

# Sang-Yung Shin

## List of Publications by Year in descending order

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88  
papers

1,354  
citations

361413

20  
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395702

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88  
all docs

88  
docs citations

88  
times ranked

752  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design of corrugated waveguide filters by the Gelâ€™fandâ€™Levitanâ€™Marchenko inverse-scattering method. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 1985, 2, 1905.	1.5	152
2	Ultrashort Polarization Splitter Using Two-Mode Interference in Silicon Photonic Wires. <i>IEEE Photonics Technology Letters</i> , 2009, 21, 432-434.	2.5	96
3	Optical implementation of the Hopfield model for two-dimensional associative memory. <i>Optics Letters</i> , 1988, 13, 248.	3.3	94
4	Hybrid plasmonic waveguide for low-loss lightwave guiding. <i>Optics Express</i> , 2010, 18, 2808.	3.4	68
5	Fabrication of polymeric large-core waveguides for optical interconnects using a rubber molding process. <i>IEEE Photonics Technology Letters</i> , 2000, 12, 62-64.	2.5	44
6	Dynamic gain and output power control in a gain-flattened erbium-doped fiber amplifier. <i>IEEE Photonics Technology Letters</i> , 1998, 10, 787-789.	2.5	41
7	Low Optical Loss Perfluorinated Methacrylates for a Single-Mode Polymer Waveguide. <i>Chemistry of Materials</i> , 2005, 17, 962-966.	6.7	41
8	Tunable polymer waveguide notch filter using a thermo-optic long-period grating. <i>IEEE Photonics Technology Letters</i> , 2005, 17, 145-147.	2.5	40
9	Fabrication of Ridge Waveguides by UV Embossing and Stamping of Sol-Gel Hybrid Materials. <i>IEEE Photonics Technology Letters</i> , 2004, 16, 1888-1890.	2.5	34
10	Perturbation analysis of bistability and period doubling bifurcations in directly-modulated laser diodes. <i>IEEE Journal of Quantum Electronics</i> , 1989, 25, 1993-2000.	1.9	32
11	Simple and fast numerical analysis of multilayer waveguide modes. <i>Optics Communications</i> , 2004, 233, 119-126.	2.1	31
12	Poling-induced waveguide polarizers in electrooptic polymers. <i>IEEE Photonics Technology Letters</i> , 1996, 8, 375-377.	2.5	29
13	Lithium niobate integrated-optic voltage sensor with variable sensing ranges. <i>Optics Communications</i> , 1998, 152, 225-228.	2.1	29
14	Tunable Notch Filter Using a Thermo-optic Long-Period Grating. <i>Journal of Lightwave Technology</i> , 2004, 22, 1968-1975.	4.6	28
15	Characteristics of polymer waveguide notch filters using thermo-optic long-period gratings. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2005, 11, 190-196.	2.9	26
16	Characterizations of realized metal-insulator-silicon-insulator-metal waveguides and nanochannel fabrication via insulator removal. <i>Optics Express</i> , 2012, 20, 21875.	3.4	25
17	Programmable quadratic associative memory using holographic lenslet arrays. <i>Optics Letters</i> , 1989, 14, 838.	3.3	24
18	0.1-nm narrow bandwidth transmission of a 2.5-Gb/s spectrum-sliced incoherent light channel using an all-optical bandwidth expansion technique at the receiver. <i>IEEE Photonics Technology Letters</i> , 1998, 10, 1501-1503.	2.5	24

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19	Refractive index sensitivity measurement of a long-period waveguide grating. IEEE Photonics Technology Letters, 2005, 17, 1923-1925.	2.5	24
20	Integrated optical high-voltage sensor using a Z-cut LiNbO <sub>3</sub> /cutoff modulator. IEEE Photonics Technology Letters, 1993, 5, 996-999.	2.5	21
21	TE-TM mode converter in a poled-polymer waveguide. IEEE Journal of Quantum Electronics, 1996, 32, 1054-1062.	1.9	21
22	Optical implementation of quadratic associative memory with outer-product storage. Optics Letters, 1988, 13, 693.	3.3	20
23	Silicon Photonic Wire Filter Using Asymmetric Sidewall Long-Period Waveguide Grating in a Two-Mode Waveguide. IEEE Photonics Technology Letters, 2008, 20, 520-522.	2.5	19
24	2.5 Gbit/s transmission of spectrum-sliced fibre amplifier light source channels over 200 km of dispersion-shifted fibre. Electronics Letters, 1995, 31, 989-991.	1.0	18
25	Vertical Digital Thermo-optic Switch in Polymer. IEEE Photonics Technology Letters, 2004, 16, 783-785.	2.5	18
26	Inverse scattering problem for the coupled-wave equations when the reflection coefficient is a rational function. Proceedings of the IEEE, 1983, 71, 266-268.	21.3	17
27	Simulation of polarization converter formed by poling-induced polymer waveguides. IEEE Journal of Quantum Electronics, 1995, 31, 1698-1704.	1.9	16
28	Polymer waveguide notch filter using two stacked thermo-optic long-period gratings. IEEE Photonics Technology Letters, 2005, 17, 792-794.	2.5	14
29	Silver Stripe Optical Waveguide for Chip-to-Chip Optical Interconnections. IEEE Photonics Technology Letters, 2009, 21, 902-904.	2.5	14
30	Scattering by right angle dielectric wedge. IEEE Transactions on Antennas and Propagation, 1984, 32, 61-69.	0.8	13
31	Control of mode profiles in proton-diffused LiNbO <sub>3</sub> /waveguides using self-aligned SiO <sub>2</sub> /cladding. IEEE Photonics Technology Letters, 1990, 2, 184-186.	2.5	13
32	Grating-assisted codirectional coupler filter using electro-optic and passive polymer waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2001, 7, 819-825.	2.9	13
33	TAG: A Neural Network Model for Large-Scale Optical Implementation. Neural Computation, 1991, 3, 135-143.	2.2	12
34	TM-pass polarizer based on a photobleaching-induced waveguide in polymers. IEEE Photonics Technology Letters, 1998, 10, 836-838.	2.5	12
35	Tunable Polarization-Dependent Loss Element Based on Acousto-optic Mode Coupling in a Polarization-Maintaining Fiber. IEEE Photonics Technology Letters, 2004, 16, 1510-1512.	2.5	12
36	Tunable channel-drop filters consisting of polymeric Bragg reflectors and a mode sorting asymmetric X-junction. Optics Express, 2015, 23, 17223.	3.4	12

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37	Polymeric polarization-independent modulator incorporating twisted optic-axis waveguide polarization converters. IEEE Photonics Technology Letters, 1996, 8, 1483-1485.	2.5	11
38	Polarisation-insensitive digital optical switch using an electro-optic polymer rib waveguide. Electronics Letters, 1997, 33, 314.	1.0	11
39	Four-branch single-mode waveguide power divider. IEEE Photonics Technology Letters, 1998, 10, 1760-1762.	2.5	11
40	Multiply Reflected Gaussian Beams in a Circular Cross Section. IEEE Transactions on Microwave Theory and Techniques, 1978, 26, 845-851.	4.6	10
41	Perturbation solution of self-pulsing in semiconductor lasers with a saturable absorber. IEEE Journal of Quantum Electronics, 1994, 30, 1396-1404.	1.9	10
42	Spectral tailoring of uniform long-period waveguide grating by the cladding thickness control. Optics Communications, 2005, 250, 41-47.	2.1	10
43	Fabrication of LiNbO <sub>3</sub> channel waveguides using water. IEEE Photonics Technology Letters, 1992, 4, 457-459.	2.5	9
44	Integrated optical high-voltage sensor based on a polymeric Y-branch digital optical switch. IEEE Photonics Technology Letters, 1996, 8, 921-923.	2.5	9
45	Patterned birefringence by photoinduced depoling in electro-optic polymers and its application to a waveguide polarization splitter. Applied Physics Letters, 1998, 73, 3052-3054.	3.3	9
46	Limit of optical pulsewidth in the gain-switched DFB semiconductor laser. IEEE Photonics Technology Letters, 1999, 11, 782-784.	2.5	9
47	Experimental demonstration of a long-period grating based on the sampling theorem. Applied Physics Letters, 2006, 88, 211103.	3.3	9
48	Polarisation-independent phase modulator using electro-optic polymer. Electronics Letters, 2000, 36, 969.	1.0	9
49	Polymeric digital optical switch incorporating linear branch with modified coupling region. Electronics Letters, 1999, 35, 1245.	1.0	8
50	Parallel N <sup>4</sup> weighted optical interconnections: comments. Applied Optics, 1988, 27, 4364.	2.1	7
51	Double component long period waveguide grating filter in sol-gel material. Optics Express, 2007, 15, 15147.	3.4	7
52	Optical path monitoring based on the identification of optical cross-connect input ports. , 0, , .		6
53	Fabrication of an integrated optical filter using a large-core multimode waveguide vertically coupled to a single-mode waveguide. Optics Express, 2003, 11, 2211.	3.4	6
54	Thermally stable optical characteristics of sol-gel hybrid material films. Applied Physics Letters, 2006, 88, 101916.	3.3	6

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55	Investigation and Improvement of 90° Direct Bends of Metal-Insulator-Silicon-Insulator-Metal Waveguides. IEEE Photonics Journal, 2013, 5, 6601909-6601909.	2.0	6
56	1-4 thermo-optic switch based on four-branch waveguide. Electronics Letters, 1999, 35, 1546.	1.0	5
57	Electro-optic polymer digital optical switch with photobleached waveguides and a self-aligned electrode. Optics Communications, 1997, 138, 298-300.	2.1	4
58	Post-fabrication tuning of a polymeric grating-assisted codirectional coupler filter by photobleaching. Optics Communications, 2001, 194, 309-312.	2.1	4
59	Design and analysis of a vertical directional coupler between a three-dimensional plasmonic slot waveguide and a silicon waveguide. Optics Communications, 2011, 284, 3522-3527.	2.1	4
60	Arrayed waveguide collimators for integrating free-space optics on polymeric waveguide devices. Optics Express, 2014, 22, 23801.	3.4	4
61	Inhomogeneous wave tracking in anisotropic media. Proceedings of the IEEE, 1974, 62, 1609-1610.	21.3	3
62	Optical neural-net analog-to-digital converter. Optics Letters, 1989, 14, 159.	3.3	3
63	Proton-diffused channel waveguides on Y-cut LiNbO <sub>3</sub> using a self-aligned SiO <sub>2</sub> -cap diffusion method. , 1991, , ,		3
64	Theoretical investigation of a notch filter using a long-period grating based on the sampling theorem. Optics Communications, 2006, 263, 214-218.	2.1	3
65	An asymptotic approximation of linear-chirped grating filter response. Optics Communications, 1983, 44, 371-376.	2.1	2
66	Y-cut LiNbO <sub>3</sub> directional coupler with a self-aligned electrode. Journal of Lightwave Technology, 1994, 12, 872-875.	4.6	2
67	Simple analytical expression for the effect of initial interaction in - cerenkov second-harmonic generation. IEEE Journal of Quantum Electronics, 2003, 39, 516-522.	1.9	2
68	Optical implementation of associative memory with controlled bit-significance. Applied Optics, 1988, 27, 1921.	2.1	1
69	Explicit vector beam propagation method for uniaxial poled polymer waveguide devices. , 0, , ,		1
70	Optical path monitoring and path dependent loss compensation for optical cross-connect systems. , 0, , ,		1
71	Poling-Induced Waveguide Polarizers in Electro-Optic Polymers. , 1996, , ,		1
72	Mode determination of a general multilayer waveguide using a simple and fast numerical method. , 2003, , ,		1

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73	<title>Modified TAG neural network for large-scale optical implementation</title>. , 1992, , .		0
74	Proton-outdiffusion effects on the domain inversion during the heat treatment of a proton-exchanged lithium tantalate. , 0, , .		0
75	Optical adaptive neural networks with a ground glass for global random interconnections and local gain controls. Optical and Quantum Electronics, 1995, 27, 519-525.	3.3	0
76	Lithium niobate integrated optical devices for voltage sensors. , 0, , .		0
77	Integrated Optical High-Voltage Sensor Based on a Polymeric Digital Optical Switch. , 1996, , .		0
78	TM-pass polarizer based on a photobleaching-induced waveguide in polymers. , 0, , .		0
79	Polarization splitter using asymmetric sidewall long-period waveguide gratings in a two-mode silicon waveguide. , 2008, , .		0
80	Influence of the Parameters of a Heater Array Inducing a Thermo-optic Long-Period Grating on Its Power Consumption. Journal of Lightwave Technology, 2009, 27, 1108-1113.	4.6	0
81	Tunable wavelength filters based on dual polymer Bragg gratings and a mode sorting waveguide. , 2015, , .		0
82	Filter using vertical coupling between a single-mode waveguide and a multimode waveguide. , 2002, , .		0
83	Refractive Index Sensitivity and Post-Fabrication Tuning in a Long-Period Waveguide Grating. , 2005, , .		0
84	Optical Implementation of Neural Networks with Fixed Global Interconnection and Local Adaptive Gain-Control. , 1990, , 611-614.		0
85	OPTICAL TAG NEURAL NETWORKS FOR LARGE-SCALE IMPLEMENTATION. , 1991, , 1529-1532.		0
86	Proton Exchanged LiNbO3 Ridge Waveguide Fabricated by Wet Etching Process. , 1995, , .		0
87	Blue Light Generation in a Lithium Tantalate Waveguide Domain-Inverted by Heat Treatment with a Mask. , 1996, , .		0
88	1 $\mu$ m—4 thermo-optic switch based on the 4-branch waveguide. , 0, , .		0