

## SOLIDSTATE

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<b>Subject Coverage</b>	Theoretical and applied literature on solid state studies.				
	<ul style="list-style-type: none"> <li>• Applications</li> <li>• Atomic and molecular physics</li> <li>• Chemistry</li> <li>• Condensed matter physics</li> <li>• Materials</li> <li>• Measurement</li> <li>• Metallurgy</li> </ul>	<ul style="list-style-type: none"> <li>• Plasma physics</li> <li>• Problem areas</li> <li>• Resonance</li> <li>• Semiconductors</li> <li>• Solid state physics</li> <li>• Superconductivity theories</li> </ul>			
<b>File Type</b>	Bibliographic				
<b>Features</b>	CAS Registry Numbers® <input type="checkbox"/>	Page Images <input type="checkbox"/>	STN AnaVist <input type="checkbox"/>		
	<a href="#">Keep &amp; Share</a> <input checked="" type="checkbox"/>	<a href="#">SLART</a> <input checked="" type="checkbox"/>	STN Easy <input type="checkbox"/>		
	Learning Database <input type="checkbox"/>	Structures <input type="checkbox"/>	STN Viewer <input type="checkbox"/>		
<b>Record Content</b>	<ul style="list-style-type: none"> <li>• <b>SOLIDSTATE (Solid State and Superconductivity Abstracts)</b> is a bibliographic database from Cambridge Scientific Abstracts that contains information on solid state studies, including applications, physics, and superconductivity of metallic, plastic, and ceramic materials. The database contains both research and government reports. SOLIDSTATE corresponds to a printed publication <i>Solid State and Superconductivity Abstracts</i>.</li> </ul>				
<b>File Size</b>	999,324 records (11/2010)				
<b>Coverage</b>	1981 to the present				
<b>Updates</b>	<ul style="list-style-type: none"> <li>• Updated monthly</li> <li>• Automatic current-awareness searches (SDIs) are run monthly</li> </ul>				
<b>Language</b>	English				
<b>Database Producer</b>	ProQuest (Cambridge Scientific Abstracts) 7200 Wisconsin Avenue Bethesda, MD 20814 Phone: (301) 961-6700 Phone: (800) 843-7751 Fax: (301) 961-6720 E-mail: support@csa.com				

**Sources** Books, conference proceedings, government reports, and journal titles

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## Search and Display Field Codes

Fields that allow left truncation and SLART in this file (/BI, /AB, and /TI) are indicated by an asterisk (\*).

Search Field Names	Search Code	Search Examples	Display Codes
Basic Index * (contains single words from the abstract (AB), uncontrolled term (UT), and title (TI) fields)	None (or /BI)	S IMAGING/BI S CIRCULAR (A) DICHRO? S ?MOLT?	AB, TI, UT
Abstract *	/AB	S HALIDE/AB S ?FIBER?/AB	AB
Accession Number	/AN	S 2004:1934/AN	AN
Author	/AU	S JONES R?/AU S JONES, R?/AU S JONES,R?/AU	AU
Classification Code (1)	/CC	S MATERIAL# TEST?/CC	CC
Corporate Source (1)	/CS	S KANAGAWA/CS	CS
Document Number	/DN	S "0974264 (SO)"/DN	DN
Document Type (code and text)	/DT	S CONFERENCE/DT	DT
E-mail Address	/EML	S J.BUTTERWORTH@UCL.AC.UK/EML	EML
Entry Date (2)	/ED	S ED>20041219	ED
Field Availability	/FA	S FERROMAGNET? AND AB/FA	Not displayed
File Segment (code and text)	/FS	S ENGINEERED MATERIALS/FS	FS
International Standard (Document) Number (contains ISBN and ISSN)	/ISN	S 0018-9529/ISN	ISN, SO
Journal Title	/JT	S ELECTRON TECH?/JT	JT, SO
Language (code and text)	/LA	S FR/LA	LA
Meeting Date (4)	/MD	S 20010917/MD	SO, MD
Meeting Location (4)	/ML	S GOETTINGEN/ML	SO, MD
Meeting Title (4)	/MT	S PARTICLE/MT	SO, MT
Note (3)	/NTE		NTE
Number of Report	/NR	S EUR?/NR	NR, SO
Publication Date (2)	/PD	S PD>=20020900	SO
Publication Year (2)	/PY	S GLASS-FORM? AND 2002/PY	PY SO
Publisher (4)	/PB	S SPRINGER/PB	PB
Reference Count	/REC	S 24/REC	REC
Source (contains journal title, collation information (volume, issue, pagination), meeting information, report number, publication date, ISSN, and ISBN)	/SO	S MAGNETIC!/SO	SO
Summary Language (code and text)	/SL	S ENGLISH/SL	SL
Title	/TI	S RHEOLOG?/TI AND POLYPROPYLENE	TI
Update Date (2)	/UP	S L1 AND UP>=20041219	ED

- (1) Search with implied (S) proximity is available in this field.  
 (2) Numeric search field that may be searched with numeric operators or ranges.  
 (3) Currently an empty field.  
 (4) Field added May 2005, new data only.

**SOLIDSTATE****Display and Print Formats**

Any combination of formats may be used to display or print answers. Multiple codes must be separated by spaces or commas, e.g., D L1 TI AU. The fields are displayed or printed in the order requested.

Hit-term highlighting is available in all fields except PY. Highlighting must be on during SEARCH in order to use the HIT, KWIC, and OCC.

<b>Format</b>	<b>Content</b>	<b>Examples</b>
AB AN AU CC CS DN DT ED EML FS ISN (1) JT (1) JTA (1) LA MD ML MT NR (1) NTE PB PY (1) REC SL SO TI UP UT	Abstract Accession Number Author Classification Code Corporate Source Document Number Document Type Entry Date E-mail Address File Segment International Standard (Document) Number Journal Title Journal Title, Abbreviation Language Meeting Date Meeting Location Meeting Title Number of Report Note Publisher Publication Year Reference Count Summary Language Source Title Update Date Uncontrolled Term	D L4 1-4 AB D L1 3 AN D AU 1,3-5 D CC 5-10 D 1-3,7,8 CS D DN D DT 1-5 D ED D EML D L1 FS 3 D ISN D JT 2 D JTA D L8 LA 1-3 D MD D ML D MT D NR L1 4 D NTE D PB D PY D REC D L3 SL D SO 2 L5 D L3 4 TI D UP D UT
ABS ALL BIB  CBIB DALL FREE (1) IALL IBIB IND SAM SCAN (1,2) TRIAL (1)	AB AN, DN, TI, AU, CS, SO, DT, FS, LA, SL, NTE, REC, ED, AB, CC, UT AN, DN, TI, AU, CS, SO, DT, FS, LA, SL, NTE, REC, ED (BIB is the default) Compressed bibliographic information ALL, delimited for post-processing TI, CC, UT ALL, indented with text labels BIB, indented with text labels CC, UT TI, CC, UT TI, CC, UT (random display without answer numbers) TI, CC, UT	D L4 ABS CT D ALL 2 D 1,4 L3 D BIB 6 L2 D L1 2 CBIB D 1-4 IALL D FREE D 1-4 IALL D L5 IBIB 2 7 D IND FS D SAM L3 D SCAN D TRIAL 2-4
HIT KWIC OCC (1)	Fields containing hit terms Hit terms plus 20 words on either side (KeyWord-In-Context) Number of occurrences of hit terms and fields in which they occur	D HIT D KWIC NOH D OCC

(1) No online display fee for this format.

(2) SCAN must be specified on the command line, e.g., D SCAN or DISPLAY SCAN.

## SELECT, ANALYZE, and SORT Fields

The SELECT command is used to create E-numbers containing terms taken from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Y	N
Accession Number	AN	Y	N
Author	AU	Y	Y
Classification Code	CC	Y	Y
Corporate Source	CS	Y	Y
Document Number	DN	Y	Y
Document Type	DT	Y	Y
E-mail Address	EML	Y	Y
Entry date	ED	Y	Y
File Segment	FS	Y	Y
International Standard Book Number	ISBN	N	Y
International Standard (Document) Number	ISN	Y (3)	Y
International Standard Serial Number	ISSN	N	Y
Journal Title	JT	Y	Y
Journal Title, Abbreviation	JTA	Y	Y
Language	LA	Y	Y
Meeting Date	MD	Y	Y
Meeting Location	ML	Y	Y
Meeting Title	MT	Y	Y
Number of Report	NR	Y	Y
Occurrence Count of HIT Search Terms	OCC	N	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y (4)	Y
Publisher	PB	Y	Y
Reference Count	REC	Y	Y
Source	SO	Y (5)	N
Summary Language	SL	Y	Y
Title	TI	Y (default)	Y
Uncontrolled Term	UT	Y (2)	N
Update Date	UP	Y	Y

- (1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT TI.
- (2) Appends /BI to the terms created by SELECT.
- (3) Selects or analyzes the ISSN and ISBN and appends /ISN to the terms created by SELECT.
- (4) SELECT HIT and ANALYZE HIT are not valid with this field.
- (5) Selects or analyzes the ISSN and ISBN and appends /SO to the terms created by SELECT.

**SOLIDSTATE****Sample Records****DISPLAY IALL**

ACCESSION NUMBER: 2003:15522 COMPUBAB  
 DOCUMENT NUMBER: 200402-10-0055 (EA); 200402-75-0028 (SO)  
 TITLE: Frequency noise in hysteretic resistive SQUIDs.  
 AUTHOR: Thomasson S L; Bozler H M; Gould C M  
 CORPORATE SOURCE: University of Southern California (Los Angeles). gould@usc.edu  
 SOURCE: Physica B: Condensed Matter, Vol. 329-333, No. Part II, pp. 1485-1486, 20030500. Publisher: Elsevier BV, North-Holland, P.O. Box 211, Amsterdam, 1000 AE, Netherlands, [mailto:nlinfo-f@elsevier.nl]. Illustration: Spectra. ISSN: 0921-4526.

DOCUMENT TYPE: Journal  
 FILE SEGMENT: Electronics & Communication; Solid State & Superconductivity

LANGUAGE: English  
 REFERENCE COUNT: Reference Count: 5  
 ENTRY DATE: Entered STN: 19 Dec 2004  
 Last Updated on STN: 19 Dec 2004

ABSTRACT: We present measurements of hysteretic resistive SQUIDs (R-SQUIDs) as a function of the hysteresis parameter  $\beta_L = 2\pi I_L \Phi_0 / \Phi_0$ . Varying  $\beta_L$  in situ from 15 to 45, we observe quasiperiodic peaks in frequency noise which decrease toward the thermal limit with increasing temperature. We have developed a model illustrating the dynamics of the two characteristic time scales: Josephson phase oscillations and catastrophic transitions in phase. From this model, an intuitive energy picture emerges wherein low thermal energy is shown to promote trapping in false minima leading to excess frequency noise. The energy model further illustrates that confusion between degenerate branch solutions results in quasiperiodic noise peaks.

CLASSIFICATION: 10 Circuits (General) (EA); 75 Applications (SO)  
 UNCONTROLLED TERM: Noise; Frequencies; Models; Phases; Energy; Oscillations; Limits; Thermal Energy; Temperature; Hysteresis; Measurement; Superconducting Devices; Solutions; Functions; Transition; Scale; Characteristics

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