Silke H Christiansen

List of Publications by Year in Descending Order

269 papers	9,060 citations	50 h-index	83 g-index
290 ext. papers	10,157 ext. citations	5.3 avg, IF	6 L-index

#	Paper	IF	Citations
269	Tibia Cortical Bone Segmentation in Micro-CT and X-ray Microscopy Data Using a Single Neural Network. *Informatik Aktuell*, **2022**, 333-338	0.3	0
268	Synthetic Image Rendering Solves Annotation Problem in Deep Learning Nanoparticle Segmentation.. *Small Methods*, **2021**, 5, e2100223	12.8	8
267	Double-Sided Graphene-Enhanced Raman Scattering and Fluorescence Quenching in Hybrid Biological Structures. *Advanced Materials Technologies*, **2021**, 6, 2100385	6.8	
266	Microscopic Deformation Modes and Impact of Network Anisotropy on the Mechanical and Electrical Performance of Five-fold Twinned Silver Nanowire Electrodes. *ACS Nano*, **2021**, 15, 362-376	16.7	8
265	Photon Statistics of Incoherent Cathodoluminescence with Continuous and Pulsed Electron Beams. *ACS Photonics*, **2021**, 8, 916-925	6.3	1
264	Novel diagnostic and therapeutic techniques reveal changed metabolic profiles in recurrent focal segmental glomerulosclerosis. *Scientific Reports*, **2021**, 11, 4577	4.9	3
263	Towards fully integrated photonic displacement sensors. *Nature Communications*, **2020**, 11, 2915	17.4	16
262	Critical Review of Processing and Classification Techniques for Images and Spectra in Microplastic Research. *Applied Spectroscopy*, **2020**, 74, 989-1010	3.1	57
261	Correlative Microscopy and Spectroscopy Workflow for Microplastics. *Applied Spectroscopy*, **2020**, 74, 1155-1160	3.1	9
260	Critical Assessment of Analytical Methods for the Harmonized and Cost-Efficient Analysis of Microplastics. *Applied Spectroscopy*, **2020**, 74, 1012-1047	3.1	97
259	All-silicon polarized light source based on electrically excited whispering gallery modes in inversely tapered photonic resonators. *APL Materials*, **2020**, 8, 061110	5.7	3
258	Towards polarization-based excitation tailoring for extended Raman spectroscopy. *Optics Express*, **2020**, 28, 10239-10252	3.3	3
257	Learning with Known Operators reduces Maximum Training Error Bounds. *Nature Machine Intelligence*, **2019**, 1, 373-380	22.5	63
256	A network of trans-cortical capillaries as mainstay for blood circulation in long bones. *Nature Metabolism*, **2019**, 1, 236-250	14.6	129
255	Frontline Science: Aggregated neutrophil extracellular traps prevent inflammation on the neutrophil-rich ocular surface. *Journal of Leukocyte Biology*, **2019**, 105, 1087-1098	6.5	27
254	GaN-Based Nanorods/Graphene Heterostructures for Optoelectronic Applications. *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1800454	1.3	4
253	Aggregated neutrophil extracellular traps resolve inflammation by proteolysis of cytokines and chemokines and protection from antiproteases. *FASEB Journal*, **2019**, 33, 1401-1414	0.9	56

252	Next-generation imaging of the skeletal system and its blood supply. *Nature Reviews Rheumatology* , **2019**, 15, 533-549	8.1	19
251	Plasmonic carbon nanohybrids from laser-induced deposition: controlled synthesis and SERS properties. *Journal of Materials Science*, **2019**, 54, 8177-8186	4.3	9
250	Complementary cathodoluminescence lifetime imaging configurations in a scanning electron microscope. *Ultramicroscopy*, **2019**, 197, 28-38	3.1	25
249	Axial p□ Junctions in GaN Microrods. *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1800452	1.3	1
248	Germanium Template Assisted Integration of Gallium Arsenide Nanocrystals on Silicon: A Versatile Platform for Modern Optoelectronic Materials. *Advanced Optical Materials*, **2018**, 6, 1701329	8.1	
247	Free charges versus excitons: photoluminescence investigation of InGaN/GaN multiple quantum well nanorods and their planar counterparts. *Nanoscale*, **2018**, 10, 5358-5365	7.7	12
246	Bone tissue aging affects mineralization of cement lines. *Bone*, **2018**, 110, 187-193	4.7	31
245	Spatially resolved luminescence properties of non- and semi-polar InGaN quantum wells on GaN microrods. *Journal Physics D: Applied Physics*, **2018**, 51, 355102	3	1
244	Hollow silica capsules for amphiphilic transport and sustained delivery of antibiotic and anticancer drugs.. *RSC Advances*, **2018**, 8, 24883-24892	3.7	9
243	Chiroptical response of a single plasmonic nanohelix. *Optics Express*, **2018**, 26, 19275-19293	3.3	28
242	Competitive interplay of deposition and etching processes in atomic layer growth of cobalt and nickel metal films. *Journal of Materials Research*, **2018**, 33, 4241-4250	2.5	6
241	Selective area growth of AlGaN nanopyramid arrays on graphene by metal-organic vapor phase epitaxy. *Applied Physics Letters*, **2018**, 113, 263102	3.4	11
240	A novel copper precursor for electron beam induced deposition. *Beilstein Journal of Nanotechnology*, **2018**, 9, 1220-1227	3	5
239	Small-sized microplastics and pigmented particles in bottled mineral water. *Water Research*, **2018**, 141, 307-316	12.5	313
238	Nanoscale characterization of GaN/InGaN multiple quantum wells on GaN nanorods by photoluminescence spectroscopy **2017**,		1
237	Strong plasmonic enhancement of biexciton emission: controlled coupling of a single quantum dot to a gold nanocone antenna. *Scientific Reports*, **2017**, 7, 42307	4.9	41
236	Efficient Nitrogen Doping of Single-Layer Graphene Accompanied by Negligible Defect Generation for Integration into Hybrid Semiconductor Heterostructures. *ACS Applied Materials & Interfaces* , **2017**, 9, 10003-10011	9.5	36
235	Development of an optimal filter substrate for the identification of small microplastic particles in food by micro-Raman spectroscopy. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 4099-4109	4.4	66

234	Potential of PEDOT:PSS as a hole selective front contact for silicon heterojunction solar cells. *Scientific Reports*, **2017**, 7, 2170	4.9	49
233	Significant performance enhancement of InGaN/GaN nanorod LEDs with multi-layer graphene transparent electrodes by alumina surface passivation. *Nanotechnology*, **2017**, 28, 055201	3.4	22
232	Plasmonic gold helices for the visible range fabricated by oxygen plasma purification of electron beam induced deposits. *Nanotechnology*, **2017**, 28, 055303	3.4	21
231	Effect of ammonification temperature on the formation of coaxial GaN/Ga2O3nanowires. *Journal Physics D: Applied Physics*, **2017**, 50, 035302	3	7
230	Photon bunching reveals single-electron cathodoluminescence excitation efficiency in InGaN quantum wells. *Physical Review B*, **2017**, 96,	3.3	24
229	Laser-Patterning Engineering for Perovskite Solar Modules With 95% Aperture Ratio. *IEEE Journal of Photovoltaics*, **2017**, 7, 1674-1680	3.7	83
228	Mode Matching for Optical Antennas. *Physical Review Letters*, **2017**, 119, 217401	7.4	12
227	Understanding GaN/InGaN core-shell growth towards high quality factor whispering gallery modes from non-polar InGaN quantum wells on GaN rods. *Nanotechnology*, **2017**, 28, 485601	3.4	5
226	Low temperature solid-state wetting and formation of nanowelds in silver nanowires. *Nanotechnology*, **2017**, 28, 385701	3.4	5
225	The Formation of Calcified Nanospherites during Micropetrosis Represents a Unique Mineralization Mechanism in Aged Human Bone. *Small*, **2017**, 13, 1602215	11	37
224	Barrier inhomogeneities limited current and 1/f noise transport in GaN based nanoscale Schottky barrier diodes. *Scientific Reports*, **2016**, 6, 27553	4.9	26
223	Nanoscale Characterization of Carrier Dynamic and Surface Passivation in InGaN/GaN Multiple Quantum Wells on GaN Nanorods. *ACS Applied Materials & Interfaces*, **2016**, 8, 31887-31893	9.5	29
222	Self-Catalyzed Growth of Vertically Aligned InN Nanorods by Metal-Organic Vapor Phase Epitaxy. *Nano Letters*, **2016**, 16, 3415-25	11.5	14
221	New insights into colloidal gold flakes: structural investigation, micro-ellipsometry and thinning procedure towards ultrathin monocrystalline layers. *Nanoscale*, **2016**, 8, 4529-36	7.7	18
220	Electromechanically Tunable Suspended Optical Nanoantenna. *Nano Letters*, **2016**, 16, 2680-5	11.5	11
219	In-Situ Characterization of Individual Building Blocks for Nanophotonic Solar Cells by Correlative Microscopy. *Microscopy and Microanalysis*, **2016**, 22, 50-51	0.5	1
218	Unveiling the optical properties of a metamaterial synthesized by electron-beam-induced deposition. *Nanotechnology*, **2016**, 27, 025705	3.4	7
217	Composite Nanostructures of TiO2 and ZnO for Water Splitting Application: Atomic Layer Deposition Growth and Density Functional Theory Investigation. *Advanced Functional Materials*, **2016**, 26, 4882-4889	15.6	38

216	Silicon Nanowire Sensors Enable Diagnosis of Patients via Exhaled Breath. *ACS Nano*, **2016**, 10, 7047-57	16.7	142
215	Maximizing Photoluminescence Extraction in Silicon Photonic Crystal Slabs. *Scientific Reports*, **2016**, 6, 25135	4.9	9
214	Systematic Surface Phase Transition of Ag Thin Films by Iodine Functionalization at Room Temperature: Evolution of Optoelectronic and Texture Properties. *Scientific Reports*, **2016**, 6, 21439	4.9	11
213	Design of multi-layered TiO2-Fe2O3 photoanodes for photoelectrochemical water splitting: patterning effects on photocurrent density. *MRS Communications*, **2016**, 6, 442-448	2.7	7
212	Gold platelets for high-quality plasmonics. *Materials Today*, **2016**, 19, 240-241	21.8	1
211	Unveiling the Hybrid n-Si/PEDOT:PSS Interface. *ACS Applied Materials & Interfaces*, **2016**, 8, 8841-8	9.5	38
210	Inorganic photovoltaics Planar and nanostructured devices. *Progress in Materials Science*, **2016**, 82, 294-404	42.2	38
209	Vertically Oriented Growth of GaN Nanorods on Si Using Graphene as an Atomically Thin Buffer Layer. *Nano Letters*, **2016**, 16, 3524-32	11.5	67
208	Index matching at the nanoscale: light scattering by core-shell Si/SiO x nanowires. *Nanotechnology*, **2016**, 27, 435202	3.4	1
207	Spatially-controlled laser-induced decoration of 2D and 3D substrates with plasmonic nanoparticles. *RSC Advances*, **2016**, 6, 75681-75685	3.7	11
206	Enhanced photovoltaics inspired by the fovea centralis. *Scientific Reports*, **2015**, 5, 8570	4.9	42
205	Study of high quality spinel zinc gallate nanowires grown using CVD and ALD techniques. *Nanotechnology*, **2015**, 26, 335603	3.4	4
204	Integration of plasmonic Ag nanoparticles as a back reflector in ultra-thin Cu(In,Ga)Se2 solar cells. *Applied Surface Science*, **2015**, 355, 800-804	6.7	31
203	Ultrafast Dynamics of Lasing Semiconductor Nanowires. *Nano Letters*, **2015**, 15, 4637-43	11.5	41
202	Encapsulation of silver nanowire networks by atomic layer deposition for indium-free transparent electrodes. *Nano Energy*, **2015**, 16, 196-206	17.1	59
201	Growth of GaN Micro- and Nanorods on Graphene-Covered Sapphire: Enabling Conductivity to Semiconductor Nanostructures on Insulating Substrates. *Crystal Growth and Design*, **2015**, 15, 2079-2086	3.5	29
200	Systematic increase of electrocatalytic turnover at nanoporous platinum surfaces prepared by atomic layer deposition. *Journal of Materials Chemistry A*, **2015**, 3, 8450-8458	13	18
199	Functionalization of Silver Nanowires Surface using Ag-C Bonds in a Sequential Reductive Method. *ACS Applied Materials & Interfaces*, **2015**, 7, 21657-61	9.5	13

198	Carrier-induced refractive index change observed by a whispering gallery mode shift in GaN microrods. *New Journal of Physics*, **2015**, 17, 083047	2.9	10
197	Electronic Properties of Si-Hx Vibrational Modes at Si Waveguide Interface. *Journal of Physical Chemistry Letters*, **2015**, 6, 3988-93	6.4	8
196	Modeling the dielectric function of degenerately doped ZnO:Al thin films grown by ALD using physical parameters. *Optical Materials Express*, **2015**, 5, 1979	2.6	5
195	Interfacing transitions of different alkali atoms and telecom bands using one narrowband photon pair source. *Optica*, **2015**, 2, 773	8.6	36
194	Effect of rapid thermal annealing on barrier height and 1/f noise of Ni/GaN Schottky barrier diodes. *Applied Physics Letters*, **2015**, 107, 093502	3.4	27
193	Ultrasensitive silicon nanowire for real-world gas sensing: noninvasive diagnosis of cancer from breath volatolome. *Nano Letters*, **2015**, 15, 1288-95	11.5	173
192	Self-Catalytic Growth of □Ga2O3 Nanostructures by Chemical Vapor Deposition. *Advanced Engineering Materials*, **2015**, 17, 709-715	3.5	33
191	Sensing Nanoparticles with a Cantilever-Based Scannable Optical Cavity of Low Finesse and Sub-□ Volume. *Physical Review Applied*, **2015**, 4,	4.3	30
190	Observation of strongly enhanced photoluminescence from inverted cone-shaped silicon nanostructures. [corrected]. *Scientific Reports*, **2015**, 5, 17089	4.9	17
189	A large electrochemical setup for the anodization of aluminum towards highly ordered arrays of cylindrical nanopores. *Review of Scientific Instruments*, **2015**, 86, 073902	1.7	3
188	Junction formation and current transport mechanisms in hybrid n-Si/PEDOT:PSS solar cells. *Scientific Reports*, **2015**, 5, 13008	4.9	101
187	Engineering Nanoporous Iron(III) Oxide into an Effective Water Oxidation Electrode. *ChemCatChem* , **2015**, 7, 2455-2459	5.2	25
186	Fabrication and characterization of plasmonic nanocone antennas for strong spontaneous emission enhancement. *Nanotechnology*, **2015**, 26, 404001	3.4	17
185	Maximizing the ultimate absorption efficiency of vertically-aligned semiconductor nanowire arrays with wires of a low absorption cross-section. *Nano Energy*, **2015**, 12, 801-809	17.1	26
184	Direct laser writing of □chips based on hybrid C-Au-Ag nanoparticles for express analysis of hazardous and biological substances. *Lab on A Chip*, **2015**, 15, 1742-7	7.2	20
183	Role of silicon nanowire diameter for alkyl (chain lengths C□C□) passivation efficiency through Si-C bonds. *Langmuir*, **2015**, 31, 2430-7	4	4
182	Accurate tuning of ordered nanotubular platinum electrodes by galvanic plating. *Dalton Transactions*, **2014**, 43, 4345-50	4.3	6
181	Whispering gallery modes in GaN microdisks, microrods and nanorods grown by MOVPE. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 794-797		10

180	Disentangling the effects of nanoscale structural variations on the light emission wavelength of single nano-emitters: InGaN/GaN multiquantum well nano-LEDs for a case study. *Nanoscale*, **2014**, 6, 11953-62	7.7	21
179	Probing photo-carrier collection efficiencies of individual silicon nanowire diodes on a wafer substrate. *Nanoscale*, **2014**, 6, 7897-902	7.7	17
178	Large area fabrication of vertical silicon nanowire arrays by silver-assisted single-step chemical etching and their formation kinetics. *Nanotechnology*, **2014**, 25, 175601	3.4	80
177	Photoluminescence analysis of coupling effects: The impact of shunt resistance and temperature. *Solar Energy Materials and Solar Cells*, **2014**, 130, 170-181	6.4	6
176	Improving the Optical Properties of Self-Catalyzed GaN Microrods toward Whispering Gallery Mode Lasing. *ACS Photonics*, **2014**, 1, 990-997	6.3	36
175	Study of iron-catalysed growth of Ga2O3nanowires and their detailed characterization using TEM, Raman and cathodoluminescence techniques. *Journal Physics D: Applied Physics*, **2014**, 47, 435101	3	44
174	Interface investigation of planar hybrid n-Si/PEDOT:PSS solar cells with open circuit voltages up to 645 mV and efficiencies of 12.6 %. *Applied Physics A: Materials Science and Processing*, **2014**, 115, 1109-1113	2.6	54
173	XPS study of triangular GaN nano/micro-needles grown by MOCVD technique. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2014**, 186, 89-93	3.1	20
172	The Role of Si during the Growth of GaN Micro- and Nanorods. *Crystal Growth and Design*, **2014**, 14, 1486-1492	3.5	66
171	Charge transfer doping of silicon. *Physical Review Letters*, **2014**, 112, 155502	7.4	20
170	Heterojunction based hybrid silicon nanowire solar cell: surface termination, photoelectron and photoemission spectroscopy study. *Progress in Photovoltaics: Research and Applications*, **2014**, 22, 1050-1061	6.8	29
169	Optical properties of vertical, tilted and in-plane GaN nanowires on different crystallographic orientations of sapphire. *Journal Physics D: Applied Physics*, **2014**, 47, 394008	3	24
168	AFM-Based Pick-and-Place Handling of Individual Nanoparticles inside an SEM for the Fabrication of Plasmonic Nano-Patterns **2014**,		3
167	Optical nano-structuring in light-sensitive AgCl-Ag waveguide thin films: wavelength effect. *Optics Express*, **2014**, 22, 30669-82	3.3	7
166	EMIL: The energy materials in situ laboratory Berlin **2014**,		3
165	A Non-Oxidative Approach Towards Hybrid Silicon Nanowire- Based Solar Cell Heterojunctions **2014**, 1,		3
164	Glow discharge techniques in the chemical analysis of photovoltaic materials. *Progress in Photovoltaics: Research and Applications*, **2014**, 22, 371-382	6.8	21
163	A comparative study of Ga2O3 nanowires grown on different substrates using CVD technique. *Journal of Alloys and Compounds*, **2014**, 587, 812-818	5.7	51

162	DNA hybridization assay at individual, biofunctionalized zinc oxide nanowires. *Journal of Biophotonics*, **2013**, 6, 143-7	3.1	6
161	Geometrical optimization and contact configuration in radial pn junction silicon nanorod and microrod solar cells. *Progress in Photovoltaics: Research and Applications*, **2013**, 21, 1567-1579	6.8	8
160	Applying contact to individual silicon nanowires using a dielectrophoresis (DEP)-based technique. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	9
159	Kinetic study of H-terminated silicon nanowires oxidation in very first stages. *Nanoscale Research Letters*, **2013**, 8, 41	5	12
158	Extraction of plasticity parameters of GaN with high temperature, in situ micro-compression. *International Journal of Plasticity*, **2013**, 40, 140-151	7.6	62
157	A time-resolved numerical study of the vapor-liquid-solid growth kinetics describing the initial nucleation phase as well as pulsed deposition processes. *Nano Letters*, **2013**, 13, 873-83	11.5	12
156	Split Ring Resonators: Enhanced Raman Scattering of Graphene using Arrays of Split Ring Resonators (Advanced Optical Materials 2/2013). *Advanced Optical Materials*, **2013**, 1, 150-150	8.1	
155	Oxide-free hybrid silicon nanowires: From fundamentals to applied nanotechnology. *Progress in Surface Science*, **2013**, 88, 39-60	6.6	42
154	Enhanced Raman Scattering of Graphene using Arrays of Split Ring Resonators. *Advanced Optical Materials*, **2013**, 1, 151-157	8.1	28
153	The Role of Hole Transport in Hybrid Inorganic/Organic Silicon/Poly(3,4-ethylenedioxy-thiophene):Poly(styrenesulfonate) Heterojunction Solar Cells. *Journal of Physical Chemistry C*, **2013**, 117, 9049-9055	3.8	66
152	High quality factor whispering gallery modes from self-assembled hexagonal GaN rods grown by metal-organic vapor phase epitaxy. *Optics Express*, **2013**, 21, 2733-40	3.3	29
151	Determination of the effective refractive index of nanoparticulate ITO layers. *Optics Express*, **2013**, 21, 22754-61	3.3	14
150	Material Properties of Laser-Welded Thin Silicon Foils. *International Journal of Photoenergy*, **2013**, 2013, 1-6	2.1	1
149	Controlling morphology and optical properties of self-catalyzed, mask-free GaN rods and nanorods by metal-organic vapor phase epitaxy. *Journal of Applied Physics*, **2013**, 114, 144304	2.5	35
148	Growth of GaN Nanorods and Wires and Spectral Tuning of Whispering Gallery Modes in Tapered GaN Wires. *Japanese Journal of Applied Physics*, **2013**, 52, 08JE09	1.4	15
147	Spray-coating route for highly aligned and large-scale arrays of nanowires. *ACS Nano*, **2012**, 6, 4702-12	16.7	45
146	Far-field imaging for direct visualization of light interferences in GaAs nanowires. *Nano Letters*, **2012**, 12, 5412-7	11.5	48
145	Nanowire arrays in multicrystalline silicon thin films on glass: a promising material for research and applications in nanotechnology. *Nano Letters*, **2012**, 12, 4050-4	11.5	69

144	Molecular gating of silicon nanowire field-effect transistors with nonpolar analytes. *ACS Nano*, **2012**, 6, 335-45	16.7	83
143	Field-effect transistors based on silicon nanowire arrays: effect of the good and the bad silicon nanowires. *ACS Applied Materials & Interfaces*, **2012**, 4, 4251-8	9.5	19
142	Grain structure of thin-film silicon by zone melting recrystallization on SiC base layer. *Journal of Crystal Growth*, **2012**, 357, 20-24	1.6	5
141	Influence of the contacting scheme in simulations of radial silicon nanorod solar cells. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2012**, 177, 1558-1562	3.1	2
140	Early stages of oxide growth in H-terminated silicon nanowires: determination of kinetic behavior and activation energy. *Physical Chemistry Chemical Physics*, **2012**, 14, 11877-81	3.6	29
139	Plasmonic dimer antennas for surface enhanced Raman scattering. *Nanotechnology*, **2012**, 23, 185303	3.4	33
138	Self-catalyzed, vertically aligned GaN rod-structures by metal-organic vapor phase epitaxy. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 596-600		12
137	Characterization of Grain Boundary Geometry in the TEM, Exemplified in Si Thin Films. *Solid State Phenomena*, **2012**, 186, 7-12	0.4	2
136	Novel Discovery of Silicon. *Journal of Nanoelectronics and Optoelectronics*, **2012**, 7, 583-590	1.3	7
135	Permanent bending and alignment of ZnO nanowires. *Nanotechnology*, **2011**, 22, 185307	3.4	60
134	A precise optical determination of nanoscale diameters of semiconductor nanowires. *Nanotechnology*, **2011**, 22, 385201	3.4	27
133	The effect of internal stresses on the recombination activity of structural defects in multi-crystalline solar silicon **2011**,		1
132	Growth of doped silicon nanowires by pulsed laser deposition and their analysis by electron beam induced current imaging. *Nanotechnology*, **2011**, 22, 075706	3.4	18
131	Toward local growth of individual nanowires on three-dimensional microstructures by using a minimally invasive catalyst templating method. *Nano Letters*, **2011**, 11, 4213-7	11.5	20
130	Photoluminescence of samples produced by electroless wet chemical etching: Between silicon nanowires and porous structures. *Physica Status Solidi (A) Applications and Materials Science*, **2011**, 208, 893-899	1.6	13
129	The direct writing of plasmonic gold nanostructures by electron-beam-induced deposition. *Advanced Materials*, **2011**, 23, 2657-61	24	97
128	Chemical and optical characterisation of atomic layer deposition aluminium doped ZnO films for photovoltaics by glow discharge optical emission spectrometry. *Journal of Analytical Atomic Spectrometry*, **2011**, 26, 822	3.7	14
127	Enhanced sensing of nonpolar volatile organic compounds by silicon nanowire field effect transistors. *ACS Nano*, **2011**, 5, 5620-6	16.7	119

126	Catalyst-free functionalization for versatile modification of nonoxidized silicon structures. *Langmuir*, **2011**, 27, 4764-71	4	21
125	Correlating internal stresses, electrical activity and defect structure on the micrometer scale in EFG silicon ribbons. *Solar Energy Materials and Solar Cells*, **2011**, 95, 2264-2271	6.4	30
124	Statistical model on the optical properties of silicon nanowire mats. *Physical Review B*, **2011**, 84,	3.3	16
123	Growth of axial SiGe heterostructures in nanowires using pulsed laser deposition. *Nanotechnology*, **2011**, 22, 305604	3.4	13
122	Investigation of a hydrogen implantation-induced blistering phenomenon in Si0.70Ge0.30. *Semiconductor Science and Technology*, **2011**, 26, 125001	1.8	4
121	Simulation of Symmetrically Doped Silicon Nanowire Solar Cells. *Materials Research Society Symposia Proceedings*, **2011**, 1322, 95		
120	Photoluminescence and Raman Scattering in Arrays of Silicon Nanowires. *Journal of Nanoelectronics and Optoelectronics*, **2011**, 6, 519-524	1.3	16
119	H□lich, G□ele, and Christiansen Reply:. *Physical Review Letters*, **2010**, 104,	7.4	1
118	Future of raman in PV development **2010**,		2
117	Stress and doping uniformity of laser crystallized amorphous silicon in thin film silicon solar cells. *Journal of Applied Physics*, **2010**, 107, 054312	2.5	9
116	Structural, optical, and electrical properties of silicon nanowires for solar cells **2010**,		1
115	Synthesis Mechanisms of Organized Gold Nanoparticles: Influence of Annealing Temperature and Atmosphere. *Crystal Growth and Design*, **2010**, 10, 587-596	3.5	103
114	Lithographically patterned silicon nanowire arrays for matrix free LDI-TOF/MS analysis of lipids. *Lab on A Chip*, **2010**, 10, 320-5	7.2	17
113	Realization of Vertical and Zigzag Single Crystalline Silicon Nanowire Architectures. *Journal of Physical Chemistry C*, **2010**, 114, 3798-3803	3.8	88
112	Optical properties of individual silicon nanowires for photonic devices. *ACS Nano*, **2010**, 4, 7113-22	16.7	179
111	In Situ Electron Microscopy Mechanical Testing of Silicon Nanowires Using Electrostatically Actuated Tensile Stages. *Journal of Microelectromechanical Systems*, **2010**, 19, 663-674	2.5	60
110	Stresses and their relation to defects in multicrystalline solar silicon **2010**,		3
109	Roughness of silicon nanowire sidewalls and room temperature photoluminescence. *Physical Review B*, **2010**, 82,	3.3	82

108	Effects of light localization in photoluminescence and Raman scattering in silicon nanostructures. *Bulletin of the Russian Academy of Sciences: Physics*, **2010**, 74, 1712-1714	0.4	9
107	Ordered arrays of epitaxial silicon nanowires produced by nanosphere lithography and chemical vapor deposition. *Journal of Crystal Growth*, **2010**, 312, 2887-2891	1.6	18
106	The Phenomenology of Ion Implantation-Induced Blistering and Thin-Layer Splitting in Compound Semiconductors. *Journal of Electronic Materials*, **2010**, 39, 2177-2189	1.9	29
105	Silver coated platinum core-shell nanostructures on etched Si nanowires: atomic layer deposition (ALD) processing and application in SERS. *ChemPhysChem*, **2010**, 11, 1995-2000	3.2	5
104	Microstructure and lattice bending in polycrystalline laser-crystallized silicon thin films for photovoltaic applications. *Thin Solid Films*, **2010**, 519, 58-63	2.2	7
103	Hydrogen implantation-induced large area exfoliation in AlN epitaxial layers. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 29-32	1.6	5
102	Surface exfoliation in ZnO by hydrogen implantation and its smoothening by high temperature annealing. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 444-447		3
101	Study of implantation-induced blistering/exfoliation in wide bandgap semiconductors for layer transfer applications. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 44-47		3
100	Are volume plasmons excitable by classical light?. *Physical Review Letters*, **2009**, 103, 087404	7.4	12
99	Strained Silicon on Wafer Level by Waferbonding: Materials Processing, Strain Measurements and Strain Relaxation. *ECS Transactions*, **2009**, 16, 311-320	1	7
98	Silicon nanowire oxidation: the influence of sidewall structure and gold distribution. *Nanotechnology*, **2009**, 20, 405607	3.4	26
97	Near-field investigations of nanoshell cylinder dimers. *Journal of Chemical Physics*, **2009**, 131, 164704	3.9	19
96	III-V and III-Nitride Engineered Heterostructures: Wafer Bonding, Ion Slicing, and More. *ECS Transactions*, **2009**, 16, 251-262	1	4
95	Stress Adjustment and Bonding of H-Implanted 2 in. Freestanding GaN Wafer: The Concept of Double-Sided Splitting. *Electrochemical and Solid-State Letters*, **2009**, 12, H105		12
94	Selectively deposited silver coatings on gold-capped silicon nanowires for surface-enhanced Raman spectroscopy. *ChemPhysChem*, **2009**, 10, 1219-24	3.2	13
93	Mechanisms of ion-induced GaN thin layer splitting. *Nuclear Instruments & Methods in Physics Research B*, **2009**, 267, 1264-1268	1.2	13
92	Highly p-doped regions in silicon solar cells quantitatively analyzed by small angle beveling and micro-Raman spectroscopy. *Journal of Applied Physics*, **2009**, 106, 074515	2.5	39
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