Kenneth JÃ¤rrendahl

List of Publications by Year
in descending order

85 papers	1,583 citations	361413 20 h-index	330143 37 g-index
85 all docs	85 docs citations	85 times ranked	1635 citing authors

#	Article	IF	Citations
1	Effective absorption coefficient and effective thickness in attenuated total reflection spectroscopy. Optics Letters, 2021, 46, 872.	3.3	8
2	Optical Chirality Determined from Mueller Matrices. Applied Sciences (Switzerland), 2021, 11, 6742.	2.5	14
3	Quantification of Optical Chirality in Cellulose Nanocrystal Films Prepared by Shear-Coating. Applied Sciences (Switzerland), 2021, 11, 6191.	2.5	12
4	Shear-Coated Linear Birefringent and Chiral Cellulose Nanocrystal Films Prepared from Non-Sonicated Suspensions with Different Storage Time. Nanomaterials, 2021, 11, 2239.	4.1	13
5	Glancing Angle Deposition and Growth Mechanism of Inclined AlN Nanostructures Using Reactive Magnetron Sputtering. Coatings, 2020, 10, 768.	2.6	19
6	Effective structural chirality of beetle cuticle determined from transmission Mueller matrices using the Tellegen constitutive relations. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, .	1.2	3
7	Transmission Mueller-matrix characterization of transparent ramie films. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, .	1.2	5
8	Graded circular Bragg reflectors: a semi-analytical retrieval of approximate pitch profiles from Mueller-matrix data. Journal of Optics (United Kingdom), 2019, 21, 125401.	2.2	5
9	Mueller-matrix modeling of the architecture in the cuticle of the beetle <i>Chrysina resplendens</i>. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, .	1.2	7
10	Linear Birefringent Films of Cellulose Nanocrystals Produced by Dip-Coating. Nanomaterials, 2019, 9, 45.	4.1	24
11	Mueller matrix spectroscopic ellipsometry study of chiral nanocrystalline cellulose films. Journal of Optics (United Kingdom), 2018, 20, 024001.	2.2	31
12	Pitch profile across the cuticle of the scarab beetle <i>Cotinis</i> <i>mutabilis</i> determined by analysis of Mueller matrix measurements. Royal Society Open Science, 2018, 5, 181096.	2.4	8
13	Experimental degradation of helicoidal photonic nanostructures in scarab beetles (Coleoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Journal of the Royal Society Interface, 2018, 15, 20180560.	3.4	6
14	Influence of InAlN Nanospiral Structures on the Behavior of Reflected Light Polarization. Nanomaterials, 2018, 8, 157.	4.1	3
15	Graded pitch profile for the helicoidal broadband reflector and left-handed circularly polarizing cuticle of the scarab beetle Chrysina chrysargyrea. Scientific Reports, 2018, 8, 6456.	3.3	17
16	Polarizing Natural Nanostructures. Springer Series in Surface Sciences, 2018, , 247-268.	0.3	2
17	Neutral shielding and cloaking of magnetic fields using isotropic media. Journal of Physics Condensed Matter, 2017, 29, 035801.	1.8	3
18	Neutral inclusions for diffusive acoustic fields. Journal of Sound and Vibration, 2017, 395, 80-89.	3.9	0

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19	Exposing different in-depth pitches in the cuticle of the scarab beetle Cotinis mutabilis. Materials Today: Proceedings, 2017, 4, 4969-4978.	1.8	3
20	On the polarization of light reflected from beetle cuticle. Materials Today: Proceedings, 2017, 4, 4933-4941.	1.8	2
21	Bragg reflection from periodic helicoidal media with laterally graded refractive index. Optical Materials, 2017, 72, 334-340.	3.6	1
22	Modeling of light interaction with exoskeletons of scarab beetles. Applied Optics, 2017, 56, 2510.	2.1	3
23	Birefringence of nanocrystalline chitin films studied by Mueller-matrix spectroscopic ellipsometry. Optical Materials Express, 2016, 6, 671.	3.0	10
24	Sum regression decomposition of spectral and angle-resolved Mueller matrices from biological reflectors. Applied Optics, 2016, 55, 4060.	2.1	8
25	Polarizing properties and structure of the cuticle of scarab beetles from theChrysinagenus. Physical Review E, 2016, 94, 012409.	2.1	19
26	Structural circular birefringence and dichroism quantified by differential decomposition of spectroscopic transmission Mueller matrices from Cetonia aurata. Optics Letters, 2016, 41, 3293.	3.3	23
27	Simulation of light scattering from exoskeletons of scarab beetles. Optics Express, 2016, 24, 5794.	3.4	3
28	In_xAl_{1-x}N chiral nanorods mimicking the polarization features of scarab beetles. Proceedings of SPIE, 2015, , .	0.8	0
29	Exploring polarization features in light reflection from beetles with structural colors. , 2015, , .		0
30	Scattering and polarization properties of the scarab beetle Cyphochilus insulanus cuticle. Applied Optics, 2015, 54, 6037.	2.1	15
31	Sum decomposition of Mueller-matrix images and spectra of beetle cuticles. Optics Express, 2015, 23, 1951.	3.4	18
32	Curved-Lattice Epitaxial Growth of In_{<i>x</i>}Al_{1â€“<i>x</i>}N Nanospirals with Tailored Chirality. Nano Letters, 2015, 15, 294-300.	9.1	19
33	Polarization of Light Reflected from Chrysina Gloriosa Under Various Illuminations. Materials Today: Proceedings, 2014, 1, 172-176.	1.8	3
34	Exploring Optics of Beetle Cuticles with Mueller-matrix Ellipsometry. Materials Today: Proceedings, 2014, 1, 155-160.	1.8	5
35	Evidence for a dispersion relation of optical modes in the cuticle of the scarab beetle Cotinis mutabilis. Optical Materials Express, 2014, 4, 2484.	3.0	17
36	Optical Mueller matrix modeling of chiral AlxIn1âˆ’xN nanospirals. Thin Solid Films, 2014, 571, 447-452.	1.8	7

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37	Symmetries and relationships between elements of the Mueller matrix spectra of the cuticle of the beetle Cotinis mutabilis. Thin Solid Films, 2014, 571, 660-665.	1.8	16
38	Comparison and analysis of Mueller-matrix spectra from exoskeletons of blue, green and red Cetonia aurata. Thin Solid Films, 2014, 571, 739-743.	1.8	16
39	Polarizing properties and structural characteristics of the cuticle of the scarab Beetle Chrysina gloriosa. Thin Solid Films, 2014, 571, 410-415.	1.8	40
40	Polarizing Natural Nanostructures. Springer Series in Surface Sciences, 2014, , 155-169.	0.3	1
41	Chiral nanostructures producing near circular polarization. Optical Materials Express, 2014, 4, 1389.	3.0	5
42	Cuticle structure of the scarab beetle Cetonia aurata analyzed by regression analysis of Mueller-matrix ellipsometric data. Optics Express, 2013, 21, 22645.	3.4	47
43	Fano interference in supported gold nanosandwiches with weakly coupled nanodisks. Optics Express, 2012, 20, 29646.	3.4	4
44	Chirality-induced polarization effects in the cuticle of scarab beetles: 100 years after Michelson. Philosophical Magazine, 2012, 92, 1583-1599.	1.6	80
45	Spectroscopic ellipsometry study on the dielectric function of bulk Ti_2AlN, Ti_2AlC, Nb_2AlC, $(Ti_{0.5},Nb_{0.5})_2AlC$, and Ti_3GeC_2 MAX-phases. Journal of Applied Physics, 2011, 109, .	2.5	13
46	Optical response of supported gold nanodisks. Optics Express, 2011, 19, 12093.	3.4	30
47	Optical properties and switching of a Rose Bengal derivative: A spectroscopic ellipsometry study. Thin Solid Films, 2011, 519, 3582-3586.	1.8	17
48	Mueller-matrix ellipsometry studies of optically active structures in scarab beetles. EPJ Web of Conferences, 2010, 5, 03005.	0.3	1
49	Spectroscopic ellipsometry analysis of silicon nanotips obtained by electron cyclotron resonance plasma etching. Applied Optics, 2009, 48, 4996.	2.1	4
50	Spectroscopic ellipsometry and vector network analysis for determination of the electromagnetic response in two wavelength regions. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1089-1092.	0.8	3
51	A FEM-based application for numerical calculations of ellipsometric data. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 945-948.	1.8	3
52	Infrared to vacuum ultraviolet optical properties of 3C, 4H and 6H silicon carbide measured by spectroscopic ellipsometry. Thin Solid Films, 2004, 455-456, 235-238.	1.8	4
53	Improvement of porous silicon based gas sensors by polymer modification. Physica Status Solidi A, 2003, 197, 378-381.	1.7	23
54	Spectroscopy studies of 4H-SiC. Materials Research, 2003, 6, 43-45.	1.3	0

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55	Optical properties of 4Hâ€"SiC. Journal of Applied Physics, 2002, 91, 2099-2103.	2.5	20
56	Electrical peculiarities in Al/Si/Ge/â€¦/Ge/Si and Al/SiGe/Si structures. Applied Surface Science, 2002, 190, 403-407.	6.1	10
57	Electronic structure of ScN determined using optical spectroscopy, photoemission, andab initiocalculations. Physical Review B, 2001, 63, .	3.2	139
58	Electrical and optical properties of sputter deposited tin doped indium oxide thin films with silver additive. Thin Solid Films, 2001, 392, 305-310.	1.8	24
59	Optical properties of intrinsic and doped a-Si:H films grown by d.c. magnetron sputter deposition. Thin Solid Films, 2001, 394, 255-262.	1.8	8
60	Er/O doped Si1â^'xGex alloy layers grown by MBE. Optical Materials, 2001, 17, 131-134.	3.6	2
61	Ordinary and extraordinary dielectric functions of 4Hâ€" and 6Hâ€"SiC from 3.5 to 9.0 eV. Applied Physics Letters, 2001, 78, 2715-2717.	3.3	25
62	Electrical and optical properties of CNx(0â©½xâ©½0.25) films deposited by reactive magnetron sputtering. Journal of Applied Physics, 2001, 89, 1184-1190.	2.5	58
63	Characterization of 3C-SiC by Spectroscopic Ellipsometry. Physica Status Solidi (B): Basic Research, 2000, 218, r1-r2.	1.5	8
64	Optical Characterization Of Industrially Sputtered Nickelâ€"Nickel Oxide Solar Selective Surface. Solar Energy, 2000, 68, 325-328.	6.1	50
65	Enhanced quality of epitaxial AlN thin films on 6Hâ€"SiC by ultra-high-vacuum ion-assisted reactive dc magnetron sputter deposition. Applied Physics Letters, 2000, 76, 170-172.	3.3	27
66	Ion implanted dopants in GaN and AlN: Lattice sites, annealing behavior, and defect recovery. Journal of Applied Physics, 2000, 87, 2149-2157.	2.5	52
67	Real-time assessment of selected surface preparation regimens for 4Hâ€"SiC surfaces using spectroscopic ellipsometry. Surface Science, 2000, 464, L703-L707.	1.9	11
68	Multiple sample analysis of spectroscopic ellipsometry data of semi-transparent films. Thin Solid Films, 1998, 313-314, 114-118.	1.8	56
69	Growth of highly (0001)-oriented aluminum nitride thin films with smooth surfaces on silicon carbide by gas-source molecular beam epitaxy. Vacuum, 1998, 49, 189-191.	3.5	4
70	Chapter 1 Materials Properties and Characterization of SiC. Semiconductors and Semimetals, 1998, , 1-20.	0.7	32
71	Microstructure evolution in amorphous Ge/Si multilayers grown by magnetron sputter deposition. Journal of Materials Research, 1997, 12, 1806-1815.	2.6	14
72	Annealing induced interdiffusion and crystallization in sputtered amorphous Si/Ge multilayers. Journal of Materials Research, 1997, 12, 2255-2261.	2.6	12

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73	Growth and doping via gas-source molecular beam epitaxy of SiC and heterostructures and their microstructural and electrical characterization. Diamond and Related Materials, 1997, 6, 1282-1288.	3.9	3
74	Homoepitaxial SiC Growth by Molecular Beam Epitaxy. Physica Status Solidi (B): Basic Research, 1997, 202, 379-404.	1.5	17
75	Compositional information from amorphous Si-Ge multilayers using high-resolution electron microscopy imaging and direct digital recording. Ultramicroscopy, 1996, 66, 221-235.	1.9	5
76	X-ray diffraction from amorphous Ge/Si Cantor superlattices. Physical Review B, 1995, 51, 7621-7631.	3.2	16
77	Study of ion mixing during Auger depth profiling of Geâ€“Si multilayer system. II. Low ion energy (0.2â€“2) Tj ETQq1 1 0.784314 rgBT /O 1999-2004.	2.1	15
78	A spectroscopic ellipsometry study of cerium dioxide thin films grown on sapphire by rf magnetron sputtering. Journal of Applied Physics, 1995, 77, 5369-5376.	2.5	186
79	Growth of epitaxial AlN(0001) on Si(111) by reactive magnetron sputter deposition. Journal of Applied Physics, 1995, 78, 5721-5726.	2.5	64
80	Optical properties and crystallization of amorphous Si:Sb alloy thin films. Journal of Applied Physics, 1994, 75, 507-513.	2.5	7
81	Growth and ellipsometric studies of periodic and cantor aperiodic amorphous Ge/Si superlattices. Thin Solid Films, 1994, 240, 7-13.	1.8	5
82	An X-ray study of generalized Cantor superlattices. Thin Solid Films, 1994, 246, 120-125.	1.8	4
83	A quasi three-dimensional optical memory with n-bit memory cells based on the ellipsometric principle: concept and prototype devices. Optics Communications, 1994, 104, 277-279.	2.1	5
84	Low energy ion mixing in Si-Ge multilayer system. Nuclear Instruments & Methods in Physics Research B, 1994, 85, 383-387.	1.4	7
85	Optical constants and Drude analysis of sputtered zirconium nitride films. Applied Optics, 1994, 33, 1993.	2.1	54