

I. BOOKS, BOOK CHAPTERS AND EDITED BOOKS

I a books

2008

23. A Chinese translation of „Chaos and Fractals“, Springer-Verlag, Tokyo, appeared in 2008.

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22. Wprowadzenie do dynamiki społecznej, with K. Winkowska-Nowak, D. Batorski, SWPS Academica, Warszawa, 2003

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21. "Fractals for the Classroom - Strategic Activities, Vol. 3", Springer-Verlag, New York, and NCTM, 1999 (with H. Jürgens, D. Saupe, E. Maletsky and T. Perciante).

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20. A Polish translation of "Fractals for the Classroom – Part Two", appeared in 1996 under the title "Granice Chaosu Fraktale", WYDAWNICTWO NAUKOWE PWN, Warsaw.

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19. A Polish translation of "Fractals for the Classroom – Part One", appeared in 1995 under the title "Granice Chaosu Fraktale", WYDAWNICTWO NAUKOWE PWN, Warsaw.
18. A Chinese translation of „The Beauty of Fractals“, appeared in 1995.

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17. A Russian translation of the „The Beauty of Fractals“ by A. Sharkovsky (edited by V. I. Arnold), appeared in 1994, MIR Publishers, Moscow.
16. A German translation and new edition of „Fractals for the Classroom – Part Two“, appeared in January 1994 under the title "Chaos - Baustein der Ordnung", Klett-Cotta Verlag Stuttgart and Springer-Verlag Heidelberg, also appeared under the same title as paperback, Rowohlt Taschenbuch Verlag, Hamburg 1998.

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15. "Chaos and Fractals", Springer-Verlag, New York, 1992. (with H. Jürgens and D. Saupe, winner of the Award "Best Mathematics Book of 1992", Amer. Publ. Assoc.), Second Edition 2004.
14. Chaos, Iteration, Sensitivität, Mandelbrotmenge. Ein Arbeitsbuch, Klett Schulbuchverlag and Springer-Verlag Heidelberg, 1992. German translations of „Fractals for the Classroom – Strategic Activities, Vol. 2“.
13. Fraktale, Selbstähnlichkeit, Chaospiegel, Dimension. Ein Arbeitsbuch, Klett Schulbuchverlag Stuttgart and Springer-Verlag Heidelberg, 1992. German translations of „Fractals for the Classroom – Strategic Activities, Vol. 1“.
12. "Fractals for the Classroom - Strategic Activities, Vol. 2", Springer-Verlag, New York, and NCTM, 1992 (with H. Jürgens, D. Saupe, E. Maletsky, T. Perciante and L. Yunker).
11. "Fractals for the Classroom - Part Two", Springer-Verlag, New York, and NCTM, 1992 (with H. Jürgens and D. Saupe).
10. A German translation and new edition of „Fractals for the Classroom – Part One“, appeared in September 1992 under the title "Bausteine des Chaos - Fraktale", Klett-Cotta Verlag Stuttgart and Springer-Verlag Heidelberg, also appeared under the same title as paperback, Rowohlt Taschenbuch Verlag, Hamburg 1998.

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9. "Fractals for the Classroom - Part One", Springer-Verlag, New York, and NCTM, 1991 (with H. Jürgens and D. Saupe).

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8. "Fractals for the Classroom - Strategic Activities, Vol. 1", Springer-Verlag, New York, and NCTM, 1990 (with H. Jürgens, D. Saupe, E. Maletsky, T. Perciante and L. Yunker).
7. "Fraktale: Gezähmtes Chaos", Carl Friedrich von Siemens Stiftung, Themen XLIX, München, 1990 (with H. Jürgens).

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6. "Newton's Method and Dynamical Systems", Kluwer Academic Publishers, Dordrecht, 1989.
5. A Japanese translation of „The Science of Fractal Images“, appeared in 1989.

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4. "The Science of Fractal Images", Springer-Verlag, Tokyo, Springer, New York, 1988 (with D. Saupe) (based on a Course for SIGGRAPH'87), Winner of the 1989 Award for Technical Communication presented by the Society for Techn. Comm.
3. A Japanese translation of „The Beauty of Fractals“ appeared in June 1988, Springer-Verlag, Tokyo.

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1. "The Beauty of Fractals", Springer, Heidelberg, 1986 (with P. H. Richter), winner of the 1987 Award for Technical Communication presented by the Society for Techn. Comm.

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21. Peitgen HO. Modellbildung in der bildbasierten Medizin: Radiologie jenseits des Auges. In: Niederlag W, Lemke HU, Lehrarch H, Peitgen HO (eds). Der Virtuelle Patient. De Gruyter, 2014: 16-32.

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20. Endo I, Matsuyama R, Tanaka K, Wendt N, Schenk A, Peitgen HO. Role of 3D Reconstructive Imaging. In: Hilar Cholangiocarcinoma, Edited by W. Y. Lau. pp 65–74; Springer., ISBN: 978-94-007-6473-6

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18. Oldhafer K J, Hindennach M, Ritter F, Schenk A, Bourquain H, Preim B, Peitgen HO. Computerunterstützung in der Operationsplanung. In: Nagel E, Löhlein D (eds). Pichlmayr's Chirurgische Therapie. Berlin: Springer, 2006: 369-390.

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17. Boskamp T, Hahn HK, Hindennach M, Oeltze S, Preim B, Zidowitz S, Peitgen HO. Geometrical and Structural Analysis of Vessel Systems in 3D Medical Image Datasets. In: Medical Imaging Systems. World Scientific, 2005: 1-60.
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15. Bourquain H, Schenk A, Peitgen HO. Computer-assisted planning and decision-making in living-donor liver transplantation. In: Tanaka K., Inomata Y., Kaihara S. (eds). Living-donor liver transplantation - Surgical techniques and innovations. Barcelona: Prous Science, 2003: 23-28.
14. Peitgen HO, Boskamp T, Singer P. Signal Correction in NMR Spectroscopy. In: Jäger W, Krebs HJ (eds.) Mathematics - Key Technology for the Future. Heidelberg: Springer, 2003: 483-492

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13. Peitgen HO. Risse im mathematischen Weltbild: Kunst und Wissenschaft im 20. Jahrhundert. Kunst und Wissenschaft – Politik und Moderne Band V. Heinrich Böll Stiftung Bremen / Mecklenburg-Vorpommern, 2001, 26-59

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12. Peitgen HO, Preim B, Selle D, Böhm D, Schenk A, Spindler W. L'analisi del rischio nella chirurgia del fegato (Risk Analysis for Liver Surgery. In: Emmer M. (eds). *Matematica e Cultura*. Milano: Springer, 2000: 331-340.
11. Peitgen HO, Evertsz CJG, Preim B, Selle D, Schindewolf T, Spindler W. Bildverarbeitung und Visualisierung für die Operationsplanung am Beispiel der Leberchirurgie. In: Aigner M., Behrends E (eds). Alles Mathematik: Pythagoras zum CD-Player. Vieweg, 2000: 31-44.
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8. Ehlers SE, Lang M, Peitgen HO. Technische Qualitätssicherung in der Mammographie. In: Jäckel A (ed.) Telemedizinführer Deutschland. Bad Nauheim: Minerva, 1999: 277-278.

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5. Schindewolf T, Selle D, Spindler W, Schenk A, Böhm D, Preim B, Oldhafer K, Galanski M, Klose KJ, Peitgen HO. Virtuelle Operationsplanung in der Leberchirurgie. In: Jäckel A (ed.) Bad Nauheim: Minerva, 1999: 300-301.

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1. Peitgen HO. Berechnung von Cohomologie-Ringen simplizialer Paare auf EDV-Anlagen, Ber. Ges. Math. Datenverarbeitung, Bonn, 74 (1973), 56 Seiten. Asymptotische Fixpunktsätze und Stabilität, Dissertation, Universität Bonn, 1973.

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8. Hegselmann R, Peitgen HO. Modelle Sozialer Dynamiken, Verlag Hölder-Pichler-Tempsky, 1996

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7. Encarnacao JL, Peitgen HO, Sakas G, Englert G. Fractal Geometry and Computer Graphics, Springer-Verlag, 1992

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6. Peitgen HO, Henriques JM, Penedo LF. Fractals in the Fundamental and Applied Sciences, North-Holland, 1991

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5. Jürgens H, Peitgen HO, Saupe D. Chaos und Fraktale, Spektrum Verlag, 1989
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2. Allgower EL, Glashoff K, Peitgen HO. Numerical Solutions of Nonlinear Equations, Lecture Notes in Mathematics 878, Springer-Verlag, 1981

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1. Peitgen HO, Wather HO. Functional Differential Equations and Approximation of Fixed Points, Lecture Notes in Mathematics 730, Springer-Verlag, 1979