1 Academic Curriculum Vitae

Prof. Dr. rer. nat. Patrick Huber
Witthof 19
22305 Hamburg

Affiliation:	Hamburg University of Technology (TUHH)
	Institute of Materials Physics and Technology
Mail Address:	Eissendorfer Str. 42, 21073 Hamburg, Germany
Email:	patrick.huber@tuhh.de
URL:	huberlab.wp.tuhh.de
Phone/Fax:	+49 40 42878 3135

Scientific and Professional Career

since 03/2018	Speaker of the research focus "Integrated Materials Systems" at Hamburg University of Techology
since 02/2012	Associate Professor (W2) in Materials Physics, TUHH
2011-2012	Associate Professor at Pontifical Catholic University of Santiago de Chile, Department of Physics & Astronomy
2010-2011	Visiting scientist at Max-Planck Institute of Colloids and Interfaces, Potsdam in the Department of Biomaterials of Prof. Peter Fratzl
2009-2012	Project leader within the DFG graduate school 1276, *"Structure formation and transport in complex systems"*, Saarbrücken
2003-2012	Manager of the introductory physics laboratory course at Saarland University
2001-2012	Research associate (Akademischer Rat and Oberrat) and Privat-Dozent in Experimental Physics, Saarland University
1999-2001	Post-Doc position at Harvard University, X-ray group of Prof. Dr. Peter Pershan, within a DFG post-doc scholarship, *"Synchrotron X-ray studies of the microscopic structure and dynamics of the free surface of liquid metals"*

Education

2008	Habilitation thesis on "Condensed matter in spatially confined geometries: Structure, thermo- and hydrodynamics".
1995-1999	Dissertation in physics with "summa cum laude", thesis title "Structure and thermodynamics of condensates in porous glasses", under the supervision of Prof. Dr. Klaus Knorr, Saarland University.
1989-1995	Studies in physics, Diploma in physics, thesis title "Design and setup of a X-ray diffractometer for low temperatures" (1995) under the supervision of Prof. Dr. Klaus Knorr, Saarland University.
1988-1989	Military Service, Karlsruhe and Nürnberg, Germany.
1988	Abitur, Gymnasium Ottweiler.

Honors & Awards

2010	Best talk award at the Workshop *Nano- and Microfluidics: Bridging the Gap between Molecular Motion and Continuum Flow*, Bad Honnef
2000	*Dr.-Eduard-Martin Award* of the friends of Saarland University for an outstanding PhD thesis
1999	Research scholarship (2 years) of the Deutsche Forschungsgemeinschaft (DFG) in the Physics Department of Harvard University
1988	Award of Gymnasium Ottweiler for the best Abitur in Physics and Mathematics

2 Publications

2.1 Bibliometric Breakdown

Peer-reviewed publications:	95
Books:	1
Overall number of citations:	2482
Hirsch-index:	30
Number of publications	
with more than 10 citations, i10-index:	61
with more than 50 citations, i50-index:	13
in journals with impact factor > 7:	15

based on my Google Scholar entry as of 15.10.2018.

2.2 10 Key Publications

Please note the hyperlinks to abstracts and/or pdf-copies of the manuscripts.

1 Quantized Self-Assembly of Discotic Rings in a Liquid Crystal Confined in Nanopores

K. Sentker, A. Zantop, M. Lippmann, T. Hofmann, O. Seeck, A. Kityk, A. Yildirim, A. Schönhals, M. Mazza, and **P. Huber**

Physical Review Letters 120, 067801 (2018).

2 A Ferroelectric Liquid Crystal Confined in Cylindrical Nanopores: Reversible Smectic Layer Buckling, Enhanced Light Rotation and Extremely Fast Electro-Optically Active Goldstone Excitations

M. Busch, A. V. Kityk, W. Piecek, T. Hofmann, D. Wallacher, S. Calus, P. Kula, M. Steinhart, M. Eich, and **P. Huber**.

Nanoscale 9, 19086 (2017).

3 Soft Matter in Hard Confinement: Phase Transition Thermodynamics, Structure, Texture, Diffusion and Flow in Nanoporous Media

P. Huber

Journal of Physics: Condensed Matter 27, 103102 (2015) - invited review.

4 Elastic Response of Mesoporous Silicon due to Capillary Pressure in the Pores

G. Gor, L. Bertinetti, N. Bernstein, T. Hofmann, P. Fratzl, and **P. Huber**

Applied Physics Letters 106, 261901 (2015).

5 Switchable Imbibition in Nanoporous Gold

Y. Xue, J. Markmann, H. Duan, J. Weissmüller, and **P. Huber**

Nature Communications 5, 5237 (2014).

6 Anomalous Front Broadening During Spontaneous Imbibition in a Matrix with Elongated Pores

S. Gruener, Z. Sadjadi, H. E. Hermes, A. V. Kityk, K. Knorr, S. U. Egelhaaf, H. Rieger, and **P. Huber**

Proceedings of the National Academy of Sciences (PNAS) 26, 10245 (2012).

7 Thermotropic Nematic and Smectic Order in Silica Glass Nanochannels

A.V. Kityk and **P. Huber**

Applied Physics Letters 97, 153124 (2010).

8 Evidence of a Sticky Boundary Layer in Nanochannels: A Neutron Spin Echo Study of n-Hexatriacontane and Poly(ethylene oxide) Confined in Porous Silicon

A. Kusmin, S. Gruener, A. Henschel, O. Holderer, J. Allgaier, D. Richter, and **P. Huber**

Journal of Physical Chemistry Letters 1, 3116 (2010).

9 Continuous Paranematic-To-Nematic Ordering Transitions in Tubular Silica Nanochannels

A. V. Kityk, M. Wolff, K. Knorr, D. Morineau, R. Lefort, and **P. Huber**

Physical Review Letters 101, 187801 (2008).

10 Knudsen Diffusion in Silicon Nanochannels

S. Gruener and **P. Huber**

Physical Review Letters 100, 064502 (2008).