

Publications about **Diamond**

Low Pressure Diamond Deposition from a Methane - Hydrogen Gas Mixture

R.Bichler, R.Haubner, B.Lux

6th Euro CVD Conf., Jerusalem 413-22 (1987)

Influence of Inhomogeneous Microwave Plasma on Diamond Morphology

R.Haubner, B.Lux

J.Ref. Hard Metals, Vol.6, No.4, (1987) 210-215

Preparation of a Diamond/Corundum Layer Composite Using Low Pressure Diamond PA-CVD

R.Bichler, J.Peng, R.Haubner, B.Lux

* Abstracts, 3rd Int.Conf.on the Science of Hard Materials, Nov. 8-13, 1987, Nassau, Bahamas

* Mat. Science and Engineering, A105/106, (1988) 543-547

Low-Pressure Diamond growth on High-Pressure Diamond Crystals Pressed onto Different Substrates

P.O.Joffreau, R.Bichler, R.Haubner, B.Lux

J.Ref. Hard Metals, Vol.7, No.2, (1988) 92-97

Deposition of Thermal CVD Low-Pressure Diamond on cub-BN

R.Haubner

* Poceedings: Advances in Hard Materials Production, London, 11-13 April 1988, 34-1/17

* J.Ref. Hard Metals, Vol.9, No.2, 70-76 (1990)

Low-pressure diamond growth on different refracteric metals

P.O.Joffreau, R.Haubner, B.Lux

* MRS, Extended Abstracts, E-15, "Diamond and Diamond-Like Materials Synthesis", edited by: G.H.Johnson, A.R.Badzian, M.W.Geis, 1988, p.15-8

* J.Ref. Hard Metals, Vol.7, No.4, (1988) 186-194

Low Pressure synthesis of Superhard Coatings

B.Lux, R.Haubner

* 12th Int. Plansee Seminar '89, Mai 1989, Reutte, Austria, Editors: H.Bildstein, H.Ortner, Proc., Vol.3, C2, 615-60

* J.Ref. Hard Metals, Vol.8, No.3, 158-174 (1989)

Diamantabscheidung aus Wasserstoff-Methan Gasgemischen mittels thermisch aktivierter Gasabscheidung (TA-CVD) auf SiAlON-Substraten

R.Bichler, R.Haubner, B.Lux

* 12th Int. Plansee Seminar '89, Mai 1989, Reutte, Austria, Editors: H.Bildstein, H.Ortner, Proc., Vol.3, C15, 427-60

* High Temperature-High Pressure, Vol.21 (1989) 576-593

Untersuchung der Kinetik von Diamantabscheidungen auf Mo-Drahtsubstraten

R.Litos, R.Haubner, B.Lux

* 12th Int. Plansee Seminar '89, Mai 1989, Reutte, Austria, Editors: H.Bildstein, H.Ortner, Proc., Vol.3, C16, 461-93

* High Temperature-High Pressure, Vol.22 (1990) 99-118

Acetone as carbon source for deposition of diamond thin films by thermal CVD

S.Okoli, R.Haubner, B.Lux

* 7th Euro CVD Conf., June 1989, Perpignan, France, Editors: M.Ducarrion, C.Bernard, L.Vandenbulke, pp.159-68

* Journal de Physique Coll.C5, suppl.5, mai 1989, 159-68

Influence of the Cobalt Content in Hot-Pressed Cemented Carbide on the Deposition of Low Pressure Diamond Layers

R.Haubner, B.Lux

* 7th Euro CVD Conf., June 1989, Perpignan, France, Editors: M.Ducarrion, C.Bernard, L.Vandenbulke, pp.169-76

* Journal de Physique Coll.C5, suppl.5, mai 1989, 169-76

CVD-Beschichtung von Werkzeugen mit polykristallinem Diamant

B.Lux, R.Haubner

CIRP/VDI Conference "Cutting Materials and Tools" in Düsseldorf, Sept.19-20, 1989, VDI Berichte 762, pp.61-84

Examination of Low Pressure Diamond Layers by Transmission Electron Microscopy

Ch.Chatfield, R.Haubner, B.Lux

J.Materials Science Letters 8 (1989) 1188-1192

Influence of a nitrogen gas content on the deposition of low-pressure diamond layers by the hot filament CVD-method

R.Haubner, B.Lux

3rd Int.Conf.Surface Modification Technologies, Neuchatel, Switzerland, Aug.28-Sept.1 1989, 835-839, Edited by T.S.Sudarshan and D.G.Bhat

Low-Pressure Synthesis of Hard Coatings

B.Lux, R.Haubner

Carbon, 28(6)(1990) 779-780

**Aspects of Diamond Deposition by Abnormal Glow Discharge- (DC-Discharge-)
Activated CVD**

D.Satrapa, R.Haubner, B.Lux

* Proc. DIAMOND 1990, Crans-Montana, Switzerland, Sept.17-19, 1990, pp.59-68,

Editors: A.Matthews, P.K.Bachmann

* Surface and Coatings Technology, 47 (1991) 59-68

**Carburization of Tungsten and Tantalum Filaments during Low-Pressure Diamond
Deposition**

S.Okoli, R.Haubner, B.Lux

* Proc. DIAMOND 1990, Crans-Montana, Switzerland, Sept.17-19, 1990, pp.585-599,

Editors: A.Matthews, P.K.Bachmann

* Surface and Coatings Technology, 47 (1991) 585-599

CVD Diamond Coatings of Cemented Carbide Tools

J.Oakes, X.X.Pan, R.Bichler, R.Haubner, B.Lux

* Proc. DIAMOND 1990, Crans-Montana, Switzerland, Sept.17-19, 1990, pp.600-607,

Editors: A.Matthews, P.K.Bachmann

* Surface and Coatings Technology, 47 (1991) 600-607

Low-Pressure Diamond Coatings for tools and wear parts

B.Lux, R.Haubner

New Diamond Science and Technology, Washington,DC, Sept.23-27, 1990, pp.805-808,

Editors: R.Messier, J.T.Glass, J.E.Butler, R.Roy; MRS Pittsburgh

**Influence of the Filament Material on Low-Pressure Hot-Filament CVD Diamond
Deposition**

S.Okoli, R.Haubner, B.Lux

* 8th EURO-CVD Conf., Sept.1991, Glasgow, Scotland, 923-930, Editors:

M.L.Hitchman, N.J.Archer

* Journal de Physique IV, Coll.C2, Vol.1, sept.1991, 923-930

Nucleation and Growth of Low-Pressure Diamond

B.Lux, R.Haubner

Diamond and Diamond-Like Films and Coatings, NATO-ASI, Series B: Physics,

Vol.266, pp.579-609, Edited by R.E. et al., Plenum, New York, 1991

Analysis of hydrogen in low pressure diamond layers

W.Wagner, F.Rauch, R.Haubner, B.Lux

Thin Solid Films, 207 (1992) 24-28

**Radiation Analytical Material Characterization of Diamond Layers Deposited Onto
Tungsten Carbide**

H.J.Ullrich, M.Schlaubit, R.Haubner, B.Lux

Microchem.Acta 107 (1992) 257-263

Influence of hot-filament/DC-plasma co-enhancement on low-pressure diamond synthesis

S.Okoli, R.Haubner, B.Lux

Diamond and Related Materials 01 (1992) 955-962

Low-pressure diamond deposition on iron substrates by microwave-plasma CVD

A.Lindlbauer, R.Haubner, B.Lux

Diamond Films and Technology, Vol.2, No.2 & 3 (1992) 81-98

Diamond for tooling and abrasives

B.Lux, R.Haubner, P.Renard

* Proc. Workshop on European Diamond Technology for the 90s, Brussels, Belgium, Dec.2-3, 1991, pp.1049-1065

* Diamond and Related Materials 01 (1992) 1035-1047

Diamantabscheidung auf keramischen Materialien mit der Hot-Filament-Methode

A.Lindlbauer, R.Haubner, B.Lux

Wear 159 (1992) 67-77

Diamantabscheidung auf PM- und Keramik-Werkstoffen

R.Haubner, B.Lux

"Pulvermetallurgie in Wissenschaft und Praxis" Band 8, 1992, Editor: Hans Kolaska, VDI Verlag

Effects of microwave plasma deposition parameters on diamond coating formation on SiAlON substrates

A.Lindlbauer, R.Haubner, B.Lux

* Int. Conf. on Advances in Hard Materials Production, 35 pp.1-15, May 4-6, 1992, Bonn, Germany

* Refractory Metals & Hard Materials 11 (1992) 247-258

The importance of the substrate surface temperature and other parameters in hot-filament diamond synthesis

R.Haubner, S.Okoli, B.Lux

* Int. Conf. on Advances in Hard Materials Production, 44 pp.1-14, May 4-6, 1992, Bonn, Germany

* Refractory Metals & Hard Materials 11 (1992) 259-269

Diamond as a wear-resistant coating

B.Lux, R.Haubner

* Phil.Trans.R.Soc.Lond.A, Vol.342 (1993) 297-311

* "Thin Film Diamond" pp.127-141, edited by A.Lettington and J.W.Steed, Chapman & Hall for the Royal Society 1993

Diamond nucleation and growth on refractory metals using microwave plasma deposition

R.Haubner, A.Lindlbauer, B.Lux

* 13th Int. Plansee Seminar '93, Mai 1993, Reutte, Austria, Editors: H.Bildstein, R.Eck, Proc., Vol.3, C7, 89-100

* Refractory Metals & Hard Materials 14 (1996) 119-125

Influence of Carbon Monoxide - Addition to the Reaction Gas on the Hot-Filament Diamond Deposition

R.Brunsteiner, R.Haubner, B.Lux

* 13th Int. Plansee Seminar '93, Mai 1993, Reutte, Austria, Editors: H.Bildstein, R.Eck, Proc., Vol.3, C31, 304-316

* Refractory Metals & Hard Materials 14 (1996) 127-135

A Simple Method to Calculate the Temperature Distribution in Hot-Filament CVD Reactors

D.Satrapa, R.Haubner, B.Lux

* 13th Int. Plansee Seminar '93, Mai 1993, Reutte, Austria, Editors: H.Bildstein, R.Eck, Proc., Vol.3, C32, 317-332

* Diamond Films and Technology, Vol.4, No.4 (1994) 201-217

Investigation of surface preparation for diamond deposition on metal-substrates by secondary ion mass spectrometry

R.Steiner, G.Stingeder, M.Grasserbauer, R.Haubner, B.Lux

* Proc. DIAMOND 1992, Heidelberg Germany, Aug.31-Sep.4, 1992, pp.958-962, Editors: P.K.Bachmann, A.T.Collins, M.Seal

* Diamond and Related Materials 2 (1993) 958-962

Hot-filament CVD diamond deposition on SiAlON at pressures up to 500 torr

R.Brunsteiner, R.Haubner, B.Lux

Diamond and Related Materials 2 (1993) 1263-1270

Diamond growth by hot-filament CVD: State of the art

R.Haubner, B.Lux

Diamond and Related Materials 2 (1993) 1277-1294

Diamond deposition on chromium, cobalt and nickel substrates by microwave plasma CVD

R.Haubner, A.Lindlbauer, B.Lux

Diamond and Related Materials 2 (1993) 1505-1515

Surface/Coating Interactions During Low-Pressure Diamond Deposition

R.Haubner, B.Lux

3rd Int.Symp.on Diamond Materials, Honolulu, Hawaii - May 16-21, 1993; pp.198-208, Editors: J.P.Dismukes, K.V.Ravi; The Electrochemical Society, Inc., Pennington, NJ

Influence of Chemical Substrate Interaction on Diamond Nucleation and Growth

R.Haubner, B.Lux

* 2nd Int.Conf.on the Applications of Diamond Films and Related Materials, Omiya Saitama, Japan, Aug.25-27, 1993; pp.131-138, Editors: M.Yoshikawa, M.Murakawa, Y.Tzeng, W.A.Yarbrough, MYU, Tokyo 1993

* Diamond Films and Technology, Vol.3, No.4 (1994) 209-218

Undesirable Glow Discharge Formations in Large-Scale Hot-Filament Diamond CVD Reactors

D.Satrapa, R.Haubner, B.Lux

* 2nd Int.Conf.on the Applications of Diamond Films and Related Materials, Omiya Saitama, Japan, Aug.25-27, 1993; pp.505-510, Editors: M.Yoshikawa, M.Murakawa, Y.Tzeng, W.A.Yarbrough, MYU, Tokyo 1993

* Diamond Films and Technology, Vol.3, No.4 (1994) 219-226

Characterization of diamond coatings with transmission electron microscopy (TEM)

M.Joksch, P.Wurzinger, P.Pongratz, R.Haubner, B.Lux

* Proc. DIAMOND 1993, Albufeira, Portugal, Sept.20-24, 1993, pp.681-687

* Diamond and Related Materials 3 (1994) 681-687

Internal stresses in diamond CVD layers

D.Schwarzbach, R.Haubner, B.Lux

* Proc. DIAMOND 1993, Albufeira, Portugal, Sept.20-24, 1993, pp.757-764

* Diamond and Related Materials 3 (1994) 757-764

Characterization of tantalum impurities in hot-filament diamond layers

M.Griesser, G.Stingeder, M.Grasserbauer, H.Baumann, P.Wurzinger, R.Haubner, B.Lux

* Proc. DIAMOND 1993, Albufeira, Portugal, Sept.20-24, 1993, pp.638-644

* Diamond and Related Materials 3 (1994) 638-644

Diamond as a wear-resistant coating

B.Lux, R.Haubner

“Diamond Films and Coatings“ pp.184-243, edited by R.F.Davis; NOYES Publications Park Ridge, New Jersey, USA, 1993

Cathodoluminescence (CL) and CL Spectra of Microwave Plasma Enhanced CVD Diamond

J.Ponahlo, R.Haubner, B.Lux

Microchimica Acta, 116 (1994) 143-156

Diamond Substrate Interactions and the Adhesion of Diamond Coatings

B.Lux, R.Haubner

Proc.of the NIRIM International Symposium on Advanced Materials '94, pp.179-184, Editors: M.Kamo, H.Kanda, Y.Matsui, T.Sekine, NIRIM, Tsukuba, Japan, 1994

Techniques of hot-filament assisted deposition of diamond

R.Haubner, B.Lux

“Properties and growth of diamond“, EMIS Datareviews Series No. 9, Chapter 11.2, pp.336-348, edited by G.Davies, INSPEC, London, 1994

Diamond substrate interactions and the adhesion of diamond coatings

B.Lux, R.Haubner

Pure & Appl.Chem., Vol.66, No.9 (1994) 1783-1788

Influences of WC/Co hard metal substrates pretreatments with boron and silicon on low-pressure diamond

S.Kubelka, R.Haubner, B.Lux, R.Steiner, G.Stingeder, M.Grasserbauer

Diamond and Related Materials,3 (1994) 1360-1369

Influence of Phosphorus Addition on Diamond CVD

S.Bohr, R.Haubner, B.Lux

Diamond and Related Materials, 4 (1995) 133-144

Pretreatment of silicon substrates for CVD diamond deposition studied by atomic force microscopy

G.Friedbacher, E.Bouveresse, G.Fuchs, M.Grasserbauer, D.Schwarzbach, R.Haubner, B.Lux

Applied Surface Science 84 (1995) 133-143

Chemical interactions of WC/Co hard metal substrates with low-pressure diamond coatings

S.Kubelka, R.Haubner, B.Lux, R.Steiner, G.Stingeder, M.Grasserbauer

Diamond Films and Technology, Vol.5, No.2 (1995) 105-120

Imaging SIMS for the investigation of substrate surfaces for CVD diamond deposition

R.Steiner, G.Stingeder, H.Hutter, M.Grasserbauer, R.Haubner, B.Lux,

Fresenius J.Anal.Chem. 352 (1995) 313-317

Comparative Aspects of c-BN and diamond CVD

S.Bohr, R.Haubner, B.Lux

* Proc. DIAMOND FILMS '94, Il Ciocco, Tuscany, Italy, Sept.25-30, 1994, pp. 714-719

* Diamond and Related Materials 4 (1995) 714-719

Diamond Deposition on Cutting Tools

B.Lux, R.Haubner

* Advances in Science and Technology 6; New Diamond and Diamond-Like Films, pp.11-21, Editor P.Vincenzini, Techna Srl. 1995

* Ceramic International 22 (1996) 347-351

Murakami and H₂SO₄/H₂O₂ Pretreatment of WC-Co Hard Metal Substrates to Increase the Adhesion of CVD Diamond Coatings

R.Haubner, S.Kubelka, B.Lux, M.Griesser, M.Grasserbauer

* Proc.10th EURO-CVD, 10-15. Sept. 1995 Jesolo Lido Venice, Italy Vol.II, pp.753-760,

Editor: G.Battiston, R.Gerbasi, M.Porchia, Les editions de physique, France

* Journal de Physique IV, Coll.C5, Vol.5, juin 1995, 753-760

NIR- and VIS-Raman spectroscopy of CVD diamond films

M.Griesser, M.Grasserbauer, R.Kellner, S.Bohr, R.Haubner, B.Lux

Fresenius J.Anal.Chem. 352 (1995) 763-770

On the Formation of Diamond Coatings on WC/Co Hard Metal Tools

R.Haubner, B.Lux

Refractory Metals & Hard Materials 14 (1996) 111-118

Influence of boron on diamond growth on WC-Co hardmetals

W.Kalss, S.Bohr, R.Haubner, B.Lux, M.Griesser, H.Spicka, M.Grasserbauer,

P.Wurzinger

Refractory Metals & Hard Materials 14 (1996) 137-144

A Comparison of low-pressure CVD Synthesis of Diamond and c-BN

A.Bartl, S.Bohr, R.Haubner, B.Lux

Refractory Metals & Hard Materials 14 (1996) 145-157

Influence of nitrogen addition on hot-filament CVD diamond growth

S.Bohr, R.Haubner, B.Lux

Appl.Phys.Lett. 68 (8) (1996) 1075-1077

Deposition of thick diamond films by pulsed d.c. glow discharge CVD

P.Hartmann, R.Haubner, B.Lux

* Proc. DIAMOND FILMS '95, Sept.10-15, 1995, Barcelona, Spain, pp.850-856

Editors: P.K.Bachmann, I.M.Buckley-Golder, J.T.Glass, M.Kamo, ELSEVIER

* Diamond and Related Materials, 5 (1996) 850-856

Investigation of the incorporation of B, P and N into CVD-diamond films by secondary ion mass spectrometry

H.Spicka, M.Griesser, H.Hutter, M.Grasserbauer, S.Bohr, R.Haubner, B.Lux

* Proc. DIAMOND FILMS '95, Sept.10-15, 1995, Barcelona, Spain, pp.383-387

Editors: P.K.Bachmann, I.M.Buckley-Golder, J.T.Glass, M.Kamo, ELSEVIER

* Diamond and Related Materials, 5 (1996) 383-387

Mechanical and Thermal Applications of Low-Pressure Diamond

H.Holzer, R.Haubner, B.Lux

Conference Proceedings Vol.52 "EURODIAMOND '96", C.Manfredotti and

E.Vittone (Eds.) SIF, Bologna, 1996, pp.71-88

Superhard Coatings - Production and Analysis

B.Lux, R.Haubner, M.Griesser, M.Grasserbauer

Microchimica Acta 125, (1997) 197-209

Diamond deposition on noble metals

W.Kalss, R.Haubner, B.Lux

* Proc. DIAMOND 1996, Sept.8-13, 1996, Tours, France, pp. 240-246

Editors: J.C.Angus, P.K.Bachmann, I.M.Buckley-Golder, O.Fukunaga, J.T.Glass, M.Kamo, ELSEVIER

* Diamond and Related Materials 6 (1997) 240-246

Diamond growth in a direct-current low-pressure supersonic plasmajet

J.Laimer, H.Pauser, H.Störi, R.Haubner, B.Lux

* Proc. DIAMOND 1996, Sept.8-13, 1996, Tours, France, pp. 406-410

Editors: J.C.Angus, P.K.Bachmann, I.M.Buckley-Golder, O.Fukunaga, J.T.Glass, M.Kamo, ELSEVIER

* Diamond and Related Materials 6 (1997) 406-410

Effects of simultaneous boron and nitrogen addition on hot-filament CVD diamond growth

P.Hartmann, R.Haubner, B.Lux

* Proc. DIAMOND 1996, Sept.8-13, 1996, Tours, France, pp. 456-462

Editors: J.C.Angus, P.K.Bachmann, I.M.Buckley-Golder, O.Fukunaga, J.T.Glass, M.Kamo, ELSEVIER

* Diamond and Related Materials 6 (1997) 456-462

Lithium addition during CVD diamond deposition using lithium tert.-butanolat as precursor

H.Sachdev, R.Haubner, B.Lux

* Proc. DIAMOND 1996, Sept.8-13, 1996, Tours, France, pp. 494-500

Editors: J.C.Angus, P.K.Bachmann, I.M.Buckley-Golder, O.Fukunaga, J.T.Glass, M.Kamo, ELSEVIER

* Diamond and Related Materials 6 (1997) 494-500

Investigation of the boron incorporation in polycrystalline CVD diamond films by TEM, EELS and Raman spectroscopy

P.Wurzinger, P.Pongratz, P.Hartmann, R.Haubner, B.Lux

* Proc. DIAMOND 1996, Sept.8-13, 1996, Tours, France, pp. 763-768

Editors: J.C.Angus, P.K.Bachmann, I.M.Buckley-Golder, O.Fukunaga, J.T.Glass, M.Kamo, ELSEVIER

* Diamond and Related Materials 6 (1997) 763-768

Interactions of hard metal substrates during diamond deposition

R.Haubner, W.D.Schubert, B.Lux

* 14th Int. Plansee Seminar '97, Mai 1997, Reutte, Austria, Editors: G.Kneringer,

P.Rödhammer, P.Wilhartitz, Proc., Vol.3, C2, 16-30

* Refractory Metals & Hard Materials 16 (1998) 177-185

Characteristics of a Pulsed DC-Glow Discharge CVD Reactor for Deposition of Thick Diamond Films

P.Hartmann, R.Haubner, B.Lux

* 14th Int. Plansee Seminar '97, Mai 1997, Reutte, Austria, Editors: G.Kneringer,

P.Rödhammer, P.Wilhartitz, Proc., Vol.3, C14, 129-143

* Refractory Metals & Hard Materials 16 (1998) 207-216

SIMS-analysis on B, N, and C containing layers

M.Griesser, H.Hutter, M.Grasserbauer, W.Kalss, R.Haubner, B.Lux

Fresenius J.Anal.Chem. 358 (1997) 293-296

Natural and Synthetic Polycrystalline Diamond, with Emphasis on Ballas

B.Lux, R.Haubner, H.Holzer, R.C.DeVries

Refractory Metals & Hard Materials 15 (1997) 263-288

Fourier-transform Infrared and Temperature-programmed Desorption Spectroscopic Study on the Oxidation of Diamond Surfaces Using Nitrous and Nitric Oxide

T.Ando, K.Yamamoto, Y.Sato, M.N.Gamo, R.Haubner

Proc.of the 4th NIRIM International Symposium on Advanced Materials (ISAM '97), pp.261-262, NIRIM, Tsukuba, Japan, 1997

Diamond deposition on platinum and palladium - Raman investigations

W.Kalss, R.Haubner, G.Lippold, B.Lux

* Proc. DIAMOND 1997, Aug.3-8, 1997, Edinburgh, Scotland, pp. 158-164

Editors: A.-Bonnot, R.F.Davis, P.John, M.Kamo, A.H.Lettington, R.Zachai, ELSEVIER

* Diamond and Related Materials 7 (1998) 158-164

CVD Diamond for Cutting Tools

B.Lux, R.Haubner

„Low Pressure Synthetic Diamond“ Chapter 12, pp.223-242, Eds.: B.Dischler and C.Wild, Springer-Verlag Berlin Heidelberg 1998

Comparison of P, N and B additions during CVD diamond deposition

R.Haubner, S.Bohr, B.Lux

* Proc. DIAMOND 1998, Sept. 13-18, 1998, Crete, Greece, pp. 171-178

Editors: A.M.Bonnot, P.John, H.Kawarada, A.H.Lettington, Z.Sitar, R.Zachai, ELSEVIER

* Diamond and Related Materials 8 (1999) 171-178

Characterization of ballas diamond depositions

S.Bühlmann, E.Blank, R.Haubner, B.Lux

* Proc. DIAMOND 1998, Sept. 13-18, 1998, Crete, Greece pp. 194-201

Editors: A.M.Bonnot, P.John, H.Kawarada, A.H.Lettington, Z.Sitar, R.Zachai, ELSEVIER

* Diamond and Related Materials 8 (1999) 194-201

Diamond deposition on Ni₃Ge single- and polycrystalline substrates

R.Haubner, B.Lux, U.Gruber, J.C.Schuster
Diamond and Related Materials 8 (1999) 246-250

Quantitative investigation of boron incorporation in polycrystalline CVD diamond films by SIMS

T. Kolber, K. Piplits, R. Haubner, H. Hutter
Fresenius J.Anal.Chem. 365 (1999) 636-641

WC-Co substrate surface pretreatments with aluminium compounds prior to polycrystalline CVD diamond deposition

T.Kolber, A.Köpf, R.Haubner, H.Hutter
Refractory Metals & Hard Materials 17 (1999) 445-452

Diamond deposition on copper treated hardmetal substrates

M. Sommer, R. Haubner, B. Lux
Diamond and Related Materials 9 (2000) 351-357

Double-layer coatings on WC-Co hardmetals containing diamond and titaniumcarbide/nitride

A.Köpf, R.Haubner, B.Lux
Diamond and Related Materials 9 (2000) 494-501

Effect of B, N and P on low-temperature diamond growth

R.Haubner, B.Lux
“Properties, growth and applications of diamond“, EMIS Datareviews Series No. 26,
Chapter B1.5, pp.281-290, edited by M.H.Nazare and A.J.Neves, INSPEC, London, 2001

Sample requirements for diamond deposition

B.Lux, R.Haubner
“Properties, growth and applications of diamond“, EMIS Datareviews Series No. 26,
Chapter C2.1, pp.401-409, edited by M.H.Nazare and A.J.Neves, INSPEC, London, 2001

Substrate Effects during Nucleation and Growth of CVD Diamond

A.Köpf, B.Lux, R.Haubner
New Diamond and Frontier Carbon Technology 11 (2001) 11-23

Diamond deposition on hardmetal-substrates after pre-treatment with aluminium or aluminium-compounds

A.Köpf, M.Sommer, R.Haubner, B.Lux
Diamond and Related Materials 10 (2001) 790-796

Deposition of Ballas Diamond and Nano-crystalline Diamond

R.Haubner, B.Lux
Refractory Metals & Hard Materials 20 (2002) 93-100

Multilayer coatings containing diamond and other hard materials on hardmetal substrates

A.Köpf, R.Haubner, B.Lux

Refractory Metals & Hard Materials 20 (2002) 107-114

Diamond deposition on hardmetal substrates after pre-treatment with boron or sulfur compounds

R.Haubner, A.Köpf, B.Lux

Diamond and Related Materials 11(2002) 555-561

Superhard Materials

R.Haubner

Refractory Metals & Hard Materials 20 (2002) 91-92

Hot-filament diamond deposition with sulfur addition

R. Haubner, D. Sommer

Diamond and Related Materials (2003), 12(3-7), 298-305

Diamond deposition with sulfur addition—thermodynamic calculations

R. Haubner

Diamond and Related Materials (2004) 13(4-8), 648-655

Investigation of diamond coatings on titanium substrates for electrochemical applications

I. Gerger , R. Haubner , H. Kronberger and G. Fafilek

Diamond and Related Materials (2004) 13(4-8), 1062-1069

Diamond deposition on titanium stretch metal for electrodes

I. Gerger, R. Haubner

PM2004 Powdermetallurgy World Congress&Exhibition, Wien; 17.10.2004 -

21.10.2004; in: "PM2004 Powdermetallurgy World Congress&Exhibition", H.

Danninger, R. Ratzi (Hrg.); EPMA, Shrewsbury, Vol. 2 (2004), 1899072 15 2; S. 417 - 422.

Superhard coatings for wear parts

R. Haubner

PM2004 Powdermetallurgy World Congress&Exhibition, Wien; 17.10.2004 -

21.10.2004; in: "PM2004 Powdermetallurgy World Congress&Exhibition", H.

Danninger, R. Ratzi (Hrg.); EPMA, Shrewsbury, Vol. 2 (2004), 1899072 15 2; S. 483 - 489.

Comparison of sulfur, boron, nitrogen and phosphorus additions during low-pressure diamond deposition

R. Haubner

Diamond and Related Materials, 14 (2005), S. 355 - 363.

Cyclic voltammetry measurements on boron and nitrogen doped diamond layers

I. Gerger, R. Haubner

Diamond and Related Materials, 14 (2005), S. 369 - 374.

Diamond deposition on steel substrates using intermediate layers

R. Haubner, B. Lux

16th International Plansee Seminar 2005, Reutte; 30.05.2005 - 03.06.2005; in: "Plenary Lectures & PM Hard Materials", Plansee Holding AG, Vol. 2 (2005), S. 959 - 972.

Editorial, Special Issue devoted to the 75th birthday of

Em.O.Univ. Prof. Dipl.-Ing. Dr.techn. Benno LUX

W.D. Schubert, R. Haubner, H. Danninger, B. Zeiler, E. Lassner, H. Ortner:

International Journal of Refractory Metals & Hard Materials, **24** (2006), S. 351 - 352.

Temperature pre-treatments of hardmetal substrates to reduce the cobalt content and improve diamond deposition

S. Ullram, R. Haubner

Diamond and Related Materials, **15** (2006), S. 994 - 999.

The behaviour of Ti-substrates during diamond deposition

I. Gerger, R. Haubner

15th IFHTSE - International Federation for Heat Treatment and Surface Engineering Congress 2006, Wien; 25.09.2006 - 29.09.2006; in: "*Proceedings 15th IFHTSE*", (2006) 633- 638.

Diamond Layers - Deposition Methods and Applications

R. Haubner:

15th IFHTSE - International Federation for Heat Treatment and Surface Engineering Congress 2006, Vienna; 25.09.2006 - 29.09.2006; in: "*Proceedings 15th IFHTSE*", (2006) 322 – 327

Gradient layers of boron doped diamond on titanium substrates

I. Gerger, R. Haubner:

Diamond and Related Materials, 16 (2007), S. 899 - 904.

Micro- and nanomechanical properties of diamond film with various surface morphologies

A.M. Bogus, I. Gebeshuber, A. Pauschitz, M. Roy, R. Haubner:

Diamond and Related Materials, **17** (2008) 1998-2004.

The behaviour of Ti-substrates during deposition of boron doped diamond

I. Gerger, R. Haubner

International Journal of Refractory Metals & Hard Materials, **26** (2008) 438-443.

Influence of H₂S addition during diamond deposition on hardmetal substrates

R. Haubner, S. Ullram

Diamond and Related Materials, **17** (2008) 1100-1105.

Diamond deposition on hardmetal substrates - comparison of substrate pre-treatments

R. Haubner, W. Kalss

17th International Plansee Seminar 2009, Reutte; 25. - 29.05.2009; in: "Proceedings of International Conference on High Performance P/M Materials", L. Sigl, P. Rödhammer, H. Wildner (Hrg.); Plansee Group, Vol. 4 (2009) 1 - 12.

Comparison of Diamond Deposition With Boron or Sulfur Addition

R. Haubner

EuroCVD 17 and CVD 17, Wien; 04.10.2009 - 09.10.2009; in: "ECS Transactions, 25", The Electrochemical Society, 25 (8) (2009) 317 - 321.

Tribology of hard coatings

M. Roy, R. Haubner:

International Journal of Refractory Metals & Hard Materials, 28 (2010), 1; S. 1.

Diamond deposition on hardmetal substrates - Comparison of substrate pre-treatments and industrial applications

R. Haubner, W. Kalss

International Journal of Refractory Metals & Hard Materials, 28 (2010) 475 - 483.

Characterisation of diamond coatings with different morphologies by Raman spectroscopy using various laser wavelengths

M. Rudigier, R. Haubner

Analytical and Bioanalytical Chemistry, 403 (2012), 3, 675 - 681.

Raman characterisation of diamond coatings using different laser wavelengths

R. Haubner, M. Rudigier

Physics Procedia, 46 (2013) 71 - 78.

Diamond coatings on hardmetal substrates with CVD coatings as intermediate layers

M. Lessiak, R. Haubner

Surface & Coatings Technology, 230 (2013) 119 - 123.

Diamond Film and Their Tribological Performances

M. Roy, R. Haubner

Surface Engineering for Enhanced Performance against Wear

M. Roy (Hrg.); Springer, Wien, 2013, (eingeladen), 79 - 110.