

SAE INTERNATIONAL

SAE DIGITAL LIBRARY

USER GUIDE



SAE Digital Library'ye erişmek için aşağıdaki adımları izleyebilirsiniz.

SAE Digital Library ana sayfasına giriş yapınız “digitallibrary.sae.org”. Kullanıcı adı ve şifre bilgilerinizi girerek sisteme giriş yapabilirsiniz. Eğer erişiminiz IP ile sağlanmış ise girişiniz otomatik olarak gerçekleşecektir.

Select a Login Type

Subscription Login Institutional Login

User Id:

Password:

SAE Digital Library arayüzü kullanıcıların bilgiye en hızlı ve kolay yoldan ulaşmaları için iki sütun halinde tasarlanmıştır.

The screenshot shows the SAE Digital Library search results page for the query "Simulation Modeling". The page is divided into two main columns. The left column displays search results, including a list of articles with titles, authors, and dates. The right column contains a filter menu with various categories like "Aerospace Material Specifications", "Aerospace Standards", "Books", "SAE eBooks", "Ground Vehicle Standards", "Historical Aerospace Standards", "Historical Ground Vehicle Standards", "Historical USCAR Reports", "USCAR Reports", "Journal Articles", "Magazines", and "Technical Papers".

Callouts point to the following features:

- Abonelik Bilgisi**: Points to the "MY ACCESS" button.
- Arama Alanı**: Points to the search input field.
- Tüm Sonuçlar**: Points to the "All Results" button.
- Bölüm/Kaynak Seçimi**: Points to the "Filter" menu.
- Bölümler ve Filtreler**: Points to the "Filter" menu.
- Paylaşım Butonu**: Points to the "Email", "Print", and "Export" buttons.
- Gösterim/Sıralama**: Points to the "Display" and "Sort By" dropdown menus.

Search Results: Simulation Modeling

My Access: Journal Articles [1998 - Present]

Date: 2015

Viewing 1 to 25 of 282

Display: List Sort By: Relevance

An Innovative Vehicle Behaviour Modeling Methodology for Model-Based Development
Marina Roche, Marco Mammetti
2015-04-14
Technical Paper
Vehicle simulation models are essential throughout the development process in the automotive industry. The benefit of using models starts when post processing measurements performed on market vehicles, continues when assessing for target setting and components selection, and permits the development of controllers and strategies easing optimization of the vehicle. This paper gives an overview of methodologies based on longitudinal dynamics for the simulation of vehicle performance and fuel economy. These methodologies can be applied to a variety of architectures ranging from quadricycles to trucks and from combustion to hybrid. The main difference between methodologies is the solver, which influences the results and thus the area of application. The two main trends, namely forward and backward simulation, have features that make them not able to fully describe the behaviour of a real vehicle. Consequently, several hybrid simulation methods that combine their virtues for a specific object.

State of the Art Water Wading Simulation Method to Design Under-Body Components
Prashant Khapane, Uday Ganeshwade, Kevin Carvalho
2015-01-14 DOI: 10.4271/2015-26-0188
Technical Paper
Vehicle water wading capability refers to vehicle functional part integrity (e.g. engine under-tray, bumper cover, plastic sill cover etc.) when travelling through water. Wade testing involves vehicles being driven through different depths of water at various speeds. The test

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Citation



My Access section

Bu bölümde mevcut abonelik içeriğinizi görüntüleyebilirsiniz.

MY ACCESS Logout Provided by Nigel Watts

Subscriptions

- Aerospace Material Specifications
 - Aerospace Material Specifications
 - Historical Aerospace Material Specifications
- Aerospace Standards
 - Aerospace Standards
 - Historical Aerospace Standards
- Books
 - SAE eBooks

As part of your subscription you may have access to additional documents.

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Tam metin içeriğine hızlı erişim

My Access Section bölümünde yaptığınız aramalar ve sonuçla mevcuttur. Sayfanızın yanında beliren bu filtreler ile aradığınız bilgiye en kısa sürede ulaşmanız hedeflenmiştir.

Filter

My Access

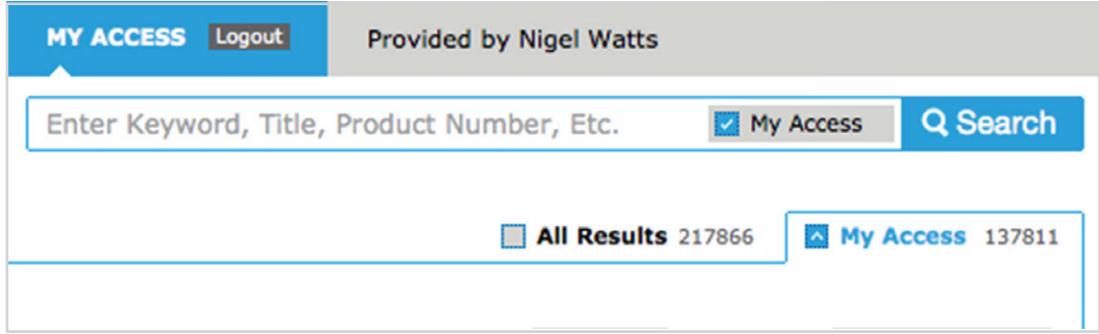
- Aerospace Material Specifications
 - Aerospace Material Specifications
 - Historical Aerospace Material Specifications
- Aerospace Standards
 - Aerospace Standards
 - Historical Aerospace Standards
- Books
 - SAE eBooks
- Ground Vehicle Standards
 - Ground Vehicle Standards
 - Historical Ground Vehicle Standards
 - Historical USCAR Reports
 - USCAR Reports
- Journal Articles
 - Journal Articles 1998 - Present
- Magazines
 - Aerospace Engineering [All]
 - Automotive Engineering [2012]
 - Automotive Engineering [2013]
 - Automotive Engineering [2014]
 - Automotive Engineering [2015]

SAE Digital Library’de aramalar nasıl yapılır?

Aramalarınızı basit ve gelişmiş olmak üzere iki şekilde yapabilirsiniz. SAE Digital Library aboneliği 200.000’in üzerinde tam metin güncel ve bibliyografik standartları, e-kitapları, e-dergileri ve teknik raporları içermektedir. Bu içerik aynı zamanda 35.000’in üzerinde havacılık ve zemin araç standartlarını içermenin yanı sıra, 1906’dan günümüze uzanan 95.000 teknik doküman da içermektedir.

My Access ile ne yapabilirsiniz?

My Access butonu altında bir arama kutusu ile karşılaşacaksınız. Bu kutu işaretli olduğu zaman yapmış olduğunuz tarama yalnızca abonelik içeriğinizi kapsayacaktır. Bu şekilde tarama sonucunda ulaştığınız tüm dokümanlar abonelik kapsamınızda ve tam metin erişilebilir olacaktır. Dokümanlar “My Access” bölümü altında görüntülenebilecektir.



The screenshot shows the top navigation bar with 'MY ACCESS' and 'Logout' buttons, and 'Provided by Nigel Watts'. Below is a search bar with the placeholder text 'Enter Keyword, Title, Product Number, Etc.' and a 'Search' button. A 'My Access' checkbox is checked. Below the search bar, there are two result counts: 'All Results 217866' and 'My Access 137811'. The 'My Access' count is highlighted with a blue box.

Arama sonuçlarınızı genişletebilir daha fazla sonuç ve kaynak taraması yapmak isteyebilirsiniz. Bu durumda My Access altındaki işareti kaldırıp, taramanızı bu şekilde gerçekleştirebilirsiniz. Elde ettiğiniz sonuçlar “All Results” bölümü altında görüntülenebilir olacaktır.



The screenshot shows the same search interface as above, but with the 'All Results' checkbox selected and the 'My Access' checkbox unchecked. Below the search bar, there are two result counts: 'All Results 217866' and 'My Access 137811'. The 'All Results' count is highlighted with a blue box. At the bottom, there are two dropdown menus: 'Display: List' and 'Sort By: Relevance'.

Digital Library içinde taramalarınızı yapmanın en kolay ve hızlı yolu “Search Tool” kullanmaktır. Search Tool anahtar kelime, belge numarası, standart numarası, DOI numarası, yazar adı vb. pek çok arama yöntemi ile kullanıcılarına yanıt verebilmektedir. Aynı zamanda Boolean işlemlerine (boolean operations: and, or, not, *) de duyarlı olan sistem aramalarınızı özelleştirmenizi sağlar.

The Advanced Search Tool (Gelişmiş Arama Aracı)

Gelişmiş arama aracı ile ihtiyacınız olan bilgiye ulaşmak için seçimlerinizi belirleyebilir, kendi aramalarınızı sınırlandırabilirsiniz.

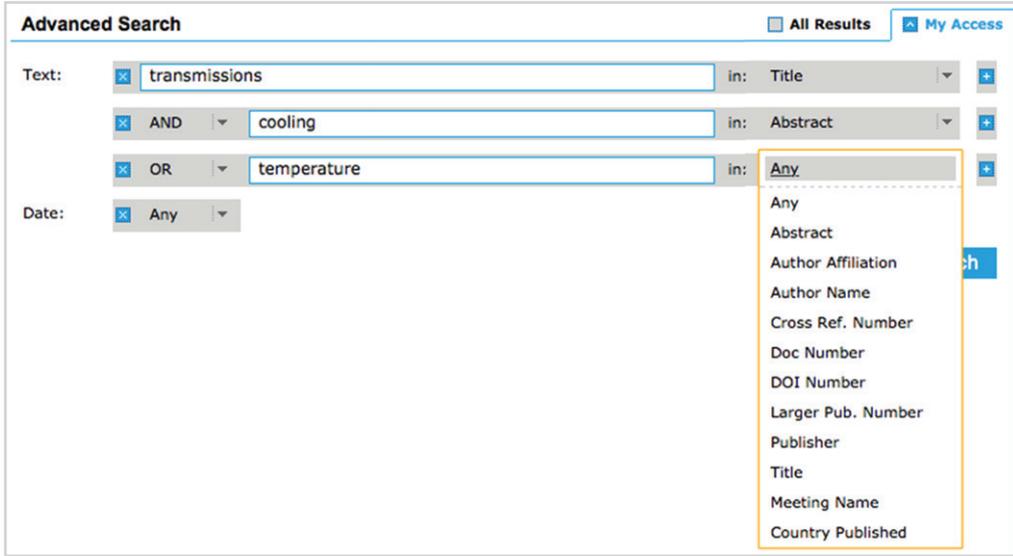


The screenshot shows the 'Advanced Search' interface. At the top right, there are two tabs: 'All Results' (selected) and 'My Access'. Below the tabs, there is a search form with the following fields:

- Text:** A text input field containing 'Enter Keyword, Title, Product Number, Etc.' with a dropdown menu set to 'Any' and a '+' icon to its right.
- AND:** A dropdown menu set to 'AND' followed by an empty text input field, a dropdown menu set to 'Any', and a '+' icon.
- AND:** A dropdown menu set to 'AND' followed by an empty text input field, a dropdown menu set to 'Any', and a '+' icon.
- Date:** A dropdown menu set to 'Any'.

At the bottom right of the form, there is a blue button with a magnifying glass icon and the text 'Advanced Search'.

Sağ tarfta yer alan artı (+) işaretini kullanarak daha fazla arama alanı ekleyebilir, arama seçeneklerinizi genişletebilirsiniz



The screenshot shows the 'Advanced Search' interface with a dropdown menu open. The search form has the following fields:

- Text:** A text input field containing 'transmissions' with a dropdown menu set to 'Title' and a '+' icon to its right.
- AND:** A dropdown menu set to 'AND' followed by a text input field containing 'cooling', a dropdown menu set to 'Abstract', and a '+' icon.
- OR:** A dropdown menu set to 'OR' followed by a text input field containing 'temperature', a dropdown menu set to 'Any', and a '+' icon.
- Date:** A dropdown menu set to 'Any'.

The dropdown menu for the 'OR' field is open, showing a list of search options: Any, Abstract, Author Affiliation, Author Name, Cross Ref. Number, Doc Number, DOI Number, Larger Pub. Number, Publisher, Title, Meeting Name, and Country Published.

SAE Digital Library ile seçimlerinizi özgürce yapabilir, aralama ve sıralama seçeneklerinizi kendiniz belirleyebilir, aradığınız bilgiye dilediğiniz şekilde erişebilirsiniz.

Teknik Doküman Arama Örneği

Implementation and Evaluation of Predictive Concepts for Hybrid Electric Vehicle Fuel Economy Improvement

2015-26-0013

Ashwini S. Athreya, Sreenath K R, Deepak Sharma

2015-01-14

DOI: 10.4271/2015-26-0013

Technical Paper

In the era where governmental agencies are perennially pushing automobile OEMs for reducing harmful emissions and customers looking for vehicles with better fuel economy values, it is imperative on the manufacturers to implement new technologies to appease them.

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-  Citation

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 **DIGITAL LIBRARY** MY ACCESS [Logout](#) Provided by Nigel Watts

Enter Keyword, Title, Product Number, Etc. My Access [Q Search](#) Advanced Search

Implementation and Evaluation of Predictive Concepts for Hybrid Electric Vehicle Fuel Economy Improvement

[Details](#) [References](#) [Share](#) **Technical Paper**

Paper #: **2015-26-0013** Published: 2015-01-14

DOI: 10.4271/2015-26-0013

ISSN: 0148-7191

Citation: Athreya, A., K R, S., and Sharma, D., "Implementation and Evaluation of Predictive Concepts for Hybrid Electric Vehicle Fuel Economy Improvement," SAE Technical Paper 2015-26-0013, 2015, doi:10.4271/2015-26-0013.

Author(s): [Ashwini S. Athreya - Mercedes-Benz R&D India Pvt. Ltd.](#) [Sreenath K R - Mercedes-Benz R&D India Pvt. Ltd.](#)
[Deepak Sharma - Mercedes-Benz R&D India Pvt. Ltd.](#)

Publisher: [SAE International](#)

Abstract:

In the era where governmental agencies are perennially pushing automobile OEMs for reducing harmful emissions and customers looking for vehicles with better fuel economy values, it is imperative on the manufacturers to implement new technologies to appease them.

Of the many new technologies, the most promising ones are the new control strategies/algorithms which predictively access the road condition, weather, traffic situations and help automobile to function in the most efficient mode. These control strategies/algorithms are termed as "Predictive technologies".

The most common way to assess the benefit of such new technologies is to simulate the vehicle behavior in conjunction with the existing complex control strategies of Hybrid vehicles in simulation environment.

Since such technology finalization is done at the start of a vehicle program, the simulation engineers face numerous challenges like, non-availability of exact vehicle specifications, need for quicker evaluations of new concepts, faster simulation time and scalable models for extending the scope of project.

To overcome such difficulties of concept creators while working with new technologies, a simulation environment has been created that is capable of providing quick results for new concepts. This paper intends to further explain the methodology of creating a simulation environment for a state-of-the-art technology like "Predictive Control Strategies" in Hybrid Vehicles, simulation setup based on VB and MS Excel platform for simulating the vehicle dynamics and Fuel Economy of a Full Hybrid vehicle and how complex control strategies can be Integrated into MS Excel Platform for a quick simulation.

Sector: [Automotive](#)

Topic: [Fuel Economy](#) [Prognostics](#) [Hybrid electric vehicles \(HEV\)](#)

Event: [Symposium on International Automotive Technology 2015](#)

Language: English Published In: United States

Browsing: [Search Results: 2015-26-0013](#) Hide Bar

Standart Arama Örneği

Plating, Cadmium-Titanium	AMS2419D	 Download
2015-01-26	Revised	Latest Aerospace Material Specification
This specification covers the engineering requirements for electrodeposition of cadmium-titanium on metal parts and the properties of the deposit.		 Preview

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Enter Keyword, Title, Product Number, Etc. My Access [Advanced Search](#)

Vehicle Application Layer

[Latest Version](#) [Ground Vehicle Standard](#)

Standard: **J1939/71** Published: 2014-04-28

Status: **Revised**  Download

Issuing: [Truck Bus Control and Communications Network Committee](#)  Preview

Publisher: [SAE International](#)  Email

Scope: The SAE J1939 communications network is developed for use in heavy-duty environments and suitable for horizontally integrated vehicle industries. The SAE J1939 communications network is applicable for light-duty, medium-duty, and heavy-duty vehicles used on-road or off-road, and for appropriate stationary applications which use vehicle derived components (e.g. generator sets). Vehicles of interest include, but are not limited to, on-highway and off-highway trucks and their trailers, construction equipment, and agricultural equipment and implements. SAE **J1939-71** Vehicle Application Layer is the SAE J1939 reference document for the conventions and notations that specify parameter placement in PGN data fields, the conventions for ASCII parameters, and conventions for PGN transmission rates. This document previously contained the majority of the SAE J1939 data parameters and messages for information exchange between the ECU applications connected to the SAE J1939 communications network. The data parameters (SPNs) and messages (PGNs) previously published within this document are now published in SAE J1939DA. The reference figures and reference information for the SPNs and PGNS associated with the SAE **J1939-71** document are published in this document. The data parameters (SPNs) and messages (PGNs) associated with this document are applicable to most SAE J1939 applications. There are several SAE J1939-7X documents that collectively define all of the SAE J1939 application layer data parameters and messages. Diagnostic services and some industry specific data parameters and messages are documented within other SAE J1939-7X application layer documents. An ECU may simultaneously use and support data parameters and messages from multiple SAE J1939-7X application layer documents.  Print

Sector: [Automotive](#)

Topic: [Electrical, Electronics and Avionics](#) [Vehicle Networking](#) [Electronic control systems](#) [Trucks](#) [Buses](#)

Language: English Published In: United States

Browsing: Viewing 3 of 24

e- Kitap Arama Örneği

Advanced Hybrid Powertrains for Commercial Vehicles

R-396

 Download

Rudolf M. Smaling, Simon Baseley, Haoran Hu

2012-08-06

Book

This book provides a broad and comprehensive look at hybrid powertrain technologies for commercial vehicles. It begins with the fundamentals of hybrid powertrain systems, government regulations, and driving cycles, then provides design guidelines and key components of hybrid powertrains for commercial vehicles. It was written for vehicle and component engineers and developers, researchers, students, policymakers, and business executives in the commercial vehicle and transportation industries to help them understand the fundamentals of hybrid powertrain technologies and market requirements for commercial vehicles. It is useful for anyone who designs or is interested in hybrid powertrains and their key components. The term 'commercial vehicle' applies to everything from light delivery vehicles to class 8 long haul trucks, buses, and coaches. These vehicles are used for a wide range of duties, including transporting goods or people and infrastructure service.

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Enter Keyword, Title, Product Number, Etc. My Access Advanced Search

An Introduction to Engine Testing and Development

Number: **R-344** Published: 2009-04-01  Download

ISBN: 978-0-7680-3007-5  Email

Author(s): [Richard D. Atkins - Richard D Atkins & Associates](#)  Print

Publisher: [SAE International](#)

Summary: This book presents the basic principles required for the testing and development of internal combustion engine powertrain systems, providing the new automotive engineer with the basic tools required to effectively carry out meaningful tests. With useful information for graduate students, new test technicians, and established engineers, this book explains the test process - from setting up a dynamometer test facility to testing for performance and durability. Combustion analysis and emissions, and new test trends are also covered.

Affiliated: [Richard D Atkins & Associates](#)

Sector: [Automotive](#)

Topic: [Product Development](#) [Engines](#) [Tests and Testing](#)

Pages: 308

Language: English Published In: United States

Browsing: [Search Results: r-344](#) Hide Bar

Historical Standards Listing (Standartların Geçmiş Versiyonlarının Listesi)

Bir standardın geçmiş versiyon listesi (historical) standardın detaylarının bulunduğu sayfada revizyonlar sekmesinde sunulmuştur. Görüntülenen standart listede mavi kutu ve tik işareti ile işaretlenmiştir. Her standardın durumu revizyon ve yayın tarihi ile birlikte gösterilmektedir.

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Enter Keyword, Title, Product Number, Etc. My Access **Q Search** Advanced Search

Torque, Threaded Application, Electrical Connector, Accessory and Terminal Board Installation

Details Revisions Cross References Share **Historical Version** Aerospace Standard

History:	Document	Published	Revision	Status	
	<input type="checkbox"/> AIR6151B	2014-01-14	Latest	Revised ?	Download
	<input checked="" type="checkbox"/> AIR6151A	2013-01-03	Historical	Revised ?	Preview
	<input type="checkbox"/> AIR6151	2011-05-18	Historical	Issued ?	Email
					Print

Cross references listing (Çapraz Referans Listesi)

Uygulanabilir durumlarda çapraz referans listesi doküman kaydı detayları sayfasında Cross References (Çapraz Referanslar) yer almaktadır. Eğer Digital Library'de referans kaydı uygulanabilir durumda ise çapraz referans seçilebilir bir bağlantı düğmesi olarak gösterilmektedir.

L.E.D. Signal and Marking Lighting Devices

Details Revisions Cross References Share **Latest Version** Ground Vehicle Standard

Cross Reference:

578 J1330_201409 J2139_201304 J2139_201412 J387_201204 J387_201404 J575G_197709

J575_201204 J578D_197809 J578_201207 J579C_197412

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