

Karsten Fleischer

List of Publications by Year in descending order

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92
papers

1,952
citations

257450

24
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276875

41
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95
all docs

95
docs citations

95
times ranked

2528
citing authors

#	ARTICLE	IF	CITATIONS
1	Spectroscopic ellipsometry and polarimetry for materials and systems analysis at the nanometer scale: state-of-the-art, potential, and perspectives. Journal of Nanoparticle Research, 2009, 11, 1521-1554.	1.9	180
2	Hydrogen Local Vibrational Modes in Zinc Oxide. Physical Review Letters, 2003, 90, 197402.	7.8	114
3	Direct experimental evidence for the role of oxygen in the luminescent properties of GaN. Physical Review B, 1999, 59, 1575-1578.	3.2	90
4	Magnesium, nitrogen codoped Cr ₂ O ₃ : A p-type transparent conducting oxide. Applied Physics Letters, 2011, 99, .	3.3	82
5	Depth profiling of GaN by cathodoluminescence microanalysis. Applied Physics Letters, 1999, 74, 1114-1116.	3.3	73
6	Influence of the Precursors and Chemical Composition of the Solution on the Properties of ZnO Thin Films Grown by Spray Pyrolysis. Journal of Physical Chemistry C, 2009, 113, 21074-21081.	3.1	64
7	Conducting mechanism in the epitaxial p-type transparent conducting oxide	3.2	62
8	Synthesis of nanocrystalline Cu deficient CuCrO ₂ – a high figure of merit p-type transparent semiconductor. Journal of Materials Chemistry C, 2016, 4, 126-134.	5.5	61
9	PEDOT:PSS interfaces stabilised using a PEGylated crosslinker yield improved conductivity and biocompatibility. Journal of Materials Chemistry B, 2019, 7, 4811-4820.	5.8	59
10	Untangling Cooperative Effects of Pyridinic and Graphitic Nitrogen Sites at Metal-Free N-Doped Carbon Electrocatalysts for the Oxygen Reduction Reaction. Small, 2019, 15, e1902081.	10.0	57
11	GaAs(001): Surface Structure and Optical Properties. Physica Status Solidi A, 2001, 188, 1401-1409.	1.7	53
12	Improving solar cell efficiency with optically optimised TCO layers. Solar Energy Materials and Solar Cells, 2012, 101, 262-269.	6.2	52
13	Quantifying the Performance of P-Type Transparent Conducting Oxides by Experimental Methods. Materials, 2017, 10, 1019.	2.9	51
14	Phonon and polarized reflectance spectra from Si(111)-(4Å-1)In: Evidence for a charge-density-wave driven phase transition. Physical Review B, 2003, 67, .	3.2	48
15	Structure of Si(111)-In Nanowires Determined from the Midinfrared Optical Response. Physical Review Letters, 2009, 102, 226805.	7.8	46
16	Polarization conversion-based molecular sensing using anisotropic plasmonic metasurfaces. Nanoscale, 2016, 8, 10576-10581.	5.6	39
17	Spray pyrolysis growth of a high figure of merit, nano-crystalline, p-type transparent conducting material at low temperature. Applied Physics Letters, 2015, 107, .	3.3	35
18	Effect of Chemical Precursors On the Optical and Electrical Properties of p-Type Transparent Conducting Cr ₂ O ₃ :(Mg,N). Journal of Physical Chemistry C, 2013, 117, 21901-21907.	3.1	32

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19	Atomic structure and optical anisotropy of $\text{In}^{\text{V}}(001)$ surfaces. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 1756.	1.6	31
20	Micro-Raman studies of vertical-cavity surface-emitting lasers with $\text{Al}_x\text{O}_y/\text{GaAs}$ distributed Bragg reflectors. Applied Physics Letters, 2002, 81, 2544-2546.	3.3	30
21	Surface phonons of the $\langle \text{Si} \rangle$ $\langle \text{In} \rangle$ $\langle \text{Si} \rangle$ heterostructure. Physical Review B, 2007, 76, .	3.2	28
22	Self-assembled broadband plasmonic nanoparticle arrays for sensing applications. Applied Physics Letters, 2012, 100, .	3.3	28
23	Probing the out-of-plane optical response of plasmonic nanostructures using spectroscopic ellipsometry. Physical Review B, 2011, 84, .	3.2	25
24	Tuning the crystallographic, morphological, optical and electrical properties of $\text{ZnO}:\text{Al}$ grown by spray pyrolysis. Thin Solid Films, 2014, 555, 9-12.	1.8	24
25	Controlled <i>in situ</i> growth of tunable plasmonic self-assembled nanoparticle arrays. Nanotechnology, 2012, 23, 035606.	2.6	22
26	<i>In situ</i> characterization of one-dimensional plasmonic Ag nanocluster arrays. Physical Review B, 2011, 83, .	3.2	21
27	Equilibrium faceting formation in vicinal Al_2O_3 (0001) surface caused by annealing. Surface Science, 2012, 606, 1815-1820.	1.9	21
28	Aluminium doped $\text{Zn}_{1-x}\text{Mg}_x\text{O}$ A transparent conducting oxide with tunable optical and electrical properties. Applied Physics Letters, 2012, 101, .	3.3	21
29	Raman spectra of p-type transparent semiconducting $\text{Cr}_2\text{O}_3:\text{Mg}$. Thin Solid Films, 2015, 594, 245-249.	1.8	20
30	General approach to the analysis of plasmonic structures using spectroscopic ellipsometry. Physical Review B, 2013, 87, .	3.2	19
31	Oxidation of Nb(110): atomic structure of the NbO layer and its influence on further oxidation. Scientific Reports, 2020, 10, 3794.	3.3	18
32	An alternative fluorine precursor for the synthesis of $\text{SnO}_2:\text{F}$ by spray pyrolysis. Thin Solid Films, 2012, 520, 1856-1861.	1.8	17
33	Reflectance Anisotropy Spectroscopy of $\text{Si}(111)-(4 \times 1/2 \times 1)$ -In. Physica Status Solidi A, 2001, 188, 1411-1416.	1.7	15
34	Atomic indium nanowires on Si(111): the $(4 \times 1) \rightarrow (8 \times 2)$ phase transition studied with reflectance anisotropy spectroscopy. Applied Surface Science, 2004, 234, 302-306.	6.1	15
35	X-ray spectroscopic studies of the electronic structure of chromium-based p -type transparent conducting oxides. Physical Review B, 2016, 93, .	3.2	15
36	Low-Cost, High-Performance Spray Pyrolysis-Grown Amorphous Zinc Tin Oxide: The Challenge of a Complex Growth Process. ACS Applied Materials & Interfaces, 2020, 12, 46892-46899.	8.0	14

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37	Silver nanocolloid generation using dynamic Laser Ablation Synthesis in Solution system and drop-casting. Nano Structures Nano Objects, 2022, 29, 100841.	3.5	14
38	Photoinduced chain-oxygen ordering in detwinned YBa ₂ Cu ₃ O _{6.7} single crystals studied by reflectance-anisotropy spectroscopy. Physical Review B, 2004, 69, .	3.2	13
39	Effect of light on the reflectance anisotropy and chain-oxygen related Raman signal in untwinned, underdoped crystals of YBa ₂ Cu ₃ O _{7-δ} . Journal of Physics and Chemistry of Solids, 2006, 67, 340-343.	4.0	13
40	Additive-free silver nanoparticle ink development using flow-based Laser Ablation Synthesis in Solution and Aerosol Jet printing. Chemical Engineering Journal, 2022, 449, 137817.	12.7	13
41	Optical reflectance anisotropy of buried Fe nanostructures on vicinal W(110). Journal of Physics Condensed Matter, 2007, 19, 266003.	1.8	12
42	Surface plasmon on topological insulator/dielectric interface enhanced ZnO ultraviolet photoluminescence. AIP Advances, 2012, 2, .	1.3	12
43	Manipulating and probing the growth of plasmonic nanoparticle arrays using light. Nanoscale, 2013, 5, 4923.	5.6	12
44	Stability and capping of magnetite ultra-thin films. Applied Physics Letters, 2014, 104, 192401.	3.3	12
45	Oxygen vacancy induced surface stabilization: (110) terminated magnetite. Physical Review B, 2016, 94, .	3.2	12
46	Decoupling the refractive index from the electrical properties of transparent conducting oxides via periodic superlattices. Scientific Reports, 2016, 6, 33006.	3.3	12
47	Nanodomain structure of single crystalline nickel oxide. Scientific Reports, 2021, 11, 3496.	3.3	12
48	Optical and electronic properties of Ag nanodots on Si(111). Journal of Physics Condensed Matter, 2006, 18, 6979-6986.	1.8	11
49	Metal-insulator transition in Si(111)-(4 \times 4)-(8 \times 8) studied by optical spectroscopy. Physica Status Solidi (B): Basic Research, 2010, 247, 2033-2039.	1.5	11
50	Influence of temperature on morphological and optical properties of MoS ₂ layers as grown based on solution processed precursor. Thin Solid Films, 2018, 645, 38-44.	1.8	11
51	Magneto-optic Kerr effect in a spin-polarized zero-moment ferrimagnet. Physical Review B, 2018, 98, .	3.2	10
52	Growth and characterization of epitaxial magnesium ferrite thin films. Thin Solid Films, 2016, 612, 290-295.	1.8	9
53	Crystallographic Characterisation of Ultra-Thin, or Amorphous Transparent Conducting Oxides – The Case for Raman Spectroscopy. Materials, 2020, 13, 267.	2.9	9
54	Free-electron response in reflectance anisotropy spectra. Physical Review B, 2006, 74, .	3.2	8

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55	Extracting the hysteresis loops of magnetic interfaces from optical second-harmonic intensity measurements. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 396002.	1.8	8
56	Ultrathin magnetite in $\text{Fe}_3\text{O}_4/\text{MgO}$ heterostructures: Investigating the enhanced thin film magnetic moment. <i>Physical Review B</i> , 2017, 95, .	3.5	8
57	Bending stability of $\text{Cu}_{0.4}\text{CrO}_2$ —A transparent p-type conducting oxide for large area flexible electronics. <i>AIP Advances</i> , 2018, 8, 085013.	1.3	8
58	Importance of Local Bond Order to Conduction in Amorphous, Transparent, Conducting Oxides: The Case of Amorphous ZnSnO_4 . <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 44399-44405.	8.0	8
59	Suppression of the metal-insulator transition in magnetron sputtered Ti_2O_3 films. <i>Thin Solid Films</i> , 2020, 694, 137642.	1.8	8
60	Nitrogen grain-boundary passivation of In-doped ZnO transparent conducting oxide. <i>Physical Review Materials</i> , 2018, 2, .	2.4	8
61	Magnetic second-harmonic generation from the terraces and steps of aligned magnetic nanostructures grown on low symmetry interfaces. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 265002.	1.8	7
62	Magnetic second-harmonic generation from interfaces and nanostructures. <i>Journal of Magnetism and Magnetic Materials</i> , 2010, 322, 1488-1493.	2.3	7
63	Reflectance anisotropy spectroscopy of magnetite (110) surfaces. <i>Physical Review B</i> , 2014, 89, .	3.2	7
64	Surface Modification and Subsequent Fermi Density Enhancement of $\text{Bi}(111)$. <i>Journal of Physical Chemistry C</i> , 2021, 125, 5549-5558.	3.1	7
65	Optical properties of indium nanowires - an adsorption study. <i>Physica Status Solidi (B): Basic Research</i> , 2005, 242, 2655-2663.	1.5	6
66	Using reflectance anisotropy spectroscopy to characterize capped silver nanostructures grown on silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 2556-2560.	0.8	6
67	A photochemical approach for a fast and self-limited covalent modification of surface supported graphene with photoactive dyes. <i>Nanotechnology</i> , 2018, 29, 275705.	2.6	6
68	Influence of Sn on the optical anisotropy of single-domain $\text{Si}(001)$. <i>Physical Review B</i> , 2001, 63, .	3.2	5
69	Superconductivity in Sn films on $\text{InSb}()$ taking account of the film morphology and structure. <i>Physica C: Superconductivity and Its Applications</i> , 2002, 377, 89-95.	1.2	5
70	Optical characterisation of plasmonic nanostructures on planar substrates using second-harmonic generation. <i>Optics Express</i> , 2015, 23, 26486.	3.4	5
71	In-situ Raman Spectroscopy on III-V semiconductors at high temperature in MOVPE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 2949-2955.	0.8	4
72	Structural analysis by reflectance anisotropy spectroscopy: As and Sb on $\text{GaAs}(110)$. <i>Journal of Physics Condensed Matter</i> , 2004, 16, S4367-S4374.	1.8	4

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73	Electronic structure and reflectance anisotropy spectrum of InAs(110). Physical Review B, 2005, 71, .	3.2	4
74	Optical second-harmonic generation studies of Si(111)-Ag and Si(111)-Ag grown on vicinal Si(111). Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2649-2652.	0.8	4
75	A Rare Case of Mesomorphic Behavior—Molecular Reorientation of Itraconazole Liquid Crystal Induced by a Hygrothermal Treatment. Crystal Growth and Design, 2016, 16, 1329-1336.	3.0	4
76	Optical Anisotropy of SrTiO ₃ (110) for Different Surface Terminations. Physica Status Solidi (B): Basic Research, 2018, 255, 1700459.	1.5	4
77	Optical anisotropy of Cs nanostructures on InV(110) surfaces. Journal of Physics Condensed Matter, 2004, 16, S4353-S4365.	1.8	3
78	Optical response of Ag-induced reconstructions on vicinal Si(111). Physica Status Solidi (B): Basic Research, 2005, 242, 3017-3021.	1.5	3
79	Reflectance anisotropy studies of 5-2-Au structures grown on Si(111) surfaces with different step formations. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2569-2572.	0.8	3
80	Reflectance anisotropy spectroscopy of FeO(110): Anisotropic strain. Physical Review B, 2018, 98, .	3.2	3
81	Growth of ZnO:Al by atomic layer deposition: Deconvoluting the contribution of hydrogen interstitials and crystallographic texture on the conductivity. Thin Solid Films, 2019, 690, 137533.	1.8	3
82	The electrical and structural properties of granular superconducting Sn on InSb(1 1 0). Physica B: Condensed Matter, 2000, 284-288, 1121-1122.	2.7	1
83	Optimizing the magnetic contrast in the optical second-harmonic response of capped magnetic nanostructures grown on vicinal surfaces. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2645-2648.	0.8	1
84	Determining magnetization curves using optical second-harmonic generation. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2653-2656.	0.8	1
85	Optical anisotropy of Si(111)-(4 Å-1)/(8 Å-2) nanowires calculated from first-principles. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 133-136.	0.8	1
86	Formation of plasmonic nanoparticle arrays—rules and recipes for an ordered growth. Physica Status Solidi (B): Basic Research, 2016, 253, 198-205.	1.5	1
87	Photonic crystals-based light-trapping approach in solar cells. , 2020, , 337-345.		1
88	Electron Beam Induced Impurity Electro-Migration in Unintentionally Doped GaN. MRS Internet Journal of Nitride Semiconductor Research, 1999, 4, 257-262.	1.0	1
89	An In Situ Study of Precursor Decomposition via Refractive Index Sensing in p-Type Transparent Copper Chromium Oxide. Chemistry of Materials, 2022, 34, 3020-3027.	6.7	1
90	Temperature-dependent magnetic second-harmonic generation from Fe nanostructures grown on vicinal W(110). Physical Review B, 2011, 83, .	3.2	0

#	ARTICLE	IF	CITATIONS
91	Formation of plasmonic nanoparticle arrays "rules and recipes for an ordered growth (Phys. Status Tj ETQq1 1 0,784314 rgBT /Over	1.5	
92	Increasing the refractive index of materials via nanolamination: a -IGZO nanolaminates. Physical Review Materials, 2018, 2, .		