

Gustavo S Wiederhecker

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6327481/gustavo-s-wiederhecker-publications-by-year.pdf>

Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

41 papers	1,481 citations	16 h-index	38 g-index
89 ext. papers	1,942 ext. citations	8.8 avg, IF	4.41 L-index

#	Paper	IF	Citations
41	Historical perspective and basic principles. <i>Semiconductors and Semimetals</i> , 2022 , 1-25	0.6	
40	Theoretical formalisms for stimulated Brillouin scattering. <i>Semiconductors and Semimetals</i> , 2022 , 27-91	0.6	
39	Optomechanical synchronization across multi-octave frequency spans. <i>Nature Communications</i> , 2021 , 12, 5625	17.4	1
38	Intermodal Brillouin scattering in solid-core photonic crystal fibers. <i>APL Photonics</i> , 2021 , 6, 036108	5.2	1
37	High-frequency GaAs optomechanical bullseye resonator. <i>APL Photonics</i> , 2021 , 6, 016104	5.2	2
36	Designing of strongly confined short-wave Brillouin phonons in silicon waveguide periodic lattices. <i>Optics Express</i> , 2021 , 29, 1736-1748	3.3	1
35	Accurate modeling and characterization of photothermal forces in optomechanics. <i>APL Photonics</i> , 2021 , 6, 086101	5.2	1
34	Quasinormal-Mode Perturbation Theory for Dissipative and Dispersive Optomechanics. <i>Physical Review Letters</i> , 2020 , 125, 233601	7.4	9
33	Dispersion tailoring in wedge microcavities for Kerr comb generation. <i>Optics Letters</i> , 2020 , 45, 3232-3235		4
32	Ar/Cl ₂ etching of GaAs optomechanical microdisks fabricated with positive electroresist. <i>Optical Materials Express</i> , 2020 , 10, 57	2.6	2
31	Bright and Vivid Diffractive Plasmonic Reflective Filters for Color Generation. <i>ACS Applied Nano Materials</i> , 2020 , 3, 1111-1117	5.6	2
30	Alumina coating for dispersion management in ultra-high Q microresonators. <i>APL Photonics</i> , 2020 , 5, 116107	5.2	5
29	Real-time vibrations of a carbon nanotube. <i>Nature</i> , 2019 , 566, 89-93	50.4	32
28	Brillouin optomechanics in nanophotonic structures. <i>APL Photonics</i> , 2019 , 4, 071101	5.2	32
27	Self-Sustained Laser Pulsation in Active Optomechanical Devices. <i>IEEE Photonics Journal</i> , 2018 , 10, 1-10	1.8	4
26	Brillouin Optomechanics in Coupled Silicon Microcavities. <i>Scientific Reports</i> , 2017 , 7, 43423	4.9	16
25	Ultrahigh-Q optomechanical crystal cavities fabricated in a CMOS foundry. <i>Scientific Reports</i> , 2017 , 7, 2491	4.9	13

24	Hybrid confinement of optical and mechanical modes in a bullseye optomechanical resonator. <i>Optics Express</i> , 2017 , 25, 508-529	3.3	13
23	Efficient anchor loss suppression in coupled near-field optomechanical resonators. <i>Optics Express</i> , 2017 , 25, 31347-31361	3.3	5
22	Brillouin scattering self-cancellation. <i>Nature Communications</i> , 2016 , 7, 11759	17.4	64
21	Modeling quasi-dark states with temporal coupled-mode theory. <i>Optics Express</i> , 2016 , 24, 18960-72	3.3	8
20	Tunable Photonic Molecules for Spectral Engineering in Dense Photonic Integration 2016 , 337-348		1
19	Spectral engineering with coupled microcavities: active control of resonant mode-splitting. <i>Optics Letters</i> , 2015 , 40, 3332-5	3	14
18	Embedded coupled microrings with high-finesse and close-spaced resonances for optical signal processing. <i>Optics Express</i> , 2014 , 22, 10430-8	3.3	21
17	Eliminating anchor loss in optomechanical resonators using elastic wave interference. <i>Applied Physics Letters</i> , 2014 , 105, 051904	3.4	14
16	Dielectric resonator antenna for applications in nanophotonics. <i>Optics Express</i> , 2013 , 21, 1234-9	3.3	49
15	Enhanced Q with Internally Coupled Microring Resonators 2013 ,		1
14	Synchronization of micromechanical oscillators using light. <i>Physical Review Letters</i> , 2012 , 109, 233906	7.4	238
13	Synchronization of Coupled Optomechanical Oscillators 2012 ,		1
12	Power insensitive silicon microring resonators. <i>Optics Letters</i> , 2012 , 37, 590-2	3	22
11	Broadband tuning of optomechanical cavities. <i>Optics Express</i> , 2011 , 19, 2782-90	3.3	41
10	High quality factor etchless silicon photonic ring resonators. <i>Optics Express</i> , 2011 , 19, 6284-9	3.3	70
9	Efficient Frequency Conversion at Low-Powers in a Silicon Microresonator Using Carrier Extraction 2011 ,		2
8	Controlling photonic structures using optical forces. <i>Nature</i> , 2009 , 462, 633-6	50.4	247
7	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> , 2009 , 26, 1641	1.7	9

6	Optical excitation and characterization of gigahertz acoustic resonances in optical fiber tapers. <i>Applied Physics Letters</i> , 2008 , 93, 131110	3.4	28
5	Coherent control of ultrahigh-frequency acoustic resonances in photonic crystal fibers. <i>Physical Review Letters</i> , 2008 , 100, 203903	7.4	31
4	Field enhancement within an optical fibre with a subwavelength air core. <i>Nature Photonics</i> , 2007 , 1, 115-118	11.8	125
3	Models for guidance in kagome-structured hollow-core photonic crystal fibres. <i>Optics Express</i> , 2007 , 15, 12680-5	3.3	88
2	Raman-like light scattering from acoustic phonons in photonic crystal fiber. <i>Optics Express</i> , 2006 , 14, 4141-50	3.3	72
1	Stimulated Brillouin scattering from multi-GHz-guided acoustic phonons in nanostructured photonic crystal fibres. <i>Nature Physics</i> , 2006 , 2, 388-392	16.2	192