Ilkka Juhani Tittonen

List of Publications by Year
in descending order

95	1,975	304368 22	288905 40
papers	citations	h-index	g-index

95	95	95	2087
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	InSb Nanowire Direct Growth on Plastic for Monolithic Flexible Device Fabrication. ACS Applied Electronic Materials, 2022, 4, 539-545.	2.0	1
2	Direct GaAs Nanowire Growth and Monolithic Lightâ€Emitting Diode Fabrication on Flexible Plastic Substrates. Advanced Photonics Research, 2022, 3, .	1.7	4
3	Hydrogen induced interface engineering in Fe₂O₃â€“TiO₂ heterostructures for efficient charge separation for solar-driven water oxidation in photoelectrochemical cells. RSC Advances, 2021, 11, 4297-4307.	1.7	16
4	Computational Study Revealing the Influence of Surface Phenomena in p-GaAs Water-Splitting Cells. Journal of Physical Chemistry C, 2021, 125, 12478-12487.	1.5	3
5	Large-area implementation and critical evaluation of the material and fabrication aspects of a thin-film thermoelectric generator based on aluminum-doped zinc oxide. Renewable Energy, 2020, 147, 1292-1298.	4.3	6
6	Effect of Synthesis Conditions of Nitrogen and Platinum Co-Doped Titania Films on the Photocatalytic Performance under Simulated Solar Light. Catalysts, 2020, 10, 1074.	1.6	8
7	Enhanced Thermoelectric Transport and Stability in Atomic Layer Deposited-HfO₂/ZnO and TiO₂/ZnO-Sandwiched Multilayer Thin Films. ACS Applied Materials & Interfaces, 2020, 12, 49210-49218.	4.0	16
8	Synergies of co-doping in ultra-thin hematite photoanodes for solar water oxidation: In and Ti as representative case. RSC Advances, 2020, 10, 33307-33316.	1.7	13
9	Large-Area Thermal Distribution Sensor Based on Multilayer Graphene Ink. Sensors, 2020, 20, 5188.	2.1	10
10	Photodeposition of RuO_x Nanostructures on TiO₂ Films with a Controllable Morphology. ACS Omega, 2020, 5, 10671-10679.	1.6	5
11	Solar-Powered Carbon Fixation for Food and Feed Production Using Microorganismsâ€”A Comparative Techno-Economic Analysis. ACS Omega, 2020, 5, 33242-33252.	1.6	16
12	Electrostatic and RF-properties of MEMS structures. , 2020, , 305-324.		0
13	Cast Monocrystalline Silicon: New Alternative for Micro- and Nano-Electromechanical Systems?. Journal of Microelectromechanical Systems, 2019, 28, 695-699.	1.7	0
14	Size- and density-controlled photodeposition of metallic platinum nanoparticles on titanium dioxide for photocatalytic applications. Journal of Materials Chemistry A, 2019, 7, 14519-14525.	5.2	20
15	Anderson Localization Quenches Thermal Transport in Aperiodic Superlattices. Physical Review Letters, 2019, 122, 105901.	2.9	76
16	Thermal conductivity suppression in GaAsâ€“AlAs coreâ€“shell nanowire arrays. Nanoscale, 2019, 11, 20507-20513.	2.8	9
17	Highly transparent copper iodide thin film thermoelectric generator on a flexible substrate. RSC Advances, 2019, 9, 35384-35391.	1.7	44
18	Inkjet Printed Largeâ€Area Flexible Fewâ€Layer Graphene Thermoelectrics. Advanced Functional Materials, 2018, 28, 1800480.	7.8	136

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19	CuI p-type thin films for highly transparent thermoelectric p-n modules. Scientific Reports, 2018, 8, 6867.	1.6	62
20	Silicon dioxide mask by plasma enhanced atomic layer deposition in focused ion beam lithography. Nanotechnology, 2017, 28, 085303.	1.3	5
21	Optimization of Cuprous Oxides Thin Films to be used as Thermoelectric Touch Detectors. ACS Applied Materials & Interfaces, 2017, 9, 6520-6529.	4.0	27
22	Excitation-dependent fluorescence from atomic/molecular layer deposited sodium-uracil thin films. Scientific Reports, 2017, 7, 6982.	1.6	13
23	Thermal conductivity of amorphous Al₂O₃/TiO₂nanolaminates deposited by atomic layer deposition. Nanotechnology, 2016, 27, 445704.	1.3	27
24	Fluorescence-enhancing plasmonic silver nanostructures using azopolymer lithography. RSC Advances, 2016, 6, 48129-48136.	1.7	9
25	Large-area thermoelectric high-aspect-ratio nanostructures by atomic layer deposition. Nanotechnology, 2016, 27, 355403.	1.3	15
26	Transparent, Flexible, and Passive Thermal Touch Panel. Advanced Materials Technologies, 2016, 1, 1600204.	3.0	20
27	Electrostatic and RF-Properties of MEMS Structures. , 2015, , 294-312.		2
28	Broadband laser polarization control with aligned carbon nanotubes. Nanoscale, 2015, 7, 11199-11205.	2.8	14
29	Coherent Terahertz Control of Vertical Transport in Semiconductor Heterostructures. Physical Review Letters, 2015, 114, 116802.	2.9	6
30	Measurement of thin film thermal conductivity using the laser flash method. Nanotechnology, 2015, 26, 195706.	1.3	29
31	Coherent Control of Correlation Transport between Semiconductor Quantum Wells. , 2015, , .		0
32	Light-harvesting zinc chlorin-poly(4-vinylpyridine) complexes. , 2014, , .		1
33	Focused ion beam lithography for fabrication of suspended nanostructures on highly corrugated surfaces. Nanotechnology, 2014, 25, 335302.	1.3	26
34	Improved SERS Intensity from Silverâ€Coated Black Silicon by Tuning Surface Plasmons. Advanced Materials Interfaces, 2014, 1, 1300008.	1.9	15
35	Influence of aluminium doping on thermoelectric performance of atomic layer deposited ZnO thin films. Applied Physics Letters, 2013, 103, 203903.	1.5	26
36	Sensitivity-improved silicon cantilever microphone for acousto-optical detection. Sensors and Actuators A: Physical, 2013, 190, 90-95.	2.0	17

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37	Biomimetic zinc chlorinâ€“poly(4-vinylpyridine) assemblies: doping level dependent emissionâ€“absorption regimes. Journal of Materials Chemistry C, 2013, 1, 2166.	2.7	24
38	Aluminum oxide mask fabrication by focused ion beam implantation combined with wet etching. Nanotechnology, 2013, 24, 175304.	1.3	7
39	High-quality crystallinity controlled ALD TiO_2 for waveguiding applications. Optics Letters, 2013, 38, 3980.	1.7	22
40	Towards broad-bandwidth polarization-independent nanostrip waveguide ring resonators. Optics Express, 2013, 21, 9974.	1.7	10
41	Fabrication of large-area plasmonic nanostructures for surface enhanced fluorescence. , 2013, , .		1
42	Drugs and precursor sensing by complementing low cost multiple techniques: overview of the European FP7 project CUSTOM. , 2012, , .		1
43	ALD-Assisted Multiorder Dispersion Engineering of Nanophotonic Strip Waveguides. Journal of Lightwave Technology, 2012, 30, 2488-2493.	2.7	15
44	Drug precursor vapor phase sensing by cantilever enhanced photoacoustic spectroscopy and quantum cascade laser. Proceedings of SPIE, 2012, , .	0.8	6
45	Design and fabrication of a tuning fork shaped voltage controlled resonator with additional tuning electrodes for low-voltage applications. Procedia Engineering, 2010, 5, 882-885.	1.2	3
46	Electrostatic and RF-Properties of MEMS Structures. , 2010, , 221-237.		3
47	The fabrication of silicon nanostructures by focused-ion-beam implantation and TMAH wet etching. Nanotechnology, 2010, 21, 145301.	1.3	59
48	Interaction-time-averaged optical pumping in alkali-metal-atom Doppler spectroscopy. Physical Review A, 2009, 80, .	1.0	16
49	Localized Gallium Doping and Cryogenic Deep Reactive Ion etching in Fabrication of Silicon Nanostructures. Materials Research Society Symposia Proceedings, 2009, 1181, 84.	0.1	1
50	Passively Q-switched Nd:YAG pumped UV lasers at 280 and 374nm. Optics Communications, 2009, 282, 2930-2933.	1.0	6
51	GHz-range FSK-reception with microelectromechanical resonators. Sensors and Actuators A: Physical, 2008, 142, 346-351.	2.0	15
52	Thermal tuning of laser pulse parameters in passively Q-switched Nd:YAG lasers. Applied Optics, 2008, 47, 4262.	2.1	14
53	Towards Micromechanical Radio: Overtone Excitations of a Microresonator Through the Nonlinearities of the Second and Third Order. Journal of Microelectromechanical Systems, 2008, 17, 363-369.	1.7	15
54	Correction to "Towards micromechanical radio: overtone excitations of a microresonator through the nonlinearities of the second and third order". Journal of Microelectromechanical Systems, 2008, 17, 1557-1557.	1.7	0

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55	Atomic layer deposition enhanced rapid dry fabrication of micromechanical devices with cryogenic deep reactive ion etching. Journal of Micromechanics and Microengineering, 2007, 17, 1731-1736.	1.5	16
56	Atomic layer deposited alumina (Al2O3) thin films on a high-Qmechanical silicon oscillator. Journal of Micromechanics and Microengineering, 2007, 17, 737-742.	1.5	19
57	Improvement of the Conversion Performance of a Resonating Multimode Microelectromechanical Mixer-Filter Through Parametric Amplification. IEEE Electron Device Letters, 2007, 28, 970-972.	2.2	17
58	Effect of optical pumping on alkali-atom Doppler-limited spectra. Journal of Modern Optics, 2007, 54, 2779-2793.	0.6	16
59	Fabrication and characterization of an ultrasensitive acousto-optical cantilever. Journal of Micromechanics and Microengineering, 2007, 17, 852-859.	1.5	31
60	Short pulse, high peak power, diode pumped, passively Q-switched 946nm Nd:YAG laser. Optics Communications, 2007, 273, 496-499.	1.0	17
61	Non-tilting out-of-plane mode high-Q mechanical silicon oscillator as a moving cavity mirror. Applied Physics B: Lasers and Optics, 2007, 88, 417-423.	1.1	2
62	Optical actuation of a macroscopic mechanical oscillator. Applied Physics B: Lasers and Optics, 2005, 81, 589-596.	1.1	12
63	Non-tilting out-of-plane mode high-Qmechanical silicon oscillator. Journal of Micromechanics and Microengineering, 2005, 15, 1848-1853.	1.5	7
64	Long-term stability of single-crystal silicon microresonators. Sensors and Actuators A: Physical, 2004, 115, 23-27.	2.0	41
65	Silicon Micromechanical Resonators for RF-Applications. Physica Scripta, 2004, T114, 181-183.	1.2	8
66	All-optical atomic clock based on coherent population trapping in ^85Rb. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 273.	0.9	120
67	<title>Optical interferometric detection of a mechanical silicon oscillator</title>. , 2002, 4755, 430.		0
68	A 12 MHz micromechanical bulk acoustic mode oscillator. Sensors and Actuators A: Physical, 2002, 101, 1-9.	2.0	125
69	Experiments with Coherent Î³ Fields: Gamma Echo and Related Phenomena. Hyperfine Interactions, 2001, 135, 167-190.	0.2	1
70	Compact external-cavity diode laser with a novel transmission geometry. Optics Communications, 2000, 174, 175-180.	1.0	20
71	Realization of the luminous-flux unit using a LED scanner for the absolute integrating-sphere method. Metrologia, 2000, 37, 595-598.	0.6	9
72	Quantum noise in the position measurement of a cavity mirror undergoing Brownian motion. Physical Review A, 1999, 60, 538-548.	1.0	53

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73	Interferometric measurements of the position of a macroscopic body: Towards observation of quantum limits. Physical Review A, 1999, 59, 1038-1044.	1.0	125
74	Stepwise phase modulation of atoms coupled to a quasicontinuum of states in a cavity. Journal of Modern Optics, 1998, 45, 23-33.	0.6	2
75	Low-energy elementary excitations of a trapped Bose-condensed gas. Physical Review A, 1997, 56, R3346-R3349.	1.0	98
76	Effect of a phase step on two-level atoms in a cavity. Optics Communications, 1996, 124, 271-276.	1.0	13
77	Floquet-state perturbation theory for the radio-frequency modulation of the MÃ¶ssbauer resonance. Physical Review A, 1996, 53, 1112-1119.	1.0	8
78	Invariant time object in particle tunnelling. Europhysics Letters, 1996, 33, 689-694.	0.7	2
79	Two-electron semiconductor gate. Physical Review B, 1995, 52, 10972-10978.	1.1	9
80	Semiclassical computations of time-dependent tunneling. Physical Review A, 1995, 51, 2826-2837.	1.0	22
81	MÃ¶ssbauer-NMR double resonance. Physical Review B, 1995, 52, 10268-10277.	1.1	18
82	Eu151MÃ¶ssbauer spectroscopy and x-ray-diffraction studies on thePb2Ba2EuCu3O8+Î´system. Physical Review B, 1994, 50, 16040-16043.	1.1	3
83	Precise determination of the hyperfine parameters of europium in multifluorite perovskites byEu151MÃ¶ssbauer spectroscopy. Physical Review B, 1994, 49, 15280-15286.	1.1	6
84	Europium substitution effects in superconductingYBa2Cu4O8synthesized under one atmosphere oxygen pressure. Physical Review B, 1994, 50, 4154-4158.	1.1	11
85	Theoretical aspects of double resonance phenomena in Mï¿½ssbauer spectroscopy. Hyperfine Interactions, 1993, 78, 397-401.	0.2	7
86	Stepwise phase modulation of recoilless gamma radiation in a coincidence experiment: Gamma echo. Physical Review B, 1993, 47, 7840-7846.	1.1	35
87	Characterization of the europium substituted superconducting Bi2Sr2CaCu2O8+yphase. Superconductor Science and Technology, 1992, 5, 476-481.	1.8	4
88	Observation of MÃ¶ssbauer resonance line splitting caused by Rabi oscillations. Physical Review Letters, 1992, 69, 2815-2818.	2.9	50
89	Europium-based high-temperature superconductors studied by x-ray diffraction andEu151MÃ¶ssbauer spectroscopy. Physical Review B, 1992, 46, 8534-8541.	1.1	16
90	Gamma echo. Physical Review Letters, 1991, 66, 2037-2040.	2.9	69

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91	Studies of hyperfine interactions inRBa2(Cu1-x 57Fex)3O7-Î´ high-T c superconductors. Hyperfine Interactions, 1990, 55, 1399-1403.	0.2	7
92	Characterization of superconductingBi2Sr2Canâ”1CunO4+2nphases withFe57MÃ¶ssbauer spectroscopy. Physical Review B, 1990, 42, 4212-4218.	1.1	18
93	Percolation models in granular high-Tcsuperconductors in the transition region. Physical Review B, 1989, 39, 7251-7254.	1.1	13
94	Short pulse, diode pumped, passively Q-switched Nd:YAG laser at 946 nm quadrupled for UV production. Journal of the European Optical Society-Rapid Publications, 0, 3, .	0.9	7
95	Thermoelectric Characteristics of InAs Nanowire Networks Directly Grown on Flexible Plastic Substrates. ACS Applied Energy Materials, 0, , .	2.5	3