Vincenzo Stornelli

List of Publications by Citations

167 papers	1,861 citations	25 h-index	33 g-index
197 ext. papers	2,392 ext. citations	2.5 avg, IF	5.31 L-index

#	Paper	IF	Citations
167	Electronic interfaces. *Sensors and Actuators B: Chemical*, **2007**, 121, 295-329	8.5	80
166	Low-voltage low-power integrated analog lock-in amplifier for gas sensor applications. *Sensors and Actuators B: Chemical*, **2010**, 144, 400-406	8.5	61
165	. *IEEE Sensors Journal*, **2009**, 9, 2035-2041	4	44
164	A single-chip integrated interfacing circuit for wide-range resistive gas sensor arrays. *Sensors and Actuators B: Chemical*, **2009**, 143, 218-225	8.5	41
163	. *IEEE Transactions on Instrumentation and Measurement*, **2008**, 57, 1596-1604	5.2	40
162	The VCG-CCII: a novel building block and its application to capacitance multiplication. *Analog Integrated Circuits and Signal Processing*, **2009**, 58, 55-59	1.2	38
161	Class AB tunable active inductor. *Electronics Letters*, **2015**, 51, 65-67	1.1	37
160	Solar Photovoltaic Panels Combined with Energy Storage in a Residential Building: An Economic Analysis. *Sustainability*, **2018**, 10, 3117	3.6	37
159	. *IEEE Transactions on Instrumentation and Measurement*, **2010**, 59, 1276-1283	5.2	36
158	High performance voltage output filter realizations using second generation voltage conveyor. *International Journal of RF and Microwave Computer-Aided Engineering*, **2018**, 28, e21534	1.5	35
157	A CCII-BASED HIGH IMPEDANCE INPUT STAGE FOR BIOMEDICAL APPLICATIONS. *Journal of Circuits, Systems and Computers*, **2011**, 20, 1441-1447	0.9	34
156	A novel low-voltage low-power fully differential voltage and current gained CCII for floating impedance simulations. *Microelectronics Journal*, **2009**, 40, 20-25	1.8	34
155	A single current conveyor-based low voltage low power bootstrap circuit for ElectroCardioGraphy and ElectroEncephaloGraphy acquisition systems. *Analog Integrated Circuits and Signal Processing*, **2014**, 79, 171-175	1.2	32
154	LOW VOLTAGE LOW POWER FULLY DIFFERENTIAL BUFFER. *Journal of Circuits, Systems and Computers*, **2009**, 18, 497-502	0.9	32
153	. *IEEE Transactions on Instrumentation and Measurement*, **2018**, 67, 885-893	5.2	31
152	Fully differential DDA-based fifth and seventh order Bessel low pass filters and buffers for DCR radio systems. *Analog Integrated Circuits and Signal Processing*, **2013**, 75, 305-310	1.2	30
151	An Overview on the Second Generation Voltage Conveyor: Features, Design and Applications. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2019**, 66, 547-551	3.5	30

150	A low-voltage low-power 0.25 μm integrated single transistor active inductor-based filter. *Analog Integrated Circuits and Signal Processing*, **2016**, 87, 463-469	1.2	29
149	A first approach to universal daylight and occupancy control system for any lamps: Simulated case in an academic classroom. *Energy and Buildings*, **2017**, 152, 24-39	7	28
148	. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2011**, 58, 647-651	3.5	28
147	An integrated improved CCII topology for resistive sensor application. *Analog Integrated Circuits and Signal Processing*, **2006**, 48, 247-250	1.2	28
146	Dual band harvester architecture for autonomous remote sensors. *Sensors and Actuators A: Physical* , **2016**, 247, 598-603	3.9	26
145	Novel CMOS fully integrable interface for wide-range resistive sensor arrays with parasitic capacitance estimation. *Sensors and Actuators B: Chemical*, **2008**, 130, 207-215	8.5	26
144	Integrated Rail-to-Rail Low-Voltage Low-Power Enhanced DC-Gain Fully Differential Operational Transconductance Amplifier. *ETRI Journal*, **2007**, 29, 785-793	1.4	26
143	Single transistor high linearity and wide dynamic range active inductor. *International Journal of Circuit Theory and Applications*, **2015**, 43, 277-285	2	25
142	Low-noise tunable filter design by means of active components. *Electronics Letters*, **2016**, 52, 86-88	1.1	25
141	RF and microwave high-Q floating active inductor design and implementation. *International Journal of Circuit Theory and Applications*, **2015**, 43, 1095-1104	2	25
140	Uncalibrated integrable wide-range single-supply portable interface for resistance and parasitic capacitance determination. *Sensors and Actuators B: Chemical*, **2008**, 132, 477-484	8.5	24
139	Real-Time Autonomous System for Structural and Environmental Monitoring of Dynamic Events. *Electronics (Switzerland)*, **2018**, 7, 420	2.6	24
138	TUNABLE ACTIVE FILTERS FOR RF AND MICROWAVE APPLICATIONS. *Journal of Circuits, Systems and Computers*, **2014**, 23, 1450088	0.9	23
137	Environmental and economic benefits of optimal insulation thickness: A life-cycle cost analysis. *Renewable and Sustainable Energy Reviews*, **2019**, 116, 109441	16.2	22
136	Full range analog Wheatstone bridge-based automatic circuit for differential capacitance sensor evaluation. *International Journal of Circuit Theory and Applications*, **2017**, 45, 2149-2156	2	22
135	A New Simplified Five-Parameter Estimation Method for Single-Diode Model of Photovoltaic Panels. *Energies*, **2019**, 12, 4271	3.1	21
134	Automatic Bridge-based Interface for Differential Capacitive Full Sensing. *Procedia Engineering*, **2016**, 168, 1585-1588		21
133	Third order integrable UHF bandpass filter using active inductors. *Microwave and Optical Technology Letters*, **2012**, 54, 1426-1429	1.2	20

132	. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2008**, 55, 394-398	3.5	20
131	The assessment of wind conditions by means of hot wire sensors and a modifed Wheatstone bridge architecture. *Sensors and Actuators A: Physical*, **2017**, 262, 130-139	3.9	19
130	A second-generation voltage conveyor (VCII)Based simulated grounded inductor. *International Journal of Circuit Theory and Applications*, **2020**, 48, 1180-1193	2	19
129	A New Low-Voltage Low-Power Dual-Mode VCII-Based SIMO Universal Filter. *Electronics (Switzerland)*, **2019**, 8, 765	2.6	18
128	An IC architecture for RF Energy Harvesting systems. *Journal of Communications Software and Systems*, **2017**, 13, 96	0.8	18
127	A New High Drive Class-AB FVF-Based Second Generation Voltage Conveyor. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2020**, 67, 405-409	3.5	17
126	A CMOS full-range linear integrated interface for differential capacitive sensor readout. *Sensors and Actuators A: Physical*, **2018**, 281, 130-140	3.9	17
125	A low-cost portable spherical directional anemometer for fixed points measurement. *Sensors and Actuators A: Physical*, **2018**, 280, 543-551	3.9	16
124	Structural Health Monitoring: An IoT Sensor System for Structural Damage Indicator Evaluation. *Sensors*, **2020**, 20,	3.8	16
123	HIGH QUALITY FACTOR L-BAND ACTIVE INDUCTOR-BASED BAND-PASS FILTERS. *Journal of Circuits, Systems and Computers*, **2013**, 22, 1350014	0.9	15
122	Low Voltage Integrated Astable Multivibrator Based on a Single CCII **2007**,		15
121	Energy harvester for remote sensors systems **2016**,		15
120	A Novel Electronic Interface for Micromachined Si-Based Photomultipliers. *Micromachines*, **2018**, 9,	3.3	15
119	A rail-to-rail constant-gm CCII for Instrumentation Amplifier applications. *AEU - International Journal of Electronics and Communications*, **2018**, 91, 103-109	2.8	14
118	A VCII-Based Stray Insensitive Analog Interface for Differential Capacitance Sensors. *Sensors*, **2019**, 19,	3.8	14
117	Thermal Transmittance Measurements of the Historical Masonries: Some Case Studies. *Energies*, **2018**, 11, 2987	3.1	14
116	An Autonomous Low-Power LoRa-Based Flood-Monitoring System. *Journal of Low Power Electronics and Applications*, **2020**, 10, 15	1.7	13
115	A human body powered sensory glove system based on multisource energy harvester **2018**,		13

114	A Low Cost Fully Integrable in a Standard CMOS Technology Portable System for the Assessment of Wind Conditions. *Procedia Engineering*, **2016**, 168, 1024-1027		13
113	Analysis and design of a new COA-based current-mode instrumentation amplifier with robust performance against mismatches. *AEU - International Journal of Electronics and Communications*, **2018**, 89, 105-109	2.8	12
112	Traditional Op-Amp and new VCII: A comparison on analog circuits applications. *AEU - International Journal of Electronics and Communications*, **2019**, 110, 152845	2.8	12
111	A New Extremely Low Power Temperature Insensitive Electronically Tunable VCII-Based Grounded Capacitance Multiplier. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2021**, 68, 72-76	3.5	12
110	A low-cost energy-harvesting sensory headwear useful for tetraplegic people to drive home automation. *AEU - International Journal of Electronics and Communications*, **2019**, 107, 9-14	2.8	11
109	Remote sensor networks with efficient energy harvesting architecture **2016**,		11
108	An Integrated Analog Lock-In Amplifier for Low-Voltage Low-Frequency Sensor Interface **2007**,		11
107	NIC-based capacitance multipliers for low-frequency integrated active filter applications **2007**,		11
106	A new versatile full wave rectifier using voltage conveyors. *AEU - International Journal of Electronics and Communications*, **2020**, 122, 153267	2.8	11
105	. *IEEE Sensors Journal*, **2018**, 18, 2861-2869	4	10
104	Reliable and Inexpensive Solar Irradiance Measurement System Design. *Procedia Engineering*, **2016**, 168, 1767-1770		10
103	New Current Mode Wheatstone Bridge Topologies with Intrinsic Linearity **2018**,		10
102	Current conveyor-based differential capacitance analog interface for displacement sensing application. *AEU - International Journal of Electronics and Communications*, **2017**, 81, 83-91	2.8	10
101	Electronic System for Structural and Environmental Building Monitoring. *Lecture Notes in Electrical Engineering*, **2019**, 481-488	0.2	9
100	A standard CMOS bridge-based analog interface for differential capacitive sensors **2017**,		9
99	Smart power management system for home appliances and wellness based on wireless sensors network and mobile technology **2015**,		9
98	A CCII-based wide frequency range square waveform generator. *International Journal of Circuit Theory and Applications*, **2011**, 41, n/a-n/a	2	9
97	Integrated Measuring and Control System for Thermal Analysis of Buildings Components in Hot Box Experiments. *Energies*, **2019**, 12, 2053	3.1	8

96	A low-voltage low-power instrumentation amplifier based on supply current sensing technique. *AEU - International Journal of Electronics and Communications*, **2018**, 91, 125-131	2.8	8
95	Gallium arsenide 0.5–18 GHz antenna front-end with integrated limiter and differential to single ended low-noise amplifier. *IET Microwaves, Antennas and Propagation*, **2018**, 12, 947-953	1.6	8
94	A rail-to-rail DC-enhanced adaptive biased fully differential OTA **2007**,		8
93	Integrated CMOS interfaces for wide-range resistive gas sensors. *Sensors and Actuators B: Chemical*, **2006**, 118, 269-275	8.5	8
92	New mixed-mode second-generation voltage conveyor based first-order all-pass filter. *IET Circuits, Devices and Systems*, **2020**, 14, 901-907	1.1	8
91	The AB-CCII, a novel adaptive biasing LV-LP current conveyor architecture. *AEU - International Journal of Electronics and Communications*, **2017**, 79, 301-306	2.8	7
90	On Field Infrared Thermography Sensing for PV System Efficiency Assessment: Results and Comparison with Electrical Models. *Sensors*, **2020**, 20,	3.8	7
89	High dynamic range, low power, tunable, active filter for RF and microwave wireless applications. *IET Microwaves, Antennas and Propagation*, **2018**, 12, 595-601	1.6	7
88	A New Rail-to-Rail Second Generation Voltage Conveyor. *Electronics (Switzerland)*, **2019**, 8, 1292	2.6	7
87	A standard CMOS technology fully-analog differential capacitance sensor front-end **2015**,		6
86	Full-Analog Parasitic Capacitance Compensation for AC-Excited Differential Sensors. *IEEE Transactions on Instrumentation and Measurement*, **2020**, 69, 5890-5899	5.2	6
85	A high precision temperature control system for CMOS integrated wide range resistive gas sensors. *Analog Integrated Circuits and Signal Processing*, **2006**, 47, 293-301	1.2	6
84	A Low Cost Flexible Power Line Communication System. *Lecture Notes in Electrical Engineering*, **2018**, 413-420	0.2	6
83	IoT-Ready Energy-Autonomous Parking Sensor Device. *IEEE Internet of Things Journal*, **2021**, 8, 4830-4840	10.7	6
82	A novel general purpose current mode oscillating circuit for the read-out of capacitive sensors **2009** ,		5
81	A novel CMOS temperature control system for resistive gas sensor arrays		5
80	Analog current-mode interfaces for differential capacitance sensing **2016**,		5
79	A new VCII based grounded positive/negative capacitance multiplier. *AEU - International Journal of Electronics and Communications*, **2021**, 137, 153793	2.8	5

78	GaAs MMIC tunable active filter **2017**,		4
77	On-chip active filter in GaAs technology for wireless communication systems. *Analog Integrated Circuits and Signal Processing*, **2018**, 96, 1-7	1.2	4
76	Automated Calibration System for RF Configurable Voltage-Controlled Filters. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2018**, 65, 1034-1038	3.5	4
75	Active resonator for low-phase-noise tunable oscillators. *Microwave and Optical Technology Letters*, **2016**, 58, 1032-1035	1.2	4
74	Class-AB current conveyors based on the FVF **2017**,		4
73	A Gas Sensor Device for Oxygen and Carbon Dioxide Detection. *Proceedings (mdpi)*, **2017**, 1, 447	0.3	4
72	A novel LV LP CMOS internal topology of CCII+ and its application in current-mode integrated circuits **2009**,		4
71	A New Approach to the Design of High Dynamic Range Tunable Active Inductors **2008**,		4
70	A fully-differential Symmetrical OTA-based rail-to-rail Switched Buffer **2007**,		4
69	A New CMOS Integrable Oscillating Circuit for High-Value Wide-Range Resistive Sensors **2007**,		4
68	A New VCII Application: Sinusoidal Oscillators. *Journal of Low Power Electronics and Applications*, **2021**, 11, 30	1.7	4
67	An assessment on low-voltage low-power integrated single transistor active inductor design for RF filter applications **2016**,		3
66	**2017**,		3
65	Power-efficient dynamic-biased CCII **2017**,		3
64	Linear Integrated Interface for Automatic Differential Capacitive Sensing. *Proceedings (mdpi)*, **2017**, 1, 592	0.3	3
63	**2009**,		3
62	CMOS PULSE GENERATOR FOR BPSK, OOK, PAM, AND PPM MODULATIONS. *Journal of Circuits, Systems and Computers*, **2009**, 18, 487-495	0.9	3
61	Physical/electromagnetic analysis of multifinger MOSFETs with SB-SP combined methods. *International Journal of RF and Microwave Computer-Aided Engineering*, **2010**, 20, 141-147	1.5	3

60	A Frequency- and Space-Domain Series-Expansion Approach for Efficient Numerical Modeling of Semiconductor Devices. *IEEE Transactions on Electron Devices*, **2008**, 55, 3525-3531	2.9	3
59	Global Modeling Analysis of HEMTs by the Spectral Balance Technique. *IEEE Transactions on Microwave Theory and Techniques*, **2007**, 55, 1405-1412	4.1	3
58	A temperature control system for integrated resistive gas sensor arrays **2005**,		3
57	A New Simulated Inductor with Reduced Series Resistor Using a Single VCII. *Electronics (Switzerland)*, **2021**, 10, 1693	2.6	3
56	A simplified architecture for differential capacitance sensors **2015**,		2
55	RF Active Inductors Small-Signal Design by Means of Conformal Transformations. *IEEE Access*, **2020**, 8, 50390-50398	3.5	2
54	A Spherical Directional Anemometer Sensor System. *Proceedings (mdpi)*, **2017**, 1, 388	0.3	2
53	Automatic Wireless Monitoring System for Real-Time Rock Fall Events. *Proceedings (mdpi)*, **2017**, 1, 569	0.3	2
52	Digital Multi-Probe Temperature Monitoring System for Long-Term on Field Measurements. *Proceedings (mdpi)*, **2017**, 1, 596	0.3	2
51	A GAUSSIAN MONOCYCLE PULSE GENERATOR/MODULATOR FOR UWB RADIOS APPLICATIONS. *Journal of Circuits, Systems and Computers*, **2014**, 23, 1450060	0.9	2
50	**2008**,		2
49	An Uncalibrated Wide-Range Single-Supply Integrable Front-End for Resistance and Capacitance Estimation **2007**,		2
48	High-Accuracy, High-Precision DEM-CCII Amplifiers **2007**,		2
47	On the use of field programmable gate arrays in light detection and ranging systems.. *Review of Scientific Instruments*, **2021**, 92, 121501	1.7	2
46	A Novel General Purpose Combined DFVF/VCII Based Biomedical Amplifier. *Electronics (Switzerland)*, **2020**, 9, 331	2.6	2
45	Noise analysis and optimization of VCII-based SiPM interface circuit. *Analog Integrated Circuits and Signal Processing*, **2020**, 109, 1	1.2	2
44	Electronically Tunable First Order AP/LP and LP/HP Filter Topologies Using Electronically Controllable Second Generation Voltage Conveyor (CVCII). *Electronics (Switzerland)*, **2021**, 10, 822	2.6	2
43	Sensorial Multifunctional Panels for Smart Factory Applications. *Electronics (Switzerland)*, **2021**, 10, 1495	2.6	2

42	Current-Mode Instrumentation Amplifiers. *Analog Circuits and Signal Processing Series*, **2019**,	0.2	2
41	A Novel Actuating-Sensing Bone Conduction-Based System for Active Hand Pose Sensing and Material Densities Evaluation Through Hand Touch. *IEEE Transactions on Instrumentation and Measurement*, **2021**, 70, 1-7	5.2	2
40	CCII-Based Voltage Amplifier Optimization for Reduced Relative Gain Error. *Circuits, Systems, and Signal Processing*, **2018**, 37, 1315-1326	2.2	2
39	Towards Realization of a Low-Voltage Class-AB VCII with High Current Drive Capability. *Electronics (Switzerland)*, **2021**, 10, 2303	2.6	2
38	A New Realization of Electronically Tunable Multiple-Input Single-Voltage Output Second-Order LP/BP Filter Using VCII. *Electronics (Switzerland)*, **2022**, 11, 646	2.6	2
37	A 3D Printable Apparatus for the Industrial Programming of NFC/RFID TAGs **2019**,		1
36	FDM 3D Printing of high performance composite materials **2019**,		1
35	Flexible Piezoelectric Harvester for Human Fingers: Measurements and Applications **2019**,		1
34	Low-power class-AB 4th-order low-pass filter based on current conveyors with dynamic mismatch compensation of biasing errors. *International Journal of Circuit Theory and Applications*, **2020**, 48, 472-484	2	1
33	An active and passive antenna pattern comparison **2016**,		1
32	Fully analog automatic stray compensation for bridge-based differential capacitive sensor interfaces **2018**,		1
31	Resonant Directly Coupled Inductors?Capacitors Ladder Network Shows a New, Interesting Property Useful for Application in the Sensor Field, Down to Micrometric Dimensions. *Micromachines*, **2018**, 9,	3.3	1
30	Bandpass filter design with active inductor by means of wave digital approach **2017**,		1
29	Design considerations and effects of class-AB polarization in active filters realized by means of active inductors **2017**,		1
28	A wideband class-AB tunable active filter **2015**,		1
27	Low-phase-noise VCO with active resonator **2014**,		1
26	A 0.13um double balanced mixer for 3.2-4.8GHz IR-UWB applications **2012**,		1
25	A CMOS Integrable DDCCII-Based Readout System For Portable Potentiometric Sensors Array **2009**,		1

24	NEW LOW-VOLTAGE LOW-POWER CURRENT-MODE RESISTIVE SENSOR INTERFACE WITH R/T CONVERSION AND DC EXCITATION VOLTAGE **2008**,		1
23	Frequency-Domain Physics-Based Analysis of semiconductor devices by a Spectral-Balance approach **2006**,		1
22	New Resistor-Less Electronically Controllable □C Simulator Employing VCII, DVCC, and a Grounded Capacitor. *Electronics (Switzerland)*, **2022**, 11, 286	2.6	1
21	Realization of an Electronically Tunable Resistor-Less Floating Inductance Simulator Using VCII. *Electronics (Switzerland)*, **2022**, 11, 312	2.6	1
20	Low power class-AB VCII with extended dynamic range. *AEU - International Journal of Electronics and Communications*, **2022**, 146, 154120	2.8	1
19	Voltage-Mode Analog Interfaces for Differential Capacitance Position Transducers. *Lecture Notes in Electrical Engineering*, **2018**, 388-397	0.2	1
18	CCII-Based Linear Ratiometric Capacitive Sensing by Analog Read-Out Circuits. *Lecture Notes in Electrical Engineering*, **2018**, 398-405	0.2	1
17	Integrable Autonomous Devices for WSNs. *Lecture Notes in Electrical Engineering*, **2018**, 406-412	0.2	1
16	Low-Current Design of GaAs Active Inductor for Active Filters Applications. *Electronics (Switzerland)* , **2020**, 9, 1232	2.6	1
15	Silicon Photomultiplier Sensor Interface Based on a Discrete Second Generation Voltage Conveyor. *Sensors*, **2020**, 20,	3.8	1
14	Artificial neural networks approach to active inductor-based filter design. *International Journal of RF and Microwave Computer-Aided Engineering*, **2018**, 28, e21568	1.5	1
13	SB□E drift-diffusion algorithm for FET devices global modeling. *Microelectronics Journal*, **2013**, 44, 45-49	1.8	0
12	Wireless Smart Parking Sensor System for Vehicles Detection. *Lecture Notes in Electrical Engineering*, **2018**, 197-200	0.2	0
11	Integrable Sensor System for Live Monitoring of Loudspeaker Performances. *Lecture Notes in Electrical Engineering*, **2018**, 3-7	0.2	
10	An Electrode Impedance Balanced Interface for Biomedical Application. *Lecture Notes in Electrical Engineering*, **2018**, 289-294	0.2	
9	A Novel Calibration-Less CCII-Based Resistance-to-Time Front-End for Gas Sensor Interfacing. *Lecture Notes in Electrical Engineering*, **2010**, 279-284	0.2	
8	A New Fast-Readout Front-End for High Resistive Chemical Sensor Applications. *Lecture Notes in Electrical Engineering*, **2010**, 273-278	0.2	
7	A Differential Difference Current-Conveyor (DDCCII) Based Front-End for Integrable and Portable Sensor Applications. *Lecture Notes in Electrical Engineering*, **2010**, 267-271	0.2	

List of Publications

6	A Compact Architecture for Heartbeat Monitoring. *Lecture Notes in Electrical Engineering*, **2014**, 301-305	0.2
5	Radio Frequency Energy Harvester for Remote Sensor Networks. *Lecture Notes in Electrical Engineering*, **2014**, 331-334	0.2
4	CMIA for Biomedical and Low-Voltage Low-Power Applications. *Analog Circuits and Signal Processing Series*, **2019**, 137-155	0.2
3	CMIA for Sensor Applications. *Analog Circuits and Signal Processing Series*, **2019**, 157-169	0.2
2	A New Fully Closed-Loop, High-Precision, Class-AB CCII for Differential Capacitive Sensor Interfaces. *Electronics (Switzerland)*, **2022**, 11, 903	2.6
1	Time Continuous VCII-Based Fully Analog Interface for Differential Capacitive Sensors. *Lecture Notes in Electrical Engineering*, **2023**, 369-374	0.2