

Stoyan Nihtianov

List of Publications by Year in descending order

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papers

714
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567281

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all docs

37
docs citations

37
times ranked

839
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparative Study of Silicon-Based Ultraviolet Photodetectors. IEEE Sensors Journal, 2012, 12, 2453-2459.	4.7	134
2	Advances in Capacitive, Eddy Current, and Magnetic Displacement Sensors and Corresponding Interfaces. IEEE Transactions on Industrial Electronics, 2017, 64, 9595-9607.	7.9	83
3	Eddy-Current Sensor Interface for Advanced Industrial Applications. IEEE Transactions on Industrial Electronics, 2011, 58, 4414-4423.	7.9	63
4	Measuring in the Subnanometer Range: Capacitive and Eddy Current Nanodisplacement Sensors. IEEE Industrial Electronics Magazine, 2014, 8, 6-15.	2.6	43
5	A Novel Interface for Eddy Current Displacement Sensors. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 1623-1632.	4.7	37
6	Capacitive-Sensor Interface With High Accuracy and Stability. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 1633-1639.	4.7	37
7	An Energy-Efficient 3.7-nV/μHz Bridge Readout IC With a Stable Bridge Offset Compensation Scheme. IEEE Journal of Solid-State Circuits, 2019, 54, 856-864.	5.4	37
8	An Interface for Eddy-Current Displacement Sensors With 15-bit Resolution and 20 MHz Excitation. IEEE Journal of Solid-State Circuits, 2013, 48, 2868-2881.	5.4	30
9	Power-Efficient High-Speed and High-Resolution Capacitive-Sensor Interface for Subnanometer Displacement Measurements. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1315-1322.	4.7	28
10	A Precision Capacitance-to-Digital Converter With 16.7-bit ENOB and 7.5-ppm/$^{\circ}\text{C}$ Thermal Drift. IEEE Journal of Solid-State Circuits, 2017, 52, 3018-3031.	5.4	28
11	Electrical and Optical Performance Investigation of Si-Based Ultrashallow-Junction $\text{p}^+\text{-n}$ VUV/EUV Photodiodes. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1268-1277.	4.7	26
12	A 19.8-mW Eddy-Current Displacement Sensor Interface With Sub-Nanometer Resolution. IEEE Journal of Solid-State Circuits, 2018, 53, 2273-2283.	5.4	22
13	Stability Characterization of High-Sensitivity Silicon-Based EUV Photodiodes in a Detrimental Environment. IEEE Sensors Journal, 2013, 13, 1699-1707.	4.7	20
14	Demodulation Techniques for Self-Oscillating Eddy-Current Displacement Sensor Interfaces: A Review. IEEE Sensors Journal, 2017, 17, 2617-2624.	4.7	20
15	A 4.5 nV/μHz Capacitively Coupled Continuous-Time Sigma-Delta Modulator with an Energy-Efficient Chopping Scheme. IEEE Solid-State Circuits Letters, 2018, 1, 18-21.	2.0	18
16	An eddy-current displacement-to-digital converter based on a ratio-metric delta-sigma ADC. , 2014, , .		9
17	New Trends in Smart Sensors for Industrial Applications - Part I. IEEE Transactions on Industrial Electronics, 2017, 64, 7281-7283.	7.9	8
18	A doping-less junction-formation mechanism between n-silicon and an atomically thin boron layer. Scientific Reports, 2017, 7, 13247.	3.3	8

#	ARTICLE	IF	CITATIONS
19	A 117-dB In-Band CMRR 98.5-dB SNR Capacitance-to-Digital Converter for Sub-nm Displacement Sensing With an Electrically Floating Target. IEEE Solid-State Circuits Letters, 2020, 3, 9-12.	2.0	8
20	Power-Efficiency Evolution of Capacitive Sensor Interfaces. IEEE Sensors Journal, 2021, 21, 12457-12468.	4.7	8
21	A Power-Efficient Readout for Wheatstone-Bridge Sensors With COTS Components. IEEE Sensors Journal, 2017, 17, 6986-6994.	4.7	7
22	Suppression Efficiency of the Correlated-noise and Drift of Self-oscillating Pseudo-differential Eddy Current Displacement Sensor. Procedia Engineering, 2016, 168, 946-949.	1.2	5
23	Backside illuminated CMOS image sensors for extreme ultraviolet applications. , 2014, , .		4
24	Design trade-offs of a capacitance-to-voltage converter with a zoom-in technique for grounded capacitive sensors. International Journal of Circuit Theory and Applications, 2018, 46, 2231-2247.	2.0	4
25	Interfaces between crystalline Si and amorphous B: Interfacial interactions and charge barriers. Physical Review B, 2021, 103, .	3.2	4
26	9.9 A 0.6nm resolution 19.8mW eddy-current displacement sensor interface with 126MHz excitation. , 2017, , .		3
27	An accurate and power-efficient period-modulator-based interface for grounded capacitive sensors. International Journal of Circuit Theory and Applications, 2019, 47, 1211-1224.	2.0	3
28	An Energy Efficiency Figure of Merit for Radio Transceivers. , 2019, , .		3
29	New Trends in Smart Sensors for Industrial Applications”Part II. IEEE Transactions on Industrial Electronics, 2017, 64, 9592-9594.	7.9	3
30	Characterization Challenges of a Low Noise Charge Detection ROIC. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-8.	4.7	3
31	Low-Temperature PureB CVD Technology for CMOS Compatible Photodetectors. , 2016, , .		2
32	Response Time of Detectors Based on a Boron-Silicon Junction. , 2018, , .		2
33	Mechanism of Electronegativity Heterojunction of Nanometer Amorphous-Boron on Crystalline Silicon: An Overview. Crystals, 2021, 11, 108.	2.2	2
34	Highly-Stable Electronic Sensor Interface for Capacitive Position Measurement. Key Engineering Materials, 2014, 613, 51-57.	0.4	1
35	Power Consumption Optimization of a Wireless Temperature Sensor Node Using Unidirectional Communication. , 2019, , .		1
36	Shieldless Eddy-Current Displacement Sensor with Improved Measurement Sensitivity. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
37	Guest Editorial Special Issue on Advanced Interface Circuits for Autonomous Smart Sensors. IEEE Sensors Journal, 2020, 20, 13880-13880.	4.7	0