temperature-atomic-layer-deposition of SiO₂ using various organic precursors

Sehyoung Ahn, Yunsu Kim, Sangyeoul Kang, Kivin Im, and Hanjin Lim

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Incorporation of Al or Hf in atomic layer deposition TiO₂ for ternary dielectric gate insulation of InAlN/GaN and AlGaIn/GaN metal-insulator-semiconductor-heterojunction structure

Albert Colon, Liliana Stan, Ralu Divan, and Junxia Shi

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Enhanced process and composition control for atomic layer deposition with lithium trimethylsilanolate

Amund Ruud, Ville Miikkulainen, Kenichiro Mizohata, Helmer Fjellvåg, and Ola Nilsen

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Room temperature TiO₂ atomic layer deposition on collagen membrane from a titanium alkylamide precursor

Arghya K. Bishal, Cortino Sukotjo, and Christos G. Takoudis

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In-gap states in titanium dioxide and oxynitride atomic layer deposited films

Karsten Henkel, Chittaranjan Das, Małgorzata Kot, Dieter Schmeißer, Franziska Naumann more...

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Molecular layer deposition using cyclic azasilanes, maleic anhydride, trimethylaluminum, and water

Ling Ju, Bo Bao, Sean W. King, and Nicholas C. Strandwitz

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Atomic layer deposition of tin oxide using tetraethyltin to produce high-capacity Li-ion batteries

Denis V. Nazarov, Maxim Yu. Maximov, Pavel A. Novikov, Anatoly A. Popovich, Aleksey O. Silin more...

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Reactant utilization in CVD and ALD chambers

Edward J. McInerney

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Atomic layer deposition of h-BN(0001) on RuO₂(110)/Ru(0001)

Jessica Jones, Brock Beauclair, Opeyemi Olanipekun, Sherard Lightbourne, Mofei Zhang more...

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Plasma enhanced atomic layer deposition of Al₂O₃ gate dielectric thin films on AlGaN/GaN substrates: The role of surface predeposition treatments

Emanuela Schilirò, Patrick Fiorenza, Giuseppe Greco, Fabrizio Roccaforte, and Raffaella Lo Nigro

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Plasma enhanced atomic layer deposition of molybdenum carbide and nitride with bis(*tert*-butylimido)bis(dimethylamido) molybdenum

Adam Bertuch, Brent D. Keller, Nicola Ferralis, Jeffrey C. Grossman, and Ganesh Sundaram

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Growth of aluminum oxide on silicon carbide with an atomically sharp interface

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Stress modulation of titanium nitride thin films deposited using atomic layer deposition

Manuj Nahar, Noel Rocklein, Michael Andreas, Greg Funston, and Duane Goodner

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