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โดย จิรวัดน์ พรหมพร

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 - **Basic Search**
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- **ดาวน์โหลดรายการบรรณานุกรม**
- **เอกสารฉบับเต็ม (Full Text)**



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- **IEEE Standards** ให้ข้อมูลย้อนหลังถึงมกราคม 1988 รวมถึงมาตรฐานเก่าที่ยกเลิกไปแล้ว
- **IET Journals, Letters, Magazines และ Conference Proceedings** ให้ข้อมูลตั้งแต่ปี 1988

- **Acoustics**
- **Biomedical Eng**
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PUBLICATION YEAR

Single Year Range

1951 2013

From: 1951

To: 2013

PUBLISHER

IEEE (3,506)

IET (2,464)

VDE (67)

TOPIC

6036 Results Returned

100 Years of Radio, 1995., International Conference on

Publisher: IET

Methods and Models in Automation and Robotics (MMAR), 2013 18th International Conference on

Publisher: IEEE

View Title History **3**

Applied Measurements for Power Systems (AMPS), 2013 IEEE International Workshop on

Publisher: IEEE

View Title History

2013 IEEE International Conference on Cybernetics

Publisher: IEEE

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By Title **By Topic**

Aerospace
Bioengineering
Communication, Networking & Broadcasting
Components, Circuits, Devices & Systems
Computing & Processing (Hardware/Software)
Engineered Materials, Dielectrics & Plasmas
Engineering Profession
Fields, Waves & Electromagnetics

General Topics for Engineers (Math, Science & Engineering)
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1955 2013

From: 1955 To: 2013

PUBLISHER

IEEE (530)
 IET (60)
 VDE (4)

594 Results Returned for "Aerospace"

3D Imaging (IC3D), International Conference on
Publisher: IEEE
View Title History

Actual Problems of Unmanned Air Vehicles Developments Proceedings (APUAVD), 2013 IEEE 2nd International Conference
Publisher: IEEE
View Title History

Adaptive Hardware and Systems (AHS), NASA/ESA Conference on
Publisher: IEEE
View Title History

1. ไล่เรียงดูรายชื่อการประชุมตามสาขาวิชาที่สนใจ
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Solid-State Circuits Conference - Digest of Technical Papers, 2009. ISSCC 2009. IEEE International



Date 8-12 Feb. 2009

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AUTHOR

Search for Author

- Nauta, Brami (5)
- Friedman, Daniel J. (4)
- Kuroda, Tadahiro (4)
- Klumperink, Eric A M (4)
- Sakurai, Takayasu (3)
- Cho, Gyu-Hyeong Hyeong (3)
- Wambacq, Piet (3)
- Liu, Shen-Iuan I. (3)
- Bulzacchelli, John F. (3)
- Yoo, Hoi-Jun Jun (3)
- Mizuno, Masayuki (3)
- Hajimiri, Ali (3)
- Rylov, Sergey V. (2)
- Itab, Kiyoo (2)

- Secure AES engine with a local switched-capacitor current equalizer**
Tokunaga, C. ; Blaauw, D.
Multimedia
 | | PDF (2308 KB)
- A 4Gb/s/ch 356fJ/b 10mV digitalized on-chip interconnect with nonlinear charge-injecting transmit filter and transimpedance receiver in 90nm CMOS**
Byungsub Kim ; Stojanovic, V. **1**
Multimedia **2**
 | | PDF (1551 KB) **3**
- Dual-DLL-based CMOS all-digital temperature sensor for microprocessor thermal monitoring**
Kyoungho Woo ; Menger, S. ; Xanthopoulos, Thucydides ; Crain, E. ; Dongwan Ha ; Ham, D.
Multimedia

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PUBLICATION YEAR

Single Year Range

1872 2014

From: 1872

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PUBLISHER

IEEE (191)

282 Results Returned

IEEE Access

Publisher: IEEE , Years: 2013 - Present Most Recent Issue

Advanced Packaging, IEEE Transactions on

Publisher: IEEE , Years: 1999 - 2010 Most Recent Issue

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Aerospace and Electronic Systems Magazine, IEEE

Publisher: IEEE , Years: 1986 - Present Most Recent Issue

Aerospace and Electronic Systems, IEEE Transactions on

Publisher: IEEE , Years: 1965 - Present Most Recent Issue

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By Title **By Topic** Virtual Journals

- Aerospace
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- Components, Circuits, Devices & Systems
- Computing & Processing (Hardware/Software)
- Engineered Materials, Dielectrics & Plasmas
- Engineering Professions
- Fields, Waves & Electromagnetics
- General Topics for Engineers (Math, Science & Engineering)
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IEEE (32)

IET (2)

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37 Results Returned for "Aerospace"

IEEE Access

Publisher: IEEE , Years: 2013 - Present [Most Recent Issue](#)

Advanced Packaging, IEEE Transactions on

Publisher: IEEE , Years: 1999 - 2010 [Recent Issue](#)

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Aerospace and Electronic Systems Magazine, IEEE

Publisher: IEEE , Years: 1986 - Present [Most Recent Issue](#)

Aerospace and Electronic Systems, IEEE Transactions on

Publisher: IEEE , Years: 1965 - Present [Most Recent Issue](#)

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Affective Computing, IEEE Transactions on

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Aims & Scope

The theory, design and application of Control Systems. It shall encompass components, and the integration of these components, as are necessary for the construction of such systems. The word `systems' as used herein shall be interpreted to include physical, biological, organizational and other entities and combinations thereof, which can be represented through a mathematical symbolism. The Field of Interest: shall include scientific, technical, industrial or other activities that contribute to this field, or utilize the techniques or products of this field, subject, as the art develops, to additions, subtractions, or other modifications directed or approved by the IEEE Technical Activities Board.

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2. เลือกดูฉบับย้อนหลัง **Past Issues**
3. รายละเอียดข้อมูลวารสาร **About Journal**

Automatic Control, IEEE Transactions on

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 Gao, H. (2) Yu, C. (2) Chen, J. (2) Wang, Y. (2) Chen, T. (2) Li, H. (2) Feng, J. (2) Li, X. (2) Li, Z. (2) Wang, L. (2) **Sparse Packetized Predictive Control for Networked Control over Erasure Channels**

Nagahara, M. ; Quevedo, D. ; Ostergaard, J.

PDF (366 KB)

 Comments on "Decentralized Stabilization of Interconnected Systems With Time-Varying Delays"

Liu, J. ; Yue, D. S. ; Ge, Z.

PDF (169 KB)

 On Most Permissive Observers in Dynamic Sensor Activation Problems

Dallal, E. ; Lafortune, S.

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- Active (1,108)
- Active Approved Draft (66)
- Active Unapproved Draft (381)
- Archived (609)
- Archived Approved Draft (288)
- Archived Draft (22)
- Archived Unapproved Draft (455)
- Draft (4)
- Redline (184)
- Withdrawn (274)

1775 Results Returned

1 - IEEE Recommended Practice - General Principles for Temperature Limits in the Rating of Electrical Equipment and for the Evaluation of Electrical Insulation

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3 - IEEE Recommended Practice in the Selection of Reference Ambient Conditions for Test Measurements of Electrical Apparatus

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4 - IEEE Standard for High-Voltage Testing Techniques

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Computing & Processing (Hardware/Software)

Engineered Materials, Dielectrics & Plasmas

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- Archived Unapproved Draft (63)
- Draft (1)
- Redline (37)
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162 Results Returned for "Aerospace"

1 - IEEE Recommended Practice - General Principles for Temperature Limits in the Rating of Electrical Equipment and for the Evaluation of Electrical Insulation

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18 - IEEE Standard for Shunt Power Capacitors

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80 - IEEE Guide for Safety in AC Substation Grounding

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81 - IEEE Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Grounding System

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137 - IEEE Standard for Aerospace Equipment Voltage and

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- Energy Development/Power Generation
- Insulated Conductors
- National Electrical Safety Code (NESC) Online*
- Petroleum and Chemical Industrial Standards*
- Power Substations
- Power Switchgear, Circuits and Fuses*
- Power Systems Communications
- Power Transformers (Distribution and Regulating)*
- Power Transmission and Distribution*
- Protective Relaying*
- Surge Protective Devices
- Testing, Instrumentation and Measurement, and Metric Practice
- ▼ All Inclusive Telecommunications *
- Communications
- Electromagnetic Compatibility*
- Insulated Conductors
- Local and Metropolitan Area Networks (LAN/MAN)*
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- » Millimeter Wave Mobile Communications for 5G Cellular
- » Data Mining with Big Data

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6. กำหนดสำนักพิมพ์ที่ต้องการสืบค้น

Content Types

7

- Conference Publications (2,328,759)
- Journals & Magazines (1,269,653)
- Books & eBooks (23,881)
- Early Access Articles (8,482)
- Standards (5,526)
- Education & Learning (391)

Publication Year

8

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The fuel economy and all-electric range (AER) of hybrid electric vehicles (HEVs) are highly dependent on the onboard energy-storage system (ESS) of the vehicle. Energy-storage devices charge during low power demands and discharge during high power demands, acting as catalysts to provide energy boost. Batteries are the primary energy-storage devices in ground vehicles. Increasing the AER of vehicles by 15% almost doubles the incremental cost of the ESS. This is due to the fact that the ESS of HEVs requires higher peak power while preserving high energy density. Ultracapacitors (UCs) are the options with higher power densities in comparison with batteries. A hybrid ESS composed of batteries, UCs, and/or fuel cells (FCs) could be a more appropriate option for advanced hybrid vehicular ESSs. This paper presents state-of-the-art energy-storage topologies for HEVs and plug-in HEVs (PHEVs). Battery, UC, and FC technologies are discussed and compared in this paper. In addition, various hybrid ESSs that combine two or more storage devices are addressed.

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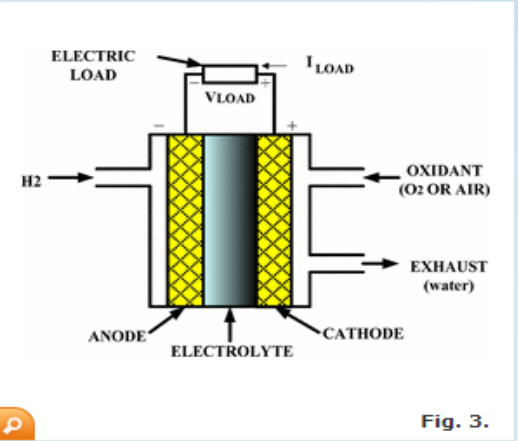
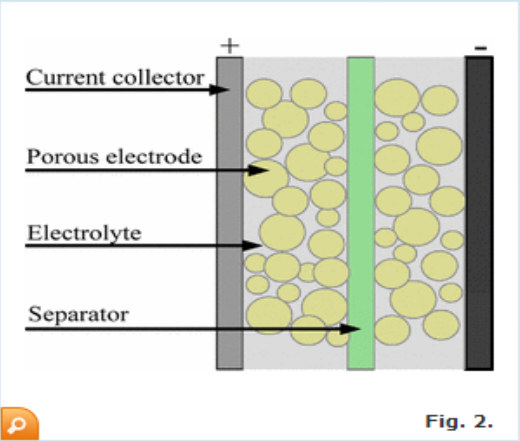
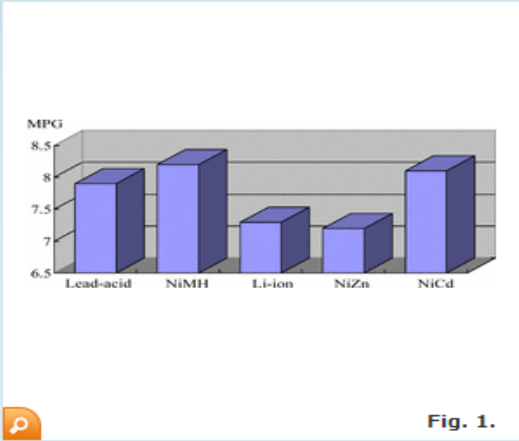
The fuel economy and all-electric range (AER) of hybrid electric vehicles (HEVs) are highly dependent on the vehicle. Energy-storage devices charge during low power demands, acting as catalysts to provide energy to the vehicle. Increasing the AER of HEVs increases the cost of the ESS. This is due to the fact that the ESS of HEVs requires high energy density. Ultracapacitors (UCs) are the most appropriate option for advanced hybrid vehicular ESSs. This paper compares different topologies for HEVs and plug-in HEVs (PHEVs). The results are compared in this paper. In addition, various hybrid ESSs are addressed.

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IT IS ESTIMATED that current global petroleum resources could be used up within 50 years if they are consumed at present consumption rates. The U.S. Energy Information Administration stated that the United States consumed 18.7 million barrels of petroleum per day in the first half of 2009. Most petroleum is used by various ground vehicles. The global number of vehicles will increase from 700 million to 2.5 billion in the next 50 years [1]. Thus, methods of improving vehicular fuel economy have gained worldwide attention.

A hybrid power train utilizes an electric motor to supplement the output of an internal

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A hybrid power train utilizes an electric motor to supplement the output of an internal combustion engine (ICE) during acceleration and recovers the energy during braking [2], [3], [4]. In hybrid topologies, since the vehicle is no longer dependent on only one type of fuel, they have many benefits for the vehicle, from emission reduction to performance and efficiency improvements. The efficiency and all-electric range (AER) of hybrid electric vehicles (HEVs) depend on the capability of their energy-storage system (ESS), which not only is utilized to store large amounts of energy but also should be able to release it quickly according to load demands [5]. The important characteristics of vehicular ESSs include energy density, power density, lifetime, cost, and maintenance. Currently, batteries and ultracapacitors (UCs) are the most common options for vehicular ESSs. Batteries usually have high energy densities and store the majority of onboard electric energy. On the other hand, UCs have high power densities and present a long life cycle with high efficiency and a fast response for charging/discharging [8], [9]. A fuel cell (FC) is another clean energy source; however, the long time constant of the FC limits its performance on vehicles. At present, no single energy-storage device could meet all requirements of HEVs and electric vehicles (EVs). Hybrid energy sources complement drawbacks of each single device [6], [7], [8].

This paper reviews state-of-the-art ESSs for advanced hybrid vehicular applications. [Section II](#) presents the battery technologies for automotive applications. [Section III](#) addresses ultracapacitors (UCs) as another ESS for future hybrid vehicles. Applications of FCs in vehicular systems are presented in [Section IV](#). In addition, topologies of hybridized ESS are addressed in [Section V](#). Finally, [Section VI](#) presents the summary and conclusions.

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