# Ivan OhlÃ-dal

List of Publications by Year
in descending order

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Optical characterization of inhomogeneous thin films with randomly rough boundaries. Optics Express, 2022, 30, 2033. | 3.4 | 5 |
| 2 | Characterization of randomly rough surfaces using angle-resolved scattering of light and atomic force microscopy. Journal of Optics (United Kingdom), 2021, 23, 105602. | 2.2 | 4 |
| 3 | Optics of Inhomogeneous Thin Films with Defects: Application to Optical Characterization. Coatings, 2021, 11, 22. | 2.6 | 9 |
| 4 | Determining shape of thickness non-uniformity using variable-angle spectroscopic ellipsometry. Applied Surface Science, 2020, 534, 147625. | 6.1 | 6 |
| 5 | Spectroscopic ellipsometry of inhomogeneous thin films exhibiting thickness non-uniformity and transition layers. Optics Express, 2020, 28, 160. | 3.4 | 22 |
| 6 | Optical quantities of a multilayer system with randomly rough boundaries and uniaxial anisotropic media calculated using the Rayleighâ€"Rice theory and Yeh matrix formalism. Physica Scripta, 2020, 95, 095503. | 2.5 | 1 |
| 7 | Ellipsometric characterization of inhomogeneous thin films with complicated thickness non-uniformity: application to inhomogeneous polymer-like thin films. Optics Express, 2020, 28, 36796. | 3.4 | 4 |
| 8 | Optical Characterization of Non-Stoichiometric Silicon Nitride Films Exhibiting Combined Defects. Coatings, 2019, 9, 416. | 2.6 | 13 |
| 9 | Optical characterization of inhomogeneous thin films containing transition layers using the combined method of spectroscopic ellipsometry and spectroscopic reflectometry based on multiple-beam interference model. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, . | 1.2 | 8 |
| 10 | Optical properties of the crystalline silicon wafers described using the universal dispersion model. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 062907. | 1.2 | 3 |
| 11 | Approximations of reflection and transmission coefficients of inhomogeneous thin films based on multiple-beam interference model. Thin Solid Films, 2019, 692, 137189. | 1.8 | 12 |
| 12 | Combination of spectroscopic ellipsometry and spectroscopic reflectometry with including light scattering in the optical characterization of randomly rough silicon surfaces covered by native oxide layers. Surface Topography: Metrology and Properties, 2019, 7, 045004. | 1.6 | 11 |
| 13 | Efficient method to calculate the optical quantities of multi-layer systems with randomly rough boundaries using the Rayleighâ€"Rice theory. Physica Scripta, 2019, 94, 045502. | 2.5 | 12 |
| 14 | Approximate methods for the optical characterization of inhomogeneous thin films: Applications to silicon nitride films. Journal of Electrical Engineering, 2019, 70, 16-26. | 0.7 | 4 |
| 15 | Ellipsometry of Layered Systems. Springer Series in Surface Sciences, 2018, , 233-267. | 0.3 | 5 |
| 16 | Optical quantities of multi-layer systems with randomly rough boundaries calculated using the exact approach of the Rayleighâ€"Rice theory. Journal of Modern Optics, 2018, 65, 1720-1736. | 1.3 | 9 |
| 17 | Determination of thicknesses and temperatures of crystalline silicon wafers from optical measurements in the far infrared region. Journal of Applied Physics, 2018, 123, . | 2.5 | 3 |
| 18 | Use of the Richardson extrapolation in optics of inhomogeneous layers: Application to optical characterization. Surface and Interface Analysis, 2018, 50, 757-765. | 1.8 | 15 |

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| 19 | Different theoretical approaches at optical characterization of randomly rough silicon surfaces covered with native oxide layers. Surface and Interface Analysis, 2018, 50, 1230-1233. | 1.8 | 7 |
| 20 | Optical Characterization of Thin Films Exhibiting Defects. Springer Series in Surface Sciences, 2018, , 271-313. | 0.3 | 4 |
| 21 | Temperature-dependent dispersion model of float zone crystalline silicon. Applied Surface Science, 2017, 421, 405-419. | 6.1 | 21 |
| 22 | Optical characterization of randomly microrough surfaces covered with very thin overlayers using effective medium approximation and Rayleighâ€“Rice theory. Applied Surface Science, 2017, 419, 942-956. | 6.1 | 21 |
| 23 | Ellipsometric and reflectometric characterization of thin films exhibiting thickness non-uniformity and boundary roughness. Applied Surface Science, 2017, 421, 687-696. | 6.1 | 13 |
| 24 | Optical characterization of SiO<sub>2</sub>thin films using universal dispersion model over wide spectral range. Proceedings of SPIE, 2016, , . | 0.8 | 5 |
| 25 | Simultaneous determination of optical constants, local thickness, and local roughness of thin films by imaging spectroscopic reflectometry. , 2015, , . |  | 0 |
| 26 | Possibilities and limitations of imaging spectroscopic reflectometry in optical characterization of thin films. Proceedings of SPIE, 2015, , . | 0.8 | 2 |
| 27 | Measurement of optical parameters of thin films non-uniform in thickness. , 2014, , . |  | 0 |
| 28 | Measurement of thickness distribution, optical constants, and roughness parameters of rough nonuniform ZnSe thin films. Applied Optics, 2014, 53, 5606. | 1.8 | 20 |
| 29 | Utilization of the sum rule for construction of advanced dispersion model of crystalline silicon containing interstitial oxygen. Thin Solid Films, 2014, 571, 490-495. | 1.8 | 14 |
| 30 | Improved combination of scalar diffraction theory and Rayleighâ€“Rice theory and its application to spectroscopic ellipsometry of randomly rough surfaces. Thin Solid Films, 2014, 571, 695-700. | 1.8 | 17 |
| 31 | Assessment of non-uniform thin films using spectroscopic ellipsometry and imaging spectroscopic reflectometry. Thin Solid Films, 2014, 571, 573-578. | 1.8 | 19 |
| 32 | Ellipsometric characterization of inhomogeneous nonâ€stoichiometric silicon nitride films. Surface and Interface Analysis, 2013, 45, 1188-1192. | 1.8 | 11 |
| 33 | Optical characterisation of SiO C H thin films non-uniform in thickness using spectroscopic ellipsometry, spectroscopic reflectometry and spectroscopic imaging reflectometry. Thin Solid Films, 2011, 519, 2874-2876. | 1.8 | 19 |
| 34 | Anisotropy-enhanced depolarization on transparent film/substrate system. Thin Solid Films, 2011, 519, 2637-2640. | 1.8 | 3 |
| 35 | Optical characterization of HfO2 thin films. Thin Solid Films, 2011, 519, 6085-6091. | 1.8 | 32 |
| 36 | The reflectance of non-uniform thin films. Journal of Optics, 2009, 11, 045202. | 1.5 | 27 |

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|---|---|---|---|
| 37 | Characterization of non-uniform diamond-like carbon films by spectroscopic ellipsometry. Diamond and Related Materials, 2009, 18, 364-367. | 3.9 | 12 |
| 38 | Complete Optical Characterization of Non-Uniform SiOx Thin Films Using Imaging Spectroscopic Reflectometry. E-Journal of Surface Science and Nanotechnology, 2009, 7, 409-412. | 0.4 | 3 |
| 39 | Optical quantities of rough films calculated by Rayleigh-Rice theory. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1395-1398. | 0.8 | 6 |
| 40 | Optical characterization of non-stoichiometric silicon nitride films. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1320-1323. | 0.8 | 4 |
| 41 | Optical characterization of phase changing Ge<sub>2</sub>Sb<sub>2</sub>Te<sub>5</sub> chalcogenide films. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1324-1327. | 0.8 | 6 |
| 42 | Spectroscopic ellipsometry and reflectometry of statistically rough surfaces exhibiting wide intervals of spatial frequencies. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1399-1402. | 0.8 | 7 |
| 43 | Optical characterization of diamond-like carbon thin films non-uniform in thickness using spectroscopic reflectometry. Diamond and Related Materials, 2008, 17, 709-712. | 3.9 | 1 |
| 44 | Influence of cross-correlation effects on the optical quantities of rough films. Optics Express, 2008, 16, 7789. | 3.4 | 11 |
| 45 | Influence of shadowing on ellipsometric quantities of randomly rough surfaces and thin films. Journal of Modern Optics, 2008, 55, 1077-1099. | 1.3 | 11 |
| 46 | Characterization of polymer thin films deposited on aluminum films by the combined optical method and atomic force microscopy. Surface and Interface Analysis, 2006, 38, 842-846. | 1.8 | 3 |
| 47 | Applications of scanning thermal microscopy in the analysis of the geometry of patterned structures. Surface and Interface Analysis, 2006, 38, 383-387. | 1.8 | 14 |
| 48 | Comparison of effective medium approximation and Rayleighâ€“Rice theory concerning ellipsometric characterization of rough surfaces. Optics Communications, 2005, 248, 459-467. | 2.1 | 82 |
| 49 | Atomic force microscopy analysis of morphology of the upper boundaries of GaN thin films prepared by MOCVD. Vacuum, 2005, 80, 53-57. | 3.5 | 3 |
| 50 | Optical characterization of thin films by the combined method of spectroscopic ellipsometry and spectroscopic photometry. Vacuum, 2005, 80, 159-162. | 3.5 | 30 |
| 51 | Optical characterization of double layers containing epitaxial ZnSe and ZnTe films. Journal of Modern Optics, 2005, 52, 583-602. | 1.3 | 9 |
| 52 | Atomic Force Microscopy Analysis of Statistical Roughness of GaAs Surfaces Originated by Thermal Oxidation. Mikrochimica Acta, 2004, 147, 175. | 5.0 | 12 |
| 53 | Theoretical analysis of the atomic force microscopy characterization of columnar thin films. Ultramicroscopy, 2003, 94, 19-29. | 1.9 | 36 |
| 54 | Atomic Force Microscopy Characterization of ZnTe Epitaxial Thin Films. Japanese Journal of Applied Physics, 2003, 42, 4706-4709. | 1.5 | 13 |

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| 55 | Influence of overlayers on determination of the optical constants of ZnSe thin films. Journal of Applied Physics, 2002, 92, 1873-1880. | 2.5 | 39 |
| 56 | Analysis of the boundaries of ZrO2and HfO2thin films by atomic force microscopy and the combined optical method. Surface and Interface Analysis, 2002, 33, 559-564. | 1.8 | 5 |
| 57 | Analysis of Slightly Rough Thin Films by Optical Methods and AFM. Mikrochimica Acta, 2000, 132, 443-447. | 5.0 | 37 |
| 58 | Ellipsometry of Thin Film Systems. Progress in Optics, 2000, 41, 181-282. | 0.6 | 48 |
| 59 | Determination of the basic parameters characterizing the roughness of metal surfaces by laser light scattering. Journal of Modern Optics, 1999, 46, 279-293. | 1.3 | 4 |
| 60 | Ellipsometric parameters and reflectances of thin films with slightly rough boundaries. Journal of Modern Optics, 1998, 45, 903-934. | 1.3 | 68 |
| 61 | IV: Scattering of Light from Multilayer Systems With Rough Boundaries. Progress in Optics, 1995, 34, 249-331. | 0.6 | 26 |