

Publications (148) and Citations (7604)

Professor Dr. Ralf Busch

(as of December 3, 2018; H-Index: 45, Google Scholar)

I. Journals [112]:

The role of Ga addition on the thermodynamics, kinetics, and tarnishing properties of the Au Ag Pd Cu Si bulk metallic glass forming system.

N. Neuber, O. Gross, M. Eisenbart, A. Heiss, U. E. Klotz, J. P. Best, M. N. Polyakov, J. Michler, **R. Busch**, I. Gallino, *Acta Materialia*, in press (2018).

High-temperature rotating cylinder rheometer for studying metallic glass forming liquids.

W. Hembree, B. Bochtler, and **R. Busch**, *Review of Scientific Instruments* **89**, 113904 (2018).

Ignition in ternary Ru/Al-based reactive multilayers—Effects of chemistry and stacking sequence.

C Pauly, K Woll, I Gallino, M Stüber, H Leiste, **R Busch**, F Mücklich, *Journal of Applied Physics* **124**, 195301 (2018).

On the bulk glass formation in the ternary Pd-Ni-S system.

A Kuball, B Bochtler, O Gross, V Pacheco, M Stolpe, S Hechler, **R Busch**, *Acta Materialia* **158**, 13 (2018).

Microscopic evidence of the connection between liquid-liquid transition and dynamical crossover in an ultraviscous metallic glass former.

S Hechler, B Ruta, M Stolpe, E Pineda, Z Evenson, O Gross, A Bernasconi, **R. Busch**, I. Gallino, *Physical Review Materials* **2**, 085603 (2018). [\(1\)](#)

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M Frey, **R Busch**, W Possart, I Gallino, *Acta Materialia*, **155**, 117 (2018).

Analysis of thermophysical properties of lead silicates in comparison to bulk metallic glasses.
S Hechler, I Gallino, M Stolpe, FT Lentes, **R Busch**, *Journal of Non-Crystalline Solids* **485**, 66 (2018).

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Development of novel 18-karat, premium-white gold bulk metallic glasses with improved tarnishing resistance.

O Gross, M Eisenbart, LY Schmitt, N Neuber, L Ciftci, UE Klotz, **R Busch**, I. Gallino, *Materials & Design* **140**, 495 (2018). [\(2\)](#)

Consolidation of amorphous powder by thermoplastic forming and subsequent mechanical testing.

B Bochtler, M Stolpe, B Reiplinger, **R Busch**, Materials & Design **140**, 188 (2018). [\(1\)](#)

Analysis of thermophysical properties of lead silicates in comparison to bulk metallic glasses
S Hechler, I Gallino, M Stolpe, FT Lentes, **R Busch**, Journal of Non-Crystalline Solids **485**, 66 (2018).

Indications for a fragile-to-strong transition in the high- and low-temperature viscosity of the Fe₄₃Cr₁₆Mo₁₆C₁₅B₁₀ bulk metallic glass-forming alloy

B Bochtler, O Gross, **R Busch**, Applied Physics Letters **111**, 261902 (2017). [\(3\)](#)

Magnetic small-angle neutron scattering on bulk metallic glasses: a feasibility study for imaging displacement fields

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O Gross, SS Riegler, M Stolpe, B Bochtler, A Kuball, S Hechler, **R Busch**, I. Gallino, Acta Materialia **141**, 109-119 (2017). [\(5\)](#)

Kinetics, Thermodynamics, and Structure of Bulk Metallic Glass Forming Liquid.

R Busch, I Gallino, JOM **69** (11), 2178 (2017). [\(4\)](#)

Relaxation Pathways in Metallic Glasses

I Gallino, **R. Busch**, JOM **69** (11), 2171 (2017). [\(4\)](#)

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Atomic scale analysis of phase formation and diffusion kinetics in Ag/Al multilayer thin films
H Aboulfadl, I Gallino, **R Busch**, F Mücklich, Journal of Applied Physics **120**, 195306 (2016) [\(4\)](#)

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