

Тема: “Comparison of internal combustion engines and electric motors of cars”
Выполнила: Костикова Олеся Алексеевна
Группа: КС-30

Проведем поиск по ключевым словам в РИНЦ и проанализируем результаты поиска.
Ключевые слова: Internal combustion engine, automobile, electric vehicle, ecology.

Google Академия

Internal combustion engine, automobile, electric vehicle, ecology

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L Yang, B Yu, B Yang, H Chen, G Malima ... - Journal of Cleaner ..., 2021 - Elsevier

... emissions from the stage of vehicle production, vehicle use and vehicle end-of-life ... vehicles in China, including internal combustion engine vehicle (ICEV), plug-in hybrid electric vehicle ...

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RK Lattanzio, CE Clark - ... Research Service (CRS) Reports and Issue ..., 2020 - go.gale.com

... electric vehicles (BEVs) and other alternative-fueled vehicles ... the economy, and the environment. In an effort to address ... variety of electric vehicle options and the variety of electricity ...

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Похожие статьи

Все версии статьи (2)

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A comparative LCA of an electric vehicle and an internal combustion engine vehicle using the appropriate power mix: the Italian case study

P Girardi, A Gargiulo, PC Brambilla - The International Journal of Life ..., 2015 - Springer

... performances of two passenger cars: an electric vehicle (EV) and an internal combustion engine vehicle (ICEV) paying particular attention to the production of electricity that will charge ...

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Life Cycle Assessment in the automotive sector: A comparative case study of Internal Combustion Engine (ICE) and electric car

F Del Pero, M Delogu, M Pierini - Procedia Structural Integrity, 2018 - Elsevier

... eco-profile of vehicles with different propulsion technologies such as internal combustion engine, pure electric ... of an electric vehicle and an internal combustion engine vehicle using the ...

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Цитируется: 253

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Electric cars: technical characteristics and environmental impacts

E Helmers, P Marx - Environmental Sciences Europe, 2012 - Springer

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Conceptualization of a digital product passport to enable circular and sustainable automotive value chains – the combustion engine use case

Procedia CIRP, 2024

Antonia Pohlmann, Martin Popowicz, ... Rupert J. Baumgartner

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Encyclopedia

Applications – Transportation Applications | Hybrid Electric Cars - Batteries and Fuel Cells

Encyclopedia of Electrochemical Power Sources (Second Edition), 2025

Parag Jose Chacko, S. Akshaya, R. Imran Jafri

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Research article

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Life Cycle Assessment in the automotive sector: a comparative case study of Internal Combustion Engine (ICE) and electric car

Procedia Structural Integrity, 2018

FEEDBACK

1)Socolow, R. and Thomas, V. (1997), The Industrial Ecology of Lead and Electric Vehicles. Journal of Industrial Ecology, 1: 13-36. <https://doi.org/10.1162/jiec.1997.1.1.13>



Full Access

The Industrial Ecology of Lead and Electric Vehicles

Robert Socolow✉ Valerie Thomas

First published: 08 February 2008 | <https://doi.org/10.1162/jiec.1997.1.1.13> | Citations: 48

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Summary

The lead battery has the potential to become one of the first examples of a hazardous product managed in an environmentally acceptable fashion. The tools of industrial ecology are helpful in identifying the key criteria that an ideal lead-battery recycling system must meet: maximal recovery of batteries after use, minimal export of used batteries to countries where environmental controls are weak, minimal impact on the health of communities near lead-processing facilities, and maximal worker protection from lead exposure in these facilities. A well-known risk analysis of electric vehicles is misguided, because it treats lead batteries and lead additives in gasoline on the same footing and implies that the lead battery should be abandoned. The use of lead additives in gasoline is a dissipative use where emissions cannot be confined: the goal of management should be and has been to phase out this use. The use of lead in batteries is a recyclable use, because the lead remains confined during cycles of discharge and recharge. Here, the goal should be clean recycling. The likelihood that the lead battery



Volume 1, Issue 1
January 1997
Pages 13-36

This article also appears in:
Celebrating 25 Years of the
Journal of Industrial Ecology

Translations

- 《产业生态学报》中文摘要 (JIE Chinese Abstracts)
- Resúmenes en Español de la Revista de Ecología Industrial (JIE Spanish Abstracts)



References



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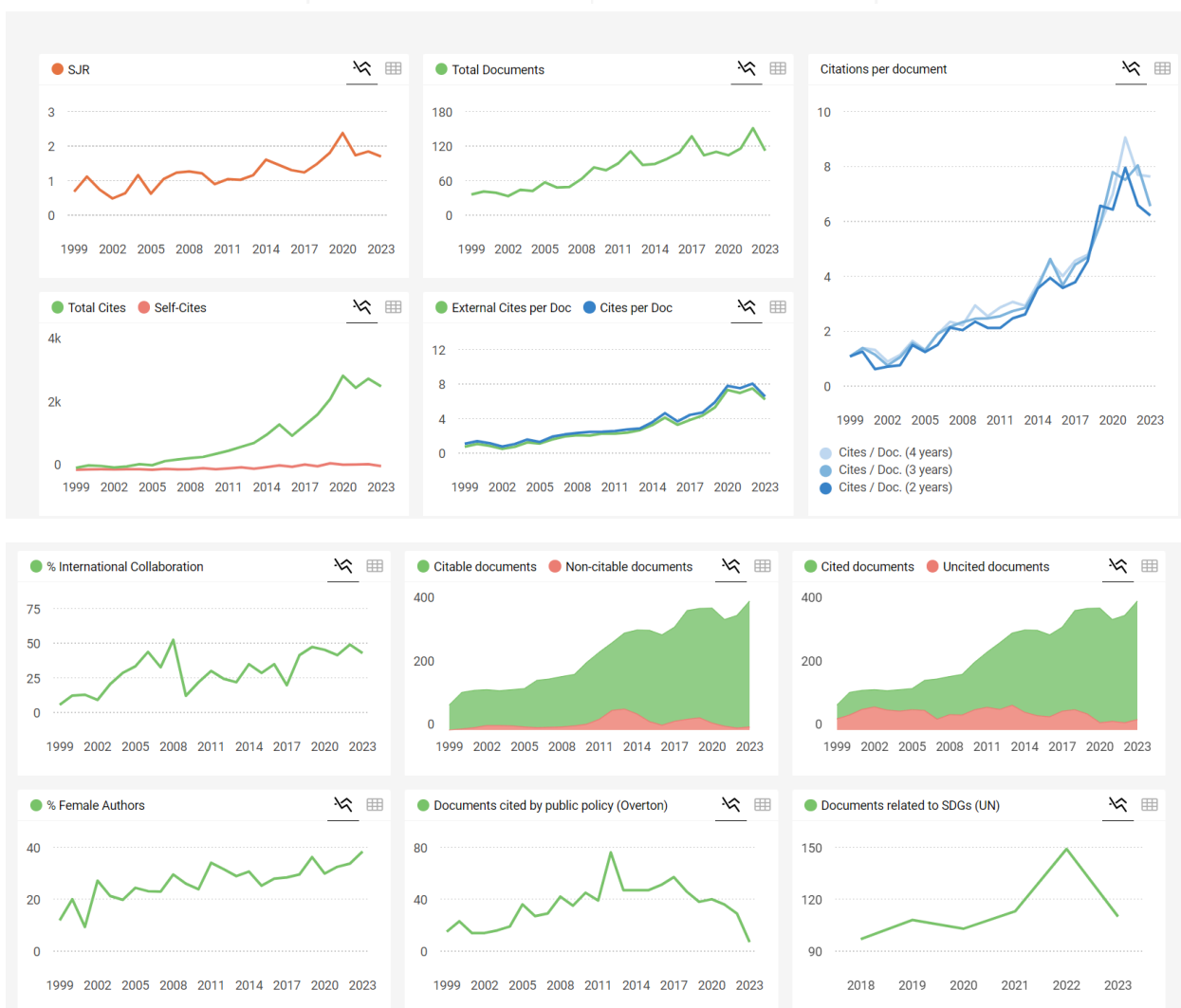
Citations: 48



Details

Journal of Industrial Ecology

COUNTRY United States Universities and research institutions in United States Media Ranking in United States	SUBJECT AREA AND CATEGORY Economics, Econometrics and Finance └ Economics and Econometrics Environmental Science └ Environmental Science (miscellaneous) Social Sciences └ Social Sciences (miscellaneous)	PUBLISHER Wiley-Blackwell	H-INDEX 130
PUBLICATION TYPE Journals	ISSN 10881980, 15309290	COVERAGE 1997-2023	INFORMATION Homepage How to publish in this journal indecol@yale.edu

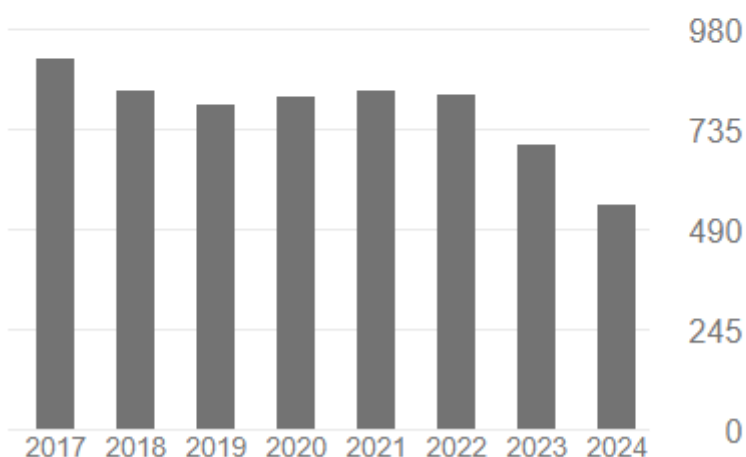


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ПРОСМОТРЕТЬ ВСЕ

Все Начиная с 2019 г.

Статистика цитирования	16374	4528
h-индекс	49	29
i10-индекс	95	43



2) Loder, J., Rinscheid, A., & Wüstenhagen, R. (2023). Why do (some) German car manufacturers go electric? The role of dynamic capabilities and cognitive frames. *Business Strategy and the Environment*, 1–15. <https://doi.org/10.1002/bse.3538>

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Why do (some) German car manufacturers go electric? The role of dynamic capabilities and cognitive frames

Julia Loder [✉](#), Adrian Rinscheid, Rolf Wüstenhagen

First published: 21 August 2023 | <https://doi.org/10.1002/bse.3538> | Citations: 1



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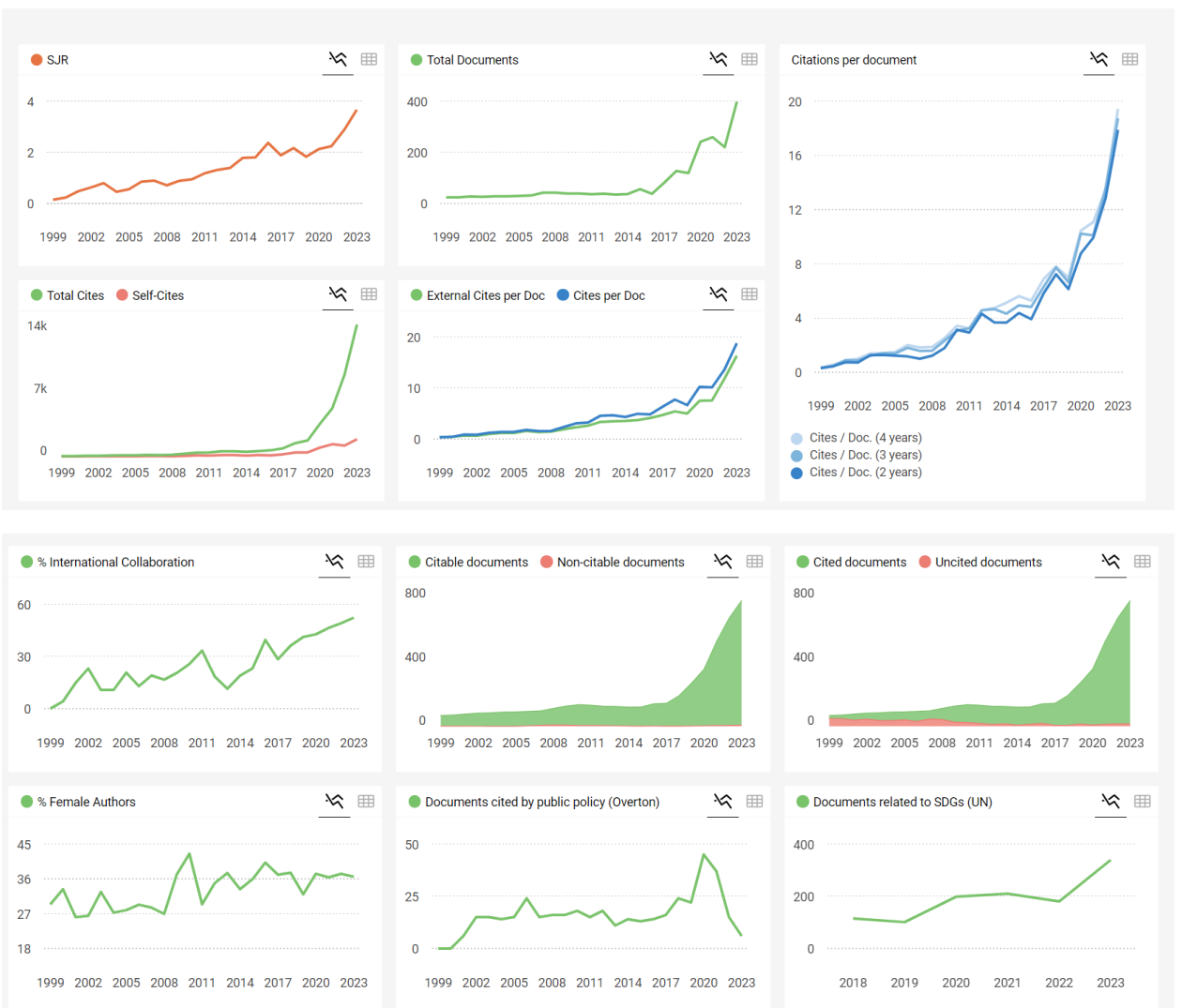
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Abstract

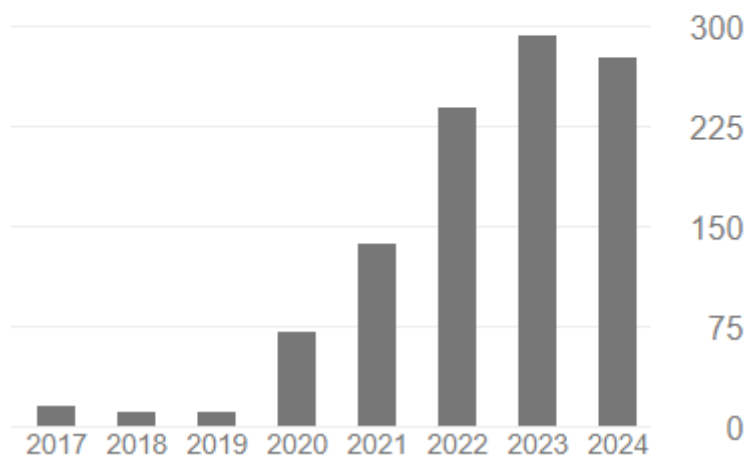
After the internal combustion engine was the dominant technology in the automotive industry for more than a century, a transition to electric cars is now under way. However, not all car manufacturers seem equally determined to move away from fossil fuels. Based on a comparative case study of German automakers, we discuss some underlying factors associated with variation in electrification strategies. Conceptually, we focus on

Business Strategy and the Environment

COUNTRY United Kingdom  Universities and research institutions in United Kingdom  Media Ranking in United Kingdom	SUBJECT AREA AND CATEGORY Business, Management and Accounting └ Business and International Management └ Strategy and Management Environmental Science └ Management, Monitoring, Policy and Law Social Sciences └ Geography, Planning and Development	PUBLISHER John Wiley and Sons Ltd	H-INDEX 147
PUBLICATION TYPE Journals	ISSN 09644733, 10990836	COVERAGE 1992-2023	INFORMATION Homepage How to publish in this journal



Статистика цитирования	1074	1035
h-индекс	16	16
i10-индекс	21	21



3) Anat Tchetchik, Liat I. Zvi, Sigal Kaplan, Vered Blass, The joint effects of driving hedonism and trialability on the choice between internal combustion engine, hybrid, and electric vehicles, Technological Forecasting and Social Change, Volume 151, 2020, 119815, ISSN 0040-1625, <https://doi.org/10.1016/j.techfore.2019.119815>



The joint effects of driving hedonism and trialability on the choice between internal combustion engine, hybrid, and electric vehicles

Anat Tchetchik^a, Liat I. Zvi^b, Sigal Kaplan^c, Vered Blass^d

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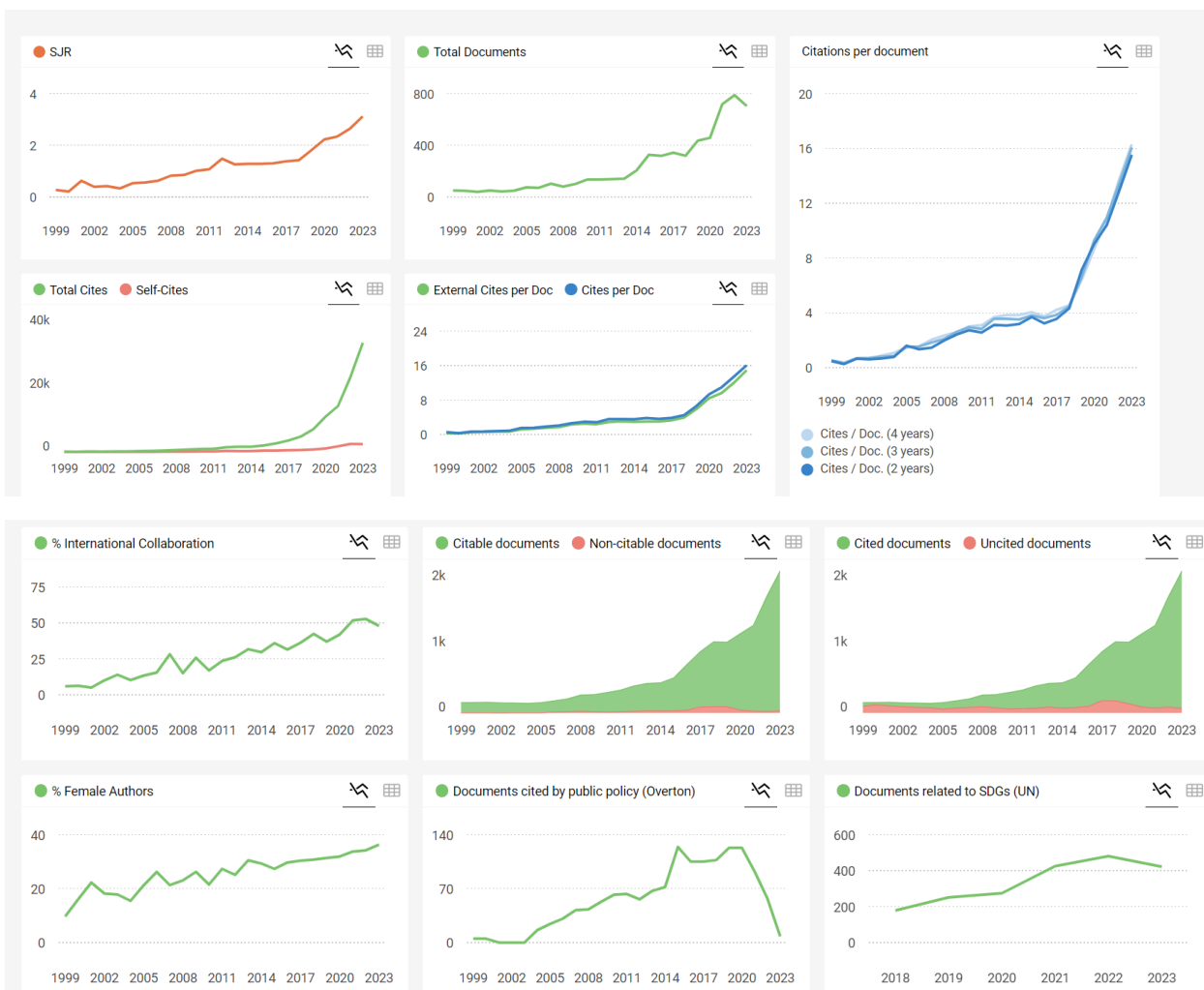
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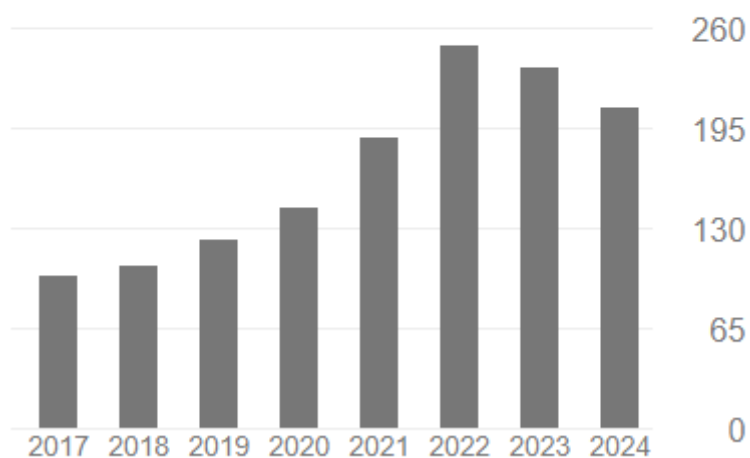
- Normative, gain and hedonic goals affect consumers discrete choice between conventional, hybrid and electric cars.

Technological Forecasting and Social Change

COUNTRY	SUBJECT AREA AND CATEGORY	PUBLISHER	H-INDEX
United States Universities and research institutions in United States Media Ranking in United States	Business, Management and Accounting └ Business and International Management └ Management of Technology and Innovation Psychology └ Applied Psychology	Elsevier Inc.	179
PUBLICATION TYPE	ISSN	COVERAGE	INFORMATION
Journals	00401625	1970-2023	Homepage How to publish in this journal Contact



Статистика цитирования	1904	1148
h-индекс	18	17
i10-индекс	26	24

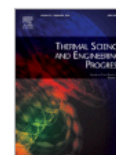


4)Tomáš Pawlenka, Martin Juránek, Pavel Klaus, Marek Beseda, Michal Buráň, Miroslav Suchánek, Petr Sehnoutka, Jiří Kulhánek, Compact automatic controlled internal combustion engine cogeneration system based on natural gas with waste heat recovery from the combustion process, Thermal Science and Engineering Progress, Volume 44, 2023, 102042, ISSN 2451-9049, <https://doi.org/10.1016/j.tsep.2023.102042>.



Thermal Science and Engineering Progress

Volume 44, 1 September 2023, 102042



Compact automatic controlled internal combustion engine cogeneration system based on natural gas with waste heat recovery from the combustion process

Tomáš Pawlenka ^a , Martin Juránek ^a, Pavel Klaus ^a, Marek Beseda ^a, Michal Buráň ^a, Miroslav Suchánek ^a, Petr Sehnoutka ^a, Jiří Kulhánek ^b

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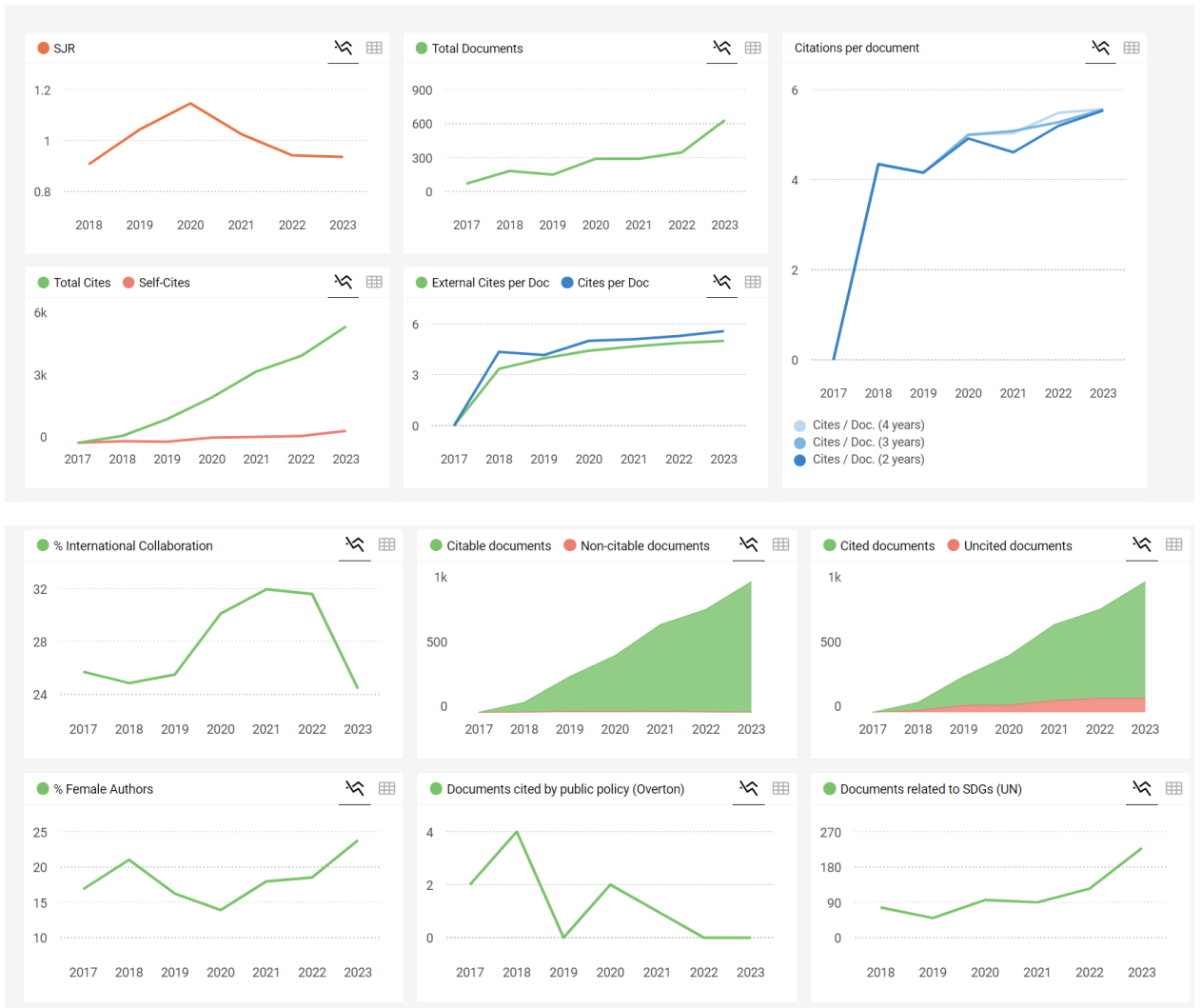
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Abstract

This paper is related to cogeneration, or combined heat and power systems (CHP) and its development, which is based on an already used and low-cost internal combustion engine ICE with a fuel system redesigned for the injection of natural gas. The main role of this system is heating and electricity production and is mainly designed for small or

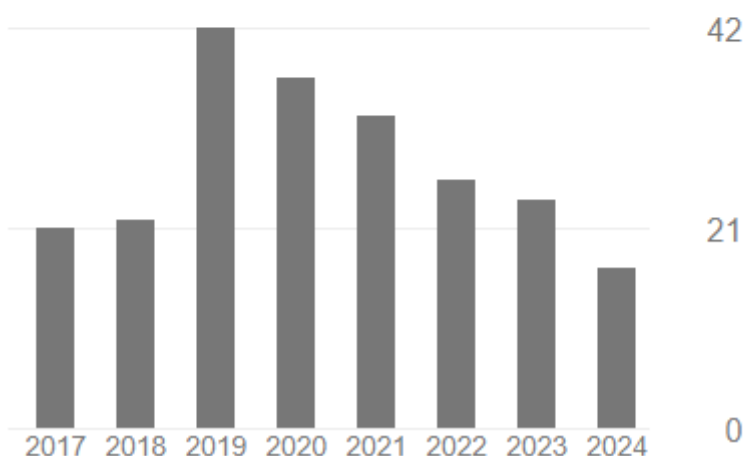
Thermal Science and Engineering Progress

COUNTRY United Kingdom Universities and research institutions in United Kingdom Media Ranking in United Kingdom	SUBJECT AREA AND CATEGORY Chemical Engineering └ Fluid Flow and Transfer Processes	PUBLISHER Elsevier Ltd	H-INDEX 56
PUBLICATION TYPE Journals	ISSN 24519049	COVERAGE 2017-2023	INFORMATION Homepage How to publish in this journal



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	Все	Начиная с 2019 г.
Статистика цитирования	243	179
h-индекс	4	4
i10-индекс	2	2



5)Van Mierlo, J. and Maggetto, G. (2007), Fuel Cell or Battery: Electric Cars are the Future. Fuel Cells, 7: 165-173. <https://doi.org/10.1002/fuce.200600052>



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Fuel Cell or Battery: Electric Cars are the Future

J. Van Mierlo G. Maggetto

First published: 30 March 2007 | <https://doi.org/10.1002/fuce.200600052> | Citations: 44

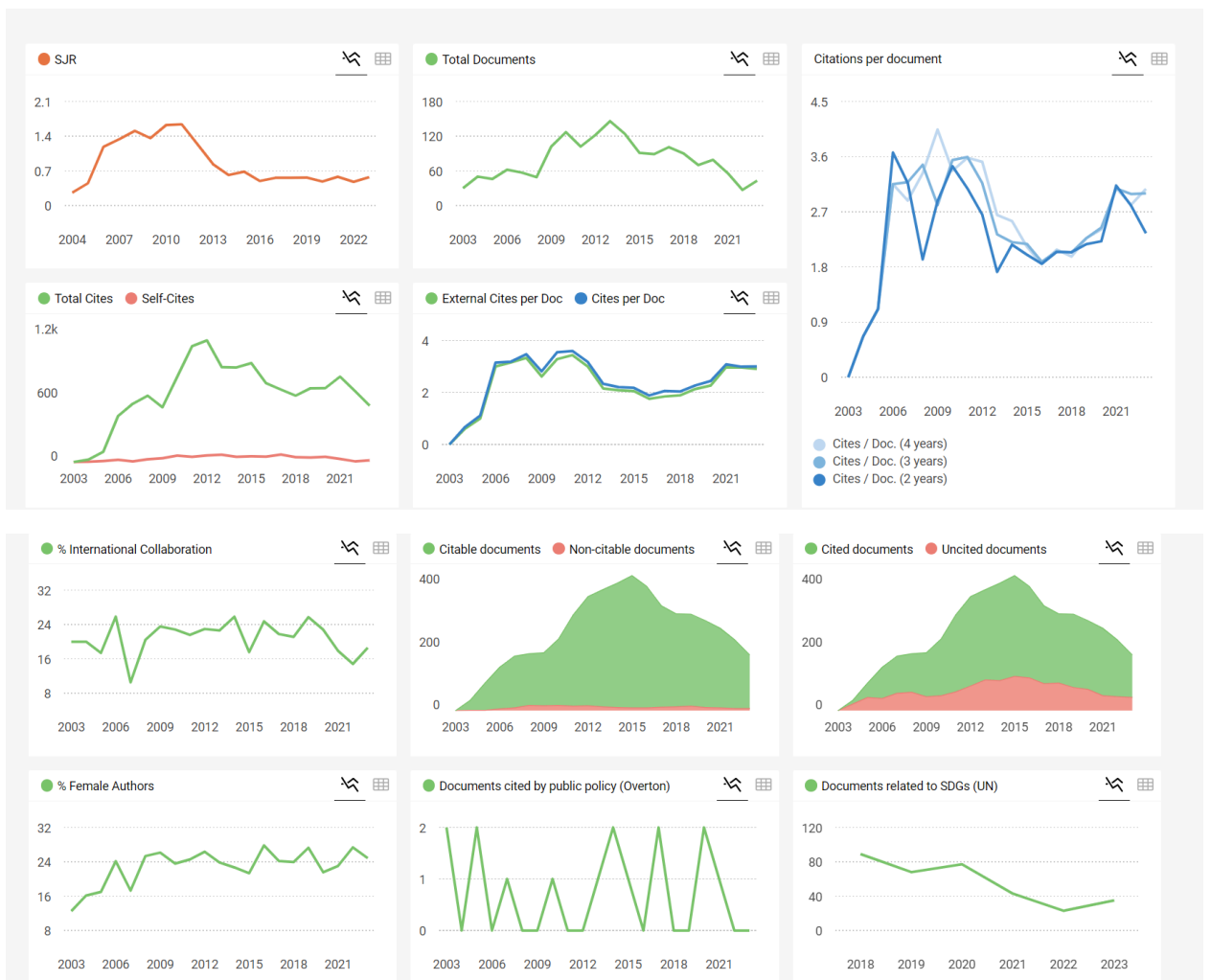
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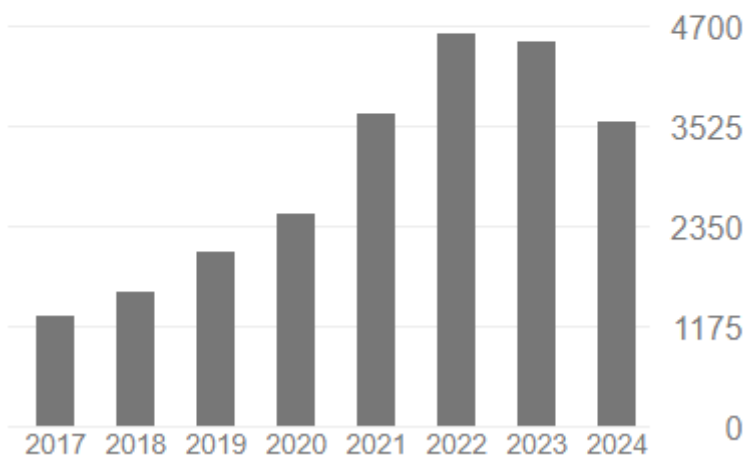
Battery and hybrid vehicles are today's sustainable mobility solutions, preparing a future shared with a hydrogen economy. The summary report of the EU High Level Group for Hydrogen and Fuel Cells, presented in June 2003, develops a vision on the contribution that hydrogen and fuel cells could make to the realization of sustainable energy systems in the future [1].

Fuel Cells

COUNTRY United Kingdom  Universities and research institutions in United Kingdom  Media Ranking in United Kingdom	SUBJECT AREA AND CATEGORY Energy Energy Engineering and Power Technology Renewable Energy, Sustainability and the Environment	PUBLISHER John Wiley and Sons Ltd	H-INDEX 78
PUBLICATION TYPE Journals	ISSN 16156846, 16156854	COVERAGE 2003-2023	INFORMATION Homepage How to publish in this journal Ulrich.Stimming@newcastle.ac.uk



Статистика цитирования	29495	21053
h-индекс	87	71
i10-индекс	335	268



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 - Alive (820)
 - Dead (1402)
- 1st application year
 - After 2020 (142)
 - 2016-2020 (546)
 - 2011-2015 (490)
 - 2006-2010 (284)
 - Before 2006 (760)
- Assignee
- Litigations
- Oppositions

#	Title	Publication number	1st app. date	Applicant/Assignee
1	Method for actuating an accumulator catalyst for nitrogen dioxide on an internal combustion engine for a vehicle, in particular a car	EP1590560	2003-01-22	AUDI LIFE TECH
2	Double dynamical source of electric power internal combustion tamping car	CN205382369	2015-12-14	SOOCHOW U...
3	Electric car power supply device for driving power generation by combining super capacitor with internal-combustion engine	CN101797894	2009-02-11	GENESIS PO...
4	Water-wave-proof open-type self-ventilation main generator installed under vehicle and used for internal combustion motor car	CN111478491	2020-05-18	CRRC YONGJ...
5	Cooling device for internal combustion engine of motor vehicle e.g. of passenger car has cooling circuit in which three condensers are arranged whereby condensers are connected with each other in combined rows or paral...	DE102004050436	2004-10-16	AUDI
6	Electric motor car internal-combustion engine blast pipe	CN204716370	2015-06-04	HANSHAN C...
7	Internal combustion engine electric car end cover convenient to install	CN218112627	2022-07-29	CHONGQING ...
8	Internal combustion electric drive rescue operation car for railway	CN207225354	2017-09-15	BAQJI CRRC ...
9	Internal combustion engine for a motor vehicle, more particularly for a motor car, and method for operating such an internal combustion engine	US11293341	2018-05-17	DAIMLER MERC
10	Mixed power car of wind power electric internal combustion engine	CN1647969	2005-01-28	DAN J...

Method for actuating an accumulator catalyst for nitrogen dioxide on an internal combustion engine for a vehicle, in particular a car

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Family view - 4 / 2222

☐ CN111478491 B
☐ CN111478491 A

Water-wave-proof open-type self-ventilation main generator installed under vehicle and used for internal combustion motor car

Abstract

The invention relates to a generator, in particular to a water-wave-proof open-type self-ventilation main generator installed under a vehicle and used for an internal combustion motor car. The problem that water waves easily enter a motor through an air inlet and an air outlet of an open type self-ventilation main generator on a power dispersion type internal combustion motor car is solved. An airduct is fixed to the outer end face of a non-transmission end cover of the main generator, the bottom of the air duct is sealed, an opening in the top of the air duct is upward, and an air inlet window right opposite to a first air inlet in the non-transmission end cover is formed in the side face, opposite to the outer end face of the non-transmission end cover, of the air duct. A second air inlet is formed in the end, close to the non-transmission end cover, of the top of the machine base and covered with a machine base air inlet cylinder. A water baffle is fixed to the lower portion of their outlet in the machine base so that water waves can be prevented from splashing into the stator through the air outlet. According to the invention, the main generator with the open type self-ventilation structure meets the requirement of water wave prevention under the vehicle, so that the main generator can be pushed to move on the power dispersion type internal combustion motor car.

Protected countries
Granted: CN

List of publications

Application number: 2020CN-0416868 Date: 2020-05-18 Register

CN111478491 B - Granted patent for invention 2021-07-30
 CN111478491 A - Published application 2020-07-31

Inventor
ZHENG SHOUHAI
REN YANSHENG
WEI XIAOWEN
WEI CHAO
ZHANG WEI
JING WANPENG
DU JIE

Applicant/Assignee
CRRC YONGJI ELECTRIC
owned by CRRC & 33 004 M

Representative
ZHU YUAN, TAIYUAN KEWEI PATENT OFFICE (GENERAL PARTNER); Reg. Nb: 14100

Priority Numbers & Dates
2020CN-0416868 2020-05-18

Technology domain
Electrical machinery, apparatus, energy

IPC codes
H01G 23/00, H01G 23/02, H01G 23/04, H01G 23/06, H01G 23/08, H01G 23/10, H01G 23/12, H01G 23/14, H01G 23/16, H01G 23/18, H01G 23/20, H01G 23/22, H01G 23/24, H01G 23/26, H01G 23/28, H01G 23/30, H01G 23/32, H01G 23/34, H01G 23/36, H01G 23/38, H01G 23/40, H01G 23/42, H01G 23/44, H01G 23/46, H01G 23/48, H01G 23/50, H01G 23/52, H01G 23/54, H01G 23/56, H01G 23/58, H01G 23/60, H01G 23/62, H01G 23/64, H01G 23/66, H01G 23/68, H01G 23/70, H01G 23/72, H01G 23/74, H01G 23/76, H01G 23/78, H01G 23/80, H01G 23/82, H01G 23/84, H01G 23/86, H01G 23/88, H01G 23/90, H01G 23/92, H01G 23/94, H01G 23/96, H01G 23/98, H01G 24/00, H01G 24/02, H01G 24/04, H01G 24/06, H01G 24/08, H01G 24/10, H01G 24/12, H01G 24/14, H01G 24/16, H01G 24/18, H01G 24/20, H01G 24/22, H01G 24/24, H01G 24/26, H01G 24/28, H01G 24/30, H01G 24/32, H01G 24/34, H01G 24/36, H01G 24/38, H01G 24/40, H01G 24/42, H01G 24/44, H01G 24/46, H01G 24/48, H01G 24/50, H01G 24/52, H01G 24/54, H01G 24/56, H01G 24/58, H01G 24/60, H01G 24/62, H01G 24/64, H01G 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