

ISSN 1726-5749

SENSORS & TRANSDUCERS

vol. 87
1 /08

```
lbl = Format$(1PulseDuration / 1PeriodsNumber, "0.0")
lbl = (PeriodDuration
dbD = (PeriodDuration
lbl = Format$(PeriodDuration * 1000, "0.00")
lbl = Format$(PeriodDuration * 0.32) / 0.0047, "0.0")
Temp = (PeriodDuration * 0.32) / 0.0047
```

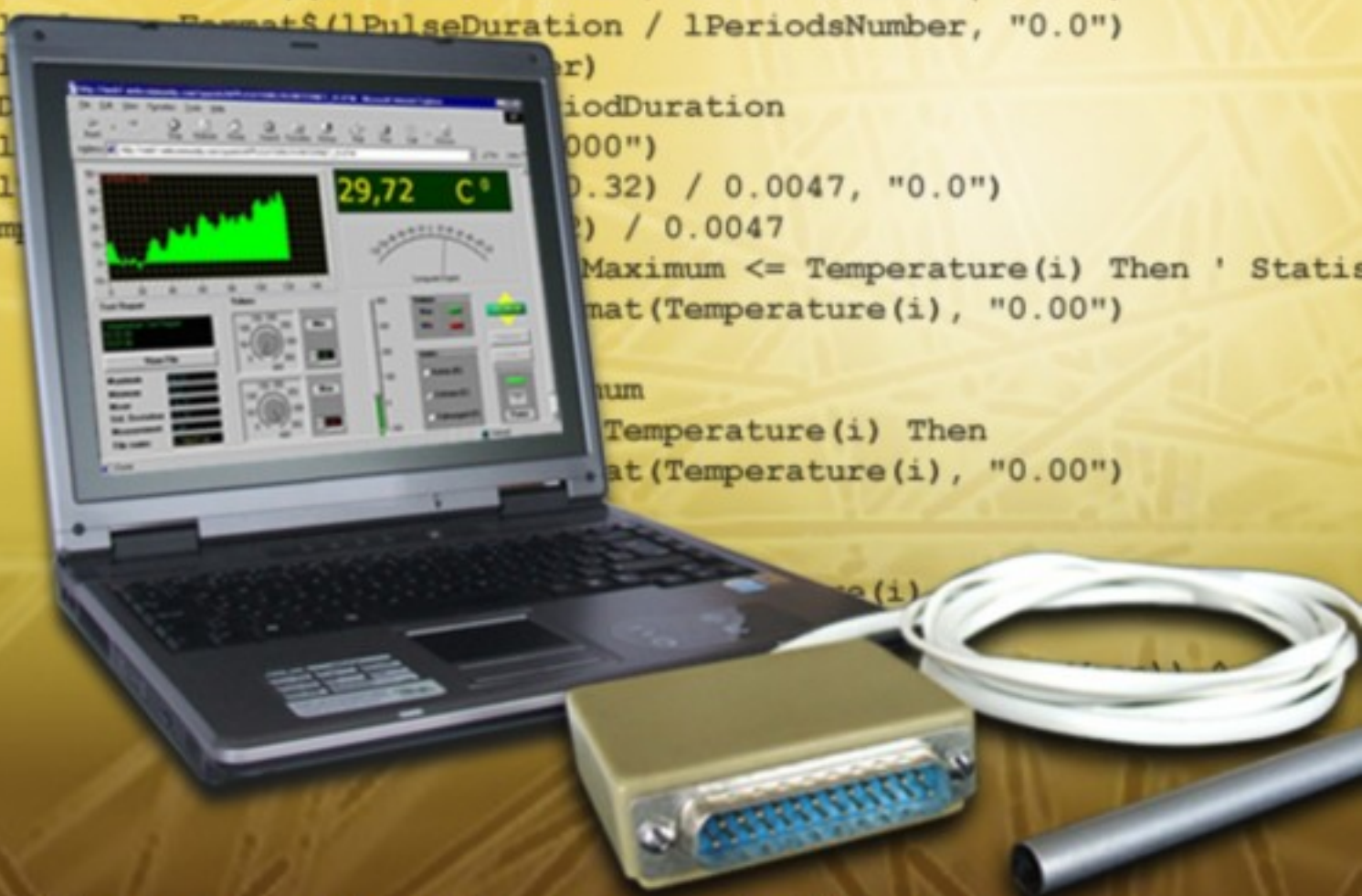
```
Maximum <= Temperature(i) Then ' Statist
mat (Temperature(i), "0.00")
```

num

```
Temperature(i) Then
```

```
mat (Temperature(i), "0.00")
```

```
Temperature(i)
```



Sensor Instrumentation, DAQ and Virtual Instruments

International Frequency Sensor Association Publishing





Sensors & Transducers

Volume 87
Issue 1
January 2008

www.sensorsportal.com

ISSN 1726-5479

Editor-in-Chief: professor Sergey Y. Yurish, phone: +34 696067716, fax: +34 93 4011989,
e-mail: editor@sensorsportal.com

Editors for Western Europe

Meijer, Gerard C.M., Delft University of Technology, The Netherlands
Ferrari, Vittorio, Università di Brescia, Italy

Editors for North America

Datskos, Panos G., Oak Ridge National Laboratory, USA
Fabien, J. Josse, Marquette University, USA
Katz, Evgeny, Clarkson University, USA

Editor South America

Costa-Felix, Rodrigo, Inmetro, Brazil

Editor for Eastern Europe

Sachenko, Anatoly, Ternopil State Economic University, Ukraine

Editor for Asia

Ohyama, Shinji, Tokyo Institute of Technology, Japan

Editorial Advisory Board

- Abdul Rahim, Ruzairi**, Universiti Teknologi, Malaysia
Ahmad, Mohd Noor, Nothern University of Engineering, Malaysia
Annamalai, Karthigeyan, National Institute of Advanced Industrial Science and Technology, Japan
Arcega, Francisco, University of Zaragoza, Spain
Arguel, Philippe, CNRS, France
Ahn, Jae-Pyoung, Korea Institute of Science and Technology, Korea
Arndt, Michael, Robert Bosch GmbH, Germany
Ascoli, Giorgio, George Mason University, USA
Atalay, Selcuk, Inonu University, Turkey
Atghiaee, Ahmad, University of Tehran, Iran
Augutis, Vyantas, Kaunas University of Technology, Lithuania
Avachit, Patil Lalchand, North Maharashtra University, India
Ayesh, Aladdin, De Montfort University, UK
Bahreyni, Behraad, University of Manitoba, Canada
Baoxian, Ye, Zhengzhou University, China
Barford, Lee, Agilent Laboratories, USA
Barlingay, Ravindra, RF Arrays Systems, India
Basu, Sukumar, Jadavpur University, India
Beck, Stephen, University of Sheffield, UK
Ben Bouzid, Sihem, Institut National de Recherche Scientifique, Tunisia
Binnie, T. David, Napier University, UK
Bischoff, Gerlinde, Inst. Analytical Chemistry, Germany
Bodas, Dhananjay, IMTEK, Germany
Borges Carval, Nuno, Universidade de Aveiro, Portugal
Bousbia-Salah, Mounir, University of Annaba, Algeria
Bouvet, Marcel, CNRS – UPMC, France
Brudzewski, Kazimierz, Warsaw University of Technology, Poland
Cai, Chenxin, Nanjing Normal University, China
Cai, Qingyun, Hunan University, China
Campanella, Luigi, University La Sapienza, Italy
Carvalho, Vitor, Minho University, Portugal
Cecelja, Franjo, Brunel University, London, UK
Cerda Belmonte, Judith, Imperial College London, UK
Chakrabarty, Chandan Kumar, Universiti Tenaga Nasional, Malaysia
Chakravorty, Dipankar, Association for the Cultivation of Science, India
Changhai, Ru, Harbin Engineering University, China
Chaudhari, Gajanan, Shri Shivaji Science College, India
Chen, Rongshun, National Tsing Hua University, Taiwan
Cheng, Kuo-Sheng, National Cheng Kung University, Taiwan
Chiriac, Horia, National Institute of Research and Development, Romania
Chowdhuri, Arijit, University of Delhi, India
Chung, Wen-Yaw, Chung Yuan Christian University, Taiwan
Corres, Jesus, Universidad Publica de Navarra, Spain
Cortes, Camilo A., Universidad de La Salle, Colombia
Courtois, Christian, Universite de Valenciennes, France
Cusano, Andrea, University of Sannio, Italy
D'Amico, Arnaldo, Università di Tor Vergata, Italy
De Stefano, Luca, Institute for Microelectronics and Microsystem, Italy
Deshmukh, Kiran, Shri Shivaji Mahavidyalaya, Barshi, India
Kang, Moonho, Sunmoon University, Korea South
Kaniusas, Eugenijus, Vienna University of Technology, Austria
Katake, Anup, Texas A&M University, USA
Kausel, Wilfried, University of Music, Vienna, Austria
Kavasoglu, Nese, Mugla University, Turkey
Dickert, Franz L., Vienna University, Austria
Dieguez, Angel, University of Barcelona, Spain
Dimitropoulos, Panos, University of Thessaly, Greece
Ding Jian, Ning, Jiangsu University, China
Djordjevich, Alexandar, City University of Hong Kong, Hong Kong
Donato, Nicola, University of Messina, Italy
Donato, Patricio, Universidad de Mar del Plata, Argentina
Dong, Feng, Tianjin University, China
Drljaca, Predrag, Instersema Sensoric SA, Switzerland
Dubey, Venketesh, Bournemouth University, UK
Enderle, Stefan, University of Ulm and KTB mechatronics GmbH, Germany
Erdem, Gursan K. Arzum, Ege University, Turkey
Erkmen, Aydan M., Middle East Technical University, Turkey
Estelle, Patrice, Insa Rennes, France
Estrada, Horacio, University of North Carolina, USA
Faiz, Adil, INSA Lyon, France
Fericean, Sorin, Balluff GmbH, Germany
Fernandes, Joana M., University of Porto, Portugal
Francioso, Luca, CNR-IMM Institute for Microelectronics and Microsystems, Italy
Fu, Weiling, South-Western Hospital, Chongqing, China
Gaura, Elena, Coventry University, UK
Geng, Yanfeng, China University of Petroleum, China
Gole, James, Georgia Institute of Technology, USA
Gong, Hao, National University of Singapore, Singapore
Gonzalez de la Rosa, Juan Jose, University of Cadiz, Spain
Grael, Annette, Goteborg University, Sweden
Graff, Mason, The University of Texas at Arlington, USA
Guan, Shan, Eastman Kodak, USA
Guillet, Bruno, University of Caen, France
Guo, Zhen, New Jersey Institute of Technology, USA
Gupta, Narendra Kumar, Napier University, UK
Hadjiloucas, Sillas, The University of Reading, UK
Hashsham, Syed, Michigan State University, USA
Hernandez, Alvaro, University of Alcalá, Spain
Hernandez, Wilmar, Universidad Politecnica de Madrid, Spain
Homentcovschi, Dorel, SUNY Binghamton, USA
Horstman, Tom, U.S. Automation Group, LLC, USA
Hsiai, Tzung (John), University of Southern California, USA
Huang, Jeng-Sheng, Chung Yuan Christian University, Taiwan
Huang, Star, National Tsing Hua University, Taiwan
Huang, Wei, PSG Design Center, USA
Hui, David, University of New Orleans, USA
Jaffrezic-Renault, Nicole, Ecole Centrale de Lyon, France
Jaime Calvo-Galleg, Jaime, Universidad de Salamanca, Spain
James, Daniel, Griffith University, Australia
Janting, Jakob, DELTA Danish Electronics, Denmark
Jiang, Liudi, University of Southampton, UK
Jiao, Zheng, Shanghai University, China
John, Joachim, IMEC, Belgium
Kalach, Andrew, Voronezh Institute of Ministry of Interior, Russia
Rodriguez, Angel, Universidad Politecnica de Cataluna, Spain
Rothberg, Steve, Loughborough University, UK
Robert, Michel, University Henri Poincare, France

Ke, Cathy, Tyndall National Institute, Ireland
Khan, Asif, Aligarh Muslim University, Aligarh, India
Kim, Min Young, Koh Young Technology, Inc., Korea South
Ko, Sang Choon, Electronics and Telecommunications Research Institute, Korea South
Kockar, Hakan, Balikesir University, Turkey
Kotulska, Malgorzata, Wroclaw University of Technology, Poland
Kratz, Henrik, Uppsala University, Sweden
Kumar, Arun, University of South Florida, USA
Kumar, Subodh, National Physical Laboratory, India
Kung, Chih-Hsien, Chang-Jung Christian University, Taiwan
Lacnjevac, Caslav, University of Belgrade, Serbia
Laurent, Francis, IMEC, Belgium
Lay-Ekuakille, Aime, University of Lecce, Italy
Lee, Jang Myung, Pusan National University, Korea South
Lee, Jun Su, Amkor Technology, Inc. South Korea
Lei, Hua, National Starch and Chemical Company, USA
Li, Genxi, Nanjing University, China
Li, Hui, Shanghai Jiaotong University, China
Li, Xian-Fang, Central South University, China
Liang, Yuanchang, University of Washington, USA
Liawruangrath, Saisunee, Chiang Mai University, Thailand
Liew, Kim Meow, City University of Hong Kong, Hong Kong
Lin, Hermann, National Kaohsiung University, Taiwan
Lin, Paul, Cleveland State University, USA
Linderholm, Pontus, EPFL - Microsystems Laboratory, Switzerland
Liu, Aihua, Michigan State University, USA
Liu Changgeng, Louisiana State University, USA
Liu, Cheng-Hsien, National Tsing Hua University, Taiwan
Liu, Songqin, Southeast University, China
Lodeiro, Carlos, Universidade NOVA de Lisboa, Portugal
Lorenzo, Maria Encarnacio, Universidad Autonoma de Madrid, Spain
Lukaszewicz, Jerzy Pawel, Nicholas Copernicus University, Poland
Ma, Zhanfang, Northeast Normal University, China
Majstorovic, Vidosav, University of Belgrade, Serbia
Marquez, Alfredo, Centro de Investigacion en Materiales Avanzados, Mexico
Matay, Ladislav, Slovak Academy of Sciences, Slovakia
Mathur, Prafull, National Physical Laboratory, India
Maurya, D.K., Institute of Materials Research and Engineering, Singapore
Mekid, Samir, University of Manchester, UK
Melnyk, Ivan, Photon Control Inc., Canada
Mendes, Paulo, University of Minho, Portugal
Mennell, Julie, Northumbria University, UK
Mi, Bin, Boston Scientific Corporation, USA
Minas, Graca, University of Minho, Portugal
Moghavvemi, Mahmoud, University of Malaya, Malaysia
Mohammadi, Mohammad-Reza, University of Cambridge, UK
Molina Flores, Esteban, Benemirita Universidad Autonoma de Puebla, Mexico
Moradi, Majid, University of Kerman, Iran
Morello, Rosario, DIMET, University "Mediterranea" of Reggio Calabria, Italy
Mounir, Ben Ali, University of Sousse, Tunisia
Mukhopadhyay, Subhas, Massey University, New Zealand
Neelamegam, Periasamy, Sastra Deemed University, India
Neshkova, Milka, Bulgarian Academy of Sciences, Bulgaria
Oberhammer, Joachim, Royal Institute of Technology, Sweden
Ould Lahoucine, University of Guelma, Algeria
Pamidighanta, Sayanu, Bharat Electronics Limited (BEL), India
Pan, Jisheng, Institute of Materials Research & Engineering, Singapore
Park, Joon-Shik, Korea Electronics Technology Institute, Korea South
Penza, Michele, ENEA C.R., Italy
Pereira, Jose Miguel, Instituto Politecnico de Setebal, Portugal
Petsev, Dimiter, University of New Mexico, USA
Pogacnik, Lea, University of Ljubljana, Slovenia
Post, Michael, National Research Council, Canada
Prance, Robert, University of Sussex, UK
Prasad, Ambika, Gulbarga University, India
Prateepasen, Asa, Kingmoungut's University of Technology, Thailand
Pullini, Daniele, Centro Ricerche FIAT, Italy
Pumera, Martin, National Institute for Materials Science, Japan
Radhakrishnan, S. National Chemical Laboratory, Pune, India
Rajanna, K., Indian Institute of Science, India
Ramadan, Qasem, Institute of Microelectronics, Singapore
Rao, Basuthkar, Tata Inst. of Fundamental Research, India
Raouf, Kosai, Joseph Fourier University of Grenoble, France
Reig, Candid, University of Valencia, Spain
Restivo, Maria Teresa, University of Porto, Portugal
Rezazadeh, Ghader, Urmia University, Iran
Royo, Santiago, Universitat Politecnica de Catalunya, Spain
Sadana, Ajit, University of Mississippi, USA
Sadeghian Marnani, Hamed, TU Delft, The Netherlands
Sandacci, Serghei, Sensor Technology Ltd., UK
Sapozhnikova, Ksenia, D.I.Mendeleyev Institute for Metrology, Russia
Saxena, Vibha, Bhabha Atomic Research Centre, Mumbai, India
Schneider, John K., Ultra-Scan Corporation, USA
Seif, Selemeni, Alabama A & M University, USA
Seifert, Achim, Los Alamos National Laboratory, USA
Sengupta, Deepak, Advance Bio-Photonics, India
Shearwood, Christopher, Nanyang Technological University, Singapore
Shin, Kyuho, Samsung Advanced Institute of Technology, Korea
Shmaliy, Yuriy, Kharkiv National University of Radio Electronics, Ukraine
Silva Girao, Pedro, Technical University of Lisbon Portugal
Slomovitz, Daniel, UTE, Uruguay
Smith, Martin, Open University, UK
Soleymanpour, Ahmad, Damghan Basic Science University, Iran
Somani, Prakash R., Centre for Materials for Electronics Technol., India
Srinivas, Talabattula, Indian Institute of Science, Bangalore, India
Srivastava, Arvind K., Northwestern University
Stefan-van Staden, Raluca-Ioana, University of Pretoria, South Africa
Sumriddetchka, Sarun, National Electronics and Computer Technology Center, Thailand
Sun, Chengliang, Polytechnic University, Hong-Kong
Sun, Dongming, Jilin University, China
Sun, Junhua, Beijing University of Aeronautics and Astronautics, China
Sun, Zhiqiang, Central South University, China
Suri, C. Raman, Institute of Microbial Technology, India
Sysoev, Victor, Saratov State Technical University, Russia
Szewczyk, Roman, Industrial Research Institute for Automation and Measurement, Poland
Tan, Ooi Kiang, Nanyang Technological University, Singapore.
Tang, Dianping, Southwest University, China
Tang, Jaw-Luen, National Chung Cheng University, Taiwan
Thumbavanam Pad, Kartik, Carnegie Mellon University, USA
Tsiantos, Vassilios, Technological Educational Institute of Kaval, Greece
Tsigara, Anna, National Hellenic Research Foundation, Greece
Twomey, Karen, University College Cork, Ireland
Valente, Antonio, University, Vila Real, - U.T.A.D., Portugal
Vaseashta, Ashok, Marshall University, USA
Vazques, Carmen, Carlos III University in Madrid, Spain
Vieira, Manuela, Instituto Superior de Engenharia de Lisboa, Portugal
Vigna, Benedetto, STMicroelectronics, Italy
Vrba, Radimir, Brno University of Technology, Czech Republic
Wandelt, Barbara, Technical University of Lodz, Poland
Wang, Jiangping, Xi'an Shiyou University, China
Wang, Kedong, Beihang University, China
Wang, Liang, Advanced Micro Devices, USA
Wang, Mi, University of Leeds, UK
Wang, Shinn-Fwu, Ching Yun University, Taiwan
Wang, Wei-Chih, University of Washington, USA
Wang, Wensheng, University of Pennsylvania, USA
Watson, Steven, Center for NanoSpace Technologies Inc., USA
Weiping, Yan, Dalian University of Technology, China
Wells, Stephen, Southern Company Services, USA
Wolkenberg, Andrzej, Institute of Electron Technology, Poland
Woods, R. Clive, Louisiana State University, USA
Wu, DerHo, National Pingtung University of Science and Technology, Taiwan
Wu, Zhaoyang, Hunan University, China
Xiu Tao, Ge, Chuzhou University, China
Xu, Tao, University of California, Irvine, USA
Yang, Dongfang, National Research Council, Canada
Yang, Wuqiang, The University of Manchester, UK
Ymeti, Aurel, University of Twente, Netherland
Yu, Haihu, Wuhan University of Technology, China
Yufera Garcia, Alberto, Seville University, Spain
Zagnoni, Michele, University of Southampton, UK
Zeni, Luigi, Second University of Naples, Italy
Zhong, Haoxiang, Henan Normal University, China
Zhang, Minglong, Shanghai University, China
Zhang, Qintao, University of California at Berkeley, USA
Zhang, Weiping, Shanghai Jiao Tong University, China
Zhang, Wenming, Shanghai Jiao Tong University, China
Zhou, Zhi-Gang, Tsinghua University, China
Zorzano, Luis, Universidad de La Rioja, Spain
Zourob, Mohammed, University of Cambridge, UK

Contents

Volume 87
Issue 1
January 2008

www.sensorsportal.com

ISSN 1726-5479

Editorial

- Impact Factor of Sensors Journals: What Does it Really Mean ?** |
Sergey Y. Yurish.....

Research Articles

- Minimising Relative Measurement Errors for Sensors Applications** 1
Jerzy Kolanko, Karol Wiśniewski.....
- Kinetics Analysis of Respiratory Epithelium by Virtual Instrumentation** 11
Libor Hargaš, Dušan Koniar, Miroslav Hrianka, Anna Příkopová.....
- Application of DICOM Standard in LabVIEW Environment** 19
Dušan Koniar, Libor Hargaš, Miroslav Hrianka, Pavol Špánik.....
- A Modified Design of a Thermocouple Based Digital Temperature Indicator With Opto-Isolation** 24
S. C. Bera and D. N. Kole.....
- Pharmaceutical Pill Counting and Inspection Using a Capacitive Sensor** 31
Ganesan Letchumanan, Simon Hawkins, Peter Rockett, Steve Sheard, Conrad Shail, Kenneth Shail, Peter Dobson.....
- An Optoelectronic Sensor Configuration for the Determination of Age Related Indices Using Blood Volume Pulse** 39
Jayasree V. K, Shaija P. J, Manu P. John, P. Radhakrishnan.....
- An Embedded Based Digital Controller for Thermal Process** 46
A. Lakshmi Sangeetha and A. Balaji Ganesh.....
- Magneto-Optic Over-Current Detection with Null Optical Tuning** 52
Sarbani Chakraborty and Satish Chandra Bera.....
- Design and Development of a Multi-Degree of Freedom Dextrous Instrumented Robot Gripper** 63
Sagarika Pal, Subrata Chattopadhyay and Satya Ranjan Deb.....
- Design and Testing of a Low Cost PID Controller Combined with Inverse Derivative Control Action and Its Application in Voltage Control Systems of DC Generator** 74
Subrata Chattopadhyay and Satish Chandra Bera.....
- Modeling & Simulation of Dynamic Voltage Restorer (DVR) for Enhancing Voltage Sag** 85
Amrita Rai and A. K. Nadir.....

Authors are encouraged to submit article in MS Word (doc) and Acrobat (pdf) formats by e-mail: editor@sensorsportal.com
Please visit journal's webpage with preparation instructions: <http://www.sensorsportal.com/HTML/DIGEST/Submission.htm>

Impact Factor of Sensors Journals: What Does it Really Mean ?

Sergey Y. Yurish

E-mail: editor@sensorsportal.com

Tel: + 34 696067716, fax: +34 93 4011989

The topic of Sensors Web Portal survey 2007 was ‘*What is the most important factor at article publication ?*’ [1]. Most of our authors and readers assume that it is: 1) High impact factor of scientific journal (45 %); 2) Rapid publication (24 %); 3) Number of readers who will read an article; 4) Easy preparation instructions for articles (3 %); 5) Wide readers auditorium of journal (3 %) and 6) Other (4 %). The survey results are shown in Figure 1.

What does it really mean a ‘high impact factor’ of journals ? According to [2, 3] the impact factor was devised by Eugene Garfield, the founder of the Institute for Scientific Information, now part of Thomson, a large worldwide US-based publisher. Impact factors are calculated each year by Thomson Scientific for those journals which it indexes, and the factors and indices are published in *Journal Citation Reports*.

The impact factor for a journal is calculated based on a 3-year period, and can be viewed as an approximation of the average number of times published papers are cited in the two calendar years following publication. For example, the 2007 impact factor for a journal would be calculated as follows:

$$2007 \text{ Impact Factor} = A/B,$$

where *A* is the number of times articles published in 2005-2006 were cited in tracked journals during 2007; *B* is the number of articles published in 2005-2006. Please note that the 2007 impact factor will be actually published in 2008.

Today impact factors have a big, but controversial influence. New journals that are indexed from their first published issue will receive an Impact Factor only after the completion of two years' indexing [3]. However, the impact factor now is not infallible measures of journal quality. It was introduced when most of journals were published as “paper” journals. But today’s global Net and online “virtual” realities introduce many changes.

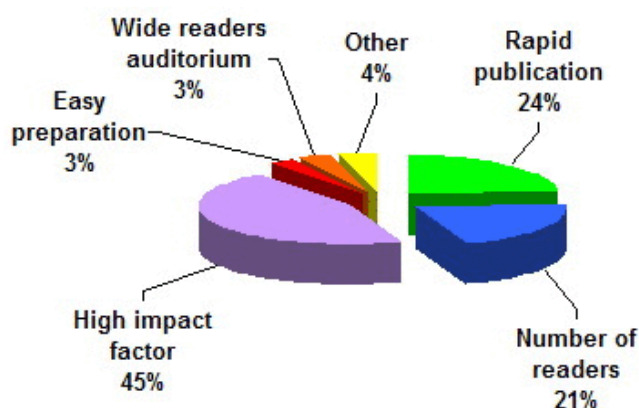


Fig. 1. Most important factors at article publication (Sensors Web Portal survey 2007 [1]).

There is no any guarantee if an article published in a journal with a high impact factor will be read by somebody. But a good feedback after publication as well as a big number of readers are the best factors to measure a research importance and its quality for an author and research team. A high impact factor does not mean reaching a wide reader auditorium and big number of readers for particular article. Eugene Garfield warns about the "misuse in evaluating individuals" because there is "a wide variation from article to article within a single journal" [4]. The citation index (citation impact) [5] and h-index [6] also do not give an objective result and even provide misleading information about a scientist's output because of many pioneer researches are pass ahead today's reality and time. What are the most cited articles ? As usually, it is some fundamental, tutorial type articles, state-of-the-art reviews (as a good start point for research) and articles from common, popular research fields, which contain results that can be improved today by other researchers. While many research articles remain non-cited after 3 years, nearly all review articles receive at least one citation within three years of publication [3]. Speaking about really revolution and innovative articles, many people read it, know and think about it but not cited. It needs much more time for technical progress to improve something in pioneer achievements.

The second problem consists in that many sensors and measurements related journals that have high impact factors have also very long publication time (from 1.5 to 2.5 year in average). There are only few of them, which have a quick time for publication. What readers have in a new issue of journal with articles submitted two years ago ? Unfortunately, very often such results are outdated, authors now go ahead in they research, but readers must wait again for a long time to know about a progress. This is very bad situation for a modern technical progress especially in novel microelectronics technologies. For well-timed dissemination of new and innovative results to the sensor community the rapid publication is essential. Furthermore, in a journal, which has long lag time between submission and publication, it might be impossible to cite articles within the three-year window. Indeed, for some journals, the time between submission and publication can be over two years, which leaves less than a year for citation. On the other hand, a longer temporal window would be slow to adjust to changes in journal impact factors [3].

As it was marked by survey 2008 [1] participants in comments to this survey, "even though a high impact factor is one of the prime considerations for journal article publishing, from the point of view of dissemination of knowledge, the number of readers who read an article is fundamental and more important".

Due to a lot of sensors and measurements related journals that are also distributed online, today's reality needs more advanced metrics for determination of journal quality. Some fist steps were done in this direction and so-called e-Impact Factor was proposed by Sensors & Transducer journal's editorial board. Theoretically, the e-Impact Factor (EIF) can be calculated on any time interval, for example, per month, per year, overall, etc.:

$$e\text{-Impact Factor} = D/P,$$

where D is the number of downloaded articles during the particular time period (month, year, overall, etc.); P is the number of all published articles in the journal in the particular time interval. It is possible also to determine the EIF for each of journal issue per month, year, etc, as a division of the number downloaded articles from this particular issue during the investigated period by the number of articles, published in this issue. The minimal time interval is determined by a journal's periodicity of publication (many sensors journals are published normally on the monthly basis). Naturally, the proposed metrics can be used for any scientific journals. Only the e-Impact Factor can take into account the real minimal number (at least) of readers for particular article.

Some fist steps include also publications by some journals of lists for most downloaded articles. For example, the Sensors & Transducers Journal (ISSN 1726-5479) published by IFSA

(<http://www.sensorsportal.com>) has started to publish such lists in May 2006 and since this date publishes every month the 25 Top List of Most Downloaded Articles [7]. All published lists are available online and let observe some dynamic changes. Of course, there is not any problem to calculate all downloaded articles per months, per year, overall, etc. or even per issue in order to determine the EIF.

Of course, such metrics are possible only for journals with a possibility to download published articles online as well as for peer review international Open Access online journals. Such journals have a big advantage (one more advantage of Open Access online journals) for wide knowledge dissemination because of it is free of charge and can provide much more readers and free subscribers.

Today in order to have a quick, timely publication, a good feedback after publication and big number of readers, authors must obligatory consider online international peer review journals for publication of new results along with publication in traditional 'paper' printed journals. Are you ready for today's reality ? Our 290 editorial board members from 47 countries will help you. Starting from 2007 we have begun the EIF calculation on the annual basis and for 2007 it is 156.504. In addition, for the first time in the World our authors will have a unique opportunity to see the current download statistics for their articles, which let them observe a progress in a real time. Good luck !

References and Web Links

- [1]. Sensors Polls and Survey at Sensors Web Portal: <http://www.sensorsportal.com/HTML/Polls.htm>
- [2]. Impact Factor: http://www.starrepublic.org/encyclopedia/wikipedia/i/im/impact_factor.html
- [3]. Impact Factor: http://en.wikipedia.org/wiki/Impact_factor
- [4]. Eugen Garfield, Der Impact Faktor und seine richtige Anwendung, *Der Unfallchirurg* (1998), 101 (6), pp. 413-414.
- [5]. Citation Impact: http://en.wikipedia.org/wiki/Citation_impact
- [6]. H-index: <http://en.wikipedia.org/wiki/H-index>
- [7]. 25 Top List of Most Downloaded Articles: www.sensorsportal.com/HTML/DIGEST/Top_articles.htm

2008 Copyright ©, International Frequency Sensor Association (IFSA). All rights reserved.
(<http://www.sensorsportal.com>)

Sensors & Transducers Journal (ISSN 1726-5479)

Open access, peer review
international journal devoted to research,
development and applications of sensors,
transducers and sensor systems.

Published monthly by
International Frequency Sensor Association (IFSA)



<http://www.sensorsportal.com/HTML/DIGEST/Submission.htm>

Guide for Contributors

Aims and Scope

Sensors & Transducers Journal (ISSN 1726-5479) provides an advanced forum for the science and technology of physical, chemical sensors and biosensors. It publishes state-of-the-art reviews, regular research and application specific papers, short notes, letters to Editor and sensors related books reviews as well as academic, practical and commercial information of interest to its readership. Because it is an open access, peer review international journal, papers rapidly published in *Sensors & Transducers Journal* will receive a very high publicity. The journal is published monthly as twelve issues per annual by International Frequency Association (IFSA). In addition, some special sponsored and conference issues published annually.

Topics Covered

Contributions are invited on all aspects of research, development and application of the science and technology of sensors, transducers and sensor instrumentations. Topics include, but are not restricted to:

- Physical, chemical and biosensors;
- Digital, frequency, period, duty-cycle, time interval, PWM, pulse number output sensors and transducers;
- Theory, principles, effects, design, standardization and modeling;
- Smart sensors and systems;
- Sensor instrumentation;
- Virtual instruments;
- Sensors interfaces, buses and networks;
- Signal processing;
- Frequency (period, duty-cycle)-to-digital converters, ADC;
- Technologies and materials;
- Nanosensors;
- Microsystems;
- Applications.

Submission of papers

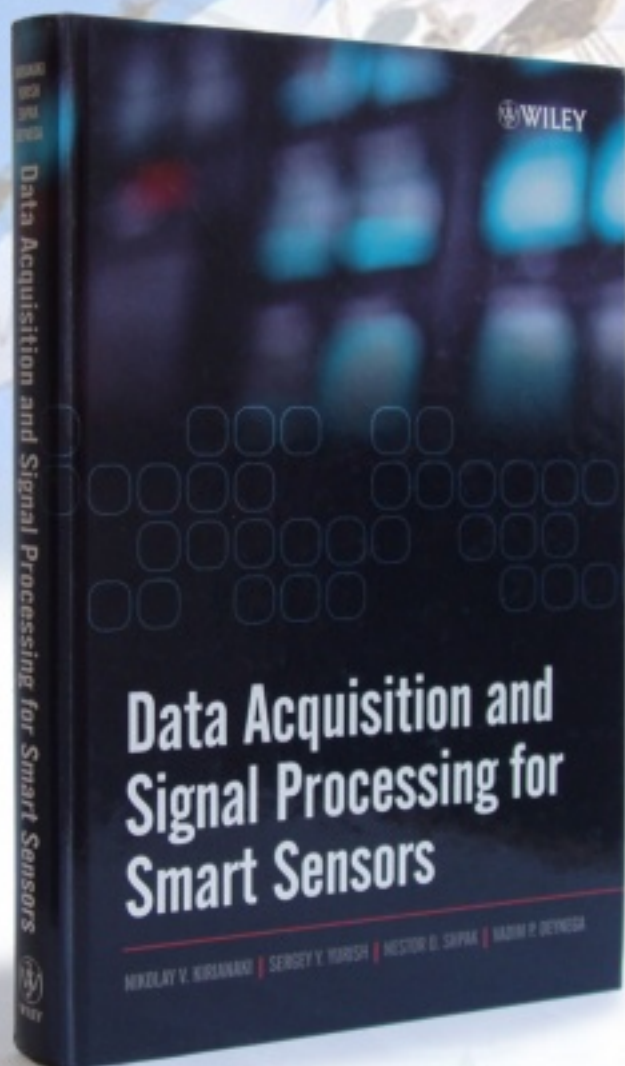
Articles should be written in English. Authors are invited to submit by e-mail editor@sensorsportal.com 6-14 pages article (including abstract, illustrations (color or grayscale), photos and references) in both: MS Word (doc) and Acrobat (pdf) formats. Detailed preparation instructions, paper example and template of manuscript are available from the journal's webpage: <http://www.sensorsportal.com/HTML/DIGEST/Submission.htm> Authors must follow the instructions strictly when submitting their manuscripts.

Advertising Information

Advertising orders and enquires may be sent to sales@sensorsportal.com Please download also our media kit: http://www.sensorsportal.com/DOWNLOADS/Media_Kit_2008.pdf



KNOWLEDGE FOR GENERATIONS



'This book provides a good basis for anyone entering or studying the field of smart sensors not only for the inexperienced but also very useful to those with some experience'

(from IEEE Instrumentation & Measurement Magazine review)



Order online:

http://www.sensorsportal.com/HTML/BOOKSTORE/DAQ_SP.htm

www.sensorsportal.com