

## **Lebenslauf und beruflicher Werdegang, Michael Scheffler**

Name: Michael Scheffler  
Adresse: Diesdorfer Privatweg 9  
D-39110 MAGDEBURG  
Geburtsdatum: 27.11.1964  
Geburtsort: Quedlinburg  
Familienstand: verheiratet, drei Kinder (1984, 1994 und 1997)  
Grundwehrdienst: 11/83 - 04/85  
Beruf: Diplomchemiker  
Tätigkeit: Professor für Werkstofftechnik Nichtmetallischer Werkstoffe  
Arbeitsstelle: Otto-von-Guericke-Universität Magdeburg  
Universitätsplatz 2, 39106 Magdeburg

### **Beruflicher und wissenschaftlicher Werdegang**

- 09/90 - 10/93 Dissertation "Synthese und Charakterisierung nickelhaltiger Pillared Clays" (Prädikat: magna cum laude; Betreuer: Doz. Dr. K.-P. Wendlandt) am Institut für Anorganische Chemie der Technischen Hochschule Merseburg, später Martin-Luther-Universität Halle-Wittenberg  
- Laborverantwortlicher  
- Betreuung von Diplomarbeiten  
- Katalyseforschung in Kooperation mit den damaligen Leuna-Werken (Prof. Dr. P. Birke)
- 10/93 - 04/94 wissenschaftlicher Mitarbeiter am Institut für Anorganische Chemie der Martin-Luther-Universität Halle-Wittenberg (Prof. Dr. R. Taube)  
- Synthese und Immobilisierung von Koordinationsverbindungen
- 05/94 – 12/98 wissenschaftlicher Mitarbeiter am Institut für Physikalische Hochtechnologie (IPHT) e.V. in Jena, Bereich Moderne Optik, Abt. Optische Fasern  
- Aufbau eines Faserziehlabors und eines glastechn. Präparationslabors  
- Entwicklung von aktiven Chalkogenidglasfasern  
- Untersuchungen an Schwermetalloxid-Gläsern und -Fasern  
- Löslichkeit von Seltenerd-Ionen in Chalkogenidgläsern
- 01/99-07/00 wiss. Mitarbeiter am Lehrstuhl f. Glas und Keramik, Universität Erlangen-Nürnberg
- 08/00-07/03 Leiter der Arbeitsgruppe Polymerkeramik am Lehrstuhl für Glas und Keramik, Universität Erlangen
- 1999-2002 div. DAAD-Aufenthalte an Partnerinstituten im Ausland (Padova, Italien; São Paulo, Brasilien, Limoges, Frankreich)
- 09/2003-08/2005 Forschungsstipendiat/Visiting Scholar am MS&E, Univ. of Washington, Seattle, WA, USA (DFG-Stipendium)

09/2005-09/2006	Bayerisches Zentrum für Angewandte Energieforschung e.V. (ZAE Bayern), Leiter der Abteilung Thermosensorik und Photovoltaik, Erlangen, und Mitglied im erweiterten Vorstand des ZAE Bayern
10/2006-09/2009	Lehrstuhlinhaber des LS Leichtbaukeramik, Brandenburgische Technische Universität Cottbus
seit 10/2009	Lehrstuhlinhaber des LS Werkstofftechnik, Otto-von-Guericke-Universität Magdeburg
Mitgliedschaften:	Gesellschaft Deutscher Chemiker (GDCh) American Ceramic Society (ACerS) Gesellsch. f. Chemische Technik und Biotechnologie e.V. (DECHEMA)

#### Forschungsschwerpunkte und -interessen

- Thermische Zersetzung präkeramischer Polymere, Reaktionen mit Füllstoffen, Anwendung und Formgebung
- Zellulare Keramiken, Herstellung, Charakterisierung, Oberflächenmodifizierung, Reaktionen in offenzelligen Keramikporen - Nanoaggregate und Intercalate von Nanoaggregaten in mesoporösen Keramiken
- Anorganische Funktionsmaterialien/Materialien für erneuerbare Energietechniken (Solarzellen, Brennstoffzellen, Wärmespeichermaterialien)

Magdeburg, 03.05.2010





Im Namen des

## **Landes Sachsen - Anhalt**

ernenne ich

Herrn

## **Prof. Dr. Michael Scheffler**

mit Wirkung vom 1. Oktober 2009

unter Berufung in das Beamtenverhältnis auf Lebenszeit

zum

## **Universitätsprofessor**

Magdeburg, den 17. September 2009

A handwritten signature in black ink, appearing to read "Michael Scheffler".

Der Rektor  
der Otto-von-Guericke-Universität Magdeburg



## LAND BRANDENBURG

Im Namen des Landes Brandenburg

ernenne ich

*Herrn*

*Dr. rer. nat. Michael Scheffler*

mit Wirkung vom 01. Oktober 2006  
unter Berufung in das Beamtenverhältnis auf Zeit  
für die Dauer von fünf Jahren

zum

Universitätsprofessor

Potsdam, 25. September 2006



Prof. Dr. Johanna Wanka

Duplikat  
MARTIN-LUTHER-UNIVERSITÄT  
HALLE-WITTENBERG



Unter dem Rektorat des Professors für Experimentalphysik  
Dr. rer. nat. habil. Dr.-Ing. Gunnar Berg  
verleiht die

Mathematisch-Naturwissenschaftliche Fakultät

Herrn Dipl.-Chem. Michael Scheffler  
geboren am 27. November 1964 in Quedlinburg

auf Grund der Dissertation  
*"Synthese und Charakterisierung nickelhaltiger Pillared Clays"*

und der öffentlichen Verteidigung

den akademischen Grad

doctor rerum naturalium (Dr. rer. nat.)

für das Fachgebiet

Anorganische Chemie

Für die Gesamtleistung wird das Prädikat  
**magna cum laude (sehr gut)**  
erteilt.

Halle (Saale), 25. Oktober 1993

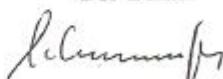
Der Rektor



Prof. Dr. rer. nat. habil. Dr.-Ing. G. Berg



Der Dekan



Prof. Dr. rer. nat. habil. A. Schelleberger

DEUTSCHE DEMOKRATISCHE REPUBLIK  
TECHNISCHE HOCHSCHULE „CARL SCHORLEMMER“  
LEUNA-MERSEBURG



# DIPLOM

Herrn Michael Scheffler

geboren am 27.11.1964 in Quedlinburg

wird der akademische Grad

Diplomchemiker

verliehen.

Nachdem in einem ordnungsgemäßen Diplomverfahren  
die erforderlichen wissenschaftlichen Kenntnisse und Fähigkeiten nachgewiesen  
sind, wird das Prädikat

gut

erteilt.

Merseburg, den 31.08.1990

Der Rektor  
*Faughänel*



Der Direktor der Sektion  
Chemie  
*i.V. Sandner*

## I Publikationsliste

### 1 Publikationen in Periodika

- [1] J. Kirchhof, J. Kobelke, M. Scheffler, A. Schwuchow, As-S based materials and fibres towards efficient 1.3  $\mu\text{m}$  fibre amplification, *Electronic Letters* **32** (1996) 1220-1221.
- [2] V. Tikhomirov, P. Hertogen, G. Adriaenssens, V. Krasteva, G. Siegel, J. Kirchhof, J. Kobelke, M. Scheffler, Photoinduced anisotropy in Pr-doped sulfide glasses with varying composition and Pr content, *J. Non-Cryst. Solids* **227-230** (1998) 694-699.
- [3] J. Kobelke, J. Kirchhof, S. Jetschke, U. Röpke, M. Scheffler and A. Schwuchow, Small core high NA Pr-doped As-glass fibres for efficient 1.3  $\mu\text{m}$  amplification *Electronic Letters* **35** (1999) 496-497.
- [4] M. Scheffler, J. Kirchhof, J. Kobelke, A. Schwuchow, Increased rare earth solubility in As-S glasses, *J. Non-Cryst. Solids* **256&257** (1999) 59-62.
- [5] J. Kobelke, J. Kirchhof, M. Scheffler, A. Schwuchow, Chalcogenide glass single-mode fibers—preparation and properties, *J. Non-Cryst. Solids* **256&257** (1999).
- [6] T. Gambaryan-Roisman, M. Scheffler, P. Buhler, P. Greil, Processing of Ceramic Foam by Pyrolysis of Filler containing Phenylmethyl Polysiloxane, *Ceram. Trans.* **108** (2000) 121-130.
- [7] P. Colombo, T. Gambaryan-Roisman, M. Scheffler, P. Buhler, P. Greil, Conductive Ceramic Foams from Preceramic Polymers, *J. Am. Ceram. Soc.* **84** (2001) 2265-68.
- [8] M. Scheffler, Q. Wei, E. Pippel, J. Woltersdorf, P. Greil, Si-C-O ceramics from preceramic polymers: Reaction mechanism between the Si-filler and the polymer derived matrix during pyrolytic conversion, *Key Eng. Mater.* **206-213** (2001) 289-292.
- [9] M. Scheffler, T. Gambaryan-Roisman, T. Takahashi, J. Kaschta, H. Muenstedt, P. Buhler, P. Greil, Pyrolytic decomposition of preceramic organo polysiloxanes, *Ceram. Trans.* **115** (2001) 239-250.
- [10] V.K. Tikhomirov, L.F. Santos, R.M. Almeida, A. Jha, J. Kobelke, M. Scheffler, On the origin of the Boson peak in the Raman scattering spectrum of  $\text{As}_2\text{S}_3$  glass, *J. Non-Cryst. Solids* **284** (2001) 198-202.
- [11] Q. Wei, E. Pippel, J. Woltersdorf M. Scheffler and P. Greil, Interfacial SiC-Formation in Polysiloxane Derived Si-O-C Ceramics, *Mat. Chem. Phys.* **73** (2002) 281-289.
- [12] J. Zeschky, J.H. Lo, M. Scheffler, H.-W. Hoeppel, M. Arnold, P. Greil, Polysiloxane-derived ceramic foams for the reinforcement of Mg alloy, *Z. Metallkd.* **93**, 8 (2002), 812-818.
- [13] P. Cromme, M. Scheffler, P. Greil, Ceramic tapes from preceramic polymers, *Adv. Eng. Mater.* **4** (2002) 873-877 .
- [14] M. Scheffler, T. Gambaryan-Roisman, J. Zeschky, F. Scheffler and P. Greil, Self-Foamed Cellular Ceramics from Silicone Resins with a zeolite surface, *Ceram. Eng. Sci. Proc.* **23** [4] (2002) 203-210.
- [15] J. Zeschky, M. Scheffler, P. Colombo, P. Greil, Cellular Oxide Ceramics from Filler-loaded Silicone Resins, *Ceram. Eng. Sci. Proc.* **23** [4] (2002) 285-290.
- [16] M. Scheffler, E. Pippel, J. Woltersdorf, P. Greil, In situ formation of  $\text{SiC}-\text{Si}_2\text{ON}_2$  micro-composite materials from preceramic polymers, *Mat. Chem. Phys.* **80** (2003) 565-572.
- [17] R. Melcher, P. Cromme, M. Scheffler, P. Greil, Centrifugal casting of thin-walled ceramic tubes from preceramic polymers, *J. Am. Ceram. Soc.* **86** (2003) 1211-1213.
- [18] M. Scheffler, O. Dernovsek, D. Schwarze, A.H.A. Bressiani, J.C. Bressiani, W. Acchar, P. Greil, Poly(siloxane) derived NbC composite ceramics, *J. Mater. Sci.* **38** (2003) 4925-4931.

- [19] J. Zeschky, F. Goetz-Neunhoeffer, J. Neubauer, S. H. J. Lo, B. Kummer, M. Scheffler and P. Greil, Preceramic Polymer Derived Cellular Ceramics, *Composite Science and Technologies*, **63** (2003) 2361-2370.
- [20] F. Scheffler, R. Herrmann, W. Schwieger and M. Scheffler, Preparation and properties of an electrically heatable aluminium foam/zeolite composite, *Micropor. Mesopor. Mater.* **67** (2004) 53–59.
- [21] M. Scheffler, J. Zeschky, A. Zampieri, R. Herrmann, W. Schwieger, F. Scheffler, P. Greil, Polymer-derived ceramic foams with a zeolitic surface by supported crystallization, *Ceram. Trans.* **154** (2004) 49-59.
- [22] M. Scheffler, A. Berger, E. Pippel, J. Woltersdorf, P. Greil, Nickel-catalyzed in situ formation of carbon nanotubes and turbostratic carbon in polymer-derived ceramics, *Mat. Chem. Phys.* **84** (2004) 131-139.
- [23] F. Scheffler, A. Zampieri, W. Schwieger and M. Scheffler, Chemical and mechanical supported crystallization (CMCS) of MFI-type zeolites on different reactive substrate materials, Proceedings of the 14<sup>th</sup> International Zeolite Conference, Cape Town, South Africa 25-30 April 2004, Eds.: E.W.J. van Steen, L.H. Callanan, M. Claeys, C.T. O'Connor, CD, pages 647-653.
- [24] J. Zeschky, T. Hoefner, H. Dannheim, M. Scheffler, P. Greil, High Temperature Behavior of Ceramic Foams from Si/SiC-Filled Preceramic Polymers, *Ceram. Eng. Sci. Proc.* **25** (2004) 465-470.
- [25] T. Hoefner, J. Zeschky, M. Scheffler, P. Greil, Light Weight Ceramic Sandwich Structures from Preceramic Polymers, *Ceram. Eng. Sci. Proc.* **25** (2004) 559-564.
- [26] M. Scheffler, Raj Bordia, High-yield ceramic inks for inkjet printing with Si-based preceramic polymers, *Ceram. Trans.* **166** (2005) 101-107.
- [27] A. Zampieri, H. Sieber, T. Selvam, G.T.P. Mabande, W. Schwieger, F. Scheffler, M. Scheffler, P. Greil, Biomorphic cellular SiSiC/zeolite ceramic composites: from Rattan palm to bioinspired structured monoliths for catalysis and sorption, *Advanced Materials* **17** (2005) 344-349.
- [28] T. Friedel, N. Travitzky, F. Niebling, M. Scheffler and P. Greil, Fabrication of Polymer Derived Ceramic Parts by Selective Laser Curing, *J. Europ. Ceram. Soc.* **25** (2005) 193-197.
- [29] M. Scheffler, R. Bordia, N. Travitzky, P. Greil, Development of a rapid crosslinking preceramic polymer system, *J. Europ. Ceram. Soc.* **25** (2005) 175-180.
- [30] F. Scheffler, A. Zampieri and W. Schwieger, J. Zeschky, M. Scheffler and P. Greil, Zeolite-covered polymer-derived ceramic foams: novel hierarchical pore systems for sorption and catalysis, *Adv. Appl. Ceram.* **104** (2005) 43-48.
- [31] J. Zeschky, T. Hoefner, C. Arnold, R. Weißmann, D. Bahloul-Hourlier, M. Scheffler, P. Greil, Polysilsesquioxane derived ceramic foams with gradient porosity, *Acta Materialia* **53** (2005) 927-937.
- [32] A. Berger, E. Pippel, J. Woltersdorf, M. Scheffler, P. Cromme, P. Greil, Nanoprocesses in polymer-derived Si-O-C ceramics: Electronmicroscopic observations and reaction kinetics, *phys. stat. sol. (a)*, **12** (2005) 2277-2286.
- [33] F. Scheffler, A. Zampieri, W. Schwieger, P. Greil, M. Scheffler, Neue Zeolith-Träger-Komposite - Ein Beitrag zur Entwicklung neuer Reaktorkonzepte, *Chemie Ingenieur Technik* **78** (2006) 1331.
- [34] M. Scheffler, R. K. Bordia, J. Woltersdorf, P. Greil, Poren als Mikroreaktoren zur in situ Herstellung von Nanoaggregaten in polymerabgeleiteten Keramiken, *Chemie Ingenieur Technik* **8** 2006, *Chemie Ingenieur Technik* **78** (2006) 1335-1336.
- [35] M. Scheffler, and F. Scheffler, Zeolite coatings on porous monoliths, *Advances in Science and Technology* **45** (2006) 1260-1267.

- [36] M. Scheffler, F. Scheffler, Processing of ceramic foams and their surface modification with zeolites, Ceramic Forum International **85** (2008) E45-E50.
- [37] S. Gaydardzhiev, V. Wilker, M. Scheffler, Dip-coating of fibrous natural materials for alumina tube manufacturing, *Adv. Eng. Mater.* **10**, 223-226 2008.
- [38] M. Scheffler, F. Scheffler, C. Fyfe and R.K. Bordia, High-yield low viscosity preceramic polymers, Part I: Crosslinking Rheology, in *Vorbereitung*.
- [39] M. Scheffler, F. Scheffler, C. Fyfe and R.K. Bordia, Hihg-yield low viscosity preceramic polymers, Part II:  $^{29}\text{Si}$  MAS NMR study of the crosslinking mechanism, in *Vorbereitung*.
- [40] M. Scheffler, J. Jongjitirat, F. Scheffler, and R.K. Bordia, Liquid processing with preceramic polymers, in *Vorbereitung*.
- [41] F. Scheffler, and M. Scheffler, Polymer-derived ceramic tapes as substrate and support for zeolites, *Advances in Applied Ceramics*, 2009, in press.
- [42] Franziska Scheffler, Craig S. Terry, Jessica D. Torrey, Jon Morrison, Rajendra K. Bordia, and Michael Scheffler, In-situ carbon nanotube formation in templated pores of polymer-derived ceramics, submitted.
- [43] Scheffler, F.; Scheffler, M., Polymer derived ceramic tapes as substrate and support for zeolites.In: *Advances in applied ceramics*. - London: Maney, 8 (2009) 468-475.

## 2 Publikationen in Konferenz- und Symposiumsbänden

- [1] M. Scheffler, J. Kirchhof, J. Kobelke, A. Schwuchow, Pr-doped Sulfide Glasses for Optical Applications, *PROC. 10<sup>th</sup> Int. Symp. Non-Oxide Glasses*, June 19-22, 1996, Corning, New York pp. 544-548.
- [2] V. Tikhomirov, P. Hertogen, G. Adriaenssens, V. Krasteva, G. Siegel, J. Kirchhof, J. Kobelke, M. Scheffler, Photoinduced anisotropy in Pr-doped sulphide glasses with varying composition and Pr content, *17<sup>th</sup> International Conference on Amorphous and Microcrystalline Semiconductors – Science and Technology (ICAMS 17)*, Vols 227-230, (1998) 694-699.
- [3] M. Scheffler, J. Kirchhof, J. Kobelke, K. Schuster, A. Schwuchow, Optical and thermal properties of rare earth containing low phonon energy glasses *SPIE Conference on Infrared Glass Optical Fibers and Their Applications, Proceedings Series*, SPIE 3416, (1998) 89 – 98.
- [4] J. Kobelke, J. Kirchhof, M. Scheffler, A. Schwuchow, Chalcogenide glass multi-mode and single-mode fibers, *SPIE Conference on Infrared Glass Optical Fibers and Their Applications, Proceedings Series*, SPIE 3416, (1998) 55 – 65, 1998.
- [5] M. Scheffler, J. Kirchhof, J. Kobelke, A. Schwuchow, Enahnced rare earth solubility in As-S glasses, *PROC. XI<sup>th</sup> IS(NOG)<sup>2</sup>*, September 6-10, 1998, Sheffield, UK.
- [6] J. Kobelke, J. Kirchhof, M. Scheffler, A. Schwuchow, Chalcogenide glass single-mode fibers – preparation and properties, *Proc. XI<sup>th</sup> IS(NOG)<sup>2</sup>*, September 6-10, 1998, Sheffield, UK.
- [7] K. Schuster, J. Kirchhof, J. Kobelke, A. Schwuchow, M. Scheffler, Heavy metal oxide glasses as potential materials for VIS fiber laser, *SPIE Conference on Infrared Glass Optical Fibers and Their Applications, Proceedings Series*, SPIE 3849, (1999) 116-124.
- [8] T. Gambaryan-Roisman, M. Scheffler, T. Takahashi, P. Buhler and P. Greil, Formation and Properties of Poly(siloxane) Derived Ceramic Foams, in: Mueller, G. (ed.) *EUROMAT 99*, Wiley-VCH Verlag GmbH, Weinheim, G, p. 247-251.
- [9] M. Scheffler, P. Buhler and P. Greil, Influence of Al reactive filler on the carbon redistribution during pyrolysis of poly (siloxanes), in: Mueller, G. (ed.) *EUROMAT 99*, Wiley-VCH Verlag GmbH, Weinheim, G, p. 307-311.

- [10] M. Scheffler, J. Zeschky, Cellular Ceramics by Self Foaming of Silicone Resins, Materials Week 2001, Biannu. Meet. Fed. Eur. Mater. Soc. (FEMS), Oktober 1-4, 2001, Munich, G, on CD.
- [11] J. Zeschky, M. Scheffler, Cellular Oxide Ceramics from Silicone Resins, Materials Week 2001, Biannu. Meet. Fed. Eur. Mater. Soc. (FEMS), Oktober 1-4, 2001, Munich, G, on CD.
- [12] M. Scheffler, R. Melcher, P. Cromme and P. Greil, Manufacturing of thin-walled ceramic tubes from preceramic polymers, Proc. 2<sup>nd</sup> Intl. Conf. On Shaping of Advanced Ceramics, October 24-26, 2002, Gent, B.
- [13] J. Zeschky, J. Neubauer, J. Lo, M. Scheffler, B. Kummer, P. Greil, Verstärkung von Magnesiumlegierungen mit Keramikschläumen aus präkeramischen Polymeren, in: Verbundwerkstoffe, 14. Symposium Verbundwerkstoffe und Werkstoffverbunde, 2.-4. Juli 2003, Wien, H.-P. Degischer, Hrsg. Wiley-VCH, Weinheim, 2003.
- [14] J. Lo, J. Zeschky, V. Gerstman, R. Santos, J. Li, R. Zhang, M. Scheffler, P. Greil, Novel Fabrication Processes for Magnesium Matrix Composites, Proc. 1<sup>st</sup> Light Metals Technology Conference, Brisbane, Australia, 18-20 September 2003.
- [15] J. Zeschky, T. Höfner, J. Lo, M. Scheffler, P. Greil, High Strength Si-O-C Ceramic Foams for the Reinforcement of Mg-Alloys, in: K. U. Kainer (ed.), Magnesium. Proceedings of the 6th International Conference on Magnesium Alloys and their Applications, Wiley-VCH, Weinheim, 2003, 378-383.
- [16] S.R. Boddapati, M. Scheffler, F. Scheffler, C. Fyfe and R.K. Bordia, Ceramic MICRO/NANO Structures from preceramic polymers, International Conference Porous Ceramic Materials (PCM 2005) October 20-21<sup>th</sup>, 2005, Bruges, B, on CD.
- [17] M. Scheffler, F. Scheffler, C. Fyfe and R.K. Bordia, Hierarchically built porous materials from volcanic materials, International Conference Porous Ceramic Materials (PCM 2005) October 20-21<sup>th</sup>, 2005, Bruges, B, on CD.
- [18] V. Gazuz, M. Scheffler, R. Auer, 60 µm - Thick Crystalline Silicon Solar Cell on Ceramic Substrate by Al-Bonding, Proc. 4th World Conference on Photovoltaic Energy Conversion WCPEC-4, Hawaii, 2006, 976-979.
- [19] T. Kunz, I. Burkert, M. Grosch, M. Scheffler, and R. Auer, Spatial uniformity of large-area silicon layers (43 \* 43 cm<sup>2</sup>) grown by convection-assisted chemical vapor deposition, Proc. 4th World Conference on Photovoltaic Energy Conversion WCPEC-4, Hawaii, 2006, 1620-1623.
- [20] M. Grosch, I. Burkert, T. Kunz, V. Gazuz, N. Gaweihns, M. Scheffler and R. Auer, Electrical Characterization of silicon layers grown by convection-assisted chemical vapour deposition (CoCVD), Proc. 4th World Conference on Photovoltaic Energy Conversion WCPEC-4, Hawaii, 2006, 1661-1663.
- [21] T. Kunz, I. Burkert, M. Grosch, R. Auer, S. Siegel, R. Weiss, A. Lauer, M. Scheffler, Biologically derived ceramic Substrates for crystalline silicon thin-film solar cells, in: Proc. 21st Photovoltaic Solar Energy Conference and Exhibition 2006, Sep 04-08, Dresden, 1142.
- [22] M. Mühlbauer, V. Gazuz, N. Gaweihns, R. Weissmann, M. Scheffler, and R. Auer, Novel Heterojunction Solar Cell Concept with thin monocrystalline Silicon on Low Cost Glass, in Proc. 21st Photovoltaic Solar Energy Conference and Exhibition, 2006, Sep 04-08, Dresden, 1021.
- [23] T. Kunz, I. Burkert, M. Grosch, M. Scheffler, R. Auer, Silicon layers on SiC-encapsulated low-cost substrates for thin-film solar cells, in: Proc. 21st Photovoltaic Solar Energy Conference and Exhibition 2006, Sep 04-08, Dresden, 1170.
- [24] V. Gazuz, M. Mühlbauer, M. Scheffler, R. Weissmann, and R. Auer, Processing of High Efficiency Silicon Solar Cells by Bonding to Borosilicate Glass, in Proc. Renewable Energy 2006 Conference and Exhibition, Chiba, Japan, 9-13 October 2006, 411-414.

- [25] V. Gazuz, T. Kunz, I. Burkert, M. Grosch, M. Muehlbauer, R. Auer, R. Weissmann, and M. Scheffler, Thin Silicon Solar Cells on Extraneous Substrates: Processing Routes, Needs and Obstacles, Renewable Energy 2006, International Conference and Exhibition, Chiba, Japan, 09-13 October 2006, 217-219.
- [26] Ohl, C.; Kappa, M.; Olschewski, C.; Wilker, V.; Bhattacherjee, S.; Scheffler, F.; Scheffler, M.: Neuartige Glasschäume mit hoher optischer Transparenz, In: Forum der Forschung. - Cottbus: BTU, 22, S. 133-138.

### 3 Bücher und Kapitel in Büchern

- [1] Michael Scheffler  
Synthese und Charakterisierung Nickelhaltiger Pillared Clays (Dissertation)  
Verlag Shaker, Aachen 1993, ISBN 3-86111-741-X.
- [2] Cellular Ceramics: Structure, Manufacturing, Properties and Applications, Michael Scheffler and Paolo Colombo (eds.), WILEY-VCH Weinheim, Germany, May 2005, ISBN 3-527-31320-6.
- [3] F. Scheffler, P. Claus, S. Schimpf, M. Lucas, M. Scheffler, Ceramic monoliths in heterogeneously catalysed processes, in: Cellular Ceramics: Structure, Manufacturing, Properties and Applications, Paolo Colombo and Michael Scheffler (eds.), WILEY-VCH Weinheim, Germany, 2005, 454-483.
- [4] Colombo, P.; Scheffler, M., Highly porous components. In: Polymer derived ceramics. - DEStech Publications, ISBN 978-1-605-95000-6, S. 379-396, 2009.

### 4 Patente

- [1] A. Zampieri, F. Scheffler, M. Scheffler, J. Zeschky, W. Schwieger, P. Greil. Erzeugung von Zeolithschichten auf polymerabgeleiteten Keramiken, DE 103 09 009.6 (01.03.2003).
- [2] A. Zampieri, T. Selvam, W. Schwieger, F. Scheffler, M. Scheffler, H. Sieber, P. Greil: Erzeugung von Zeolith-Schichten auf SiSiC-Keramiken (01.12.2003).
- [3] Rajendra K. Bordia and Michael Scheffler, Crosslinked silicone compounds and methods for crosslinking silicone compoundss by in situ water generation, 06-Oct-2006, US 11/539,457.
- [4] M. Scheffler, S.R. Boddapati, R. Bordia, 2005, angemeldet als US-Patent.
- [5] M. Scheffler, E. Schnabel, Solarglas für up-conversion der Infraroten Sonnenstrahlung, 29.08.2007, DE 10 2007 034 263.4
- [6] M. Scheffler, Chr. Ohl, Chr. Olschewski, V. Wilker, F. Scheffler, Verfahren zur Herstellung hoch lichtdurchlässiger Glas- und Glaskeramik-Schäume für optische Anwendungen, 16.01.2009

### 5 Eingeladene Vorträge

- [1] Reactive filler controlled pyrolysis of poly(siloxanes)  
Instituto de Pesquisas Energéticas e Nucleares, Departamento de Engenharia de Materiais, 14.12.1999, Sao Paulo, BR.

- [2] Keramische Schäume, Chemiewerk Bad Köstritz GmbH, 27.06.2000, Bad Köstritz, D.
- [3] Activities in polymer derived ceramics and components at the University of Erlangen, SRI International, 11.09.2000, Menlo Park, CA, USA.
- [4] Ceramics from Si-filled silicones  
Universitá di Bologna, Dip. Di Chimica Applicata e Scienza dei Materiali, 15.11.2000, Bologna, It.
- [5] Polymerabgeleitete keramische Compacts, Folien und Schäume  
TU-Bergakademie Freiberg, Inst. f. Keramische Werkstoffe, 11.01.2001, Freiberg, D.
- [6] Keramische Materialien aus Siliconen  
TU Bremen, FB 4, 19.07.2001, TU Bremen, D.
- [7] Silicone – Multifunktionale Komponenten für die Keramikherstellung  
TU Darmstadt, FG Disperse Feststoffe, 26.11.2001, Darmstadt, D.
- [8] Siliconharze in der Keramikherstellung – Formgebung, thermische Umwandlung und Festkörperreaktionen  
Universität Bayreuth, 04.12.2001, Bayreuth, D.
- [9] Ceramic parts from Silicones – Shaping, thermal conversion and interface reactions –  
TU Wien, Institut für Chemische Technologien und Analytik, 30.10.2002, Wien, A.
- [10] Filler-loaded silicones: A tool box for the fabrication of ceramic macro and micro parts, Pacific Northwest National Laboratories, 17 December 2003, Richland, WA, USA.
- [11] Ceramics from plastics? Seminar Series at the Materials Science & Engineering Department, 05 April 2004, University of Washington, Seattle, WA, USA.
- [12] Ceramic Processing with filler loaded preceramic polymers, E-MRS Spring Meeting, May 24 - 28, 2004, Strasbourg, F.
- [13] Processing with preceramic Polymers – Key features, Applications and Potential for Chemical Surface Modification, Innovatek, 28 October 2004, Richland, WA, USA.
- [14] M. Scheffler, Hierarchically built Porous Ceramics from Natural Materials, Int. Conf. Porous Ceramic Materials (PCM 2005), Brugge, B.
- [15] Michael Scheffler, Craig S. Terry, John Morris, and Rajendra K. Bordia, Degradation behavior of polymer-derived CNT/ceramic matrix composite materials MRS Fall Meeting 2005, Boston, MA, November 28-December 02.
- [16] Functional coatings on porous ceramic monoliths, CIMTEC 2006 – 11<sup>th</sup> International Ceramics Congress & 4<sup>th</sup> Forum on New Materials, June 4-9, 2006, Acireale, Sicily, Italy.
- [17] Silicone: Multifunktionale molekulare Werkzeuge für die Keramikherstellung, Kolloquium des Institut für Fertigungstechnologie keramischer Bauteile (IKFB) 13.07.2006, Stuttgart, D.
- [18] Zellulare Keramiken - Moderne Materialien mit maßgeschneiderten Eigenschaften, Kolloquium des Fraunhofer-IZM, Außenstelle Polymermaterialien und Composite, 15.06.2006, Teltow, D.
- [19] F. Scheffler, R. K. Bordia, J. Woltersdorf, P. Greil, M. Scheffler, Bildung von Kohlenstoffnanoröhren aus präkeramischen Polymeren in inerter Reaktionsatmosphäre, AKK der DKG Fachausschusssitzung 12.10.2006, Meitingen, D.
- [20] Keramische Schäume: Herstellung, morphologische Eigenschaften und Oberflächenmodifizierung, 38. Sitzung des DKG-Fachausschuss III (Verfahrenstechnik), 10.05.2007, Erlangen, D.
- [21] Cellular Ceramics from Nature – Technical Use and potential new Applications, 10th International Conference and Exhibition of the European Ceramic Society, June 17 - 21, 2007, Berlin, D.
- [22] Natürliche und technische keramische Schäume: Bildung, Herstellung, Makrostruktur, 4. Workshop "Feste Schwämme", 02.07.07, Karlsruhe, D.

- [23] Natural Cellular Structures –Potential as Ceramics for New Applications, 6th International Conference on High Temperature Ceramic Matrix Composites (HTCMC-6), September 4-7, 2007, New Delhi, India.
- [24] In situ formation of carbon nanotubes in polymer derived ceramics, National Workshop on Catalysis: Futuristic Materials Catalysts and Adsorbents, Bhubaneswar, India, 18-20 February, 2008.
- [25] Bottom-up manufacturing: Complex alumina parts by plasma joining, Intl. Seminar High Temperature Materials, February 23-25, 2009, Banaras Hindu University, Varanasi, UP, IN.

## 6 Vorträge auf Konferenzen und Symposien

- [1] M. Scheffler, M. Henker, F. Vogt, K.-P. Wendlandt, Synthesis and Charakterization of Nickel containing Pillared Clays, 4<sup>th</sup> German Conference on Zeolites, March 8-10, 1992, Mainz, G.
- [2] M. Scheffler, J. Kirchhof, J. Kobelke, K. Schuster, A. Schwuchow, Optical and thermal behaviour of rare earth containing low phonon energy glasses, SPIE Conference on Infrared Glass Optical Fibers and Their Applications, July 15-16, 1998, Quebec, CN.
- [3] M. Scheffler, P. Buhler and P. Greil, Influence of Al reactive filler on the carbon redistribution during pyrolysis of poly (siloxanes), EUROMAT 99, 1999, Munich, G.
- [3] M. Scheffler, T. Gambaryan-Roisman, T. Takahashi, J. Kaschta, H. Muenstedt, P. Buhler, P. Greil, 102<sup>nd</sup> Annual Meeting & Exposition of the American Ceramic Society, April 30-May 03, 2000, St. Louis, MO, USA.
- [4] M. Scheffler, P. Buhler, T. Gambaryan-Roisman, P. Greil, Low temperature decomposition and phase formation of poly(methylsiloxane) with Al<sub>88</sub>Si<sub>12</sub> active filler, 102<sup>nd</sup> Annual Meeting & Exposition of the American Ceramic Society, April 30-May 03, 2000, St. Louis, MO, USA.
- [5] M. Scheffler, T. Gambaryan-Roisman, T. Takahashi, P. Buhler and P. Greil, Ceramic Foams from Poly(siloxanes), 52<sup>nd</sup> PCRM 2000 Meeting, September 6-9, 2000, San Francisco, CA, USA.
- [6] M. Scheffler, T. Gambaryan-Roisman, T. Takahashi, P. Buhler, P. Greil Polymer-Füller abgeleitete Schäume, Arbeitskreistreffen „Ausgangspulver“ (Vorsitzender: Prof. H. Schubert, TU Berlin), 10./11.10.2000, Erlangen, G.
- [7] M. Scheffler, Q. Wei, E. Pippel, J. Woltersdorf, P. Greil, Si-C-O ceramics from preceramic polymers: Reaction mechanism between the Si-filler and the polymer derived matrix during pyrolytic conversion, 7<sup>th</sup> Conference & Exhibition of the European Ceramic society, September 9-13, 2001, Brugge, B.
- [8] M. Scheffler, J. Zeschky, T. Gambaryan-Roisman, P. Greil, Cellular Ceramics by a Self Foaming Process of Preceramic Polymers, 26<sup>th</sup> Annual International Conference on Advanced Ceramics & Composites, January 13-18, 2002, Cocoa Beach, FL, USA.
- [9] M. Scheffler, P. Cromme, J. Zeschky, R. Melcher, P. Greil Tapes, Foams, Tubes and Compacts from Preceramic Polymers, , 104<sup>th</sup> Annual Meeting & Exposition of the American Ceramic Society, April 28-May 1, 2002, St. Louis, MO, USA.
- [10] M. Scheffler, P. Greil, E. Pippel, J. Woltersdorf, In-Situ Formation of Silicon Oxynitride in Silicon-Filled Silicones, 104<sup>th</sup> Annual Meeting & Exposition of the American Ceramic Society, April 28-May 1, 2002, St. Louis, MO, USA.
- [11] M. Scheffler, P. Cromme, J. Zeschky, R. Melcher, R. Sindelar, J. Kaschta, P. Greil Formgebung mit Polysiloxanen, 7. Arbeitskreistreffen „Polymerkeramik“ (AK-Vorsitzender: Prof. P. Greil) im Gemeinschaftsausschuss von DKG und DGM 21./22.05.2002, Dübendorf, CH.

- [12] M. Scheffler, O. Dermovsek, D. Schwarze, J.C. Bressiani, A.H. Bressiani, W. Acchar, P. Greil, Direct Formation of Ceramic NbC/Composite by Filler-Controlled Polymer Pyrolysis, 105<sup>th</sup> Annual Meeting & Exposition of the American Ceramic Society, April 27-30, 2003, Nashville, TN, USA.
- [13] M. Scheffler, J. Zeschky, P. Greil, A. Zampieri, F. Scheffler, R. Herrmann, W. Schwieger, J. Lo, Ceramic Foams for Novel Applications, 105<sup>th</sup> Annual Meeting & Exposition of the American Ceramic Society, April 27-30, 2003, Nashville, TN, USA.
- [14] M. Scheffler, J. Woltersdorf, E. Pippel, A. Berger, P. Greil, Transition Metal-Catalyzed In Situ Formation of Carbon Nanotubes and Turbostratic Carbon in Polymer Derived Ceramics, 55<sup>th</sup> Pacific Coast Regional & Basic Science Division Fall Meeting, October 19 - 22, 2003, Oakland, CA, USA.
- [15] M. Scheffler, J. Woltersdorf, E. Pippel, A. Berger, P. Greil, Polymer Derived Ceramics from Silicone Resins, 55<sup>th</sup> Pacific Coast Regional & Basic Science Division Fall Meeting, October 19 - 22, 2003, Oakland, CA, USA.
- [16] M. Scheffler, P. Cromme, M. Gross, N. Popovska, P. Greil, SiC coated polymer derived ceramic substrates for Si-thin film solar cells, 106<sup>th</sup> Annual Meeting & Exposition of the American Ceramic Society, April 18-21, 2004, Indianapolis, IN, USA.
- [17] M. Scheffler, N. Travitzky, P. Greil, R. Bordia, Ceramic slurries for ink jet printing with preceramic polymers, 106<sup>th</sup> Annual Meeting & Exposition of the American Ceramic Society, April 18-21, 2004, Indianapolis, IN, USA
- [18] M. Scheffler, P. Cromme, P. Greil, A. Berger, E. Pippel, J. Woltersdorf, Low-temperature in situ formation of SiC/SiO<sub>x</sub> nanowires in polymer-derived ceramics, 56<sup>th</sup> Pacific Coast Regional & Basic Science Division Fall Meeting, September 12-15, 2004.
- [19] J. Zeschky, C. Arnold, M. Scheffler, P. Greil, Micro Composite Foams with Gradient Porosity from Filler Loaded Silicon Resins, 5<sup>th</sup> International Conference on High Temperature Ceramic Matrix Composites (HTCMC-5), September 12-15, Seattle, WA, USA
- [20] M. Scheffler, N. Travitzky, P. Greil, R. Bordia, Inkjet Printing with Filler-Loaded Preceramic Polymers, 56<sup>th</sup> Pacific Coast Regional & Basic Science Division Fall Meeting, September 12-15, 2004.
- [21] M. Scheffler, J.D. Whitt, and R.K. Bordia, In situ formation of Carbon Nanotubes (CNTs) in polymer derived ceramics, MRS Fall Meeting, Boston, MA, November 29-December 03, 2004.
- [22] J. Zeschky, M. Scheffler, T. Hoefner, C. Arnold, N. Travitzky, P. Greil, and R. K. Bordia, Polymer derived ceramic foams for light weight applications, MRS Fall Meeting, Boston, MA, November 29-December 03, 2004.
- [23] M. Scheffler, F. Scheffler, C. Schneider, C. F. Fyfe, R. K. Bordia Preceramic polymers for inkjet printing: crosslinking mechanism and filler-loading, MRS Fall Meeting, Boston, MA, November 29-December 03, 2004.
- [24] M. Scheffler, R. L. Anderson, R. K. Bordia, Preceramic polymers in 3D printing processes, 29<sup>th</sup> Annual Cocoa Beach Conference and Exposition on Advanced Ceramics & Composites, January 23-28, 2005, Cocoa Beach, FL, USA.
- [25] M. Scheffler, F. Scheffler, Porous Ceramic Monoliths in Heterogeneous Catalysis: Principles, Processes and Surface Modification, 29<sup>th</sup> Annual Cocoa Beach Conference and Exposition on Advanced Ceramics & Composites, January 23-28, 2005, Cocoa Beach, FL, USA.
- [26] M. Scheffler, F. Scheffler, C. Schneider, C. Fyfe and R.K. Bordia, Preceramic polymers for low-viscosity processing: Composition, crosslinking and ceramic residue, 107<sup>th</sup> Annual Meeting & Exposition of the American Ceramic Society, April 10-13, 2005, Baltimore, MD, USA.
- [27] M. Scheffler, Herstellverfahren für kristalline Silicium-Dünnsschicht-Solarzellen auf hochtemperaturstabilen Substraten, Teilprojekt: Großflächige Siliciumepitaxie für

- kristalline Dünnschicht-Solarzellen auf Keramiksubstraten, Workshop "Kristalline Silicium-Dünnschicht-Technologien" des BMU zum Entwicklungsstand Dünnschichtsolarzellen, 16.08.2006, Erlangen, D.
- [28] M. Scheffler, V. Gazuz, T. Kunz, I. Burkert, M. Grosch, M. Muchlbauer, R. Auer, R. Weissmann, and, Thin Silicon Solar Cells on Extraneous Substrates: Processing Routes, Needs and Obstacles, Renewable Energy 2006, International Conference and Exhibition, Makuhari Messe, 09-13 October 2006, Chiba, Japan.
- [29] M. Scheffler, H.-P. Ebert, G. Reichenauer, A. Hauer, G. Storch, F. Scheffler, Supported Zeolite Crystallisation for Adsorptive Heat Storage, First International Renewable Energy storage Conference, 31.10.2006, Gelsenkirchen, D.
- [30] M. Scheffler, F. Scheffler, Polymer-derived ceramics: Multifunctional Material for the use of Renewable Energies, 2nd International Renewable Energy Stotage Conference (IRES II), November 19-21, 2007, Bonn, D.
- [31] Michael Scheffler, Christina Ohl, Christiane Olszewski, Viola Wilker, Sarama Bhattacharjee, and Franziska Scheffler, Glass foams for photocatalytic applications, 33th Intl. Conf. and Exposition on Advanced Ceramics and Composites, January 18-23, 2009, Daytona Beach, Fl, USA.

## 7 Poster auf Konferenzen und Symposien

- [1] M. Scheffler, F. Vogt, K.-P. Wendlandt, Reduction Behaviour, Localization and Properties of Nickel encaged in Pillared Clays, 6<sup>th</sup> German Conference on Zeolites, March 6-8, 1994, Bochum, G.
- [2] H. Toufar, K.-P. Wendlandt, F. Vogt, A. Bukhzam, M. Scheffler, On The Crystallization Of MFI Zeolites In The Presence Of Boron, Chromium And Iron, 5<sup>th</sup> German Conference on Zeolites, March 14-16, 1993, Leipzig, G.
- [3] M. Scheffler, J. Kirchhof, J. Kobelke, A. Schwuchow, Pr-doped Sulfide Glasses for Optical Applications, 10<sup>th</sup> Int. Symp. Non-Oxide Glasses, June 19-22, 1996, Corning, NY.
- [4] M. Scheffler, J. Kirchhof, J. Kobelke, Chalkogenidgläser - Materialien für Passive und Aktive optische Anwendungen, 26. GDCh-Hauptversammlung und 100-Jahrfeier der GÖCH, Wien, 7.-11. September 1997, Wien, AT.
- [5] M. Scheffler, J. Kirchhof, J. Kobelke, A. Schwuchow, Enhanced rare earth solubility in As-S glasses, PROC. XI<sup>TH</sup> IS(NOG)<sup>2</sup>, SEPTEMBER 6-10, 1998, SHEFFIELD, UK.
- [6] J. Kobelke, J. Kirchhof, M. Scheffler, A. Schwuchow, Chalcogenide glass single-mode fibers – preparation and properties, PROC. XI<sup>TH</sup> IS(NOG)<sup>2</sup>, SEPTEMBER 6-10, 1998, SHEFFIELD, UK.
- [7] M. Scheffler, P. Buhler, P. Greil, Aluminium und Bor – Einfluß auf die Pyrolyse von Polysiloxanen bei der Keramikherstellung, DGM-Symposium „Precursorkeramiken“, 15./16.04.1999, Stuttgart, G.
- [8] T. Gambaryan-Roisman, M. Scheffler, P. Buhler, P. Greil, Processing of Ceramic Foam by Pyrolysis of Filler Containing Phenylmethyl Polysiloxane Precursor 101<sup>th</sup> Annual Meeting of the American Ceramic Society, April 25-28, 1999, Indianapolis, IN, USA.
- [9] T. Gambaryan-Roisman, M. Scheffler, T. Takahashi, P. Buhler and P. Greil, Formation and Properties of Poly(siloxane) Derived Ceramic Foams, Biannual Meet. Fed. Eur. Mater. Soc. (FEMS) (1999).
- [10] M. Scheffler, P. Buhler, T. Takahashi, J. Kaschta, P. Greil; Kompositionelle Zusammenhänge zwischen vernetzten und thermolysierten Polysiloxanen, 10.

- Vortragstagung der GDCh-Fachgruppe Festkörperchemie und Materialforschung:  
Anorganische Funktionsmaterialien, 26.-28.09.2000, Münster, G.
- [11] M. Scheffler, J. Zeschky, Cellular Ceramics by Self Foaming of Silicone Resins, Materials Week 2001, Biannu. Meet. Fed. Eur. Mater. Soc. (FEMS) (2001), Oktober 1-4, 2001, Munich, G.
- [12] F. Scheffler, M. Scheffler, Herstellung und Charakterisierung von geformten zeolithhaltigen Schäumen, DECHEMA/VDI-GVC-Symposium Schäume – Grundlagen und Anwendungen, 8./9. November 2001, Baden-Baden, G.
- [13] M. Scheffler, J. Zeschky, P. Greil, Polymerabgeleitete keramische Schäume, DECHEMA/VDI-GVC-Symposium Schäume – Grundlagen und Anwendungen, 8./9. November 2001, Baden-Baden, G.
- [14] J. Zeschky, M. Scheffler, P. Colombo, P. Greil, Cellular Oxide Ceramics from Filler-loaded Silicone Resins, Ceram. Trans. 2002, 26<sup>th</sup> Annual International Conference on Advanced Ceramics & Composites, January 13-18, 2002, Cocoa Beach, FL, USA.
- [15] P. Cromme, M. Scheffler, R. Melcher, P. Greil, Precursor-Derived Ceramic Tubes, 104<sup>th</sup> Annual Meeting & Exposition of the American Ceramic Society, April 28-May 1, 2002, St. Louis, MO, USA.
- [16] F. Scheffler, M. Scheffler, W. Schwieger, Hirarchical structures via supported crystallization of zeolites on open-cell ceramic foams, Gordon Research Conference on Zeolitic and Layered Materials, June 16-21, 2001, Mount Holyoke College, South Hadley, MA, USA,
- [17] J. Zeschky, M. Scheffler, P. Greil, Cermet Foams from Aluminum-Filled Preceramic Polymers, 104<sup>th</sup> Annual Meeting & Exposition of the American Ceramic Society, April 28-May 1, 2002, St. Louis, MO, USA.
- [18] J. Zeschky, M. Scheffler, P. Greil, Gas Permeability of Cellular Ceramics from Preceramic Polymers, 27<sup>th</sup> Annual Cocoa Beach Conference and Exposition on Advanced Ceramics & Composites, January 26-31, 2003, Cocoa Beach, FL, USA.
- [19] A. Zampieri, F. Scheffler, W. Schwieger, M. Scheffler, J. Zeschky, P. Greil, Electrically conductive ceramic foam-zeolite composite by chemical-mechanical supported crystallization (CMSC), 15<sup>th</sup> German Zeolite Conference, March 5-7, 2003, Kaiserslautern, G.
- [20] D. Hourlier-Bahloul, J. Zeschky, Th. Hoefner, M. Scheffler, P. Greil, Effects of Filler Particle Size on Their Distribution in Preceramic Polymers, 55<sup>th</sup> Pacific Coast Regional & Basic Science Division Fall Meeting, October 19 - 22, 2003, Oakland, CA, USA.
- [21] J. Zeschky, T. Hoefner, D. Bahloul-Hourlier, M. Scheffler, P. Greil, Tailoring the Structure and Properties of Ceramic Foams from Filler Loaded Silicon Resins, 28<sup>th</sup> Annual Cocoa Beach Conference and Exposition on Advanced Ceramics & Composites, January 25-30, 2004, Cocoa Beach, FL, USA.
- [22] T. Hoefner, J. Zeschky, M. Scheffler, P. Greil, Light Weight Ceramic Sandwich Structures from Preceramic Polymers, 28<sup>th</sup> Annual Cocoa Beach Conference and Exposition on Advanced Ceramics & Composites, January 25-30, 2004, Cocoa Beach, FL, USA.
- [23] M. Scheffler, F. Scheffler, C. Schneider, C. Fyfe, R.K. Bordia, Room Temperature Rapid Crosslinking Preceramic Polymer System: Mechanism and Applications, Gordon Research Conference on Solid state studies in ceramics, July 17-22, 2005, Tilton School, Tilton, NH, USA.



10.-	A1		21.12.79
	A		08.12.80
			08.12.80
	B		22.06.83
	C1		22.06.83
	C		22.06.83 26.11.14 172
	D1		
	D		
	BE		22.06.83
	C1E		22.06.83
	CE		22.06.83 26.11.14
	D1E		
	DE		
	M		21.12.79
	L		21.12.79 174,175
	T/S		22.06.83
	12.		