

# Proceedings of the Twentieth International Cryogenic Engineering Conference

Beijing China 2004

Edited by: Liang ZHANG, Liangzhen LIN, Goubang CHEN



ELSEVIER

**Getting  
Started**

**Conference  
Information**

**Sessions**

**Authors**

**Search**

# Getting Started

Welcome to the Twentieth International Cryogenic Engineering Conference (ICEC 20) on CD-ROM. This disc is designed so that you may locate papers by session or author, as well as with full text search.

Papers originated as electronic files or hard copy. The papers were converted to Adobe Acrobat PDF file format for cross-platform access. Since some of the papers were scanned, the viewing quality will vary with the size and quality of fonts used. Even though the viewing quality on your monitor may vary, all papers print clearly.

Be sure to read the “Getting Started” section for useful recommendations on how to use this electronic guide.

Thank you and Enjoy!

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Getting Started

## Trademarks

---

Adobe, the Adobe logo, Acrobat and the Acrobat logo are trademarks of Adobe Systems Incorporated or its subsidiaries and may be registered in certain jurisdictions. Macintosh is a registered trademark of Apple Computer, Inc. HP is a registered trademark and HP-UX is a trademark of Hewlett-Packard Company. Motif is a trademark of Open Software Foundation, Inc. Solaris is a registered trademark of Sun Microsystems, Inc., Sun and OpenWindows are trademarks of Sun Microsystems, Inc. SPARC is a registered trademark of SPARC International, Inc. SPARCstation is a registered trademark of SPARC International, Inc., licensed exclusively to Sun Microsystems, Inc. and is based upon an architecture developed by Sun Microsystems, Inc. UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company, Ltd. Windows is a trademark of Microsoft Corporation. X Window System is a trademark of the Massachusetts Institute of Technology. i386, 486 and Pentium are trademarks of Intel Corporation. All other products or name brands are trademarks of their respective holders.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Getting Started

## ORIENTATION


This Electronic Guide file contains hypertext links to individual article files. Links are represented by colored text (e.g., a name or title); clicking on the text activates the link.

Before you start browsing and using the information on this CD-ROM, you will need to install Adobe Acrobat Reader + Search 5.0. If you already have Acrobat Reader installed on your system, make sure it is version 4.0 or higher and includes the Search plug-in.

The [README.TXT](#) file found on the root directory of this CD-ROM provides additional information.

In many instances, we refer to the “menu bar” and “tool bar”, shown here for reference.

menu bar: 

tool bar: 

**Be sure to read the following on how to achieve the best performance with this electronic guide.**

[Main Menu](#)




# Getting Started

## RECOMMENDATIONS FOR OPTIMAL PERFORMANCE

In order to take full advantage of the performance capabilities of this collection, we recommend that you do the following:

1. To make navigation and searching easier, we strongly recommend changing the following Acrobat Search Preferences (found under Edit> Preferences > Search on the menu bar.) In the dialog box shown for Acrobat Search Preferences, make the following changes:

A. Select the “Document Information” option so that Title, Author, Keywords, and Subject fields are visible when specifying search criteria. If for some reason this preference option is not present on your system, check to see that you have the Search plug-in

installed. The Search icon  will be present on the Acrobat tool bar if the function is properly installed. Specifics of the Search function are described later in this section.

B. Change “Show first 100 documents” to “Show first 1000 documents”. (Type in “1000” in the field provided.) This allows the maximum number of hits to be displayed during a search.

These settings will become your new default.

# Getting Started

## USING BOOKMARKS

In addition to links, you can navigate through the Electronic Guide using Bookmarks. If they are not already visible, choose Window > Bookmarks from the menu bar or press the “Show/Hide Navigation Pane” button on the tool bar. A panel opens on the left side of the screen displaying Bookmarks in a hierarchy.

Each Bookmark corresponds to a location in the Electronic Guide. Click on the text in a Bookmark to go to that location.

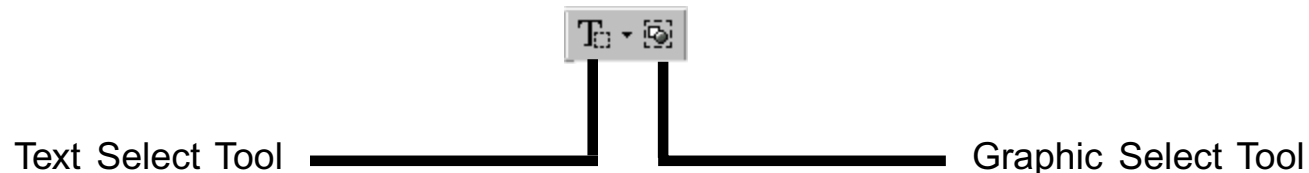
Entries with lower level Bookmarks show a plus sign (+) when subordinate Bookmarks are hidden and a negative sign (-) when subordinate Bookmarks are visible. To view subordinate Bookmarks, click on the plus sign (+). To hide them, click on the negative sign (-). Dragging the right margin of the bookmark panel resizes it. Dragging the Bookmark tab moves the panel to a different location.



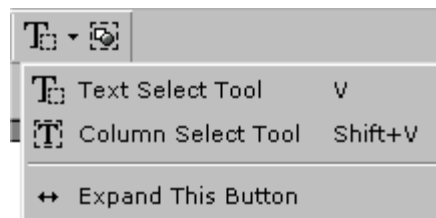
# Getting Started

## SELECTING TEXT AND GRAPHICS

To select text or graphics, the appropriate select tool must be selected. The select tools share the same space on the tool bar.



To see more text selection tools you must click the arrow to the right of the Text Select Tool. A “flyout” menu will allow you to select the Column Select Tool.



See the Adobe Acrobat Reader 5.0 Guide (Help > Reader Help) for more information on these tools.

# Getting Started

## NAVIGATION BUTTONS

### Section Map

The current section is shown at the top of each page. The “path” to this section is shown at the right. Clicking these text buttons moves you to the start of that section.

### Next Page

Click to advance to the next page in the section.



### Previous Page

Click to go back to the previous page in the section.



(The Page Up and Page Down keys perform the same functions as the Next and Previous Page buttons.)

### Fast Forward Pages

Click to advance (jump) multiple pages in the section.



### Fast Back Pages

Click to go back (jump) multiple pages in the section.



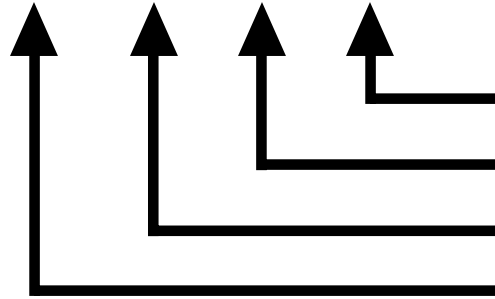
Main Menu





# Getting Started

## ACROBAT TOOLBAR



Go to Last Page  
Go Forward One Page  
Go Backward One Page  
Go to First Page

## Navigation



Go to Next View (One Link)  
Go to Previous View (One Link)

## History

Main Menu

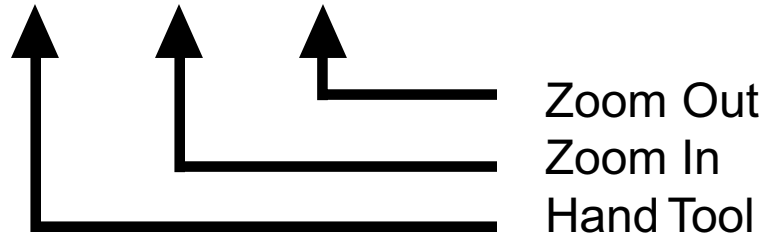


# Getting Started

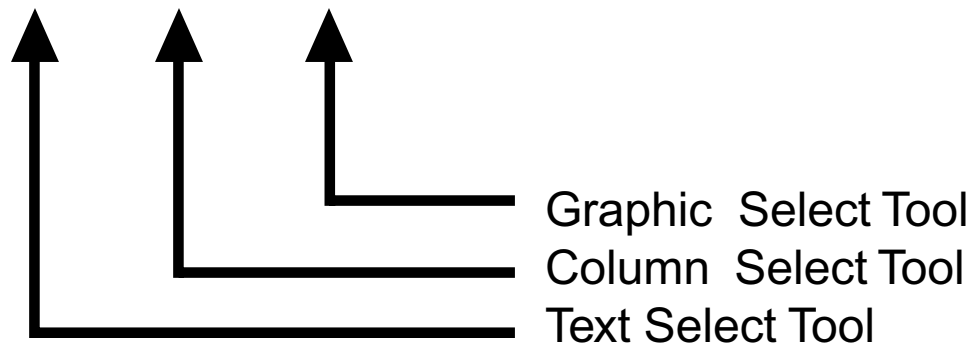
## ACROBAT TOOLBAR



### Zoom



### Selection

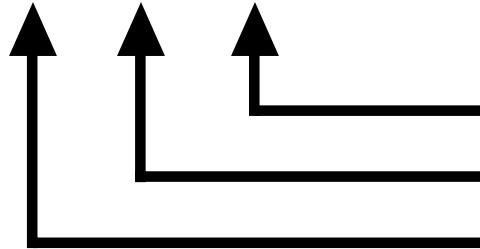


Main Menu



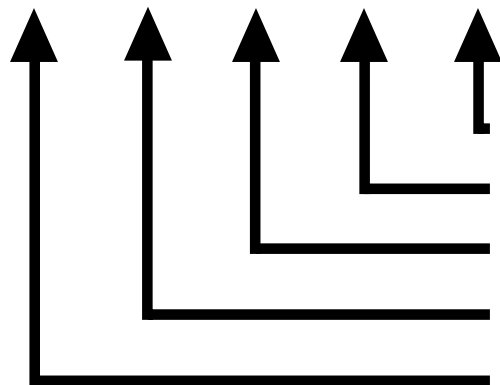
# Getting Started

## ACROBAT TOOLBAR



Fit Width  
Fit in Window  
Actual Size

## Page View



Next Highlight (Hit)  
Previous Highlight (Hit)  
View Search Results  
Search  
Find

## Find/Search

Main Menu



# Getting Started

## PERFORMING A “FIND”

Choosing Find opens a dialog box. Find scans linearly through the currently open Acrobat file from the cursor forward. If the Electronic Guide PDF is open, Find will scan the entire Electronic Guide for a match to your text. Type a text string in the field provided, check the appropriate options and press the “Find” button. Reader then highlights the first instance of the text string. To look at the next “hit”, click on the Find icon and press the “Find Again” button in the Acrobat Find window.

## PERFORMING A “SEARCH”

Choosing the “Search” tool bar button or Search menu item (Edit > Search > Query), opens a dialog box from which you can access the more powerful full-text search engine (if you installed Acrobat Reader from this CD-ROM). Its dialog box is shown on the next page.

Typing a term in the text box at the top of the Search dialog box and pressing the “Search” button causes a full-text search of all words in the body of papers in the collection. If you have “Document

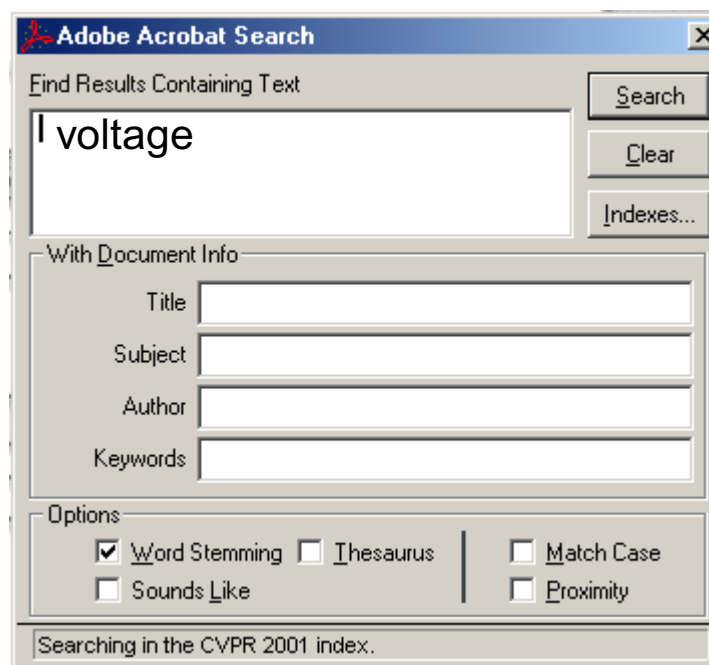


# Getting Started

Information” active in your Reader preferences, entering a term in one or more of the fixed fields (Title, Author, Subject or Keywords) will cause a search for hits in only those fields.

If you are not finding files you think should show in the results list, Acrobat may not be attached to the correct index file. To check, press the “Indexes...” button for a list of available indexes. If this collection is not listed, press the “Add...” button and look in the root directory of the CD-ROM for a file called “index.pdx”. Click on that file to add it to the list.

See the Reader Help (on Help menu) for more complete instructions on selecting appropriate options, constructing boolean queries, etc.



# Conference Information

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

- ☐ [Preface](#)
- ☐ [Technical Committees](#)
- ☐ [Sponsors](#)
- ☐ [Exhibitors](#)
- ☐ [Copyright Notice](#)

# Conference Information

## PREFACE

The Twentieth International Cryogenic Engineering Conference (ICEC 20) is the Twentieth in the International series of biennial conference on cryogenic engineering held by the International Cryogenic Engineering Committee. It is the second such conference held in Beijing (ICEC 13, 1990).

ICEC 20 which was held on May 11-14, 2004 in Beijing, brought together around 400 delegates from 17 countries, including 322 registered participants and dozens exhibitors from 31 companies.

The technical program of ICEC-20 consisted of 345 contributed papers and 9 plenary invited papers, including the Mendelssohn Award speech. There are 19 parallel oral sessions with 114 papers, including a special oral session dedicated to the space cryogenics and 231 papers presented in 7 poster sessions. Besides, the program also consisted of a half-day technical visits to the Institute of No.101, China Academy of Launch Vehicle Technology; Technical Institute of Physics and Chemistry, Institute of Electric Engineering, Chinese Academy of Sciences.

The Proceedings of ICEC-20 documents 9 plenary papers and 5 leading papers, and 241 contributed papers, which were selected

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

from 312 papers after peer reviewing and some of them were revised according to the review results.

The International Cryogenic Engineering Committee presented the Mendelssohn Award during the Conference to Prof. Gustav Klipping and Dr. Ingrid Klipping in recognition of their outstanding contributions to the development and promotion of Cryogenics worldwide and also to the promotion of ICEC over its whole time since the beginning.

We would like to thank all of our friends and colleagues who devoted their efforts for the successful holding of the Conference. Our appreciation is also to the numerous reviewers for their excellent contributions.

We are looking forward to seeing you at the ICEC 21, which will be held in July 2006 at Prague, Czech.

**Liang ZHANG** Chairman, Organizing Committee  
**Liangzhen LIN** Chairman, Program Committee  
Vice Chairman, Organizing Committee  
**Guobang CHEN** Vice Chairman, Program Committee

Beijing, August 25, 2004

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)





# Conference Information

## International Cryogenic Engineering Committee

Guy GISTAU-BAGUER, Chairman

Kazuo FUNAKI

Tomiyoshi HARUYAMA, Secretary

Peter KITTEL

Peter KOMAREK

Philippe LEBRUN, Vice Chairman

Liangzhen LIN

Kishan NARAYANKHEDKAR

Carlo RIZZUTO

Horst ROGALLA

Stanislas SAFRATA

Ralph SCURLOCK

Alistair STEEL

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

Steve Van SCIVER

Konstantin YUSHCHENKO

Liang ZHANG, Vice Chairman

Bruno ZIEGLER, Treasurer

## Honorary Members

Gustav KLIPPING

Martin WOOD

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

## Local Organizing Committees

### Organizing Committee

Liang ZHANG , Chairman

Liangzhen LIN, Vice Chairman

Ming LI, Vice Chairman

Chunzheng CHEN

Guangming CHEN

Anzhong GU

Hongwei GU

Fangzhong GUO

Jianguo HAN

Zhenghe HAN

Zezhao HUA

Bencheng HUANG

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

Li KONG

Yanzhong LI

Jingtao LIANG

Zhongyue QIU

Yuejin TANG

Ruzhu WANG

Weiyang WANG

Yan WANG

Peide WENG

Peiheng WU

Liye XIAO

Yanru YANG

Pingxiang ZHANG

Jiwen ZHENG

Yuan ZHOU

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

## Programme Committee

Liangzhen LIN, Chairman

Guobang CHEN, Vice Chairman

Liezhao CAO

Jun JI

Xiaohua JIANG

Laifeng LI

Qing LI

Jing LIU

Tao LIU

Limin QIU

Jiasu WANG

Yinshun WANG

Qiansheng YANG

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

Daole YIN

Guansen YUAN

## **Advisory Board**

Chaosheng HONG, Chairman

Wenshan ZHAN, Vice Chairman

Chingwu CHU

Zizhao GAN

Yiyi LI

Luguang YAN

Guozhen YANG

Zhongxian ZHAO

Lian ZHOU

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

## Sponsor

International Cryogenic Engineering Committee

## Co-Sponsors

International Institute of Refrigeration

Chinese Academy of Sciences

National Natural Science Foundation of China

Chinese Association of Refrigeration

Technical Institute of Physics and Chemistry, Chinese Academy of Sciences

Institute of Electrical Engineering, Chinese Academy of Sciences

China Refrigeration and Air Conditioning Industry Association

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

## Exhibitors

Air Liquide

Alstom Magnets and Superconductors

AMAC International Inc.

Barber Nichils Inc.

Beijing Saisiai M&E Equipment Co., Ltd

Beijing Bloom-Top Co.Ltd.

Chengdu Golden Phoenix Liquid Nitrogen Container Co., Ltd.

Cryofab Inc.

Cryogenmash

Cryomagnetics Inc.

Cryomech Inc.

DeMaCo

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)





# Conference Information

DY Refrigeration Co., Ltd.

East changing Technologies Inc.

Huanghe Oxygen Plant Factory

Kaifeng Air Separation Group Company, Ltd.

Lanzhou vacuum Equipment co., Ltd.

Linde Kryotechnik AG

Messer Cryotherm GmbH

Nippon Sanso Corporation

Oxford Instruments Superconductivity

PBS

Ricor-Cryogenic and Vacuum System

Scientific Instruments Inc.

Shandong Dongyue Chemical Co., Ltd.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

Shanghai Hanbell Precise Machinery Co., Ltd.

Stars (Guangzhou) Refrigerating Equipment Manufacturing Co., Ltd.

Sumitomo Electric Industries, Ltd.

Taylor-Wharton Beijing Cryogenic Equipment Co., Ltd.

Tianjin Huanhu Hospital

Tristan

Vacree Technologies Co., Ltd.

Velan SA

Weka AG

Wessington Cryogenics

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Conference Information

## Copyright Notice

All Rights Reserved. These Proceedings of the Twentieth International Cryogenic Engineering Conference Congress VII protected by copyright of Elsevier Ltd. The Proceedings are for the sole and exclusive use of the purchaser in accordance with the terms of the licence. Unauthorised use is prohibited and would be an infringement of copyright. In particular, no part of these Proceedings, including data and software, may be produced, stored electronically, adapted or distributed except as indicated in the licence, without the written permission of the applicable copyright holder and the publisher.

Electronic Publication and Distribution Rights © 2005 Elsevier Ltd.

Data Copyright © 2005 Elsevier Ltd.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)



# Sessions

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

- ☐ Large Scale Refrigeration
- ☐ Cryogenic Systems and Test Facilities
- ☐ Coolers
- ☐ Pulse Tube Coolers
- ☐ Thermo-Acoustic Refrigeration System
- ☐ Space Cryogenics
- ☐ Cryogenic Components and Machinery
- ☐ Superconductor Behaviour
- ☐ LTS Superconducting Devices
- ☐ HTS Superconducting Devices
- ☐ Applications
- ☐ Gas Liquefaction and Separation
- ☐ Heat Transfer and Thermal Insulation
- ☐ Cryogens
- ☐ Properties of Materials at Cryogenic Temperatures
- ☐ Cryogenic Instrumentation and Process Control
- ☐ Cryogenics in Medicine and Biology
- ☐ LHC

Click on a session for a list of papers.

# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Large Scale Refrigeration

---

- ❑ [Cryogenics in Russia: Development of basic cryogenic cycles \(Plenary Invited Paper\)](#)  
Brodianski V.M., Alexeev A.
- ❑ [Cryogenics in Russia \(Plenary Invited Paper\)](#)  
Alexeev A., Klipping G.
- ❑ [Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator](#)  
Makida Y., Doi Y., Haruyama T., Kimura N., Kobayashi T., Nakamoto T., Ogitsu T., Ohhata H., Yamamoto A.
- ❑ [Performance of a Cryogenic System for the Superconducting RF Cavity at NSRRC](#)  
Hsiao F. Z., Li H. C., Chiou W. S., Chang S. H., and Chen J. R.
- ❑ [The Cryogenic System of BESIII in Preliminary Design](#)  
Liu L., Zhu Z., Han S., Makida Y., Yamaoka H., Tsuchiya K., Liang W., Gong L., Zhang L.
- ❑ [A Retrospect on the Successful Commissioning of the Linde 18kw Refrigerators for the LHC Particle Accelerator at CERN](#)  
Kuendig A., Chromec B., Fleck U., Voigt Th.

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

## ❑ Helium Refrigeration System for Wendelstein 7-X

Kuendig A., Schauer F., Bozhko Y., Dhard C.P.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Cryogenic Systems and Test Facilities

---

- ❑ Cryogen free refrigeration to 270mK by adiabatic expansion of He<sup>3</sup> gas (Plenary Invited Paper)

Mikheev V., Noonan P., Adams A.

- ❑ Development of the Cryogenic Ground Support Equipment (CGSE) for the Superconducting Magnet of the Alpha Magnetic Spectrometer (AMS-02)

Gu A., Grechko A., Harrison S., Hofer H., Lin W., Shi Y., Ting S.C.C., Vostrikov S., Wang R.

- ❑ Unique Method for Liquid Nitrogen Precooling of a Plate Fin Heat Exchanger in a Helium Refrigeration Cycle

Weber T. B., Candia A., Howell G., Racine M., Weisend II J.G.

- ❑ Test Results and Analysis of Cryogenic System for Cooling HTS Cables and the Next Stage Plan

Fan Y.F., Gong L.H., Xu X-D., Li L.F., Zhang L., Xiao L.Y.

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

Jia L.X., Wang L., Yang G.D., Liu X.K., Zhang X.B., Tang H.M., Du H.P., Xing Z.H., Liu C.S., Han G., Xu F.Y., Wang T.H., Yang C.Z., Xiao H., Liu D., Shi L.H., Huang M.X., Gai X.Y., Xu F.Y., Ji Z.M., Jiang W., Yao Z.L., Chen A.B.

Main Menu

Sessions

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ **First Cold Test of the ISAC-II Medium Beta Cryomodule**  
Sekachev I., Laxdal R.E., Marshall C., Ries T., Stanford G.
- ❑ **Experimental Study of Self-Pressurizing Transfer System  
Cryogenic Liquid**  
Li Q.F., Chen G.B., Xie X.M., Bao R.
- ❑ **Design of a Cooling System for the Cold Test of the ITER TF  
Coils Before Installation**  
Zahn G.R., Duchateau J.L., Fietz W.H., Gravit B., Heller R., Millet F., Nicollet S., Chesny P.
- ❑ **Study on Key-Tech Problems in Development of a Cold  
Neutron Source in China Advanced Research Reactor**  
Feng Q.K., Yu Q.F., Zhao C., Shen F., Yuan L.Z.
- ❑ **Experiences from the Operation Tests with the ITER Model  
Pump**  
Haas H., Antipenkov A., Day Chr., Dremel M., Mack A., Murdoch D.K.
- ❑ **Design of Cryogenic System for the KSTAR Device**  
Kim Y. S., Chang H. S., Cho K.W., Gistau Baguer G., Bak J. S., Lee G. S., Briend P.,  
Fuenzalida P., Fossen A.
- ❑ **Air Liquide Cryogenic System for the KSTAR Device**  
Briend P., Dauget P., Delcayre F., Abe I., Fauve E., Fossen A., Fuenzalida P., Lee L.A.,  
Gistau G., Kim Y.S., Cho K.W., Chang H.S.

Click on title for a paper.





# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

❑ **Cryogenic System for BEPCII SRF Cavity IR Quadrupole and Detector Solenoid Magnets**

Jia L.X., Wang L.

❑ **Status of the ISAC-II Cryogenic System**

Sekachev I., Andersson W., Laxdal R.E., Marshal C., Stanford G.

❑ **Overview of Different Standard Helium Liquefiers / Refrigerators for Various Applications**

Caillaud A., Bonneton M., Delcayre F., Grabié V., Grillot D., Hilbert B., Praud A., Walter E.

❑ **Standard Liquefier-Test Results with Improved Turbines**

Schoenfeld H., Creteigny D., Loehlein K.

❑ **Thermal Fluid Modeling of BEPCII IR Quadrupole Magnet Cryostat**

Wang L., Tang H.M., Zhang X.B., Yang G. D., Jia L.X.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Coolers

---

- ☐ [Recent developments in cryocoolers in Europe \(Invited\)](#)  
Ravex A., Trollier T.
- ☐ [Experimental Study on a Split-Type Free-Piston Stirling Cooler for Space Applications](#)  
Zhang W., Wu Y., Lu G.H.
- ☐ [The Effects of the Clearance at Expander on the Performance of the Stirling Refrigerator](#)  
Yong J. H., Deuk Y. K., Seong J. P., Hyo B. K., Young D. C.
- ☐ [Novel Regenerator Design and its Experimental Characteristics](#)  
Kwanwoo N., Sangkwon J.
- ☐ [Investigation of a Single-Stage G-M Refrigerator with High Cooling Capacity for HTS Devices](#)  
Fang Z.C., Su X.T., Liu L.Q., Gong L.H., Zhang L.
- ☐ [Dimensional Analysis on Multi-Component Mixed-Refrigerants Flow Characteristics in Adiabatic Capillary Tube](#)  
Qi Y.F., Gong M.Q., Sun Z.H., Luo E.C., Wu J.F.

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

❑ **An Experimental Research on a Small Flow Vortex Tube at Low Temperature Ranges**

Liu J.Y., Gong M.Q., Wu J. F., Cao Y., Luo E.C.

❑ **Performance of Different Throttle Refrigeration Cycles**

Gong M.Q., Wu J.F.

❑ **A 70 K J-T Cryocooler Based on the Fractional Mixed-Refrigerant Cycle**

Gong M.Q., Wu J.F.

❑ **Development of a Cryogenic Water-Trap Based on the Recuperative Mixture Refrigeration Cycle**

Gong M.Q., Wu J.F., Hu Q.G.

❑ **Room Temperature Magnetic Refrigerator Using Both Metal Gd or/and Gd-Si-Ge Alloys and a Permanent Magnetic Field Source**

Lu D.W., Wu H.B., Yuan G.Q., Han Y.S., Xu X.N., Jin X., Wu W.

❑ **Properties of Thermoelectric Device with  $(\text{Bi}_x\text{Sb}_{1-x})_2(\text{Te}_y\text{Se}_{1-y})_3$  Materials**

Liu H.J., Li G., Li L.F.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Pulse Tube Coolers

---

- ❑ [Future Trend of Pulse Tube Cryocooler Research \(Plenary Invited Paper\)](#)  
Matsubara, Y.
- ❑ [Performance of a Pulse Tube Cryocooler with Two Separate Stages using  \$^3\text{He}\$  in the Second Stage](#)  
Jiang N., Lindemann U., Chen G.B., Thummes G.
- ❑ [Experimental Analysis of the Oscillating Flow Characteristics for High Frequency Regenerators](#)  
Wang X.L., Zhao M.G., Cai J.H., Liang J.T., Zhou Y.
- ❑ [Experimental Investigation on DC Flow Suppression and Refrigeration Characteristics of a High-Performance Single-Stage GM-Type PTC](#)  
Jiang Y.L., Chen G.B., Thummes G.
- ❑ [Use of Ceramic Part in G-M Refrigerator](#)  
Su X.T., Fang Z.C., Gong L.H., Li L.F., Zhang L.
- ❑ [Experiment on a Single-stage GM Type Pulse Tube Cryocooler near 20K](#)  
Gan Z.H., Liu H.Z., Cheng Z.Z., Qiu L.M., Chen G.B.

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

❑ **Design and Test of a 80 K Miniature Pulse Tube Cryocooler**

Zhao M.G., Wang X.L., Hou X.F., Liang J.T., Cai J.H., Zhou Y.

❑ **Development of the 3.5 W at 80 K High-Frequency Pulse Tube Cryocooler**

Jing W., Wang G.P., Liang J.T., Cai J.H.

❑ **The Effect of Timing Ratio of Injecting to Rejecting on G-M Type PTC's Cooling Temperature**

Wang Y.Y., Cai J.H., Liang J.T.

❑ **Comparison of Oscillating Flow Characteristics of a Metallic and a Nonmetallic Regenerators at High Frequencies**

Wang X.L., Dang H.Z., Cai J.H., Liang J.T., Zhou Y.

❑ **Analysis of Inertance Tube in the Pulse Tube Refrigerator**

Chen N., Yang C.G., Xu L., Xu R.P.

❑ **Single Stage Double-Inlet Pulse Tube Refrigerator with Integral Thermo-Electric Cooler**

Karunanithi R., Jacob S., Kasthuriengan S., Durgesh Nadig, Upendra Behera, Tamizhanban K.

❑ **Experimental Study of Wall Temperature Distribution of Stirling Type Pulse Tube Refrigerator (SPTR)**

Liu Y.W., He Y.L., Huang J., Li X.Z., Chen C.Z.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

❑ **Studies on a Single Stage GM Type Pulse Tube Cryocooler Using an Indigenous Helium Compressor**

Kasthurirengan S., Jacob S., Karunanithi R., Upendra Behera, Nadig D.S.,  
Anand Bahuguni

❑ **Experimental Investigation on the Performances of Gas Flow in Oscillating Tube**

Li Z.C., Xu L.

❑ **Optimal Vector Analysis of the Phase Shifter in the Pulse Tube Refrigerator**

Chen N., Yang C.G., Xu L.

❑ **Characteristics of 4 K Pulse Tube Cryocoolers in Applications**

Wang C.

❑ **Experimental Investigation on Heat Transfer Performance of a Cryogenic Thermosyphon**

Li W.Z., Qiu L.M., Zhang X.J., Chen P., He Y.L.

❑ **Reduction of Convective Heat Losses in Pulse Tube Refrigerators by Additional DC Flow**

Shiraishi M., Fujisawa Y., Murakami M., and Nakano A.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ Interference Characterization of Stirling-Type Nonmagnetic and Nonmetallic Pulse Tube Cryocoolers for High-Tc SQUIDs Operation

Dang H.Z., Liang J.T., Ju Y.L., Zhou Y.

- ❑ Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector

Haruyama T., Tomaru T., Suzuki T., Shintomi T., Sato N., Yamamoto A., Ikushima Y., Li R., Akutsu T., Uchiyama T., Miyoki S.

- ❑ Influence of He-H<sub>2</sub> Mixture Proportion on the Performance of Pulse Tube Refrigerator

Huang Y.H., Chen G.B., Gan Z.H., Tang K., Bao R.

- ❑ Three Dimensional Numerical Computation of the Flow Field in a Pulse Tube

Ding W.J., He Y.L., Tao W.Q.

- ❑ Comparison of the Performance of Regenerators to Counterflow Heat Exchangers

Will M.E., de Waele A.T.A.M.

- ❑ Temperature Hysteresis in a GM-Type Orifice Pulse Tube Refrigerator

Gan Z.H., Thummes G.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

## Thermo-Acoustic Refrigeration System

---

- ❑ [Theoretical Prediction on the Coupling of Thermoacoustic Prime Mover and RC Load](#)  
Tang K., Chen G.B., Jia Z.Z., Jiang N., Bao R.
- ❑ [Lattice Gas Modeling of Thermoacoustic Oscillations](#)  
Zhang X. Q., Chen Y., Liu X.
- ❑ [Characteristics of a Miniature Pulse Tube Cooler Driven by Thermoacoustic Standing Wave Engine](#)  
Dai W., Luo E.C., Zhou Y., Zhu W.X.
- ❑ [Experimental Investigation on the Dynamic Character of Thermoacoustic Engine and Parameters of Regenerator](#)  
Chen X., Li Q., Li Z. Y., Yu Z. B., Xie X.J.
- ❑ [Basic Operation Principle of a Novel Cascade Thermoacoustic Prime Mover](#)  
Luo E., Dai E., Ling H.
- ❑ [Study on a Linear Compressor with Metal-Bellow Replacing Conventional Cylinder-Piston Unit](#)  
Wu Z., Luo E., Dai W., Hu J.

Click on title for a paper.





# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Sessions](#)

- ❑ [Analytical Model for Onset Temperature Difference of Thermoacoustic Stirling Prime Movers](#)  
Hu J., Luo E., Ling H.
- ❑ [Two-Dimensional Numerical Simulation of the Inertance Tube](#)  
Zhang Y., Dai W., Luo E., Radebaugh R., Lewis M.
- ❑ [Numerical Simulation on a Novel Cascade Thermoacoustic Prime Mover](#)  
Ling H., Luo E., Dai W., Li X.
- ❑ [New Perspective on Thermodynamic Cycles of Oscillating Flow Regenerators](#)  
Luo E., Dai W., Radebaugh R.
- ❑ [Experimental Investigation on a Room-Temperature Traveling-Wave Thermoacoustic Refrigerator](#)  
Huang Y., Luo E., Dai W., Wu Z.
- ❑ [Study on Thermoacoustic Resonance Pipe Driven by Loudspeaker Using Two-Microphone Method](#)  
Fan L., Wang B. R., Jin T., Shen Y., Zhang S. Y.
- ❑ [Stack and Frequency's Coupling Characteristic Analysis in Thermoacoustic Systems](#)  
Zhang F. Z., Jiang R.Q., Li Q., Chen X.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

## ❑ Numerical Simulation of Loudspeaker-Driven Thermoacoustic Refrigerator

Tu Q., Chen Z.J., Liu J.X., Zhang X.Q., Li Q., Guo F.Z.

## ❑ Study on the Optimal Characteristic Dimension of Regenerator in a Thermoacoustic engine

Yu Z. B., Li Q., Chen X., Guo F. Z., and Xie X. J.

## ❑ Investigation on Acoustic Characteristics of Regenerator in the Thermoacoustic Apparatus

Xie X. J., Li Q., Chen X., Yu Z. B.

## ❑ Discussion on Resonant Frequency in Thermoacoustic Systems

Jin T., Fan L., Zhang B.S., Wang B.R., Chen G.B.

## ❑ Figure of Merit for Regenerator Working in Acoustic Field (Invited)

Guo F.Z.

## ❑ Investigation of Acoustic Streaming in a Thermoacoustic-Stirling Heat Engine

Duthil P., Bretagne E., Wu J., François M.-X., Li Q.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ Investigation on a Thermoacoustically Driven Pulse Tube Cooler Working at 82.5 K  
Qiu L.M., Sun D.M., Yan W.L., Chen P., Gan Z.H., Chen G.B.
- ❑ Thermoacoustic Turbulent-Flow Model for Inertance Tubes Used for Pulse Tube Refrigerators  
Luo E., Radebaugh R., Dai W., Lewis M., Wu Z., Zhang Y.
- ❑ Thermoacoustically Driven Pulse Tube Refrigeration Below 90K  
Tang K., Chen G.B., Jin T., Bao R.

Click on title for a paper.



# Papers by Session

## Space Cryogenics

---

- ❑ [Study on Electricity Generation Performance of Thermoelectric Device in Extreme Environmental Conditions](#)  
Wu Z.-L., Zhou Y.-X., Li T., Liu J.
- ❑ [Experimental Investigation on He II Porous Plug Liquid-Vapor Phase Separator](#)  
Yu X., Li Q., Li Z., Li Qiang
- ❑ [Novel Cryogenic Motion Control for Aerospace](#)  
Cao Z.T., Chen H.P., He G. G., Cai J. J.
- ❑ [Spitzer Space Telescope Thermal/Cryogenic System Flight Performance](#)  
Paul T. Finley, Richard A. Hopkins, and Russell B. Schweickart
- ❑ [Thermal Validation of the Design of the CFRP Support Members to be Used in the Spatial Framework of the Herschel Space Observatory](#)  
McDonald P.C., and Jaramillo E.
- ❑ [Development and Testing of a Novel Thermal Switch](#)  
You J.G., Dong D.P., Wang W.Y., Li Z.W.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ **Cryocoolers Development and Integration for Space Applications at Air Liquide**  
Ravex A., Trolhier T., Sentis L., Durand F., Crespi P.
- ❑ **Overview of the Air Liquide Cryogenic Ground Space Activities for Launchers and Satellites**  
Duval S., Bravais P., Courty J.C., Crispel S., Marot G.
- ❑ **Thermal Analysis of Cryogenic Rocket Engine with One, Two and Three Dimensional Approaches**  
Kuzhiveli B.T., Ghosh S.C., Kuruvila G. K., Gandhi V.G.
- ❑ **Liquid Hydrogen Droplet Generation from a Vibrating Orifice**  
Xu J.Q., Celik D., Yousuff Hussaini M., Van Sciver S .W.
- ❑ **The Working Performance of Radiant Cooler in Thermal Vacuum Test**  
Xu H.Y., Dong D.P., Wang W.Y., Li Z.
- ❑ **A Study on the Conic Support in the Radiant Cooler**  
Fu L.Y., Tu F.H., Wang W.Y.
- ❑ **Analysis of the Influences of View Angle on Paraboloid W Style Radiant Cooler's Working Performance**  
Wang X.J., Pan Y.P., He Y.L., Chen C.Z.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Cryogenic Components and Machinery

---

- ❑ [Simple Method for Calculation of Cryogenic Transfer Line Cool Down](#)  
Alexeev A., Pelle Th.
- ❑ [Study of New Aerodynamic Foil Thrust Gas Bearing with Elastic Support for Cryogenic Turbo-Expander](#)  
Chen C.Z., Lin S.N., Hou Y., Zhu Z.H.
- ❑ [Design of Small Turbo Brayton Cycle Air Refrigerator Test Rig](#)  
Hou Y., Sun Y., Wang J., Chen C.Z.
- ❑ [Analysis of Centrifugal Stresses in the Rotor of a Cryogenic Turboexpander](#)  
Parthasarathi Ghosh, Sunil Kr Sarangi
- ❑ [Study of Temperature Distribution of Flat Steel Ribbon Wound Cryogenic High-Pressure Vessel](#)  
Cui X. L., Chen G. M.
- ❑ [The Design and Study of a Reciprocating Helium Compressor](#)  
Lei G., Gong L-H., Lu W-H., Zhang L.

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Sessions](#)

## Superconductor Behaviour

---

- ❑ [Strain Effects on the Critical Current of Bi-2223/Ag Tape](#)  
Wu Y. L., Wang Z. D., Xiong Y. F.
- ❑ [Thermal, Electrical Properties and Microstructure of High Purity Niobium for High Gradient Superconducting Cavities](#)  
Wen H.M., Singer X., Singer W., Proch D., Vogel E., Hui D.
- ❑ [AC Loss Characteristics of Bi-2212 Multifilamentary Round Wires and Their Cables](#)  
Funaki K., Iwakuma M., Kajikawa K., Hirano N., Nagaya S., Ohtani N., Hasegawa T.
- ❑ [Property of Joint Resistance of Bi-2223 Multi-Filament Tape by Using Sn-Pb Solder](#)  
Gu C., Zhuang C., Zhang J.Y., Qu T.M., Han Z.
- ❑ [Quench Characteristics of High- \$T\_c\$  Superconducting Tape for Alternating Over-Current Using DFT](#)  
Lim S.H., Yim S.W., Lee J.H., Ko S.C., Hwang S.D., Han B.S.
- ❑ [Dip-Coated  \$\text{YBa}\_2\text{Cu}\_3\text{O}\_{7-x}\$  Films on Ag Substrate by MOD Method](#)  
Dong J., Liu M., Liu D.M., Zhao Y., Liang J.X., Sheng J.L., Suo H.L., Zhou M.L.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Sessions](#)

❑ **Influence of Ag Substrate Surface Condition on Surface Morphology of YBCO Film**

Liu M., Liu D. M., Dong J., Zhao Y., Sheng J., Liang J. X., Suo H. L., Zhou M. L.

❑ **Boiling Heat Transfer to Liquid Nitrogen Pool from Ag Sheathed PbBi2223 Tapes Carrying Over-Current**

Bailey W., Young E.A., Yang Y., Beduz C.

❑ **Equivalent Circuit Model for High- $T_c$  Superconducting Flux Flow Transistor with a Dual-Gate Structure**

Ko S-C., Kang H-G., Lim S-H., Lee J-H., Han B-S.

❑ **Direct Observation of Percolation and Phase Separation in  $\text{Pr}_{5/8}\text{Ca}_{3/8}\text{MnO}_3$  System**

Cao G. X., Zhang J. C., Li P. L., Yu J., Wang S. P., Jing C., Cao S. X., Shen X.C.

❑ **The Reentrant Behaviour of Spin-Glass Phase in  $(\text{La,Pr})_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  Manganites**

Zhang J. C., Cao G. X., Sha Y. N., Wang S. P., Yu J., Jia G. Q., Jing C., Cao S. X., Shen X. C.

❑ **Anisotropic Transport and Magnetic Properties of  $\text{Pr}_{1/2}\text{Sr}_{1/2}\text{MnO}_3$  Single Crystal Sample**

Cao S.X., Wang X.Y., Zhang Y.F., Yu L.M., Jing C., Zhang J.C., and Shen X. C.

Click on title for a paper.





# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ **Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy**  
Liu Y.S., Zhang J.C., Jia G.Q., Zhang X.Y., Ren Z.M., Jing C., Li X., Cao S.X., Deng K.
- ❑ **Physical Properties in Layered Transition-Metal Oxide Crystals and Anisotropic Transport Measurement**  
Ruan K. Q., Yu Y., Huang S. L., Li H. L., Qian S., Cao L. Z.
- ❑ **Design of a Cryogenic Giant Magnetostrictive Actuator Using HTS**  
Cai J.J., Cao Z.T., Chen H.P., He G.G.
- ❑ **A New Method of Magnetizing and Demagnetizing the Magnetic Refrigerants by Dint of Dynamic-Magnetic-Link**  
Lu D.W., Wu H.B., Yuan G.Q., Han Y.S., Xu X.N., Jin X.
- ❑ **Extended Power Law of Nonlinear Transport Properties of Superconducting Materials**  
Ning Z.H., Hu X., Yin D.L., Qi Z., Wang F.R., Guo J.D., Li C.Y.
- ❑ **AC Loss Characteristics of HTS Tapes Subject to Bending Strains**  
Tsukamoto O., Ogawa J., Suzuki H.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

## LTS Superconducting Devices

---

### ❑ EAST Superconducting Tokamak Device (Plenary Invited Paper)

Weng P. D. and EAST team

### ❑ Challenges of Large Scale Superconducting Accelerators (Plenary invited paper)

Proch D.

### ❑ Cryogen-Free Superconducting Magnet Fabricated by a React-and-Wind Method Employing Nb<sub>3</sub>Sn Wires with CuNbTi Reinforcement

Watanabe K., Nishijima G., Awaji S., Takahashi K., Miyoshi K., Megro S., Ishizuka M., Hasebe T.

### ❑ Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor

della Corte A., Affinito L., Chiarelli S., Gislon P., Messina G., Muzzi L., Pasotti G., Turtù S., Mariani M., Matrone A., Rossi S.

### ❑ Multi-Tube Power Leads Tower for BEPCII IR Magnets

Jia L.X., Zhang X.B., Wang L., Wang T.H., Yao Z.L.

### ❑ The MICE Focusing Solenoids and Their Cooling System

Green M. A., Barr G., Lau W., Senanayake R. S., Yang S. Q.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Sessions](#)

## ❑ Evaluation of the ITER Cable in Conduit Conductor Heat Transfer Coefficient

Nicollet S., Ciazynski D., Duchateau J.L., Lacroix B., Renard B.

## ❑ The BESIII Detector Magnet

Zhu Z., Zhao L., Wang L., Hou Z., Huang S., Yang H., Hu J., Zhou J., Han S., Yi C., Chen H., Xu Q., Liu L., Makida Y., Yamaoka H., Tsuchiya K., Wang B., Wahrer B., Taylor C., Chen C.

## ❑ Stability Analysis for Cryocooled Aluminum-Stabilized Superconducting Magnet

Liu H.W., Wang Q.L., Yu Y.J., and Bai Y.

## ❑ Thermal Design of BESIII Magnet

Xu Q., Zhu Z., Liu L., Wang S., Yi C., Chen H., Zhang L.

## ❑ A Numerical Code to Simulate Quenching in Conduction Cooled Superconducting Magnet

Dai Y.M., Blau B., Hofer H., Yu Y.J., Wang Q.L.

## ❑ Numerical Simulation on Thermal Stress and Magnetic Force of Current Leads in BEPCII

Zhang X.B., Jia L.X.

## ❑ Design and Manufacture of a Low Current ADR Magnet for Space Application

Brockley-Blatt C., Harrison S., Hepburn I., McMahon R., Milward S., Stafford Allen R.

Click on title for a paper.



# Papers by Session

## ▣ Study of Stress, Strain in Super-Conducting Magnet by Fiber-Bragg Grating

Feng Z.A., Wang Q.L., Dai F., Huang G.J.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## HTS Superconducting Devices

---

- ❑ [Design Study of Conduction-Cooled High Temperature Superconducting Magnet](#)  
Wang Q.L., Huang H., Song S.S., Dai Y.M., Zhao B.Z., Yun Y.J., Yan L.G.
- ❑ [Testing the Coils of the Superconducting Magnet for the Alpha Magnetic Spectrometer](#)  
McMahon R., Harrison S., Milward S., Stafford Allen R., Hofer H., Ulbricht J., Viertel G., Ting S.C.
- ❑ [Normal Transition in YBCO Thin Film and its Effect on Current Limiting Characteristics](#)  
Onishi T., Sasaki K., Kayoda T.
- ❑ [Characterization of the Quenching Process and the Protection of an AC High Temperature Superconductor Coil](#)  
Li X. H., Wang Y. S., and Xiao L. Y.
- ❑ [Technical Analyses of HTS Bulk Used in a Rotating Machine](#)  
Qiu M., Huo H.K., Xu Z., Yao Z.H., Xia D., Lin L.Z.
- ❑ [Investigation of the Subcooled LN2 Characteristics in the Prototype Cryostat for the Resistive Superconducting Fault Current Limiter](#)  
Cho S., Yang H.S., Kim D.L., Jung W.M., Kim D.H., Kim H.R., Hyun O.B.

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ **LN2 Forced Flow Cooling on HTS Power Cables**  
Koh D-Y, Yeom H-K, Lee K-S
- ❑ **Shape Optimization of Field Windings in a High Temperature Superconducting Synchronous Generator with Finite Element Method**  
Song F.C., Zhang G.Q., Chen B., Yu S.Z., Gu G.B.
- ❑ **Development and Testing of 10.5kV/1.5kA HTS Power Cable**  
Lin Y. B., Gao Z.Y., Ning Z., Dai S. T., Teng Y. P., Xu L., Lin L. Z., Xiao L. Y.
- ❑ **Study on a Hybrid Superconducting Magnetic Bearing System**  
Fang J.R., Lin L.Z., Yan L.G.
- ❑ **Electromagnetic Design and Analysis of a PM Motor with HTS Bulk**  
Huo H. K., Qiu M., Xia D., Xu Z., Lin L.Z.
- ❑ **Finite-Element Simulation of HTS Bulk Reluctance Motor**  
Xu Z., Qiu M., Yao Z.H., Xia D.
- ❑ **A Current Compensation Type Superconducting Fault Current Limiter**  
Chen D.F., Zhao C.H., Xiao L.Y.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ **Evaluation on Power System Transient Stability with Resistor Type SFCL and Parameter Design**  
Ye Y., Xiao L.Y.
- ❑ **Effects of Bias Power Supply on Bridge Type Superconducting FCL**  
Zhang Z.F., Xiao L.Y.
- ❑ **20kA HTS Current Leads for EAST Tokamak Project**  
Bi Y.F., Chen X.Q., Ma D.K., Liu X.L., Wu S.T., Li J.G.
- ❑ **Design of Cooling System and Temperature Characteristics Analysis of High Temperature Superconducting Demonstrative Synchronous Generator**  
Chen B., Zhang G.Q., Song F.C., Yu S. Z., Gu G.B.
- ❑ **A Prototype 4m, 2kA, AC HTS Power Cable System**  
Xi H.X., Hou B., Bi Y.F., Yang X.C., Ding H.K., Xin Y.
- ❑ **Development of a Three-Phase HTS Power Transformer**  
Wang Y.S., Zhao X., Li H.D., Han J.J., Xiao L.Y., Lin L.Z., Guan Y., Bao Q., Lu G.H., Zhu Z.Q., Xu X., Lu Y., Dai S.T., Hui D.
- ❑ **Thermal Stability and Quench Propagation in a Cryocooler-Cooled Pancake Coil of Bi-2223 Tape Operating Between 35K and 65K**  
Johnstone A.P., Yang Y., Beduz C.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ **A New Concept of Bridge Fault Current Limiter-SMES for Interline Application to Improve Power Quality**  
Zhao C.H., Xiao L.Y., Lin L.Z., Yu Y.J.
- ❑ **Design and Primary Experiment for a Single Phase 220V/100A/6kW Bridge Fault Current Limiter-SMES**  
Zhao C.H., Zhang Y.G., Li S., Huang X.H., Chen D.F., Xiao L.Y., Lin L.Z., Yu Y.J.
- ❑ **Fabrication and Characterization of Bi-2223 Coils for Generator Applications**  
Xu B., Al-Mosawi M.K., Yang Y., Beduz C.
- ❑ **Shape Optimization of HTS Magnets Using Hybrid Genetic Algorithms**  
Wang C., Wang Q.L.
- ❑ **An Adaptive Neuro-Fuzzy Control Strategy for the Bridge Type Superconducting Fault Current Controller**  
Guo W.Y., Zhao C.H., Xiao L.Y.

Click on title for a paper.





# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Applications

---

- ❑ **Cryoelectronics – An Experimental Examination of the Behaviour of Power Electronic Devices at Low Temperatures**  
Hawley C.J., Gower S.A.
- ❑ **Operational Amplifiers in the Temperature Range from 300 to 4 K**  
Nawrocki W., and Pająkowski J.
- ❑ **Development and Test of a Cryopulverizer for Reprocessing Plastic Wastes**  
Jacob S., Kasthuriengan S., Karunanithi R., Upendra Behera, Nadig D. S.
- ❑ **A Cryostat with Optics Windows for Study of ICF Cryogenics Target**  
Liu Y., Zhu Y. Q., Jiang C., Zhou G.
- ❑ **Temperature Effects on Formation of a Uniform Layer of Isotopes Inside a Cryogenic ICF Target**  
Zhou G., Zhu Y. Q., Liu Y., Jiang C., Li Q.

Main Menu

Sessions

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Gas Liquefaction and Separation

---

- ❑ [Optimization Analysis of Peakshaving Cycle to Liquefy the Natural Gas](#)  
Shi Y., Gu A., Wang R., Zhu G.
- ❑ [The Experimental Study on the Performance of a Small-Scale Oxygen Concentrator by PSA](#)  
Zhang Y.W., Wu Y.Y., Gong J.Y., Zhang J.L.
- ❑ [The Thermodynamic Analysis and Adjusting Methods for Reliquefaction Plant on Board LEG carriers](#)  
Zhao Z.L., Jiang A.L., Xiong L.L.
- ❑ [A Study of the Optimum Temperature for Hydrogen Storage on Carbon Nanostructures](#)  
Zheng Q.R., Gu A.Z., Lu X.S., Lin W.S.
- ❑ [Design of Vortex Tubes and Experimental Program on LOX Separation Using Cryogenic Vortex Tubes](#)  
Jacob S., Upendra Behera, Paul P. J., Kasthuriangan S., Karunanithi R., Ram S. N., Dinesh K.

Main Menu

Sessions

Click on title for a paper.



# Papers by Session

## Heat Transfer and Thermal Insulation

---

❑ [Heat Transfer Enhancement of He II Co-Current Two-Phase Flow in the Presence of Atomisation](#)

Rousset B., Thibault P., Perraud S., Puech L., Wolf P. E., van Weelderen R.

❑ [Design Consideration Validation of Cryo-Components for Current Feeder System of SST-1 Using Flexibility Analysis](#)

Gupta N.C., Sarkar B., Gupta G., and Saxena Y.C.

❑ [Contractible Thermosyphon for Conduction Cooled Superconducting Magnets](#)

Noh C., Kim S., Jeong S., Jin H.

❑ [Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1](#)

Sarkar B., Gupta N. C., Sahu A. K., Bansal G., Pradhan S., Dhard C. P., Misra Ruchi, Panchal Pradip, Tank Jignesh, Gupta G., and Saxena Y.C.

❑ [Investigation of Header Configuration and its Effect on Flow Maldistribution in Plate-Fin Heat Exchanger](#)

Wen J., Li Y.Z., Zhang K.

❑ [Experimental Investigation on High Performance Cryogenic Heat Transfer Based Upon Natural Circulation Cooling](#)

Qiu L.M., Li W.Z., Gan Z.H., Zhang X.J., Jiao B., Chen G.B., Yang C.J.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Sessions](#)

- ❑ **Film Boiling Modes in Weakly Subcooled He II Around Lambda Pressure**  
Nozawa M., Kimura N., Murakami M., Zhang P.
- ❑ **Modeling of Multilayer Vacuum Insulation – Complexity Versus Accuracy**  
Chorowski M., Polinski J.
- ❑ **Experimental Study of the Narrow Channel Heat Transfer In Liquid Nitrogen**  
Zhang P., You G. C., Ren X., Wang R. Z.
- ❑ **Observation of Various Boiling States in Nearly Saturated He II**  
Zhang P., Murakami M., Nozawa M.
- ❑ **Heat Transfer During Natural Convective Boiling in a Vertical Uniformly Heated Closed Tube Submerged in Saturated Helium**  
Baudouy B.
- ❑ **Several Problems in the Thermal Contact Resistance Research of Solid Interfaces at Low Temperature**  
Xu L., Li Z.C.
- ❑ **Investigation of Thermal Insulation for HTS Cable Systems**  
Kim D. H., Kim D. L., Yang H. S., Jung W. M., Hwang S. D.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ **Experimental Investigation on Pool Boiling Heat Transfer of Pure Refrigerants and Binary Mixtures**  
Sun Z.H., Gong M.Q., Qi Y.F., Luo E.C., Wu J.F.
- ❑ **Modeling the Thermal Mechanical Behavior of a 300 K Vacuum Vessel that is Cooled by Liquid Hydrogen in Film Boiling**  
Yang S. Q., Green M. A., and Lau W.
- ❑ **Fractal Description of Thermal Contact Resistance Between Rough Surfaces at Low Temperature**  
Xu R.P., Feng H.D., Jin T.X., Xu L., Zhao L.P.
- ❑ **Study of Two Phase Flow Distribution and its Influence in a Plate-Fin Heat Exchanger**  
Xu Q., Li Y.Z., Zhang Z.
- ❑ **A Thermodynamic Optimization of Counterflow Recuperative-Type Heat Exchangers**  
Wang Q., Zhang H. F., Chen G. M.
- ❑ **A New Type of Condenser-Evaporator Safely Operated in Large Air Separation Plant**  
Wu Y.Y., Chen L.F., Wu T.H.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ **Heat Transfer in Gas Filled Pipes with Closed Warm End Under Different Orientations**  
Hieke M., Haberstroh Ch., Quack H.
- ❑ **Normalized Representation for Steady State Heat Transport in a Channel Containing He II Covering Pressure Range Up to 1.5 Mpa**  
Sato A., Maeda M., Yuyama M., and Kamioka Y.
- ❑ **Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System**  
Schauer F., Nagel M., Bozhko Y., Pietsch M., Shim S.Y., Kufner F., Leher F., Binni A., Posselt H.
- ❑ **Modeling Free Convection Flow of Liquid Hydrogen within a Cylindrical Heat Exchanger Cooled to 14K**  
Yang S. Q., Green M. A., Lau W.
- ❑ **Experiment on Natural Convection of Subcooled Liquid Nitrogen**  
Yean S-C., Chang H-M., Van Sciver S. W.

Click on title for a paper.



# Papers by Session

## Cryogenics

---

❑ [Numerical Simulation of Flow Boiling of Cryogenic Liquids in Tubes](#)

Li X.D., Wang R.S., Gu A.Z.

❑ [A Density Equation for Saturated Helium-3](#)

Li X.Y., Huang Y.H., Chen G.B., Arp V.

❑ [The Characterization of Carbon Nanofibres Based on N<sub>2</sub> Adsorption Isotherms at 77K](#)

Zhang C., Lu X.S., Gu A.Z.H.

❑ [Experimental Investigation into Storage of Confined Cryogenic Liquids without Evaporation Venting](#)

Huang Z., Wang R., Shi Y., Gu A.

❑ [Thermal Stress Analysis of Cryogenic Adhesive Joints for Non-Magnetic Dewar](#)

Zhu H. M., Jin T. X., Xu L., Sun H., Xiao Y. M.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

## Properties of Materials at Cryogenic Temperatures

---

- ❑ [Development of Cryogenic Structural Materials \(Plenary Invited Paper\)](#)  
Li L.F., Zhang Y.T., Li Y.Y.
- ❑ [Thermal Conductivity of Materials and Measuring System at Cryogenic Temperature](#)  
Li B., Wu B. M., Yang D. S., Zheng W. H., Cao L. Z.
- ❑ [Cryogenic Properties of Polymer Composite Materials – A Review](#)  
Fu S. Y., Li Y., Zhang Y. H., Pan Q. Y., Huang C. J.
- ❑ [CRYOFLUIDS – A Software for Physical Property Data of Cryogenic Fluids](#)  
P. Lalkoshti, Raja Banerjee, Abhijit Tarafder and Sunil Kr Sarangi
- ❑ [Discussion on Gibbons' Equation of State for Helium-3](#)  
Huang Y.H., Chen G.B., Li X.Y.
- ❑ [An Internet-Based Working Fluid Properties Database](#)  
Huang J., He Y.L., Zhang Y.W.
- ❑ [A New Process for the Preparation of Polyimide/Silica Hybrid Films](#)  
Li Y., Fu S. Y., Pan Q. Y., Zhang Y. H., and Lin D. J.

Click on title for a paper.





# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Cryogenic Instrumentation and Process Control

---

- ❑ [Design of a Fibre Reinforced Plastic Anticryostat for Magnetorelaxometric Measurements](#)  
Koettig T., Weber P., Prass S., Seidel P.
- ❑ [Alignment of the ISAC-II Medium Beta Cryomodule with a Wire Monitoring System](#)  
Rawnsley W.R., Bylinski Y., Fong K., Laxdal R.E., Dutto G., Giove D.
- ❑ [Digital Temperature Sensors in the Range of 77-300 K](#)  
Nawrocki W., Jurkowski A., and Pająkowski J.
- ❑ [Measurement of characteristic feature of cavitation flows of He I and He II](#)  
Harada K., Tsukahara R., and Murakami M.
- ❑ [Application of PIV Technique to Cavitating Flows of Liquid Helium](#)  
Tsukahara R., Murakami M., and Harada K.
- ❑ [Measurement of the Cryogenic Tensile Properties of Polymer Composites](#)  
Pan Q.Y., Fu S.Y., Zhang Y.H., Li Y.

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Sessions

- ❑ **High Precise Thermopower Measurement System and its Applying to Organic Conductors (TMTSF)<sub>2</sub>ClO<sub>4</sub> in a Direction**  
Chai Y. S., Yang H. S., Liu J., Zhu L., Cao L. Z.
- ❑ **Multichannel Temperature Monitor Compatible with PC**  
Filippov Yu.P., Alpatov S.V., and Sveshnikov B.N.
- ❑ **Interchangeability of Diode Temperature Sensors for Various Nonstandard Excitation Currents**  
Courts S., Yeager C.
- ❑ **The Laser Megajoule CryoTarget Thermal Regulation**  
Lamaison V., Brisset D., Cathala B., Paquignon G., Bonnay P., Chatain D., Communal D., Périn J-P.
- ❑ **Discussion of the Protection of Pressure Vessels by Using Safety Valves-Rupture Disc-Combinations**  
Süßer M.
- ❑ **New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project**  
Mitin V.F., McDonald P.C., Pavese F., Boltovets N.S., Kholevchuk V.V., I.Yu. Nemish, Basanets V.V., Dugaev V.K., Sorokin P.V., Venger E.F., Mitin E.V.

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Cryogenics in Medicine and Biology

---

- ❑ [Characteristic Studies of Sputter Deposited Cermet Cryogenic Heaters](#)  
Yeager C., Courts S., Chapin L.
- ❑ [Study of Skin Burns Due to Contact with Cold Mediums at Extremely Low Temperature](#)  
Deng Z-S., Liu J.
- ❑ [A New Method for Uniformly Cooling Engineered Tissues](#)  
Yu L-N., Deng Z-S., Liu J., Zhou Y-X.
- ❑ [Comparative Analysis of the Cryogens Used in Cryomedical Applications](#)  
Chorowski M., Piotrowska A.

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## LHC

---

- ❑ [Measured Performance of Four New 18 kW@4.5 K Helium Refrigerators for the LHC Cryogenic System](#)

Gruehagen H., Wagner U.

- ❑ [Overview of the Air Liquide Cryogenic Systems Designed for CERN LHC](#)

Dauguet P., Briend P., Delcayre F., Hilbert B., Mantileri C., Marot G., Monneret E., Walter E.

- ❑ [1.8 K Refrigeration Units for the LHC: Performance Assessment of Pre-series Units](#)

Claudet S., Ferlin G., Millet F., Tavian L.

- ❑ [The Application of Ultrasonic Oxygen Deficiency Hazard Detectors in the LHC Accelerator Tunnel](#)

Brodzinski K., Chorowski M., Gizicki W., Ostropolski W., Riddone G.

- ❑ [Numerical Study of the Final Cooldown from 4.5 K to 1.9 K of the Large Hadron Collider](#)

Riddone G., Liu L., Tavian L.

- ❑ [Cryogenic Infrastructure for Testing of LHC Series Superconducting Magnets](#)

Axensalva J., Benda V., Herblin L., Lamboy JP., Tovar-Gonzalez A., Vullierme B.

[Main Menu](#)

[Sessions](#)

Click on title for a paper.



# Papers by Session

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Sessions](#)

❑ **Control System and Operation of the Cryogenic Test Facilities for LHC Series Superconducting Magnets**

Axensalva J., Herblin L., Lamboy JP., Tovar-Gonzalez A., and Vullierme B.

❑ **Series Production of 13 kA Current Leads with Dry and Compact Warm Terminals**

Andersen T.P., Benda V., Vullierme B.

❑ **Experience with the String2 Cryogenic Instrumentation and Control System**

Gomes P., Balle Ch., Blanco E., Casas J., Pelletier S., Rodriguez M.A., Serio L., Suraci A., Vauthier N.

❑ **The Management of Cryogenics at CERN**

Delikaris D., Barth K., Passardi G., Serio L., Tavian L.

Click on title for a paper.



**A B C D E F G H I**  
**J K L M N O P Q R**  
**S T U V W X Y Z**

[Main Menu](#)

Colored letters are active links to the index.

# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## A

---

- ☐ [Abe I.](#)
- ☐ [Abhijit Tarafder](#)
- ☐ [Affinito L.](#)
- ☐ [Akutsu T.](#)
- ☐ [Alexeev A.](#)
- ☐ [Al-Mosawi M. K.](#)
- ☐ [Alpatov S.V.](#)
- ☐ [Anand B.](#)
- ☐ [Andersen T.P.](#)
- ☐ [Andersson W.](#)
- ☐ [Antipenkov A.](#)
- ☐ [Arp V.](#)
- ☐ [Awaji S.](#)
- ☐ [Axensalva J.](#)

## B

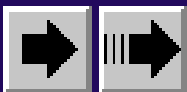
---

- ☐ [Bai Y.](#)
- ☐ [Bailey W.](#)
- ☐ [Bak J.S.](#)
- ☐ [Bansal G.](#)
- ☐ [Bao Q.](#)
- ☐ [Bao R.](#)
- ☐ [Barr G.](#)
- ☐ [Barth K.](#)
- ☐ [Basanets V.V.](#)
- ☐ [Baudouy B.](#)
- ☐ [Beduz C.](#)
- ☐ [Benda V.](#)
- ☐ [Bi Y.F.](#)
- ☐ [Binni A.](#)
- ☐ [Blau B.](#)
- ☐ [Boltovets N.S.](#)

[Main Menu](#)

[Authors](#)

Click on a name for a list of papers.



# Authors

- ❑ Bonnay P.
- ❑ Bonneton M.
- ❑ Bozhko Y.
- ❑ Bravais P.
- ❑ Bretagne E.
- ❑ Briend P.
- ❑ Brisset D.
- ❑ Brockley-Blatt C.
- ❑ Brodzinski K.
- ❑ Bylinski Y.

## C

---

- ❑ Cai J.H.
- ❑ Cai J.J.
- ❑ Caillaud A.
- ❑ Candia A.
- ❑ Cao G. X.
- ❑ Cao L. Z.
- ❑ Cao S. X.
- ❑ Cao Y.
- ❑ Cao Z.T.
- ❑ Cathala B.
- ❑ Chai Y. S.
- ❑ Chang H.S.
- ❑ Chang H-M
- ❑ Chapin L.
- ❑ Chatain D.
- ❑ Chen X.
- ❑ Chen A.B.
- ❑ Chen B.
- ❑ Chen C.
- ❑ Chen C.Z.
- ❑ Chen D.F.
- ❑ Chen G. M.
- ❑ Chen G.B.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

Click on a name for a list of papers.





# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ☐ [Chen G.B.](#)
- ☐ [Chen G.M.](#)
- ☐ [Chen H.](#)
- ☐ [Chen H.P.](#)
- ☐ [Chen J. R.](#)
- ☐ [Chen L.F.](#)
- ☐ [Chen N.](#)
- ☐ [Chen P.](#)
- ☐ [Chen X.](#)
- ☐ [Chen X.Q.](#)
- ☐ [Chen Y.](#)
- ☐ [Chen Z.J.](#)
- ☐ [Cheng Z.Z.](#)
- ☐ [Chesny P.](#)
- ☐ [Chiarelli S.](#)
- ☐ [Chiou W. S.](#)
- ☐ [Cho K.W.](#)

- ☐ [Cho S.](#)
- ☐ [Choi Y.D.](#)
- ☐ [Chorowski M.](#)
- ☐ [Chromec B.](#)
- ☐ [Ciazynski D.](#)
- ☐ [Claudet S.](#)
- ☐ [Communal D.](#)
- ☐ [Courts S.](#)
- ☐ [Courty J.C.](#)
- ☐ [Crespi P.](#)
- ☐ [Creteigny D.](#)
- ☐ [Crispel S.](#)
- ☐ [Cui X.L.](#)

## D

---

- ☐ [Dai E.](#)
- ☐ [Dai S.T.](#)

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ☐ Dai W.
- ☐ Dai Y.M.
- ☐ Dang H.Z.
- ☐ Dauguet P.
- ☐ Day Chr.
- ☐ de Waele.A.T.A.M
- ☐ Delcayre F.
- ☐ Delikaris D.
- ☐ della Corte A.
- ☐ Deng K.
- ☐ Deng Z.S.
- ☐ Dhard C. P.
- ☐ Dinesh K.
- ☐ Ding H.K.
- ☐ Ding W.J.
- ☐ Dogan C.
- ☐ Doi Y.

- ☐ Dong D.
- ☐ Dong D.P.
- ☐ Dong J.
- ☐ Dremel M.
- ☐ Du H.P.
- ☐ Duchateau J.L
- ☐ Dugaev V.K.
- ☐ Durand F.
- ☐ Durgesh Nadig
- ☐ Duthil P.
- ☐ Dutto G.
- ☐ Duval S.

## F

---

- ☐ Fan L.
- ☐ Fan Y.F.
- ☐ Fang Z.C.

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ☐ Fauve E.
- ☐ Feng H.D.
- ☐ Feng Q.K.
- ☐ Feng Z.A.
- ☐ Ferlin G.
- ☐ Fietz W.H.
- ☐ Filippov Yu.P.
- ☐ Fleck U.
- ☐ Fong K.
- ☐ Fossen A.
- ☐ François M.X.
- ☐ Fu L.Y.
- ☐ Fu S. Y.
- ☐ Fuenzalida P.
- ☐ Fujisawa Y.
- ☐ Funaki K.

## G

---

- ☐ Gai X.Y.
- ☐ Gan Z.H.
- ☐ Gandhi V.G.
- ☐ Gao Z.Y.
- ☐ Ghosh S.C.
- ☐ Giove D.
- ☐ Gislou P.
- ☐ Gistau Baguer G.
- ☐ Gistau G.
- ☐ Gizicki W.
- ☐ Gong J.Y.
- ☐ Gong L.
- ☐ Gong L.H.
- ☐ Gong M.Q.
- ☐ Gower S.A.

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ☐ Grabié V.
- ☐ Gravil B.
- ☐ Grechko A.
- ☐ Green M. A.
- ☐ Grillot D.
- ☐ Gruehagen H.
- ☐ Gu A.
- ☐ Gu A.Z.
- ☐ Gu C.
- ☐ Gu G.B.
- ☐ Guan Y.
- ☐ Guo F. Z.
- ☐ Guo J.D.
- ☐ Guo W.Y.
- ☐ Gupta G.
- ☐ Gupta N. C.

## H

---

- ☐ Haas H.
- ☐ Haberstroh Ch.
- ☐ Han B.S.
- ☐ Han G.
- ☐ Han J.J.
- ☐ Han S.
- ☐ Han Y.S.
- ☐ Han Z.
- ☐ Harada K.
- ☐ Harrison S.
- ☐ Haruyama T.
- ☐ Hasebe T.
- ☐ Hasegawa T.
- ☐ Hawley C.J.
- ☐ He G.G.

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ☐ He Y.L.
- ☐ Heller R.
- ☐ Hepburn I.
- ☐ Herblin L.
- ☐ Hieke M.
- ☐ Hilbert B.
- ☐ Hirano N.
- ☐ Hofer H.
- ☐ Hong Y.Z.
- ☐ Hou B.
- ☐ Hou X.F.
- ☐ Hou Y.
- ☐ Hou Z.
- ☐ Howell G.
- ☐ Hsiao F. Z.
- ☐ Hu J.
- ☐ Hu Q.G.
- ☐ Hu X.
- ☐ Huang C.J.
- ☐ Huang H.
- ☐ Huang J.
- ☐ Huang M.X.
- ☐ Huang S.
- ☐ Huang S. L.
- ☐ Huang X.H.
- ☐ Huang Y.
- ☐ Huang Y.H.
- ☐ Huang Z.
- ☐ Hui D.
- ☐ Huo H.K.
- ☐ Hwang S.D.
- ☐ Hyun O.B.

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## I

---

- ☐ Ikushima Y.
- ☐ Ishizuka M.
- ☐ Iwakuma M.

## J

---

- ☐ Jacob S.
- ☐ Jaramillo E.
- ☐ Jeong S.
- ☐ Jeong S.K.
- ☐ Ji Z.M.
- ☐ Jia G. Q.
- ☐ Jia L.X.
- ☐ Jia Z.Z.
- ☐ Jiang A.L.
- ☐ Jiang C.
- ☐ Jiang N.
- ☐ Jiang R.Q.
- ☐ Jiang W.
- ☐ Jiang Y.L.
- ☐ Jiao B.
- ☐ Jin H.
- ☐ Jin T.
- ☐ Jin T.X.
- ☐ Jin X.
- ☐ Jin X.
- ☐ Jing C.
- ☐ Jing W.
- ☐ Johnstone A. P.
- ☐ Ju Y.L.
- ☐ Jung W.M.
- ☐ Jurkowski A.

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## K

---

- ☐ Kajikawa K.
- ☐ Kamioka Y.
- ☐ Karunanithi R.
- ☐ Kasthuriengan S.
- ☐ Kayoda T.
- ☐ Kholevchuk V.V.
- ☐ Kim D. H.
- ☐ Kim D. L.
- ☐ Kim H.B.
- ☐ Kim H.R.
- ☐ Kim S.
- ☐ Kim Y.S.
- ☐ Kimura N.
- ☐ Ko S.C.
- ☐ Kobayashi T.

- ☐ Koettig T.
- ☐ Koh D.Y.
- ☐ Kuendig A.
- ☐ Kufner F.
- ☐ Kuruvila G. K.
- ☐ Kuzhiveli B.T.

## L

---

- ☐ Lacroix B.
- ☐ Lalkoshti P.
- ☐ Lamaison V.
- ☐ Lamboy JP.
- ☐ Lau W.
- ☐ Laxdal R.E.
- ☐ Lee G.S.
- ☐ Lee J.H.

Main Menu

Authors

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ☐ Lee K.S.
- ☐ Lee L.A.
- ☐ Leher F.
- ☐ Lei G.
- ☐ Lewis M.
- ☐ Li B.
- ☐ Li C.Y.
- ☐ Li G.
- ☐ Li H. C.
- ☐ Li H. L.
- ☐ Li H.D.
- ☐ Li J.G.
- ☐ Li L.F.
- ☐ Li P. L.
- ☐ Li Q.
- ☐ Li Q.F.
- ☐ Li R.
- ☐ Li S.
- ☐ Li T.
- ☐ Li W.Z.
- ☐ Li X.
- ☐ Li X. H.
- ☐ Li X.D.
- ☐ Li X.Y.
- ☐ Li X.Z.
- ☐ Li Y.
- ☐ Li Y.Z.
- ☐ Li Z.
- ☐ Li Z.C.
- ☐ Li Z.W.
- ☐ Li Z.Y.
- ☐ Liang J. X.

Click on a name for a list of papers.





# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ☐ Liang J.T.
- ☐ Liang J.X.
- ☐ Liang W.
- ☐ Lim S.H.
- ☐ Lin D. J.
- ☐ Lin L. Z.
- ☐ Lin S.N.
- ☐ Lin W.
- ☐ Lin W.S.
- ☐ Lin Y. B.
- ☐ Lindemann U.
- ☐ Ling H.
- ☐ Liu C.S.
- ☐ Liu D.
- ☐ Liu D. M.
- ☐ Liu H.J.
- ☐ Liu H.W.
- ☐ Liu H.Z.
- ☐ Liu J.
- ☐ Liu J.X.
- ☐ Liu J.Y.
- ☐ Liu L.
- ☐ Liu L.Q.
- ☐ Liu M.
- ☐ Liu X.
- ☐ Liu X.K.
- ☐ Liu X.L.
- ☐ Liu Y.
- ☐ Liu Y.S.
- ☐ Liu Y.W.
- ☐ Loehlein K.
- ☐ Lu D.W.

Click on a name for a list of papers.



# Authors

- ☐ Lu G.H.
- ☐ Lu W.H.
- ☐ Lu X.S.
- ☐ Lu Y.
- ☐ Luo E.
- ☐ Luo E.C.

## M

---

- ☐ Ma D.K.
- ☐ Mack A.
- ☐ Maeda M.
- ☐ Makida Y.
- ☐ Mantileri C.
- ☐ Mariani M.
- ☐ Marot G.
- ☐ Marshall C.
- ☐ Matrone A.

- ☐ McDonald P.C.
- ☐ McMahon R.
- ☐ Megro S.
- ☐ Messina G.
- ☐ Millet F.
- ☐ Milward S.
- ☐ Misra Ruchi
- ☐ Mitin E.V.
- ☐ Mitin V.F.
- ☐ Miyoki S.
- ☐ Miyoshi K.
- ☐ Monneret E.
- ☐ Murakami M.
- ☐ Murdoch D.K.
- ☐ Muzzi L.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## N

---

- ☐ [N. Sato](#)
- ☐ [Nadig D.S.](#)
- ☐ [Nagaya S.](#)
- ☐ [Nagel M.](#)
- ☐ [Nakamoto T.](#)
- ☐ [Nakano A.](#)
- ☐ [Nam K.](#)
- ☐ [Nawrocki W.](#)
- ☐ [Nemish I.Yu.](#)
- ☐ [Nicollet S.](#)
- ☐ [Ning Z.](#)
- ☐ [Ning Z.H.](#)
- ☐ [Nishijima G.](#)
- ☐ [Noh C.](#)
- ☐ [Nozawa M.](#)

## O

---

- ☐ [Ogawa J.](#)
- ☐ [Ogitsu T.](#)
- ☐ [Ohhata H.](#)
- ☐ [Ohtani N.](#)
- ☐ [Onishi T.](#)
- ☐ [Ostropolski W.](#)

## P

---

- ☐ [Pająkowski J.](#)
- ☐ [Pan Q. Y.](#)
- ☐ [Pan Y.P.](#)
- ☐ [Panchal Pradip](#)
- ☐ [Paquignon G.](#)
- ☐ [Park S.J.](#)
- ☐ [Parthasarathi G.](#)

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ☐ [Pasotti G.](#)
- ☐ [Passardi G.](#)
- ☐ [Paul P. J.](#)
- ☐ [Paul T. Finley](#)
- ☐ [Pavese F.](#)
- ☐ [Pelle Th.](#)
- ☐ [Périn J.P.](#)
- ☐ [Perraud S.](#)
- ☐ [Pietsch M.](#)
- ☐ [Piotrowska A.](#)
- ☐ [Polinski J.](#)
- ☐ [Posselt H.](#)
- ☐ [Pradhan S.](#)
- ☐ [Prass S.](#)
- ☐ [Praud A.](#)
- ☐ [Proch D.](#)
- ☐ [Puech L.](#)

## Q

---

- ☐ [Qi Y.F.](#)
- ☐ [Qi Z.](#)
- ☐ [Qian S.](#)
- ☐ [Qiu L.M.](#)
- ☐ [Qiu M.](#)
- ☐ [Qu T.M.](#)
- ☐ [Quack H.](#)

## R

---

- ☐ [Racine M.](#)
- ☐ [Radebaugh R.](#)
- ☐ [Raja Banerjee](#)
- ☐ [Ram S. N.](#)
- ☐ [Ravex A.](#)
- ☐ [Rawnsley W.R.](#)

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ☐ Ren X.
- ☐ Ren Z.M.
- ☐ Renard B.
- ☐ Richard A. H.
- ☐ Riddone G.
- ☐ Ries T.
- ☐ Rossi S.
- ☐ Rousset B.
- ☐ Ruan K. Q.
- ☐ Russell B. S.

## S

---

- ☐ Sahu A. K.
- ☐ Sarkar B.
- ☐ Sasaki K.
- ☐ Sato A.
- ☐ Saxena Y.C.
- ☐ Schauer F.
- ☐ Schoenfeld H.
- ☐ Seidel P.
- ☐ Sekachev I.
- ☐ Senanayake R. S.
- ☐ Sentis L.
- ☐ Serio L.
- ☐ Sha Y. N.
- ☐ Shen F.
- ☐ Shen X. C.
- ☐ Shen Y.
- ☐ Sheng J.
- ☐ Sheng J.L.
- ☐ Shi L.H.
- ☐ Shi Y.
- ☐ Shim S.Y.

Click on a name for a list of papers.



# Authors

- ❑ Shintomi T.
- ❑ Shiraishi M.
- ❑ Singer W.
- ❑ Singer X.
- ❑ Song F.C.
- ❑ Song Sh.S.
- ❑ Sorokin P.V.
- ❑ Stafford Allen R.
- ❑ Stanford G.
- ❑ Steven W. V. S.
- ❑ Su X.T.
- ❑ Sun D.M.
- ❑ Sun H.
- ❑ Sun Y.
- ❑ Sun Z.H.
- ❑ Sunil K.S.

- ❑ Sunil Kr Sarangi
- ❑ Suo H. L.
- ❑ Süßer M.
- ❑ Suzuki H.
- ❑ Suzuki T.
- ❑ Sveshnikov B.N.

## T

---

- ❑ Takahashi K.
- ❑ Tamizhanban K.
- ❑ Tang H.M.
- ❑ Tang K.
- ❑ Tank Jignesh
- ❑ Tao W.Q.
- ❑ Tavian L.
- ❑ Taylor C.

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

Click on a name for a list of papers.



# Authors

- ❑ [Teng Y. P.](#)
- ❑ [Thibault P.](#)
- ❑ [Thummes G.](#)
- ❑ [Ting S.C.C.](#)
- ❑ [Tomaru T.](#)
- ❑ [Tovar-Gonzalez A.](#)
- ❑ [Trollier T.](#)
- ❑ [Tsuchiya K.](#)
- ❑ [Tsukahara R.](#)
- ❑ [Tsukamoto O.](#)
- ❑ [Tu F.H.](#)
- ❑ [Tu Q.](#)
- ❑ [Turtù S.](#)

## U

---

- ❑ [Uchiyama T.](#)
- ❑ [Ulbricht J.](#)
- ❑ [Upendra B.](#)
- ❑ [Upendra Behera](#)

## V

---

- ❑ [Van Sciver S](#)
- ❑ [van Weelderen R.](#)
- ❑ [Venger E.F.](#)
- ❑ [Viertel G.](#)
- ❑ [Vogel E.](#)
- ❑ [Voigt Th.](#)
- ❑ [Vostrikov S.](#)
- ❑ [Vullierme B.](#)

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## W

---

- ☐ Wagner U.
- ☐ Wahrer B.
- ☐ Walter E.
- ☐ Wang B.
- ☐ Wang B.R.
- ☐ Wang B.R.
- ☐ Wang C.
- ☐ Wang F.R.
- ☐ Wang G.P.
- ☐ Wang J.
- ☐ Wang L.
- ☐ Wang Q.
- ☐ Wang Q.L.
- ☐ Wang R.
- ☐ Wang R. Z.
- ☐ Wang R.S.
- ☐ Wang S.
- ☐ Wang S. P.
- ☐ Wang T.H.
- ☐ Wang W.Y.
- ☐ Wang X.J.
- ☐ Wang X.L.
- ☐ Wang X.Y.
- ☐ Wang Y.S.
- ☐ Wang Y.Y.
- ☐ Wang Z. D.
- ☐ Watanabe K.
- ☐ Weber P.
- ☐ Weber T. B.

Main Menu

Authors

Click on a name for a list of papers.





# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ☐ Weisend II J.G.
- ☐ Wen H.M.
- ☐ Wen J.
- ☐ Will M.E.
- ☐ Wolf P. E.
- ☐ Wu B.M.
- ☐ Wu H.B.
- ☐ Wu J.
- ☐ Wu J.F.
- ☐ Wu S.T.
- ☐ Wu T.H.
- ☐ Wu Y. L.
- ☐ Wu Y.N.
- ☐ Wu Y.Y.
- ☐ Wu Z.
- ☐ Wu Z.L.

## X

---

- ☐ Xi H.X.
- ☐ Xia D.
- ☐ Xiao H.
- ☐ Xiao L. Y.
- ☐ Xiao Y. M.
- ☐ Xie X. J.
- ☐ Xie X.M.
- ☐ Xin Y.
- ☐ Xing Z.H.
- ☐ Xiong L.L.
- ☐ Xiong Y. F.
- ☐ Xu B.
- ☐ Xu F.Y.
- ☐ Xu H.Y.
- ☐ Xu J.Q.

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ☐ Xu L
- ☐ Xu Q.
- ☐ Xu R.P.
- ☐ Xu X.
- ☐ Xu X.D.
- ☐ Xu X.N.
- ☐ Xu Z.

## Y

---

- ☐ Yamamoto A.
- ☐ Yamamoto A.
- ☐ Yamaoka H.
- ☐ Yan L.G.
- ☐ Yan W.L.
- ☐ Yang C.G.
- ☐ Yang C.J.
- ☐ Yang C.Z.
- ☐ Yang D.S.
- ☐ Yang G.D.
- ☐ Yang H.
- ☐ Yang H. S.
- ☐ Yang S. Q.
- ☐ Yang X.C.
- ☐ Yang Y.
- ☐ Yao Z.H.
- ☐ Yao Z.L.
- ☐ Ye Y.
- ☐ Yeager C.
- ☐ Yean S-C
- ☐ Yeom H.K.
- ☐ Yi C.
- ☐ Yim S.W.
- ☐ Yin D.L.
- ☐ You G. C.

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ☐ You J.G.
- ☐ Young E.A.
- ☐ Yousuff H. M.
- ☐ Yuan L.Z.
- ☐ Yu J.
- ☐ Yu L.M.
- ☐ Yu L.N.
- ☐ Yu Q.F.
- ☐ Yu S. Z.
- ☐ Yu X.
- ☐ Yu Y.
- ☐ Yu Y.J.
- ☐ Yu Z. B.
- ☐ Yuan G.Q.
- ☐ Yuyama M.

## Z

---

- ☐ Zahn G.R.
- ☐ Zhang B.S.
- ☐ Zhang C.
- ☐ Zhang F. Z.
- ☐ Zhang G.Q.
- ☐ Zhang H. F.
- ☐ Zhang J. C.
- ☐ Zhang J.L.
- ☐ Zhang J.Y.
- ☐ Zhang K.
- ☐ Zhang L.
- ☐ Zhang P.
- ☐ Zhang S.Y.
- ☐ Zhang W.

Click on a name for a list of papers.



# Authors

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ☐ Zhang X.B.
- ☐ Zhang X.J.
- ☐ Zhang X.Q.
- ☐ Zhang X.Y.
- ☐ Zhang Y.
- ☐ Zhang Y. H.
- ☐ Zhang Y.F.
- ☐ Zhang Y.G
- ☐ Zhang Y.H.
- ☐ Zhang Y.W.
- ☐ Zhang Z.
- ☐ Zhang Z.F.
- ☐ Zhao B.Z.
- ☐ Zhao C.
- ☐ Zhao C.H.
- ☐ Zhao L.
- ☐ Zhao L.P.
- ☐ Zhao M.G.
- ☐ Zhao X.
- ☐ Zhao Y.
- ☐ Zhao Z.L.
- ☐ Zhao C.H.
- ☐ Zheng Q.R.
- ☐ Zheng W.H.
- ☐ Zhou G.
- ☐ Zhou J.
- ☐ Zhou M. L.
- ☐ Zhou Y.
- ☐ Zhou Y.X.
- ☐ Zhu G.
- ☐ Zhu H. M.
- ☐ Zhu L.

Click on a name for a list of papers.



# Authors

- ☐ [Zhu W.X.](#)
- ☐ [Zhu Y. Q.](#)
- ☐ [Zhu Z.](#)
- ☐ [Zhu Z.H.](#)
- ☐ [Zhu Z.Q.](#)
- ☐ [Zhuang C.](#)

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

Click on a name for a list of papers.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

**Abe I.**

---

- ❑ [Air Liquide Cryogenic System for the KSTAR Device](#)

**Abhijit Tarafder**

---

- ❑ [CRYOFLUIDS – A Software for Physical Property Data of Cryogenic Fluids](#)

**Affinito L.**

---

- ❑ [Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor](#)

**Akutsu T.**

---

- ❑ [Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector](#)

**Alexeev A.**

---

- ❑ [Simple Method for Calculation of Cryogenic Transfer Line Cool Down](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

**Al-Mosawi M. K.**

---

- ❑ [Fabrication and Characterization of Bi-2223 Coils for Generator Applications](#)

**Alpatov S.V.**

---

- ❑ [Multichannel Temperature Monitor Compatible with PC](#)

**Anand B.**

---

- ❑ [Studies on a Single Stage GM type Pulse Tube Cryocooler Using an Indigenous Helium Compressor](#)

**Andersen T.P.**

---

- ❑ [Series Production of 13 kA Current Leads with Dry and Compact Warm Terminals](#)

**Andersson W.**

---

- ❑ [Status of the ISAC-II Cryogenic System](#)

**Antipenkov A.**

---

- ❑ [Experiences from the Operation Tests with the ITER Model Pump](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

**Arp V.**

---

- [□ A Density Equation for Saturated Helium-3](#)

**Awaji S.**

---

- [□ Cryogen-Free Superconducting Magnet Fabricated by a React-and-Wind Method Employing Nb<sub>3</sub>Sn Wires with CuNbTi Reinforcement](#)

**Axensalva J.**

---

- [□ Control System and Operation of the Cryogenic Test Facilities for LHC Series Superconducting Magnets](#)
- [□ Cryogenic Infrastructure for Testing of LHC Series Superconducting Magnets](#)

**Bai Y.**

---

- [□ Stability Analysis for Cryocooled Aluminum-Stabilized Superconducting Magnet](#)

**Bailey W.**

---

- [□ Boiling Heat Transfer to Liquid Nitrogen Pool from Ag Sheathed PbBi2223 Tapes Carrying Over-Current](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

**Bak J.S.**

---

- ❑ [Design of Cryogenic System for the KSTAR Device](#)

**Bansal G.**

---

- ❑ [Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1](#)

**Bao Q.**

---

- ❑ [Development of a Three-Phase HTS Power Transformer](#)

**Bao R.**

---

- ❑ [Theoretical Prediction on the Coupling of Thermoacoustic Prime Mover and RC Load](#)
- ❑ [Experimental Study of Self-Pressurizing Transfer System for Cryogenic Liquid](#)
- ❑ [Influence of He-H<sub>2</sub> Mixture Proportion on the Performance of Pulse Tube Refrigerator](#)
- ❑ [Thermoacoustically Driven Pulse Tube Refrigeration Below 90K](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Barr G.

---

- ❑ [The MICE Focusing Solenoids and Their Cooling System](#)

## Barth K.

---

- ❑ [The Management of Cryogens at CERN](#)

## Basanets V.V.

---

- ❑ [New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project](#)

## Baudouy B.

---

- ❑ [Heat Transfer During Natural Convective Boiling in a Vertical Uniformly Heated Closed Tube Submerged in Saturated Helium](#)

## Beduz C.

---

- ❑ [Boiling Heat Transfer to Liquid Nitrogen Pool from Ag Sheathed PbBi2223 Tapes Carrying Over-Current](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Thermal Stability and Quench Propagation in a Cryocooler-Cooled Pancake Coil of Bi-2223 Tape Operating between 35K and 65K
- ❑ Fabrication and Characterization of Bi-2223 Coils for Generator Applications

## Benda V.

---

- ❑ Series Production of 13 kA Current Leads with Dry and Compact Warm Terminals
- ❑ Cryogenic Infrastructure for Testing of LHC Series Superconducting Magnets
- ❑ Test Results and Analysis of Cryogenic System for Cooling HTS Cables and the Next Stage Plan

## Bi Y.F.

---

- ❑ A Prototype 4m, 2kA, AC HTS Power Cable System
- ❑ 20kA HTS Current Leads for EAST Tokamak Project

## Binni A.

---

- ❑ Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Blau B.

---

- ❑ [A Numerical Code to Simulate Quenching in Conduction Cooled Superconducting Magnet](#)

## Boltovets N.S.

---

- ❑ [New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project](#)

## Bonnay P.

---

- ❑ [The Laser Megajoule CryoTarget Thermal Regulation](#)

## Bonneton M.

---

- ❑ [Overview of Different Standard Helium Liquefiers / Refrigerators for Various Applications](#)

## Bozhko Y.

---

- ❑ [Helium Refrigeration System for Wendelstein 7-X](#)
- ❑ [Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Bravais P.

---

- ❑ [Overview of the Air Liquide Cryogenic Ground Space Activities for Launchers and Satellites](#)

## Bretagne E.

---

- ❑ [Investigation of Acoustic Streaming in a Thermoacoustic-Stirling Heat Engine](#)

## Briend P.

---

- ❑ [Overview of the Air Liquide Cryogenic Systems Designed for CERN LHC](#)
- ❑ [Design of Cryogenic System for the KSTAR Device](#)
- ❑ [Air Liquide Cryogenic System for the KSTAR Device](#)

## Brisset D.

---

- ❑ [The Laser Megajoule CryoTarget Thermal Regulation](#)

## Brockley-Blatt C.

---

- ❑ [Design and Manufacture of a Low-Current ADR Magnet for a Space Application](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Brodzinski K.

---

- ❑ [The Applicability of Ultrasonic Oxygen Deficiency Hazard Detectors in the LHC Accelerator Tunnel](#)

## Bylinski Y.

---

- ❑ [Alignment of the ISAC-II Medium Beta Cryomodule with a Wire Monitoring System](#)

## Cai J.H.

---

- ❑ [Experimental Analysis of the Oscillating Flow Characteristics for High Frequency Regenerators](#)
- ❑ [Design and Test of a 80 K Miniature Pulse Tube Cryocooler](#)
- ❑ [Development of the 3.5 W at 80 K High-Frequency Pulse Tube Cryocooler](#)
- ❑ [Comparison of Oscillating Flow Characteristics of a Metallic and a Nonmetallic Regenerators at High Frequencies](#)

## Cai J.J.

---

- ❑ [Novel Cryogenic Motion Control for Aerospace](#)
- ❑ [Design of a Cryogenic Giant Magnetostrictive Actuator Using HTS](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Caillaud A.

---

- ❑ Overview of Different Standard Helium Liquefiers / Refrigerators for Various Applications

## Candia A.

---

- ❑ Unique Method for Liquid Nitrogen Precooling of a Plate Fin Heat Exchanger in a Helium Refrigeration Cycle

## Cao G. X.

---

- ❑ Direct Observation of Percolation and Phase Separation in  $\text{Pr}_{5/8}\text{Ca}_{3/8}\text{MnO}_3$  System
- ❑ The Reentrant Behaviour of Spin-Glass Phase in  $(\text{La,Pr})_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  Manganites

## Cao L. Z.

---

- ❑ High Precise Thermopower Measurement System and its Applying to Organic Conductors  $(\text{TMTSF})_2\text{ClO}_4$  in a Direction
- ❑ Thermal Conductivity of Materials and Measuring System at Cryogenic Temperature

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ Physical Properties in Layered Transition-Metal Oxide Crystals and Anisotropic Transport Measurement

**Cao S. X.**

---

- ❑ Direct Observation of Percolation and Phase Separation in  $\text{Pr}_{5/8}\text{Ca}_{3/8}\text{MnO}_3$  System
- ❑ The Reentrant Behaviour of Spin-Glass Phase in  $(\text{La,Pr})_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  Manganites
- ❑ Anisotropic Transport and Magnetic Properties of  $\text{Pr}_{1/2}\text{Sr}_{1/2}\text{MnO}_3$  Single Crystal Sample
- ❑ Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy

**Cao Y.**

---

- ❑ An Experimental Research on a Small Flow Vortex Tube at Low Temperature Ranges

**Cao Z.T.**

---

- ❑ Novel Cryogenic Motion Control for Aerospace
- ❑ Design of a Cryogenic Giant Magnetostrictive Actuator Using HTS

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Cathala B.

---

- [❑ The Laser Megajoule CryoTarget Thermal Regulation](#)

## Chai Y. S.

---

- [❑ High Precise Thermopower Measurement System and its Applying to Organic Conductors  \$\(\text{TMTSF}\)\_2\text{ClO}\_4\$  in a Direction](#)

## Chang H.S.

---

- [❑ Design of Cryogenic System for the KSTAR Device](#)
- [❑ Air Liquide Cryogenic System for the KSTAR Device](#)
- [❑ Performance of a Cryogenic System for the Superconducting RF Cavity at NSRRC](#)

## Chang H-M

---

- [❑ Experimental on Natural Convection of Subcooled Liquid Nitrogen](#)

## Chapin L.

---

- [❑ Characterization Studies of Sputter Deposited Cermets Cryogenic Heaters](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Chatain D.

---

- [❑ The Laser Megajoule CryoTarget Thermal Regulation](#)

## Chen X.

---

- [❑ Investigation on Acoustic Characteristics of Regenerator in the Thermoacoustic Apparatus](#)

## Chen A.B.

---

- [❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)

## Chen B.

---

- [❑ Shape Optimization of Field Windings in a High Temperature Superconducting Synchronous Generator with Finite Element Method](#)
- [❑ Design of Cooling System and Temperature Characteristics Analysis of High Temperature Superconducting Demonstrative Synchronous Generator](#)

## Chen C.

---

- [❑ The BESIII Detector Magnet](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Chen C.Z.

---

- ❑ [Experimental Study of Wall Temperature Distribution of Stirling Type Pulse Tube Refrigerator \(SPTR\)](#)
- ❑ [Study of New Aerodynamic Foil Thrust Gas Bearing with Elastic Support for Cryogenic Turbo-Expander](#)
- ❑ [Analysis of the Influences of View Angle on Paraboloid W Style Radiant Cooler's Working Performance](#)
- ❑ [Design of Small Turbo Brayton Cycle Air Refrigerator Test Rig](#)

## Chen D.F.

---

- ❑ [Design and Primary Experiment for a Single Phase 220V/100A/6kW Bridge Fault Current Limiter-SMES](#)
- ❑ [A Current Compensation Type Superconducting Fault Current Limiter](#)

## Chen G. M.

---

- ❑ [A Thermodynamic Optimization of Counterflow Recuperative-Type Heat Exchangers](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Chen G.B.

---

- ❑ [A Density Equation for Saturated Helium-3](#)
- ❑ [Discussion on Gibbons' Equation of State for Helium-3](#)
- ❑ [Performance of a Pulse Tube Cryocooler with Two Separate Stages using  \$^3\text{He}\$  in the Second Stage](#)
- ❑ [Experimental Investigation on DC Flow Suppression and Refrigeration Characteristics of a High-Performance Single-Stage GM-Type PTC](#)
- ❑ [Theoretical Prediction on the Coupling of Thermoacoustic Prime Mover and RC Load](#)
- ❑ [Experimental Study of Self-Pressurizing Transfer System for Cryogenic Liquid](#)
- ❑ [Discussion on Resonant Frequency in Thermoacoustic Systems](#)

## Chen G.B.

---

- ❑ [Influence of He-H<sub>2</sub> Mixture Proportion on the Performance of Pulse Tube Refrigerator](#)
- ❑ [Investigation on A Thermoacoustically Driven Pulse Tube Cooler Working at 82.5 K](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Thermoacoustically Driven Pulse Tube Refrigeration Below 90K
- ❑ Experimental Investigation on High Performance Cryogenic Heat Transfer Based upon Natural Circulation Cooling
- ❑ Experiment on a Single-stage GM Type Pulse Tube Cryocooler near 20K

## Chen G.M.

---

- ❑ Study of Temperature Distribution of Flat Steel Ribbon Wound Cryogenic High-Pressure Vessel

## Chen H.

---

- ❑ The BESIII Detector Magnet
- ❑ Thermal Design of BESIII Magnet

## Chen H.P.

---

- ❑ Novel Cryogenic Motion Control for Aerospace
- ❑ Design of a Cryogenic Giant Magnetostrictive Actuator Using HTS

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Chen J. R.

---

- ❑ Performance of a Cryogenic System for the Superconducting RF Cavity at NSRRC

## Chen L.F.

---

- ❑ A New Type of Condenser-Evaporator Safely Operated in Large Air Separation Plant

## Chen N.

---

- ❑ Optimal Vector Analysis of the Phase Shifter in the Pulse Tube Refrigerator

## Chen P.

---

- ❑ Experimental Investigation on Heat Transfer Performance of A Cryogenic Thermosyphon
- ❑ Investigation on A Thermoacoustically Driven Pulse Tube Cooler Working at 82.5 K

## Chen X.

---

- ❑ Experimental Investigation on the Dynamic Character of Thermoacoustic Engine and Parameters of Regenerator

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Stack and Frequency's Coupling Characteristic Analysis in Thermoacoustic Systems
- ❑ Study on the Optimal Characteristic Dimension of Regenerator in a Thermoacoustic engine

Chen X.Q.

---

- ❑ 20kA HTS Current Leads for EAST Tokamak Project

Chen Y.

---

- ❑ Lattice Gas Modeling of Thermoacoustic Oscillations

Chen Z.J.

---

- ❑ Numerical Simulation of Loudspeaker-Driven Thermoacoustic Refrigerator

Cheng Z.Z.

---

- ❑ Experiment on a Single-Stage GM Type Pulse Tube Cryocooler near 20K

Chesny P.

---

- ❑ Design of a Cooling System for the Cold Test of the ITER TF Coils Before Installation

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Chiarelli S.

---

- ❑ [Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor](#)

## Chiou W. S.

---

- ❑ [Performance of a Cryogenic System for the Superconducting RF Cavity at NSRRC](#)

## Cho K.W.

---

- ❑ [Design of Cryogenic System for the KSTAR Device](#)
- ❑ [Air Liquide Cryogenic System for the KSTAR Device](#)

## Cho S.

---

- ❑ [Investigation of the Subcooled LN2 Characteristics in the Prototype Cryostat for the Resistive Superconducting Fault Current Limiter](#)

## Choi Y.D.

---

- ❑ [The Effects of the Clearance in the Cold Finger on the Performance of the Stirling Refrigerator](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Chorowski M.

---

- ❑ The Applicability of Ultrasonic Oxygen Deficiency Hazard Detectors in the LHC Accelerator Tunnel
- ❑ Modeling of Multilayer Vacuum Insulation – Complexity Versus Accuracy
- ❑ Comparative Analysis of the Cryogenics Used in Cryomedical Applications

## Chromec B.

---

- ❑ A Retrospect on the Successful Commissioning of the Linde 18kw Refrigerators for the LHC Particle Accelerator at CERN

## Ciazynski D.

---

- ❑ Evaluation of the ITER Cable in Conduit Conductor Heat Transfer

## Claudet S.

---

- ❑ 1.8 K Refrigeration Units for the LHC: Performance Assessment of Pre-series Units

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Communal D.

---

- ❑ [The Laser Megajoule CryoTarget Thermal Regulation](#)

## Courts S.

---

- ❑ [Interchangeability of Diode Temperature Sensors for Various Nonstandard Excitation Currents](#)
- ❑ [Characterization Studies of Sputter Deposited Cermet Cryogenic Heaters](#)

## Courty J.C.

---

- ❑ [Overview of the Air Liquide Cryogenic Ground Space Activities for Launchers and Satellites](#)

## Crespi P.

---

- ❑ [Cryocoolers Development and Integration for Space Applications at Air Liquide](#)

## Cretegny D.

---

- ❑ [Standard Liquefier-Test Results with Improved Turbines](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Crispel S.

---

- ❑ Overview of the Air Liquide Cryogenic Ground Space Activities for Launchers and Satellites

## Cui X.L.

---

- ❑ Study of Temperature Distribution of Flat Steel Ribbon Wound Cryogenic High-Pressure Vessel

## Dai E.

---

- ❑ Basic Operation Principle of a Novel Cascade Thermoacoustic Prime Mover
- ❑ Study of Stress, Strain in Super-Conducting Magnet by Fiber-Bragg Grating

## Dai S.T.

---

- ❑ Development and Testing of 10.5kV/1.5kA HTS Power Cable
- ❑ Development of a Three-Phase HTS Power Transformer

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Dai W.

---

- ❑ Characteristics of a Miniature Pulse Tube Cooler Driven by Thermoacoustic Standing Wave Engine
- ❑ Study on a Linear Compressor with Metal-Bellow Replacing Conventional Cylinder-Piston Unit
- ❑ Two-Dimensional Numerical Simulation of the Inertance Tube
- ❑ Numerical Simulation on a Novel Cascade Thermoacoustic Prime Mover
- ❑ New Perspective on Thermodynamic Cycles of Oscillating Flow Regenerators
- ❑ Experimental Investigation on a Room-Temperature Traveling-Wave Thermoacoustic Refrigerator
- ❑ Thermoacoustic Turbulent-Flow Model for Inertance Tubes Used for Pulse Tube Refrigerators

## Dai Y.M.

---

- ❑ Design Study of Conduction-Cooled High Temperature Superconducting Magnet

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ [A Numerical Code to Simulate Quenching in Conduction Cooled Superconducting Magnet](#)

**Dang H.Z.**

---

- ❑ [Interference Characterization of Stirling-Type Nonmagnetic and Nonmetallic Pulse Tube Cryocoolers for High-Tc SQUIDS Operation](#)

**Dauguet P.**

---

- ❑ [Air Liquide Cryogenic System for the KSTAR Device](#)
- ❑ [Overview of the Air Liquide Cryogenic Systems Designed for CERN LHC](#)

**Day Chr.**

---

- ❑ [Experiences from the Operation Tests with the ITER Model Pump](#)

**de Waele A.T.A.M**

---

- ❑ [Comparison of the Performance of Regenerators to Counterflow Heat Exchangers](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Delcayre F.

---

- ❑ Overview of the Air Liquide Cryogenic Systems Designed for CERN LHC
- ❑ Air Liquide Cryogenic System for the KSTAR Device
- ❑ Overview of Different Standard Helium Liquefiers / Refrigerators for Various Applications

## Delikaris D.

---

- ❑ The Management of Cryogenics at CERN

## della Corte A.

---

- ❑ Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor

## Deng K.

---

- ❑ Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy

## Deng Z.S.

---

- ❑ A New Method for Uniformly Cooling Engineered Tissues

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ [Study of Skin Burns Due to Contact with Cold Mediums at Extremely Low Temperature](#)

**Dhard C.P.**

---

- ❑ [Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1](#)
- ❑ [Helium Refrigeration System for Wendelstein 7-X](#)

**Dinesh K.**

---

- ❑ [Design of Vortex Tubes and Experimental Program on LOX Separation Using Cryogenic Vortex Tubes](#)

**Ding H.K.**

---

- ❑ [A Prototype 4m, 2kA, AC HTS Power Cable System](#)

**Ding W.J.**

---

- ❑ [Three Dimensional Numerical Computation of the Flow Field in a Pulse Tube](#)

**Dogan C.**

---

- ❑ [Liquid Hydrogen Droplet Generation from a Vibrating Orifice](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Doi Y.

---

- ❑ Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator

Dong D.

---

- ❑ Development and Testing of a Novel Thermal Switch

Dong D.P.

---

- ❑ The Working Performance of Radiant Cooler in Thermal Vacuum Test

Dong J.

---

- ❑ Dip-Coated  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  Films on Ag Substrate by MOD Method
- ❑ Influence of Ag Substrate Surface Condition on Surface Morphology of YBCO Film

Dremel M.

---

- ❑ Experiences from the Operation Tests with the ITER Model Pump

Main Menu

Authors

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Du H.P.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

## Duchateau J.L

---

- ❑ Design of a Cooling System for the Cold Test of the ITER TF Coils Before Installation
- ❑ Evaluation of the ITER Cable in Conduit Conductor Heat Transfer

## Dugaev V.K.

---

- ❑ New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project

## Durand F.

---

- ❑ Cryocoolers Development and Integration for Space Applications at Air Liquide

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Durgesh Nadig

---

- ❑ [Single Stage Double-Inlet Pulse Tube Refrigerator with Integral Thermo-Electric Cooler](#)

## Duthil P.

---

- ❑ [Investigation of Acoustic Streaming in a Thermoacoustic-Stirling Heat Engine](#)

## Dutto G.

---

- ❑ [Alignment of the ISAC-II Medium Beta Cryomodule with a Wire Monitoring System](#)

## Duval S.

---

- ❑ [Overview of the Air Liquide Cryogenic Ground Space Activities for Launchers and Satellites](#)

## Fan L.

---

- ❑ [Study on Thermoacoustic Resonance Pipe Driven by Loudspeaker Using Two-Microphone Method](#)
- ❑ [Discussion on Resonant Frequency in Thermoacoustic Systems](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Fan Y.F.

---

- ❑ [Test Results and Analysis of Cryogenic System for Cooling HTS Cables and the Next Stage Plan](#)

## Fang Z.C.

---

- ❑ [Investigation of a Single-Stage G-M Refrigerator with High Cooling Capacity for HTS Devices](#)
- ❑ [Use of Ceramic Part in G-M Refrigerator](#)

## Fauve E.

---

- ❑ [Air Liquide Cryogenic System for the KSTAR Device](#)

## Feng H.D.

---

- ❑ [Fractal Description of Thermal Contact Resistance Between Rough Surfaces at Low Temperature](#)

## Feng Q.K.

---

- ❑ [Study on Key-Tech Problems in Development of a Cold Neutron Source in China Advanced Research Reactor](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Feng Z.A.

---

- ❑ Study of Stress, Strain in Super-Conducting Magnet by Fiber-Bragg Grating

## Ferlin G.

---

- ❑ 1.8 K Refrigeration Units for the LHC: Performance Assessment of Pre-series Units

## Fietz W.H.

---

- ❑ Design of a Cooling System for the Cold Test of the ITER TF Coils Before Installation

## Filippov Yu.P.

---

- ❑ Multichannel Temperature Monitor Compatible with PC

## Fleck U.

---

- ❑ A Retrospect on the Successful Commissioning of the Linde 18kw Refrigerators for the LHC Particle Accelerator at CERN

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Fong K.

---

- ❑ [Alignment of the ISAC-II Medium Beta Cryomodule with a Wire Monitoring System](#)

## Fossen A.

---

- ❑ [Design of Cryogenic System for the KSTAR Device](#)
- ❑ [Air Liquide Cryogenic System for the KSTAR Device](#)

## François M.X.

---

- ❑ [Investigation of Acoustic Streaming in a Thermoacoustic-Stirling Heat Engine](#)

## Fu L.Y.

---

- ❑ [A Study on the Conic Support in the Radiant Cooler](#)

## Fu S. Y.

---

- ❑ [A New Process for the Preparation of Polyimide/Silica Hybrid Films](#)
- ❑ [Measurement of the Cryogenic Tensile Properties of Polymer Composites](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ [Cryogenic Properties of Polymer Composite Materials – A Review](#)

**Fuenzalida P.**

---

- ❑ [Design of Cryogenic System for the KSTAR Device](#)
- ❑ [Air Liquide Cryogenic System for the KSTAR Device](#)

**Fujisawa Y.**

---

- ❑ [Reduction of Convective Heat Losses in Pulse Tube Refrigerators by Additional DC Flow](#)

**Funaki K.**

---

- ❑ [AC Loss Characteristics of Bi-2212 Multifilamentary Round Wires and Their Cables](#)

**Gai X.Y.**

---

- ❑ [Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)

**Gan Z.H.**

---

- ❑ [Influence of He-H<sub>2</sub> Mixture Proportion on the Performance of Pulse Tube Refrigerator](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ Temperature Hysteresis in a GM-Type Orifice Pulse Tube Refrigerator
- ❑ Investigation on a Thermoacoustically Driven Pulse Tube Cooler Working at 82.5 K
- ❑ Experimental Investigation on High Performance Cryogenic Heat Transfer Based Upon Natural Circulation Cooling
- ❑ Experiment on a Single-Stage GM Type Pulse Tube Cryocooler Near 20K

## Gandhi V.G.

---

- ❑ Thermal Analysis of Cryogenic Rocket Engine with One, Two and Three Dimensional Approaches

## Gao Z.Y.

---

- ❑ Development and Testing of 10.5kV/1.5kA HTS Power Cable

## Ghosh S.C.

---

- ❑ Thermal Analysis of Cryogenic Rocket Engine with One, Two and Three Dimensional Approaches

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Giove D.

---

- ❑ [Alignment of the ISAC-II Medium Beta Cryomodule with a Wire Monitoring System](#)

## Gislon P.

---

- ❑ [Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor](#)

## Gistau Baguer G.

---

- ❑ [Design of Cryogenic System for the KSTAR Device](#)

## Gistau G.

---

- ❑ [Air Liquide Cryogenic System for the KSTAR Device](#)

## Gizicki W.

---

- ❑ [The Applicability of Ultrasonic Oxygen Deficiency Hazard Detectors in the LHC Accelerator Tunnel](#)

## Gong J.Y.

---

- ❑ [The Experimental Study on the Performance of a Small-Scale Oxygen Concentrator by PSA](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Gong L.

---

- ❑ [The Cryogenic System of BESIII in Preliminary Design](#)

## Gong L.H.

---

- ❑ [Test Results and Analysis of Cryogenic System for Cooling HTS Cables and the Next Stage Plan](#)
- ❑ [Investigation of a Single-Stage G-M Refrigerator with High Cooling Capacity for HTS Devices](#)
- ❑ [Use of Ceramic Part in G-M Refrigerator](#)
- ❑ [The Design and Study of a Reciprocating Helium Compressor](#)

## Gong M.Q.

---

- ❑ [Dimensional Analysis on Multi-Component Mixed-Refrigerants Flow Characteristics in Adiabatic Capillary Tube](#)
- ❑ [An Experimental Research on a Small Flow Vortex Tube at Low Temperature Ranges](#)
- ❑ [Performance of Different Throttle Refrigeration Cycles](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ A 70 K J-T Cryocooler Based on the Fractional Mixed-Refrigerant Cycle
- ❑ Experimental Investigation on Pool Boiling Heat Transfer of Pure Refrigerants and Binary Mixtures
- ❑ Development of a Cryogenic Water-Trap Based on the Recuperative Mixture Refrigeration Cycle

## Gower S.A.

---

- ❑ Cryoelectronics – An Experimental Examination of the Behaviour of Power Electronic Devices at Low Temperatures

## Grabié V.

---

- ❑ Overview of Different Standard Helium Liquefiers / Refrigerators for Various Applications

## Gravil B.

---

- ❑ Design of a Cooling System for the Cold Test of the ITER TF Coils Before Installation

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Grechko A.

---

- ❑ Development of the Cryogenic Ground Support Equipment (CGSE) for the Superconducting Magnet of the Alpha Magnetic Spectrometer (AMS-02)

## Green M. A.

---

- ❑ The MICE Focusing Solenoids and Their Cooling System
- ❑ Modeling Free Convection Flow of Liquid Hydrogen Within a Cylindrical Heat Exchanger Cooled to 14K

## Grillot D.

---

- ❑ Overview of Different Standard Helium Liquefiers / Refrigerators for Various Applications

## Gruehagen H.

---

- ❑ Measured Performance of Four New 18 kW@4.5 K Helium Refrigerators for the LHC Cryogenic System

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Gu A.

---

- ❑ Development of the Cryogenic Ground Support Equipment (CGSE) for the Superconducting Magnet of the Alpha Magnetic Spectrometer (AMS-02)
- ❑ Optimization Analysis of Peakshaving Cycle to Liquefy the Natural Gas
- ❑ Experimental Investigation into Storage of Confined Cryogenic Liquids without Evaporation Venting

## Gu A.Z.

---

- ❑ A study of the Optimum Temperature for Hydrogen Storage on Carbon Nanostructures
- ❑ Numerical Simulation of Flow Boiling of Cryogenic Liquids in Tubes
- ❑ The Characterization of Carbon Nanofibres Based on N<sub>2</sub> Adsorption Isotherms at 77K

## Gu C.

---

- ❑ Property of Joint Resistance of Bi2223 Multi-Filament Tape by Using Sn-Pb Solder

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Gu G.B.

---

- ❑ Shape Optimization of Field Windings in a High Temperature Superconducting Synchronous Generator with Finite Element Method
- ❑ Design of Cooling System and Temperature Characteristics Analysis of High Temperature Superconducting Demonstrative Synchronous Generator

## Guan Y.

---

- ❑ Development of a Three-Phase HTS Power Transformer

## Guo F. Z.

---

- ❑ Study on the Optimal Characteristic Dimension of Regenerator in a Thermoacoustic engine
- ❑ Numerical Simulation of Loudspeaker-Driven Thermoacoustic Refrigerator
- ❑ Figure of Merit for Regenerator Working in Acoustic Field (Invited)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Guo J.D.

---

- ❑ [Extended Power Law of Nonlinear Transport Properties of Superconducting Materials](#)

## Guo W.Y.

---

- ❑ [An Adaptive Neuro-Fuzzy Control Strategy for the Bridge Type Superconducting Fault Current Controller](#)

## Gupta G.

---

- ❑ [Design Consideration Validation of Cryo-Components for Current Feeder System of SST-1 Using Flexibility Analysis](#)
- ❑ [Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1](#)

## Gupta N. C.

---

- ❑ [Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1](#)
- ❑ [Design Consideration Validation of Cryo-Components for Current Feeder System of SST-1 Using Flexibility Analysis](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Haas H.

---

- ❑ [Experiences from the Operation Tests with the ITER Model Pump](#)

## Haberstroh Ch.

---

- ❑ [Heat Transfer in Gas Filled Pipes with Closed Warm End Under Different Orientations](#)

## Han B.S.

---

- ❑ [Quench Characteristics of High- \$T\_c\$  Superconducting Tape for Alternating Over-Current Using DFT](#)

## Han G.

---

- ❑ [Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)

## Han J.J.

---

- ❑ [Development of a Three-Phase HTS Power Transformer](#)

## Han S.

---

- ❑ [The BESIII Detector Magnet](#)
- ❑ [The Cryogenic System of BESIII in Preliminary Design](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Han Y.S.

---

- ❑ Room Temperature Magnetic Refrigerator Using Both Metal Gd or/and Gd-Si-Ge Alloys and a Permanent Magnetic Field Source
- ❑ A New Method of Magnetizing and Demagnetizing the Magnetic Refrigerants by Dint of Dynamic-Magnetic-Link

## Han Z.

---

- ❑ Property of Joint Resistance of Bi2223 Multi-Filamentary Tape by Using Sn-Pb Solder

## Harada K.

---

- ❑ Measurement of characteristic feature of cavitation flows of He I and He II
- ❑ Application of PIV Technique to Cavitating Flows of Liquid Helium

## Harrison S.

---

- ❑ Development of the Cryogenic Ground Support Equipment (CGSE) for the Superconducting Magnet of the Alpha Magnetic Spectrometer (AMS-02)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Testing the Coils of the Superconducting Magnet for the Alpha Magnetic Spectrometer
- ❑ Design and Manufacture of a Low-Current ADR Magnet for a Space Application

## Haruyama T.

---

- ❑ Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector
- ❑ Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator

## Hasebe T.

---

- ❑ Cryogen-Free Superconducting Magnet Fabricated by a React-and-Wind Method Employing Nb<sub>3</sub>Sn Wires with CuNbTi Reinforcement

## Hasegawa T.

---

- ❑ AC Loss Characteristics of Bi-2212 Multifilamentary Round Wires and Their Cables

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Hawley C.J.

---

- ❑ Cryoelectronics – An Experimental Examination of the Behaviour of Power Electronic Devices at Low Temperatures

## He G.G.

---

- ❑ Novel Cryogenic Motion Control for Aerospace
- ❑ Design of a Cryogenic Giant Magnetostrictive Actuator Using HTS

## He Y.L.

---

- ❑ Experimental Study of Wall Temperature Distribution of Stirling Type Pulse Tube Refrigerator (SPTR)
- ❑ Analysis of the Influences of View Angle on Paraboloid W Style Radiant Cooler's Working Performance
- ❑ Experimental Investigation on Heat Transfer Performance of a Cryogenic Thermosyphon
- ❑ Three Dimensional Numerical Computation of the Flow Field in a Pulse Tube
- ❑ An Internet-Based Working Fluid Properties Database

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Heller R.

---

- ❑ [Design of a Cooling System for the Cold Test of the ITER TF Coils Before Installation](#)

## Hepburn I.

---

- ❑ [Design and Manufacture of a Low Current ADR Magnet for Space Application](#)

## Herblin L.

---

- ❑ [Control System and Operation of the Cryogenic Test Facilities for LHC Series Superconducting Magnets](#)
- ❑ [Cryogenic Infrastructure for Testing of LHC Series Superconducting Magnets](#)

## Hieke M.

---

- ❑ [Heat Transfer in Gas Filled Pipes with Closed Warm End Under Different Orientations](#)

## Hilbert B.

---

- ❑ [Overview of the Air Liquide Cryogenic Systems Designed for CERN LHC](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Overview of Different Standard Helium Liquefiers / Refrigerators for Various Applications

Hirano N.

---

- ❑ AC Loss Characteristics of Bi-2212 Multifilamentary Round Wires and Their Cables

Hofer H.

---

- ❑ Development of the Cryogenic Ground Support Equipment (CGSE) for the Superconducting Magnet of the Alpha Magnetic Spectrometer (AMS-02)
- ❑ Testing the Coils of the Superconducting Magnet for the Alpha Magnetic Spectrometer
- ❑ A Numerical Code to Simulate Quenching in Conduction Cooled Superconducting Magnet

Hong Y.Z.

---

- ❑ The Effects of the Clearance in the Cold Finger on the Performance of the Stirling Refrigerator

Hou B.

---

- ❑ A Prototype 4m, 2kA, AC HTS Power Cable System

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Hou X.F.

---

- ❑ [Design and Test of a 80 K Miniature Pulse Tube Cryocooler](#)

## Hou Y.

---

- ❑ [Study of New Aerodynamic Foil Thrust Gas Bearing with Elastic Support for Cryogenic Turbo-Expander](#)
- ❑ [Design of Small Turbo Brayton Cycle Air Refrigerator Test Rig](#)

## Hou Z.

---

- ❑ [The BESIII Detector Magnet](#)

## Howell G.

---

- ❑ [Unique Method for Liquid Nitrogen Precooling of a Plate Fin Heat Exchanger in a Helium Refrigeration Cycle](#)

## Hsiao F. Z.

---

- ❑ [Performance of a Cryogenic System for the Superconducting RF Cavity at NSRRC](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Hu J.

---

- ❑ Study on a Linear Compressor with Metal-Bellow Replacing Conventional Cylinder-Piston Unit
- ❑ Analytical Model for Onset Temperature Difference of Thermoacoustic Stirling Prime Movers
- ❑ The BESIII Detector Magnet

## Hu Q.G.

---

- ❑ Development of a Cryogenic Water-Trap Based on the Recuperative Mixture Refrigeration Cycle

## Hu X.

---

- ❑ Extended Power Law of Nonlinear Transport Properties of Superconducting Materials

## Huang C.J.

---

- ❑ Cryogenic Properties of Polymer Composite Materials – A Review
- ❑ Study of Stress, Strain in Super-Conducting Magnet by Fiber-Bragg Grating

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Huang H.

---

- ❑ [Design Study of Conduction-Cooled High Temperature Superconducting Magnet](#)

## Huang J.

---

- ❑ [Experimental Study of Wall Temperature Distribution of Stirling Type Pulse Tube Refrigerator \(SPTR\)](#)
- ❑ [An Internet-Based Working Fluid Properties Database](#)

## Huang M.X.

---

- ❑ [Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)

## Huang S.

---

- ❑ [The BESIII Detector Magnet](#)

## Huang S. L.

---

- ❑ [Physical Properties in Layered Transition-Metal Oxide Crystals and Anisotropic Transport Measurement](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Huang X.H.

---

- ❑ Design and Primary Experiment for a Single Phase 220V/100A/6kW Bridge Fault Current Limiter-SMES

## Huang Y.

---

- ❑ Experimental Investigation on a Room-Temperature Traveling-Wave Thermoacoustic Refrigerator

## Huang Y.H.

---

- ❑ Influence of He-H<sub>2</sub> Mixture Proportion on the Performance of Pulse Tube Refrigerator
- ❑ A Density Equation for Saturated Helium-3
- ❑ Discussion on Gibbons' Equation of State for Helium-3

## Huang Z.

---

- ❑ Experimental Investigation into Storage of Confined Cryogenic Liquids without Evaporation Venting

## Hui D.

---

- ❑ Development of a Three-Phase HTS Power Transformer

Main Menu

Authors

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Thermal, Electrical Properties and Microstructure of High Purity Niobium for High Gradient Superconducting Cavities

Huo H.K.

---

- ❑ Technical Analyses of HTS Bulk Used in a Rotating Machine

Hwang S.D.

---

- ❑ Investigation of Thermal Insulation for HTS Cable Systems
- ❑ Quench Characteristics of High- $T_c$  Superconducting Tape for Alternating Over-Current Using DFT

Hyun O.B.

---

- ❑ Investigation of the Subcooled LN2 Characteristics in the Prototype Cryostat for the Resistive Superconducting Fault Current Limiter

Ikushima Y.

---

- ❑ Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Ishizuka M.

---

- ❑ Cryogen-Free Superconducting Magnet Fabricated by a React-and-Wind Method Employing Nb<sub>3</sub>Sn Wires with CuNbTi Reinforcement

## Iwakuma M.

---

- ❑ AC Loss Characteristics of Bi-2212 Multifilamentary Round Wires and Their Cables

## Jacob S.

---

- ❑ Single Stage Double-Inlet Pulse Tube Refrigerator with Integral Thermo-Electric Cooler
- ❑ Studies on a Single Stage GM Type Pulse Tube Cryocooler Using an Indigenous Helium Compressor
- ❑ Development and Test of a Cryopulverizer for Reprocessing Plastic Wastes
- ❑ Design of Vortex Tubes and Experimental Program on LOX Separation Using Cryogenic Vortex Tubes

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Jaramillo E.

---

- ❑ [Thermal Validation of the Design of the CFRP Support Members to be Used in the Spatial Framework of the Herschel Space Observatory](#)

## Jeong S.

---

- ❑ [Contractible Thermosyphon for Conduction Cooled Superconducting Magnets](#)

## Jeong S.K.

---

- ❑ [Novel Regenerator Design and its Experimental Characteristics](#)

## Ji Z.M.

---

- ❑ [Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)

## Jia G. Q.

---

- ❑ [The Reentrant Behaviour of Spin-Glass Phase in  \$\(\text{La,Pr}\)\_{0.5}\text{Ca}\_{0.5}\text{MnO}\_3\$  Manganites](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ [Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy](#)

## [Jia L.X.](#)

---

- ❑ [Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)
- ❑ [Cryogenic System for BEPCII SRF Cavity IR Quadrupole and Detector Solenoid Magnets](#)
- ❑ [Multi-Tube Power Leads Tower for BEPCII IR Magnets](#)
- ❑ [Numerical Simulation on Thermal Stress and Magnetic Force of Current Leads in BEPCII](#)
- ❑ [Thermal Fluid Modeling of BEPCII IR Quadrupole Magnet Cryostat](#)

## [Jia Z.Z.](#)

---

- ❑ [Theoretical Prediction on the Coupling of Thermoacoustic Prime Mover and RC Load](#)

## [Jiang A.L.](#)

---

- ❑ [The Thermodynamic Analysis and Adjusting Methods for Reliquefaction Plant on Board LEG carriers](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Jiang C.

---

- ❑ A Cryostat with Optics Windows for Study of ICF Cryogenics Target
- ❑ Temperature Effects on Formation of a Uniform Layer of Isotopes Inside a Cryogenic ICF Target

## Jiang N.

---

- ❑ Performance of a Pulse Tube Cryocooler with Two Separate Stages Using  $^3\text{He}$  in the Second Stage
- ❑ Theoretical Prediction on the Coupling of Thermoacoustic Prime Mover and RC Load

## Jiang R.Q.

---

- ❑ Stack and Frequency's Coupling Characteristic Analysis in Thermoacoustic Systems

## Jiang W.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Jiang Y.L.

---

- ❑ Experimental Investigation on DC Flow Suppression and Refrigeration Characteristics of a High-Performance Single-Stage GM-Type PTC

## Jiao B.

---

- ❑ Experimental Investigation on High Performance Cryogenic Heat Transfer Based Upon Natural Circulation Cooling

## Jin H.

---

- ❑ Contractible Thermosyphon for Conduction Cooled Superconducting Magnets

## Jin T.

---

- ❑ Study on Thermoacoustic Resonance Pipe Driven by Loudspeaker Using Two-Microphone Method
- ❑ Discussion on Resonant Frequency in Thermoacoustic Systems
- ❑ Thermoacoustically Driven Pulse Tube Refrigeration Below 90K

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Jin T.X.

---

- ❑ Thermal Stress Analysis of Cryogenic Adhesive Joints for Non-Magnetic Dewar
- ❑ Fractal Description of Thermal Contact Resistance Between Rough Surfaces at Low Temperature

## Jin X.

---

- ❑ Room Temperature Magnetic Refrigerator Using Both Metal Gd or/and Gd-Si-Ge Alloys and a Permanent Magnetic Field Source

## Jin X.

---

- ❑ A New Method of Magnetizing and Demagnetizing the Magnetic Refrigerants by Dint of Dynamic-Magnetic-Link

## Jing C.

---

- ❑ Direct Observation of Percolation and Phase Separation in  $\text{Pr}_{5/8}\text{Ca}_{3/8}\text{MnO}_3$  System
- ❑ The Reentrant Behaviour of Spin-Glass Phase in  $(\text{La,Pr})_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  Manganites

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy
- ❑ Anisotropic Transport and Magnetic Properties of  $\text{Pr}_{1/2}\text{Sr}_{1/2}\text{MnO}_3$  Single Crystal Sample

Jing W.

---

- ❑ Development of the 3.5 W at 80 K High-Frequency Pulse Tube Cryocooler

Johnstone A. P.

---

- ❑ Thermal Stability and Quench Propagation in a Cryocooler-Cooled Pancake Coil of Bi-2223 Tape Operating Between 35K and 65K

Ju Y.L.

---

- ❑ Interference Characterization of Stirling-Type Nonmagnetic and Nonmetallic Pulse Tube Cryocoolers for High-Tc SQUIDS Operation

Jung W.M.

---

- ❑ Investigation of Thermal Insulation for HTS Cable Systems

Main Menu

Authors

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Investigation of the Subcooled LN2 Characteristics in the Prototype Cryostat for the Resistive Superconducting Fault Current Limiter

**Jurkowski A.**

---

- ❑ Digital Temperature Sensors in the Range of 77-300 K

**Kajikawa K.**

---

- ❑ AC Loss Characteristics of Bi-2212 Multifilamentary Round Wires and Their Cables

**Kamioka Y.**

---

- ❑ Normalized Representation for Steady State Heat Transport in a Channel Containing He II Covering Pressure Range Up to 1.5 Mpa

**Karunanithi R.**

---

- ❑ Single Stage Double-Inlet Pulse Tube Refrigerator with Integral Thermo-Electric Cooler
- ❑ Studies on a Single Stage GM Type Pulse Tube Cryocooler Using an Indigenous Helium compressor

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Development and Test of a Cryopulverizer for Reprocessing Plastic Wastes
- ❑ Design of Vortex Tubes and Experimental Program on LOX Separation Using Cryogenic Vortex Tubes

## Kasthuriengan S.

---

- ❑ Single Stage Double-Inlet Pulse Tube Refrigerator with Integral Thermo-Electric Cooler
- ❑ Studies on a Single Stage GM Type Pulse Tube Cryocooler Using an Indigenous Helium Compressor
- ❑ Development and Test of a Cryopulverizer for Reprocessing Plastic Wastes
- ❑ Design of Vortex Tubes and Experimental Program on LOX Separation Using Cryogenic Vortex Tubes

## Kayoda T.

---

- ❑ Normal Transition in YBCO Thin Film and its Effect on Current Limiting Characteristics

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Kholevchuk V.V.

---

- ❑ [New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project](#)

## Kim D. H.

---

- ❑ [Investigation of Thermal Insulation for HTS Cable Systems](#)
- ❑ [Investigation of the Subcooled LN2 Characteristics in the Prototype Cryostat for the Resistive Superconducting Fault Current Limiter](#)

## Kim D. L.

---

- ❑ [Investigation of Thermal Insulation for HTS Cable Systems](#)
- ❑ [Investigation of the Subcooled LN2 Characteristics in the Prototype Cryostat for the Resistive Superconducting Fault Current Limiter](#)

## Kim H.B.

---

- ❑ [The Effects of the Clearance in the Cold Finger on the Performance of the Stirling Refrigerator](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Kim H.R.

---

- ❑ Investigation of the Subcooled LN2 Characteristics in the Prototype Cryostat for the Resistive Superconducting Fault Current Limiter

## Kim S.

---

- ❑ Contractible Thermosyphon for Conduction Cooled Superconducting Magnets

## Kim Y.S.

---

- ❑ Design of Cryogenic System for the KSTAR Device
- ❑ Air Liquide Cryogenic System for the KSTAR Device

## Kimura N.

---

- ❑ Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator
- ❑ Film Boiling Modes in Weakly Subcooled He II Around Lambda Pressure

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Ko S.C.

---

- ❑ [Quench Characteristics of High- \$T\_c\$  Superconducting Tape for Alternating Over-Current Using DFT](#)

## Kobayashi T.

---

- ❑ [Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator](#)

## Koettig T.

---

- ❑ [Design of a Fibre Reinforced Plastic Anticryostat for Magnetorelaxometric Measurements](#)

## Koh D.Y.

---

- ❑ [The Effects of the Clearance in the Cold Finger on the Performance of the Stirling Refrigerator](#)
- ❑ [LN2 Forced Flow Cooling on HTS Power Cables](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Kuendig A.

---

- ❑ [A Retrospect on the Successful Commissioning of the Linde 18kw Refrigerators for the LHC Particle Accelerator at CERN](#)
- ❑ [Helium Refrigeration System for Wendelstein 7-X](#)

## Kufner F.

---

- ❑ [Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System](#)

## Kuruvila G. K.

---

- ❑ [Thermal Analysis of Cryogenic Rocket Engine with One, Two and Three Dimensional Approaches](#)

## Kuzhiveli B.T.

---

- ❑ [Thermal Analysis of Cryogenic Rocket Engine with One, Two and Three Dimensional Approaches](#)

## Lacroix B.

---

- ❑ [Evaluation of the ITER Cable in Conduit Conductor Heat Transfer](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Lalkoshti P.

---

- ❑ [CRYOFLUIDS – A Software for Physical Property Data of Cryogenic Fluid](#)

## Lamaison V.

---

- ❑ [The Laser Megajoule CryoTarget Thermal Regulation](#)

## Lamboy JP.

---

- ❑ [Control System And Operation of the Cryogenic Test Facilities for LHC Series Superconducting Magnets](#)
- ❑ [Cryogenic Infrastructure for Testing of LHC Series Superconducting Magnets](#)

## Lau W.

---

- ❑ [Modeling the Thermal Mechanical Behavior of a 300 K Vacuum Vessel that is Cooled by Liquid Hydrogen in Film Boiling](#)
- ❑ [Modeling Free Convection Flow of Liquid Hydrogen within a Cylindrical Heat Exchanger Cooled to 14K](#)
- ❑ [The MICE Focusing Solenoids and Their Cooling System](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Laxdal R.E.

---

- ❑ Alignment of the ISAC-II Medium Beta Cryomodule with a Wire Monitoring System
- ❑ First Cold Test of the ISAC-II Medium Beta Cryomodule
- ❑ Status of the ISAC-II Cryogenic System

## Lee G.S.

---

- ❑ Design of Cryogenic System for the KSTAR Device

## Lee J.H.

---

- ❑ Quench Characteristics of High- $T_c$  Superconducting Tape for Alternating Over-Current Using DFT

## Lee K.S.

---

- ❑ LN2 Forced Flow Cooling on HTS Power Cables

## Lee L.A.

---

- ❑ Air Liquide Cryogenic System for the KSTAR Device

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Leher F.

---

- ❑ [Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System](#)

## Lei G.

---

- ❑ [The Design and Study of a Reciprocating Helium Compressor](#)

## Lewis M.

---

- ❑ [Two-Dimensional Numerical Simulation of the Inertance Tube](#)
- ❑ [Thermoacoustic Turbulent-Flow Model for Inertance Tubes Used for Pulse Tube Refrigerators](#)

## Li B.

---

- ❑ [Thermal Conductivity of Materials and Measuring System at Cryogenic Temperature](#)

## Li C.Y.

---

- ❑ [Extended Power Law of Nonlinear Transport Properties of Superconducting Materials](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Li G.

---

- ❑ Properties of Thermoelectric Device with  $(\text{Bi}_x\text{Sb}_{1-x})_2(\text{Te}_y\text{Se}_{1-y})_3$  Materials

Li H. C.

---

- ❑ Performance of a Cryogenic System for the Superconducting RF Cavity at NSRRC

Li H. L.

---

- ❑ Physical Properties in Layered Transition-Metal Oxide Crystals and Anisotropic Transport Measurement

Li H.D.

---

- ❑ Development of a Three-Phase HTS Power Transformer

Li J.G.

---

- ❑ 20kA HTS Current Leads for EAST Tokamak Project

Li L.F.

---

- ❑ Test Results and Analysis of Cryogenic System for Cooling HTS Cables and the Next Stage Plan
- ❑ Use of Ceramic Part in G-M Refrigerator

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- Properties of Thermoelectric Device with  $(\text{Bi}_x\text{Sb}_{1-x})_2(\text{Te}_y\text{Se}_{1-y})_3$  Materials

Li P. L.

---

- Direct Observation of Percolation and Phase Separation in  $\text{Pr}_{5/8}\text{Ca}_{3/8}\text{MnO}_3$  System

Li Q.

---

- Stack and Frequency's Coupling Characteristic Analysis in Thermoacoustic Systems
- Numerical Simulation of Loudspeaker-Driven Thermoacoustic Refrigerator
- Study on the Optimal Characteristic Dimension of Regenerator in a Thermoacoustic Engine
- Experimental Investigation on He II Porous Plug Liquid-Vapor Phase Separator
- Investigation on Acoustic Characteristics of Regenerator in the Thermoacoustic Apparatus
- Investigation of Acoustic Streaming in a Thermoacoustic-Stirling Heat Engine

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Experimental Investigation on the Dynamic Character of Thermoacoustic Engine and Parameters of Regenerator
- ❑ Temperature Effects on Formation of a Uniform Layer of Isotopes Inside a Cryogenic ICF Target

Li Q.F.

---

- ❑ Experimental Study of Self-Pressurizing Transfer System Cryogenic Liquid

Li R.

---

- ❑ Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector

Li S.

---

- ❑ Design and Primary Experiment for a Single Phase 220V/100A/6kW Bridge Fault Current Limiter-SMES

Li T.

---

- ❑ Study on Electricity Generation Performance of Thermoelectric Device in Extreme Environmental Conditions

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

Li W.Z.

---

- ❑ Experimental Investigation on Heat Transfer Performance of a Cryogenic Thermosyphon
- ❑ Experimental Investigation on High Performance Cryogenic Heat Transfer Based Upon Natural Circulation Cooling

Li X.

---

- ❑ Numerical Simulation on a Novel Cascade Thermoacoustic Prime Mover
- ❑ Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy

Li X. H.

---

- ❑ Characterization of the Quenching Process and the Protection of an AC High Temperature Superconductor Coil

Li X.D.

---

- ❑ Numerical Simulation of Flow Boiling of Cryogenic Liquids in Tubes

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu  
Authors

## Li X.Y.

---

- ❑ Discussion on Gibbons' Equation of State for Helium-3
- ❑ A Density Equation for Saturated Helium-3

## Li X.Z.

---

- ❑ Experimental Study of Wall Temperature Distribution of Stirling Type Pulse Tube Refrigerator (SPTR)

## Li Y.

---

- ❑ Cryogenic Properties of Polymer Composite Materials – A Review
- ❑ A New Process for the Preparation of Polyimide/Silica Hybrid Films
- ❑ Measurement of the Cryogenic Tensile Properties of Polymer Composites

## Li Y.Z.

---

- ❑ Study of Two Phase Flow Distribution and its Influence in a Plate-Fin Heat Exchanger

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Investigation of Header Configuration and its Effect on Flow Maldistribution in Plate-Fin Heat Exchanger

Li Z.

---

- ❑ The Working Performance of Radiant Cooler in Thermal Vacuum Test

Li Z.C.

---

- ❑ Experimental Investigation on the Performances of Gas Flow in Oscillating Tube
- ❑ Several Problems in the Thermal Contact Resistance Research of Solid Interfaces at Low Temperature

Li Z.W.

---

- ❑ Development and Testing of a Novel Thermal Switch

Li Z.Y.

---

- ❑ Experimental Investigation on the Dynamic Character of Thermoacoustic Engine and Parameters of Regenerator

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Liang J. X.

---

- ❑ Influence of Ag Substrate Surface Condition on Surface Morphology of YBCO Film

## Liang J.T.

---

- ❑ Experimental Analysis of the Oscillating Flow Characteristics for High Frequency Regenerators
- ❑ Design and Test of a 80 K Miniature Pulse Tube Cryocooler
- ❑ Development of the 3.5 W at 80 K High-Frequency Pulse Tube Cryocooler
- ❑ Analysis of Inertance Tube in the Pulse Tube Refrigerator
- ❑ Interference Characterization of Stirling-Type Nonmagnetic and Nonmetallic Pulse Tube Cryocoolers for High-Tc SQUIDS Operation

## Liang J.X.

---

- ❑ Dip-Coated  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  Films on Ag Substrate by MOD Method

## Liang W.

---

- ❑ The Cryogenic System of BESIII in Preliminary Design

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Lim S.H.

- ❑ [Quench Characteristics of High-TC Superconducting Tape for Alternating Over-Current using DFT](#)

Lin D. J.

- ❑ [A New Process for the Preparation of Polyimide/Silica Hybrid Films](#)

Lin L. Z.

- ❑ [Development and Testing of 10.5kV/1.5kA HTS Power Cable](#)
- ❑ [Development of a Three-Phase HTS Power Transformer](#)
- ❑ [Technical Analyses of HTS Bulk Used in a Rotating Machine](#)
- ❑ [A New Concept of Bridge Fault Current Limiter-SMES for Interline Application to Improve Power Quality](#)
- ❑ [Design and Primary Experiment for a Single Phase 220V/100A/6kW Bridge Fault Current Limiter-SMES](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Lin S.N.

---

- ❑ [Study of New Aerodynamic Foil Thrust Gas Bearing with Elastic Support for Cryogenic Turbo-Expander](#)

## Lin W.

---

- ❑ [Development of the Cryogenic Ground Support Equipment \(CGSE\) for the Superconducting Magnet of the Alpha Magnetic Spectrometer \(AMS-02\)](#)

## Lin W.S.

---

- ❑ [A Study of the Optimum Temperature for Hydrogen Storage on Carbon Nanostructures](#)

## Lin Y. B.

---

- ❑ [Development and Testing of 10.5kV/1.5kA HTS Power Cable](#)

## Lindemann U.

---

- ❑ [Performance of a Pulse Tube Cryocooler with Two Separate Stages Using  \$^3\text{He}\$  in the Second Stage](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Ling H.

---

- ❑ Basic Operation Principle of a Novel Cascade Thermoacoustic Prime Mover
- ❑ Analytical Model for Onset Temperature Difference of Thermoacoustic Stirling Prime Movers
- ❑ Numerical Simulation on a Novel Cascade Thermoacoustic Prime Mover

## Liu C.S.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

## Liu D.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

## Liu D. M.

---

- ❑ Influence of Ag Substrate Surface Condition on Surface Morphology of YBCO Film
- ❑ Dip-Coated  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  Films on Ag Substrate by MOD Method

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Liu H.J.

---

- ❑ Properties of Thermoelectric Device with  $(\text{Bi}_x\text{Sb}_{1-x})_2(\text{Te}_y\text{Se}_{1-y})_3$  Materials

Liu H.W.

---

- ❑ Stability Analysis for Cryocooled Aluminum-Stabilized Superconducting Magnet

Liu H.Z.

---

- ❑ Experiment on a Single-Stage GM Type Pulse Tube Cryocooler Near 20K

Liu J.

---

- ❑ Study of Skin Burns Due to Contact with Cold Mediums at Extremely Low Temperature
- ❑ A New Method for Uniformly Cooling Engineered Tissues
- ❑ Study on Electricity Generation Performance of Thermoelectric Device in Extreme Environmental Conditions
- ❑ High Precise Thermopower Measurement System and its Applying to Organic Conductors  $(\text{TMTSF})_2\text{ClO}_4$  in a Direction

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Liu J.X.

---

- ❑ Numerical Simulation of Loudspeaker-Driven Thermoacoustic Refrigerator

Liu J.Y.

---

- ❑ An Experimental Research on a Small Flow Vortex Tube at Low Temperature Ranges

Liu L.

---

- ❑ Numerical Study of the Final Cooldown from 4.5 K to 1.9 K of the Large Hadron Collider
- ❑ The Cryogenic System of BESIII in Preliminary Design
- ❑ The BESIII Detector Magnet
- ❑ Thermal Design of BESIII Magnet

Liu L.Q.

---

- ❑ Investigation of a Single-Stage G-M Refrigerator with High Cooling Capacity for HTS Devices

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Liu M.

---

- ❑ Dip-Coated  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  Films on Ag Substrate by MOD Method
- ❑ Influence of Ag Substrate Surface Condition on Surface Morphology of YBCO Film

## Liu X.

---

- ❑ Lattice Gas Modeling of Thermoacoustic Oscillations

## Liu X.K.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

## Liu X.L.

---

- ❑ 20kA HTS Current Leads for EAST Tokamak Project

## Liu Y.

---

- ❑ A cryostat with Optics Windows for Study of ICF Cryogenics Target
- ❑ Temperature Effects on Formation of a Uniform Layer of Isotopes Inside a Cryogenic ICF Target

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

**Liu Y.S.**

---

- ❑ [Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy](#)

**Liu Y.W.**

---

- ❑ [Experimental Study of Wall Temperature Distribution of Stirling Type Pulse Tube Refrigerator \(SPTR\)](#)

**Loehlein K.**

---

- ❑ [Standard Liquefier-Test Results with Improved Turbines](#)

**Lu D.W.**

---

- ❑ [Room Temperature Magnetic Refrigerator Using Both Metal Gd or/and Gd-Si-Ge Alloys and a Permanent Magnetic Field Source](#)
- ❑ [A New Method of Magnetizing and Demagnetizing the Magnetic Refrigerants by Dint of Dynamic-Magnetic-Link](#)

**Lu G.H.**

---

- ❑ [Experimental Study on a Split-Type Free-Piston Stirling Cooler for Space Applications](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Development of a Three-Phase HTS Power Transformer

Lu W.H.

---

- ❑ The Design and Study of a High Power Helium Compressor

Lu X.S.

---

- ❑ A Study of the Optimum Temperature for Hydrogen Storage on Carbon Nanostructures

- ❑ The Characterization of Carbon Nanofibres Based on N<sub>2</sub> Adsorption Isotherms at 77K

Lu Y.

---

- ❑ Development of a Three-Phase HTS Power Transformer

Luo E

---

- ❑ Characteristics of a Miniature Pulse Tube Cooler Driven by Thermoacoustic Standing Wave Engine

- ❑ Basic Operation Principle of a Novel Cascade Thermoacoustic Prime Mover

- ❑ Study on a Linear Compressor with Metal-Bellow Replacing Conventional Cylinder-Piston Unit

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ Analytical Model for Onset Temperature Difference of Thermoacoustic Stirling Prime Movers
- ❑ Two-Dimensional Numerical Simulation of the Inertance Tube
- ❑ Numerical Simulation on a Novel Cascade Thermoacoustic Prime Mover
- ❑ New Perspective on Thermodynamic Cycles of Oscillating Flow Regenerators
- ❑ Experimental Investigation on a Room-Temperature Traveling-Wave Thermoacoustic Refrigerator
- ❑ Thermoacoustic Turbulent-Flow Model for Inertance Tubes Used for Pulse Tube Refrigerators

## Luo E.C.

- ❑ Dimensional Analysis on Multi-Component Mixed-Refrigerants Flow Characteristics in Adiabatic Capillary Tube
- ❑ An Experimental Research on a Small Flow Vortex Tube at Low Temperature Ranges

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Experimental Investigation on Pool Boiling Heat Transfer of Pure Refrigerants and Binary Mixtures

**Ma D.K.**

---

- ❑ 20kA HTS Current Leads for EAST Tokamak Project

**Mack A.**

---

- ❑ Experiences from the Operation Tests with the ITER Model Pump

**Maeda M.**

---

- ❑ Normalized Representation for Steady State Heat Transport in a Channel Containing He II Covering Pressure Range Up to 1.5 Mpa

**Makida Y.**

---

- ❑ Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator
- ❑ The Cryogenic System of BESIII in Preliminary Design
- ❑ The BESIII Detector Magnet

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Mantileri C.

---

- ❑ Overview of the Air Liquide Cryogenic Systems Designed for CERN LHC

## Mariani M.

---

- ❑ Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor

## Marot G.

---

- ❑ Overview of the Air Liquide Cryogenic Systems Designed for CERN LHC
- ❑ Overview of the Air Liquide Cryogenic Ground Space Activities for Launchers and Satellites

## Marshall C.

---

- ❑ Status of the ISAC-II Cryogenic System
- ❑ First Cold Test of the ISAC-II Medium Beta Cryomodule

## Matrone A.

---

- ❑ Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## McDonald P.C.

---

- ❑ New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project
- ❑ Thermal Validation of the Design of the CFRP Support Members to be Used in the Spatial Framework of the Herschel Space Observatory

## McMahon R.

---

- ❑ Testing the Coils of the Superconducting Magnet for the Alpha Magnetic Spectrometer
- ❑ Design and Manufacture of a Low-Current ADR Magnet for a Space Application

## Megro S.

---

- ❑ Cryogen-Free Superconducting Magnet Fabricated by a React-and-Wind Method Employing  $\text{Nb}_3\text{Sn}$  Wires with CuNbTi Reinforcement

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Messina G.

---

- ❑ Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor

## Millet F.

---

- ❑ 1.8 K Refrigeration Units for the LHC: Performance Assessment of Pre-series Units
- ❑ Design of a Cooling System for the Cold Test of the ITER TF Coils Before Installation

## Milward S.

---

- ❑ Testing the Coils of the Superconducting Magnet for the Alpha Magnetic Spectrometer
- ❑ Design and Manufacture of a Low-Current ADR Magnet for Space Application

## Misra Ruchi

---

- ❑ Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Mitin E.V.

---

- ❑ New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project

## Mitin V.F.

---

- ❑ New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project

## Miyoki S.

---

- ❑ Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector

## Miyoshi K.

---

- ❑ Cryogen-Free Superconducting Magnet Fabricated by a React-and-Wind Method Employing Nb<sub>3</sub>Sn wires with CuNbTi Reinforcement

## Monneret E.

---

- ❑ Overview of the Air Liquide Cryogenic Systems Designed for CERN LHC

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Murakami M.

---

- ❑ Reduction of Convective Heat Losses in Pulse Tube Refrigerators by Additional DC Flow
- ❑ Measurement of Characteristic Feature of Cavitation Flows of He I and He II
- ❑ Film Boiling Modes in Weakly Subcooled He II around Lambda Pressure
- ❑ Observation of Various Boiling States in Nearly Saturated He II
- ❑ Application of PIV Technique to Cavitating Flows of Liquid Helium

## Murdoch D.K.

---

- ❑ Experiences from the Operation Tests with the ITER Model Pump

## Muzzi L.

---

- ❑ Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## N. Sato

---

- ❑ [Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector](#)

## Nadig D.S.

---

- ❑ [Studies on a Single Stage GM Type Pulse Tube Cryocooler Using an Indigenous Helium Compressor](#)
- ❑ [Development and Test of a Cryopulverizer for Reprocessing Plastic Wastes](#)

## Nagaya S.

---

- ❑ [AC Loss Characteristics of Bi-2212 Multifilamentary Round Wires and Their Cables](#)

## Nagel M.

---

- ❑ [Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Nakamoto T.

---

- ❑ [Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator](#)

## Nakano A.

---

- ❑ [Reduction of Convective Heat Losses in Pulse Tube Refrigerators by Additional DC Flow](#)

## Nam K.

---

- ❑ [Novel Regenerator Design and its Experimental Characteristics](#)

## Nawrocki W.

---

- ❑ [Digital Temperature Sensors in the Range of 77-300 K](#)
- ❑ [Operational Amplifiers in the Temperature Range from 300 to 4 K](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Nemish I.Yu.

---

- ❑ [New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project](#)

## Nicollet S.

---

- ❑ [Design of a Cooling System for the Cold Test of the ITER TF Coils Before Installation](#)
- ❑ [Evaluation of the ITER Cable in Conduit Conductor Heat Transfer](#)

## Ning Z.

---

- ❑ [Development and Testing of 10.5kV/1.5kA HTS Power Cable](#)

## Ning Z.H.

---

- ❑ [Extended Power Law of Nonlinear Transport Properties of Superconducting Materials](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Nishijima G.

---

- ❑ Cryogen-Free Superconducting Magnet Fabricated by a React-and-Wind Method Employing Nb<sub>3</sub>Sn Wires with CuNbTi Reinforcement

## Noh C.

---

- ❑ Contractible Thermosyphon for Conduction Cooled Superconducting Magnets

## Nozawa M.

---

- ❑ Film Boiling Modes in Weakly Subcooled He II Around Lambda Pressure
- ❑ Observation of Various Boiling States in Nearly Saturated He II

## Ogawa J.

---

- ❑ AC Loss Characteristics of HTS Tapes Subject to Bending Strains

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Ogitsu T.

---

- ❑ Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator

## Ohhata H.

---

- ❑ Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator

## Ohtani N.

---

- ❑ AC Loss Characteristics of Bi-2212 Multifilamentary Round Wires and Their Cables

## Onishi T.

---

- ❑ Normal Transition in YBCO Thin Film and its Effect on Current Limiting Characteristics

## Ostropolski W.

---

- ❑ The Applicability of Ultrasonic Oxygen Deficiency Hazard Detectors in the LHC Accelerator Tunnel

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Pająkowski J.

---

- ❑ [Digital Temperature Sensors in the Range of 77-300 K](#)
- ❑ [Operational Amplifiers in the Temperature Range from 300 to 4 K](#)

## Pan Q. Y.

---

- ❑ [A New Process for the Preparation of Polyimide/Silica Hybrid Films](#)
- ❑ [Cryogenic Properties of Polymer Composite Materials – A Review](#)
- ❑ [Measurement of the Cryogenic Tensile Properties of Polymer Composites](#)

## Pan Y.P.

---

- ❑ [Analysis of the Influences of View Angle on Paraboloid W Style Radiant Cooler's Working Performance](#)

## Panchal Pradip

---

- ❑ [Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Paquignon G.

---

- ❑ [The Laser Megajoule Cryotarget Thermal Regulation](#)

## Park S.J.

---

- ❑ [The Effects of the Clearance at Expander on the Performance of the Stirling Refrigerator](#)

## Parthasarathi G.

---

- ❑ [Analysis of Centrifugal Stresses in the Rotor of a Cryogenic Turboexpander](#)

## Pasotti G.

---

- ❑ [Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor](#)

## Passardi G.

---

- ❑ [The Management of Cryogenics at CERN](#)

## Paul P. J.

---

- ❑ [Design of Vortex Tubes and Experimental Program on LOX Separation Using Cryogenic Vortex Tubes](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Paul T. Finley

---

- ❑ [Spitzer Space Telescope Thermal/Cryogenic System Flight Performance](#)

## Pavese F.

---

- ❑ [New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project](#)

## Pelle Th.

---

- ❑ [Simple Method for Calculation of Cryogenic Transfer Line Cool Down](#)

## Périn J.P.

---

- ❑ [The Laser Megajoule Cryotarget Thermal Regulation](#)

## Perraud S.

---

- ❑ [Heat Transfer Enhancement of He II Co-Current Two-Phase Flow in the Presence of Atomisation](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu  
Authors

## Pietsch M.

---

- ❑ [Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System](#)

## Piotrowska A.

---

- ❑ [Comparative Analysis of the Cryogens Used in Cryomedical Applications](#)

## Polinski J.

---

- ❑ [Modeling of Multilayer Vacuum Insulation – Complexity Versus Accuracy](#)

## Posselt H.

---

- ❑ [Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System](#)

## Pradhan S.

---

- ❑ [Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Prass S.

---

- ❑ [Design of a Fibre Reinforced Plastic Anticryostat for Magnetorelaxometric Measurements](#)

## Praud A.

---

- ❑ [Overview of Different Standard Helium Liquefiers / Refrigerators for Various Applications](#)

## Proch D.

---

- ❑ [Thermal, Electrical Properties and Microstructure of High Purity Niobium for High Gradient Super Conducting Cavities](#)

## Puech L.

---

- ❑ [Heat Transfer Enhancement of He II Co-Current Two-Phase Flow in the Presence of Atomisation](#)

## Qi Y.F.

---

- ❑ [Dimensional Analysis on Multi-Component Mixed-Refrigerants Flow Characteristics in Adiabatic Capillary Tube](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Experimental Investigation on Pool Boiling Heat Transfer of Pure Refrigerants and Binary Mixtures

Qi Z.

---

- ❑ Extended Power Law of Nonlinear Transport Properties of Superconducting Materials

Qian S.

---

- ❑ Physical Properties in Layered Transition-Metal Oxide Crystals and Anisotropic Transport Measurement

Qiu L.M.

---

- ❑ Experimental Investigation on Heat Transfer Performance of a Cryogenic Thermosyphon
- ❑ Investigation on a Thermoacoustically Driven Pulse Tube Cooler Working at 82.5 K
- ❑ Experimental Investigation on High Performance Cryogenic Heat Transfer Based Upon Natural Circulation Cooling
- ❑ Experiment on a Single-Stage GM Type Pulse Tube Cryocooler near 20K

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu  
Authors

**Qiu M.**

---

- ❑ [Technical Analyses of HTS Bulk Used in a Rotating Machine](#)

**Qu T.M.**

---

- ❑ [Property of Joint Resistance of Bi-2223 Multi-Filament Tape by Using Sn-Pb Solder](#)

**Quack H.**

---

- ❑ [Heat Transfer in Gas Filled Pipes with Closed Warm End Under Different Orientations](#)

**Racine M.**

---

- ❑ [Unique Method for Liquid Nitrogen Precooling of a Plate Fin Heat Exchanger in a Helium Refrigeration Cycle](#)

**Radebaugh R.**

---

- ❑ [Two-Dimensional Numerical Simulation of the Inertance Tube](#)
- ❑ [New Perspective on Thermodynamic Cycles of Oscillating Flow Regenerators](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Thermoacoustic Turbulent-Flow Model for Inertance Tubes Used for Pulse Tube Refrigerators

**Raja Banerjee**

---

- ❑ CRYOFLUIDS – A Software for Physical Property Data of Cryogenic Fluids

**Ram S. N.**

---

- ❑ Design of Vortex Tubes and Experimental Program on LOX Separation Using Cryogenic Vortex Tubes

**Ravex A.**

---

- ❑ Cryocoolers Development and Integration for Space Applications at Air Liquide
- ❑ Recent Developments on Cryocoolers in Europe (Invited)

**Rawnsley W.R.**

---

- ❑ Alignment of the ISAC-II Medium Beta Cryomodule with a Wire Monitoring System

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Ren X.

---

- ❑ [Experimental Study of the Narrow Channel Heat Transfer In Liquid Nitrogen](#)

## Ren Z.M.

---

- ❑ [Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy](#)

## Renard B.

---

- ❑ [Evaluation of the ITER Cable in Conduit Conductor Heat Transfer Coefficient](#)

## Richard A. H.

---

- ❑ [Spitzer Space Telescope Thermal/Cryogenic System Flight Performance](#)

## Riddone G.

---

- ❑ [The Applicability of Ultrasonic Oxygen Deficiency Hazard Detectors in the LHC Accelerator Tunnel](#)
- ❑ [Numerical Study of the final Cooldown from 4.5 K to 1.9 K of the Large Hadron Collider](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

**Ries T.**

---

- ❑ [First Cold Test of the ISAC-II Medium Beta Cryomodule](#)

**Rossi S.**

---

- ❑ [Design and Manufacture of a NbTi Insert Module Relevant for the ITER PF Magnets Conductor](#)

**Rousset B.**

---

- ❑ [Heat Transfer Enhancement of He II Co-Current Two-Phase Flow in the Presence of Atomisation](#)

**Ruan K. Q.**

---

- ❑ [Physical Properties in Layered Transition-Metal Oxide Crystals and Anisotropic Transport Measurement](#)

**Russell B. S.**

---

- ❑ [Spitzer Space Telescope Thermal/Cryogenic System Flight Performance](#)

**Sahu A. K.**

---

- ❑ [Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Sarkar B.

---

- ❑ Design Consideration Validation of Cryo-Components for Current Feeder System of SST-1 Using Flexibility Analysis
- ❑ Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1

## Sasaki K.

---

- ❑ Normal Transition in YBCO Thin Film and its Effect on Current Limiting Characteristics

## Sato A.

---

- ❑ Normalized Representation for Steady State Heat Transport in a Channel Containing He II Covering Pressure Range Up to 1.5 Mpa

## Saxena Y.C.

---

- ❑ Design Consideration Validation of Cryo-Components for Current Feeder System of SST-1 Using Flexibility Analysis
- ❑ Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Schauer F.

---

- [❑ Helium Refrigeration System for Wendelstein 7-X](#)
- [❑ Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System](#)

## Schoenfeld H.

---

- [❑ Standard Liquefier-Test Results with Improved Turbines](#)

## Seidel P.

---

- [❑ Design of a Fibre Reinforced Plastic Anticryostat for Magnetorelaxometric Measurements](#)

## Sekachev I.

---

- [❑ First Cold Test of the ISAC-II Medium Beta Cryomodule](#)
- [❑ Status of the ISAC-II Cryogenic System](#)

## Senanayake R. S.

---

- [❑ The MICE Focusing Solenoids and Their Cooling System](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Sentis L.

---

- ❑ Cryocoolers Development and Integration for Space Applications at Air Liquide

## Serio L.

---

- ❑ The Management of Cryogens at CERN

## Sha Y. N.

---

- ❑ The Reentrant Behaviour of Spin-Glass Phase in  $(\text{La,Pr})_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  Manganites

## Shen F.

---

- ❑ Study on Key-Tech Problems in Development of a Cold Neutron Source in China Advanced Research Reactor

## Shen X. C.

---

- ❑ Anisotropic Transport and Magnetic Properties of  $\text{Pr}_{1/2}\text{Sr}_{1/2}\text{MnO}_3$  Single Crystal Sample
- ❑ Direct Observation of Percolation and Phase Separation in  $\text{Pr}_{5/8}\text{Ca}_{3/8}\text{MnO}_3$  System

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ The Reentrant Behaviour of Spin-Glass Phase in  $(\text{La,Pr})_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  Manganites

Shen Y.

---

- ❑ Study on Thermoacoustic Resonance Pipe Driven by Loudspeaker Using Two-Microphone Method

Sheng J.

---

- ❑ Influence of Ag Substrate Surface Condition on Surface Morphology of YBCO Film

Sheng J.L.

---

- ❑ Dip-Coated  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  Films on Ag Substrate by MOD Method

Shi L.H.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Shi Y.

---

- ❑ Development of the Cryogenic Ground Support Equipment (CGSE) for the Superconducting Magnet of the Alpha Magnetic Spectrometer (AMS-02)
- ❑ Optimization Analysis of Peakshaving Cycle to Liquefy the Natural Gas
- ❑ Experimental Investigation into Storage of Confined Cryogenic Liquids without Evaporation Venting

## Shim S.Y.

---

- ❑ Thermal Insulation of the Wendelstein 7-X Superconducting Magnet System

## Shintomi T.

---

- ❑ Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector

## Shiraishi M.

---

- ❑ Reduction of Convective Heat Losses in Pulse Tube Refrigerators by Additional DC Flow

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Singer W.

---

- ❑ Thermal, Electrical Properties and Microstructure of High Purity Niobium for High Gradient Superconducting Cavities

## Singer X.

---

- ❑ Thermal, Electrical Properties and Microstructure of High Purity Niobium for High Gradient Superconducting Cavities

## Song F.C.

---

- ❑ Shape Optimization of Field Windings in a High Temperature Superconducting Synchronous Generator with Finite Element Method
- ❑ Design of Cooling System and Temperature Characteristics Analysis of High Temperature Superconducting Demonstrative Synchronous Generator

## Song Sh.S.

---

- ❑ Design Study of Conduction-Cooled High Temperature Superconducting Magnet

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Sorokin P.V.

---

- ❑ [New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project](#)

## Stafford Allen R.

---

- ❑ [Testing the Coils of the Superconducting Magnet for the Alpha Magnetic Spectrometer](#)
- ❑ [Design and Manufacture of a Low Current ADR Magnet for Space Application](#)

## Stanford G.

---

- ❑ [First Cold Test of the ISAC-II Medium Beta Cryomodule](#)
- ❑ [Status of the ISAC-II Cryogenic System](#)

## Steven W. V. S.

---

- ❑ [Liquid Hydrogen Droplet Generation from a Vibrating Orifice](#)

## Su X.T.

---

- ❑ [Investigation of a Single-Stage G-M Refrigerator with High Cooling Capacity for HTS Devices](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Use of Ceramic Part in G-M Refrigerator

Sun D.M.

---

- ❑ Investigation on a Thermoacoustically Driven Pulse Tube Cooler Working at 82.5 K

Sun H.

---

- ❑ Thermal Stress Analysis of Cryogenic Adhesive Joints for Non-Magnetic Dewar

Sun Y.

---

- ❑ Design of Small Turbo Brayton Cycle Air Refrigerator Test Rig

Sun Z.H.

---

- ❑ Dimensional Analysis on Multi-Component Mixed-Refrigerants Flow Characteristics in Adiabatic Capillary Tube
- ❑ Experimental Investigation on Pool Boiling Heat Transfer of Pure Refrigerants and Binary Mixtures

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Sunil K.S.

---

- ❑ [Analysis of Centrifugal Stresses in the Rotor of a Cryogenic Turboexpander](#)

## Sunil Kr Sarangi

---

- ❑ [CRYOFLUIDS – A Software for Physical Property Data of Cryogenic Fluids](#)

## Suo H. L.

---

- ❑ [Influence of Ag Substrate Surface Condition on Surface Morphology of YBCO Film](#)
- ❑ [Dip-Coated  \$\text{YBa}\_2\text{Cu}\_3\text{O}\_{7-x}\$  Films on Ag Substrate by MOD Method](#)

## Süßer M.

---

- ❑ [Discussion of the Protection of Pressure Vessels by Using Safety Valves-Rupture Disc-Combinations](#)

## Suzuki H.

---

- ❑ [AC Loss Characteristics of HTS Tapes Subject to Bending Strains](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Suzuki T.

---

- ❑ [Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector](#)

## Sveshnikov B.N.

---

- ❑ [Multichannel Temperature Monitor Compatible with PC](#)

## Takahashi K.

---

- ❑ [Cryogen-Free Superconducting Magnet Fabricated by a React-and-Wind Method Employing Nb<sub>3</sub>Sn Wires with CuNbTi Reinforcement](#)

## Tamizhanban K.

---

- ❑ [Single Stage Double-Inlet Pulse Tube Refrigerator with Integral Thermo-Electric Cooler](#)

## Tang H.M.

---

- ❑ [Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)
- ❑ [Thermal Fluid Modeling of BEPCII IR Quadrupole Magnet Cryostat](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Tang K.

---

- ❑ Theoretical Prediction on the Coupling of Thermoacoustic Prime Mover and RC Load
- ❑ Influence of He-H<sub>2</sub> Mixture Proportion on the Performance of Pulse Tube Refrigerator
- ❑ Thermoacoustically Driven Pulse Tube Refrigeration Below 90K

## Tank Jignesh

---

- ❑ Experimental Characterization of the Hydraulic Behavior of Cooling for Toroidal Field Magnet of SST-1

## Tao W.Q.

---

- ❑ Three Dimensional Numerical Computation of the Flow Field in a Pulse Tube

## Tavian L.

---

- ❑ 1.8 K Refrigeration Units for the LHC: Performance Assessment of Pre-Series Units
- ❑ Numerical Study of the Final Cooldown from 4.5 K to 1.9 K of the Large Hadron Collider

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ The Management of Cryogenics at CERN

Taylor C.

---

- ❑ The BESIII Detector Magnet

Teng Y. P.

---

- ❑ Development and Testing of 10.5kV/1.5kA HTS Power Cable

Thibault P.

---

- ❑ Heat Transfer Enhancement of He II Co-Current Two-Phase Flow in the Presence of Atomisation

Thummes G.

---

- ❑ Performance of a Pulse Tube Cryocooler with Two Separate Stages Using  $^3\text{He}$  in the Second Stage
- ❑ Experimental Investigation on DC Flow Suppression and Refrigeration Characteristics of a High-Performance Single-Stage GM-Type PTC
- ❑ Temperature Hysteresis in a GM-Type Orifice Pulse Tube Refrigerator

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Ting S.C.C.

---

- ❑ Development of the Cryogenic Ground Support Equipment (CGSE) for the Superconducting Magnet of the Alpha Magnetic Spectrometer (AMS-02)
- ❑ Testing the Coils of the Superconducting Magnet for the Alpha Magnetic Spectrometer

## Tomaru T.

---

- ❑ Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector

## Tovar-Gonzalez A.

---

- ❑ Control System and Operation of the Cryogenic Test Facilities for LHC Series Superconducting Magnets
- ❑ Cryogenic Infrastructure for Testing of LHC Series Superconducting Magnets

## Trollier T.

---

- ❑ Recent Developments on Cryocoolers in Europe (Invited)
- ❑ Cryocoolers Development and Integration for Space Applications at Air Liquide

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Tsuchiya K.

---

- [❑ The Cryogenic System of BESIII in Preliminary Design](#)
- [❑ The BESIII Detector Magnet](#)

## Tsukahara R.

---

- [❑ Measurement of Characteristic Feature of Cavitation Flows of He I and He II](#)
- [❑ Application of PIV Technique to Cavitating Flows of Liquid Helium](#)

## Tsukamoto O.

---

- [❑ AC loss Characteristics of HTS Tapes Subject to Bending Strains](#)

## Tu F.H.

---

- [❑ A Study on the Conic Support in the Radiant Cooler](#)

## Tu Q.

---

- [❑ Numerical Simulation of Loudspeaker-Driven Thermoacoustic Refrigerator](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Turtù S.

---

- ❑ Design and Manufacture of a NbTi Insert Module Representative for the ITER PF Magnets Conductor

## Uchiyama T.

---

- ❑ Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector

## Ulbricht J.

---

- ❑ Testing the Coils of the Superconducting Magnet for the Alpha Magnetic Spectrometer

## Upendra B.

---

- ❑ Studies on a Single Stage GM Type Pulse Tube Cryocooler Using an Indigenous Helium Compressor
- ❑ Design of Vortex Tubes and Experimental Program on LOX Separation Using Cryogenic Vortex Tubes

## Upendra Behera

---

- ❑ Single Stage Double-Inlet Pulse Tube Refrigerator with Integral Thermo-Electric Cooler

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Development and Test of a Cryopulverizer for Reprocessing Plastic Wastes

**Van Sciver S**

---

- ❑ Experiment on Natural Convection of Subcooled Liquid Nitrogen

**van Weelderen R.**

---

- ❑ Heat Transfer Enhancement of He II Co-Current Two-Phase Flow in the Presence of Atomisation

**Venger E.F.**

---

- ❑ New Temperature and Magnetic Field Sensors for Cryogenic Applications Developed Under a European Project

**Viertel G.**

---

- ❑ Testing the Coils of the Superconducting Magnet for the Alpha Magnetic Spectrometer

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Vogel E.

---

- ❑ Thermal, Electrical Properties and Microstructure of High Purity Niobium for High Gradient Superconducting Cavities

## Voigt Th.

---

- ❑ A Retrospect on the Successful Commissioning of the Linde 18kw Refrigerators for the LHC Particle Accelerator at CERN

## Vostrikov S.

---

- ❑ Development of the Cryogenic Ground Support Equipment (CGSE) for the Superconducting Magnet of the Alpha Magnetic Spectrometer (AMS-02)

## Vullierme B.

---

- ❑ Control System and Operation of the Cryogenic Test Facilities for LHC series Superconducting Magnets
- ❑ Series Production of 13 kA Current Leads with Dry and Compact Warm Terminals
- ❑ Cryogenic Infrastructure for Testing of LHC Series Superconducting Magnets

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Wagner U.

---

- ❑ [Measured Performance of Four New 18 kW@4.5 K Helium Refrigerators for the LHC Cryogenic System](#)

## Wahrer B.

---

- ❑ [The BESIII Detector Magnet](#)

## Walter E.

---

- ❑ [Overview of the Air Liquide Cryogenic Systems Designed for CERN LHC](#)
- ❑ [Overview of Different Standard Helium Liquefiers / Refrigerators for Various Applications](#)

## Wang B.

---

- ❑ [The BESIII Detector Magnet](#)

## Wang B.R.

---

- ❑ [Study on Thermoacoustic Resonance Pipe Driven by Loudspeaker Using Two-Microphone Method](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Wang B.R.

---

- ❑ [Discussion on Resonant Frequency in Thermoacoustic Systems](#)

## Wang C.

---

- ❑ [Characteristics of 4 K Pulse Tube Cryocoolers in Applications](#)
- ❑ [Shape Optimization of HTS Magnets Using Hybrid Genetic Algorithms](#)

## Wang F.R.

---

- ❑ [Extended Power Law of Nonlinear Transport Properties of Superconducting Materials](#)

## Wang G.P.

---

- ❑ [Development of the 3.5 W at 80 K High-Frequency Pulse Tube Cryocooler](#)

## Wang J.

---

- ❑ [Design of Small Turbo Brayton Cycle Air Refrigerator Test Rig](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Wang L.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade
- ❑ Cryogenic System for BEPCII SRF Cavity IR Quadrupole and Detector Solenoid Magnets
- ❑ Thermal Fluid Modeling of BEPCII IR Quadrupole Magnet Cryostat
- ❑ Multi-Tube Power Leads Tower for BEPCII IR Magnets
- ❑ The BESIII Detector Magnet

## Wang Q.

---

- ❑ A Thermodynamic Optimization of Counterflow Recuperative-Type Heat Exchangers

## Wang Q.L.

---

- ❑ Design Study of Conduction-Cooled High Temperature Superconducting Magnet
- ❑ Stability Analysis for Cryocooled Aluminum-Stabilized Superconducting Magnet

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ A Numerical Code to Simulate Quenching in Conduction Cooled Superconducting Magnet
- ❑ Shape Optimization of HTS Magnets Using Hybrid Genetic Algorithms
- ❑ Study of Stress, Strain in Super-Conducting Magnet by Fiber-Bragg Grating

## Wang R.

---

- ❑ Development of the Cryogenic Ground Support Equipment (CGSE) for the Superconducting Magnet of the Alpha Magnetic Spectrometer (AMS-02)
- ❑ Optimization Analysis of Peakshaving Cycle to Liquefy the Natural Gas
- ❑ Experimental Investigation into Storage of Confined Cryogenic Liquids without Evaporation Venting

## Wang R. Z.

---

- ❑ Experimental Study of the Narrow Channel Heat Transfer in Liquid Nitrogen

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Wang R.S.

---

- ❑ [Numerical Simulation of Flow Boiling of Cryogenic Liquids in Tubes](#)

## Wang S.

---

- ❑ [Thermal Design of BESIII Magnet](#)

## Wang S. P.

---

- ❑ [Direct Observation of Percolation and Phase Separation in  \$\text{Pr}\_{5/8}\text{Ca}\_{3/8}\text{MnO}\_3\$  System](#)
- ❑ [The Reentrant Behaviour of Spin-Glass Phase in  \$\(\text{La,Pr}\)\_{0.5}\text{Ca}\_{0.5}\text{MnO}\_3\$  Manganites](#)

## Wang T.H.

---

- ❑ [Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)
- ❑ [Multi-Tube Power Leads Tower for BEPCII IR Magnets](#)

## Wang W.Y.

---

- ❑ [The Working Performance of Radiant Cooler in Thermal Vacuum Test](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ A Study on the Conic Support in the Radiant Cooler
- ❑ Development and Testing of a Novel Thermal Switch

Wang X.J.

---

- ❑ Analysis of the Influences of View Angle on Paraboloid W Style Radiant Cooler's Working Performance

Wang X.L.

---

- ❑ Experimental Analysis of the Oscillating Flow Characteristics for High Frequency Regenerators
- ❑ Design and Test of a 80 K Miniature Pulse Tube Cryocooler

Wang X.Y.

---

- ❑ Anisotropic Transport and Magnetic Properties of  $\text{Pr}_{1/2}\text{Sr}_{1/2}\text{MnO}_3$  Single Crystal Sample

Wang Y.S.

---

- ❑ Characterization of the Quenching Process and the Protection of an AC High Temperature Superconductor Coil
- ❑ Development of a Three-Phase HTS Power Transformer

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Wang Y.Y.

---

- ❑ [The Effect of Timing Ratio of Injecting to Rejecting on G-M Type PTC's Cooling Temperature](#)

## Wang Z. D.

---

- ❑ [Strain Effects on the Critical Current of Bi-2223/Ag Tape](#)

## Watanabe K.

---

- ❑ [Cryogen-Free Superconducting Magnet Fabricated by a React-and-Wind Method Employing Nb<sub>3</sub>Sn wires with CuNbTi reinforcement](#)

## Weber P.

---

- ❑ [Design of a Fibre Reinforced Plastic Anticryostat for Magnetorelaxometric Measurements](#)

## Weber T. B.

---

- ❑ [Unique Method for Liquid Nitrogen Precooling of a Plate Fin Heat Exchanger in a Helium Refrigeration Cycle](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Weisend II J.G.

---

- ❑ [Unique Method for Liquid Nitrogen Precooling of a Plate Fin Heat Exchanger in a Helium Refrigeration Cycle](#)

## Wen H.M.

---

- ❑ [Thermal, Electrical Properties and Microstructure of High Purity Niobium for High Gradient Superconducting Cavities](#)

## Wen J.

---

- ❑ [Investigation of Header Configuration and its Effect on Flow Maldistribution in Plate-Fin Heat Exchanger](#)

## Will M.E.

---

- ❑ [Comparison of the Performance of Regenerators to Counterflow Heat Exchangers](#)

## Wolf P. E.

---

- ❑ [Heat Transfer Enhancement of He II Co-Current Two-Phase Flow in the Presence of Atomisation](#)

Click on title for a paper.



# Papers by Author

## Wu B.M.

---

- ❑ [Thermal Conductivity of Materials and Measuring System at Cryogenic Temperature](#)

## Wu H.B.

---

- ❑ [Room Temperature Magnetic Refrigerator Using Both Metal Gd or/and Gd-Si-Ge Alloys and a Permanent Magnetic Field Source](#)
- ❑ [A New Method of Magnetizing and Demagnetizing the Magnetic Refrigerants by Dint of Dynamic-Magnetic-Link](#)

## Wu J.

---

- ❑ [Investigation of Acoustic Streaming in a Thermoacoustic-Stirling Heat Engine](#)

## Wu J.F.

---

- ❑ [An Experimental Research on a Small Flow Vortex Tube at Low Temperature Ranges](#)
- ❑ [Dimensional Analysis on Multi-Component Mixed-Refrigerants Flow Characteristics in Adiabatic Capillary Tube](#)

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Performance of Different Throttle Refrigeration Cycles
- ❑ A 70 K J-T Cryocooler Based on the Fractional Mixed-Refrigerant Cycle
- ❑ Experimental Investigation on Pool Boiling Heat Transfer of Pure Refrigerants and Binary Mixtures
- ❑ Development of a Cryogenic Water-Trap Based on the Recuperative Mixture Refrigeration Cycle

Wu S.T.

---

- ❑ 20kA HTS Current Leads for EAST Tokamak Project

Wu T.H.

---

- ❑ A New Type of Condenser-Evaporator Safely Operated in Large Air Separation Plant

Wu Y. L.

---

- ❑ Strain Effects on the Critical Current of Bi-2223/Ag Tape

Wu Y.N.

---

- ❑ Experimental Study on a Split Free-Piston Stirling Cooler for Space Applications

Main Menu

Authors

Click on title for a paper.



# Papers by Author

## Wu Y.Y.

---

- ❑ [The Experimental Study on the Performance of a Small-Scale Oxygen Concentrator by PSA](#)
- ❑ [A New Type of Condenser-Evaporator Safely Operated in Large Air Separation Plant](#)

## Wu Z.

---

- ❑ [Study on a Linear Compressor with Metal-Bellow Replacing Conventional Cylinder-Piston Unit](#)
- ❑ [Experimental Investigation on a Room-Temperature Traveling-Wave Thermoacoustic Refrigerator](#)
- ❑ [Thermoacoustic Turbulent-Flow Model for Inertance Tubes Used for Pulse Tube Refrigerators](#)

## Wu Z.L.

---

- ❑ [Study on Electricity Generation Performance of Thermoelectric Device in Extreme Environmental Conditions](#)

## Xi H.X.

---

- ❑ [A Prototype 4m, 2kA, AC HTS Power Cable System](#)

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Xia D.

---

- ❑ [Technical Analyses of HTS Bulk Used in a Rotating Machine](#)

## Xiao H.

---

- ❑ [Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)

## Xiao L. Y.

---

- ❑ [Characterization of the Quenching Process and the Protection of an AC High Temperature Superconductor Coil](#)
- ❑ [Development and Testing of 10.5kV/1.5kA HTS Power Cable](#)
- ❑ [A Current Compensation Type Superconducting Fault Current Limiter](#)
- ❑ [Evaluation on Power System Transient Stability with Resistor Type SFCL and Parameter Design](#)
- ❑ [Effects of Bias Power Supply on Bridge Type Superconducting FCL](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ A New Concept of Bridge Fault Current Limiter-SMES for Interline Application to Improve Power Quality
- ❑ Design and Primary Experiment for a Single Phase 220V/100A/6kW Bridge Fault Current Limiter-SMES
- ❑ An Adaptive Neuro-Fuzzy Control Strategy for the Bridge Type Superconducting Fault Current Controller
- ❑ Development of a Three-Phase HTS Power Transformer

**Xiao Y. M.**

---

- ❑ Thermal Stress Analysis of Cryogenic Adhesive Joints for Non-Magnetic Dewar

**Xie X. J.**

---

- ❑ Study on the Optimal Characteristic Dimension of Regenerator in a Thermoacoustic Engine
- ❑ Investigation on Acoustic Characteristics of Regenerator in the Thermoacoustic Apparatus
- ❑ Experimental Investigation on the Dynamic Character of Thermoacoustic Engine and Parameters of Regenerator

Click on title for a paper.



# Papers by Author

Xie X.M.

---

- ❑ Experimental Study of Self-Pressurizing Transfer System Cryogenic Liquid

Xin Y.

---

- ❑ A Prototype 4m, 2kA, AC HTS Power Cable System

Xing Z.H.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

Xiong L.L.

---

- ❑ The Thermodynamic Analysis and Adjusting Methods for Reliquefaction Plant on Board LEG Carriers

Xiong Y. F.

---

- ❑ Strain Effects on the Critical Current of Bi-2223/Ag Tape

Xu B.

---

- ❑ Fabrication and Characterization of Bi-2223 Coils for Generator Applications

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

Click on title for a paper.



# Papers by Author

Xu F.Y.

---

- ❑ [Cryogenic Facility Design in BEPCII Superconducting Upgrade](#)

Xu H.Y.

---

- ❑ [The Working Performance of Radiant Cooler in Thermal Vacuum Test](#)

Xu J.Q.

---

- ❑ [Liquid Hydrogen Droplet Generation from a Vibrating Orifice](#)

Xu L.

---

- ❑ [Experimental Investigation on the Performances of Gas Flow in Oscillating Tube](#)
- ❑ [Optimal Vector Analysis of the Phase Shifter in the Pulse Tube Refrigerator](#)
- ❑ [Several Problems in the Thermal Contact Resistance Research of Solid Interfaces at Low Temperature](#)
- ❑ [Fractal Description of Thermal Contact Resistance Between Rough Surfaces at Low Temperature](#)

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Thermal Stress Analysis of Cryogenic Adhesive Joints for Non-Magnetic Dewar
- ❑ Development and Testing of 10.5kV/1.5kA HTS Power Cable

Xu Q.

---

- ❑ Study of Two Phase Flow Distribution and Its Influence in a Plate-Fin Heat Exchanger
- ❑ The BESIII Detector Magnet
- ❑ Thermal Design of BESIII Magnet

Xu R.P.

---

- ❑ Fractal Description of Thermal Contact Resistance Between Rough Surfaces at Low Temperature

Xu X.

---

- ❑ Development of a Three-Phase HTS Power Transformer

Xu X.D.

---

- ❑ Test Results and Analysis of Cryogenic System for Cooling HTS Cables and the Next Stage Plan

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Xu X.N.

---

- ❑ Room Temperature Magnetic Refrigerator Using Both Metal Gd or/and Gd-Si-Ge Alloys and a Permanent Magnetic Field Source
- ❑ A New Method of Magnetizing and Demagnetizing the Magnetic Refrigerants by Dint of Dynamic-magnetic-Link

## Xu Z.

---

- ❑ Technical Analyses of HTS Bulk Used in a Rotating Machine

## Yamamoto A.

---

- ❑ Performance of Vibration-Free Pulse Tube Cryocooler System for a Gravitational Wave Detector

## Yamamoto A.

---

- ❑ Conceptual Design of a 2kW Cryogenic System for the Neutrino Superconducting Beam Line Magnet System in the J-PARC 50GeV Proton Accelerator

Main Menu

Authors

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Yamaoka H.

---

- ❑ [The Cryogenic System of BESIII in Preliminary Design](#)
- ❑ [The BESIII Detector Magnet](#)

## Yan L.G.

---

- ❑ [Design Study of Conduction-Cooled High Temperature Superconducting Magnet](#)

## Yan W.L.

---

- ❑ [Investigation on a Thermoacoustically Driven Pulse Tube Cooler Working at 82.5 K](#)

## Yang C.G.

---

- ❑ [Optimal Vector Analysis of the Phase Shifter in the Pulse Tube Refrigerator](#)

## Yang C.J.

---

- ❑ [Experimental Investigation on High Performance Cryogenic Heat Transfer Based Upon Natural Circulation Cooling](#)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu  
Authors

## Yang C.Z.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

## Yang D.S.

---

- ❑ Thermal Conductivity of Materials and Measuring System at Cryogenic Temperature

## Yang G.D.

---

- ❑ Thermal Fluid Modeling of BEPCII IR Quadrupole Magnet Cryostat
- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade

## Yang H.

---

- ❑ The BESIII Detector Magnet

## Yang H. S.

---

- ❑ Investigation of Thermal Insulation for HTS Cable Systems

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ High Precise Thermopower Measurement System and its Applying to Organic Conductors  $(\text{TMTSF})_2\text{ClO}_4$  in a Direction
- ❑ Investigation of the Subcooled LN2 Characteristics in the Prototype Cryostat for the Resistive Superconducting Fault Current Limiter

## Yang S. Q.

---

- ❑ The MICE Focusing Solenoids and Their Cooling System
- ❑ Modeling Free Convection Flow of Liquid Hydrogen Within a Cylindrical Heat Exchanger Cooled to 14K
- ❑ Modeling the Thermal Mechanical Behavior of a 300 K Vacuum Vessel that is Cooled by Liquid Hydrogen in Film Boiling

## Yang X.C.

---

- ❑ A Prototype 4m, 2kA, AC HTS Power Cable System

## Yang Y.

---

- ❑ Boiling Heat Transfer to Liquid Nitrogen Pool from Ag Sheathed PbBi2223 Tapes Carrying Over-Current

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ Thermal Stability and Quench Propagation in a Cryocooler-Cooled Pancake Coil of Bi-2223 Tape Operating between 35K and 65K
- ❑ Fabrication and Characterization of Bi-2223 Coils for Generator Applications

Yao Z.H.

---

- ❑ Technical Analyses of HTS Bulk Used in a Rotating Machine

Yao Z.L.

---

- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade
- ❑ Multi-Tube Power Leads Tower for BEPCII IR Magnets

Ye Y.

---

- ❑ Evaluation on Power System Transient Stability with Resistor Type SFCL and Parameter

Yeager C.

---

- ❑ Interchangeability of Diode Temperature Sensors for Various Nonstandard Excitation Currents

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ Characteristic Studies of Sputter Deposited Cermet Cryogenic Heaters

Yean S-C

---

- ❑ Experiment on Natural Convection of Subcooled Liquid Nitrogen

Yeom H.K.

---

- ❑ LN2 Forced Flow Cooling on HTS Power Cables

Yi C.

---

- ❑ The BESIII Detector Magnet
- ❑ Thermal Design of BESIII Magnet

Yim S.W.

---

- ❑ Quench Characteristics of High- $T_c$  Superconducting Tape for Alternating Over-Current Using DFT

Yin D.L.

---

- ❑ Extended Power Law of Nonlinear Transport Properties of Superconducting Materials

Click on title for a paper.



# Papers by Author

You G. C.

---

- ❑ [Experimental Study of the Narrow Channel Heat Transfer in Liquid Nitrogen](#)

You J.G.

---

- ❑ [Development and Testing of a Novel Thermal Switch](#)

Young E.A.

---

- ❑ [Boiling Heat Transfer to Liquid Nitrogen Pool from Ag Sheathed PbBi2223 Tapes Carrying Over-Current](#)

Yousuff H. M.

---

- ❑ [Liquid Hydrogen Droplet Generation from a Vibrating Orifice](#)

Yuan L.Z.

---

- ❑ [Study on Key-Tech Problems in Development of a Cold Neutron Source in China Advanced Research Reactor](#)

Yu J.

---

- ❑ [Direct Observation of Percolation and Phase Separation in  \$\text{Pr}\_{5/8}\text{Ca}\_{3/8}\text{MnO}\_3\$  System](#)

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ The Reentrant Behaviour of Spin-Glass Phase in  $(\text{La,Pr})_{0.5}\text{Ca}_{0.5}\text{MnO}_3$  Manganites

Yu L.M.

---

- ❑ Anisotropic Transport and Magnetic Properties of  $\text{Pr}_{1/2}\text{Sr}_{1/2}\text{MnO}_3$  Single Crystal Sample

Yu L.N.

---

- ❑ A New Method for Uniformly Cooling Engineered Tissues

Yu Q.F.

---

- ❑ Study on Key-Tech Problems in Development of a Cold Neutron Source in China Advanced Research Reactor

Yu S. Z.

---

- ❑ Design of Cooling System and Temperature Characteristics Analysis of High Temperature Superconducting Demonstrative Synchronous Generator
- ❑ Shape Optimization of Field Windings in a High Temperature Superconducting Synchronous Generator with Finite Element Method

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Yu X.

---

- ❑ Experimental Investigation on He II Porous Plug Liquid-Vapor Phase Separator

Yu Y.

---

- ❑ Physical Properties in Layered Transition-Metal Oxide Crystals and Anisotropic Transport Measurement

Yu Y.J.

---

- ❑ Design Study of Conduction-Cooled High Temperature Superconducting Magnet
- ❑ A Numerical Code to Simulate Quenching in Conduction Cooled Superconducting Magnet
- ❑ A New Concept of Bridge Fault Current Limiter-SMES for Interline Application to Improve Power Quality
- ❑ Design and Primary Experiment for a Single Phase 220V/100A/6kW Bridge Fault Current Limiter-SMES

Yu Z. B.

---

- ❑ Study on the Optimal Characteristic Dimension of Regenerator in a Thermoacoustic Engine

Main Menu

Authors

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

- ❑ Investigation on Acoustic Characteristics of Regenerator in the Thermoacoustic Apparatus
- ❑ Experimental Investigation on the Dynamic Character of Thermoacoustic Engine and Parameters of Regenerator

**Yuan G.Q.**

---

- ❑ Room Temperature Magnetic Refrigerator Using Both Metal Gd or/and Gd-Si-Ge Alloys and a Permanent Magnetic Field Source
- ❑ A New Method of Magnetizing and Demagnetizing the Magnetic Refrigerants by Dint of Dynamic-Magnetic-Link

**Yuyama M.**

---

- ❑ Normalized Representation for Steady State Heat Transport in a Channel Containing He II Covering Pressure Range Up to 1.5 Mpa

**Zahn G.R.**

---

- ❑ Design of a Cooling System for the Cold Test of the ITER TF Coils Before Installation

Click on title for a paper.



# Papers by Author

## Zhang B.S.

---

- ❑ Discussion on Resonant Frequency in Thermoacoustic Systems

## Zhang C.

---

- ❑ The Characterization of Carbon Nanofibres Based on N<sub>2</sub> Adsorption Isotherms at 77K

## Zhang F. Z.

---

- ❑ Stack and Frequency's Coupling Characteristic Analysis in Thermoacoustic Systems

## Zhang G.Q.

---

- ❑ Shape Optimization of Field Windings in a High Temperature Superconducting Synchronous Generator with Finite Element Method
- ❑ Design of Cooling System and Temperature Characteristics Analysis of High Temperature Superconducting Demonstrative Synchronous Generator

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Zhang H. F.

---

- ❑ [A Thermodynamic Optimization of Counterflow Recuperative-Type Heat Exchangers](#)

## Zhang J. C.

---

- ❑ [Direct Observation of Percolation and Phase Separation in  \$\text{Pr}\_{5/8}\text{Ca}\_{3/8}\text{MnO}\_3\$  System](#)
- ❑ [The Reentrant Behaviour of Spin-Glass Phase in  \$\(\text{La,Pr}\)\_{0.5}\text{Ca}\_{0.5}\text{MnO}\_3\$  Manganites](#)
- ❑ [Anisotropic Transport and Magnetic Properties of  \$\text{Pr}\_{1/2}\text{Sr}\_{1/2}\text{MnO}\_3\$  Single Crystal Sample](#)
- ❑ [Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy](#)

## Zhang J.L.

---

- ❑ [The Experimental Study on the Performance of a Small-Scale Oxygen Concentrator by PSA](#)

## Zhang J.Y

---

- ❑ [Property of Joint Resistance of Bi2223 Multi-Filament Tape by Using Sn-Pb Solder](#)

Click on title for a paper.



# Papers by Author

## Zhang K.

---

- ❑ [Investigation of Header Configuration and its Effect on Flow Maldistribution in Plate-Fin Heat Exchanger](#)

## Zhang L.

---

- ❑ [The Cryogenic System of BESIII in Preliminary Design](#)
- ❑ [Test Results and Analysis of Cryogenic System for Cooling HTS Cables and the Next Stage Plan](#)
- ❑ [Investigation of a Single-Stage G-M Refrigerator with High Cooling Capacity for HTS Devices](#)
- ❑ [Use of Ceramic Part in G-M Refrigerator](#)
- ❑ [The Design and Study of a Reciprocating Helium Compressor](#)
- ❑ [Thermal Design of BESIII Magnet](#)

## Zhang P.

---

- ❑ [Film Boiling Modes in Weakly Subcooled He II Around Lambda Pressure](#)
- ❑ [Experimental Study of the Narrow Channel Heat Transfer in Liquid Nitrogen](#)

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Observation of Various Boiling States in Nearly Saturated He II

Zhang S.Y.

---

- ❑ Study on Thermoacoustic Resonance Pipe Driven by Loudspeaker Using Two-Microphone Method

Zhang W.

---

- ❑ Experimental Study on a Split-Type Free-Piston Stirling Cooler for Space Applications

Zhang X.B.

---

- ❑ Numerical Simulation on Thermal Stress and Magnetic Force of Current Leads in BEPCII
- ❑ Cryogenic Facility Design in BEPCII Superconducting Upgrade
- ❑ Thermal Fluid Modeling of BEPCII IR Quadrupole Magnet Cryostat
- ❑ Multi-Tube Power Leads Tower for BEPCII IR Magnets

Main Menu

Authors

Click on title for a paper.



# Papers by Author

## Zhang X.J.

---

- ❑ Experimental Investigation on Heat Transfer Performance of a Cryogenic Thermosyphon
- ❑ Experimental Investigation on High Performance Cryogenic Heat transfer Based Upon Natural Circulation Cooling

## Zhang X.Q.

---

- ❑ Lattice Gas Modeling of Thermoacoustic Oscillations
- ❑ Numerical Simulation of Loudspeaker-Driven Thermoacoustic Refrigerator

## Zhang X.Y.

---

- ❑ Dependence of Structure and Magnetic Properties on Magnetic Field and Temperature for Bi-Mn Alloy

## Zhang Y.

---

- ❑ Two-Dimensional Numerical Simulation of the Inertance Tube
- ❑ Thermoacoustic Turbulent-Flow Model for Inertance Tubes Used for Pulse Tube Refrigerators

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

## Zhang Y. H.

---

- ❑ A New Process for the Preparation of Polyimide/Silica Hybrid Films

## Zhang Y.F.

---

- ❑ Anisotropic Transport and Magnetic Properties of  $\text{Pr}_{1/2}\text{Sr}_{1/2}\text{MnO}_3$  Single Crystal Sample

## Zhang Y.G

---

- ❑ Design and Primary Experiment for a Single Phase 220V/100A/6kW Bridge Fault Current Limiter-SMES

## Zhang Y.H.

---

- ❑ Cryogenic Properties of Polymer Composite Materials – A Review
- ❑ Measurement of the Cryogenic Tensile Properties of Polymer Composites

## Zhang Y.W.

---

- ❑ The Experimental Study on the Performance of a Small-Scale Oxygen Concentrator by PSA

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

- ❑ [An Internet-Based Working Fluid Properties Database](#)

Zhang Z.

---

- ❑ [Study of Two Phase Flow Distribution and its Influence in a Plate-Fin Heat Exchanger](#)

Zhang Z.F.

---

- ❑ [Effects of Bias Power Supply on Bridge Type Superconducting FCL](#)

Zhao B.Z.

---

- ❑ [Design Study of Conduction-Cooled High Temperature Superconducting Magnet](#)

Zhao C.

---

- ❑ [Study on Key-Tech Problems in Development of a Cold Neutron Source in China Advanced Research Reactor](#)

Zhao C.H.

---

- ❑ [An Adaptive Neuro-Fuzzy Control Strategy for the Bridge Type Superconducting Fault Current Controller](#)

Click on title for a paper.





# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ A Current Compensation Type Superconducting Fault Current Limiter
- ❑ Design and Primary Experiment for a Single Phase 220V/100A/6kW Bridge Fault Current Limiter-SMES

Zhao L.

---

- ❑ The BESIII Detector Magnet

Zhao L.P.

---

- ❑ Fractal Description of Thermal Contact Resistance Between Rough Surfaces at Low Temperature

Zhao M.G.

---

- ❑ Experimental Analysis of the Oscillating Flow Characteristics for High Frequency Regenerators
- ❑ Design and Test of a 80 K Miniature Pulse Tube Cryocooler

Zhao X.

---

- ❑ Development of a Three-Phase HTS Power Transformer

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

## Zhao Y.

---

- ❑ Dip-Coated  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  Films on Ag Substrate by MOD Method
- ❑ Influence of Ag Substrate Surface Condition on Surface Morphology of YBCO Film

## Zhao Z.L.

---

- ❑ The Thermodynamic Analysis and Adjusting Methods for Reliquefaction Plant on Board LEG Carriers

## Zhao C.H.

---

- ❑ A New Concept of Bridge Fault Current Limiter-SMES for Interline Application to Improve Power Quality

## Zheng Q.R.

---

- ❑ A Study of the Optimum Temperature for Hydrogen Storage on Carbon Nanostructures

## Zheng W.H.

---

- ❑ Thermal Conductivity of Materials and Measuring System at Cryogenic Temperature

Main Menu

Authors

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

## Zhou G.

---

- ❑ [A Cryostat with Optics Windows for Study of ICF Cryogenics Target](#)
- ❑ [Temperature Effects on Formation of a Uniform Layer of Isotopes Inside a Cryogenic ICF Target](#)

## Zhou J.

---

- ❑ [The BESIII Detector Magnet](#)

## Zhou M. L.

---

- ❑ [Influence of Ag Substrate Surface Condition on Surface Morphology of YBCO Film](#)
- ❑ [Dip-Coated  \$\text{YBa}\_2\text{Cu}\_3\text{O}\_{7-x}\$  Films on Ag Substrate by MOD Method](#)

## Zhou Y.

---

- ❑ [Experimental Analysis of the Oscillating Flow Characteristics for High Frequency Regenerators](#)
- ❑ [Design and Test of a 80 K Miniature Pulse Tube Cryocooler](#)

Click on title for a paper.



# Papers by Author

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

- ❑ Characteristics of a Miniature Pulse Tube Cooler Driven by Thermoacoustic Standing Wave Engine
- ❑ Interference Characterization of Stirling-Type Nonmagnetic and Nonmetallic Pulse Tube Cryocoolers for High-Tc SQUIDs Operation

**Zhou Y.X.**

---

- ❑ Study on Electricity Generation Performance of Thermoelectric Device in Extreme Environmental Conditions
- ❑ A New Method for Uniformly Cooling Engineered Tissues

**Zhu G.**

---

- ❑ Optimization Analysis of Peakshaving Cycle to Liquefy the Natural Gas

**Zhu H. M.**

---

- ❑ Thermal Stress Analysis of Cryogenic Adhesive Joints for Non-Magnetic Dewar

Main Menu

Authors

Click on title for a paper.



# Papers by Author

Zhu L.

---

- ❑ High Precise Thermopower Measurement System and its Applying to Organic Conductors  $(\text{TMTSF})_2\text{ClO}_4$  in a Direction

Zhu W.X.

---

- ❑ Characteristics of a Miniature Pulse Tube Cooler Driven by Thermoacoustic Standing Wave Engine

Zhu Y. Q.

---

- ❑ Temperature Effects on Formation of a Uniform Layer of Isotopes Inside a Cryogenic ICF Target
- ❑ A Cryostat with Optics Windows for Study of ICF Cryogenics Target

Zhu Z.

---

- ❑ The Cryogenic System of BESIII in Preliminary Design
- ❑ The BESIII Detector Magnet
- ❑ Thermal Design of BESIII Magnet

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

Main Menu

Authors

Click on title for a paper.



# Papers by Author

Zhu Z.H.

---

- ❑ [Study of New Aerodynamic Foil Thrust Gas Bearing with Elastic Support for Cryogenic Turbo-Expander](#)

Zhu Z.Q.

---

- ❑ [Development of a Three-Phase HTS Power Transformer](#)

Zhuang C.

---

- ❑ [Property of Joint Resistance of Bi2223 Multi-Filament Tape by Using Sn-Pb Solder](#)

20th  
International  
Cryogenic  
Engineering  
Conference  
(ICEC 20)

[Main Menu](#)

[Authors](#)

Click on title for a paper.

