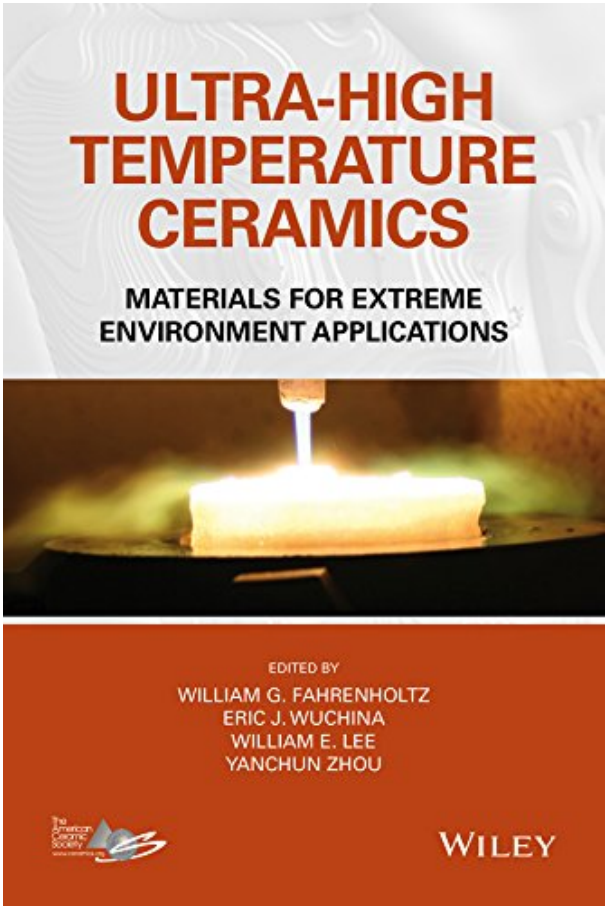
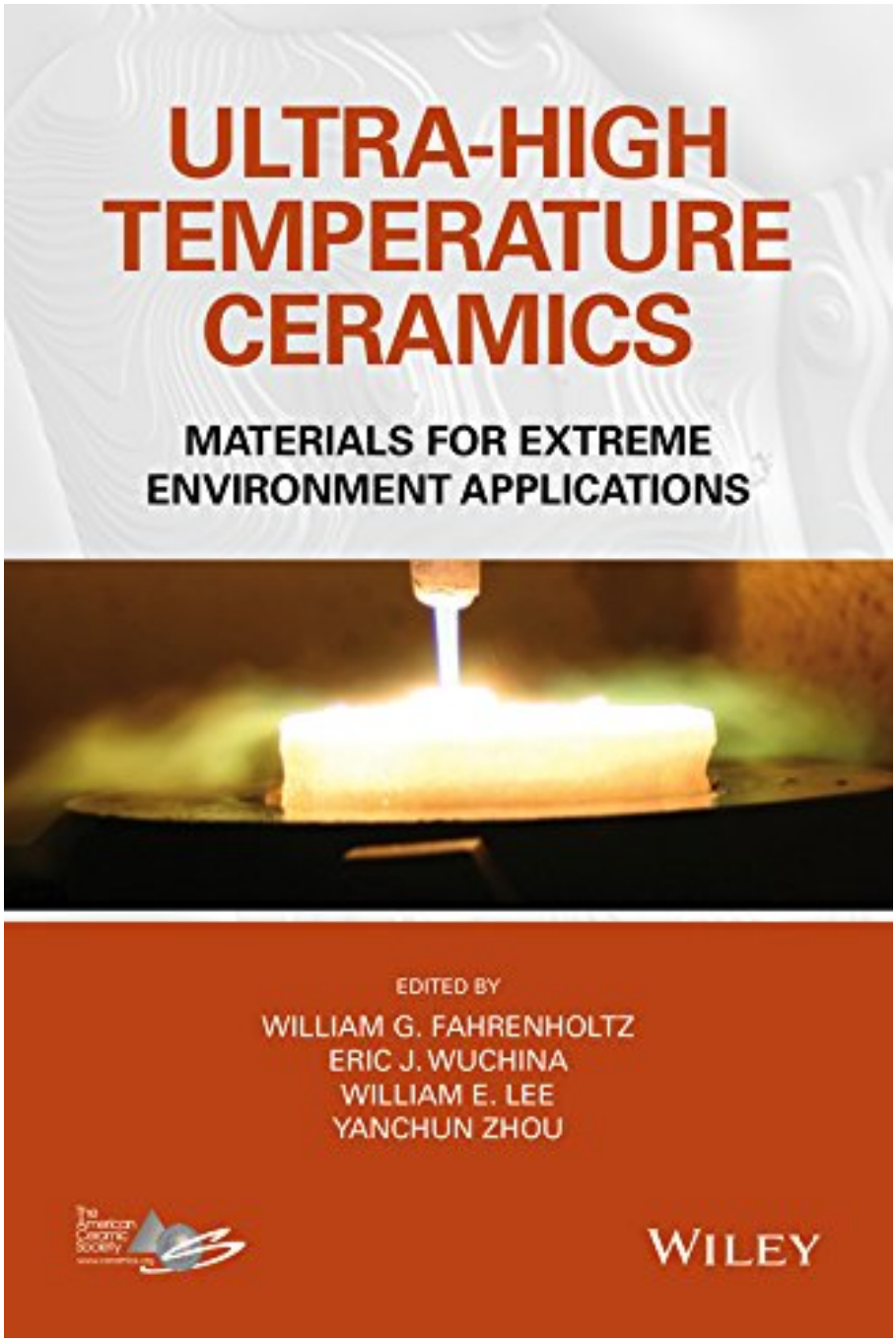
ULTRA-HIGH TEMPERATURE CERAMICS: MATERIALS FOR EXTREME ENVIRONMENT APPLICATIONS FROM WILEY-AMERICAN CERAMIC SOCIETY





ULTRA-HIGH TEMPERATURE CERAMICS: MATERIALS FOR EXTREME ENVIRONMENT APPLICATIONS FROM WILEY-AMERICAN CERAMIC SOCIETY PDF

From the mix of understanding as well as activities, someone could boost their skill as well as capability. It will certainly lead them to live and work better. This is why, the students, workers, and even companies should have reading behavior for books. Any kind of book Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society will give particular understanding to take all perks. This is what this Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society informs you. It will certainly include more expertise of you to life and function far better. Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society, Try it and also prove it.

From the Back Cover

The first comprehensive book to focus on ultra-high temperature ceramic materials in more than 20 years

Ultra-High Temperature Ceramics are a family of compounds that display an unusual combination of properties, including extremely high melting temperatures (>3000°C), high hardness, and good chemical stability and strength at high temperatures. Typical UHTC materials are the carbides, nitrides, and borides of transition metals, but the Group IV compounds (Ti, Zr, Hf) plus TaC are generally considered to be the main focus of research due to the superior melting temperatures and stable high-melting temperature oxide that forms in situ. Rather than focusing on the latest scientific results, Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications broadly and critically combines the historical aspects and the state-of-the-art on the processing, densification, properties, and performance of boride and carbide ceramics.

In reviewing the historic studies and recent progress in the field, Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications provides:

- Original reviews of research conducted in the 1960s and 70s
- Content on electronic structure, synthesis, powder processing, densification, property measurement, and characterization of boride and carbide ceramics.
- Emphasis on materials for hypersonic aerospace applications such as wing leading edges and propulsion components for vehicles traveling faster than Mach 5
- Information on materials used in the extreme environments associated with high speed cutting tools and nuclear power generation

Contributions are based on presentations by leading research groups at the conference "Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications II" held May 13-19, 2012 in Hernstein, Austria. Bringing together disparate researchers from academia, government, and industry in a singular forum, the meeting cultivated didactic discussions and efforts between bench researchers, designers and engineers in assaying results in a broader context and moving the technology forward toward near- and long-term use. This book is useful for furnace manufacturers, aerospace manufacturers that may be pursuing hypersonic technology, researchers studying any aspect of boride and carbide ceramics, and practitioners of high-temperature structural ceramics.

About the Author

William G. Fahrenholtz, PhD, is Professor of Ceramic Engineering in the Department of Materials Science and Engineering at the Missouri University of Science and Technology. He has authored or co-authored more than 100 publications in peer-reviewed journals and holds four U.S. patents.

Eric J. Wuchina, PhD, is currently a Senior Materials Research Engineer at the Naval Surface Warfare Center, Carderock Division and program officer in the Office of Naval Research with responsibility for ultra-high temperature materials. He has authored over 25 publications, 80 presentations (12 invited) and 4 patents.

Bill Lee, DPhil, is Professor of Ceramics, founding Director of the Centre for Advanced Structural Ceramics (CASC) and Director of the Centre for Nuclear Engineering at Imperial College London. He has over 350 publications, including 4 books for which he is lead or co-author, and has supervised 52 students to PhD completion.

Yanchun Zhou, PhD, is Deputy Director of advanced composite laboratory Aerospace Research Institute of Materials and Processing Technology. Dr. Zhou has authored or co-authored more than 300 publications in peer-reviewed journals, and holds 36 China patents.

ULTRA-HIGH TEMPERATURE CERAMICS: MATERIALS FOR EXTREME ENVIRONMENT APPLICATIONS FROM WILEY-AMERICAN CERAMIC SOCIETY PDF

Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society. Change your routine to put up or throw away the time to only talk with your pals. It is done by your everyday, don't you feel bored? Currently, we will show you the new practice that, actually it's an older routine to do that can make your life a lot more certified. When feeling burnt out of consistently chatting with your pals all free time, you could find the book qualify Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society and after that read it.

Obtaining guides *Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society* now is not kind of challenging means. You can not just choosing e-book shop or library or borrowing from your pals to review them. This is an extremely basic means to exactly get guide by online. This on-line e-book Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society could be among the options to accompany you when having leisure. It will certainly not squander your time. Believe me, the e-book will show you new thing to read. Merely spend little time to open this online book Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society and review them anywhere you are now.

Sooner you obtain guide Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society, earlier you can appreciate checking out guide. It will be your count on maintain downloading and install the book Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society in offered link. In this method, you can really decide that is worked in to obtain your very own publication on the internet. Here, be the very first to obtain the book qualified Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society and be the first to understand exactly how the writer indicates the message and expertise for you.

ULTRA-HIGH TEMPERATURE CERAMICS: MATERIALS FOR EXTREME ENVIRONMENT APPLICATIONS FROM WILEY-AMERICAN CERAMIC SOCIETY PDF

The first comprehensive book to focus on ultra-high temperature ceramic materials in more than 20 years

Ultra-High Temperature Ceramics are a family of compounds that display an unusual combination of properties, including extremely high melting temperatures (>3000°C), high hardness, and good chemical stability and strength at high temperatures. Typical UHTC materials are the carbides, nitrides, and borides of transition metals, but the Group IV compounds (Ti, Zr, Hf) plus TaC are generally considered to be the main focus of research due to the superior melting temperatures and stable high-melting temperature oxide that forms in situ. Rather than focusing on the latest scientific results, Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications broadly and critically combines the historical aspects and the state-of-the-art on the processing, densification, properties, and performance of boride and carbide ceramics.

In reviewing the historic studies and recent progress in the field, Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications provides:

- Original reviews of research conducted in the 1960s and 70s
- Content on electronic structure, synthesis, powder processing, densification, property measurement, and characterization of boride and carbide ceramics.
- Emphasis on materials for hypersonic aerospace applications such as wing leading edges and propulsion components for vehicles traveling faster than Mach 5
- Information on materials used in the extreme environments associated with high speed cutting tools and nuclear power generation

Contributions are based on presentations by leading research groups at the conference "Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications II" held May 13-19, 2012 in Hernstein, Austria. Bringing together disparate researchers from academia, government, and industry in a singular forum, the meeting cultivated didactic discussions and efforts between bench researchers, designers and engineers in assaying results in a broader context and moving the technology forward toward near- and long-term use. This book is useful for furnace manufacturers, aerospace manufacturers that may be pursuing hypersonic technology, researchers studying any aspect of boride and carbide ceramics, and practitioners of high-temperature structural ceramics.

- Sales Rank: #2510096 in Books
- Published on: 2014-11-03
- Original language: English
- Number of items: 1
- Dimensions: 9.55" h x 1.15" w x 6.40" l, .0 pounds

- Binding: Hardcover
- 456 pages

From the Back Cover

The first comprehensive book to focus on ultra-high temperature ceramic materials in more than 20 years

Ultra-High Temperature Ceramics are a family of compounds that display an unusual combination of properties, including extremely high melting temperatures (>3000°C), high hardness, and good chemical stability and strength at high temperatures. Typical UHTC materials are the carbides, nitrides, and borides of transition metals, but the Group IV compounds (Ti, Zr, Hf) plus TaC are generally considered to be the main focus of research due to the superior melting temperatures and stable high-melting temperature oxide that forms in situ. Rather than focusing on the latest scientific results, Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications broadly and critically combines the historical aspects and the state-of-the-art on the processing, densification, properties, and performance of boride and carbide ceramics.

In reviewing the historic studies and recent progress in the field, Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications provides:

- Original reviews of research conducted in the 1960s and 70s

- Content on electronic structure, synthesis, powder processing, densification, property measurement, and characterization of boride and carbide ceramics.

- Emphasis on materials for hypersonic aerospace applications such as wing leading edges and propulsion components for vehicles traveling faster than Mach 5

- Information on materials used in the extreme environments associated with high speed cutting tools and nuclear power generation

Contributions are based on presentations by leading research groups at the conference "Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications II" held May 13-19, 2012 in Hernstein, Austria. Bringing together disparate researchers from academia, government, and industry in a singular forum, the meeting cultivated didactic discussions and efforts between bench researchers, designers and engineers in assaying results in a broader context and moving the technology forward toward near- and long-term use. This book is useful for furnace manufacturers, aerospace manufacturers that may be pursuing hypersonic technology, researchers studying any aspect of boride and carbide ceramics, and practitioners of high-temperature structural ceramics.

About the Author

William G. Fahrenholtz, PhD, is Professor of Ceramic Engineering in the Department of Materials Science and Engineering at the Missouri University of Science and Technology. He has authored or co-authored more than 100 publications in peer-reviewed journals and holds four U.S. patents.

Eric J. Wuchina, PhD, is currently a Senior Materials Research Engineer at the Naval Surface Warfare Center, Carderock Division and program officer in the Office of Naval Research with responsibility for ultra-high temperature materials. He has authored over 25 publications, 80 presentations (12 invited) and 4 patents.

Bill Lee, DPhil, is Professor of Ceramics, founding Director of the Centre for Advanced Structural Ceramics (CASC) and Director of the Centre for Nuclear Engineering at Imperial College London. He has over 350 publications, including 4 books for which he is lead or co-author, and has supervised 52 students to PhD completion.

Yanchun Zhou, PhD, is Deputy Director of advanced composite laboratory Aerospace Research Institute of Materials and Processing Technology. Dr. Zhou has authored or co-authored more than 300 publications in peer-reviewed journals, and holds 36 China patents.

Most helpful customer reviews

See all customer reviews...

ULTRA-HIGH TEMPERATURE CERAMICS: MATERIALS FOR EXTREME ENVIRONMENT APPLICATIONS FROM WILEY-AMERICAN CERAMIC SOCIETY PDF

It will certainly believe when you are going to pick this book. This impressive **Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society** e-book can be reviewed completely in particular time depending on exactly how commonly you open up as well as review them. One to keep in mind is that every book has their own production to acquire by each visitor. So, be the good viewers and also be a better person after reading this publication Ultra-High Temperature Ceramics: Materials For Extreme Environment Applications From Wiley-American Ceramic Society

From the Back Cover

The first comprehensive book to focus on ultra-high temperature ceramic materials in more than 20 years

Ultra-High Temperature Ceramics are a family of compounds that display an unusual combination of properties, including extremely high melting temperatures (>3000°C), high hardness, and good chemical stability and strength at high temperatures. Typical UHTC materials are the carbides, nitrides, and borides of transition metals, but the Group IV compounds (Ti, Zr, Hf) plus TaC are generally considered to be the main focus of research due to the superior melting temperatures and stable high-melting temperature oxide that forms in situ. Rather than focusing on the latest scientific results, Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications broadly and critically combines the historical aspects and the state-of-the-art on the processing, densification, properties, and performance of boride and carbide ceramics.

In reviewing the historic studies and recent progress in the field, Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications provides:

- Original reviews of research conducted in the 1960s and 70s
- Content on electronic structure, synthesis, powder processing, densification, property measurement, and characterization of boride and carbide ceramics.
- Emphasis on materials for hypersonic aerospace applications such as wing leading edges and propulsion components for vehicles traveling faster than Mach 5
- Information on materials used in the extreme environments associated with high speed cutting tools and nuclear power generation

Contributions are based on presentations by leading research groups at the conference "Ultra-High Temperature Ceramics: Materials for Extreme Environment Applications II" held May 13-19, 2012 in Hernstein, Austria. Bringing together disparate researchers from academia, government, and industry in a singular forum, the meeting cultivated didactic discussions and efforts between bench researchers, designers and engineers in assaying results in a broader context and moving the technology forward toward near- and long-term use. This book is useful for furnace manufacturers, aerospace manufacturers that may be pursuing

hypersonic technology, researchers studying any aspect of boride and carbide ceramics, and practitioners of high-temperature structural ceramics.

About the Author

William G. Fahrenholtz, PhD, is Professor of Ceramic Engineering in the Department of Materials Science and Engineering at the Missouri University of Science and Technology. He has authored or co-authored more than 100 publications in peer-reviewed journals and holds four U.S. patents.

Eric J. Wuchina, PhD, is currently a Senior Materials Research Engineer at the Naval Surface Warfare Center, Carderock Division and program officer in the Office of Naval Research with responsibility for ultra-high temperature materials. He has authored over 25 publications, 80 presentations (12 invited) and 4 patents.

Bill Lee, DPhil, is Professor of Ceramics, founding Director of the Centre for Advanced Structural Ceramics (CASC) and Director of the Centre for Nuclear Engineering at Imperial College London. He has over 350 publications, including 4 books for which he is lead or co-author, and has supervised 52 students to PhD completion.

Yanchun Zhou, PhD, is Deputy Director of advanced composite laboratory Aerospace Research Institute of Materials and Processing Technology. Dr. Zhou has authored or co-authored more than 300 publications in peer-reviewed journals, and holds 36 China patents.