

Olivier D Bernal

List of Publications by Year in descending order

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Version: 2024-02-01

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	A precision relaxation oscillator with a self-locked offset-cancellation scheme for implantable biomedical SoCs. , 2009, , .		73
2	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
3	Self-Mixing Laser Sensor for Large Displacements: Signal Recovery in the Presence of Speckle. IEEE Sensors Journal, 2013, 13, 824-831.	4.7	46
4	Current Developments on Optical Feedback Interferometry as an All-Optical Sensor for Biomedical Applications. Sensors, 2016, 16, 694.	3.8	41
5	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
6	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
7	Design and Analysis of an Embedded Accelerometer Coupled Self-Mixing Laser Displacement Sensor. IEEE Sensors Journal, 2013, 13, 2200-2207.	4.7	34
8	Classification of laser self-mixing interferometric signal under moderate feedback. Applied Optics, 2014, 53, 702.	1.8	34
9	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
10	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
11	MEMS accelerometer embedded in a self-mixing displacement sensor for parasitic vibration compensation. Optics Letters, 2011, 36, 612.	3.3	27
12	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
13	All Analog Processing of Speckle Affected Self-Mixing Interferometric Signals. IEEE Sensors Journal, 2017, 17, 5892-5899.	4.7	23
14	Comprehensive Modeling of Multimode Fiber Sensors for Refractive Index Measurement and Experimental Validation. Scientific Reports, 2018, 8, 5912.	3.3	23
15	Detection of Multimodal Fringes for Self-Mixing-Based Vibration Measurement. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 258-267.	4.7	20
16	Sub- $\lambda/2$ 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
17	Adaptive Estimation and Reduction of Noises Affecting a Self-Mixing Interferometric Laser Sensor. IEEE Sensors Journal, 2020, 20, 9806-9815.	4.7	15
18	Nanometric Vibration Sensing Using Spectral Processing of Laser Self-Mixing Feedback Phase. IEEE Sensors Journal, 2021, 21, 17766-17774.	4.7	13

#	ARTICLE	IF	CITATIONS
19	A high performance real-time Interferometry Sensor System Architecture. Microprocessors and Microsystems, 2019, 64, 23-33.	2.8	10
20	Automatic Detection of Multi-Modality in Self-Mixing Interferometer. IEEE Sensors Journal, 2018, 18, 9195-9202.	4.7	8
21	High-sensitivity integrated SiN rib-waveguide long period grating refractometer. Photonics Research, 2022, 10, 564.	7.0	8
22	Hardware implementation of metric algorithms for a self-mixing laser interferometric sensor. , 2016, , .		6
23	A low-power high-performance accelerometer ASIC for high-end medical motion sensing. , 2010, 2010, 190-3.		5
24	New Stability Method of a Multirate Controller for a Three-Axis High- ω MEMS Accelerometer With Simultaneous Electrostatic Damping. IEEE Sensors Journal, 2018, 18, 6106-6114.	4.7	5
25	Toward an Estimation of the Optical Feedback Factor C on the Fly for Displacement Sensing. Sensors, 2021, 21, 3528.	3.8	5
26	Integrated Width-Modulated SiN Long Period Grating Designed for Refractometric Applications. Journal of Lightwave Technology, 2021, 39, 4820-4827.	4.6	5
27	A Low-Power CMOS Instrumentation Chain for Microchannel Plates in Astrophysics. IEEE Sensors Journal, 2011, 11, 1040-1045.	4.7	4
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	A 64-channel readout ASIC for nanowire biosensor array with electrical calibration scheme. , 2010, 2010, 3491-4.		3
30	Variable Optical Feedback-Based Behavioral Model of a Self-Mixing Laser Sensor. IEEE Sensors Journal, 2021, 21, 16568-16575.	4.7	3
31	Radiation hardened bootstrapped switch in 0.18 μ m CMOS process. , 2014, , .		2
32	Real time Discrete Wavelet Transform architecture for self mixing interferometry signal processing. , 2017, , .		2
33	Integrated Silicon Nitride Horizontal Long Period Grating for Refractometric Gas Sensing applications. , 2020, , .		2
34	A Clamping Circuit Architecture Implementing Charges Injection Reduction Techniques. , 2006, , .		1
35	Non-linearity in high gain CMOS buffer amplifiers for CCD processor applications. , 2007, , .		1
36	Real time self-mixing interferometric laser sensor for embedded applications. IOP Conference Series: Materials Science and Engineering, 2013, 51, 012016.	0.6	1

#	ARTICLE	IF	CITATIONS
37	A High Performance Real-Time FPGA-Based Interferometry Sensor Architecture. , 2016, , .		1
38	Robust real-time self-mixing interferometric laser vibration sensor with embedded MEMS accelerometer. , 2012, , .		0
39	Multimode semiconductor lasers for adaptive self-mixing sensors. , 2015, , .		0
40	Detection of Self-Mixing Interferometric Fringes of a Laser Sensor Using Matched Filter. Proceedings (mdpi), 2017, 1, .	0.2	0