

Letters

FullMarch 2018

Temperature-dependent growth window of CaTiO₃ films grown by hybrid molecular beam epitaxy

Joseph Roth, Eddy Arriaga, Matthew Brahlek, Jason Lapano more...

Journal of Vacuum Science & Technology A **36**, 020601 (2018); <https://doi.org/10.1116/1.5011384>

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Time evolution of ion fluxes incident at the substrate plane during reactive high-power impulse magnetron sputtering of groups IVb and VIb transition metals in Ar/N₂

Grzegorz Greczynski, Igor Zhirkov, Ivan Petrov, J. E. Greene more...

Journal of Vacuum Science & Technology A **36**, 020602 (2018); <https://doi.org/10.1116/1.5016241>

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Remote doping of graphene on SiO₂ with 5 keV x-rays in air

Björn Salzmänn, Carlo Bernard, Adrian Hemmi, and Thomas Greber

Journal of Vacuum Science & Technology A **36**, 020603 (2018); <https://doi.org/10.1116/1.5013003>

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Review Articles

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Review Article: Stress in thin films and coatings: Current status, challenges, and prospects

Grégory Abadias, Eric Chason, Jozef Keckes, Marco Sebastiani more...

Journal of Vacuum Science & Technology A **36**, 020801 (2018); <https://doi.org/10.1116/1.5011790>

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Plasma Science and Technology

FullMarch 2018

Sub-damage-threshold plasma etching and profile tailoring of Si through laser-stimulated thermal desorption

Jason A. Peck, and David N. Ruzic

Journal of Vacuum Science & Technology A **36**, 021301 (2018); <https://doi.org/10.1116/1.4991586>

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Low temperature plasma enhanced deposition of GaP films on Si substrate

Alexander S. Gudovskikh, Ivan A. Morozov, Alexander V. Uvarov, Dmitriy A. Kudryashov more...

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Synergistic interactions of H₂ and N₂ with molten gallium in the presence of plasma

Maria L. Carreon, Daniel F. Jaramillo-Cabanzo, Indira Chaudhuri, Madhu Menon more...

Journal of Vacuum Science & Technology A **36**, 021303 (2018); <https://doi.org/10.1116/1.5004540>

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Role of the dense amorphous carbon layer in photoresist etching

Adam Pranda, Sandra A. Gutierrez Razo, Zuleykhan Tomova, John T. Fourkas more...

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Downstream etching of silicon nitride using continuous-wave and pulsed remote plasma sources sustained in Ar/NF₃/O₂ mixtures

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Journal of Vacuum Science & Technology A **36**, 021401 (2018); <https://doi.org/10.1116/1.4998345>

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Interaction of coadsorbed C and O atoms on W(100) surface: Implications of CO₂ on the temperature-programmed desorption profile

Allan Abraham B. Padama, and Marvin A. Albao

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Treatment of SU-8 surfaces using atmospheric pressure dielectric barrier discharge plasma

Juliana de Novais Schianti, Felype do Nascimento, Jhonattan Cordoba Ramirez, Munemasa Machida more...

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Influence of discharge power and bias potential on microstructure and hardness of sputtered amorphous carbon coatings

Christian Saringer, Christoph Oberroither, Katrin Zorn, Robert Franz more...

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Electronic transport and Raman spectroscopic properties of Co doped (110) PrBa₂Cu₃O₇ thin film

Hom Kandel, TarPin Chen, and Zhongrui Li

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Identification and tuning of zinc-site nitrogen-related complexes in ZnO material

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Residual stress measurements in electron beam evaporated yttria doped zirconia films deposited on Si (111) substrates

Kamalan Kirubakaran Amirtharaj Moses, Kuppasami Parasuraman, Sujay Chakravarty, Arul Maximus Rabel more...

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Atomic layer deposition of AlN from AlCl₃ using NH₃ and Ar/NH₃ plasma

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Atomic layer deposition of carbon doped silicon oxide by precursor design and process tuning

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Surface and interface properties of polar thin films on a ferroelectric substrate: ZnO on LiNbO₃ (0001) and (000 $\bar{1}$ 1 $\bar{1}$)

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Alan J. Slavin

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Oxidation and wet etching behavior of sputtered Mo-Ti-Al films

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Role of film thickness on the structural and optical properties of GaN on Si (100) grown by hollow-cathode plasma-assisted atomic layer deposition

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Journal of Vacuum Science & Technology A **36**, 021514 (2018); <https://doi.org/10.1116/1.5003154>

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Effect of ion energies on the film properties of titanium dioxides synthesized via plasma enhanced atomic layer deposition

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Petteri Peltonen, Ville Vuorinen, Giovanni Marin, Antti J. Karttunen more...

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Coefficient of thermal expansion and biaxial Young's modulus in Si-rich silicon nitride thin films

Scott Habermehl

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Development of copper electroformed vacuum chambers with integrated non-evaporable getter thin film coatings

Lucia Lain Amador, Paolo Chiggiato, Leonel M. A. Ferreira, Valentin Nistor more...

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Outgassing behavior of different high-temperature resistant polymers

Katharina Battes, Christian Day, and Volker Hauer

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Journal of Vacuum Science & Technology A **36**, 023001 (2018); <https://doi.org/10.1116/1.5017867>

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Vacuum furnace for degassing stainless-steel vacuum components

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Fracture behavior of diamondlike carbon films deposited on polymer substrates

Go Yamamoto, Tomonaga Okabe, and Noriaki Ikenaga

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High-rate sputter deposition of electrochromic nickel oxide thin films using substrate cooling and water vapor injection

Yoshio Abe, Shun Yamauchi, Midori Kawamura, Kyung Ho Kim more...

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Etching low-*k* films by F atoms: Inside view

Alexander P. Palov, Tatyana V. Rakhimova, Ekaterina N. Voronina, and Yuri A. Mankelevich

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Influence of incident angle of sputtered atom on the size and shape of granule in granular films using CoFeAlSi alloy

Yuji Fujiwara, Ryosuke Ishii, Toshifumi Shimizu, and Mutsuko Jimbo

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Effect of postannealing on properties of ZnO-SnO₂ thin film transistors

Kazuo Satoh, Shuichi Murakami, Yusuke Kanaoka, Yoshiharu Yamada more...

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Articles

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In-system photoelectron spectroscopy study of tin oxide layers produced from tetrakis(dimethylamino)tin by plasma enhanced atomic layer deposition

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Initial reactions of ultrathin HfO₂ films by *in situ* atomic layer deposition: An *in situ* synchrotron photoemission spectroscopy study

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Atomic layer deposition of 2D and 3D standards for synchrotron-based quantitative composition and structure analysis methods

Nicholas G. Becker, Anna L. Butterworth, Murielle Salome, Stephen R. Sutton more...

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Magnetic properties of iron doped zirconia as a function of Fe concentration: From *ab initio* simulations to the growth of thin films by atomic layer deposition and their characterization by synchrotron radiation

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***In situ* characterization of the deposition of anatase TiO₂ on rutile TiO₂(110)**

Ashley R. Head, Niclas Johansson, Yuran Niu, Olesia Snezhkova more...

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Elucidation of ALD MgZnO deposition processes using low energy ion scattering

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High sensitivity Rutherford backscattering spectrometry using multidetector digital pulse processing

Grazia Laricchiuta, Wilfried Vandervorst, Ivan Zyulkov, Silvia Armini more...

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Low temperature plasma enhanced deposition approach for fabrication of microcrystalline GaP/Si superlattice

Alexander S. Gudovskikh, Alexander V. Uvarov, Ivan A. Morozov, Artem I. Baranov more...

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