

A Current Conveyor-Based Relaxation Oscillator As A Versatile Electronic Interface For Capacitive And Resistive Sensors

Abuelma'Atti, MT; Al-Absi, MA

TAYLOR FRANCIS LTD, INTERNATIONAL JOURNAL OF ELECTRONICS; pp: 473-477; Vol: 92

King Fahd University of Petroleum & Minerals

<http://www.kfupm.edu.sa>

Summary

A new electronic interface circuit is presented. The circuit is built around a single plus-type second-generation current conveyor (CCII+) and can be used with resistive, capacitive and resistive-capacitive sensors. Experimental results are provided.

References:

1. ABUELMAATTI MT, 1998, INT J ELECTRON, V84, P583
2. ALMASHARY B, 2000, MICROELECTR J, V31, P239
3. CICEKOGLU MO, 1998, MICROELECTR J, V29, P983
4. CICEKOGLU O, 1999, INT J ELECTRON, V86, P1453
5. COBAN LA, 1994, P INT C MICR ICM 94, P172
6. DICATALDO G, 1995, INT J CIRC THEOR APP, V23, P161
7. ELWAKIL AS, 2000, ELECTRON LETT, V36, P1256
8. FILANOVSKY IM, 1989, P IEEE 32 MIDW S CIR, V36, P1256
9. FILANOVSKY IM, 1994, SENSOR TECHNOLOGY DE, P217
10. GOES FML, 1996, IEEE T INSTRUM MEAS, V45, P536
11. LIU YL, 2000, IEEE T INSTRUM MEAS, V49, P980
12. NIHTIANOV SN, 2001, IEEE T INSTRU MEAS, V50, P1663
13. PALLASARENY R, 1991, SENSOR SIGNAL CONDIT, P217
14. PASSERAUB PA, 1997, SENSOR ACTUAT A-PHYS, V58, P141
15. ROBERTS GW, 1989, ELECTRON LETT, V25, P759

For pre-prints please write to: mtaher@kfupm.edu.sa