

Poster Session Industrial co-operative research

Projects about the industrial co-operative research are shown. From this publicly sponsored research results are presented about the following subjects:



Influence of the oxide layer on the brazeability of aluminium

E. Hofmann et al., Technical University of Dresden, Institute for Surface and Production Engineering

Determination of failure criteria of mechanically and corrosively loaded brazed joints of sheets made of stainless chromium-nickel steel

U. Holländer et al., Leibniz University Hannover, Institute for Materials Science

Fluxfree brazing of copper based alloys and steels at temperatures between 650 °C and 850 °C in monosilane-doped nitrogen

U. Holländer et al., Leibniz University Hannover, Institute for Materials Science

Development of high-temperature resistant Co-based brazing fillers

T. Uhlig et al., Technical University Chemnitz, Institute of Material Science and Engineering

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- 01 Strength of titanium base metals after brazing at different temperatures in the range of 680-1000 °C**
A. Shapiro*, Y. Flom, S. Nezgoda, A. Sutliff, M. Surplus, Z. Mospens
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- 02 Joining of some perovskite ceramic materials using air-brazing technology**
T. Sydorenko*, Y. Naidich
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- 03 Development of brazing alloys based on Al-Si-Cu and Al-Si-Ge system for brazing of aluminum alloys with low solidus temperature**
I. Pashkov*, J. Karpova, V. Bazhenov, T. Bazlova
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- 04 Keyhole brazing an approach for energy efficient brazing by using the deep penetration effect**
T. Radel*, P. Woizeschke, F. Vollertsen
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- 05 Joining 7075 aluminium alloy to galvanized steel by CMT process**
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- 06 Low temperature soldering of glass to metal and its joint properties**
H. Li*, W. Tillmann, H. Teng, Y. Pei
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- 07 Construction of an experimental set-up for brazing stainless steel samples in low vacuum atmosphere consisting of mono-silane-doped argon**
S. Schöler*, U. Holländer, C. Kunz, L. Wegewitz, W. Maus-Friedrichs, K. Möhwald
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- 08 Economic processing of high volume binder burn out in vacuum furnace**
R. Stein*, M. Strojczek
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- 09 Development of scaled thrust chamber with diffusion bonding**
H. Lee*, K. No, J. Yoon, J. Yoo
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- 10 Development of the reaction zone at the steel interface during aging of reactive air brazed ceramic/metal joints**
S. Wiesner*, K. Bobzin, M. Öte
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- 11 Reactive partial transient liquid phase diffusion bonding of SiC-SiC**
C. Schaak*, W. Tillmann, J. Pfeiffer
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- 12 Brazing of dissimilar metals with thermal gradients and mechanical characteristic**
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- 13 Title effect of current load at relative low temperature on microstructure of copper joined by Sn-based alloy**
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- 14 Effect of brazing temperature on the microstructure and strength of FGH96/DD6 joints**
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- 15 Evaluation of new silver-free brazing filler metals**
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- 16 Development of AlCuTi and AlCuAgTi brazing filler alloys for joining processes of aluminum alloys with low brazing temperatures**
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- 17 Characterization of Ti-6Al-4V joints, brazed with a nano-structured Cu-W filler material**
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- 20 Arc brazing of aluminum matrix composites using AlAgCu filler**
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- 21 Characterisation of transient liquid phase bonding solidification processes with rapidly solidified brazing ribbons**
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- 22 Influence of thermomechanical treatment on the liquid metal embrittlement of copper-brazed plate heat exchangers**
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