Roberto Koropecki

List of Publications by Year
in descending order

75	774	516710 16	610901 24
papers	citations	h-index	g-index

77	77	77	740
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Normal incidence birefringence in nanoporous alumina. Optical Materials, 2021, 122, 111652.	3.6	0
2	Sensing anisotropic stresses with ferromagnetic nanowires. Applied Physics Letters, 2020, 116, .	3.3	7
3	Formation of lipid bilayers on the pore walls of macroporous silicon. Thin Solid Films, 2019, 672, 120-125.	1.8	3
4	Optical Losses in Hybrid Microcavity Based in Porous Semiconductors and its Application as Optic Chemical Sensor. Journal of Nano Research, 2019, 56, 158-167.	0.8	0
5	Negative thermal expansion of nanoporous anodic aluminum oxide membranes. Applied Physics Letters, 2019, 114, 111901.	3.3	7
6	Optical performance of hybrid porous siliconâ€“porous alumina multilayers. Journal of Applied Physics, 2018, 123, 183101.	2.5	9
7	Effects of Irradiation on Porous Silicon. , 2018, , 739-753.		3
8	White light from annealed porous silicon: Broadband emission from violet to the near infrared. Materials Letters, 2015, 150, 55-58.	2.6	3
9	Transmittance correlation of porous silicon multilayers used as a chemical sensor platform. Sensors and Actuators B: Chemical, 2015, 213, 164-170.	7.8	10
10	Structural Analysis of ZnO(:Al,Mg) Thin Films by X-ray Diffraction. , 2015, 8, 551-560.		26
11	Negative differential resistance in porous silicon devices at room temperature. Superlattices and Microstructures, 2015, 79, 45-53.	3.1	17
12	On the origin of white photoluminescence from ZnO nanocones/porous silicon heterostructures at room temperature. Superlattices and Microstructures, 2015, 79, 29-37.	3.1	22
13	Density of States in Thin Boron-Doped Microcrystalline Silicon Films Estimated from the Thermally Stimulated Conductivity Method. Acta Physica Polonica A, 2014, 125, 174-176.	0.5	0
14	Inverse Problem of Capillary Filling. Physical Review Letters, 2014, 112, 134502.	7.8	32
15	Effects of Irradiation on Porous Silicon. , 2014, , 1-14.		0
16	Effects of Irradiation on Porous Silicon. , 2014, , 505-519.		0
17	Effects of Irradiation on Porous Silicon. , 2014, , 1-15.		0
18	Structural mosaicity and electrical properties of pyrolytic SnO2:F thin films. Thin Solid Films, 2013, 531, 172-178.	1.8	19

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19	Switchable Electric Field Induced Diode Effect in Nanostructured Porous Silicon. IEEE Electron Device Letters, 2013, 34, 590-592.	3.9	2
20	Real-time study of protein adsorption kinetics in porous silicon. Colloids and Surfaces B: Biointerfaces, 2013, 111, 354-359.	5.0	9
21	Optofluidic Characterization of Nanoporous Membranes. Langmuir, 2013, 29, 2784-2789.	3.5	26
22	Vacuum-enhanced nickel-induced crystallization of hydrogenated amorphous silicon. Journal of Applied Physics, 2012, 112, 073506.	2.5	5
23	Rationally designed porous silicon as platform for optical biosensors. Thin Solid Films, 2012, 520, 6434-6439.	1.8	9
24	Current-voltage characteristics in macroporous silicon/SiOx/SnO2:F heterojunctions. Nanoscale Research Letters, 2012, 7, 419.	5.7	5
25	Structural properties of porous silicon/SnO2:F heterostructures. Thin Solid Films, 2012, 520, 4254-4258.	1.8	7
26	Capillary Filling in Nanostructured Porous Silicon. Langmuir, 2011, 27, 2067-2072.	3.5	50
27	Optimization of porous silicon multilayer as antireflection coatings for solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 3069-3073.	6.2	37
28	Kinetics of electron induced desorption of hydrogen in nanostructured porous silicon. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1453-1457.	1.8	5
29	Fano resonance in heavily doped porous silicon. Journal of Raman Spectroscopy, 2011, 42, 1405-1407.	2.5	5
30	Innovative design for optical porous silicon gas sensor. Sensors and Actuators B: Chemical, 2010, 149, 189-193.	7.8	31
31	Internal Strain Distribution in Freestanding Porous Silicon. Journal of the Electrochemical Society, 2009, 156, K215.	2.9	9
32	Infrared study of the oxidation of porous silicon: evidence of surface modes. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1546-1550.	0.8	4
33	Secondary electron emission in nanostructured porous silicon. Journal of Physics: Conference Series, 2009, 167, 012006.	0.4	4
34	Enhanced photoconductivity and fine response tuning in nanostructured porous silicon microcavities. Journal of Physics: Conference Series, 2009, 167, 012005.	0.4	4
35	Reversible Ion Induced Modification of Consequent Secondary Electron Emission in Porous Silicon. The Open Surface Science Journal, 2009, 1, 46-49.	2.0	4
36	Hydrogen isotopic substitution experiments in nanostructured porous silicon. Thin Solid Films, 2008, 516, 3729-3734.	1.8	2

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37	Polycrystalline silicon thin film solar cells prepared by PECVD-SPC. International Journal of Hydrogen Energy, 2008, 33, 3522-3525.	7.1	17
38	Microcrystalline silicon thin films: A review of physical properties. Microelectronics Journal, 2008, 39, 1292-1295.	2.0	5
39	Modulated photoconductivity in the high and low frequency regimes. Journal of Non-Crystalline Solids, 2008, 354, 2914-2917.	3.1	5
40	Low frequency modulated photoconductivity in semiconductors having multiple species of traps. Journal of Applied Physics, 2007, 101, 103705.	2.5	7
41	Role of hydrogen in the photoinduced evolution of porous silicon luminescence. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2150-2154.	0.8	10
42	Effect of boron on the microstructure of hydrogenated microcrystalline silicon thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 4134-4138.	0.8	4
43	Power-law photoconductivity time decay in nanocrystalline TiO₂thin films. Journal of Physics Condensed Matter, 2007, 19, 486205.	1.8	13
44	Determination of semiconductor band gap state parameters from photoconductivity measurements. II. Experimental results. Physical Review B, 2006, 73, .	3.2	25
45	Kinetics of the photoinduced evolution of the nanostructured porous silicon photoluminescence. Journal of Non-Crystalline Solids, 2006, 352, 1163-1166.	3.1	13
46	Determination of the density of states of semiconductors from steady-state photoconductivity measurements. Journal of Non-Crystalline Solids, 2006, 352, 1024-1027.	3.1	4
47	Photoinduced phenomena in nanostructured porous silicon. Thin Solid Films, 2006, 510, 169-174.	1.8	16
48	On the validity of defect density determinations by the recombination-regime modulated photoconductivity technique. Thin Solid Films, 2004, 449, 180-186.	1.8	1
49	Photo-oxidation effects in porous silicon luminescence. Physical Review B, 2004, 69, .	3.2	38
50	Infrared studies combined with hydrogen effusion experiments on nanostructured porous silicon. Journal of Non-Crystalline Solids, 2004, 338-340, 159-162.	3.1	20
51	Determination of the density of defect states by thermally stimulated conductivity studied from numerical simulations. Journal of Non-Crystalline Solids, 2004, 338-340, 322-325.	3.1	11
52	Post-growth annealing effects in compensated Î¼c-Si:H samples. Journal of Non-Crystalline Solids, 2004, 338-340, 430-433.	3.1	2
53	Density of states in the gap of amorphous semiconductors determined from modulated photocurrent measurements in the recombination regime. Journal of Applied Physics, 2002, 91, 8965-8969.	2.5	30
54	Energy-resolved photon flux dependence of the steady state photoconductivity in hydrogenated amorphous silicon: implications for the constant photocurrent method. Thin Solid Films, 2000, 376, 267-274.	1.8	6

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55	Light-induced creation of metastable defects in hydrogenated amorphous silicon studied by computer simulations of constant photocurrent measurements. Physical Review B, 1999, 59, 4568-4571.	3.2	12
56	Kinetics of the oxidation of GaAs(100) at high pressure: an Auger electron spectroscopy study. Surface and Coatings Technology, 1999, 122, 56-59.	4.8	2
57	Light-induced defects in hydrogenated amorphous silicon studied by the constant-photocurrent method. Physical Review B, 1997, 55, 9621-9627.	3.2	15
58	Conductivity dependence on the thickness of hydrogenated, amorphous silicon-carbon films. Thin Solid Films, 1997, 295, 287-294.	1.8	2
59	Effects of the carrier gas on properties of SnO2 deposited by pyrolysis. Solar Energy Materials and Solar Cells, 1995, 36, 327-337.	6.2	4
60	Annealingâ€induced effects on the stability of hydrogenated amorphous silicon. Journal of Applied Physics, 1995, 78, 5959-5964.	2.5	6
61	Effect of the deposition variables on amorphous silicon stability. Journal of Non-Crystalline Solids, 1993, 164-166, 259-262.	3.1	4
62	The thickness dependence of electronic properties of doped a-Si:H alloys. Journal of Physics Condensed Matter, 1993, 5, A339-A340.	1.8	0
63	Reply to â€˜â€˜Comment on â€˜Infrared study of the Siâ€H stretching band inaâ€SiC:Hâ€™ â€™â€™ [J. Appl. Phys. 69, 7805 (1991)]. Journal of Applied Physics, 1992, 71, 4092-4093.	2.5	2
64	Photoinduced effects in diamondlike hydrogenated amorphous carbon films. Journal of Non-Crystalline Solids, 1991, 137-138, 835-838.	3.1	3
65	Infrared study of the Siâ€H stretching band inaâ€SiC:H. Journal of Applied Physics, 1991, 69, 7805-7811.	2.5	28
66	Cathodoluminescence of Diamond-Like and Hydrogenated Amorphous Silicon Carbide Materials. Materials Research Society Symposia Proceedings, 1990, 192, 181.	0.1	1
67	Cathodoluminescence of diamondlike films deposited by glow discharge. Journal of Applied Physics, 1990, 68, 3786-3788.	2.5	0
68	Cathodo and photoluminescence studies of non-stoichiometric amorphous silicon carbide and nitride. Journal of Non-Crystalline Solids, 1989, 115, 42-44.	3.1	4
69	Direct evidence of porosity in carbonâ€rich hydrogenated amorphous silicon carbide films. Journal of Applied Physics, 1989, 66, 4544-4546.	2.5	27
70	Kinetics of the Staebler-Wronski effect. Physical Review B, 1987, 35, 1442-1445.	3.2	4
71	a-Si thin-film growth by sputtering: A Monte Carlo study. Physical Review B, 1987, 35, 7611-7617.	3.2	14
72	Oxygen depth profiling of high pressure DC-sputtered amorphous silicon. Applied Surface Science, 1986, 25, 321-326.	6.1	6

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73	Infrared study of the kinetics of oxidation in porous amorphous silicon. Journal of Applied Physics, 1986, 60, 1802-1807.	2.5	17
74	The role of surface in sputtered amorphous silicon: An oxidation study. Journal of Applied Physics, 1985, 58, 4251-4255.	2.5	1
75	Oxidation mechanisms in high pressure dc-sputtered a-Si films. Journal of Non-Crystalline Solids, 1985, 74, 11-17.	3.1	14