

Curriculum Vitae¹

Hofer, Helmut

Institute for Advanced Study

Contact info: Phone Office: 609-7348101
Email: hofer@ias.edu

Citizenship: German and US

Education: Fichte-Gymnasium Krefeld (FRG), 1966-74
Diplom in Mathematics, Univ. of Zürich, 1979
Ph.D., University of Zürich, 1981

Positions:

- Asst. in Mathematics, Univ. of Zürich, 1979-81
- Oberassistent, Univ. of Zürich, 1981-82
- Lecturer in Pure Mathematics, Univ. of Bath, 1983-85
- Asst. Professor, Rutgers University, 1985-87
- Associate Professor, Rutgers University, 1987-88
- Professor, Rutgers University, 1988-89
- C4-Professor, Bochum, 1989-1993 (Dekan 1992-1993)
- Professor, ETH Zürich, 1993-1997
- Professor, Courant Institute, 1997-2006
- Silver Professor, Courant Institute, 2006–2009
- Professor, Institute for Advanced Study, July 1st, 2009–2019
- Hermann Weyl Professor, Institute for Advanced Study, 2019–
- Visiting Lecturer with rank of Professor, Princeton University, 2013–

¹April 16, 2025

Special Awards, Lectures and Prizes

- Alfred P. Sloan Fellowship, 1987-1989
- The 1999 Ostrowski Prize
- Member National Academy of Sciences, since 2008
- Member Academia Europaea (Foreign Associate), since 2008
- Member German National Academy of Sciences Leopoldina, since 2010
- Fellow of the American Mathematical Society, since 2012
- 2013 Heinz Hopf Prize
- Member of the American Academy of Arts and Sciences, since 2020

Special Invited Lectures:

- Invited Speaker International Congress, Kyoto (ICM) 1990
- Plenary Speaker German Mathematical Society, Berlin, September 1992
- Plenary Speaker Joint Meeting AMS/DMV, Heidelberg, October 1993
- Plenary Speaker Annual Meeting of the London Mathematical Society, October 1993
- Invited Speaker Geometries in Interaction, Tel Aviv, December 1993
- The 1995 Raymond and Beverly Sackler Distinguished Lectures in Pure Mathematics, Tel Aviv University, October 1995
- Invited Speaker, TAG Aarhus, Aarhus 1998
- Plenary Speaker International Congress, Berlin (ICM) 1998
- AMS Colloquim Lecturer, San Antonio, AMS Annual Meeting 1999
- Invited Speaker, Visions in Mathematics , Towards 2000, Tel Aviv 1999
- Invited Speaker, Mathematical Challenges of the 21st Century, Los Angeles 2000

- Stieltje Colloquim Lecturer, Leiden, September 2000
- Plenary Speaker, Fifth International Joint Meeting AMS and SMM, Morelia 2001
- Plenary Speaker, Georgia Topology Conference, Athens 2001
- Plenary Speaker, 23rd Brazilian Mathematical Colloquium, Rio 2001
- 2003 Hopf-Lectures, Zurich
- Lezioni Leonardesche, Milano 2004
- D'Atri Lectures, Rutgers 2004
- CDM-Lectures, Harvard 2004
- Lecture Series, SFT Workshop, Leipzig 2005
- Distinguished Lecture Series, Madison 2006
- Pacific Institute of Mathematics, 10th Anniversary Lecture, Vancouver 2006
- 2008 Clay Research Conference, May 2008
- 2011 Blumenthal Lectures, Tel Aviv, May 2011
- 2011 Landau Lectures, Hebrew University, June 2011
- Festive Colloquium on the occasion of the opening of the Floer Center for Geometry, Bochum, December 2011
- At the Interface of Dynamics and Symplectic Geometry, University of Leipzig, Opening of the Felix Klein Colleg, October 2012
- Aisenstadt Lectures, CRM Montreal, April and May 2013
- Distinguished Lecture in Topology, Dynamics and Physics (TIDY), Tel Aviv, March 2014
- Speaker, Geometric Dynamics Days, Bochum, January 2017
- Plenary Lecture, Georgia Topology Conference, Athens, May 2017
- Distinguished Lecture, UConn Geometry Day, March 2020

- Gauss Lecture, German Mathematical Society, October 2025

Organisation of Conferences:

- Conference on Dynamical Systems (jointly with J. Moser and E. Zehnder), Oberwolfach, July 1993
- Conference on Dynamical Systems (jointly with J. Moser and E. Zehnder), Oberwolfach, July 1995
- Conference on Symplectic Topology and Three- and Four-Dimensional Topology (jointly with S. Donaldson, M. Gromov and E. Zehnder), Ascona, July 1996
- Conference on Geometry and Variational Problems (jointly with J. Jost), Schloss Ringberg, June 1998
- Conference on Dynamical Systems (jointly with J.C. Yoccoz and E. Zehnder), Oberwolfach, July 1999
- Conference on Dynamical Systems (jointly with J.C. Yoccoz and E. Zehnder), Oberwolfach, July 2001
- Georgia Topology Conference (Scientific Board), Athens, June 2001
- Moser Memorial Conference (jointly with M. Burger), Zurich, June 2001
- Conference on Dynamical Systems (jointly with J.C. Yoccoz and E. Zehnder), Oberwolfach, July 2003
- Workshop on Symplectic Geometry and Mathematical Physics, MSRI (jointly with D. Auroux, D. Freed, G. Tian), March 2004
- Geometry Festival, Courant (jointly with S. Cappell and T. Colding), May 2004
- Workshop on Symplectic Field Theory (jointly with K. Cieliebak, D. McDuff, K. Mohnke, and M. Schwarz), Leipzig, June 2005.
- Conference on Dynamical Systems (jointly with J.C. Yoccoz and E. Zehnder), Oberwolfach, July 2005
- Workshop on Symplectic Geometry (jointly with Y. Eliashberg, J. Milnor and D. Salamon), Banff, December 2005

- Conference on Dynamical Systems (jointly with K. Eliasson and J.C. Yoccoz), Oberwolfach, July 2007
- MSRI Hot-Topic workshop (jointly with M. Hutchings, P. Kronheimer, T. Mrowka and C. Taubes), June 2008
- Conference on Dynamical Systems (jointly with K. Eliasson and J.C. Yoccoz), Oberwolfach, July 2009
- Symplectic and contact topology and dynamics: puzzles and horizons (jointly with P. Biran, J. Etnyre, D. McDuff , and L. Polterovich), March 2010.
- Workshop in Sheaf-theoretic Methods in Symplectic Topology (jointly with C. Viterbo), IAS, May 2011
- Conference on Dynamical Systems (jointly with K. Eliasson and J.C. Yoccoz), Oberwolfach, July 2011
- Conference on Symplectic Dynamics (jointly with J. Mather), IAS, October 2011
- Conference on Symplectic Dynamics (jointly with J. Mather), IAS, March 2012
- Bismut-Fest, member of the scientific advisory committee, Paris, May 2013
- D-Days, a conference on the occasion of D. Salamon's 60th birthday (jointly with P. Biran and L. Polterovich), ETHZ, June 2013
- Conference on Dynamical Systems (jointly with K. Eliasson and J.C. Yoccoz), Oberwolfach, July 2013
- A Legacy of V. Arnold (jointly with Bierstone, Khesin, Khovanskii, Tabachnikov and Varchenko), Fields Institute, November 2014
- Conference on Dynamical Systems (jointly with K. Eliasson and J.C. Yoccoz), Oberwolfach, July 2015
- ASSAf/Leopoldina-Symposium, Stellenbosch, South Africa, March 2016
- Summer school on symplectic topology, sheaves and mirror symmetry (jointly with V. Humiliere, A. Oancea, P. Schapira, C. Viterbo) , Paris, June 2016

- Analysis, Dynamics, and Symplectic Geometry: a conference in memory of Kris Wysocki (jointly with A. Katok), State College, April 2017
- Conference on Dynamical Systems (jointly with K. Eliasson and J.C. Yoccoz), Oberwolfach, July 2017
- Mather’s Memorial Conference (jointly with M. Goresky, V. Kaloshin, Y. Sinai and A. Sorrentino), Princeton, October 2018
- C^0 -aspects of symplectic geometry and Hamiltonian dynamics (jointly with L. Buhovski, V. Humiliere, L. Polterovich and S. Seyfaddini), Technion Haifa, May 2019
- Honoring the Life and Work of Jean Bourgain (jointly with P. Sarnak), Princeton, May 2019
- Conference on Dynamical Systems (jointly with M.-C. Arnaud and V. Kaloshin), Oberwolfach, July 2019
- Conference on Dynamical Systems (jointly with M.-C. Arnaud, M. Hutchings, and V. Kaloshin), Oberwolfach, July 2021

Editorial Activities:

- Editorial board of “Communications in Pure and Applied Mathematics” 1997-2009
- Editorial Board of “*Inventiones Mathematicae*” 2007-2019, Managing Editor 2008- 2019
- Editorial Board of “Duke Mathematical Journal” till 2007
- Editorial Board of ”Journal of the European Mathematical Society” 1999-2007
- Editorial Board of ”Journal of Differential Equations” till 2007
- Editorial Board of ”Journal of Symplectic Geometry” 2001-2007
- Editorial Board of EMS Monographs in Mathematics till 2016
- Associate Editor of “Monographs in Mathematics”, Birkhäuser
- Editorial Board of “International Mathematical Research Notes” (till 2006)

- Editorial Board of “Geometric and Functional Analysis” (1991-2001)
- Editorial Board of ”Pacific Journal of Mathematics” (till 2001)
- Editorial Board of “Nonlinear Differential Equations and Applications” (1994-2001)
- Managing Editor Lectures in Mathematics, ETH Zurich, Birkhauser (1993-1997)
- Editorial Board of “Nonlinearity” (till January 1997)
- Editorial Board of the Virtual Symplectic Series, Springer Publishing, 2018–
- Editorial Board of the Annals of Mathematics, 2022–

Memberships

- American Mathematical Society

Publication List

Journal Articles

1. *A multiplicity result for a class of nonlinear problems with applications to a nonlinear wave equation.* Jour. of Nonlinear Analysis, Theory, Methods and Applications, 5, No. 1 (1981), 1-11
2. *Existence and multiplicity result for a class of second order elliptic equations.* Proc. of the Royal Society of Edinburgh, **88A** (1981), 83-92
3. *A new proof for a result of Ekeland and Lasry concerning the number of periodic Hamiltonian trajectories on a prescribed energy surface.* Bolletino UMI **6**, 1-B (1982), 931-942
4. *A variational approach to a wave equation problem at resonance.* Metodi asintotici e topologici in problemi differenziali non lineari; ed. L. Boccardo, A.M. Micheletti, Collano Atti di Congressi, Pitagora Editrice, Bologna (1981), 187-200
5. *On the range of a wave operator with nonmonotone nonlinearity.* Math. Nachrichten **106** (1982), 327-340
6. *Variational and topological methods in partially ordered Hilbert spaces.* Math. Annalen **261** (1982), 493-514
7. *On strongly indefinite functionals with applications.* Transactions of the AMS **275**, No. 1 (1983), 185-213
8. *A note on the topological degree at a critical point of mountainpasstype.* Proc. of the AMS **90**, No. 2 (1984), 309-315
9. *Homoclinic, heteroclinic and periodic orbits for indefinite Hamiltonian systems* (with J. Toland). Math. Annalen **268** (1984), 387-403
10. *The topological degree at a critical point of mountainpasstype.* AMS Proceedings of Symposia in Pure Math. **45**, Part 1 (1986) 501-509

11. *A geometric description of the neighborhood of a critical point given by the mountainpass-theorem.* Proc. of the London Math. Society **31** (1985), 566-570
12. *Periodic solutions of prescribed minimal period for convex Hamiltonian systems* (with I. Ekeland). Inv. Math. **81** (1985), 155-188
13. *Free oscillations of prescribed energy at a saddle point of the potential in Hamiltonian dynamics* (with J. Toland). Delft Progress Report **10** (1985), 238-249
14. *Lagrangian embeddings and critical point theory.* Ann. IHP, Analyse Nonlineare **6** (1985), 407-463
15. *Subharmonic solutions for convex non autonomous Hamiltonian systems* (with I. Ekeland). Comm. Pure and Appl. Math., Vol. XI, No. 1 (1987), 1-36
16. *Relations between global invariants of convex contact manifolds and local invariants of their periodic Hamiltonian trajectories.* Proc. of a Conference on Recent Advances in Hamiltonian Systems 1987, World Scientific (1987), 177-205
17. *Periodic solutions on hypersurfaces and a result by C. Viterbo* (with E. Zehnder). Inv. Math. **90** Fasc 1 (1987), 1-9
18. *Global and local invariants for convex hypersurfaces and their periodic trajectories; a survey.* (with I. Ekeland). Nato ASI Series C: **209**, Periodic solutions of Hamiltonian systems and related topics, (1987), 139-146
19. *A remark on a priori bounds for periodic solutions of Hamiltonian systems*(with V. Benci and P. Rabinowitz). Nato ASI Series C: **209**, Periodic solutions of Hamiltonian systems and related topics (1987), 85-88
20. *A strong form of the mountain pass theorem and application.* Non-linear Diffusion Equations and their Equilibrium States I, Springer, MSRI Publications, 341-351
21. *Convex Hamiltonian energy surfaces and their periodic trajectories* (with I. Ekeland). Comm. in Math. Physics **113** (1987), 419-469

22. *Sur les hypersurfaces convexes et leurs caractéristiques fermées.* (with I. Ekeland), CRAS, Paris **304**, Serie I (1987), 237-240
23. *The Weinstein conjecture in cotangent bundles and related results* (with C. Viterbo). Annali di Scuola Normale Superiore di Pisa, Serie IV, Vol. XV, Fasc III (1988), 411-445
24. *Two symplectic fixed point theorems with applications to Hamiltonian dynamics* (with I. Ekeland). Journ. Math. Pure et Appl. **68** (1989), 467-489
25. *Liusternik–Schnirelman–theory for Lagrangian intersections.* Ann. IHP, Analyse Nonlinéaire **5**, no. 5 (1988), 465-499
26. *The Weinstein conjecture in $P \times \mathbf{C}^e$* (with A. Floer and C. Viterbo). Math. Zeit. **203** (1990), 469-482
27. *Symplectic topology and Hamiltonian dynamics* (with I. Ekeland). Math. Zeit. **200** (1989), 355-378
28. *Recent progress in symplectic geometry.* Lectures in Pure and Appl. Math **121**, 49-94 (Marcel Decker)
29. *Capacités symplectiques* (with I. Ekeland). CRAS, Paris, t. 307, Serie I (1988) 37-40
30. *Symplectic topology and Hamiltonian dynamics* (with I. Ekeland). Séminaire sur les Equations aux Dérivées Partielles 1987–1988, Exp. No XXIII 4pp Ecole Polytechnique, Palaiseau, 1988
31. *Symplectic topology and Hamiltonian dynamics II* (with I. Ekeland). Math. Zeit. **203** (1990), 553-567
32. *A new capacity for symplectic manifolds* (with E. Zehnder). Analysis et cetera (P. Rabinowitz, E. Zehnder eds.) Academic Press 1990, 405-428
33. *First order elliptic systems and the existence of homoclinic orbits in Hamiltonian systems* (with K. Wysocki). Math. Annalen **288** (1990), 483-503
34. *On the topological properties of symplectic maps.* Proceedings of the Royal Society of Edinburgh **115 A** (1990), 25-38

35. *The Weinstein conjecture in the presence of holomorphic spheres* (with C. Viterbo). Comm. Pure Appl. Vol. XLV (1992), 583-622
36. *Towards the definition of symplectic boundary* (with Y. Eliashberg). Geometric and Functional Analysis **2**, No. 2 (1992) 211-220
37. *Coherent orientation for periodic orbit problems in symplectic geometry* (with A. Floer). Math. Zeit. **212** (1993), 13-38
38. *Symplectic homology I: Open sets in C^n* (with A. Floer), Math. Zeit. **215** (1994), 37-88
39. *Symplectic homology II: A General Construction* (with K. Cieliebak, A. Floer and K. Wysocki). Math. Zeit. **218** (1995), 103-122
40. *Applications of symplectic homology I* (with A. Floer and K. Wysocki). Math. Zeit. **217** (1994), 577-606
41. *Symplectic capacities*. Proceedings of the Durham Conference on Low-Dimensional Topology, (edited by S. Donaldson and C. Thomas), Cambridge University Press, London Mathematical Society Lecture Notes 151 (1990)
42. *Topological properties of symplectic maps*. Pitman Research Notes on Mathematics **243** (1992), 113-119
43. *Symplectic invariants*. Proceedings of the ICM Kyoto 1990, Springer 1991, 521-528
44. *An energy-capacity inequality for the symplectic holonomy of hypersurfaces flat at infinity* (with Y. Eliashberg). Symplectic Geometry, edited by D. Salamon, London Mathematical Society Lecture Note Series **192** (1993), 95-114
45. *Floer homology and Novikov rings* (with D. Salamon). The Floer Memorial Volume, Progress in Math. Vol. 133, Birkhäuser
46. *Estimates for the energy of a symplectic map*. Comm. Math. Helv. **68**(1993), 48-72
47. *Unseen symplectic boundaries* (with Y. Eliashberg). Volume in honour of E. Calabi

48. *Pseudoholomorphic curves in symplectisation with applications to the Weinstein conjecture in dimension three*. Inv. Math. 114(1993), 515-563
49. *A Hamiltonian characterization of the three-ball* (with Y. Eliashberg). Journal of Differential and Integral Equations, Vol.7 No.5 (1994), 1303-1324
50. *Transversality results in the elliptic Morse theory of the action functional* (with A. Floer and D. Salamon). Duke Mathematical Journal, Vol. 80 No. 1 (1995), 251-292
51. *Properties of pseudoholomorphic curves in symplectisations II: Embedding controls and algebraic invariants* (with K. Wysocki and E. Zehnder). Geometric and Functional Analysis, Vol. 5 No.2 (1995), 270-328
52. *A Characterisation of the Tight Three-Sphere* (with K. Wysocki and E. Zehnder). Duke Mathematical Journal, Vol. 81, No. 1 (1995), 159-226
53. *Lagrangian intersections in contact geometry* (with Y. Eliashberg and D. Salamon). Geometric and Functional Analysis, Vol.5 No. 2 (1995), 244-269
54. *Symplectic invariants and Hamiltonian dynamics* (with E. Zehnder). The Floer Memorial Volume, Progress in Mathematics 133, Birkhäuser 1995
55. *Properties of pseudoholomorphic curves in symplectisations I: Asymptotics* (with K. Wysocki and E. Zehnder). Ann. Inst. Henri Poincaré, Analyse Nonlineaire, Vol. 13, No.3 (1996), 337-379
56. *Applications of symplectic homology II* (with K. Cieliebak, A. Floer and K. Wysocki). Math. Zeit. **223** (1996), 27-45
57. *Properties of pseudoholomorphic curves in symplectisations IV: Asymptotics with degeneracies* (with K. Wysocki and E. Zehnder), Contact and Symplectic Geometry, edited by C. Thomas, Cambridge University Press 1996

58. *On genericity for holomorphic curves in 4-dimensional almost-complex manifolds* (with V. Lizan and J.-C. Sikorav). *Journal of Geometric Analysis*, Vol. 7, No. 1, 1998
59. *The Dynamics on Three-Dimensional Strongly Convex Energy Surfaces* (with K. Wysocki and E. Zehnder). *Annals of Mathematics*, Vol. 148 (1998), 197-289
60. *Unknotted periodic orbits for Reeb flows on the three-sphere* (with K. Wysocki and E. Zehnder). *Topol. Meth. in Nonli. Analysis* **7** (1996), 219–244
61. *Holomorphic curves in contact dynamics* (with M. Kriener). *Proceedings of Symposia in Pure Mathematics* Vol. 66 (1999), 77-131
62. *A Characterisation of the Tight Three-Sphere II* (with K. Wysocki and E. Zehnder). *Comm. Pure Appl. Math.* Vol LII (1999), 1139-1177
63. *Properties of pseudoholomorphic curves in symplectisations III: Fredholm theory* (with K. Wysocki and E. Zehnder). In *Progress in Non-linear Differential Equations and Their Applications* Vol. 35 (Ed. J. Escher and G. Simonett), 381-477
64. *Holomorphic curves and dynamics in dimension three*. *IAS/Park City Math. Ser.* Vol. 7, AMS 1999, 35-101
65. *Pseudoholomorphic curves and dynamics* (with E. Zehnder). "The Arnold-Fest", *Fields Inst. Commun.* AMS, 1999, 225-239
66. *Dynamics, Topology and Holomorphic Curves* . *Proceedings of the ICM Berlin*, vol. I
67. *Introduction to Symplectic Field Theory* (with Y. Eliashberg and A. Givental), *GAFA 2000*, Special Volume, Part II, pp560-673
68. *Holomorphic curves and real three-dimensional dynamics*, *GAFA 2000*, Special Volume, part II, pp674-704
69. *Pseudoholomorphic curves and dynamics in three dimensions* (with K. Wysocki and E. Zehnder). *Handbook on Dynamical Systems* Vol. 1A, Elsevier (2002), 1129-1188

70. *Finite Energy Cylinders of Small Area* (with K. Wysocki and E. Zehnder). *Journal of Ergodic Theory and Dynamical Systems* Vol. 22 No. 5 (2002), 1451–1486
71. *Finite Energy Foliations Of Tight Three-Spheres and Hamiltonian Dynamics* (with K. Wysocki and E. Zehnder). *Annals* Vol. 157 No. 1 (2003), 125–255
72. *Compactness Results in Symplectic Field Theory* (with F. Bourgeois, Y. Eliashberg, K. Wysocki and E. Zehnder). *Geometry and Topology* Vol. 7 (2004), 799–888
73. *The Weinstein Conjecture for Planar Contact Structures in Dimension Three* (with C. Abbas and K. Cieliebak), *Comment. Math. Helv.* 80 (2005), no. 4, 771–793
74. *A General Fredholm Theory and Applications*, Current Developments in Mathematics, 2004, Year Published: 2006, Ed. Barry Mazur, Harvard University; Wilfried Schmid, Harvard University; Shing-Tung Yau, Harvard University; David Jerison, M.I.T.; Tomasz Mrowka, M.I.T.; Richard Stanley, M.I.T., International Press
75. Quantitative symplectic geometry (with K. Cieliebak, J. Latschev and F. Schlenk), *Dynamics, ergodic theory, and geometry*, 1–44, *Math. Sci. Res. Inst. Publ.*, 54, Cambridge Univ. Press, Cambridge, 2007
76. *A General Fredholm theory I: A splicing-based differential geometry*, *JEMS*, Vol. 9, No. 4, (2007), 841–876
77. *A General Fredholm Theory II: Implicit Function Theorems* (with K. Wysocki and E. Zehnder), *GAFA* Volume 19, Number 1, (2009), 206–293
78. *On the Weinstein conjecture in higher dimensions* (with P. Albers), *Comment. Math. Helv.* Volume 84, Issue 2, (2009), 429–436
79. *A General Fredholm Theory III: Fredholm Functors and Polyfolds* (with K. Wysocki and E. Zehnder), *Geometry and Topology* 13:4, (2009), 2279–2387
80. *Integration theory on the zero sets of polyfold Fredholm sections* (with K. Wysocki and E. Zehnder), *Math. Ann.* 346, (2010), 139–198

81. *Sc-Smoothness, Retractions and New Models for Smooth Spaces* (with H. Hofer, K. Wysocki and E. Zehnder), Discrete and Continuous Dynamical Systems, Vol 28 (2), (2010), 665-788
82. *Global Surfaces of Section in the Planar Restricted Three-Body Problem* (with P. Albers, J. Fish, U. Frauenfelder and O. van Koert), Arch. Ration. Mech. Anal. 204 (2012), no. 1, 273-284
83. *First Steps Towards a Symplectic Dynamics* (with B. Bramham), Surv. Differ. Geom., 17, Int. Press, Boston, MA, 2012, 127-177
84. *Feral Pseudoholomorphic Curves and Minimal Sets* (with J. Fish), Oberwolfach Report 12 (2015), no. 3
85. *Polyfolds and Fredholm Theory*, Lectures on Geometry, Clay Lecture Notes Series, edited by N. Woodhouse, Oxford University Press 2017, 87-156
86. *Applications of Polyfold Theory I: Gromov-Witten Theory* (with K. Wysocki and E. Zehnder), Memoirs of the AMS, Vol 248, number 1179 (2017) , 224 pages
87. *Exhaustive Gromov Compactness for Pseudoholomorphic Curves* (with J. Fish), Asterisque Vol 415 (2020), 87-112.
88. *Almost Existence from the Feral Curve Perspective and Some Questions* (with J. Fish), Ergodic Theory and Dynamical Systems, 42 no. 2 (2022), 792-834.
89. *Feral pseudoholomorphic curves and minimal sets*, (with J. Fish), Annals of Mathematics Vol. 197 no. 2, March 2023, 533-738

Books: Mathematical

1. *Symplectic Invariants and Hamiltonian Dynamics* (with E. Zehnder). Advanced Texts in Mathematics, Birkhäuser
2. *The Floer Memorial Volume* (edited jointly with C. Taubes, A. Weinstein and E. Zehnder), Progress in Mathematics Vol. 133, Birkhäuser

3. *Holomorphic Curves and Global Questions in Contact Geometry* (with C. Abbas), Birkhäuser Advanced Texts / Basler Lehrbücher A Series of Advanced Textbooks in Mathematics, XII, 322 pages, 2019
4. *Polyfold and Fredholm Theory* (with K. Wysocki and E. Zehnder) *Ergebnisse der Mathematik und ihrer Grenzgebiete, 3. Folge, A Series of Modern Surveys in Mathematics* 72, Springer, 1023 pages, 2021.

Books: Non-mathematical

1. *Innovation, Venture Capital, Arbeitsplätze* (Edited jointly with A. Scheidegger and G. Scheuenstuhl, in German) Haupt Verlag (1998).

Books: History of modern math (submitted)

1. *The Floer Jungle: Charting the Development of a Theory* (with Siobhan Roberts), 230 pages.