

Category	Title Author
Advances in Manufacturing, Installation and Equipment	Study on Explosion Resistance of Dense Refractory Castables with Different Bonding Systems Zhanmin Wang *, Xiyang Cao, Xujing Yang, Lingyan Yu, Jianjun Chen
	Preparation of Masses for Isostatic Pressed Products for Steel Casting by Using the Original Eirich Preparation Technology Ralf Loebe*, Stefan Vucic
Basic Science	The Compressive Strength of Sintered Alumina by Molecular Dynamics Simulation Yosuke Kataoka*, Kiyoshi Goto, Hironori Ogata, Yusuke Moriyoshi
	Phase Formation of Y₂O₃ Nano-size Powders through Rapid Cooling Process Takamasa Ishigaki*, Sharif Abdullah Al-Mamun
	Rheological Behavior of Organic Binders for Blast Furnace Taphole Clay Shougo Miyajima*
	Mechanical Properties of In-situ Calcium Hexaluminate Castables with Difference Microstructure Jiraprabha Khajornboon*, Kouichiro Washijima, Takeshi Shiono
	Influence of Magnesium Aluminate Spinel on the Thermomechanical Properties of Alumina-Spinel Castables Karina Tyrala, Jakub Ramult, Ryszard Prorok, Dominika Madej*
	Experimental Study and Thermodynamic Modeling of Li₂O-Al₂O₃-ZrO₂ System Xintong Du, Sun Yong Kwon, In-Ho Jung*
	Microstructure and Grain Growth of Mullite by Reaction Sintering of α-Alumina with Rhyolite Toru Fukuoka*, Yoshiyuki Harada, Aya Okubo, Yusuke Moriyoshi, Kenji Tamura, Yujiro Watanabe
	Effect of K₂O Addition on Formation of Tridymite Phase from Quartz Tomoko Kitani*, Takayuki Sano, Takeshi Shiono
	Thermal Changes of Mullite Based Castable Heated in Hydrogen Atmosphere Shuya Shiomi*, Nobuyuki Takeuchi, Yasuhiro Ohba
	Numerical Modeling of Wedge Splitting Test by Discrete Element Approach: Flat Joint Contact Model Farid Asadi*, Damien Andre, Sacha Emam, Pascal Doumalin, Marc Huger
	Effect of Sodium Polyphosphate Addition on Alumina-Spinel Castable Expansion Kosuke Ota*, Kazuya Nakabo, Shigefumi Nishida
	Thermodynamic Approach on Continuous Growth of Spinel between Slag and Solid MgO and MgAl₂O₄ Cheol Min Yoon*, Dong Joon Min
	Aging Behaviour of Deflocculated Low Cement and Self-Flow Castables - Influence of Materials, Additives and Atmospheric Conditions C. J. Dileep Kumar*, Gaurav Sinha, Shushavon Sarkar, Suparna Basu, Saumen Sinha, Santanu Basak
	Influence of Al₂O₃ Content on Microstructure and Mechanical Properties of Al₂O₃-MgO Castables Kouichiro Washijima*, Kaname Hayashi, Jiraprabha Khajornboon, Takeshi Shiono
	Separation and Recovery of Gallium Oxide from Discarded Led Device by Thermal Reduction and Oxidation Using Spouted Bed Takaya Akashi*, Yuka Sakai
	Microstructure and Mechanical Properties of Lightweighting Magnesite Refractories Containing Porous Aggregates Wen Yan*, Guiyuan Wu, Guangqiang Li, Nan Li
Effect of Catalysts on Microstructure and Thermo-mechanical Properties of Al₂O₃-C Refractories Chaofan Yin*, Xiangcheng Li, Chen Bai, Wei Gong, Pingan Chen, Boquan Zhu	

Category	Title Author
Collaboration among Customers, Manufactures and Academia	Earlier Sintering of High-alumina Refractory Castables by Using Alternative Calcium Sources A. P. Luz*, L.B. Consoni, C. Pagliosa, V. C. Pandolfelli
	Refractory without Carbon for the Production of Ultra-low Carbon Steels Loise Bonfim Zaidan*, Carlos Pagliosa, Adao Adelcio Campos, Robson Arnaldo Dettogne Nascimento, Marlon Jose dos Anjos Silva, Marcio Jose Verissimo
	Benefits of the Addition of a Structural Insulation Layer in the Refractory Lining of Rotary Kiln: Thermomechanical Modeling and In-plant Results Dan Cole, Eric Stover, Shengli Jin, Lionel Rebouillat*
	Interactions of Steel Ladle Refractories with Ladle Slags in Atmospheric and Lowered Pressures Eetu-Pekka Heikkinen*, Jukka Vatanen, Miika Sihvonen, Heikki Parkka, Henna Tahtila, Riku Mattila, and Timo Fabritius
	Practical Numerical Simulation and Experimental Setup for Speeding up the Drying Behavior of Calcium Aluminate Cement (CAC)-bonded Refractory Castables M. H. Moreira*, A. P. Luz, T. M. Cunha, H. Lemaistre, J. M. Auvray, C. Parr, R. Ausas, V. C. Pandolfelli
	Refractory Lifetime Prognosis for RH Degassers Andreas Viertauer, Nikolaus Mutsam, Franz Pernkopf, Andreas Gantner, Georg Grimm, Waltraud Winkler, Gregor Lammer, Alexander Ratz, Magnus Persson
	Comparison of Cement- and Hydratable Alumina-bonded Alumina-Spinel Materials for Steel Ladle Purging Plugs Bin Long*
	Discrete Element Modeling - A Promising Method for Refractory Application M. G. G. Campos*, M. F. Santos, M. H. Moreira, R. A. Angelico, P. van Beurden, P. Put, P. Tamis, V. C. Pandolfelli, S. Sinnema
	Corrosion Behavior of a Pressure Slip Casted Spider Brick During Ingot Casting Nora Gerlac, Patrick Gehre*, Christos G. Aneziris, Leandro Schottler
	Koblenz University of Applied Science, Department of Materials Engineering, Glass and Ceramics Launched a Praxis-integrated Bachelor-degree Programme O. Krause*, B. Schwarz
New Anti-oxidation Technology for Trough and Runners Castables, Part II: Hot Adhesion Material and the Successful Results at CSN Blast-Furnace #02 E. Y. Sako*, W. Alves, F. P. Netto, N. Januario, D. F. Galesi, G. A. Alves, H. Fujiwara, T. Komatsu, L. A. Nascimento, P. R. Fusco	
Energy Saving and Insulation	Calcium Hexaluminate Lightweight Refractory Bricks: Manufacturing, Properties, Application Ph.D. Valery V. Martynenko*, Dr. Sc. Vladimir V. Primachenko, Ph.D. Nataliya M. Kaznacheeva
	Development of Al₂O₃-CAC Refractory Macroporous Ceramics Derived from Ultrastable Foams and CAC Aqueous Suspensions T. Santos Junior*, O. H. Borges, V.V.S. Machado, V.R. Salvini, C. Parr, V.C. Pandolfelli
	Impact of Distinct Ca²⁺ Sources on the Physical Properties of Alumina-based Macroporous Refractories for Thermal Insulation at High Temperature O. H. Borges*, T. Santos Jr., R. R. B. de Oliveira, V. R. Salvini, V. C. Pandolfelli
	Novel Innovative High Temperature Insulating Material Damping Capacity Based on Acoustic Emission Algorithms Based on Renewable Raw Material Dr. Volker Stein*, Dr. Thomas Schemmel, Dr. Petra Stein
	High Temperature Ceramic Coatings for Energy Saving Applications Eric Y. Sako*, Heloisa D. Orsolini, M. Moreira, V. C. Pandolfelli
	High Emissivity Coatings for Basic Refractory Bricks Jindaporn Juthapakdeeprasert*, Wirat Lerdprom, Domingos De Sousa Meneses, Doni D. Jayaseelan, William E Lee
	Improvement of High Temperature Properties of Ceramic Fiber Board Using Silica-sol Slurry with Ceramic Powders Naoya Takahashi*, Shinobu Hashimoto, Yusuke Daiko, Sawao Honda, Yuji Iwamoto
	Effect of a Ceramic Coating on the Heat Loss Through the Refractory Walls and on the Hot Refractory Surface Stability of a Ceramic Roller Kiln R. Simmat, C. Dannert, S. Otto, V. Finke, A. Mezquita, S. Ferrer, I. Celades, L. Guaita
	Eco Design of Insulating Ceramic Foams for High Temperature Application V. R. Salvini*, V. C. Pandolfelli, J. A. Rodrigues, T. Santos Jr., O. H. Borges, J. R. Binoto
	Reduction of Heat Loss in Steelmaking Process Yoshiyuki Nakamura*, Seiji Hosohara, Akihiko Inoue, Kai Taniguchi, Katsunori Takahashi
	Study on Preparation and Properties of Calcium Hexaaluminate Porous Ceramics Wang Gang*, Zhang Qi, Han Jianshen, Yuan Bo, Li Hongxia
	Development of Insulating Firebrick Through a Gelation Freezing Method Mikako Fujii*, Ayumi Matsuoka, Yosuke Tanaka, Fumihito Ozeki, Manabu Fukushima, Yuichi Yoshizawa
	Macroporous Insulation Materials with High Heat Resistance Takeshi Miyake*, Yasuo Shiraishi, Toshiaki Hashimoto
Characterization of Wool and Product Made by Alkaline Earth Silicate Yusuke Kishigawa*, Yasuo Shiraishi, Toshiaki Hashimoto	

Category	Title Author
Energy Saving and Insulation	Influence of Temperature on the Phase and Microstructural Evolutions of Mullite in a Reducing Atmosphere Ruofei Xiang*, Yuanbing Li, Zhengliang Xue, Zhiyong He
	Optimization of Porous Alumina Ceramic Structure and Properties Using Different Sol-treated Walnut Shells as Pore Formers Shujing Li*, ZhiPeng Wei, Yuanbing Li, Ruofei Xiang, Qingye Wu
Environmental Sustainability and Recycling	Recycled Raw Materials in Refractory Castables - Part 1 of 3: Water Soluble Ions from Recycled Refractory Raw Materials in Alkaline Solution Johannes Kasper*, Christian Dannert, Alexandra Koch, Olaf Krause
	Recycled Raw Materials in Refractory Castables - Part 2/3: Influence of Water Soluble Ions From Recycled Refractory Raw Materials on the Dispersion and Coagulation of the Matrix Suspension of CAC-Bonded Refractory Castables Johannes Kasper*, Christian Dannert, Alexandra Koch, Olaf Krause
	Recycled Raw Materials in Refractory Castables - Part 3/3: Influence of Water-soluble Ions from Recycled Refractory Raw Materials on the Coagulation and Hydration Velocity of CAC-bonded Refractory Castables Alexandra Koch*, Olaf Krause, Johannes Kasper, Christian Dannert
High Temperature Engineering Ceramics	Low Temperature Synthesis of α-Si₃N₄ Powders via High-energy Ball Milling Combined with Salt-assisted Nitridation Li Hongxia*, Liu Guoqi, Zhang Jing, Gu Qiang
	Spark Plasma Sintering of Aluminum Nitride Ceramics Toshiyuki Nishimura*
	Residual Strain in the Composites of Oxygen Ionic Conductors and Oxides Ryosuke Kuwabara, Keiji Yashiro, Takashi Nakamura, Fumitada Iguchi*
	Improvement in Corrosion Resistance of Silicon Nitride / Boron Nitride Composite Ceramics and Application to Atomizing Spray Nozzle Nobuhiro Otsuka, Atsushi Makiya
	3-dimensional Observation of Coarse Pore Evolution During Sintering in Alumina Ceramics Satoshi Tanaka*, Tsuyoshi Hondo
	Microstructure and Phase Evolution of Corundum-Spinel Based Castables Containing Nano Phases Xiangcheng Li*, Hui Zhu, Pingan Chen, Chen Bai, Boquan Zhu
Industrial Refractories Applications	Monolithic Basic Unshaped Materials for the Steel Industry Patrick Tassot *, Thomas Schemmel
	Characteristics of Zirconia Refractories for High Temperature Melting AKM Aziz Ahamed*, Kouichi Ando, Takashi Hori
	Countermeasure for Reduction of Boron in Cast Iron for Refractories of Channel Induction Furnaces Yoshihiro Teraura*, Hiroyuki Suzuki, Atsuhito Naka, Toshikazu Nagai, Dr.Yuechu Ma
	Phase Transition and Microstructural Evaluation of Aluminosilicate Refractories Used in Anode Baking Furnaces - A Case Study J. P. Nayak*, B. Ghosh, A. K. Samanta, K.C. Khan, K. Tsuyuguchi, P. B. Panda, A. Patra
	Improvement in Refractory Lining Life of Rotary Kiln for Iron Ore Pelletizing Elias Tiburcio*, Mohammed Khan, Alexandre Loyola, Marcus Fernandis
	Refractories for Fluidized Bed Alumina Calciners: Planned Selection, Testing and Implementation to Improve the Materials' Performance M. A. L. Braulio*, J. R. Cunha, A. J. Maxwell, D. Whiteman, V. C. Pandolfelli
	Refractory Management Program for Smelting Furnaces Mitchell Henstock, Afshin Sadri*, Winnie Ying
New Development	Design of Hydratable Alumina-bonded Castables with Optimized Drying Behavior A. P. Luz*, B. P. Bezerra, M. H. Moreira, V. C. Pandolfelli
	The Application of Ti-Max Phase in Low Carbon Refractories and Elucidating Its Related Role Junfeng Chen*, Nan Li, Yaowu Wei, Shaowei Zhang
	Slag Resistance of No-Cement Refractory Castables Hong Peng*, Jun Liu, Qinghu Wang, Bjorn Myhre, Yawei Li
	Development and Application of Advanced Refractory Systems for Improved Mechanical and Corrosion Resistance James G. Hemrick*
	Splintered Versus Cubic Grains in High Alumina Castables - Part II: Influence of Aggregate Shapes on Thermomechanical and Microstructural Changes During the Initial Heat-up Sandra Abdelouhab, Pascal Pilate*, Erwan Brochen, Christian Dannert
	High Temperature Low Bio-persistence Fiber with FeO Resistance Tsuyoshi Maeda*, Kenji Komatsu
	Splintered Versus Cubic Grains in High Alumina Castables - Part III: Assessment of the Failure Tendency in the Wear Lining of a Modelled Steel Ladle Using the Drucker-Prager Failure Criterion Erwan Brochen*, Maren Sollbach, Christian Dannert, Olaf Krause, Laura Erbar, Sandra Abdelouhab, Pascal Pilate
Assessment of a New Magnesia-based Binder Concept for Refractory Castables Christoph Wohrmeyer *, Frederic Lacoue, Lauri Thomas, Magali Szepezdyn, Chris Parr	

Category	Title Author
New Development	Splintered versus Cubic Grains in High Alumina Castables - Part I: Examination of the Impact of the Particle Shape on the Explosion Resistance Laura Erbar*, Olaf Krause, Tobias Steffen, Erwan Brochen, Christian Dannert
	Reinforcement of the Support Structure for Ceramic Fiber Blocks in a Reheat Furnace Takuya Matsumoto*, Motokuni Itakusu, Hiroshi Imagawa
	Towards a New Generation of Dry Vibrating Materials Dedicated to Coreless Induction Furnace : A Boron Free Solution Romain Techer*, Dirk Holl, Patrick Malkmus
Raw Materials	Refractory Raw Materials - Current Trends and Prospects to 2024 Kerry Satterthwaite*
	Influence of CA₂ Lightweight Raw Materials on Properties of Corundum-based Castables with TiO₂ Additions Danyang Zhang, Chunxue Li, Jianying Gao, Bruno Touzo, Wenjie Yuan*
	A New Approach to Improve the Sintering of Cr₂O₃ with a Controllable Grain Size Hang Ye, Suzhe Yao, Enhui Wang, Enxia Xu, Xinmei Hou*, Kuochih Chou
	Synthesis of Aluminum Silicon Carbide Particles by Using Carbonized Natural Ligneous Sources Hatsuo Taira, Tomoyuki Maeda*, Tomohiro Nishikawa, Yasuhiro Hoshiyama, Shigeki Uchida
	Fabrication of the Highly Porous Alumina Aggregate by High-temperature Evaporation of Na₂O-B₂O₃-SiO₂ Glass Flux and Its Application to Castable Materials Daimu Muto*, Shinobu Hashimoto, Sawao Honda, Yusuke Daiko
	Effect of Preheating Temperature of Andalusite Aggregate on the Properties of Mullite-based Refractory Qingfeng Wang*, Xianhui Li, Guihua Liao, Gan Shi, Huimin Liu, Xiaoyu Wang, Guotian Ye
	Low Temperature Decarbonation of LimesTone under Vacuum Yuki Mihashi*, Akihiko Shibuya, Tetsuo Umegaki, Yoshiyuki Kojima
	Research and Application of Microcrystalline Magnesite in China's Tibet Runtang Feng*, Baikuan Liu, Xiaoli Tian, Zhenxin Gao, Tianqing Li, Zhixun Li
	New Alternatives in the Manufacturing of Sintered 70%-Alumina Cement Andre Luis Pereira, Milli Aline Sant'Anna, Leonardo Curimbaba Ferreira*, Peter Miura Nakachima
	Corrosion Modeling of the Magnesia Aggregates in Contact with Molten Slags Wenxuan Zhang, Ao Huang*, Yongshun Zou, Huazhi Gu, Lvping Fu
	Mullitisation and Dryout Behaviour of Sol-gel Based Bauxite and Andalusite NCCs with Sillimanite/Kyanite T. Leber*, T. Tonnesen, R. Telle
	Performance of a New Aluminate Binder Adapted to Dry Gunning Bruno Touzo*, Simon Gao, Christoph Wohrmeyer, Chris Parr
	Relationship between Chemical Composition of Synthetic Dead Burned Magnesia Used as Raw Material of Shaped Refractories and Corrosion of Shaped Bricks by Alkali Sulfate Naoto Nishida*, Ikuya Umemoto, Takashi Arase, Akira Yoshida, Yuuzou Katou
Evaluation of Acheson Silicon Carbide for High Demanding Oxidation Resistance Environments Felipe Semeghin*, Daniel Moreira, Vinicius Borges, Daniel Vale	
The Changing Behaviors of Microstructure Morphologies According to Different Viscous Carbon Source Jae-Eun Kim, Sang-Ahm Lee, Jae-Il Jung*, Jens Stiegert, Christoph Jacob	
Refractories for Glass and Cement Production	Energy Saving Design with High Thermal Resisting and Insulating Monolithic Refractory around Glass Furnace Toshiro Tanimoto*
	Hybrid Spinel Technology - Basic Refractories for Cement Rotary Kiln Linings with Optimised Flexibility M. Geith*, S. Jörg, R. Krischanitz
	Basic Refractories Enabling Ecological Cement and Lime Production under Difficult Conditions Hans-Jurgen Klischat, Holger Wirsing*
	Cement-free Refractory Concretes with Balanced Thermomechanical Properties in Highly Loaded Areas of the Cement Clinker Burning Process Hans-Jurgen Klischat, Kai Beimdiek*
	Improvement of Magnesia-Spinel Bricks in Each Zone of Cement Rotary Kiln Tsuoyoshi Suwa, Yoshihiro Toda, Koichi Igabo, Tamiatsu Koyake
	Effect of Minor Components on the Properties of Magnesia-Spinel Brick for Cement Rotary Kilns Hitoshi Toda, Mikako Fujii, Makoto Ohno,
	Influence of Glassy Phase Composition on Glass Exudation of AZS Fused Cast Refractories Kuniyuki Yanagawa*, Toshiro Tanimoto, Kenji Matano
	Formation of Bubbles at the Interface between Borosilicate Glass and Dense Zircon Refractory Hiroki Akahane*, Takeshi Shiono
	Bonded High-zirconia Refractories for Glass M. D. Patil*, M. J. Dejneka, J. S. Sutherl, A. Zellet-Lukaso

Title and Author Table

Presentation List (Tentative)

Category	Title Author
Refractories for Iron and Steel	Wear Behavior of BN Composite Refractories in Steelmaking Process Oh Seong Kweon*, Young Ju Lee, Yun Ki Byeun, Dong Su Kang
Refractories for Iron and Steel Making - BOF	Improvement of Tolerance of Converter by Improving Material of MHP Hideya Masaki*, Satoru Shimizu, Atsuhisa Iida
	Investigation of MHP Wear Pattern and Advanced MHP Refractory for BOF Gaku Shimada*, Masayoshi Kakahara, Ryoma Fujiyoshi, Hiroki Yoshioka, and Atsuhisa Iida
	Technical Follow-up of BOF MgO-C Supplies: Quality Controls of Refractories and Analysis of Process Parameters Tiphaine Cordonnier*, Valerie Blaise, Guillaume Brosse
	Reduction of Refractory Repair Materials Used in the BOF Converter Shigeto Sawai*, Koji Yamada, Yasuhiro Yamada
	Improved Mechanical Properties and Thermal Shock Resistance of Low Carbon MgO-C Refractories via the Catalytic Formation of Nanocarbons and Ceramic Bonding Phases Tianbin Zhu*, Yawei Li, Shaobai Sang
	MgO-C Bricks for BOF's: Challenges from the Past and Perspectives for the Future Carlos Pagliosa*, Tom Vert
	Development of Innovative Basic Gunning Mixes and Methods to Determine Their Practical Performance Ronald Lanzenberger*, David Wappel, RHI Magnesita GmbH, Technology Center Leoben, Austria
	Improvement of MgO-C Bricks for the Charging Sidewall of the BOF in Kashima Steel Works Kensuke Kato*, Satoru Ito
Refractories for Iron and Steel Making - Coke Ovens and Blast Furnace	Development of Taphole Clay with New Generation Resin Binder Yuji Otsubo*, Yoshinobu Ushijima, Koji Yonemoto, Yutaka Kitazawa
	Application of Silica-Sol for Trough Castables Containing Spinel Ryusuke Funakoshi*, Yasuhiro Oba
	The Roles of Matrix Aluminas on the Properties of Blast Furnace Trough Castables A. K. Samanta*, R. Swain, A. Tripathi, T. Matsunaga, K. Tsuyuguchi, P. B. Panda, Shanka Chatterjee
	Behavior of Fe-Si₃N₄ in Taphole Mix Texture after Long-time Heating Yuga Yamamoto*, Daisuke Tanaka, Tatsuya Kageyama
	Influence of Carbon Raw Materials on Characteristics of Blast Furnace Trough Slag Line Castable after Thermal Cycle Tsuneyuki Iikuni*, Daisuke Tanaka, Masatsugu Kitamura
	High Performance Tap Hole Clay - A Key for Blast-Furnace Hearth Protection and a Tool for Cost Reduction E. Y. Sako*, D. C. F. Hespanhol, A. M. Souza, N. Janeiro, D. F. Galesi, D. Tanaka, T. Kageyama
	Effort to Prevent Cracks by Changing the Runner Structure at the Tip of Iron Runner Tatsuya Nakagawa*, Toshio Komatsu
	Enhancing Thermal Conductivity of Anthracite-based Carbon Blocks for Blast Furnace Yawei Li*, Tongsheng Wang, Shaobai Sang
	Use of High Durability Carbon Blocks for Blast Furnace Bottom Lining Shohsei Miyamoto*, Keisuke Hatakeyama, Michio Nitta
	Investigation of Main Trough ML Castable Wear Rate under Different Temperature Conditions Yoshihisa Morimoto*, Kosuke Yasuo
	Newly Developed Low Cement and Cement-free Castables Based on Silica Lucie Kersnerova*, Karel Lang, Stanislav Dvorak
	The Influence of Crystallisation on Thermal Shock Behaviour of a Fused Silica Refractory Castable Concrete Vahid Tadaion*, Kirill Andreev, Thorsten Tonnesen, Rainer Telle
	Development of High-performance Eco-friendly Tap-hole Clay(THC) with Carbonized Organic Matter Tae-Wan Kim*, Jae-Hoon Lee, Jin-Seog Go, Won-Gab Kim
	A Thermodynamic Understanding of Alkali Oxide Accretion on the Castable Refractories in Ironmaking Dong-Geun Kim, In-Ho Jung*
	Behaviour of Tap-hole Clays Against Slag Corrosion: A Key to assure Safe and Regular Emptying of Blast Furnaces P.Hubert*, N.Eliazord, B. Buchberger

Category	Title Author
Refractories for Iron and Steel Making - Hot Metal Transport	Development of Refractories for Torpedo Ladles Ricardo Couto*, Braulo Hemetrio, Roselaine Magalhaes, Marco Antonio Quintela
	Performance Optimization of Torpedo Ladles Through Innovative Product Development and Design Prof. Dr. Helge Jansen, Dr. Thomas Schemmel*, Dr. Ujjwal Sengupta
	Improvement of the Lance Refractories for Desiliconization of Molten Iron in Torpedo Cars Masato Shiokawa*, Kunihiko Watanabe
	Improvement of Steel Productivity in Consolidating Upstream Processes Into Kakogawa Works Koichiro Takeno*, Kazumasa Adachi, Hitoshi Sawada, Norio Sakaguchi, Atsuhiko Yoshida
	Improvements of Hot Metal Ladle Refractory Material and Design in Order to Reduce Specific Consumption, Increase Ladle Availability and Reduce Operational Cost Daniele Fonseca de Lima*, Sandro Souza Santos, Odair Jose Kirmse, Camila B Albani, Katia C F
	On the Thermal Management of Torpedo Ladle Car Logistics at Tata Steel in Ijmuiden Paul van Beurden*, Joeri Liefhebber, Peter Sentveld, Frank Kerkhoven
Refractories for Iron and Steel Making - Ladle and Secondary Refining	Vibrational Determination of Gas Purging Regime and Efficiency in a Water Model and Validation by a High-speed Camera Bernd Trummer*, Christian Manhart, Wolfgang Fellner
	Indigenously Developed Mag Dolo Refractory for Steel Ladles as an Alternate to Imported Mag-C - A Risk Mitigation Strategy Kshitish Kumar Jena, Amit Banerjee, Navneet Sinha, Brijender Singh*, Subir Biswas, Sudhansu Pathak
	Global and Indian Perspectives of Alumina-Spinel Lining Concepts in a Steel Ladle Andreas Buhr*
	Development of New Optimized Material for Lower Vessel of RH Degasser Hisashi Tomiya*, Koichi Igabo, Kentaro Hirayama
	Improvement in Steel Ladle Life at LD# Shop 1...Hitting a Century Navneet Sinha*, Sudhansu Pathak, Brijender Singh, Rajeev Ranjan, Amit Banerjee
	Melting Phase Formation in MgO-CMA-C and Their Impact on Protective Slag Layer Formation for Steel Ladle Application Patrick Gehre*, Theresia Preisker, Stefan Guhl, Nora Brachhold, Gert Schmidt, Christos G. Aneziris, Christoph Wohrmeyer, Christopher Parr
	Influence of Submicron-Size α-Al₂O₃ Powders on Slag Resistance of Corundum-Spinel Bricks in Ladle Metal Zone Tianqing Li, Qixiu Zuo, Jie Gao, Houxing Zhang, Baikuan Liu
	Study on Corrosion Mechanism of Spinel-containing Alumina Castables with Different Types of Slag Dominika Madej*, Klaudia Wisniewska, Jakub Ramult, Karina Tyralla, Ryszard Prorok
	Development of Burnt Alumina-Magnesia-Spinel Brick for Steel Ladle Lining S.K.Hazra*, Avishek Mitra, Birendra Prasad, Ingo Gruber, Shankha Chatterjee
	Development of Injection Lance in BOF Slag Modification Technique Jyun Yi Wu*, Li-Te William Chao
	Evaluation of Reduction Resistant Magnesia Chrome Bricks Kenji Tamaki*, Kiyoshi Goto, Katsumi Morikawa
	Matrix Engineered ULC High Alumina-Spinel Castable Developments for Steelmaking Applications Vladnilson Peter S. Ramos*, Eric Y. Sako, Silvio C. Frasson, Douglas F. Galesi, Haysler A. A. Lima
	Bonding Mechanisms of Basic Refractories for RH Snorkels Zongqi Guo*, Ying Ma
	Development of Improved Castable in Al₂O₃-MgAl₂O₄-Cr₂O₃ System for Different Application Manidip Jana*, Arup Kumar Samanta, Yasuaki Shin, Takashi Matsunaga, Priyabrata Panda
	Thermal Properties Characterization of Refractory Materials Used in the Insulation Layer of Steel Ladles Diana Vitiello*, David Smith, Benoit Nait-Ali, Nicolas Tessier-Doyen, Thorsten Tonnessen, Luis Laim, Lionel Rebouillat
	Improvement in Refractory Life of Smelting Reduction Furnace Kengo Matsuda*, Koichi Takahashi, Daisuke Kondo, Sohei Takagaki, Keisuke Adachi, Masanori Nishikori
New High-Grade Refractory Castable Applied to RH Degasser Snorkels Daniela Fonseca*, Arthur Mangualde, Mauro Verona, Modestino Brito	
Improvement of MgO-Al₂O₃-C Brick for Ladle Bottom and Metal Zone Keisuke Morita*, Tomoyuki Terasaka, Seiichi Takada, Masayuki Egami, Manabu Kimura	

Category	Title Author
Refractories for Iron and Steel Making - Ladle and Secondary Refining	Improvement of the Refractory Lining Life of Steel Ladle Yutaro Iio*, Hiroki Tsukigase, Satoru Ito, Mitsuo Satoh
	Novel Tempered MgO-Cr₂O₃ Bricks with Zero C Binder for RH Degasser Carlos Pagliosa*, Adão Campos, Barbara Borges, Vanderlucio Madalena, Victor Carlos Pandolfelli
	Thermomechanical Behaviour of an Alumina Spinel Refractory for Steel Ladle Applications Robert Kaczmarek*, Jean-Christophe Dupre, Pascal Doumalin, Ion Octavian Pop, Lucas Breder-Teixeira, Jean Gillibert, Eric Blond, Marc Huger
	Development of High Creep MgO-C Brick at High Temperature Kentaro Hirayama*, Atsuhisa Iida, Masakazu Iida, Hisashi Tomiya, Kazuhiro Inoue, Koyo Murakami
	Comparison of Operational Properties of Various Types of Purging Plugs for Steel Ladles Zbigniew Czapka*, Zak.ady Magnezytowe
	Comparing the Corrosion Resistance of Permanent Lining Refractories for Steel Ladles Shiori Kimura*, Yushi Tsutsui, Yuichi Kato, Takayuki Inuzuka
	Evaluation Method of Porous Plug Durability Simulating Actual Condition Kazunobu Ogata*, Takahiro Kago, Koji Matsumura
	Impact of Composition Changes of Alumina-rich Slags on the Corrosion of Refractories Found in Steel Ladles Camille Reynaert*, Edyta Sniezek, Thorsten Tonnesen, Jacek Szczerba
	Thermal Shock Resistance of Fired Corundum-Spinel Brick and Spinel-Containing LCC S. Darban*, R. Prorok, D. Madej, J. Szczerba
	C-free Refractory for Reducing the Steel Ladle Energy Consumption: Numerical Analysis and In-situ Measurements M. F. Santos*, M. H. Moreira, M. G. G. Campos, R. A. Angelico, E. Y. Sako, V. P. S. Ramos, D. F. Galesi, V. C. Pandolfelli
	Forecasting of the Wear of Selected Refractory Material of the MgO-C Type in the Slag Zone of a Steel Ladle Using Dimensional Analysis Wies.aw Zelik*, Zak.ady Magnezytowe
	An Industrial Study of the Change in Behaviour of Microporous Insulation in Teeming Ladles Liam Cotton*, Dr. Shahin Mehraban, Dr. Ria Mitchell, Dr. Tom Dunlop, Mark Griffiths, Dr Zakaria Abdallah, Prof. Cameron Pleydell-Pearce, John Madill, Dr Szymon Kubal
	Improvement of Refractory Lifetime for RH Degasser Sanghyeon Yoon*, Chang-su Ha
	Cracking Behavior on Throat Refractory of RH Degasser Yong M Lee*, Alan Sutliff, Xin Zhang
Refractories for Iron and Steel Making -Continuous Casting	Reactivity of Metallic Additives and Their Influence on the Key Thermomechanical Properties of Steel Flow Control Refractories Andrzej Warcha*, Damien Andre, Duane DeBastiani, Marc Huger, Stefano Martelli, Stephane Mazerat, Severine Romero Baivier
	Surface Abrasion Appeared on the Slide Gate Plate Keiichiro Akamine*, Arito Mizobe, Kiyoshi Goto, Katsumi Morikawa
	Mechanical and Physical Characterization of Al₂O₃-C Foam Filters Produced by Distinct Processing Routes: The Role of the Strut Morphology Bruno Luchini, Enrico Storti*, Tony Wetzig, Christoph Settgast, Martin Abendroth, Jana Hubalkova
	Development of High Performance Slide Gate Plate with Composite Structure Zenta Ohmaru*, Kenichi Oki, Yuji Nakamoto, Hidetoshi Kamio, Katsumi Morikawa
	Tundish Upper Nozzle with Gas Purging Function by Multi-layered Structure Tatsuya Ouchi*, Masaki Yamamoto, Taro Makino, Arito Mizobe
	Tundish MgO Spray Material That Be Well Attached on Internal Castable Materials Dong-Ha Lee*, Je-ha Lee, Byeong-su Kim
	Improvement of Tundish Re-oxidation by Developing Non-lancing during Ladle Shroud Nozzle Connection Operation JungMin Lee*, Hyeok Jang, WoongGan Ki, TaeJun Ha
	Development of Novel Material for Continuous Casting Nozzle Ling Li*, Kiyoshi Goto, Katsumi Morikawa
	Main Corrosion Mechanisms of Stopper Rod by Al Killed Steel Silvia Camelli*, Pablo Marinelli, Jesus Gonzalez, Maria Lujan Dignani, Adrian Vazquez
	Proposal of Robot Application for the Ladle Slide Gate Brick Replacement Mamoru Yoshimura*, Yusuke Yamaguchi, Toshihiro Imahase, Junichi Funato, Haruyuki Ohba
	Addition of Zirconium Silicide to Zirconia-Carbon Refractories for Powder Line Part of Submerged Entry Nozzle Kouhei Takami*, Kiyoshi Goto, Katsumi Morikawa
	Development of High Al Content Al₂O₃-C SV Plate Naohide Hamamoto*, Takayuki Matsunaga, Koji Moriwaki

Category	Title Author
Refractories for Iron and Steel Making -Continuous Casting	Development of High-Density and High-strength Zirconia Refractories Tsukasa Miyake*, Hirokatsu Hattanda, Tomohiro Yotabun, Tomomi Soeda
	Improvement of Steelmaking Productivity by Changing Tundish Refractories Shunsuke Matsui*, Yasushi Tsutsui, Shinichiroh Tagawa, Keisuke Shibasaki
	Evaluations of Mold Powder Crystallization from Solid and Molten Slag Shoji Takahashi*, Masanori Okada, Junya Itoh
	Cold Setting Mixes with Higher Preheating Stability David Wappel*, Bernd Petritz, Martin Kumar, Micheal Freiler
	Key Phase Diagram Experiments in the Li₂O-ZrO₂ System and Thermodynamic Modeling of the Li₂O-SiO₂-ZrO₂ System Sun Yong Kwon, Wan-Yi Kim, In-Ho Jung*
	Exchangeable Carbon-bonded Alumina Foam Filters for Continuous Casting of Steel Tony Wetzig*, Bruno Luchini, Steffen Duedzig, Jana Hubalkova, Christos G. Aneziris
	Coating Material for Tundish with Improved Workability, Drying Property and Dismantlability Yuto Suzuki*, Shigefumi Nishida, Kiyoyuki Komatsubara
	Improvement of SEN's Outletport to Prevent Alumina Adhesion Genta Matsuo*, Takayuki Matsunaga, Kanae Nishio
	Effect of Si Addition on Heat Transfer Characteristics of Mould Flux for Continuous Steel Casting Process Rie Endo*, Yo Kan, Takashi Watanabe, Miyuki Hayashi, Masahiro Susa
	Coating Restrain Destabilizing of ZrO₂ Particles at Glaze Keita Okada*, Shigeaki Takahashi, Noriaki Yamauchi, Masahiro Shinato, Keisuke Kachi
Refractories for Non-ferrous Metal Industry	Comparison between Different Taphole Clays for Metal Tapholes of Fe-alloy Reduction Furnaces Tomas Oliveira*, Wagner Silva, Humberto Bassalo, Aloisio Ribeiro and Modestino Brito
	Application of Zircon Castable for Aluminum Melting Furnace Masato Kawasaki*
	Ceramic Joining Material for Repairing Carbon Block Jae-won Kim*, Byeong-su Kim
	Titanium Casting Using Functionalized Calcium Zirconate Molds and Crucibles for Improved Corrosion Resistance and Surface Quality Lisa Freitag*, Christos G. Aneziris, Florian Bulling, Ulrich E. Klotz, Stefan Schafföner
	Influence of Constituents of Modern Aluminium Alloys on Alumina Refractory Lining Wanja Reichert*, Vadim Sannikow, Thorsten Tonnesen, Rainer Telle
	Optimizing Thermomechanical Properties of Investment Casting Shell Molds Aliz Pinto Mora *, Moustapha Coulibaly, Wen Zhang, Nicolas Tessier-Doyen, Elsa Thune, Marc Huger
	The Interfacial Wetting/Infiltration Behavior in Si/Si₃N₄/SiO₂ Ternary System: Influence of Oxygen Content in α-Si₃N₄ Coating Qinghu Wang*, Jiangtao Li, Yawei Li
	Shaped Refractories and Castables Based on Calcium Zirconate for Titanium Metallurgy Stefan Schafföner*, Christos G. Aneziris, Constantin Jahn, Miriam Bach, Helge Jansen, Christoph Vonderstein, Bernd Friedrich
Refractories for Petrochemical Industry	Phase Composition, Structure, Properties of (CaO+MgO)-stabilized Zirconia on Phosphate Binder at the Temperatures up to 2200 °C for Carbon Black Reactors Lining Ph. D. Valery V. Martynenko, Ph. D. Pavel A. Kushchenko, Dr. Sc. Vladimir V. Primachenko
	Corrosion Behavior of Chrome Oxide Free Refractories by Coal Slags under Gasification Conditions Shixian Zhao*, Hongxia Li, Binli Cai, Honggang Sun, Lan Wang, Gang Wang
	Alumina Refractory Vaporization in Secondary Reformer & Auto-thermal Reformer in Syngas Plants Manabendra Maity*
	Testing Refractories for Direct Contact Steam Generation Nicole Bond, Marc Duchesne*, Robin Hughes

Category	Title Author
Refractories for Waste Incineration and Others	Corrosion of Fireclay and High Alumina Refractories by Aggressive Vapours (Alkali, Sulphur, HCl, HF, ...) in Secondary Combustion Chambers for Hazardous Waste Incineration: Mechanisms and Recommendations Adrian Villalba Weinberg, Cyrille Varona, Xavier Chaucherie, Dominique Goeuriot, Jacques Poirier*
	Corrosion Resistance of Lime Rotary Kiln Bricks for Pulp and Paper Industry Sankar Kannabiran*, Minghua Zhang
	The New Low Cement Castable for Dry Gunning Satoshi Umeda*, Ippei Katouda, Hiroshi Yamada, Yoshimasa Miyagishi
	Alkali and Slag Resistance of Calcium Hexa-aluminate Raw Material Mouna Sassi*, Emmanuel de Bilbao, Jacques Poirier
	Chromium Free Special-impregnated Bricks for Special Waste Incineration Christina Stimpfl*, RHIMagnesita
	Utilization of Al₂O₃-CaO-Cr₂O₃ Refractory Castables System Without Cr(VI) Generation Mithun Nath, Tengeng Xu, Ning Liao, Yaqi Wang, Shengqiang Song, Yawei Li*
	Influence of the Basicity of Waste Molten Slag on Alumina-Chromia Brick for Waste Melting Furnaces Hitoshi Chiba, Hitoshi Toda, Makoto Ohno, Fumihito Ozeki
	Development of Explosion Resistant Refractory Castables for Rotary Kilns Chinami Hirate*, Shun Kawaguchi, Hitoshi Chiba, Ohno Makoto
	Preparation of SiC Bricks with In-situ Lamellar Al₄SiC₄ Coatings on SiC Aggregates by Induction Heating Ding Chen*, Huazhi Gu, Ao Huang
Refractory Engineering Systems and Design	Optimization of Magnesite Castables by Introduction of Pre-synthesized Magnesium Silicate Hydrate Yu Zhang*, Yawei Li, Junfeng Chen
	Approaches Towards a Digital Tool for Optimising Lining Design – Case Studies of Channel Induction Furnace and Steel Ladle Shengli Jin, Aidong Hou, Harald Harmuth, Dietmar Gruber*
	Thermomechanical Modelling of Refractory Mortarless Masonry Wall Subjected to Biaxial Compression Mahmoud Ali*, Thomas Sayet, Alain Gasser, Eric Blond
	Modeling of Nonlinear Behavior at High Temperature of Refractory Masonries Without Mortar Nassima Yahmi*, Alain Gasser, Eric Blond
	Design, Fabrication and Slag Behaviors of Lightweight Raw Materials Lvping Fu*, Huazhi Gu, Ao Huang, Yongshun Zou, Meijie Zhang, Hongwei Ni
	Anti-crack and Corrosion Resistance Lining for BF Main Trough Skimmer Chien-Nan Pan*, Kun-Ming Chen
	Matrix Design in High-alumina Refractory Castables - Part I: Enhanced Sintering at Low Temperatures in Service, Long-term Investigations and Microstructure Evolution Florian Holleyn*, Olaf Krause, Erwan Brochen, Christian Dannert
	Thermomechanical Design Considerations for Blast Furnace Hearth Refractory System Chad Van der Woude, Hamid Ghorbani*
	Matrix Design in High Alumina Refractory Castables - Part II: Assessment of the Brittle-ductile Transition Temperature and Ways to Influence It Erwan Brochen*, Christian Dannert, Olaf Krause, Florian Holleyn
	Influence of the Particle Size Distribution on the Properties of Refractory Castables Installed by Shotcrete Vitor G. Domiciano*, Gerado J. Reis, Aloisio S. Ribeiro, Modestino A. M. Brito
	The Characterization of Joint Behaviour in Mortarless Refractory Masonry Rafael Oliveira*, Joao Rodrigues, Joao Correia
A New Algorithm Concept of Refractory forecasting in Main Runner at Blast Furnace Min-Gyu Song*, Sang-Ahm Lee, Jae-Il Jung	
Testing of Refractories	Refractory Testing Standards - Current Gaps and Future Developments Philip Walls*
	Analysis of Thermal Shock Behavior by Digital Image Correlation Method and Finite Element Method Hidetoshi Kamio*, Ryota Hosogi, Yoichi Tsuji, Koji Goda, Katsumi Morikawa
	Evaluation Method of Thermal Shock Resistance of Refractories under Mechanical Constraint Yuya Tomita*, Ryota Hosogi, Hidetoshi Kamio, Kiyoshi Goto, Katsumi Morikawa
	Contributions to Refractories Creep Characterisation Dietmar Gruber*, Shengli Jin, Stefan Schachner, Martin Stuckelschweiger, Harald Harmuth
	Thermal Shock Resistance of Monolithic Refractories with Coarse Grained Aggregates under Constraint Condition Yoichi Tsuji*, Ryota Hosogi, Hidetoshi Kamio, Kiyoshi Goto, Katsumi Morikawa
	Radar Based Investigation of the Decomposition of Hydrate Phases in Calcium Alumina Concrete T. Stein*, O. Krause

Category	Title Author
Testing of Refractories	Three-Dimensional Analysis of Porous Plug Structure Using X-ray CT Keisuke Yamada*, Takafumi Oishi, Shigefumi Matsumoto, Tatsuya Ouchi, Kouji Gouda, Katsumi Morikawa
	Setting Shrinkage Measurement During Cement Hydration Stefan Kuiper*, Geert Wams, Alexandra Spies, Jerry Dutton
	Effect of Creep on Refractory Masonry Wall Subjected to Cyclic Temperature Loading Pratik N. Gajjar, Joao M. Pereira, Paulo B. Lourenco
	Characterization of Carbon-bonded Alumina by Mercury Intrusion and Extrusion Porosimetry for Steel Applications Claudia Voigt*, Jana Hubalkova, Herbert Giesche, Christos G. Aneziris
	Determination of Damage Limits in Refractories of Different Brittleness and Damping Capacity Based on Acoustic Emission Algorithms Naveen Shetty*, Maure De Smedt, Els Verstrynge, Kirill Andreev
	Corrosion of Polycrystalline Wool by Alkaline Vapor Takuya Naeshirozako*, Mikiya Fujii, Masaru Sugiyama, Nobuyuki Takeuchi
	Alumina-Spinel Castables under Thermal Cycling Conditions - In Situ Characterisation Ilona Kieliba*, Thorsten Tonnesen, Rainer Telle, Marc Huger, Erwan Gueguen, Chris Parr
	Correlation between the Amount of Amorphous Phase and the High-temperature Properties of Alumina Refractory Castables Considering the Grain Shape S. Etzold*, K. Wickel, T. Tonnesen, R. Telle
	Influence of Carbon Content of Molten Steel on the Corrosion of ZrO₂-C Refractories Shigefumi Matsumoto*, Tamotsu Wakita, Koji Goda, Kiyoshi Goto, Katsumi Morikawa
	New Insights into the Nature of Bond in Refractory Materials Using Soft X-ray Emission Spectroscopy for SEM Applications J. Kehren*, O. Krause
	Hyperspectral Raman Imaging: A Powerful Tool for Time-, Space-, and Temperature-resolved in Situ Studies Using the Example of the CaO-SiO₂-System J. Kehren*, K. Hauke, S. Zimmer, T. Geisler
	Time-dependent Changes of the Mineral Population in Calcium Aluminate Cements (CAC) after the Addition of Water Studied in Situ with Hyperspectral Raman Imaging Sinje Zimmer*, O. Krause
	Influence of Additives on the Crystallization and Dehydration of Calcium-Aluminate-Hydrate Phases in Refractory Castables - Part II: Dehydration Observed by Monotonic Heating R. Simmat, C. Dannert, O. Krause, L. Erbar, C. Ulbrich, T. Stein
	Influence of Additives on the Crystallization and Dehydration of Calcium-Aluminate-Hydrate Phases . Part I: The Change of Hydrate Phase Formation as a Function of Surface-active Substances in Refractory Castables Investigated by Field Emission Scanning Electron Microscopy O. Krause, L. Erbar, C. Ulbrich, T. Stein, S. Simmat, C. Dannert
	The Capillary forces: Pretty often Forgotten, Always Involved in Castables Dewatering as well as in Corrosion by Slag Emmanuel de Bilbao*, Severine Brassamin, Jacques Poirier, Anh Khoa Nguyen, Eric Blond, Thomas Sayet, Athanasios Batakis
	Creep Characterization of Refractory Materials at High Temperatures Using the Integrated Digital Image Correlation Lucas Teixeira*, Jean Gillibert, Eric Blond, Thomas Sayet
	Microstructure Observation of Refractories after Simultaneous Contact with Molten Steel and Slag Utilizing Crucible Method Kanae Nishio*, Tomoyuki Maeda, Yasuhiro Hoshiyama, Shigeyuki Takanaga, Tamiatsu Koyake, Masakazu
	Progress of Young's Modulus of High Alumina Castables During Corrosion Process T. Tonnesen*, W. Reichert, R. Telle, P. Leto, R. Haubner
	How to Design and Implement a Safe and Effective Industrial Trial for Refractories in Order to Get a Reliable Test Result Thomas Vert*