Sample Document Database Fields Search Tips Login/Registration

TOGA® Textile Technology (TOGA)

This database contains references with abstracts, keywords and descriptors on textiles. It provides information from German and international scientific and practical technical literature like journals, conference proceedings, reports, dissertations, as well as non-conventional literature. The abstracts are in German and/or English. The search may be conducted with German or English terms.

Scope

- Natural and chemical fibers, nanofibers, polymers, fiber production, fiber properties
- Yarns, yarn properties, spinning, twisting and texturing processes
- Textile machinery, textile processing, nonwoven manufacturing, braiding, tufting, weaving, knitting, seaming and embroidering processes, garment manufacturing
- Textile treatment and finishing, chemicals, detergents, coating and dyeing methods
- Apparel and fashion, protective clothing, technical textiles, smart clothing, fiber reinforced materials, composites, geotextiles, building fabrics, home textiles, carpets
- Care labelling, textile care, washing, laundering and dry cleaning, textile testing methods
- Textile and clothing industry, textile markets and trade, trade agreements, recycling of textiles, environmental protection

Language

German, English

File Data

Number of records: ca. 362,000
Years covered: from 1971
Update: weekly

Producer

WTI-Frankfurt eG
Ferdinand-Happ-Str. 32
D-60314 Frankfurt/Main
Phone: (069) 4308-111
Fax.: (069) 4308-200
Internet: http://www.wti-frankfurt.de

Responsible for database input:
Sigrid Riedel
Tel.: +49 69 4308-241

Sample Document TOP

Database
TEMA, Copyright WTI-Frankfurt eG

Title
Comparing the fracture toughness of 3-D braided preform composites with z-fiber-reinforced laminar composites.
Vergleich der Bruchzähigkeit von Verbundwerkstoffen mit dreidimensional geflochtenen Vorformen mit der von mittels z-Fasern verstärkten Schichtverbundwerkstoffen.

Descriptors
Bruchzähigkeit; dreidimensionale Struktur; Epoxidharz; Flockfaser; Geflecht (Textil); glasfaserverstärkter Kunststoff; Kurzfaserverstärkung; Schichtverbundwerkstoff; Vergleichstest; Vorform

Abstract
Organic polymer engineering composite materials based on layered fabrics have many advantageous properties and processing features. However, performance properties of the layered OPECs, especially impact strength, delamination resistance, and fracture toughness are poor. Three-dimensional preforms fabricated with 3-D weaving, knitting and braiding techniques, are employed to improve the shortcomings of 2-D layered fabric reinforcements. Z-directional microfibre-reinforced laminar composites were recently developed to improve impact strength and fracture toughness without reducing in-plane performance properties at minimal added cost and at higher productivity in the Flock Materials Laboratory at the University of Massachusetts Dartmouth. The effectiveness of laminar composite z-directional microfibre reinforcement (by a flocking process) in improving fracture toughness was compared with that of a 3-D braided 8-layer glass fibre preform/epoxy composite plate. The results show that the Mode I fracture toughness (G I) of the 3-D braided preform reinforced composites are about 10 times of the 2-D layered glass fabric laminar composites (control) as expected. This is comparable to the results of z-directional microfibre-reinforced composites; up to 9 times increase in G I over that of 2-D glass fabric/epoxy laminar composite (control). The presence of through-thickness microfibre (flock fibre) reinforcements in the matrix resin between reinforcement layers is found not to reduce the in-plane mechanical properties; the fracture toughness however, increases significantly.

Author
Ren, Jia; Kim, Yong K.; Rice, John

Institution
University of Massachusetts Dartmouth, North Dartmouth, MA, US

Source
Textile Research Journal * Band 81 (2011) Heft 4, Seite 335-343 (9 Seiten, 10 Bilder, 7 Tabellen, 10 Quellen)

Serial Codes
ISSN: 0040-5175
Zeitschriftencode: 1981 = Textile Research Journal

Classification
3KMB Fibre-reinforced composites
3KXM Mechanical properties of materials

Language
EN English

Availability
http://dx.doi.org/10.1177/0040517510385172
HS Niederrhein, Bibliothek -0000Z240

Document Number
20110401074

Treatment Codes
E Experimental

Publication Type
J Journal

Publication Form
ED Digital Object Identifier (DOI)

Publication Year
2011

Update
2011-04-26

Database Fields TOP

Title	TI
Author	AU
Institution	CO
Thesaurus	TH
Descriptors	DE
Classification	CC
Source	SO
Serial Codes	SC
Conference Details	CF
Language	LG
Publication Type	PT
Publication Form	PF

Abstract	TX
Material Terms	MT
Material Index	MI
Chemical Index	CI
Free Terms	FT
Treatment Codes	TC
Fulltext	AV
Document Number	NO
Publication Year	YR
Update	UP

Country of Institution	COC
Conference Series No = Konferenzseriennummer	CSN
Country of Conference	CFC
WTI Journal Code = WTI-Zeitschriftencode	FJC

Search Tips TOP

Thesaurus

The search with descriptors from the "Thesaurus Engineering and Management" in the search field "General Search" automatically includes any available German terms and narrower terms, as well as German and English synonyms.
With the "Thesaurus Search" (see grey menu bar) it is possible to preselect search terms for a more efficient search in the database.

*Attention: The Thesaurus Search Engine is available in every single database. But as not all general data bases have a Thesaurus search function available, we are not able to provide this option when **OneSearch** is used for interdisciplinary data base research.*

Search in specific fields

The "General Search" includes the following fields: Title, Abstract, Author, Institution, Source, Serial Codes (ISSN and ISBN), Conference Details, Thesaurus, Free Terms and Publication Year. In all other cases the respective field has to be selected. In the "Expert Search" every field can be selected from the dropdown-list, or you can directly enter the field tag (in capital letters, #tags see above) followed by colon and the search term, e.g. the classification CC:3BFB. The direct search with field tag is possible in all search types (Quick Search, Advanced Search and Expert Search).

Field Author (AU)

In the database TEMA and its parts (e.g. DOMA, WEMA, ZDE, BEFO etc.) it is sufficient to enter the first letters of first or last name of an author into the Author Field (in "Advanced Search" or "Expert Search"). You will then be given a list of matching entries, from which you can select the appropriate name.

Alternatively names may be searched with truncation (*), e.g. hoyer* returns hoyer-ina, hoyer-n-j, hoyer-norbert, hoyerberg, hoyermann etc.
For a more precise search, please truncate at the initial of the first name, e.g. "hoyer n*" returns only authors with last name Hoyer, whose first names start with "N", as Hoyer, Niklas or Hoyer,

Norbert. or Hoyer, N. Search names within quotation marks, e.g. "hoyer norbert" OR "hoyer n*" (last name - first name) and always use the Author Field. This way of searching is possible in all databases. Truncation is recommended, since first names are often abbreviated in the literature quoted.

Field Institution (CO)
This field supplies the author affiliation. Wherever possible, these institutions have been standardised and can be used for refining the search result. Changes in company names should be taken into account (e.g. DaimlerChrysler -> Daimler). The country of the institution is searchable with the tag COC (in captial letters) and the two-character ISO-Country-Code, e.g. COC:cn finds institutions from China.

Classification Field (CC)
In "Advanced Search" and "Expert Search" the subjects can be selected from a list (see link below search fields) giving the top level of the WTI-classification. Several selected items are combined with the operator OR. The selection of an item also includes the more precise subclasses into the search. If you enter the code directly, e.g. CC:3BFB, only the specified class is found, unless you truncate the class: CC:BF* includes the subclasses.
In the "General Search" the field tag CC has to be used. Instead you can select the field from the dropdown-list in the "Expert Search".
For a list of the codes see WTI Classification
Additionally you can refine your search result after a search in other search fields with the link "Classification" on the right hand side of the titlelist. Several selected subjects are combined with the operator AND, that is: all must apply. This list is sortable either by number of hits or alphabetically by codes.

Field Source (SO)
Publication titles may be searched as phrases (strings), e.g. "laser in medicine and surgery".

Field Serial Codes (SC)
ISSN and ISBN are searched with hyphens without text, e.g. 978-3-18-092009-2.
The WTI-Journal-Code is searchable e.g. as FJC:770 (see WTI Journal List [in German]).

Field Conference Details (CF)
Since 1993 the conference details have been standardised. Since then conference series numbers have been assigned to conferences regularly scanned. These numbers may be searched e.g. as CSN:14 or CSN:12349 (Numbers see Conferences [in German]). The Conference Series Numbers are to be searched without the leading zeros. CSN has to be entered in capital letters.The conference number is displayed in field Serial Codes.
Conferences published before 1993 may be searched as usual with phrases or with operators.

Publication Form (PF)
This field helps identify electronic publications. It is available since 1991. Search with the codes:
EC for CD-ROM/DVD,
ED for records with link (DOI, Digital Object Identifier) to the publisher, where the publication is available, or
EL for online documents, that are often for free in the internet.

Search e.g. PF:ed
With PF:e* all electronic publications are found.
Instead you can refine your search result with **Publication Type** "Electronic Publication" in the right column of the Results list, which includes all of the codes above.

Field Treatment Codes (TC)
This field is available since 1993, which means that selecting a code from this list excludes older records from the search result.

Field Document Number (NO)
The document number is a permanent identifier for a specific record. Search e.g. NO:20090101598.

Update

February 2016