Olivier D Bernal

List of Publications by Year
in descending order

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40 papers	659 citations	567281 15 h-index	610901 24 g-index
40 all docs	40 docs citations	40 times ranked	320 citing authors

#	Article	IF	Citations
1	High-sensitivity integrated SiN rib-waveguide long period grating refractometer. Photonics Research, 2022, 10, 564.	7.0	8
2	Toward an Estimation of the Optical Feedback Factor C on the Fly for Displacement Sensing. Sensors, 2021, 21, 3528.	3.8	5
3	Integrated Width-Modulated SiN Long Period Grating Designed for Refractometric Applications. Journal of Lightwave Technology, 2021, 39, 4820-4827.	4.6	5
4	Variable Optical Feedback-Based Behavioral Model of a Self-Mixing Laser Sensor. IEEE Sensors Journal, 2021, 21, 16568-16575.	4.7	3
5	Nanometric Vibration Sensing Using Spectral Processing of Laser Self-Mixing Feedback Phase. IEEE Sensors Journal, 2021, 21, 17766-17774.	4.7	13
6	Detection of Multimodal Fringes for Self-Mixing-Based Vibration Measurement. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 258-267.	4.7	20
7	Integrated Silicon Nitride Horizontal Long Period Grating for Refractometric Gas Sensing applications. , 2020, , .		2
8	High Resolution Laser Self-Mixing Displacement Sensor Under Large Variation in Optical Feedback and Speckle. IEEE Sensors Journal, 2020, 20, 9140-9147.	4.7	24
9	Sub-Î»/2 Displacement Sensor With Nanometric Precision Based on Optical Feedback Interferometry Used as a Non-Uniform Event-Based Sampling System. IEEE Sensors Journal, 2020, 20, 5195-5203.	4.7	19
10	Adaptive Estimation and Reduction of Noises Affecting a Self-Mixing Interferometric Laser Sensor. IEEE Sensors Journal, 2020, 20, 9806-9815.	4.7	15
11	Spectral Processing of Self-Mixing Interferometric Signal Phase for Improved Vibration Sensing Under Weak- and Moderate-Feedback Regime. IEEE Sensors Journal, 2019, 19, 11151-11158.	4.7	29
12	A high performance real-time Interferometry Sensor System Architecture. Microprocessors and Microsystems, 2019, 64, 23-33.	2.8	10
13	Comprehensive Modeling of Multimode Fiber Sensors for Refractive Index Measurement and Experimental Validation. Scientific Reports, 2018, 8, 5912.	3.3	23
14	Automatic Detection of Multi-Modality in Self-Mixing Interferometer. IEEE Sensors Journal, 2018, 18, 9195-9202.	4.7	8
15	New Stability Method of a Multirate Controller for a Three-Axis High-<inline-formula> <tex-math notation="LaTeX">Q </tex-math> </inline-formula> MEMS Accelerometer With Simultaneous Electrostatic Damping. IEEE Sensors Journal, 2018, 18, 6106-6114.	4.7	5
16	Real time Discrete Wavelet Transform architecture for self mixing interferometry signal processing. , 2017, , .		2
17	All Analog Processing of Speckle Affected Self-Mixing Interferometric Signals. IEEE Sensors Journal, 2017, 17, 5892-5899.	4.7	23
18	Analysis and Implementation of a Direct Phase Unwrapping Method for Displacement Measurement Using Self-Mixing Interferometry. IEEE Sensors Journal, 2017, 17, 7425-7432.	4.7	36

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19	Adaptive Cancellation of Parasitic Vibrations Affecting a Self-Mixing Interferometric Laser Sensor. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 332-339.	4.7	35
20	Detection of Self-Mixing Interferometric Fringes of a Laser Sensor Using Matched Filter. Proceedings (mdpi), 2017, 1, .	0.2	0
21	Current Developments on Optical Feedback Interferometry as an All-Optical Sensor for Biomedical Applications. Sensors, 2016, 16, 694.	3.8	41
22	A High Performance Real-Time FGPA-Based Interferometry Sensor Architecture. , 2016, , .		1
23	Hardware implementation of metric algorithms for a self-mixing laser interferometric sensor. , 2016, , .		6
24	Robust Detection of Non-Regular Interferometric Fringes From a Self-Mixing Displacement Sensor Using Bi-Wavelet Transform. IEEE Sensors Journal, 2016, 16, 7903-7910.	4.7	32
25	Multimode semiconductor lasers for adaptive self-mixing sensors. , 2015, , .		0
26	Classification of laser self-mixing interferometric signal under moderate feedback. Applied Optics, 2014, 53, 702.	1.8	34
27	Radiation hardened bootstrapped switch in 0.18μm CMOS process. , 2014, , .		2
28	Low Noise CMOS Analog Front-End Circuit With an 8-bit 1-MS/s ADC for Silicon Sensors for Space Applications. IEEE Sensors Journal, 2014, 14, 1617-1624.	4.7	4
29	Design and Analysis of an Embedded Accelerometer Coupled Self-Mixing Laser Displacement Sensor. IEEE Sensors Journal, 2013, 13, 2200-2207.	4.7	34
30	Study of Laser Feedback Phase Under Self-Mixing Leading to Improved Phase Unwrapping for Vibration Sensing. IEEE Sensors Journal, 2013, 13, 4962-4971.	4.7	59
31	Self-Mixing Laser Sensor for Large Displacements: Signal Recovery in the Presence of Speckle. IEEE Sensors Journal, 2013, 13, 824-831.	4.7	46
32	Real time self-mixing interferometric laser sensor for embedded applications. IOP Conference Series: Materials Science and Engineering, 2013, 51, 012016.	0.6	1
33	Robust real-time self-mixing interferometric laser vibration sensor with embedded MEMS accelerometer. , 2012, , .		0
34	A Low-Power CMOS Instrumentation Chain for Microchannel Plates in Astrophysics. IEEE Sensors Journal, 2011, 11, 1040-1045.	4.7	4
35	MEMS accelerometer embedded in a self-mixing displacement sensor for parasitic vibration compensation. Optics Letters, 2011, 36, 612.	3.3	27
36	A 64-channel readout ASIC for nanowire biosensor array with electrical calibration scheme. , 2010, 2010, 3491-4.		3

#	Article	IF	Citations
37	A low-power high-performance accelerometer ASIC for high-end medical motion sensing. , 2010, 2010, 190-3.		5
38	A precision relaxation oscillator with a self-clocked offset-cancellation scheme for implantable biomedical SoCs. , 2009, , .		73
39	Non-linearity in high gain CMOS buffer amplifiers for CCD processor applications. , 2007, , .		1
40	A Clamping Circuit Architecture Implementing Charges Injection Reduction Techniques. , 2006, , .		1