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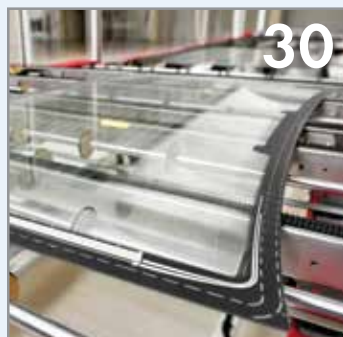
feature articles



Discrete element modeling— A promising method for refractory microstructure design

Discrete element modeling is a tool with great potential for modeling refractory materials—if challenges to applying DEM for continuous problems are overcome.

by M. H. Moreira, T. M. Cunha, M. G. G. Campos, M. F. Santos, T. Santos Jr., D. André, and V. C. Pandolfelli



Integrated PFMEA-DOE approach for reliability analysis in the manufacturing of curved glass

Identifying and fixing early-stage failure modes leads to cost savings down the road. Determining optimal initial and final molding furnace temperatures for curved glass is one such step.

by Ariel Gandelman, Carla Estorilio, Elisiane Maria Berton, Yukihiro Oikawa, and Lígia de Oliveira Franzosi Bessa



6th Ceramics Expo

I-X Center in Cleveland—May 5–6, 2020

Ceramics Expo, returning to Cleveland for its sixth annual technology showcase, will emphasize ceramics' tremendous influence on key industries with the theme "Enabling a Clean, Efficient, & Electrified Future."

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As seen on Ceramic Tech Today...



Credit: ACerS

Quantifying potential—researchers close in on hafnia-based nonvolatile memory

Hafnium oxide-based ferroelectrics are promising materials for nonvolatile memory devices, as they are compatible with modern semiconductor technologies. Researchers led by the Moscow Institute of Physics and Technology came up with a unique method to better characterize these materials.

Read more at www.ceramics.org/hafniamemory

Also see our ACerS journals...

Engineering resilience with precast monolithic refractory articles

By D. Goski and M. Lambert
International Journal of Ceramic Engineering & Science

Review of corrosion of refractory in gaseous environment

By M. K. Mahapatra
International Journal of Applied Ceramic Technology

Corrosion modeling of magnesia aggregates in contact with CaO-MgO-SiO₂ slags

By W. Zhang, A. Huang, Y. Zou, et al.
Journal of the American Ceramic Society



Also be sure to check out the Topical Collection

"Properties, Processing and Structure of Refractory Ceramics," available on ACerS Publication Central at https://ceramics.onlinelibrary.wiley.com/hub/topical_collections



Read more at www.ceramics.org/journals

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