

List of Publications Dr. M. Armbrüster

Books

2011

- 4) M. Behrens, M. Armbrüster
Methanol Steam Reforming
in *Catalysis for Alternative Energy Generation*
Springer, **2011**, *accepted*.

2010

- 3) M. Armbrüster, K. Kovnir, Yu. Grin, R. Schlögl
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Wiley-VCH, **2010**, 385-399.

2005

- 2) M. Armbrüster
Bindungsmodelle für intermetallische Verbindungen mit der Struktur des CuAl₂-Typs
Cuvillier-Verlag, Göttingen, **2005**.

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- 1) J. Osswald, R. Giedigkeit, M. Armbrüster, R.E. Jentoft, F. Girgsdies, Yu. Grin, R. Schlögl, T. Ressler
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Scientific Papers

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- 38) A. Ota, M. Armbrüster, M. Behrens, D. Rosenthal, M. Friedrich, I. Kasatkin, F. Girgsdies, W. Zhang, R. Wagner, R. Schlögl
The Intermetallic Compound Pd₂Ga as Selective Catalyst for the Semi-Hydrogenation of Acetylene: From Model to High Performance Systems
J. Phys. Chem. C, **2011**, *in print*.

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- 37) M. Armbrüster, K. Kovnir, M. Behrens, D. Teschner, Yu. Grin, R. Schlögl
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- 35) M. Friedrich, M. Armbrüster
Die intermetallische Verbindung PdZn in der Methanoldampfreformierung
Z. Anorg. Allg. Chem. 636, **2010**, 2044-2044.
- 34) M. Armbrüster
Eine wissensbasierte Entwicklung selektiver Hydrierkatalysatoren
Z. Anorg. Allg. Chem. 636, **2010**, 2043-2043.
- 33) M. Armbrüster, W. Schnelle, R. Cardoso-Gil, Yu. Grin
Chemical Bonding in Compounds of the CuAl₂ Family: MnSn₂, FeSn₂ and CoSn₂
Chem. Eur. J. 16, **2010**, 10357-10365.
- 32) P. Gille, T. Ziemer, M. Schmidt, K. Kovnir, U. Burkhardt, M. Armbrüster
Growth of large PdGa Single Crystals from the Melt
Intermetallics 18, **2010**, 1663-1668.
- 31) M. Friedrich, A. Ormeci, Yu. Grin, M. Armbrüster
PdZn or ZnPd: Charge Transfer and Pd-Pd Bonding as the Driving Force for the
Tetragonal Distortion of the Cubic Crystal Structure
Z. Anorg. Allg. Chem. 636, **2010**, 1735-1739.
- 30) H. Werheit, V. Filippov, U. Kuhlmann, U. Schwarz, M. Armbrüster, A. Leithe-Jasper, T.
Tanaka, I. Higashi, T. Lundström, V.N. Gurin, M. Korsukova
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- 28) M. Friedrich, M. Armbrüster
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J. Catal. 264, **2009**, 93-103.
- 25) K. Kovnir, M. Armbrüster, D. Teschner, T. Venkov, L. Szentmiklósi, F.C. Jentoft, A. Knop-Gericke, Yu. Grin, R. Schlögl
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- 24) E. Galloway, M. Armbrüster, K. Kovnir, M.S. Tikhov, R.M. Lambert
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J. Catal. 258, **2008**, 219-227.
- 22) J. Osswald, R. Giedigkeit, R.E. Jentoft, M. Armbrüster, F. Girgsdies, K. Kovnir, T. Ressler, Yu. Grin, R. Schlögl
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Pinning the Catalytic Centre: A New Concept for Catalysts Development
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- 20) K. Kovnir, M. Schmidt, C. Waurisch, M. Armbrüster, Yu. Prots, Yu. Grin
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- 19) M. Armbrüster, M. Schmidt, R. Cardoso-Gil, H. Borrmann, Yu. Grin
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Inorg. Chem. 45, **2006**, 9818-9825.
- 13) H. Werheit, Yu. Paderno, V. Filippov, V. Paderno, A. Pietraszko, M. Armbrüster, U.
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Preparation of intermetallic compounds via gas phase and nanoparticle syntheses
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Ordered Cobalt-Aluminum and Iron-Aluminum Intermetallic Compounds as Hydrogenation Catalysts
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- 17) M. Behrens, A. Ota, R. Schlögl, M. Armbrüster, Yu. Grin
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