Pavla Nekvindova

List of Publications by Year
in descending order

90	1,036	516561 16	477173 29
papers	citations	h-index	g-index

90	90	90	1027
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Surface plasmon resonance biosensor based on integrated optical waveguide. Sensors and Actuators B: Chemical, 2001, 76, 8-12.	4.0	250
2	A surface plasmon resonance based integrated optical sensor. Sensors and Actuators B: Chemical, 1997, 39, 286-290.	4.0	88
3	Z-scan study of nonlinear absorption of gold nano-particles prepared by ion implantation in various types of silicate glasses. Optics Communications, 2012, 285, 2729-2733.	1.0	44
4	Flexible multimode polydimethyl-diphenylsiloxane optical planar waveguides. Journal of Materials Science: Materials in Electronics, 2018, 29, 5878-5884.	1.1	31
5	Preparation and optical properties of nanocrystalline diamond coatings for infrared planar waveguides. Thin Solid Films, 2016, 618, 130-133.	0.8	23
6	Annealed proton exchanged optical waveguides in lithium niobate: differences between the X- and Z-cuts. Optical Materials, 2002, 19, 245-253.	1.7	22
7	Design and investigation of properties of nanocrystalline diamond optical planar waveguides. Optics Express, 2013, 21, 8417.	1.7	22
8	The evaluation of the refractive indices of bulk and thick polydimethylsiloxane and polydimethyl-diphenylsiloxane elastomers by the prism coupling technique. Journal of Materials Science: Materials in Electronics, 2017, 28, 7951-7961.	1.1	22
9	The Investigation of the Waveguiding Properties of Silk Fibroin from the Visible to Near-Infrared Spectrum. Materials, 2018, 11, 112.	1.3	22
10	Properties of the Optical Planar Polymer Waveguides Deposited on Printed Circuit Boards. Radioengineering, 2015, 24, 442-448.	0.3	20
11	Saturable absorption of silver nanoparticles in glass for femtosecond laser pulses at 400 nm. Journal of Non-Crystalline Solids, 2015, 426, 159-163.	1.5	20
12	Study of Cu+, Ag+ and Au+ ion implantation into silicate glasses. Journal of Non-Crystalline Solids, 2010, 356, 2468-2472.	1.5	19
13	Near-infrared photoluminescence enhancement and radiative energy transfer in RE-doped zinc-silicate glass (REÂ=ÂHo, Er, Tm) after silver ion exchange. Journal of Non-Crystalline Solids, 2021, 557, 120580.	1.5	19
14	Erbium ion implantation into diamond â€“ measurement and modelling of the crystal structure. Physical Chemistry Chemical Physics, 2017, 19, 6233-6245.	1.3	18
15	The properties of free-standing epoxy polymer multi-mode optical waveguides. Microsystem Technologies, 2019, 25, 257-264.	1.2	18
16	RBS measurement of depth profiles of erbium incorporated into lithium niobate for optical amplifier applications. Nuclear Instruments & Methods in Physics Research B, 1998, 139, 208-212.	0.6	17
17	The influence of silver ion exchange on the luminescence properties of Er-Yb silicate glasses. Optical Materials, 2017, 72, 183-189.	1.7	15
18	Optical properties of laser-prepared Er- and Er,Yb-doped LiNbO3 waveguiding layers. Laser Physics, 2013, 23, 105819.	0.6	13

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19	Properties of Siloxane Based Optical Waveguides Deposited on Transparent Paper and Foil. Radioengineering, 2016, 25, 230-235.	0.3	13
20	The formation of silver metal nanoparticles by ion implantation in silicate glasses. Nuclear Instruments & Methods in Physics Research B, 2016, 371, 245-250.	0.6	13
21	Inorganicâ€“organic hybrid polymer optical planar waveguides for micro-opto-electro-mechanical systems (MOEMS). Microsystem Technologies, 2019, 25, 2249-2258.	1.2	13
22	Neutron depth profiling study of lithium niobate optical waveguides. Nuclear Instruments & Methods in Physics Research B, 1998, 141, 498-500.	0.6	12
23	A comparison of the structural changes and optical properties of LiNbO3, Al2O3 and ZnO after Er+ ion implantation. Nuclear Instruments & Methods in Physics Research B, 2014, 331, 182-186.	0.6	12
24	Er implantation into various cuts of ZnO â€“ experimental study and DFT modelling. Journal of Alloys and Compounds, 2020, 816, 152455.	2.8	12
25	Erbium ion implantation into different crystallographic cuts of lithium niobate. Optical Materials, 2012, 34, 652-659.	1.7	11
26	Waveguiding Er 3+ /Yb 3+ :LiNbO 3 films prepared by a solâ€“gel method using polyvinylpyrrolidone. Journal of Luminescence, 2016, 176, 260-265.	1.5	11
27	The influence of silver-ion doping using ion implantation on the luminescence properties of Erâ€“Yb silicate glasses. Nuclear Instruments & Methods in Physics Research B, 2016, 371, 350-354.	0.6	11
28	Properties of Multimode Optical Epoxy Polymer Waveguides Deposited on Silicon and TOPAS Substrate. Radioengineering, 2017, 26, 10-15.	0.3	11
29	The influence of copper and silver in various oxidation states on the photoluminescence of Ho3+/Yb3+ doped zinc-silicate glasses. Optical Materials, 2019, 91, 253-260.	1.7	11
30	Features of APE waveguides in different Er:LiNbO3 and (Er+Yb):LiNbO3 cuts: electrooptical coefficient r33. Optical Materials, 2003, 24, 527-535.	1.7	10
31	Au implantation into various types of silicate glasses. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 1575-1578.	0.6	10
32	Creation of Gold Nanoparticles in ZnO by Ion Implantationâ€“DFT and Experimental Studies. Nanomaterials, 2020, 10, 2392.	1.9	10
33	Characterization of Er:LiNbO3 and APE:Er:LiNbO3 by RBSâ€“channeling and XRD techniques. Surface and Interface Analysis, 2004, 36, 949-951.	0.8	9
34	Ion exchange as a new tool to evaluate and quantify glass homogeneity. Journal of Non-Crystalline Solids, 2010, 356, 1509-1513.	1.5	9
35	All-polymer silk-fibroin optical planar waveguides. Optical Materials, 2021, 114, 110932.	1.7	9
36	Near-infrared photoluminescence properties of Er/Yb- and Ho/Yb-doped multicomponent silicate glass â€“ The role of GeO2, Al2O3 and ZnO. Journal of Non-Crystalline Solids, 2022, 582, 121457.	1.5	9

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37	The possibility of tailoring the ne vs cLi relationship in lithium niobate optical waveguides. Optical Materials, 2001, 15, 269-278.	1.7	8
38	Influence of gallium on infrared luminescence in Er3+ doped Yb3Al5â˜'yGayO12 films grown by the liquid phase epitaxy. Journal of Luminescence, 2015, 164, 90-93.	1.5	8
39	Optical waveguides in Er:LiNbO3 fabricated by different techniques â€“ A comparison. Optical Materials, 2016, 53, 160-168.	1.7	8
40	The structural changes and optical properties of LiNbO3 after Er implantation using high ion fluencies. Nuclear Instruments & Methods in Physics Research B, 2014, 332, 74-79.	0.6	7
41	Coâ€implantation of Er and Yb ions into singleâ€crystalline and nanoâ€crystalline diamond. Surface and Interface Analysis, 2018, 50, 1218-1223.	0.8	7
42	Optical properties of deoxyribonucleic acid thin layers deposited on an elastomer substrate. Optical Materials Express, 2020, 10, 421.	1.6	7
43	Er+ medium energy ion implantation into lithium niobate. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 1332-1335.	0.6	6
44	Structural and waveguiding characteristics of Er3+:Yb3Al5â˜'yGayO12 films grown by the liquid phase epitaxy. Optical Materials, 2015, 49, 46-50.	1.7	6
45	Solâ€“gel-derived planar waveguides of Er3+:Yb3Al5O12 prepared by a polyvinylpyrrolidone-based method. Journal of Sol-Gel Science and Technology, 2016, 80, 531-537.	1.1	6
46	Erbium doping into lithium niobate and sapphire single crystal wafers. Journal of Materials Research, 2001, 16, 333-335.	1.2	5
47	Erbium doping into thin carbon optical layers. Thin Solid Films, 2003, 433, 363-366.	0.8	5
48	Modified solâ€“gel preparation of LiNbO3 target for PLD. Optical Materials, 2013, 35, 2540-2543.	1.7	5
49	Erbium Luminescence Centres in Single- and Nano-Crystalline Diamondâ€”Effects of Ion Implantation Fluence and Thermal Annealing. Micromachines, 2018, 9, 316.	1.4	5
50	Magnetism and optical properties of Yb3Al5O12 hosted Er3+Ââ€“Âexperiment and theory. Journal of Alloys and Compounds, 2019, 810, 151903.	2.8	5
51	Distinct defect appearance in Gd implanted polar and nonpolar ZnO surfaces in connection to ion channeling effect. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, 061406.	0.9	5
52	Damage formation and Er structural incorporation in m-plane and a-plane ZnO. Nuclear Instruments & Methods in Physics Research B, 2019, 460, 38-46.	0.6	5
53	The Characterisation of Silicate Glasses Implanted with Ag[sup +] Ions. , 2011, , .		4
54	A study of the behaviour of copper in different types of silicate glasses implanted with Cu + and O + ions. Nuclear Instruments & Methods in Physics Research B, 2017, 406, 193-198.	0.6	4

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55	Electro-optic glass for light modulators. Journal of Non-Crystalline Solids, 2019, 518, 51-56.	1.5	4
56	Material Analyses and Modification on the Tandetron Accelerator. AIP Conference Proceedings, 2007, , .	0.3	3
57	Study of Er+ ion-implanted lithium niobate structure after an annealing procedure by RBS and RBS/channelling. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 2042-2045.	0.6	3
58	The influence of nanostructured optical fiber core matrix on the optical properties of EDFA. Proceedings of SPIE, 2013, , .	0.8	3
59	Erbium-ion implantation into various crystallographic cuts of Al2O3. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 89-93.	0.6	3
60	Ageing of PVP/LiNbO3 solutions and its impact on the optical properties of Er3+/Yb3+:LiNbO3 waveguiding films. Journal of Physics and Chemistry of Solids, 2017, 111, 343-348.	1.9	3
61	Erbium luminescence in various photonic crystalline and glass materials - a review. , 2017, , .		3
62	Water-soluble polymers as chelating agents for the deposition of Er3+/Yb3+:LiNbO3 waveguiding films. Journal of Sol-Gel Science and Technology, 2018, 86, 274-284.	1.1	3
63	Femtosecond laser induced two-photon absorption in Au-ion embedded glasses. Laser and Particle Beams, 2019, 37, 61-66.	0.4	3
64	THE EFFECT OF VARIOUS SILICATE-GLASS MATRIXES ON GOLD-NANOPARTICLE FORMATION. Ceramics - Silikaty, 2016, , 52-58.	0.2	3
65	Localized moderate-temperature Er3+doping into optical crystals. , 1999, , .		2
66	Comparison of crystal lattice changes caused by APE treatment of Er:LiNbO3 and by localised Er doping into LiNbO3 obtained by RBS-channeling and XRD analysis. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 391-394.	0.6	2
67	Electric field-assisted erbium doping of LiNbO3 from melt. Scripta Materialia, 2013, 68, 739-742.	2.6	2
68	Erbium diffusion from erbium metal or erbium oxide layers deposited on the surface of various LiNbO3 cuts. Optical Materials, 2013, 36, 402-407.	1.7	2
69	Gain determination of optical active doped planar waveguides. , 2017, , .		2
70	Energetic Au ion beam implantation of ZnO nanopillars for optical response modulation. Journal Physics D: Applied Physics, 2022, 55, 215101.	1.3	2
71	Importance of crystal structure of the substrate for diffusion technologies of waveguides fabrication. Solid State Sciences, 2001, 3, 1245-1247.	0.8	1
72	<title>Thin carbon and carbon nitride films for passive and active optical waveguides</title>. , 2001, 4281, 114.		1

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73	Characterisation of hydrogen and erbium in carbon layers fabricated by PACVD for optical applications. Nuclear Instruments & Methods in Physics Research B, 2002, 188, 112-114.	0.6	1
74	Lithium Migration Based Fabrication of Few-Modes Planar Glass Waveguides. Solid State Phenomena, 2003, 90-91, 577-582.	0.3	1
75	Simple way of fabrication of Epoxy Novolak Resin optical waveguides on silicon substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2942-2945.	0.8	1
76	Burying of channel optical waveguides: relation between near-field measurement and Ag concentration profile. , 2015, , .		1
77	Characterization of fluorescence lifetime of Tm-doped fibers with increased quantum conversion efficiency. , 2015, , .		1
78	Comparison of SIMS and RBS for depth profiling of silica glasses implanted with metal ions. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 03H129.	0.6	1
79	Possibility of tailoring n e vs. c Li relations in lithium niobate optical waveguides for sensors applications. , 1999, 3858, 190.		0
80	Crystal cut dependent H+and Er3+doping into lithium niobate and sapphire. , 2001, , .		0
81	Erbium Medium Temperature Localised Doping into Lithium Niobate and Sapphire: A Comparative Study. Solid State Phenomena, 2003, 90-91, 559-564.	0.3	0
82	Properties of the APE waveguides fabricated in Er:LiNbO 3 and (Er+Yb):LiNbO 3. , 2003, , .		0
83	Carbon layers for integrated optics. , 2003, , .		0
84	Erbium localized doping into various cuts of lithium niobate and sapphire: a comparative study. , 2003, , .		0
85	Fabrication and properties of few-modes planar lithium glass waveguides. , 2003, 5036, 576.		0
86	Optical spectroscopic properties of Er3+ions in LiNbO 3 planar waveguides produced by annealed proton exchange. , 2003, , .		0
87	Optical and laser properties of new Er:Yb zinc-silicate glasses. , 2012, , .		0
88	Polymer planar optical waveguides for optical interconnections. , 2015, , .		0
89	Modification of Er:YbAG film microstructure with a sintering agent. IOP Conference Series: Materials Science and Engineering, 2017, 266, 012004.	0.3	0
90	Polyethylene glycol (PEG) used in the preparation of (Er3+/Yb3+):LiNbO3waveguides. IOP Conference Series: Materials Science and Engineering, 2017, 266, 012011.	0.3	0