## Gustavo S Wiederhecker

## List of Publications by Citations

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41 1,481 16 38 g-index

89 1,942 8.8 4.41 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
41	Controlling photonic structures using optical forces. <i>Nature</i> , <b>2009</b> , 462, 633-6	50.4	247
40	Synchronization of micromechanical oscillators using light. <i>Physical Review Letters</i> , <b>2012</b> , 109, 233906	7.4	238
39	Stimulated Brillouin scattering from multi-GHz-guided acoustic phonons in nanostructured photonic crystal fibres. <i>Nature Physics</i> , <b>2006</b> , 2, 388-392	16.2	192
38	Field enhancement within an optical fibre with a subwavelength air core. <i>Nature Photonics</i> , <b>2007</b> , 1, 115	5-11.8	125
37	Models for guidance in kagome-structured hollow-core photonic crystal fibres. <i>Optics Express</i> , <b>2007</b> , 15, 12680-5	3.3	88
36	Raman-like light scattering from acoustic phonons in photonic crystal fiber. <i>Optics Express</i> , <b>2006</b> , 14, 4141-50	3.3	72
35	High quality factor etchless silicon photonic ring resonators. <i>Optics Express</i> , <b>2011</b> , 19, 6284-9	3.3	70
34	Brillouin scattering self-cancellation. <i>Nature Communications</i> , <b>2016</b> , 7, 11759	17.4	64
33	Dielectric resonator antenna for applications in nanophotonics. <i>Optics Express</i> , <b>2013</b> , 21, 1234-9	3.3	49
32	Broadband tuning of optomechanical cavities. <i>Optics Express</i> , <b>2011</b> , 19, 2782-90	3.3	41
31	Real-time vibrations of a carbon nanotube. <i>Nature</i> , <b>2019</b> , 566, 89-93	50.4	32
30	Brillouin optomechanics in nanophotonic structures. APL Photonics, 2019, 4, 071101	5.2	32
29	Coherent control of ultrahigh-frequency acoustic resonances in photonic crystal fibers. <i>Physical Review Letters</i> , <b>2008</b> , 100, 203903	7.4	31
28	Optical excitation and characterization of gigahertz acoustic resonances in optical fiber tapers. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 131110	3.4	28
27	Power insensitive silicon microring resonators. <i>Optics Letters</i> , <b>2012</b> , 37, 590-2	3	22
26	Embedded coupled microrings with high-finesse and close-spaced resonances for optical signal processing. <i>Optics Express</i> , <b>2014</b> , 22, 10430-8	3.3	21
25	Brillouin Optomechanics in Coupled Silicon Microcavities. <i>Scientific Reports</i> , <b>2017</b> , 7, 43423	4.9	16

## (2013-2015)

24	Spectral engineering with coupled microcavities: active control of resonant mode-splitting. <i>Optics Letters</i> , <b>2015</b> , 40, 3332-5	3	14
23	Eliminating anchor loss in optomechanical resonators using elastic wave interference. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 051904	3.4	14
22	Ultrahigh-Q optomechanical crystal cavities fabricated in a CMOS foundry. <i>Scientific Reports</i> , <b>2017</b> , 7, 2491	4.9	13
21	Hybrid confinement of optical and mechanical modes in a bullseye optomechanical resonator. <i>Optics Express</i> , <b>2017</b> , 25, 508-529	3.3	13
20	Quasinormal-Mode Perturbation Theory for Dissipative and Dispersive Optomechanics. <i>Physical Review Letters</i> , <b>2020</b> , 125, 233601	7.4	9
19	Influence of air-filling fraction on forward Raman-like scattering by transversely trapped acoustic resonances in photonic crystal fibers. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2009</b> , 26, 1641	1.7	9
18	Modeling quasi-dark states with temporal coupled-mode theory. <i>Optics Express</i> , <b>2016</b> , 24, 18960-72	3.3	8
17	Efficient anchor loss suppression in coupled near-field optomechanical resonators. <i>Optics Express</i> , <b>2017</b> , 25, 31347-31361	3.3	5
16	Alumina coating for dispersion management in ultra-high Q microresonators. <i>APL Photonics</i> , <b>2020</b> , 5, 116107	5.2	5
15	Self-Sustained Laser Pulsation in Active Optomechanical Devices. <i>IEEE Photonics Journal</i> , <b>2018</b> , 10, 1-10	1.8	4
14	Dispersion tailoring in wedge microcavities for Kerr comb generation. <i>Optics Letters</i> , <b>2020</b> , 45, 3232-323	35	4
13	Efficient Frequency Conversion at Low-Powers in a Silicon Microresonator Using Carrier Extraction <b>2011</b> ,		2
12	Ar/Cl2 etching of GaAs optomechanical microdisks fabricated with positive electroresist. <i>Optical Materials Express</i> , <b>2020</b> , 10, 57	2.6	2
11	Bright and Vivid DiffractivePlasmonic Reflective Filters for Color Generation. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 1111-1117	5.6	2
10	High-frequency GaAs optomechanical bullseye resonator. APL Photonics, 2021, 6, 016104	5.2	2
9	Synchronization of Coupled Optomechanical Oscillators 2012,		1
8	Optomechanical synchronization across multi-octave frequency spans. <i>Nature Communications</i> , <b>2021</b> , 12, 5625	17.4	1
7	Enhanced Q with Internally Coupled Microring Resonators <b>2013</b> ,		1

6	Intermodal Brillouin scattering in solid-core photonic crystal fibers. APL Photonics, 2021, 6, 036108	5.2	1
5	Tunable Photonic Molecules for Spectral Engineering in Dense Photonic Integration <b>2016</b> , 337-348		1
4	Designing of strongly confined short-wave Brillouin phonons in silicon waveguide periodic lattices. <i>Optics Express</i> , <b>2021</b> , 29, 1736-1748	3.3	1
3	Accurate modeling and characterization of photothermal forces in optomechanics. <i>APL Photonics</i> , <b>2021</b> , 6, 086101	5.2	1
2	Historical perspective and basic principles. Semiconductors and Semimetals, 2022, 1-25	0.6	
1	Theoretical formalisms for stimulated Brillouin scattering. Semiconductors and Semimetals, 2022, 27-9	91 0.6	