

Engineering Village 2

操作手冊



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EV2 系統簡介

Engineering Village 2 是由 Elsevier Engineering Information Inc. 所出版之工程類電子資料庫，Engineering Village 2 (以下簡稱 EV2) 提供了一系列優質的應用科學及工程領域專業資訊、資源。

EV2 的功能特色如下

1. 選擇資料庫：可選擇以下的資料庫

資料庫分類	資料庫名稱	資料庫內容
書目摘要 資料庫	Compendex	<ul style="list-style-type: none"> * 收錄 5000 多筆工程期刊、研討會和技術報告、超過 700 萬筆書目資料 * 收錄工程和應用科學領域的資料，包含了生物工程學、運輸學、化學和加工工程等 * 收錄 1884 年至今的資料，每年增加選自 175 種學科中約 25 萬筆記錄 * 更新頻率：每週更新
	INSPEC (須另外訂購)	<ul style="list-style-type: none"> * 收錄全球電子工程、電子學、物理學、控制工程、資訊科技、通訊學、電子計算機等科學文獻 * 從 3500 筆科學和技術性期刊、1500 筆會議記錄中收錄超過 700 萬筆書目摘要資料 * 資料庫每年增加約 330,000 筆新紀錄 * 收錄資料自 1969 年至今 * 更新頻率：每週更新
	NTIS (須另外訂購)	<ul style="list-style-type: none"> * National Technical Information Service Database (簡稱 NTIS)，內容選自美國由國家資助之研究發展計畫的研究報告，包含美國太空總署 (NASA)、能源部(DOE)及其他政府部門提供的各類研究報告，收錄超過 2 百萬筆文獻資料 * 涵蓋建築工業技術、化學、能源與能量、環境保護與控制、工業與機械工程、材料科學、自然資源、動力與燃料等學科 * 收錄自 1899 年至今 * 更新頻率：每週更新
	Compendex & Inspec Compendex & NTIS Inspec & NTIS Compendex & Inspec & NTIS	<ul style="list-style-type: none"> * 可選擇結合 Compendex & Inspec、Compendex & NTIS、Inspec & NTIS、Compendex & Inspec & NTIS * 結合 Compendex 和 INSPEC 可以移除前 500 筆重複的資料 * 更新頻率：每週更新

手冊	CRC ENGnetBASE(須另外訂購)	<ul style="list-style-type: none"> * CRC Press 出版的工程手冊線上版 * CRC ENGnetBASE 線上版收錄超過 200 本工程手冊 * 當輸入檢索辭彙時，系統會開啓新視窗連結至 CRC ENGnetBASE 網站顯示檢索結果
專利	USPTO	<ul style="list-style-type: none"> * 美國專利商標局提供從 1970 年至今的全文專利資料庫 * 1970 至 1975 年間的專利資料僅能以專利號碼、US 分類號進行查找 * 更新頻率：每週更新 * 當輸入檢索辭彙時，系統會開啓新視窗連結至 USPTO 網站顯示檢索結果
	Esp@cenet	<ul style="list-style-type: none"> * 資料來源：歐洲專利局、世界智慧財產組織、日本專利組織
網站查詢	Scirus	<ul style="list-style-type: none"> * Scirus 為一綜合性科學主題的檢索引擎，提供使用者網路上的科學或相關網站資料 * Scirus 收錄超過 1 億 5 百萬筆科學相關網站，包含 9 千萬筆網站及 1700 萬筆來自於 Science Direct、MEDLINE on BioMedNet 等的資料 * Scirus 收錄包括 4300 萬筆.edu 的網站、580 萬筆.org 的網站、570 萬筆.ac.uk 的網站、450 萬筆.com 的網站、2 百萬筆.gov 的網站。

2. 檢索：

提供 Quick Search 簡易檢索、Expert Search 專家檢索、Thesaurus 索引典檢索、eBook Search 電子書檢索（電子書全文需另購）

3. Help 使用說明：

提供 Quick Search 和 Expert Search、Thesaurus、eBook Search 的線上及 PDF 檔的使用手冊。

4. Result 檢索結果：

- * 可依照相關性或出版年來排列
- * 瀏覽檢索結果的方式有三種 citation 書目、abstract 摘要、detailed record 詳細資料
- * Print 列印檢索結果
- * E-mail 檢索結果
- * Download 下載檢索結果
- * Save to Folder 儲存到個人資料夾

5. Remove Duplicates 刪除重複資料：

選擇 Compendex & INSPEC 資料庫時，可以選擇刪除 Compendex 或 INSPEC 資料庫中前 500 筆重複的資料，另外也可以按 Recall removed 將刪除的資料重新呈現。

6. Full text 全文：

EV2 提供全文連結、文獻傳遞、館藏連結的功能。

7. Search History 檢索歷史：

EV2 會將使用者先前使用的檢索策略儲存在檢索歷史中，檢索者可以重新執行先前的檢索策略或結合先前的檢索策略重新執行檢索。另外，在檢索歷史中還提供 save(儲存)及 e-mail alert 的功能。

8. Selected Records 選取紀錄：

- * 檢索者可以單選或多選欲查看的紀錄
- * 提供 citation 書目、abstract 摘要、detailed record 詳細資料三種瀏覽方式
- * Print 列印選取紀錄
- * E-mail 以電子郵件傳送選取紀錄
- * Download 下載選取紀錄
- * Save to Folder 儲存到個人資料夾

9. Personal Account 個人帳號：

EV2 提供使用者註冊 Personal Account，Personal Account 提供使用者儲存檢索策略、建立個人資料夾、儲存檢索結果、建立 E-mail Alert，使用者在 Personal Account 中可以儲存 25 個檢索策略及 15 個 E-mail Alert。

10. My Folders 我的資料夾：

使用者在註冊個人帳號後，可以在 My Folders 建立個人資料夾儲存檢索紀錄。在 My Folder 中可以建立 3 個資料夾，每個資料夾可以儲存 50 筆記錄。

11. 切截符號 (Truncation)

星號(*) 為右切截符號。切截符號命令檢索到以切截符號為止的前幾個字母相同的所有詞：
例如：輸入 comput* 得到 computer、computerized、computation、computational、computability 等。

12. 精確片語檢索 (Exact Phrase Searching)

如果輸入的片語不帶括弧或引號，由於系統會將檢索結果按相關性排序，因此可以得到比較理想的檢索結果。但是，如果需要做精確檢索，就應使用括弧或引號。

例如："International Space Station"

{solar energy}

13. 連接詞 (Stop Words)

如果檢索的短語中包含連接詞(and, or, not, near)，則需將此短語放入括弧或引號中。

例如：{block and tackle}

"water craft parts and equipment"

{near earth objects}

14. 特殊字元 (Special Characters)

特殊字元是除 a-z, A-Z, 0-9, ?, *, #, () 或{ }之外的所有字元。檢索時系統將忽略特殊字元。如果檢索的短語中含有特殊字元，則需將此短語放入括弧或引號中，此時特殊字元將被一個空格所代替。

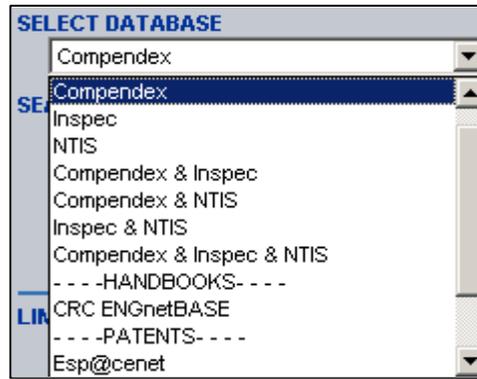
例如：{M/G/I}

Quick Search 簡易檢索

登入後，系統會自動導入簡易查詢 (Quick Search) 的頁面，檢索步驟如下：

The screenshot displays the 'Quick Search' interface. At the top, there are navigation tabs: News, Quick Search (selected), Expert Search, Thesaurus, eBook Search, Reference Services, and Help. The main search area includes a 'SELECT DATABASE' dropdown menu set to 'Compendex'. Below this is the 'SEARCH FOR' section with three input fields and 'AND' operators. To the right is the 'SEARCH IN' section with three dropdown menus, all set to 'All fields'. The 'LIMIT BY' section has dropdowns for 'All document types', 'All treatment types', and 'All languages', along with a date range selector (1990 to 2004) and a radio button for 'Last four updates only'. The 'SORT BY' section has radio buttons for 'Relevance' (selected) and 'Publication year', and a checkbox for 'Autostemming off'. At the bottom are 'Search' and 'Reset' buttons. On the right side, there is a 'Browse Indexes' sidebar with radio buttons for 'Author' (selected), 'Author affiliation', 'Serial title', 'Publisher', and 'Ei controlled term', and a 'Browse' button.

1. **選擇資料庫：**可以選擇 Compendex、INSPEC、NTIS、Compendex & Inspec、Compendex & NTIS、Inspec & NTIS、Compendex & Inspec & NTIS、CRC ENGnetBASE、USPTO、Esp@cenet、Scirus(如下圖)



2. 選擇檢索欄位

從 Search in 下拉選單中選擇欲檢索的欄位，之後在 Search for 下方空格輸入欲檢索的辭彙。另外可以利用布林邏輯 AND、OR、NOT 結合檢索條件。

Compendex

欄位	意義
All fields	Compendex 資料庫中所有的欄位
Subject/Title/Abstract/	主題、題名、摘要
Abstract	摘要
Author	作者。請輸入姓氏，空一格，再輸入名字或名字縮寫，可配合切截使用
Author affiliation	作者服務機構
EI Classification Code	EI 分類號
CODEN	叢刊代碼
Conference Information	會議資訊
Conference Code	會議代碼
ISSN	國際標準期刊號
EI Main heading	EI 主要標目
Publisher	出版者
Serial title	期刊名稱，可檢索期刊題名的全部或部分名稱
Title	題名，可檢索題名的全部或部分名稱
Ei controlled term	Ei 控制辭彙

INSPEC (須另外訂購)

欄位	意義
All fields	Compendex 資料庫中所有的欄位
Subject/Title/Abstract/	主題、題名、摘要
Author	作者。請先輸入姓氏，空一格，再輸入名字或名字縮寫，可配合切截使用

Author affiliation	作者服務機構
Classification Code	分類號
CODEN	叢刊代碼
Conference Code	會議代碼
ISSN	國際標準期刊號
Main heading	主題詞
Publisher	出版者
Material Identity Number	材料識別碼
Serial title	期刊題名，可檢索期刊題名的全部或部分名稱。
Title	題名，可檢索題名的全部或部分名稱。
INSPEC controlled term	INSPEC 控制辭彙

NTIS (須另外訂購)

欄位	意義
All fields	NTIS 資料庫中所有的欄位
Subject/Title/Abstract/	主題、題名、摘要
Abstract	摘要
Author	作者。請輸入姓氏，空一格，再輸入名字或名字縮寫，可配合切截使用
Author affiliation	作者服務機構
Classification Code	分類號
Contract Number	契約號碼
Country of Origin	原產國
Monitoring Agency	監控代理機構
NTIS Accession Number	NTIS 入藏號
NTIS controlled terms	NTIS 控制辭彙
Report Number	報告號碼
Title	題名，可檢索題名的全部或部分名稱
NTIS price codes	NTIS 價格規則

CRCENGnetBASE (須另外訂購)

提供 All Fields(所有欄位)的檢索欄位

USPTO Patents

欄位	意義	欄位	意義
All fields	所有欄位	Inventor name	發明者姓名
Title	題名	Inventor city	發明者城市

Abstract	摘要	Inventor state	發明者州別
Issue date	發布日期	Inventor country	發明者國家
Patent number	專利號碼	Government interest	政府利益
Application serial number	申請序列號碼	Attorney/Agent	律師/代理人
Application type	申請類型	PCT information	PCT 資訊
Assignee name	申請人姓名	Foreign priority	國外優先權
Assignee city	申請人城市	Reissue data	重新發行日期
Assignee state	申請人州別	Related US Application data	相關美國申請資料
Assignee country	申請人國家	US references	美國委託權限
International classification	國際分類	Foreign references	外國委託權限
U.S .classification	美國分類	Other reference	其他委託權限
Primary examiner	主要審查員	Claim(s)	所有權
Assistant examiner	助理審查員	Description/Specification	敘述

Esp@cenet

當使用者選擇Esp@cenet這個資料庫的時候，系統會重新開啓一個視窗到Esp@cenet的網站
<http://ep.espacenet.com/> 供使用者查詢。

Scirus

當使用者選擇Scirus這個資料庫的時候，系統會重新開啓一個視窗到Scirus的網站<http://www.scirus.com/> 供使用者查詢。

3. 限制條件

- (1) Document type 文件類型：只有 Compendex、INSPEC、Compendex&INSPEC 資料庫有提供。(注意：1985 年以前的 Document type 目前還未提供)

Compendex

文件類型	中文名稱	文件類型	中文名稱
All document types	所有文件類型	Monograph review	專題論文評論
Journal article	期刊文章	Report chapter	報告
Conference article	研討會文章	Report review	報告評論
Conference proceeding	研討會會議記錄	Dissertation	學位論文
Monograph chapter	專題論文	Unpublished paper	未出版發行的文章

INSPEC

CSIS 金珊資訊有限公司 <http://www.csis.com.tw>
 Chin Shan Information Service Co., Ltd

23511 台北縣中和市建一路166號10F之1 Tel : 02-82263123 Fax : 02-82263188
 80660 高雄市前鎮區中山二路2號24F之6 Tel : 07-3337702 Fax : 07-3339348

文件類型	中文名稱	文件類型	中文名稱
All document types	所有文件類型	Monograph chapter	專題論文
Journal article	期刊文章	Monograph review	專題論文評論
Conference article	研討會文章	Dissertation	學位論文
Conference proceeding	研討會會議記錄	Patent(1969-1976)	專利(1969-1976)

(2) Treatment type：只有 Compendex、INSPEC、Compendex&INSPEC 資料庫有提供。

Compendex

特殊主題類型	中文名稱	特殊主題類型	中文名稱
All treatment types	所有特殊主題類型	Historical	歷史類
Applications	應用類	Literature Review	文學評論
Biographical	傳記類	Management Aspects	管理方面
Economic	經濟類	Numerical	數字方面
Experimental	實驗性	Theoretical	理論方面
General Review	一般評論		

INSPEC

特殊主題類型	中文名稱	特殊主題類型	中文名稱
All treatment types	所有特殊主題類型	General Review	一般評論
Applications	應用類	New developments	最新發展
Biographical	傳記類	Practical	實際經驗
Economic	經濟類	Product review	產品評論
Experimental	實驗性	Theoretical	理論方面

(3) Disciplines 理論：只有 INSPEC 資料庫有提供。

理論	中文名稱	理論	中文名稱
All disciplines	所有理論	Computers/control engineering	電腦/控制工程
Physics	物理學	Information technology	資訊科技
Electrical/electronic engineering	電子工程		

(4) Languages 語文：只有 Compendex、INSPEC、Compendex&INSPEC 資料庫有提供。

語文	中文名稱	語文	中文名稱	語文	中文名稱
All language	所有語文	French	法文	Russian	俄文
English	英文	Italian	義大利文	Spanish	西班牙文
Chinese	中文	Japanese	日文	German	德文

(5) Date 日期 與 Last four updates only：可從下拉選單中選擇欲選擇的日期，或只選擇顯示最新資料
(Date 只有 Compendex、INSPEC、Compendex&INSPEC、USPTO 資料庫有提供，Last four updates

only 只有 Compendex、INSPEC、Compendex&INSPEC、資料庫有提供)

4. Sort by 檢索結果排列

可選擇 Relevance 相關性、Publication year 出版年份做排列。

5. Browse Index 索引瀏覽

使用者可以選擇欲查詢的索引瀏覽，如 Author 作者、Author affiliation 作者機構、Serial title 期刊題名、Publisher 出版社、Controlled term 控制辭彙。

6. 檢索技巧

(1) truncation 切截(*)

使用者可以使用切截符號(*)做檢索，例如：輸入 comput* 可以檢索到 computer, computers, computerize, computerization。

(2) Autostemming 自動增加相關字根

Autostemming 自動增加相關字根，當使用者勾選 Autostemming off 系統會自動關閉搜尋檢索辭彙相關的字根的辭彙。Autostemming 自動增加相關字根的例子如下：輸入 management 可以檢索到 manage, managed, manager, managers, managing, management。

(3) Phrase 片語及 phrase containing stop words 片語中包含停字

當使用者使用片語及片語中包含停字(and, or, not, near)時，請用大括弧{}或引號” ”將檢索辭彙圈起來，例如：{Journal of Microwave Power and Electromagnetic Energy}或"near field scanning"。

(4) Browse author name 瀏覽作者姓名

使用者可以透過索引瀏覽作者姓名的變化，例如：Smith, A. OR Smith, A. J. OR Smith, Alan J.。

(5) Date 日期的輸入格式

日期的輸入格式可有以下幾種：June 4, 2002、20020604、June-4-2002、Jun-4-2002。

Expert Search 專家檢索

登入後，系統會自動導入專家檢索（Expert Search）的頁面，檢索步驟如下：

The screenshot shows the Expert Search interface with the following elements:

- Navigation:** News, Quick Search, Expert Search (selected), Thesaurus, eBook Search, Reference Services, Help.
- SELECT DATABASE:** A dropdown menu currently showing "Compendex".
- ENTER SEARCH TERMS BELOW:** A large text input field.
- SEARCH FROM:** Radio buttons for "1990 TO 2004" (selected) and "Last four updates only".
- SORT BY:** Radio buttons for "Relevance" (selected) and "Publication year".
- Buttons:** "Search" and "Reset".
- Browse Indexes:** A sidebar with radio buttons for Author, Author affiliation, Serial title, Publisher, Ei controlled term, Treatment type, Document type, and Language. A "Browse" button is at the bottom.
- Search Codes Table:**

Field	Code	Field	Code	Field	Code
All fields	All	Abstract	AB	Accession number	AN
Assignee	PE	Author	AU	Author affiliation	AF
Ei classification code	CL	CODEN	CN	Conference code	CC
Conference information	CF	Ei controlled term	CV	Country of application	PU
Document type	DT	Filing date	PA	ISBN	BN
ISSN	SN	Language	LA	Ei main heading	MH
Patent issue date	PI	Patent number	PM	Publisher	PN
Serial title	ST	Subject/Title/Abstract	KY	Title	TI
Treatment Type	TR	Uncontrolled term	FL		

1. **選擇資料庫：**可以選擇 Compendex、INSPEC、NTIS、Compendex & Inspec、Compendex & NTIS、Inspec & NTIS、Compendex & Inspec & NTIS、CRC ENGnetBASE、USPTO、Esp@cenet、Scirus

2. **輸入檢索辭彙：**使用者可在 Enter search terms below 的欄位中輸入欲檢索的辭彙，例如：

{International Space Station}wn KY、"Bridge crack propagation" wn KY、{test bed} wn ALL AND {atm networks} wn TI。各資料庫的檢索代碼如下：

Compendex

Search Codes ?					
Field	Code	Field	Code	Field	Code
All fields	All	Ei controlled term	CV	Abstract	AB
Subject/Title/Abstract	KY	Document type	DT	CODEN	CN
Author	AU	Language	LA	ISSN	SN
Author affiliation	AF	Treatment Type	TR	ISBN	BN
Publisher	PN	Ei main heading	MH	Conference code	CC
Serial title	ST	Uncontrolled term	FL	Conference information	CF
Title	TI	Ei classification code	CL	Accession number	AN

INSPEC

Search Codes ?					
Field	Code	Field	Code	Field	Code
All fields	All	Uncontrolled term	FL	Chemical indexing	CI
Subject/Title/Abstract	KY	Classification code	CL	Astro. object indexing	AI
Author	AU	Abstract	AB	Document type	DT
Author affiliation	AF	CODEN	CN	Treatment Type	TR
Publisher	PN	ISSN	SN	Discipline	DI
Serial title	ST	ISBN	BN	Language	LA
Title	TI	Material Identity Number	MI	Conference info.	CF
Controlled term	CV	Numerical data indexing	NI	Accession number	AN

NTIS

Search Codes ?					
Field	Code	Field	Code	Field	Code
All fields	All	Abstract	AB	Accession number	AN
Author	AU	Author affiliation	AF	Availability	AV
Classification code	CL	Contract number	CT	Controlled term	CV
Country of origin	CO	Document type	DT	Filing date	PA
Language	LA	Monitoring agency	AG	Notes	NT
Patent issue date	PI	Report number	RN	Subject/Title/Abstract	KY
Title	TI	Uncontrolled term	FL		

Compendex & INSPEC

Search Codes ?					
C Compendex I Inspec					
Field	Code	Field	Code	Field	Code
All fields (C, I)	All	Abstract (C, I)	AB	Accession number (C, I)	AN
Assignee (C)	PE	Astronomical indexing (I)	AI	Author (C, I)	AU
Author affiliation (C, I)	AF	Chemical indexing (I)	CI	Classification code (C, I)	CL
CODEN (C, I)	CN	Conference code (C)	CC	Conference information (C, I)	CF
Controlled term (C, I)	CV	Country of application (C)	PU	Discipline (I)	DI
Document type (C, I)	DT	Filing date (C)	PA	ISBN (C, I)	BN
ISSN (C, I)	SN	Language (C, I)	LA	Ei main heading (C)	MH
Material identity number (I)	MI	Numerical indexing (I)	NI	Patent issue date (C)	PI
Patent number (C)	PM	Publisher (C, I)	PN	Serial title (C, I)	ST
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Uncontrolled term (C, I)	FL				

Compendex & NTIS

Search Codes ?					
C Compendex N NTIS					
Field	Code	Field	Code	Field	Code
All fields (C, N)	All	Abstract (C, N)	AB	Accession number (C, N)	AN
Assignee (C)	PE	Author (C, N)	AU	Author affiliation (C, N)	AF
Availability (N)	AV	Classification code (C, N)	CL	CODEN (C)	CN
Conference code (C)	CC	Conference information (C)	CF	Contract number (N)	CT
Controlled term (C, N)	CV	Country of application (C)	PU	Country of origin (N)	CO
Document type (C, N)	DT	Filing date (C, N)	PA	ISBN (C)	BN
ISSN (C)	SN	Language (C, N)	LA	Ei main heading (C)	MH
Monitoring agency (N)	AG	Notes (N)	NT	Patent issue date (C, N)	PI
Patent number (C)	PM	Publisher (C)	PN	Report number (N)	RN
Serial title (C)	ST	Subject/Title/Abstract (C, N)	KY	Title (C, N)	TI
Treatment Type (C)	TR	Uncontrolled term (C, N)	FL		

INSPEC & NTIS

Search Codes ?					
I Inspec N NTIS					
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Astronomical indexing (I)	AI	Author (I, N)	AU	Author affiliation (I, N)	AF
Availability (N)	AV	Chemical indexing (I)	CI	Classification code (I, N)	CL
CODEN (I)	CN	Conference information (I)	CF	Contract number (N)	CT
Controlled term (I, N)	CV	Country of origin (N)	CO	Discipline (I)	DI
Document type (I, N)	DT	Filing date (N)	PA	ISBN (I)	BN
ISSN (I)	SN	Language (I, N)	LA	Material identity number (I)	MI
Monitoring agency (N)	AG	Notes (N)	NT	Numerical indexing (I)	NI
Patent issue date (N)	PI	Publisher (I)	PN	Report number (N)	RN
Serial title (I)	ST	Subject/Title/Abstract (I, N)	KY	Title (I, N)	TI
Treatment Type (I)	TR	Uncontrolled term (I, N)	FL		

Compendex & INSPEC & NTIS

Search Codes ?					
C Compendex I Inspec N NTIS					
Field	Code	Field	Code	Field	Code
All fields (C, I, N)	All	Abstract (C, I, N)	AB	Accession number (C, I, N)	AN
Assignee (C)	PE	Astronomical indexing (I)	AI	Author (C, I, N)	AU
Author affiliation (C, I, N)	AF	Availability (N)	AV	Chemical indexing (I)	CI
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Country of application (C)	PU	Country of origin (N)	CO	Discipline (I)	DI
Document type (C, I, N)	DT	Filing date (C, N)	PA	ISBN (C, I)	BN
ISSN (C, I)	SN	Language (C, I, N)	LA	Ei main heading (C)	MH
Material identity number (I)	MI	Monitoring agency (N)	AG	Notes (N)	NT
Numerical indexing (I)	NI	Patent issue date (C, N)	PI	Patent number (C)	PM
Publisher (C, I)	PN	Report number (N)	RN	Serial title (C, I)	ST
Subject/Title/Abstract (C, I, N)	KY	Title (C, I, N)	TI	Treatment Type (C, I)	TR
Uncontrolled term (C, I, N)	FL				

Search Codes ?					
Field	Code	Field	Code	Field	Code
All fields	All	Assignee country	ACN	Attorney/Agent	LREP
Title	TI	Internat'l classification	ICL	PCT information	PCT
Abstract	AB	US classification	CCL	Foreign priority	PRIR
Issue date	SD	Primary examiner	EXP	Reissue data	REIS
Patent number	PT	Assistant examiner	EXA	Related US app. information	RLAP
Application date	AP	Inventor name	AU	US references	REF
Application serial number	APN	Inventor city	IC	Foreign references	FREF
Application type	APT	Inventor state	IS	Other references	OREF
Assignee name	AF	Inventor country	ICN	Claim(s)	ACLM
Assignee city	AC	Government interest	GOVT	Description/Specification	SPEC
Assignee state	AS	Parent case info.	PARN		

3. Sort by 檢索結果排列

可選擇 Relevance 相關性、Publication year 出版年做排列。

4. Browse Index 索引|瀏覽

使用者可以選擇欲查詢的索引|瀏覽，如 Author 作者、Author affiliation 作者機構、Serial title 期刊題名、Publisher 出版社、Controlled term 控制辭彙、Treatment type 特殊主題類型、Document type 文件類型、Language 語言、Discipline 理論。

5. 檢索技巧

(1) 專家檢索的特殊使用 "wn"

在使用專家檢索時，必須使用"wn"來做檢索。例如：{test bed} wn ALL AND {atm networks} wn TI 或(window wn TI AND sapphire wn TI) OR Sakamoto, Keishi wn AU。

(2) truncation 切截(*)

使用者可以使用切截符號(*)做檢索，例如：輸入 comput* 可以檢索到 computer, computers, computerize, computerization。

(3) 使用\$符號

在使用專家檢索時，可使用\$符號尋找相關字根的字彙。例如：\$management 可以檢索到 manage, managed, manager, managers, managing, management。

(4) Phrase 片語及 phrase containing stop words 片語中包含停字

當使用者使用片語及片語中包含停字(and, or, not, near)時，請用大括弧{}或引號""將檢索辭彙圈起來，例如：{Journal of Microwave Power and Electromagnetic Energy}或"near field scanning"。

(5) Browse author name 瀏覽作者姓名

使用者可以透過索引|瀏覽作者姓名的變化，例如：Smith, A. OR Smith, A. J. OR Smith,

Alan J. ◦

(6) Date 日期的輸入格式

日期的輸入格式可有以下幾種：June 4, 2002、20020604、June-4-2002、Jun-4-2002 ◦

Search Result 檢索結果

The screenshot displays a search interface with a navigation bar at the top containing 'News', 'Quick Search', 'Expert Search', 'Thesaurus', 'eBook Search', 'Reference Services', and 'Help'. Below this are buttons for 'Refine Search' and 'New Search', along with a 'Next Page' button and a page number '1 - 25'. A 'Choose format' section includes radio buttons for 'Citation', 'Abstract', and 'Detailed record', and a checked checkbox for 'Clear Selected Records on new search'. A 'Choose output' section features buttons for 'View Selections', 'E-mail', 'Print', 'Download', and 'Save to Folder'. The 'Search Results' section indicates '103130 records found in Compendex for: (((electric*) WN KY) AND ((ieee*) WN ST)), 1990-2004'. It includes a 'Select all on page' link, a 'Select range' input field, and 'Clear all on page' and 'Clear all selections' links. Two results are shown, each with a checkbox, a title, author information, source, database, and links for 'Abstract / Links', 'Detailed Record / Links', and 'Full-text'.

- (1) 可依照相關性或出版年份來排列
- (2) 瀏覽檢索結果 Abstract/Links 摘要與 Detailed Record/Link 詳細資料
- (3) 瀏覽選擇的檢索結果方式有三種 citation 引文、abstract 摘要、detailed record 詳細資料。
- (4) 使用者可將檢索結果 Print 列印、E-mail、Download 下載
- (5) 使用者假使有註冊個人帳號可將檢索結果儲存到個人資料夾(Save to Folder)
- (6) Remove Duplicates 刪除重複資料，選擇 Combined Compendex & INSPEC 資料庫時，可以選擇刪除 Compendex 或 INSPEC 資料庫中前 200 筆重複的資料，另外也可以按 Recall removed 將刪除的資料復原
- (7) Full text 全文：EV2 提供全文的連結、文獻傳遞、館藏連結的功能。

Record 1 from Compendex for:(((electric*) WN KY) AND ((ieee*) WN ST)), 1990-2004

Check record to add to Selected Records

摘要記錄

1. **Design and optimization of very high power density monochromatic GaAs photovoltaic cells**

[Algora, Carlos](#) (E.T.S.I. Telecomunicacion-UPM); [Diaz, Vicente](#) Source: *IEEE Transactions on Electron Devices*, v 45, n 9, Sep, 1998, p 2047-2053
ISSN: 0018-9383 CODEN: IETDAI

Publisher: IEEE

Abstract: This paper deals with the structure optimization of very high power density monochromatic GaAs photovoltaic cells and the theoretical prediction of their performance at irradiances ranging from 0.1 to 100 W/cm². A multifaceted optimum design including the front metal grid, device size and the semiconductor layer structure is presented. The variation in efficiency depending on emitter thickness, base thickness, emitter doping and base doping is also addressed. The objective of this being the configuration of a structure suitable for working up to 100 W/cm² without the detrimental influence of series resistance. For this, a detailed analysis of the effect of series resistance and the quantitative determination of its different components is carried out. The optimum wavelength is 830 nm at 300 K for all the analyzed light intensities, in which a 63% peak efficiency under an irradiance of 100 W/cm² for a p/n structure is obtained. The temperature effect on device performance in the 273-350 K range is also studied. Finally, the influence of device processing is analyzed. (22 refs.) (Author abstract)

Ei controlled terms: [Semiconductor device structures](#) | [Photovoltaic cells](#) | [Electric power systems](#) | [Electric power transmission](#) | [Semiconducting gallium arsenide](#) | [Semiconductor lasers](#) | [Semiconductor device models](#) | [Current density](#) | [Current voltage characteristics](#) | [Electric resistance](#) | [Optimization](#) | [Mathematical models](#)

Database: Compendex

Full-text and Local Holdings Links

[SDOS](#) | [Library Holdings](#)

[Full-text](#)

Record 1 from Compendex for:(((electric*) WN KY) AND ((ieee*) WN ST)), 1990-2004

Check record to add to Selected Records

 1. **Accession number:** 98094379446**Title:** Design and optimization of very high power density monochromatic GaAs photovoltaic cells**Authors:** [Algora, Carlos](#); [Diaz, Vicente](#)**First author affiliation:** E.T.S.I. Telecomunicacion-UPM, Madrid, Spain**Serial title:** IEEE Transactions on Electron Devices**Abbreviated serial title:** IEEE Trans Electron Devices**Volume:** v 45**Issue:** n 9**Issue date:** Sep**Publication year:** 1998**Pages:** p 2047-2053**Language:** English**ISSN:** [0018-9383](#)**CODEN:** [ETDAI](#)**Document type:** Journal article (JA)**Publisher:** IEEE, Piscataway, NJ, USA**Abstract:** This paper deals with the structure optimization of very high power density monochromatic GaAs photovoltaic cells and the theoretical prediction of their performance at irradiances ranging from 0.1 to 100 W/cm². A multifaceted optimum design including the front metal grid, device size and the semiconductor layer structure is presented. The variation in efficiency depending on emitter thickness, base thickness, emitter doping and base doping is also addressed. The objective of this being the configuration of a structure suitable for working up to 100 W/cm² without the detrimental influence of series resistance. For this, a detailed analysis of the effect of series resistance and the quantitative determination of its different components is carried out. The optimum wavelength is 830 nm at 300 K for all the analyzed light intensities, in which a 63% peak efficiency under an irradiance of 100 W/cm² for a p/n structure is obtained. The temperature effect on device performance in the 273-350 K range is also studied. Finally, the influence of device processing is analyzed.**Abstract type:** (Author abstract)**Number of references:** 22**Ei main heading:** [Semiconductor device structures](#)**Ei controlled terms:** [Photovoltaic cells](#) | [Electric power systems](#) | [Electric power transmission](#) | [Semiconducting gallium arsenide](#) | [Semiconductor lasers](#) | [Semiconductor device models](#) | [Current density](#) | [Current voltage characteristics](#) | [Electric resistance](#) | [Optimization](#) | [Mathematical models](#)**Uncontrolled terms:** [Photovoltaic power systems](#) | [Series resistance](#)**Ei classification codes:** [714.2](#) Semiconductor Devices & Integrated Circuits | [706.1](#) Electric Power Systems | [706.1.1](#) Electric Power Transmission | [744.4.1](#) Semiconductor Lasers | [701.1](#) Electricity: Basic Concepts & Phenomena | [921.5](#) Optimization Techniques**Treatment:** Theoretical (THR); Experimental (EXP)**DOI:** 10.1109/16.711373**Database:** Compendex

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詳細記錄

Full-text and Local Holdings Links[SDOS](#) | [!](#)[Library Holdings](#)[Full-text](#)

Selected Records 選擇紀錄

- (1) 選擇檢索結果的瀏覽方式有三種 citation 引文、abstract 摘要、detailed record 詳細資料。
- (2) 使用者可將選擇的檢索結果 Print 列印、E-mail、Download 下載、Save to folder 儲存到個人資料夾。

Choose format: Citation Abstract Detailed record Clear Selected Records on new search

Choose output: [View Selections](#) [E-mail](#) [Print](#) [Download](#) [Save to Folder](#) [Remove all](#)

Selected Records 選擇檢索結果(Citation 引文)

1 - 2 of 2 selected records from Compendex for: (((engineering) WVN All fields) AND ((ieee) WVN ST))

Remove 1. **Computer laboratory infrastructure in engineering education - A case study at wits**
[Nixon, K.J.](#) (Information Eng. Res. Programme, School of Electrical Info. Eng., University of the Witwatersrand); [Dwolatzky, B.](#) **Source:** *IEEE AFRICON Conference*, v 1, 2002, p 431-436
Database: Compendex

Remove 2. **PeopleMover: An example of interdisciplinary project-based education in electrical engineering**
[Daems, Walter](#) (Department of Electrical Engineering, Katholieke Universiteit); [De Smedt, Bart](#); [Vanassche, Piet](#); [Gielen, Georges](#); [Sansen, Willy](#); [De Man, Hugo](#) **Source:** *IEEE Transactions on Education*, v 46, n 1, February, 2003, p 157-167
Database: Compendex

選擇檢索結果(Abstract 摘要)

Choose format: Citation Abstract Detailed record Clear Selected Records on new search

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Selected Records

1 - 3 of 3 selected records from Compendex for: (((electric*) WN KY) AND ((ieee*) WN ST))

[Remove](#) 1. **Design and optimization of very high power density monochromatic GaAs photovoltaic cells**

[Algora, Carlos](#) (E.T.S.I. Telecomunicacion-UPM); [Diaz, Vicente](#) **Source:** *IEEE Transactions on Electron Devices*, v 45, n 9, Sep, 1998, p. 2047-2053

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Database: Compendex

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Choose format: Citation Abstract Detailed record Clear Selected Records on new search

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Selected Records

1 - 3 of 3 selected records from Compendex for: (((electric*) WN KY) AND ((ieeee*) WN ST))

[Remove](#) 1.

Accession number: 98094379446

Title: Design and optimization of very high power density monochromatic GaAs photovoltaic cells

Authors: [Algora, Carlos](#); [Diaz, Vicente](#)

First author affiliation: E.T.S.I. Telecomunicacion-UPM, Madrid, Spain

Serial title: IEEE Transactions on Electron Devices

Abbreviated serial title: IEEE Trans Electron Devices

Volume: v 45

Issue: n 9

Issue date: Sep

Publication year: 1998

Pages: p 2047-2053

Language: English

ISSN: [0018-9383](#)

CODEN: [IETDAI](#)

Document type: Journal article (JA)

Publisher: IEEE, Piscataway, NJ, USA

Abstract: This paper deals with the structure optimization of very high power density monochromatic GaAs photovoltaic cells and the theoretical prediction of their performance at irradiances ranging from 0.1 to 100 W/cm². A multifaceted optimum design including the front metal grid, device size and the semiconductor layer structure is presented. The variation in efficiency depending on emitter thickness, base thickness, emitter doping and base doping is also addressed. The objective of this being the configuration of a structure suitable for working up to 100 W/cm² without the detrimental influence of series resistance. For this, a detailed analysis of the effect of series resistance and the quantitative determination of its different components is carried out. The optimum wavelength is 830 nm at 300 K for all the analyzed light intensities, in which a 63% peak efficiency under an irradiance of 100 W/cm² for a p/n structure is obtained. The temperature effect on device performance in the 273-350 K range is also studied. Finally, the influence of device processing is analyzed.

Abstract type: (Author abstract)

Number of references: 22

Ei main heading: [Semiconductor device structures](#)

Ei controlled terms: [Photovoltaic cells](#) | [Electric power systems](#) | [Electric power transmission](#) | [Semiconducting gallium arsenide](#) | [Semiconductor lasers](#) | [Semiconductor device models](#) | [Current density](#) | [Current voltage characteristics](#) | [Electric resistance](#) | [Optimization](#) | [Mathematical models](#)

Uncontrolled terms: [Photovoltaic power systems](#) | [Series resistance](#)

Ei classification codes: [714.2](#) Semiconductor Devices & Integrated Circuits | [706.1](#) Electric Power Systems | [706.1.1](#) Electric Power Transmission | [744.4.1](#) Semiconductor Lasers | [701.1](#) Electricity: Basic Concepts & Phenomena | [921.5](#) Optimization Techniques

Treatment: Theoretical (THR); Experimental (EXP)

DOI: 10.1109/16.711373

Database: Compendex

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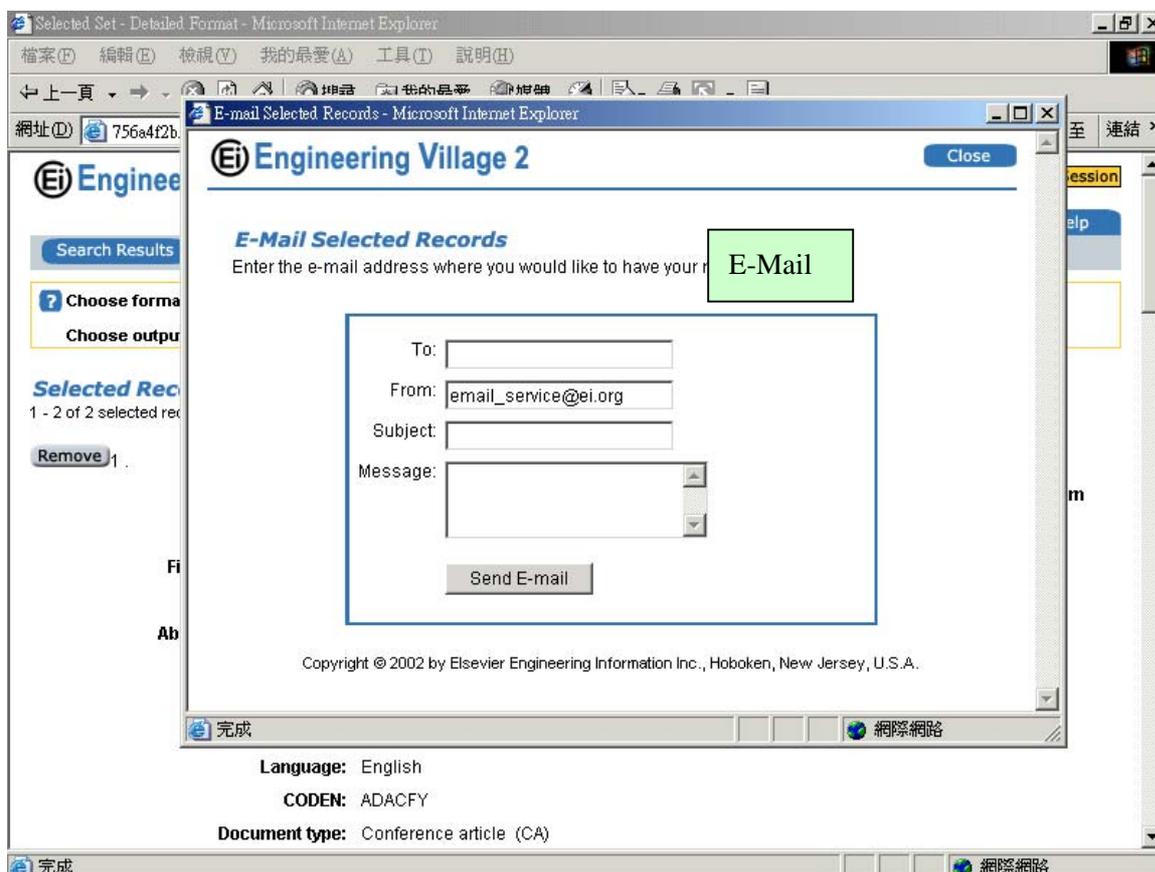
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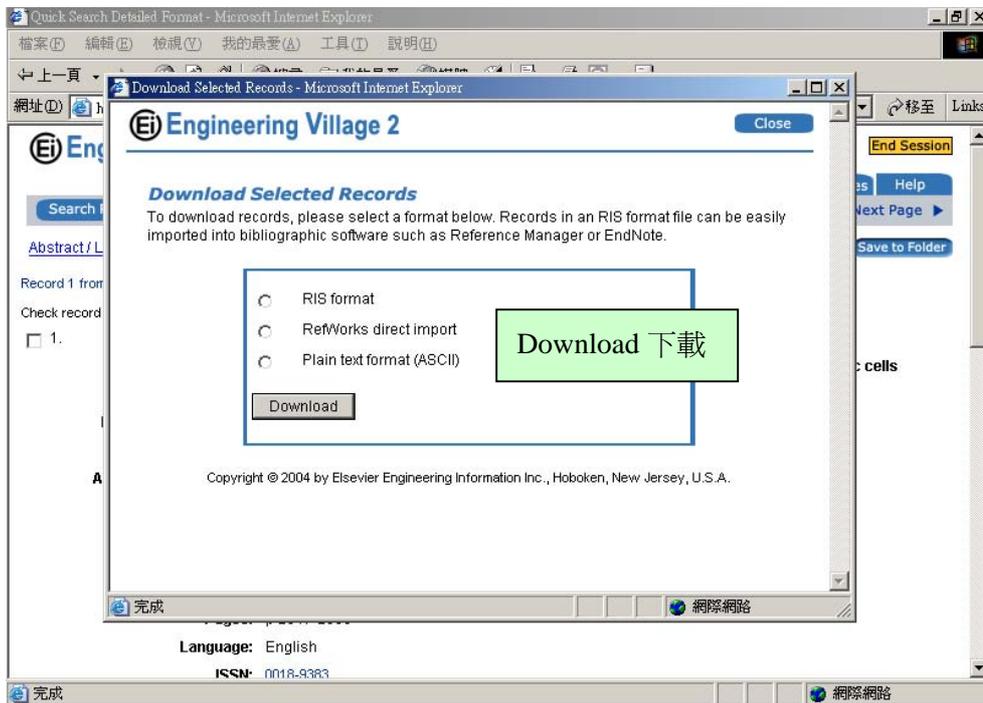
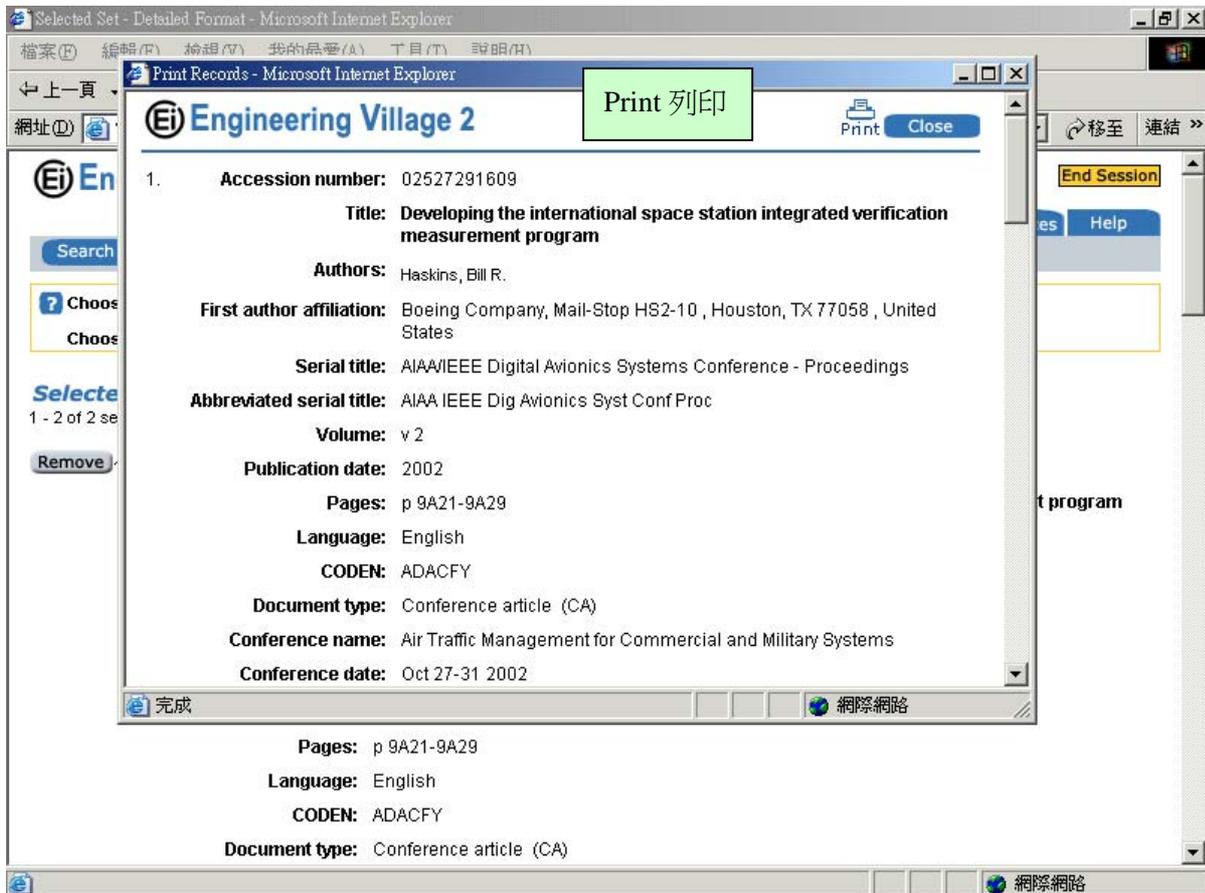
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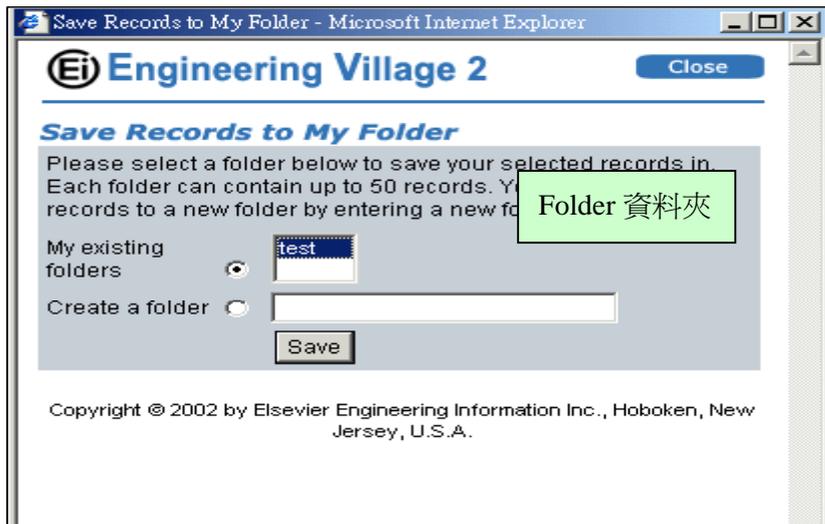
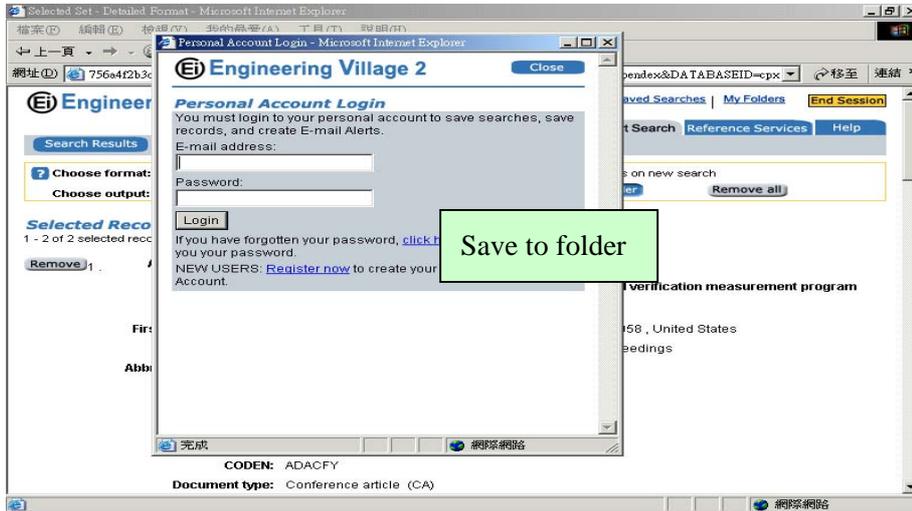
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80660 高雄市前鎮區中山二路2號24F之6 Tel : 07-3337702 Fax : 07-3339348







Search History 檢索歷史

EV2 會將使用者先前使用的檢索策略儲存在檢索歷史中，檢索者可以重新執行先前的檢索策略或結合先前的檢索策略重新執行檢索。另外，在檢索歷史中還提供了以下的功能：

(1) save 與 e-mail alert

使用者可將檢索歷史使用 Save 儲存起來，或者是利用 e-mail alert 功能獲得最新消息。

(2) Combine Previous Searches 結合檢索歷史

使用者可將檢索歷史結合做檢索，例如：(#1 AND #2)、(#1 AND #2) OR (#3 AND #4)、(#1 OR #3) NOT #2。

The screenshot displays the 'Search History' interface. It features a table with columns: No., Type, Search, Autostem, Results, Year(s), Database, E-mail Alert, and Save Search. Three search records are listed, each with a 'Save' button. Below the table are buttons for 'Clear Search History' and 'View Saved Searches'. A section titled 'Combine Previous Searches' includes a text input field, radio buttons for 'Relevance' and 'Publication year', and 'Search' and 'Reset' buttons. The 'Combined Search' section shows the logic for combining searches: (#1 AND #2), (#1 AND #2) OR (#3 AND #4), and (#1 OR #3) NOT #2. A note states: 'Combine searches executed in the same database only.'

No.	Type	Search	Autostem	Results	Year(s)	Database	E-mail Alert	Save Search
1.	Expert	international space station wn ky		1089	1990-2003	Compendex	<input type="checkbox"/>	Save
2.	Expert	(international space station) wn ky		956	1990-2003	Compendex	<input type="checkbox"/>	Save
3.	Quick	((Electromagnetic Energy) WN All fields)	On	9904	1990-2003	Compendex	<input type="checkbox"/>	Save

Saved Searches 儲存檢索

Saved Searches 儲存檢索儲存了使用者在檢索歷史中 Save 的檢索策略。

Saved Searches								
No.	Type	Search	Autostern	Results	Year(s)	Database	E-mail Alert	Date Saved
1.	Quick	((linear induction motor) WN All fields)	On	968	1990-2002	Compendex	<input type="checkbox"/>	12/09/02 Remove
2.	Quick	((network) WN All fields)	On	42099	2001-2003	Compendex	<input type="checkbox"/>	01/07/03 Remove
3.	Quick	((network) WN All fields), Journal article only, Bibliography only	Off	1262	1990-2003	INSPEC	<input type="checkbox"/>	01/07/03 Remove
4.	Expert	international space station wn ky		1089	1990-2003	Compendex	<input type="checkbox"/>	01/12/03 Remove

[Clear Saved Searches](#)

Personal Account 個人帳號

EV2 提供使用者註冊 Personal Account，Personal Account 提供使用者儲存檢索策略、建立個人資料夾、儲存檢索結果、建立 E-mail Alert，使用者在 Personal Account 個人帳號可以儲存 25 個 search 及 15 個 E-mail Alert，註冊的詳細資料如下圖。

Ei Engineering Village 2 [Remove account](#) [Close](#)

Edit Personal Account

Your account will allow you to save searches, save records, and create E-mail Alerts.

*indicate required fields

Title:

*First Name:

*Last Name:

*E-mail address:

Specify a password between 6 and 16 characters.

*Password:

*Confirm Password:

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My Folder 我的資料夾

使用者在註冊個人帳號後，可以在 My Folders 我的資料夾中建立個人資料夾儲存檢索紀錄。在 My Folder 中可以建立 3 個資料夾，每個資料夾可以儲存 50 筆記錄。



Reference Service 相關服務

- (1) Ask an Engineer 詢問工程師
- (2) Ask an Librarian 詢問館員

Thesaurus 索引典

索引典是控制詞彙的指南，用於索引 Compendex 或 INSPEC 的文章。索引人員從控制詞彙表中選擇詞彙來描述其索引的文章。控制詞彙用來將索引的文章標準化。基本上索引典採用層級結構，詞彙由廣義詞、狹義詞或相關詞所組成。索引的文章使用特別指定的控制詞彙。例如：一篇有關 metal testing 的文章在 Compendex 裡會使用 Metal testing 做為索引詞而不用 Materials testing；而探討 steel testing 的文章將會採用 Steel testing 做為索引詞而不用 metal testing。

1. 選擇資料庫

點選 Thesaurus 標籤即可從進入索引典的功能。使用索引典時，必須先從 SELECT DATABASE 下方選擇 Compendex 或 INSPEC 其中一個資料庫。如果貴單位只訂購 Compendex，系統只會顯示 Compendex。

從 Compendex 索引典中選出的詞彙只會在 Compendex 資料庫中查詢，而選自 INSPEC 索引典之詞彙也只能查詢 INSPEC 資料庫。

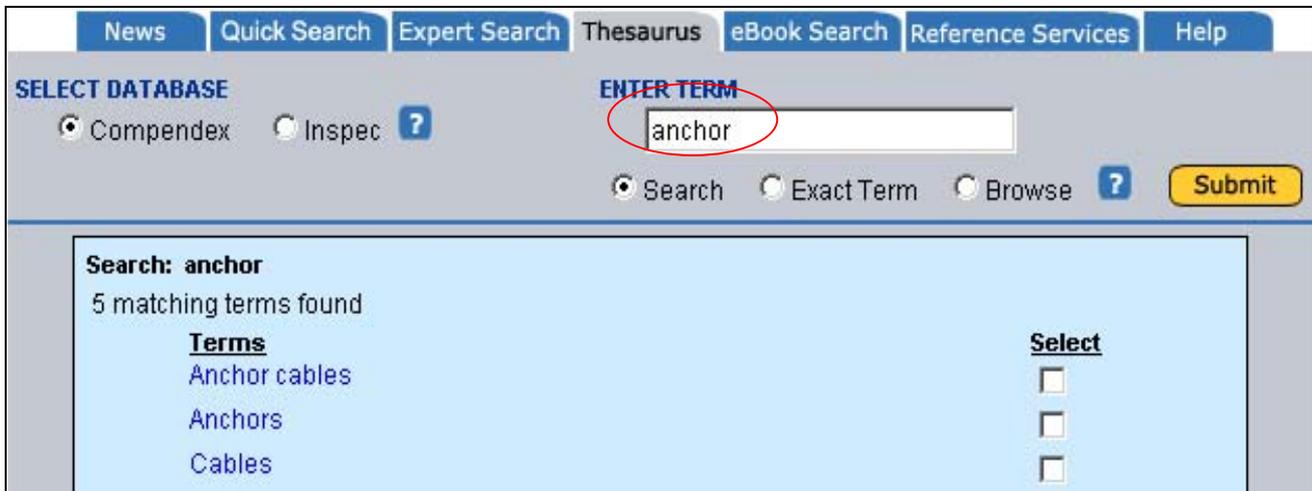
當您轉換不同資料庫的索引典時，先前所選取的索引詞彙都會被刪除。有些詞彙可能會在兩個索引典中出現，但大部份的詞彙都只屬於 Compendex 或 INSPEC 其中一個索引典，因此，這兩個索引典必須分開查詢。

2. 查詢方式

在空白區中輸入您想要查詢的詞，然後選擇 **Search** (查詢)、**Exact Term** (精確詞彙) 或 **Browse** (瀏覽)，之後按下 **Submit**。

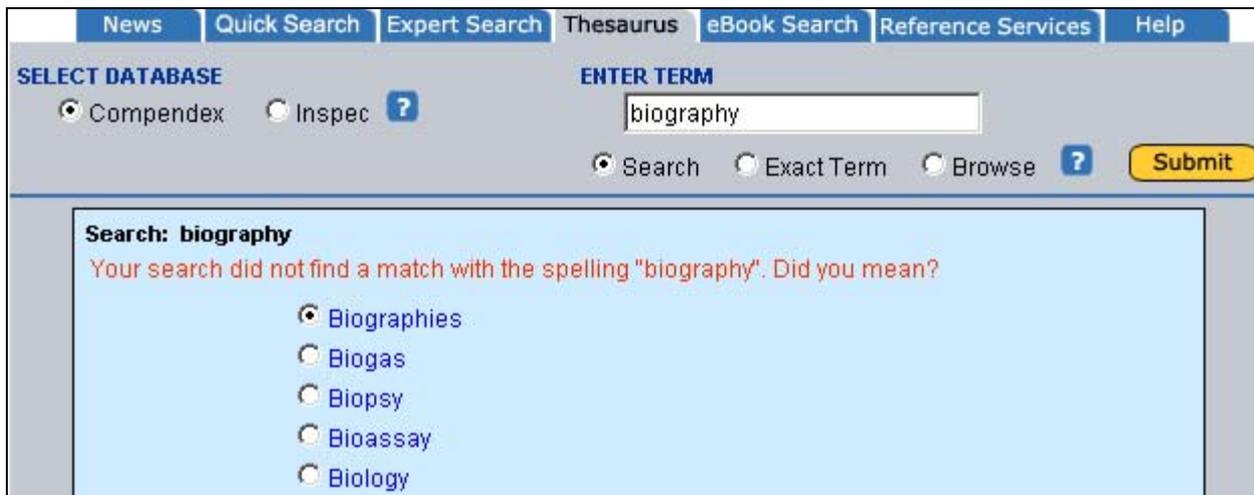
● **Search** 查詢

查詢功能會將您所輸入的詞彙在控制詞彙表中的廣義詞、狹義詞和相關詞等進行查找。詞彙將依字母順序排列。例如：輸入 **Anchor** 將會找到：



The screenshot shows a search interface with a navigation bar at the top containing 'News', 'Quick Search', 'Expert Search', 'Thesaurus', 'eBook Search', 'Reference Services', and 'Help'. Below the navigation bar, there are two sections: 'SELECT DATABASE' with radio buttons for 'Compendex' (selected) and 'Inspec' (with a question mark), and 'ENTER TERM' with a text input field containing 'anchor' (circled in red). Below the input field are radio buttons for 'Search' (selected), 'Exact Term', and 'Browse' (with a question mark), and a yellow 'Submit' button. The search results area shows 'Search: anchor' and '5 matching terms found'. A table lists the terms: 'Anchor cables', 'Anchors', and 'Cables', each with a 'Select' column containing a checkbox.

如果您輸入的詞彙不在控制詞彙表中，系統會建議另外的拼法，如下圖所示：



The screenshot shows the same search interface as above, but with the input field containing 'biography'. The search results area shows 'Search: biography' and a message: 'Your search did not find a match with the spelling "biography". Did you mean?'. Below the message is a list of suggestions: 'Biographies' (selected with a radio button), 'Biogas', 'Biopsy', 'Bioassay', and 'Biology'.

在建議的詞彙清單中若找到您要查詢的詞，點選詞彙前的圓圈，按下 **Search again**，系統會在索引典中開始查找。您也可以按下每個詞彙的連結查看索引典中有關該詞彙的資料。

● **Exact Term** 精確詞彙

如果知道某個控制詞彙而想要查詢該詞彙的廣義詞、狹義詞或相關詞時，請使用 **Exact Term** 精確詞彙的功能。這個檢索功能將直接帶您到檢索詞彙的主要資訊。記住：有些狹義詞和相關詞也會有狹義詞。如果想對某個主題進行廣泛的檢索，儘可能探索所有可能的途徑。在下面的例子中，對於兩極真空管 (**diodes**) 的綜合研究應包含所有的狹義詞而且每個狹義詞都應該要進一步探

究。Semiconductor diodes 的狹義詞有：avalanche diodes、gunn diodes、light emitting diodes、photodiodes、tunnel diodes、varactors 和 zener diodes。從 Diodes 的記錄中無法找到這幾個詞。您必須按下 Semiconductor diodes 一詞的超連結才能找到並選取這幾個詞。

News Quick Search Expert Search Thesaurus eBook Search Reference Services Help

SELECT DATABASE Compendex Inspec ?

ENTER TERM

Search Exact Term Browse ?

Exact Term: diodes

Diodes (Select)

Broader Terms	Select	Related Terms	Select	Narrower Terms	Select
Electronic equipment	<input type="checkbox"/>	Diode amplifiers	<input type="checkbox"/>	Electron tube diodes	<input type="checkbox"/>
		Diode transistor logic circuits	<input type="checkbox"/>	Plasma diodes	<input type="checkbox"/>
		Electric rectifiers	<input type="checkbox"/>	Semiconductor diodes	<input type="checkbox"/>
		Electron tube rectifiers	<input type="checkbox"/>		

News Quick Search Expert Search Thesaurus eBook Search Reference Services Help

SELECT DATABASE Compendex Inspec ?

ENTER TERM

Search Exact Term Browse ?

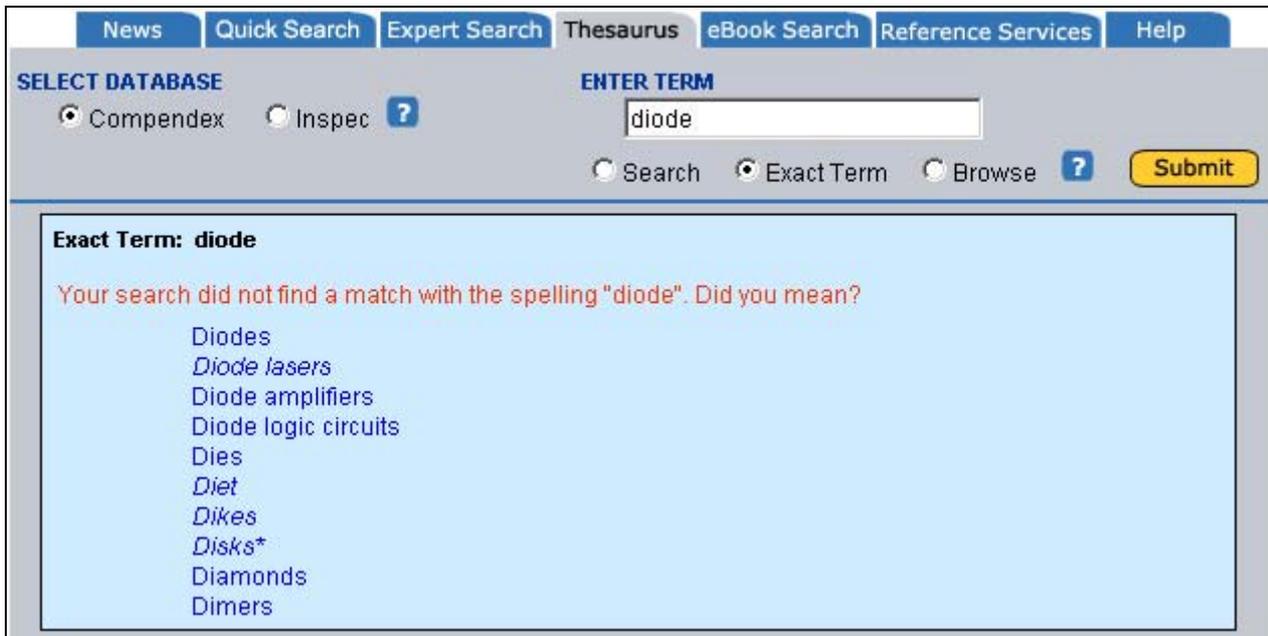
Exact Term: [diodes](#) >> Semiconductor diodes

Semiconductor diodes (Select)

Used for: [Crystal diodes](#)
[Crystal rectifiers](#)

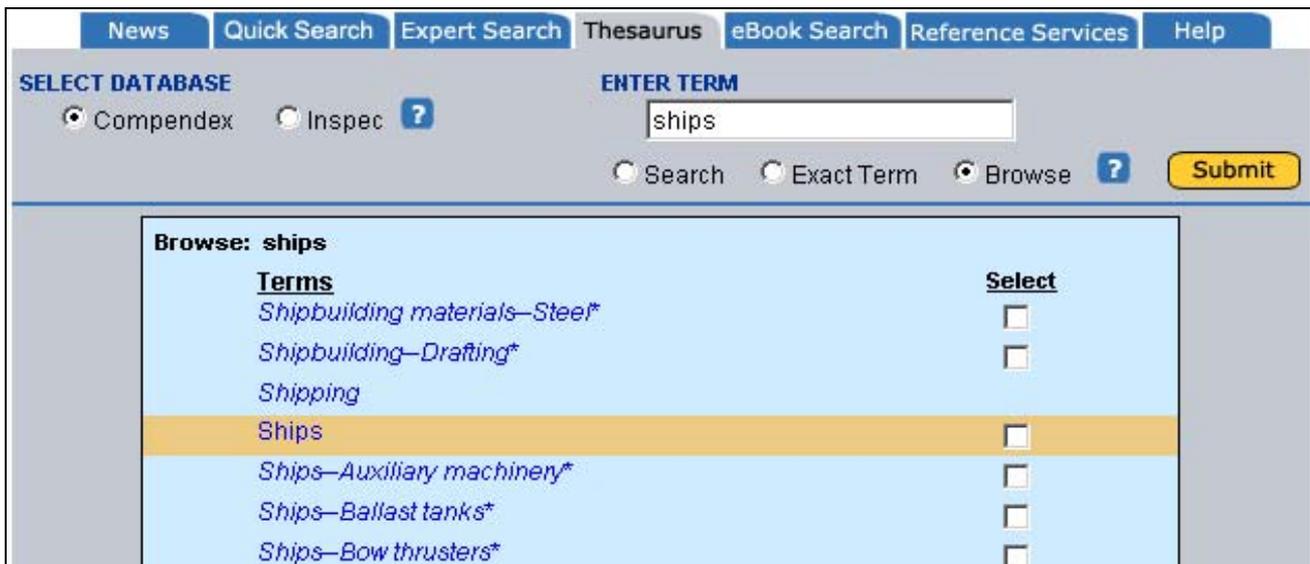
Broader Terms	Select	Related Terms	Select	Narrower Terms	Select
Diodes	<input type="checkbox"/>	Limited space charge	<input type="checkbox"/>	Avalanche diodes	<input type="checkbox"/>
Semiconductor devices	<input type="checkbox"/>	accumulation	<input type="checkbox"/>	Gunn diodes	<input type="checkbox"/>
		Solid state rectifiers	<input type="checkbox"/>	Light emitting diodes	<input type="checkbox"/>
				Photodiodes	<input type="checkbox"/>
				Tunnel diodes	<input type="checkbox"/>
				Varactors	<input type="checkbox"/>
				Zener diodes	<input type="checkbox"/>

狹義詞也應選取起來以便廣泛地檢索。若您利用 Exact Term 查詢不在控制詞彙表中的詞，系統會建議您其他拼字。按下任一建議詞的連結可直接進到索引典裡的資料。



- **Browse 瀏覽**

Browse (瀏覽)指令就好像使用紙本的索引典。使用瀏覽功能會讓您看到一個詞彙在索引典中依字母順序排列的位置。如下圖所示，在 Compendex 索引典中瀏覽 ships 一詞時可以看到其次的詞彙。使用 Previous Page 或 Next Page 可以查看索引典中的其他詞。

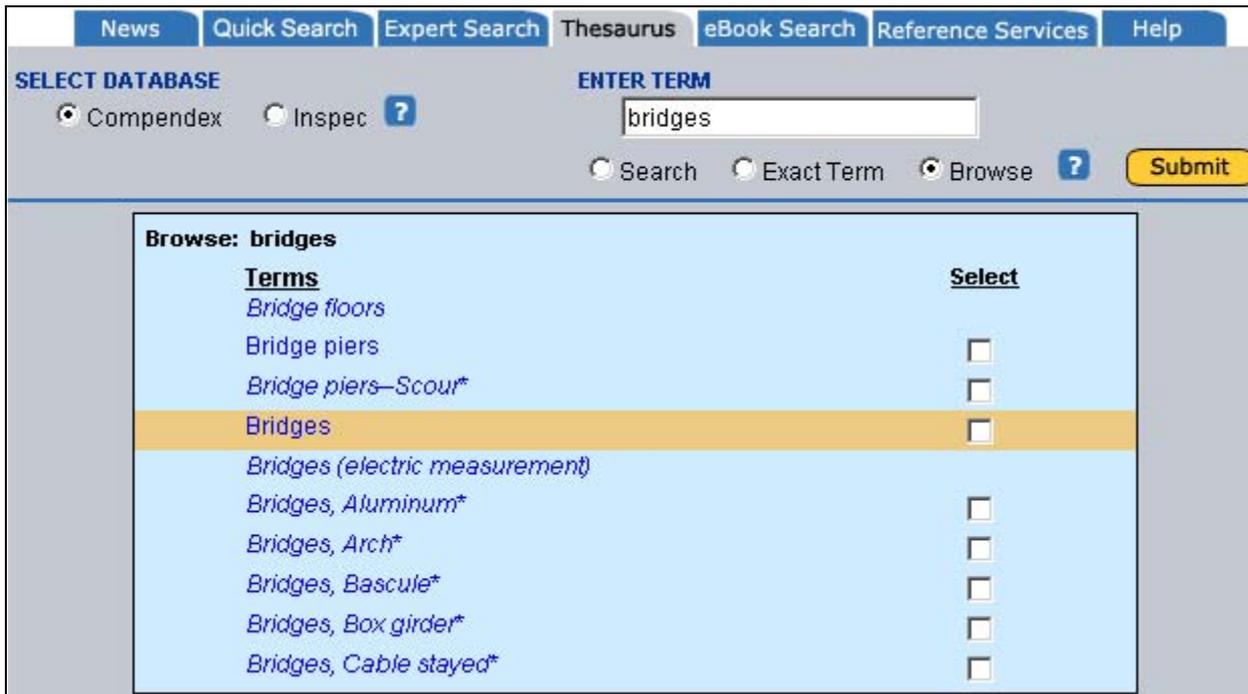


3. 索引典其他功能

- **Lead-in and Prior terms 導入詞和舊控制詞彙**

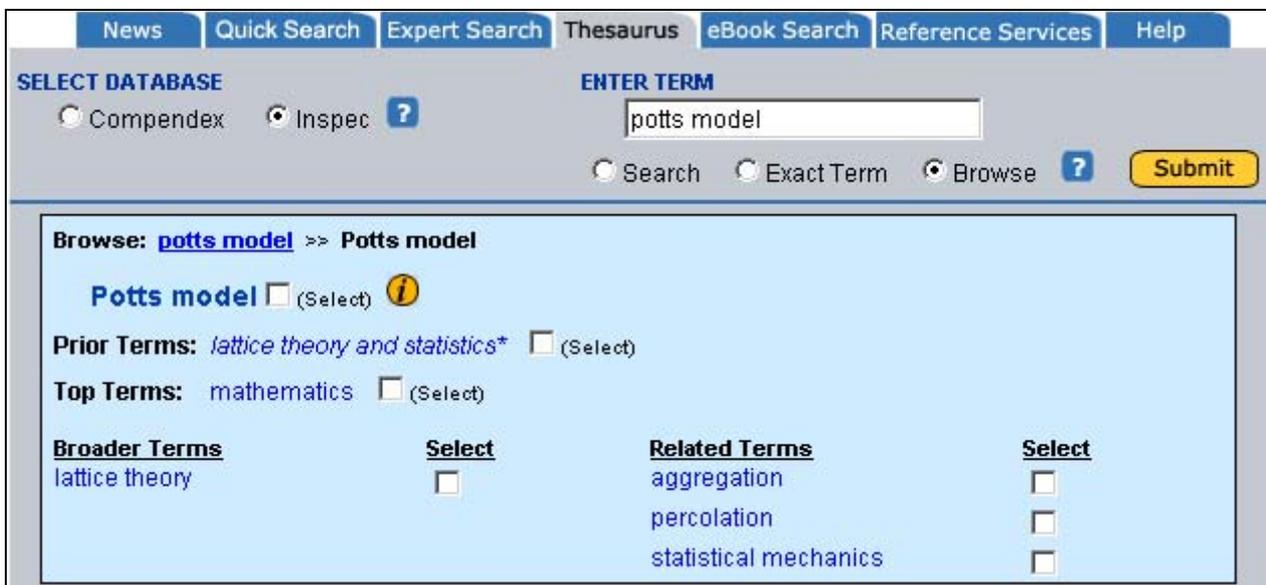
無論使用任一方法查詢索引典，找到的詞彙都具有超連結。按下連結功能就可以進一步查看該詞在索引典裡的資料。斜體標示的詞彙為導入詞彙，導入詞彙可能是非控制詞彙的同義字，或是資料庫中可以找到但已經被其他控制詞彙取代的舊控制詞彙。若檢索時設定為查找全部年限，會找到現有以及舊有的控制詞彙。舊的控制詞彙會加上星號標示。在下圖的例子中，**Bridge floors** 和 **Bridges**

(electric measurement) 都是導入詞，其他的詞 (Bridges 和 Bridges Piers 除外)則都是舊的控制詞彙。目前使用中的控制詞彙的導入詞將無法選取。



- **Top Terms**

INSPEC 的索引典包含 top term，top terms 是最高一層或是最普通的詞彙。



- **Scope notes 範圍註**

索引典中多數的控制詞彙都有範圍註(Scope notes)。範圍註包含控制詞彙使用或製定的日期以及相

關的分類表(related Classification Codes)。範圍註也包含使用說明。按下  即可查看範圍註。



The screenshot shows a web interface with a search bar and a navigation menu. The search results for 'fire hazards' are displayed, including a list of prior terms and broader terms. A pop-up window titled 'Scope notes - Microsoft Internet Explorer' is open, showing the following information:

- Fire hazards**
- Introduced:** January 1993
- Related classification codes:** 914.2: Fires & Fire Protection

The pop-up window also includes a 'Close' button and a scroll bar. The main interface shows a search for 'fire hazards' with a 'Select' button next to the term. Below the search results, there are several checkboxes for related terms: 'Fire protection', 'Fires', and 'Magnesium'.

4. 選取詞彙

資料庫中所有的控制詞彙都會可選取。但不是控制詞彙的導入詞將無法選取。選取的詞將會被放到查詢區。

如要將選取的詞彙移除，只需在方格中再按一下，系統就會將該選取的詞彙從查詢區中清除；或者在查詢區中將該詞反白，然後按下 **Remove** 按鈕。您也可以按下 **Reset** 重新設定。

5. 執行檢索

一旦選取了詞彙並放到查詢區，就可以開始查找資料庫。詞彙可以使用 **OR** (出現任一詞即可)或 **AND** (包含所有的詞)結合。系統預設為 **OR**。

6. 查詢限制

如要做更準確的查詢，可以利用限制條件的功能：**document type** (文類類型)、**treatment type** (論述類型)、**discipline** (學科，僅限 **INSPEC**)或 **date** (年代)。

7. Sorting 排序

檢索結果可以依照相關程度(**Relevance**)或出版年(**Publication year**)排序。

8. Refine search 限定檢索

執行檢索之後，如果希望再增加或刪除詞彙，您可以利用 **Refine Search** 重新修正您的檢索條件。按下 **Refine Search** 按鈕後會帶您回到索引典的檢索視窗，視窗下方會呈現先前選取的檢索詞。您可以再查詢其他的索引詞、移除先前的檢索詞、或是更改限定條件重新查詢 (如下圖)。

News Quick Search Expert Search Thesaurus eBook Search Reference Services Help

SELECT DATABASE
 Compendex Inspec ?

ENTER TERM

Search Exact Term Browse ? **Submit**

Search Tips

Use the refine feature to change the terms in the Search Box, limit the results or change the sort order of the database output.

Highlight and remove any term(s) you wish to eliminate from the Search Box.

LIMIT BY
 All document types ?
 All treatment types ?
 All languages
 1884 TO 2004
 Last four updates only ?

SEARCH BOX
 Avalanche diodes
 Diodes
 Diode transistor logic circuits

COMBINE SEARCH WITH
 AND OR

SORT BY
 Relevance Publication year

Search **Reset**
Remove

如果您按下的是 **New Search** 的按鈕而不是 **Refine Search**，則會再重新回到索 2 引典查詢的畫面，如果想要查看先前使用過的檢索條件，請點選，請點選上方的 **Search History** 連結。

Refine Search **New Search** Next Page ▶ 1 - 25 go

? **Choose format:** Citation Abstract Detailed record Clear Selected Records on new search

Choose output: **View Selections** **E-mail** **Print** **Download** **Save to Folder**

Search Results
 36908 records found in Compendex Plus
[Select all on page](#) | [Select](#)

1. **New analytical n**
 Lu, Hong-Liang (Re
 Xidian University, v
Database: Comper
[Abstract / Links](#)

2. **Edge Breakdown**
 Beck, Ariane L. (Mi
 Campbell, Joe C. S
Database: Comper
[Abstract / Links](#) | [Detailed Record / Links](#) **Full-text**

News Quick Search Expert Search Thesaurus eBook Search Reference Services Help

SELECT DATABASE
 Compendex Inspec ?

ENTER TERM

Search Exact Term Browse ? **Submit**

Search Tips

Use "Search" to display controlled vocabulary terms that contain the term that you are searching for as well as broader, narrower and related terms. For example, searching for light rail will retrieve Light rail transit, monorails, railroads, rapid transit, subways, trackless trolleys, trolley cars and urban planning.

Use "Exact Term" if you know a controlled vocabulary term and want go directly to its thesaurus entry which contains broader, narrower and related terms as well as scope notes, prior terms and lead-in terms.

9. 檢索歷史

無論使用何種方式查詢，檢索結果的瀏覽方式有：Citations (書目)、Abstracts (摘要)或 Detailed record (詳細)三種格式。利用畫面上方的 Search History 可以查看進入資料庫後所執行的檢索策略，您可以將日後還會再使用的檢索策略儲存起來，或設定 e-mail alert，也可以將不同的檢索策略結合再重新查找。

News Quick Search Expert Search Thesaurus eBook Search Reference Services Help

New Search

Search History ?

No.	Type	Search	Autostem	Results	Year(s)	Database	E-mail Alert	Save Search
1.	Thesaurus	({{Avalanche diodes}} OR {Diodes} OR {Diode transistor logic circuits}) WN CV		36908	1884-2004	Compendex	<input type="checkbox"/>	Save

[Clear Search History](#) [View Saved Searches](#)

Combine Previous Searches

ENTER SEARCHES TO COMBINE ?

SORT BY Relevance Publication year [Search](#) [Reset](#)

Combined Search

Combine searches listed in the Search History as follows:
(#1 AND #2)
(#1 AND #2) OR (#3 AND #4)
(#1 OR #3) NOT #2

eBook Search

1. Referex Engineering簡介

- 專業的工程學參考書資料庫，收錄 300 本以上優質的工程學電子書
- 內容涵蓋機械學與材料學、電子學與電機學、化學及石油與製造學三大學科領域
- 每項學科領域均提供：Handbooks of engineering fundamentals (基礎工程學手冊)、Situational reference (情況參考)、Titles focused on technique and practice (技術與實踐專指標題)、How-to guides (導引)、Highly specialized professional information (高度專業資訊)、Scholarly monograph (學術專題論作)
- 電子書全文需另外訂購

2. Quick Search快速查詢

勾選欲查詢的主題領域，在Search For輸入查詢詞，在Search In的下拉選單中選擇檢索欄位。

CHOOSE COLLECTION

All Referex collections
 Materials & Mechanical
 Electronics & Electrical
 Chemical, Petrochemical & Process

SEARCH FOR

SEARCH IN

Keyword ?

Search **Reset** [Advanced Search](#)

3. Advanced Search進階查詢

勾選欲查詢的主題領域，在Search For輸入查詢詞，在Search In的下拉選單中選擇檢索欄位。在利用布林邏輯And、Or、Not結合第二個檢索策略

CHOOSE COLLECTION

All Referex collections
 Materials & Mechanical
 Electronics & Electrical
 Chemical, Petrochemical & Process

SEARCH FOR

AND

AND

SEARCH IN

Keyword ?

Keyword

Keyword

Search **Reset** [Quick Search](#)

4. Browse瀏覽

點選任一個您想瀏覽的主題。

BROWSE BOOKS BY COLLECTION OR SUBJECT		
Materials & Mechanical (118)	Electronics & Electrical (110)	Chemical, Petrochemical & Process (93)
Aeronautical Engineering (7)	Audio Electronics (4)	Biomedical Engineering (1)
Aircraft Design (6)	Biomedical Engineering (2)	Chemical Engineering (44)
Automotive Engineering (10)	Circuit Design (17)	Chemical Health and Safety (13)
Biomedical Engineering (1)	Circuit Theory and Analysis (6)	Chemistry (16)
Chemical Engineering (6)	Communications and Signal Processing (32)	Civil Engineering (1)
Chemical Health and Safety (1)	Computer Interfacing (5)	Control Engineering (3)
Chemistry (1)	Computing for Engineers (3)	Control of Electrical Systems (3)
Civil Engineering (2)	Control Engineering (6)	Design Engineering (3)
Computer Aided Design (2)	Control of Electrical Systems (8)	Electromagnetics (1)
More...	More...	More...

5. 檢索結果

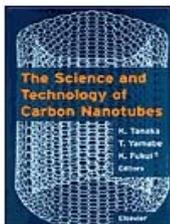
您可在檢索結果中瀏覽相關主題的電子書書名、作者等介紹，您可以再點選Table of Contents進入觀看本書目次。

The screenshot shows a search results page with a navigation bar at the top containing 'News', 'Quick Search', 'Expert Search', 'Thesaurus', 'eBook Search', 'Reference Services', and 'Help'. Below the navigation bar are 'Refine Search' and 'New Search' buttons, and a 'Next Page' button with a dropdown menu showing '1-25' and a 'go' button. The main content area is titled 'Search Results' and shows '27 section(s) found in Referex for: ((nanotechnology) WN KY), All Referex collections'. The first result is '14.2 Individual CNTs for Nanotechnology' by Tanaka, K., Yamabe, T., Fukui, K., with book title 'The Science and Technology of Carbon Nanotubes', ISBN: 0080426964, and publisher Elsevier. Below the title are links for 'Book Description', 'Read the Section', and 'Read the Book'. To the left of the text is a book cover image with a red circle around the 'Table of Contents' link at the bottom.

點選Table of Contents進入後，您可以看到本書的簡介說明以及本書目次。本書的電子書全文則需另外訂購。

[Read the Book](#)[Print](#)

Book 1 from Referex for ((nanotechnology) WN KY), All Referex collections

**The Science and Technology of Carbon Nanotubes**

Tanaka, K. Yamabe, T. Fukui, K. ISBN: 0080426964; 1999 p, 1999

Publisher: Elsevier**Book Description:**

Carbon Nanotubes (CNT) is the material lying between fullerenes and graphite as a new member of carbon allotropes. The study of CNT has gradually become more and more independent from that of fullerenes. As a novel carbon material, CNTs will be far more useful and important than fullerenes from a practical point of view, in that they will be directly related to an ample field of nanotechnology. This book presents a timely, second-generation monograph covering as far as practical, application of CNT as the newest science of these materials. Most updated summaries for preparation, purification and structural characterisation of single walled CNT and multi walled CNT are given. Similarly, the most recent developments in the theoretical treatments of electronic structures and vibrational structures are covered. The newest magnetic, optical and electrical solid-state properties providing a vital base to actual application technologies are described. Explosive research trends towards application of CNTs, including the prospect for large-scale synthesis, are also introduced. It is the most remarkable feature of this monograph that it devotes more than a half of the whole volume to practical aspects and offers readers the newest developments of the science and technological aspects of CNTs.

Subject terms: [Mechanical Engineering](#)**Collection name:** [Materials & Mechanical](#)**Table of Contents**

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- [Chapter 2: Synthesis and Purification of Multi-Walled and Single-Walled Carbon Nanotubes](#)
 - [2.1 Introduction](#)
 - [2.2 MWCNT](#)
 - [2.3 SWCNT](#)
 - [2.4 Conclusion](#)