Shuo-Yen Tseng

List of Publications by Year
in descending order

65	1,042	361296	434063
papers	citations	20 h-index	31 g-index

65	65	65	611
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Engineering of fast mode conversion in multimode waveguides. Optics Letters, 2012, 37, 5118.	1.7	70
2	Short and robust directional couplers designed by shortcuts to adiabaticity. Optics Express, 2014, 22, 18849.	1.7	53
3	Short and broadband silicon asymmetric Y-junction two-mode (de)multiplexer using fast quasiadiabatic dynamics. Optics Express, 2017, 25, 13626.	1.7	52
4	Short and robust silicon mode (de)multiplexers using shortcuts to adiabaticity. Optics Express, 2015, 23, 10405.	1.7	51
5	Mode conversion using optical analogy of shortcut to adiabatic passage in engineered multimode waveguides. Optics Express, 2012, 20, 24085.	1.7	46
6	Vibrational Mode Multiplexing of Ultracold Atoms. Physical Review Letters, 2013, 111, 213001.	2.9	45
7	Compact and high conversion efficiency mode-sorting asymmetric Y junction using shortcuts to adiabaticity. Optics Letters, 2014, 39, 2306.	1.7	45
8	Robust coupled-waveguide devices using shortcuts to adiabaticity. Optics Letters, 2014, 39, 6600.	1.7	43
9	Ultrashort and broadband silicon polarization splitter-rotator using fast quasiadiabatic dynamics. Optics Express, 2018, 26, 9655.	1.7	42
10	Variable splitting ratio 2 Ã— 2 MMI couplers using multimode waveguide holograms. Optics Express, 2007, 15, 9015.	1.7	40
11	Shortcuts to adiabaticity in optical waveguides using fast quasiadiabatic dynamics. Optics Express, 2017, 25, 159.	1.7	39
12	Optimization of adiabaticity in coupled-waveguide devices using shortcuts to adiabaticity. Optics Letters, 2015, 40, 4831.	1.7	35
13	Third-harmonic generation and its applications in optical image processing. Journal of Materials Chemistry, 2009, 19, 7394.	6.7	31
14	Implementation of discrete unitary transformations by multimode waveguide holograms. Applied Optics, 2006, 45, 4864.	2.1	29
15	Counterdiabatic mode-evolution based coupled-waveguide devices. Optics Express, 2013, 21, 21224.	1.7	29
16	Analysis of optical directional couplers using shortcuts to adiabaticity. Optics Express, 2016, 24, 18322.	1.7	28
17	Mode-evolution-based silicon-on-insulator 3â€‰â€‰dB coupler using fast quasiadiabatic dynamics. Optics Letters, 2019, 44, 815.	1.7	28
18	Adiabatic Mode Conversion in Multimode Waveguides Using Computer-Generated Planar Holograms. IEEE Photonics Technology Letters, 2010, 22, 1211-1213.	1.3	21

#	Article	IF	Citations
19	Fast and Robust Beam Coupling in a Three Waveguide Directional Coupler. IEEE Photonics Technology Letters, 2013, 25, 2478-2481.	1.3	21
20	Enhanced optical confinement and lasing characteristics of individual urchin-like ZnO microstructures prepared by oxidation of metallic Zn. Nanoscale Research Letters, 2014, 9, 178.	3.1	20
21	Robust silicon arbitrary ratio power splitters using shortcuts to adiabaticity. Optics Express, 2020, 28, 10350.	1.7	20
22	Thick Opticalâ€Quality Films of Substituted Polyacetylenes with Large, Ultrafast Thirdâ€Order Nonlinearities and Application to Image Correlation. Advanced Materials, 2008, 20, 3199-3203.	11.1	18
23	Mode Conversion/Splitting in Multimode Waveguides Based on Invariant Engineering. Journal of Lightwave Technology, 2013, 31, 3387-3394.	2.7	18
24	Variable-ratio power splitters using computer-generated planar holograms on multimode interference couplers. Optics Letters, 2009, 34, 512.	1.7	17
25	Measurement of complex ?(3) using degenerate four-wave mixing with an imaged 2-D phase grating. Optics Express, 2006, 14, 8737.	1.7	16
26	Short-length and robust polarization rotators in periodically poled lithium niobate via shortcuts to adiabaticity. Optics Express, 2014, 22, 24169.	1.7	16
27	Polarized and diameter-dependent Raman scattering from individual aluminum nitride nanowires: The antenna and cavity effects. Applied Physics Letters, 2012, 101, 121902.	1.5	15
28	Robust arbitrary ratio power splitter by fast quasi-adiabatic elimination in optical waveguides. Optics Express, 2019, 27, 37622.	1.7	15
29	Adiabaticity engineering in optical waveguides. Optics Express, 2020, 28, 30117.	1.7	15
30	Mode Conversion/Splitting by Optical Analogy of Multistate Stimulated Raman Adiabatic Passage in Multimode Waveguides. Journal of Lightwave Technology, 2010, , .	2.7	14
31	Adiabatic Mode Conversion in Multimode Waveguides Using Chirped Computer-Generated Planar Holograms. IEEE Photonics Technology Letters, 2011, 23, 807-809.	1.3	12
32	Compact beam splitters in coupled waveguides using shortcuts to adiabaticity. Journal of Optics (United Kingdom), 2018, 20, 045804.	1.0	12
33	Compact and robust 2ÂÃ—Â2 fast quasi-adiabatic 3-dB couplers on SOI strip waveguides. Optics and Laser Technology, 2022, 145, 107485.	2.2	12
34	Shortcut to Mode Conversion via Level Crossing in Engineered Multimode Waveguides. IEEE Photonics Technology Letters, 2014, 26, 123-126.	1.3	9
35	Compact polarization-independent quasi-adiabatic 2Ã—2 3 dB coupler on silicon. Optics Express, 2022, 30, 995.	1.7	9
36	Ultrafast optical image processing based on third-harmonic generation in organic thin films. Applied Physics Letters, 2007, 91, 131110.	1.5	8

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37	High fabrication tolerance and broadband silicon polarization beam splitter by point-symmetric cascaded fast quasiadiabatic couplers. OSA Continuum, 2019, 2, 2795.	1.8	6
38	Compact and self-aligned all-optical image correlator based on third-harmonic generation. Optics Letters, 2007, 32, 2599.	1.7	5
39	Synthesis of a 4 $imes$ 4 Walshâ€“Hadamard Transformer Using Long-Period Waveguide Grating Arrays. IEEE Photonics Technology Letters, 2009, 21, 972-974.	1.3	5
40	Robust silicon 3-dB coupler using inverse engineering based optimization. Japanese Journal of Applied Physics, 2018, 57, 08PC01.	0.8	5
41	Robust coherent superposition of states using quasiadiabatic inverse engineering. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 205501.	0.6	4
42	Robust Light Coupling in a Quadratically Bent Directional Coupler. IEEE Photonics Technology Letters, 2021, 33, 343-346.	1.3	4
43	Shortcut to adiabaticity in a silicon polarization splitter rotator using multi-wavelength adiabaticity engineering. Optics Express, 2022, 30, 8115.	1.7	3
44	Temporal Evolution of the Polarization State of Optical Pulses Under the Effect of Polarization-Mode Dispersion. IEEE Photonics Technology Letters, 2004, 16, 1206-1208.	1.3	2
45	Difficulties involving dynamic polarization-based impairment measurements using Jones matrices. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 1848.	0.9	2
46	Linear and nonlinear optical properties of highly transmissive one-dimensional metal-organic photonic bandgap structures. , 2008, , .		2
47	Diffraction engineering of multimode waveguides using computer-generated planar holograms. Optics Express, 2009, 17, 21465.	1.7	2
48	Design and simulation of multimode interference based demultiplexers aided by computer-generated planar holograms. Optics Express, 2010, 18, 11270.	1.7	2
49	The fast quasiadiabatic approach to optical waveguide design. , 2019, , .		2
50	Shortcut to adiabaticity in bent waveguidecouplers with a sign flip of the phase mismatch. Optics Express, 0, , .	1.7	2
51	Bandwidth Analysis of Waveguide Mode Converters Based on Optical Analogy of Stimulated Raman Adiabatic Passage in Engineered Multimode Waveguides. IEEE Photonics Journal, 2011, 3, 1198-1205.	1.0	1
52	Variable Ratio Power Splitters using Computer-Generated Planar Holograms on 2Ã—2 Multimode Interference Couplers. , 2009, , .		1
53	A technique for measuring complex χ⁽³⁾ using DFWM with an imaged 2-D phase grating. , 2006, , .		0
54	Coherent pulse injection into a monolithic passively mode-locked laser. , 2008, , .		0

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55	Third-harmonic generation in organic thin films as an alternative to degenerate four-wave mixing ultrafast optical image processing. , 2008, , .		0
56	Nonlinear refraction and absorption in highly transmissive one-dimensional metal-organic photonic bandgap structures. , 2008, , .		0
57	Adiabaticity analysis of mode conversion using quantum-optical analogy in multimode waveguides. , 2012, , .		0
58	Fast mode splitting in engineered multimode waveguides. , 2013, , .		0
59	Robust waveguide beam splitter using shortcuts to adiabaticity. , 2015, , .		0
60	Robust silicon 3-dB coupler using inverse engineering based optimization. , 2017, , .		0
61	Adaptation of a Commercially Available Laser Raman Spectrometer for Underwater Chemical Sensing. , 2019, , .		0
62	Fast Quasiadiabatic 2Ã—2 Broadband 3-dB Couplers on SOI Strip Waveguides. , 2018, , .		0
63	Ultrashort and broadband silicon polarization splitter-rotator using fast quasiadiabatic dynamics. , 2018, , .		0
64	Athermal Silicon Power Splitter using Shortcuts to Adiabaticity. , 2020, , .		0
65	Ultra-Broadband Silicon Polarization Splitter-Rotator using Adiabaticity Engineering. , 2021, , .		0