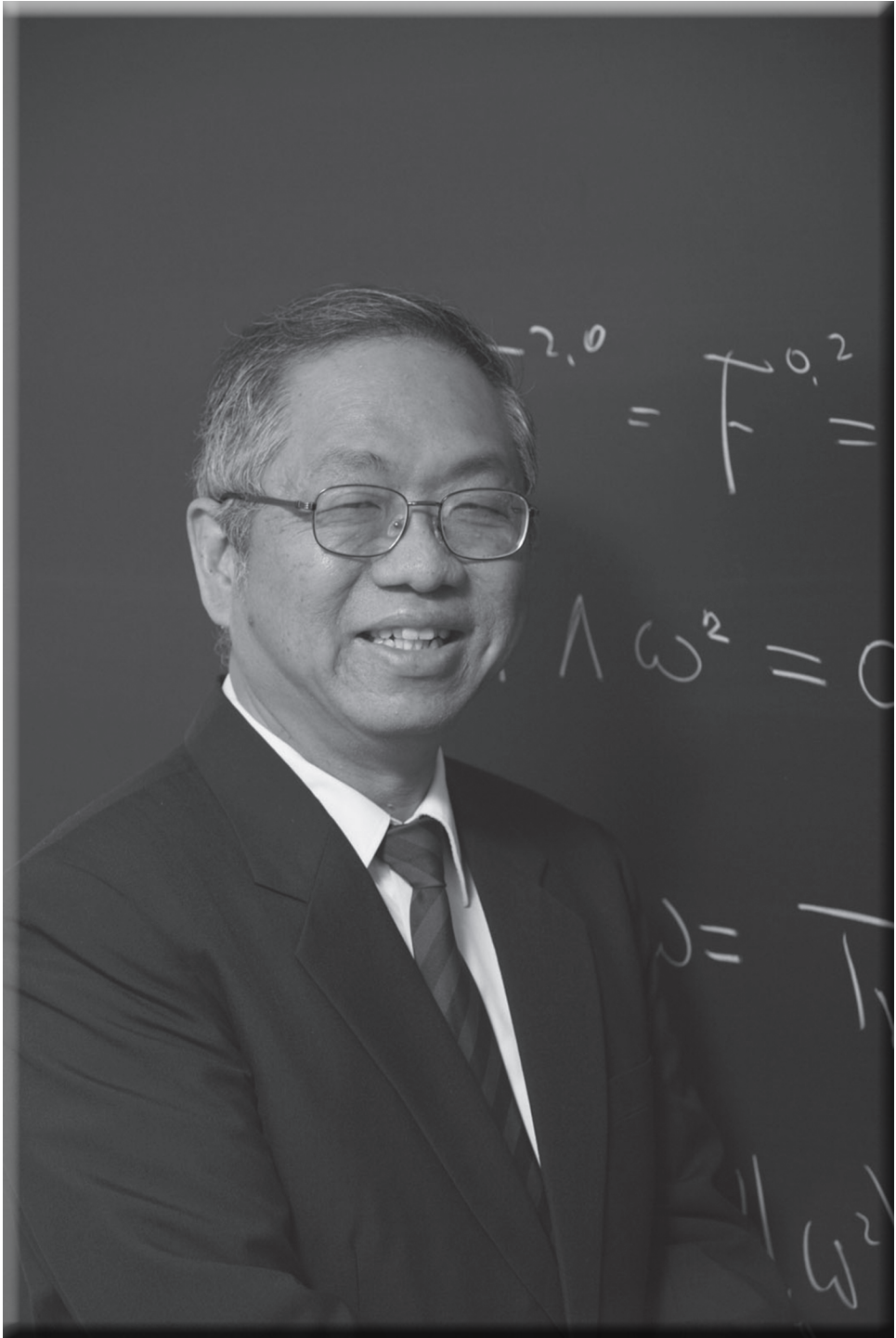


Selected Works of
Shing-Tung Yau
1990–2020



Selected Works of
Shing-Tung Yau
1990–2020

VOLUME 1 OF 10

 International Press

Selected Works of Shing-Tung Yau, 1990–2020
Volume 1 of 10

Editors:

Huai-Dong Cao	Lehigh University
Jun Li	Fudan University
Yi Li	Southeast University
Conan Nai Chung Leung	The Chinese University of Hong Kong
Kefeng Liu	Chongqing University of Technology
Chiu-Chu Melissa Liu	Columbia University
Mu-Tao Wang	Columbia University

Copyright © 2024 by International Press of Boston, Inc.
Somerville, Massachusetts, U.S.A. All rights reserved.
www.intlpress.com

We are especially grateful to the American Mathematical Society for their assistance and generosity in providing much of the original material for this collection.

All works reproduced in this volume appear with the permission of their respective copyright holders. Acknowledgements thereof are presented at the end of this volume.

ISBN (10-vol. set) 978-1-57146-435-4
Casebound, 7170 pages

Component volumes:

ISBN (vol. 1)	978-1-57146-436-1
ISBN (vol. 2)	978-1-57146-437-8
ISBN (vol. 3)	978-1-57146-438-5
ISBN (vol. 4)	978-1-57146-439-2
ISBN (vol. 5)	978-1-57146-440-8
ISBN (vol. 6)	978-1-57146-441-5
ISBN (vol. 7)	978-1-57146-442-2
ISBN (vol. 8)	978-1-57146-443-9
ISBN (vol. 9)	978-1-57146-444-6
ISBN (vol. 10)	978-1-57146-445-3

Manufactured in China

Index to the Contents by Subject Area

The articles in this ten-volume collection are ordered purely by date of publication, from earliest to latest. This index groups them by subject area: algebraic geometry, geometric analysis, general relativity, graph theory, and string theory. Each entry indicates both the volume number and page number of the article, separated by a colon. For example, “1:89” indicates that the article is found in volume 1, on page 89.

More than one of these subject areas may pertain to a single article, in which case you will find the article listed in this index under two or more subject headings.

ALGEBRAIC GEOMETRY

- Yau, S.-T., J. Li, and F. Zheng. “A Simple Proof of Bogomolov’s Theorem on Class VII₀ Surfaces with $b_2 = 0$.” *Illinois Journal of Mathematics* **34** (1990): 217–220.1:89
- Lu, Steven Shin-Yi, and Shing-Tung Yau. “Holomorphic Curves in Surfaces of General Type.” *Proceedings of the National Academy of Sciences of the United States of America* **87** (1990): 80–82.1:93
- Yau, S.-T., and F. Zheng. “On Projective Manifolds Covered by Space C^n .” In *International Symposium in Memory of Hua Loo Keng, Vol. II* (Beijing, 1988), edited by Y. T. Siu et al., 323–332. Berlin: Springer, 1991.1:241
- Jost, J. and S.-T. Yau. “Applications of Quasilinear PDE to Algebraic Geometry and Arithmetic Lattices.” In *Algebraic Geometry and Related Topics* (Inchon, 1992), edited by Y. Nam et al., 169–193. International Press, 1993.1:379
- Yau, Shing-Tung. “A Splitting Theorem and an Algebraic Geometric Characterization of Locally Hermitian Symmetric Spaces.” *Communications in Analysis and Geometry* **1** (1993): 473–486.1:401
- Jost, Jürgen, and Shing-Tung Yau. “Harmonic Mappings and Algebraic Varieties over Function Fields.” *American Journal of Mathematics* **115**, no. 6 (1993): 1197–1227.1:539
- Lian, Bong and S.-T. Yau. “Mirror Symmetry, Rational Curves on Algebraic Manifolds and Hypergeometric Series.” In *XIth International Congress of Mathematical Physics* (Paris, 1994), edited by D. Iagolnitzer et al., 163–184. Cambridge, MA: International Press, 1995. 1:611
- Hosono, S., A. Klemm, S. Theisen, and S.-T. Yau. “Mirror Symmetry, Mirror Map and Applications to Complete Intersection Calabi-Yau Spaces.” *Nuclear Physics B* **433**, no. 3 (1995): 501–552.2:695

- Hosono, S., A. Klemm, S. Theisen, and S.-T. Yau. “Mirror Symmetry, Mirror Map and Applications to Calabi-Yau Hypersurfaces.” *Communications in Mathematical Physics* **167** (1995): 301–350.2:745
- Strominger, Andrew, Shing-Tung Yau, and Eric Zaslow. “Mirror Symmetry Is T-Duality.” *Nuclear Physics B* **479**, no. 1–2 (1996): 243–259.2:795
- Lian, Bong H., and S.-T. Yau. “Mirror Maps, Modular Relations and Hypergeometric Series. II.” In *S-Duality and Mirror Symmetry* (Trieste, 1995), edited by K. Markov and P. Ramond, 248–262. *Nuclear Physics B - Proceedings Supplements* **46** (1996).2:813
- Yau, Shing-Tung, and Eric Zaslow. “BPS States, String Duality, and Nodal Curves on $K3$.” *Nuclear Physics B* **471**, no. 3 (1996): 503–512.2:829
- Yau, Shing-Tung. “An Application of Eigenvalue Estimate to Algebraic Curves Defined by Congruence Subgroups.” *Mathematical Research Letters* **3**, no. 2 (1996): 167–172.2:839
- Lian, Bong H., and Shing-Tung Yau. “Arithmetic Properties of Mirror Map and Quantum Coupling.” *Communications in Mathematical Physics* **176**, no. 1 (1996): 163–191.2:845
- Yau, Shing-Tung. “Review on Kähler-Einstein Metrics in Algebraic Geometry.” In *Proceedings of the Hirzebruch 65 Conference on Algebraic Geometry* (Ramat Gan, 1993), edited by J. Bernstein et al., 433–443. Israel Mathematical Conference Proceedings, **9**. Ramat Gan: Bar-Ilan University, 1996.2:907
- Hosono, S., B. H. Lian, and S.-T. Yau. “GKZ-Generalized Hypergeometric Systems in Mirror Symmetry of Calabi-Yau Hypersurfaces.” *Communications in Mathematical Physics* **182**, no. 3 (1996): 535–577.2:943
- Klemm, A., B. H. Lian, S.S. Roan and S.-T. Yau. “A Note on ODEs from Mirror Symmetry.” In *Functional Analysis on the Eve of the 21st Century, Vol. II*, edited by S. Gindikin et al., 301–323. Progress in Mathematics, vol. 132. Birkhäuser, 1996.2:1053
- Hosono, S., B. H. Lian, and S.-T. Yau. “Maximal Degeneracy Points of GKZ Systems.” *Journal of the American Mathematical Society* **10** (1997): 427–443.2:1195
- Lian, B. and S.-T. Yau. “Integrality of Certain Exponential Series.” In *Algebra and Geometry* (Taipei, 1995), 215–227. International Press, 1998.2:1285
- Lian, B. and S.-T. Yau. “On Mirror Symmetry.” In *Algebra and Geometry* (Taipei, 1995), 207–213. International Press, 1998.2:1299
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. “The Candelas-de la Ossa-Green-Parkes Formula.” In *String Theory, Gauge Theory and Quantum Gravity* (Trieste, 1997). *Nuclear Physics B Proceedings Supplements* **67** (1998): 106–114.2:1307
- Klemm, A., B. Lian, S.-S. Roan, and S.-T. Yau. “Calabi-Yau Four-Folds for M- and F-Theory Compactifications.” *Nuclear Physics B* **518**, no. 3 (1998): 515–574.2:1317

- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. “Mirror Principle, A Survey.” In *Current Developments in Mathematics*, 1998, edited by D. Jerison et al., (Cambridge, MA: Int. Press, 1999): 35–82.**2:1377**
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. “Mirror Principle. I.” In *Surveys in Differential Geometry: Differential Geometry Inspired by String Theory*, 405–454. Surveys in Differential Geometry, **5**. Somerville, MA: International Press, 1999.**3:1425**
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. “Mirror Principle. II.” In *Surveys in Differential Geometry: Differential Geometry Inspired by String Theory*, 455–509. Surveys in Differential Geometry, **5**. Somerville, MA: International Press, 1999.**3:1475**
- Lian, Bong H., and Shing-Tung Yau. “Differential Equations from Mirror Symmetry.” In *Surveys in Differential Geometry: Differential Geometry Inspired by String Theory*, 510–526. Surveys in Differential Geometry, **5**. Somerville, MA: International Press, 1999. **3:1513**
- Chiang, T.-M., A. Klemm, S.-T. Yau, and E. Zaslow. “Local Mirror Symmetry: Calculations and Interpretations.” *Advances in Theoretical and Mathematical Physics* **3**, no. 3 (1999): 495–565.**3:1613**
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. “Mirror principle. III.” In *Surveys in Differential Geometry*, 433–474. Surveys in Differential Geometry, **7**. Somerville, MA: International Press, 2000.**3:1723**
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. “Mirror principle. IV.” In *Surveys in Differential Geometry*, 475–496, Surveys in Differential Geometry, **7**. Somerville, MA: International Press, 2000.**3:1765**
- (with B. Lian) “A tour of mirror symmetry”, in *First International Congress of Chinese Mathematicians*, 115–127, AMS/IP Stud. Adv. Math., **20**, Amer. Math. Soc., 2001.**3:2071**
- Hu, Yi, and Chien-Hao Liu, and Shing-Tung Yau. “Toric Morphisms and Fibrations of Toric Calabi-Yau Hypersurfaces.” *Advances in Theoretical and Mathematical Physics* **6** (2002): 457–506.**3:2119**
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. “Some Applications of Mirror Principle.” In *Topology and Geometry: Commemorating SISTAG*, 161–167. Contemporary Mathematics, **314**. Providence, RI: American Mathematical Society, 2002.**4:2177**
- (with B. Lian and K. Liu) “Towards a mirror principle for higher genus, in Geometry and nonlinear partial differential equations”, pp. 77–86, AMS/IP Stud. Adv. Math., 29, Amer. Math. Soc., 2002.**4:2199**
- Hu, Yi, and Shing-Tung Yau. “HyperKähler Manifolds and Birational Transformations.” *Advances in Theoretical and Mathematical Physics* **6**, no. 3 (2002): 557–574.**4:2209**
- Thomas, Richard P., and Shing-Tung Yau. “Special Lagrangians, Stable Bundles and Mean Curvature Flow.” *Communications in Analysis and Geometry* **10** (2002): 1075–1113.**4:2227**

- Hosono, Shinobu, Bong H. Lian, Keiji Oguiso, and Shing-Tung Yau. “Kummer Structures on K3 Surface: An Old Question of T. Shioda.” *Duke Mathematical Journal* **120** (2003): 635–647.**4:2359**
- Lian, Bong H., and Shing-Tung Yau. “The n th Root of the Mirror Map.” In *Calabi-Yau Varieties and Mirror Symmetry*, 195–199. Fields Institute Communications, **38**. Providence, RI: American Mathematical Society, 2003.**4:2373**
- Hosono, Shinobu, Bong H. Lian, Keiji Oguiso, and Shing-Tung Yau. “ $c = 2$ Rational Toroidal Conformal Field Theories via the Gauss Product.” *Communications in Mathematical Physics* **241** (2003): 245–286.**4:2407**
- Lian, Bong H., Chien-Hao Liu, Kefeng Liu, and Shing-Tung Yau. “The S_1 Fixed Points in Quot-Schemes and Mirror Principle Computations.” In *Vector Bundles and Representation Theory*, 165–194. Contemporary Mathematics, **322**. Providence, RI: American Mathematical Society, 2003.**4:2501**
- Hosono, Shinobu, Bong H. Lian, Keiji Oguiso, and Shing-Tung Yau. “Fourier-Mukai Partners of a K3 Surface of Picard Number One.” In *Vector Bundles and Representation Theory*, 43–55. Contemporary Mathematics **322**. Providence, RI: American Mathematical Society, 2003.**4:2531**
- Lian, B., C.-H. Liu, and Shing-Tung Yau. “A Reconstruction of Euler Data.” *Journal of Algebraic Geometry* **12**, (2003): 269–284.**4:2587**
- Hosono, S., B. Lian, K. Oguiso, and Shing-Tung Yau. “Fourier-Mukai Number of a K3 Surface, in Algebraic Structures and Moduli Spaces.” In *Algebraic Structures and Moduli Spaces*, 177–192. CRM Proceedings Lecture Notes **38**. Providence, RI: American Mathematical Society, 2004.**4:2745**
- Liu, C.-H., K. Liu, and Shing-Tung Yau. “On A-Twisted Moduli Stack for Curves from Witten’s Gauged Linear Sigma Models.” *Communications in Analysis and Geometry* **12** (2004): 233–280.**4:2781**
- Hosono S., B. Lian, K. Oguiso, and Shing-Tung Yau. “Autoequivalences of Derived Category of a K3 Surface and Monodromy Transformations.” *Journal of Differential Geometry* **13** (2004): 513–545.**4:2829**
- Liu, K., A. Todorov, K. Zuo, and Shing-Tung Yau. “Shafarevich’s Conjecture for CY Manifolds I.” *Pure and Applied Mathematics Quarterly* **1** (2005): 28–67.**5:3025**
- Lian, B., A. Todorov, and Shing-Tung Yau. “Maximal Unipotent Monodromy or Complete Intersection CY Manifolds.” *American Journal of Mathematics* **127** (2005): 1–50.**5:3065**
- Liu, C.C.M., C.-H. Liu, K. Liu, and Shing-Tung Yau. “Mirror Symmetry and Localizations.” In *The Unity of Mathematics*, 421–442. Progress in Mathematics **244**. Birkhäuser, 2006.**5:3237**

- Liu, K., X. Sun, and Shing-Tung Yau. “Geometry of Moduli Spaces.” In *Géométrie Différentielle, Physique Mathématique, Mathématiques et Société. I, Astérisque* no. 321 (2008): 31–50.**5:3445**
- Chi, C.-Y., and Shing-Tung Yau. “A Geometric Approach to Problems in Birational Geometry.” *Proceedings of the National Academy of Sciences of the United States of America* **105**, no. 48 (2008): 18696–18701.**5:3465**
- Liu, K., X. Sun, and Shing-Tung Yau. “New Results on the Geometry of the Moduli Space of Riemann Surfaces.” *Science in China Series A: Mathematics* **51**, no. 4 (2008): 632–651.**6:3601**
- Leung, N.C., and Shing-Tung Yau. “Mirror Symmetry of Fourier-Mukai Transformation for Elliptic Calabi-Yau Manifolds.” In *The Many Facets of Geometry*, 299–323. Oxford: Oxford University Press, 2010.**6:3941**
- Liu, K., A. Todorov, K. Zuo, and Shing-Tung Yau. “Finiteness of Subfamilies of Calabi-Yau n -folds over Curves with Caximal Length of Yukawa-coupling.” *Pure and Applied Mathematics Quarterly* **7**, no. 4 (2011): 1585–1598.**6:4027**
- Yau, Shing-Tung. “A Survey of Calabi-Yau Manifolds.” *Geometry and Analysis*. In *Advanced Lectures in Mathematics* **18**, no. 2, 521–563. Somerville, MA: International Press, 2011. ..**6:4065**
- Li, S., B. Lian, and Shing-Tung Yau. “Picard-Fuchs Equations for Relative Periods and Abel-Jacobi Map for Calabi-Yau Hypersurfaces.” *American Journal of Mathematics* **134**, no. 5 (2012): 1345–1384.**7:4367**
- Yau, Shing-Tung. “Geometry of Singular Space.” *Communications in Analysis and Geometry* **20**, no. 5 (2012): 1097–1134.**7:4507**
- Lian, B., and Shing-Tung Yau. “Period Integrals of CY and General Type Complete Intersections.” *Inventiones Mathematicae* **191**, no. 1 (2013): 35–89.**7:4545**
- Lian, B.H., R. Song, and Shing-Tung Yau. “Periodic Integrals and Tautological Systems.” *Journal of the European Mathematical Society* **15**, no. 4 (2013): 1457–1483.**7:4663**
- Esole, M., J. Fullwood, and Shing-Tung Yau. “D5 Elliptic Fibrations: Non-Kodaira Fibers and New Orientifold Limits of F-Theory.” *Communications in Number Theory and Physics* **9**, no. 3 (2015): 583–642.**8:5083**
- Lau, S.-C., L.-S. Tseng, and Shing-Tung Yau. “Non-Kähler SYZ Mirror Symmetry.” *Communications in Mathematical Physics* **340**, no. 1 (2015): 145–170.**8:5143**
- Yau, Shing-Tung. “On the Pseudonorm Project of Birational Classification of Algebraic Varieties.” *Geometry and Analysis on Manifolds: Progress in Mathematics*. In *Progress in Mathematics* **308**, 327–339. Cham: Birkhäuser/Springer, 2015.**8:5237**
- Yau, Shing-Tung. “From Riemann and Kodaira to Modern Developments on Complex Manifolds.” *Japanese Journal of Mathematics* **11**, no. 2 (2016): 265–303.**8:5703**

- Liu, K., X. Sun, X. Yang, and Shing-Tung Yau. “Curvatures of Moduli Space of Curves and Applications.” *Asian Journal of Mathematics* **21**, no. 5 (2017): 841–854.**9:5743**
- Haghighat, B., H. Movasati, and Shing-Tung Yau. “Calabi-Yau Modular Forms in Limit: Elliptic Fibrations.” *Communications in Number Theory and Physics* **11**, no. 4 (2017): 879–912.**9:5807**
- Wang, Y., D. Xie, Stephen S.-T. Yau, and Shing-Tung Yau. “4d $N = 2$ SCFT from Complete Intersection Singularity.” *Advances in Theoretical and Mathematical Physics* **21**, no. 3 (2017): 801–855.**9:5927**
- Jacob, A., and Shing-Tung Yau. “A Special Lagrangian Type Equation for Holomorphic Line Bundles.” *Mathematische Annalen* **369**, no. 1–2 (2017): 869–898.**9:5983**
- Chen, B., D. Xie, Stephen S.-T. Yau, H. Zuo, and Shing-Tung Yau. “4d $N = 2$ SCFT and Singularity Theory Part II: Complete Intersection.” *Advances in Theoretical and Mathematical Physics* **21**, no. 1 (2017): 121–145.**9:6047**
- Huang, A., B. Lian, C. Yu, and Shing-Tung Yau. “Period Integrals and Tautological Systems.” *Celebrating the 50th Anniversary of the Journal of Differential Geometry*. In *Surveys in Differential Geometry* **22**, 275–289. Somerville, MA: International Press, 2018.**9:6301**

GEOMETRIC ANALYSIS

- Yau, Shing-Tung, and Peter Li. “Curvature and Holomorphic Mappings of Complete Kähler Manifolds.” *Compositio Mathematica* **73** (1990): 125–144.**1:37**
- Yau, Shing-Tung, and Gang Tian. “Complete Kähler Manifolds with Zero Ricci Curvature. I.” *Journal of the American Mathematical Society* **3** (1990): 579–609.**1:57**
- Lu, Steven Shin-Yi, and Shing-Tung Yau. “Holomorphic Curves in Surfaces of General Type.” *Proceedings of the National Academy of Sciences of the United States of America* **87** (1990): 80–82.**1:93**
- Jost, Jürgen, and Shing-Tung Yau. “Harmonic Maps and Group Representations.” In *Differential Geometry*, edited by X. Cheng et al., 241–259. Pitman Monographs and Surveys in Pure and Applied Mathematics, **no. 52**. Harlow: Longman Scientific & Technical, 1991.**1:97**
- Yau, Shing-Tung. “A Review of Complex Differential Geometry.” In *Several Complex Variables and Complex Geometry, Part 2* (Santa Cruz, CA, 1989), edited by J. P. Demailly et al., 619–625. *Proceedings of Symposia in Pure Mathematics*, **52**, part 2. Providence: American Mathematical Society, 1991.**1:117**
- Jost, Jürgen, and Shing-Tung Yau. “Harmonic Maps and Kähler Geometry.” In *Prospects in Complex Geometry* (Katata and Kyoto, 1989), edited by T. Ohsawa and K. Takeuchi, 340–370. *Lecture Notes in Mathematics*, **1468**. Berlin: Springer, 1991.**1:125**

- Tian, Gang, and Shing-Tung Yau. “Complete Kähler Manifolds with Zero Ricci Curvature. II.” *Inventiones Mathematicae* **106** (1991): 27–60. **1:157**
- Yau, S.-T., and F. Zheng. “On Projective Manifolds Covered by Space C^n .” In *International Symposium in Memory of Hua Loo Keng, Vol. II* (Beijing, 1988), edited by Y. T. Siu et al., 323–332. Berlin: Springer, 1991. **1:241**
- Yau, S.-T., and F. Zheng. “Negatively $1/4$ -Pinched Riemannian Metric on a Compact Kähler Manifold.” *Inventiones Mathematicae* **103** (1991): 527–535. **1:251**
- Yau, Shing-Tung. “The Current State and Prospects of Geometry and Nonlinear Differential Equations.” In *Mathematical Research Today and Tomorrow* (Barcelona, 1991), edited by J. J. Albaiges et al., 29–39. Lecture Notes in Mathematics, **1525**. Berlin: Springer, 1992. **1:261**
- Cao, Huai-Dong and Shing-Tung Yau. “Gradient Estimates, Harnack Inequalities and Estimates for Heat Kernels of the Sum of Squares of Vector Fields.” *Mathematische Zeitschrift* **211** (1992): 485–504. **1:287**
- Meeks, William H., and Shing-Tung Yau. “The Topological Uniqueness of Complete Minimal Surfaces of Finite Topological Type.” *Topology* **31** (1992): 305–316. **1:307**
- Li, Peter, Andrejs Treibergs, and Shing-Tung Yau. “How to Hear the Volume of Convex Domains.” In *Geometry and Nonlinear Partial Differential Equations* (Fayetteville, AR, 1990), edited by S.-T. Yau, 109–117. Contemporary Mathematics, **127**. Providence: American Mathematical Society, 1992. **1:319**
- Yau, S.-T. “Open Problems in Geometry.” In *Chern—A Great Geometer of the Twentieth Century*, edited by S.-S. Chern and W.-L. Chow, 275–319. International Press, 1992. **1:333**
- Jost, J. and S.-T. Yau. “Applications of Quasilinear PDE to Algebraic Geometry and Arithmetic Lattices.” In *Algebraic Geometry and Related Topics* (Inchon, 1992), edited by Y. Nam et al., 169–193. International Press, 1993. **1:379**
- Yau, Shing-Tung. “A Splitting Theorem and an Algebraic Geometric Characterization of Locally Hermitian Symmetric Spaces.” *Communications in Analysis and Geometry* **1** (1993): 473–486. **1:401**
- Jost, Jürgen, and Shing-Tung Yau. “A Nonlinear Elliptic System for Maps from Hermitian to Riemannian Manifolds and Rigidity Theorems in Hermitian Geometry.” *Acta Mathematica* **170**, no. 2 (1993): 221–254. **1:415**
- Yau, Shing-Tung. “Open Problems in Geometry.” In *Differential Geometry: Partial Differential Equations on Manifolds*, edited by T. H. Colding and W. P. Minicozzi II, 1–28. Proceedings of Symposia in Pure Mathematics, **54**, part 1. Providence: American Mathematical Society, 1993. **1:449**

- Li, Peter, and Shing-Tung Yau. “Asymptotically Flat Complete Kähler Manifolds.” In *Complex Geometry* (Osaka, 1990), edited by E. Ballico et al., 131–144. Lecture Notes in Pure and Applied Mathematics, **143**. New York: Dekker, 1993.**1:477**
- Yau, S.-T., and F. Zheng. “Remarks on Certain Higher-Dimensional Quasi-Fuchsian Domains.” In *Differential Geometry: Geometry in Mathematical Physics and Related Topics*, edited by T. H. Colding and W. P. Minicozzi II, 629–635. Proceedings of Symposia in Pure Mathematics, **54, part 2**. Providence: American Mathematical Society, 1993.**1:517**
- Yau, S.-T., and F. Zheng. “On a Borderline Class of Non-Positively Curved Compact Kähler Manifolds.” *Mathematische Zeitschrift* **212** (1993): 587–599.**1:525**
- Jost, Jürgen, and Shing-Tung Yau. “Harmonic Mappings and Algebraic Varieties over Function Fields.” *American Journal of Mathematics* **115**, no. 6 (1993): 1197–1227.**1:539**
- Li, Jun, Shing-Tung Yau, and Fangyang Zheng. “On Projectively Flat Hermitian Manifolds.” *Communications in Analysis and Geometry* **2** (1994): 103–109.**1:571**
- Yau, Shing-Tung. “On the Harnack Inequalities of Partial Differential Equations.” *Communications in Analysis and Geometry* **2** (1994): 431–450.**1:579**
- Jost, Jürgen, and Shing-Tung Yau. “Erratum to: A Nonlinear Elliptic System for Maps from Hermitian to Riemannian Manifolds and Rigidity Theorems in Hermitian Geometry”, [*Acta Mathematica* **170** (1993), no. 2, 221–254].” *Acta Mathematica* **173**, no. 2 (1994): 307.**1:599**
- Bourguignon, Jean-Pierre, Peter Li and Shing-Tung Yau. “Upper Bound for the First Eigenvalue of Algebraic Submanifolds.” *Commentarii Mathematici Helvetici* **69** (1994): 199–207.**1:601**
- Yau, Shing-Tung. “Harnack Inequality for Non-Self-Adjoint Evolution Equations.” *Mathematical Research Letters* **2** (1995): 387–399.**1:633**
- Yau, Shing-Tung. “An Application of Eigenvalue Estimate to Algebraic Curves Defined by Congruence Subgroups.” *Mathematical Research Letters* **3**, no. 2 (1996): 167–172.**2:839**
- Huisken, Gerhard, and Shing-Tung Yau. “Definition of Center of Mass for Isolated Physical Systems and Unique Foliations by Stable Spheres with Constant Mean Curvature.” *Inventiones Mathematicae* **124** (1996): 281–311.**2:875**
- Yau, Shing-Tung. “Review on Kähler-Einstein Metrics in Algebraic Geometry.” In *Proceedings of the Hirzebruch 65 Conference on Algebraic Geometry* (Ramat Gan, 1993), edited by J. Bernstein et al., 433–443. Israel Mathematical Conference Proceedings, **9**. Ramat Gan: Bar-Ilan University, 1996.**2:907**
- Chung, F., R. Graham, and S.-T. Yau. “On Sampling with Markov Chains.” *Random Structures & Algorithms* **9** (1996): 55–77.**2:919**

- Chung, F., and S.-T. Yau. “Logarithmic Harnack Inequalities.” *Mathematical Research Letters* **3** (1996): 793–812.**2:987**
- Yau, S.-T., and S. S.-T. Yau. “Explicit Solution of a Kolmogorov Equation.” *Applied Mathematics & Optimization* **34**, no. 3 (1996): 231–266.**2:1007**
- Shi, Wan-Xiong, and S.-T. Yau. “A Note on the Total Curvature of a Kähler Manifold.” *Mathematical Research Letters* **3** (1996): 123–132.**2:1043**
- Hamilton, Richard S., and Shing-Tung Yau. “The Harnack Estimate for the Ricci Flow on a Surface—Revisited.” *Asian Journal of Mathematics* **1** (1997): 418–421.**2:1091**
- Yau, Shing-Tung. “A Remark on the Existence of Sphere with Prescribed Mean Curvature.” *Asian Journal of Mathematics* **1** (1997): 293–294.**2:1095**
- Yau, Shing-Tung. “Sobolev Inequality for Measure Space.” In *Tsing Hua Lectures on Geometry & Analysis (Hsinchu, 1990–1991)*, edited by Shing-Tung Yau, 299–313. International Press, 1997.**2:1097**
- Jost, J. and S.-T. Yau. “Harmonic Maps and Superrigidity.” In *Tsing Hua Lectures on Geometry & Analysis, (Hsinchu, 1990–1991)*, edited by Shing-Tung Yau, 213–246. International Press, 1997.**2:1113**
- Yau, Shing-Tung, and Stephen S.-T. Yau. “Existence and Decay Estimates for Time Dependent Parabolic Equation with Application to Duncan-Mortensen-Zakai Equation.” *Asian Journal of Mathematics* **2** (1998): 1079–1149.**2:1213**
- Jost, Jürgen and Shing-Tung Yau. “Harmonic Maps and Rigidity Theorems for Spaces of Nonpositive Curvature.” *Communications in Analysis and Geometry* **7** (1999): 681–694.**3:1531**
- Yau, S.-T. “Einstein Manifolds with Zero Ricci Curvature.” In *Surveys in Differential Geometry: Essays on Einstein Manifolds*, 1–14. Surveys in Differential Geometry, **VI**. Somerville, MA: International Press, 1999.**3:1599**
- Grigor’yan, A. and S.-T. Yau. “Decomposition of a Metric Space by Capacitors.” In *Differential Equations*, 39–75. Proceedings of Symposia in Pure Mathematics, **65**. Providence, RI: American Mathematical Society, 1999.**3:1685**
- Yau, S.-T. “Review of Geometry and Analysis.” *Asian Journal of Mathematics* **4** (2000), 235–278.**3:1925**
- Yau, S.-T. “Open Problems in Geometry.” *Journal of the Ramanujan Mathematical Society* **15** (2000): 125–134.**3:2003**
- “An estimate of the gap of the first two eigenvalues in the Schrödinger operator”, in *Lectures on partial differential equations*, pp. 223–235, New Stud. Adv. Math., **2**, Int. Press, 2003.**4:2345**

- Grigor'yan, Alexander, and Shing-Tung Yau. "Isoperimetric Properties of Higher Eigenvalues of Elliptic Operators." *American Journal of Mathematics* **125** (2003): 893–940.**4:2453**
- Grigor'yan, A., Y. Netrusov, and Shing-Tung Yau. "Eigenvalues of Elliptic Operators and Geometric Applications." In *Surveys in Differential Geometry* **9**, 147–217. Somerville, MA: International Press, 2004.**4:2603**
- Liu, K., X. Sun, and Shing-Tung Yau. "Canonical Metrics on the Moduli Space of Riemann Surfaces: I." *Journal of Differential Geometry* **68** (2004): 209–242.**4:2675**
- Liu, K., X. Sun, and Shing-Tung Yau. "Canonical Metrics on the Moduli Space of Riemann Surfaces. II." *Journal of Differential Geometry* **69** (2005): 163–216.**5:2935**
- Liu, K., X. Sun, and Shing-Tung Yau. "Geometric Aspects of the Moduli Space of Riemann Surfaces." *Science in China Series A: Mathematics* **48** (2005), suppl., 97–122.**5:2989**
- Yau, Shing-Tung. "Complex Geometry: its Brief History and its Future." *Science in China Series A: Mathematics* **48** (2005), suppl., 47–60.**5:3011**
- Martelli, D., J. Sparks, and Shing-Tung Yau. "The Geometric Dual of A-maximisation for Toric Sasaki-Einstein Manifolds." *Communications in Mathematical Physics* **268**, no. 1 (2006): 39–65.**5:3147**
- Becker, K., M. Becker, Fu, J., Tseng, L.-S., and Shing-Tung Yau. "Anomaly Cancellation and Smooth Non-Kähler Solutions in Heterotic String Theory." *Nuclear Physics B* **751**, no. 1–2 (2006): 108–128.**5:3175**
- Becker, M., L.-S. Tseng, and Shing-Tung Yau. "Moduli Space of Torsional Manifolds." *Nuclear Physics B* **786**, no. 1–2 (2007): 119–134.**5:3301**
- Gauntlett, J.P., D. Martelli, J. Sparks, and Shing-Tung Yau. "Obstructions to the Existence of Sasaki-Einstein Metrics." *Communications in Mathematical Physics* **273**, no. 3 (2007): 803–827.**5:3351**
- Fu, J., and Shing-Tung Yau. "A Monge-Ampère-type Equation Motivated by String Theory." *Communications in Analysis and Geometry* **15** (2007): 29–75.**5:3377**
- Yau, Shing-Tung. "Gap of the First Two Eigenvalues of the Schrödinger Operator with Nonconvex Potential." *Matemática Contemporânea* **35** (2008): 267–285.**5:3425**
- Liu, K., X. Sun, and Shing-Tung Yau. "Geometry of Moduli Spaces." In *Géométrie Différentielle, Physique Mathématique, Mathématiques et Société. I, Astérisque* no. 321 (2008): 31–50.**5:3445**
- Chi, C.-Y., and Shing-Tung Yau. "A Geometric Approach to Problems in Birational Geometry." *Proceedings of the National Academy of Sciences of the United States of America* **105**, no. 48 (2008): 18696–18701.**5:3465**

- Tosatti, V., B. Weinkove, and Shing-Tung Yau. “Taming Symplectic Forms and the Calabi-Yau Equation.” *Proceedings of the London Mathematical Society* **97**, no. 2 (2008): 401–424.**5:3471**
- Becker, M., L.-S. Tseng, and Shing-Tung Yau. “Heterotic Kähler/non-Kähler Transitions.” *Advances in Theoretical and Mathematical Physics* **12**, no. 5 (2008): 1147–1162.**5:3495**
- Liu, K., X. Sun, and Shing-Tung Yau. “Good Geometry on the Curve Moduli.” *Publications of the Research Institute for Mathematical Sciences* **44**, no. 2 (2008): 699–724.**5:3511**
- Martelli, D., J. Sparks, and Shing-Tung Yau. “Sasaki-Einstein Manifolds and Volume Minimisation.” *Communications in Mathematical Physics* **280**, no. 3 (2008): 611–673.**5:3537**
- Liu, K., X. Sun, and Shing-Tung Yau. “New Results on the Geometry of the Moduli Space of Riemann Surfaces.” *Science in China Series A: Mathematics* **51**, no. 4 (2008): 632–651.**6:3601**
- Yau, Shing-Tung. “Canonical Metrics on Complex Manifold.” *Science in China Series A: Mathematics* **51**, no. 4 (2008): 503–508.**6:3621**
- Fu, J., and Shing-Tung Yau. “The Theory of Superstring with Flux on Non-Kähler Manifolds and the Complex Monge-Ampère Equation.” *Journal of Differential Geometry* **78** (2008): 369–428.**6:3627**
- Becker, M., L.-S. Tseng, and Shing-Tung Yau. “New Heterotic Non-Kähler Geometries.” *Advances in Theoretical and Mathematical Physics* **13**, no. 6 (2009): 1815–1845.**6:3699**
- Jost, J., and Shing-Tung Yau. “Harmonic Mappings and Moduli Spaces of Riemann Surfaces.” *Geometry of Riemann Surfaces and their Moduli Spaces*. In *Surveys in Differential Geometry* **14**, 171–196. Somerville, MA: International Press, 2004.**6:3731**
- Liu, K., X. Sun, and Shing-Tung Yau. “Recent Development on the Geometry of the Teichmüller and Moduli Spaces of Riemann Surfaces.” *Geometry of Riemann Surfaces and their Moduli Spaces*. In *Surveys in Differential Geometry* **14**, 221–259. Somerville, MA: International Press, 2009.**6:3757**
- Grigorian, S., and Shing-Tung Yau. “Local Geometry of the G2 Moduli Space.” *Communications in Mathematical Physics* **287**, no. 2 (2009): 459–488.**6:3823**
- Wu, D., F. Zheng, and S.-T. Yau. “A Degenerate Monge-Ampère Equation and the Boundary Classes of Kähler Cones.” *Mathematical Research Letters* **16**, no. 2 (2009): 365–374.**6:3875**
- Yau, Shing-Tung. “Metrics on Complex Manifolds.” *Science China Mathematics* **53**, no. 3 (2010): 565–572.**6:3975**
- Liu, K., A. Todorov, K. Zuo, and Shing-Tung Yau. “Finiteness of Subfamilies of Calabi-Yau n -folds over Curves with Caximal Length of Yukawa-coupling.” *Pure and Applied Mathematics Quarterly* **7**, no. 4 (2011): 1585–1598.**6:4027**

- Sun, X., and Shing-Tung Yau. “Deformation of Kähler-Einstein Metrics.” *Surveys in Geometric Analysis and Relativity*. In *Advanced Lectures in Mathematics* **20**, 467–489. Somerville, MA: International Press, 2011.**6:4041**
- Yau, Shing-Tung. “A Survey of Calabi-Yau Manifolds.” *Geometry and Analysis*. In *Advanced Lectures in Mathematics* **18**, no. 2, 521–563. Somerville, MA: International Press, 2011. ..**6:4065**
- Yau, Shing-Tung. “Perspectives on Geometric Analysis.” *Geometry and Analysis*, In *Advanced Lectures in Mathematics* **18**, no. 2, 417–520. Somerville, MA: International Press, 2011. .**6:4109**
- Tsai, C.J., L.-S. Tseng, and Shing-Tung Yau. “Symplectic Cohomologies on Phase Space.” *Journal of Mathematical Physics* **53**, no. 9 (2012): 095217.**6:4275**
- Tseng, L.-S., and Shing-Tung Yau. “Cohomology and Hodge Theory on Symplectic Manifolds: I.” *Journal of Differential Geometry* **91** (2012): 383–416.**6:4291**
- Tseng, L.-S., and Shing-Tung Yau. “Cohomology and Hodge Theory on Symplectic Manifolds: I.” *Journal of Differential Geometry* **91**, no. 3 (2012): 417–443.**7:4325**
- Tseng, L.-S., and Shing-Tung Yau. “Non-Kähler Calabi-Yau Manifolds.” *String-Math 2011*. In *Proceedings of Symposia in Pure Mathematics* **85**, 241–254. Providence, RI: American Mathematical Society, 2012.**7:4353**
- Fu, J., J. Li, and Shing-Tung Yau. “Balanced Metrics on Non-Kähler Calabi-Yau Threefolds.” *Journal of Differential Geometry* **90**, no. 1 (2012): 81–129.**7:4407**
- Wong, P.-M., D. Wu, and Shing-Tung Yau. “Picard Number, Holomorphic Sectional Curvature, and Ampleness.” *Proceedings of the American Mathematical Society* **140**, no. 2 (2012): 621–626.**7:4457**
- Scherfner, M., S. Weiss, and Shing-Tung Yau. “A Review of the Chern Conjecture for Isoparametric Hypersurfaces in Spheres.” *Advances in Geometric Analysis*. In *Advanced Lectures in Mathematics* **21**, 175–187. Somerville, MA: International Press, 2012.**7:4477**
- Yau, Shing-Tung. “Topics on Geometric Analysis.” In *Surveys in Differential Geometry* **17**, 459–473. Somerville, MA: International Press, 2012.**7:4491**
- Yau, Shing-Tung. “Geometry of Singular Space.” *Communications in Analysis and Geometry* **20**, no. 5 (2012): 1097–1134.**7:4507**
- “A note on the distribution of critical points of eigenfunctions,” *Open problems and surveys of contemporary mathematics*, 379–381, *Surv. Mod. Math.*, **6**, Int. Press, Somerville, MA, 2013.**7:4619**
- Yau, Shing-Tung. “Sobolev Inequality for Measure Space.” *Open Problems and Surveys of Contemporary Mathematics*. In *Surveys of Modern Mathematics* **6**, 383–396. Somerville, MA: International Press, 2013.**7:4623**

- Xu, H., and Shing-Tung Yau. "Trees and Tensors on Kähler Manifolds." *Annals of Global Analysis and Geometry* **44**, no. 2 (2013): 151–168.7:4645
- Liu, K., X. Sun, and Shing-Tung Yau. "Goodness of Canonical Metrics on the Moduli Space of Riemann Surfaces." *Pure and Applied Mathematics Quarterly* **10**, no. 2 (2014): 223–243.7:4853
- Yau, Shing-Tung. "On the Pseudonorm Project of Birational Classification of Algebraic Varieties." *Geometry and Analysis on Manifolds: Progress in Mathematics*. In Progress in Mathematics **308**, 327–339. Cham: Birkhäuser/Springer, 2015.8:5237
- Fu, J., W. Zhou, and Shing-Tung Yau. "Complete cscK Metrics on the Local Models of the Conifold Transition." *Communications in Mathematical Physics* **335**, no. 3 (2015): 1215–1233.8:5285
- Wu, D., and Shing-Tung Yau. "Negative Holomorphic Curvature and Positive Canonical Bundle." *Inventiones Mathematicae* **204**, no. 2 (2016): 595–604.8:5525
- Fu, J., W. Zhou, and Shing-Tung Yau. "On Complete Constant Scalar Curvature Kähler Metrics with Poincaré-Mok-Yau Asymptotic Property." *Communications in Analysis and Geometry* **24**, no. 3 (2016): 521–557.8:5535
- Wu, D., and Shing-Tung Yau. "Negative Holomorphic Curvature and Positive Canonical Bundle." *Communications in Analysis and Geometry* **24**, no. 4 (2016): 901–912.8:5611
- Tsai C.-J., L.-S. Tseng, and Shing-Tung Yau. "Cohomology and Hodge Theory on Symplectic Manifolds: III." *Journal of Differential Geometry* **103**, no. 1 (2016): 83–143.8:5623
- Yau, Shing-Tung. "From Riemann and Kodaira to Modern Developments on Complex Manifolds." *Japanese Journal of Mathematics* **11**, no. 2 (2016): 265–303.8:5703
- Liu, K., X. Sun, X. Yang, and Shing-Tung Yau. "Curvatures of Moduli Space of Curves and Applications." *Asian Journal of Mathematics* **21**, no. 5 (2017): 841–854.9:5743
- Gao, P., W. Zhou, and Shing-Tung Yau. "Nonexistence for Complete Kähler-Einstein Metrics on Some Noncompact Manifolds." *Mathematische Annalen* **369**, no. 3–4 (2017): 1271–1282.9:5883
- Jacob, A., and Shing-Tung Yau. "A Special Lagrangian Type Equation for Holomorphic Line Bundles." *Mathematische Annalen* **369**, no. 1–2 (2017): 869–898.9:5983
- He, Y.-H., R.-K. Seong, and Shing-Tung Yau. "Calabi-Yau Volumes and Reflexive Polytopes." *Communications in Mathematical Physics* **361**, no. 1 (2018): 155–204.9:6251
- Collins, T., D. Xie, and Shing-Tung Yau. "The Deformed Hermitian-Yang-Mills Equation." In *Geometry and Physics*, 69–90. Oxford: Oxford University Press, 2018.9:6449

- Wu, D., and Shing-Tung Yau. “Complete Kähler-Einstein Metrics under Certain Holomorphic Covering and Examples.” *Annales de l’Institut Fourier (Grenoble)* **68**, no. 7 (2018): 2901–2921. **10:6531**
- Collins, T., A. Jacob, and Shing-Tung Yau. “Poisson Metrics on Flat Vector Bundles over Non-compact Curves.” *Communications in Analysis and Geometry* **27**, no. 3 (2019): 529–597. **10:6643**
- Chruściel, P., G. Galloway, J. Isenberg, P. Miao, M.-T. Wang, and Shing-Tung Yau. “Introduction [Special Issue: In Honor of Robert Bartnik].” *Pure and Applied Mathematics Quarterly* **15**, no. 2 (2019): 609–610. **10:6713**
- Wu, D., and Shing-Tung Yau. “Invariant Metrics on Negatively Pinched Complete Kähler Manifolds.” *Journal of the American Mathematical Society* **33** (2020): 103–609. **10:6785**
- Collins, T., A. Jacob, and Shing-Tung Yau. “(1, 1) Forms with Specified Lagrangian Phase: *A Priori* Estimates and Algebraic Obstructions.” *Cambridge Journal of Mathematics* **8**, no. 2 (2020): 407–452. **10:6901**
- Yau, Shing-Tung. “Preface to CAG Special Issues in Honor of Karen Uhlenbeck’s 75th Birthday.” *Communications in Analysis and Geometry* **28**, no. 4 (2020): 743–744. **10:7031**
- Yau, Shing-Tung. “Shiing-Shen Chern: A Great Geometer of 20th Century.” *Notices of the International Consortium of Chinese Mathematicians* **8**, no. 1 (2020): 1–16. **10:7033**
- Yau, Shing-Tung. “Open Problems.” *Notices of the International Consortium of Chinese Mathematicians* **8**, no. 1 (2020): 90–92. **10:7049**
- Cao, H.-D., X. Sun, Y. Zhang, and Shing-Tung Yau. “Weil-Petersson Metrics on Deformation Spaces.” *Journal of the Iranian Mathematical Society* **1**, no. 6 (2020): 117–128. **10:7159**

GENERAL RELATIVITY

- Smoller, Joel A., Arthur G. Wasserman, Shing-Tung Yau, and J. B. McLeod. “Smooth Static Solutions of the Einstein/Yang-Mills Equations.” *Communications in Mathematical Physics* **143** (1991): 115–147. **1:191**
- Smoller, J., A. Wasserman, S.-T. Yau, and J.B. McLeod. “Smooth Static Solutions of the Einstein-Yang/Mills Equations.” *Bulletin of the American Mathematical Society (New Series)* **27** (1992): 239–242. **1:329**
- Smoller, J.A., A.G. Wasserman, and S.-T. Yau. “Existence of Black Hole Solutions for the Einstein-Yang/Mills Equations.” *Communications in Mathematical Physics* **154**, no. 2 (1993): 377–401. **1:491**

- Smoller, J., A. Wasserman, and S.-T. Yau. “Einstein-Yang/Mills Black Hole Solutions.” In *Chen Ning Yang: A Great Physicist of the Twentieth Century*, edited by C. N. Yang and R. R. Osgood, Jr., 209–220. International Press, 1995.**1:647**
- Finster, Felix, Joel Smoller, and Shing-Tung Yau. “Particle-like Solutions of the Einstein-Dirac-Maxwell Equations.” *Physics Letters A* **259**, no. 6 (1999): 431–436.**3:1545**
- Finster, Felix, Joel Smoller, and Shing-Tung Yau. “Non-existence of Black Hole Solutions for a Spherically Symmetric, Static Einstein-Dirac-Maxwell System.” *Communications in Mathematical Physics* **205** (1999): 249–262.**3:1551**
- Finster, Felix, Joel Smoller, and Shing-Tung Yau. “Particlelike Solutions of the Einstein-Dirac Equations.” *Physical Review D* **59**, no. 10 (1999): 104020.**3:1565**
- Finster, Felix, Joel Smoller, and Shing-Tung Yau. “The Coupling of Gravity to Spin and Electromagnetism.” *Modern Physics Letters A* **14**, no. 16 (1999): 1053–1057.**3:1585**
- Finster, Felix, Joel Smoller, and Shing-Tung Yau. “Absence of Static, Spherically Symmetric Black Hole Solutions for Einstein-Dirac-Yang/Mills Equations with Complete Fermion Shells.” *Advances in Theoretical and Mathematical Physics* **4** (2000): 1231–1257.**3:1787**
- Finster, Felix, Joel Smoller, and Shing-Tung Yau. “The Interaction of Dirac Particles with Non-Abelian Gauge Fields and Gravity—Bound States.” *Nuclear Physics B* **584**, no. 1–2 (2000): 387–414.**3:1815**
- Finster, Felix, Joel Smoller, and Shing-Tung Yau. “Some Recent Progress in Classical General Relativity.” *Journal of Mathematical Physics* **41**, no. 6 (2000): 3943–3963.**3:1843**
- Finster, Felix, Joel Smoller, and Shing-Tung Yau. “The Interaction of Dirac Particles with Non-Abelian Gauge Fields and Gravity—Black Holes.” *Michigan Mathematical Journal* **47** (2000): 199–208.**3:1865**
- Finster, Felix, Niky Kamran, Joel Smoller, and Shing-Tung Yau. “Non-Existence of Time-Periodic Solutions of the Dirac Equation in an Axisymmetric Black Hole Geometry.” *Communications on Pure and Applied Mathematics* **53**, no. 7 (2000): 902–929.**3:1875**
- Finster, Felix, Joel Smoller, and Shing-Tung Yau. “Non-Existence of Time-Periodic Solutions of the Dirac Equation in a Reissner-Nordström Black Hole Background.” *Journal of Mathematical Physics* **41** (2000): 2173–2194.**3:1903**
- Finster, Felix, Niky Kamran, Joel Smoller, and Shing-Tung Yau. “Erratum: ‘Non-Existence of Time-Periodic Solutions of the Dirac Equation in an Axisymmetric Black Hole Geometry.’” *Communications on Pure and Applied Mathematics* **53**, no. 9 (2000): 1201.**3:2037**
- Yau, Shing-Tung. “Geometry of Three Manifolds and Existence of Black Hole Due to Boundary Effect.” *Advances in Theoretical and Mathematical Physics* **5** (2001): 755–767.**3:2039**

- Finster, F., Smoller, J., and S.-T. Yau. “The Einstein-Dirac-Maxwell Equations—Black Hole Solutions.” *Methods and Applications of Analysis* **8** (2001): 623–634.**3:2099**
- Yau, Shing-Tung. “Geometry and Spacetime.” In *Proceedings of the Inaugural Conference of the Michigan Center for Theoretical Physics 2001: A Spacetime Odyssey* (Ann Arbor, MI), *International Journal of Modern Physics A* **17** (2002), suppl., 197–204.**4:2169**
- “Some progress in classical general relativity”, in *Geometry and nonlinear partial differential equations*, pp. 191–206, AMS/IP Stud. Adv. Math., **29**, Amer. Math. Soc., 2002.**4:2183**
- Finster, Felix, Niky Kamran, Joel Smoller, and Shing-Tung Yau. “Decay Rates and Probability Estimates for Massive Dirac Particles in the Kerr-Newman Black Hole Geometry.” *Communications in Mathematical Physics* **230** (2002): 201–244.**4:2267**
- Finster, Felix, Niky Kamran, Joel Smoller, and Shing-Tung Yau. “The Long-Time Dynamics of Dirac Particles in the Kerr-Newman Black Hole Geometry.” *Advances in Theoretical and Mathematical Physics* **7**, no. 1 (2003): 25–52.**4:2379**
- Liu, Chiu-Chu Melissa, and Shing-Tung Yau. “Positivity of Quasilocal Mass.” *Physical Review Letters* **90**, no. 23 (2003): 231102.**4:2449**
- Liu, Melissa Chiu-Chu, and Shing-Tung Yau. “Reply to a Comment by Murchadha, Szabados, and Tod Regarding Liu and Yau’s 2003 Article ‘Positivity of Quasilocal Mass.’” *Physical Review Letters* **92**, no. 25 (2004): 259001.**4:2743**
- Finster, F., N. Kamran, J. Smoller, and S.-T. Yau. “An Integral Spectral Representation of the Propagator for the Wave Equation in the Kerr Geometry.” *Communications in Mathematical Physics* **260**, no. 2 (2005): 257–298.**5:2893**
- Huang, W.-L., X. Zhang, and Shing-Tung Yau. “Positivity of the Bondi Mass in Bondi’s Radiating Spacetimes.” *Atti della Accademia Nazionale dei Lincei. Classe di Scienze Fisiche, Matematiche e Naturali. Rendiconti Lincei. Matematica e Applicazioni* **17**, no. 4 (2006): 335–349.**5:3131**
- Finster, F., N. Kamran, J. Smoller, and Shing-Tung Yau. “Decay of Solutions of the Wave Equation in the Kerr Geometry.” *Communications in Mathematical Physics* **264**, no. 2 (2006): 465–503.**5:3197**
- Yau, Shing-Tung. “Spacetime and the Geometry Behind It.” *Milan Journal of Mathematics* **74** (2006): 339–356.**5:3259**
- Liu, C.-C.M., and Shing-Tung Yau. “Positivity of Quasi-local Mass II.” *Journal of the American Mathematical Society* **19**, no. 1 (2006): 181–204.**5:3277**
- Wang, M.-T., and Shing-Tung Yau. “A Generalization of Liu-Yau’s Quasi-local Mass.” *Communications in Analysis and Geometry* **15** (2007): 249–282.**5:3317**

- Finster, F., N. Kamran, J. Smoller, and Shing-Tung Yau. “Decay of solutions of the wave equation in the Kerr geometry.” *Communications in Mathematical Physics* **280**, no. 2 (2008): 563–573.**6:3687**
- Finster, F., N. Kamran, J. Smoller, and Shing-Tung Yau. “Linear Waves in the Kerr Geometry: A Mathematical Voyage to Black Hole Physics.” *Bulletin of the American Mathematical Society* **46**, no. 4 (2009): 635–659.**6:3797**
- Finster, F., N. Kamran, J. Smoller, and Shing-Tung Yau. “A Rigorous Treatment of Energy Extraction from a Rotating Black Hole.” *Communications in Mathematical Physics* **287**, no. 3 (2009): 829–847.**6:3855**
- Wang, M.-T., and Shing-Tung Yau. “Isometric Embeddings into the Minkowski Space and New Quasi-local Mass.” *Communications in Mathematical Physics* **288**, no. 3 (2009): 919–942.**6:3885**
- Fu, J., L.-S. Tseng, and Shing-Tung Yau. “Local Heterotic Torsional Models.” *Communications in Mathematical Physics* **289**, no. 3 (2009): 1151–1169.**6:3917**
- Wang, M.-T., and Shing-Tung Yau. “Quasilocal Mass in General Relativity.” *Physical Review Letters* **102**, no. 2 (2009): 021101.**6:3937**
- Wang, M.-T., and Shing-Tung Yau. “Limit of Quasilocal Mass at Spatial Infinity.” *Communications in Mathematical Physics* **296**, no. 1 (2010): 271–283.**6:3983**
- Bieri, L., Chen, P., and Shing-Tung Yau. “Null Asymptotics of Solutions of the Einstein-Maxwell Equations in General Relativity and Gravitational Radiation.” *Advances in Theoretical and Mathematical Physics* **15**, no. 4 (2011): 1085–1113.**6:3997**
- Chen, P., M.-T. Wang, and Shing-Tung Yau. “Evaluating Quasilocal Energy and Solving Optimal Embedding Equation at Null Infinity.” *Communications in Mathematical Physics* **308**, no. 3 (2011): 845–863.**6:4213**
- Yau, Shing-Tung. “Quasi-local Mass in General Relativity.” *Perspectives in Mathematics and Physics*, 421–433. In *Surveys in Differential Geometry* **15**, 421–433. Somerville, MA: International Press, 2011.**6:4233**
- Yau, Shing-Tung. “A Survey of Geometric Structure in Geometric Analysis.” *Geometry of Special Holonomy and Related Topics*, 325–347. In *Surveys in Differential Geometry* **16**, 325–347. Somerville, MA: International Press, 2011.**6:4247**
- Fu, J., and Shing-Tung Yau. “A Note on Small Deformations of Balanced Manifolds.” *Comptes Rendus de l’Académie des Sciences* **349**, no. 13–14 (2011): 793–796.**6:4271**
- Ejaz, A., H. Gohar, H. Lin, K. Saifullah, and Shing-Tung Yau. “Quantum Tunneling from Three-dimensional Black Holes.” *Physics Letters B* **726**, no. 4–5 (2013): 827–833.**7:4637**

- Chen, P., Wang, M.-T., and Shing-Tung Yau. “Minimizing Properties of Critical Points of Quasi-local Energy.” *Communications in Mathematical Physics* **329**, no. 3 (2014): 919–935.7:4691
- Bieri, L., D. Garfinkle, and Shing-Tung Yau. “Gravitational Waves and their Memory in General Relativity.” *One Hundred Years of General Relativity*. In *Surveys in Differential Geometry* **20**, 75–97. Boston, MA: International Press, 2015.7:4959
- Chen, P.-N., M.-T. Wang, and Shing-Tung Yau. “Conserved Quantities in General Relativity: from the Quasi-local Level to Spatial Infinity.” *Communications in Mathematical Physics* **338**, no. 1 (2015): 31–80.8:5181
- Lin, H., K. Saifullah and Shing-Tung Yau. “Accelerating Black Holes, Spin-32 Fields and C-Metric.” *Modern Physics Letters A* **30**, no. 8 (2015): 1550044.8:5305
- Bieri, L., D. Garfinkle, and Shing-Tung Yau. “Gravitational Wave Memory in de Sitter Spacetime.” *Physical Review D* **94**, no. 6 (2016): 064040.8:5387
- Chen, P.-N., M.-T. Wang, and Shing-Tung Yau. “Conserved Quantities on Asymptotically Hyperbolic Initial Data Sets.” *Advances in Theoretical and Mathematical Physics* **20**, no. 6 (2016): 1337–1375.8:5405
- Chen, P.-N., M.-T. Wang, and Shing-Tung Yau. “Quasilocal Angular Momentum and Center of Mass in General Relativity.” *Advances in Theoretical and Mathematical Physics* **20**, no. 4 (2016): 671–682.8:5513
- Chen, P.-N. L.-H. Huang, M.-T. Wang, and Shing-Tung Yau. “On the Validity of the Definition of Angular Momentum in General Relativity.” *Annales Henri Poincaré* **17**, no. 2 (2016): 253–270.8:5685
- P.-N. Chen, M.-T. Wang, and Shing-Tung Yau. “Quasi-Local Mass at the Null Infinity of the Vaidya Spacetime.” *Nonlinear Analysis in Geometry and Applied Mathematics*. In *Harvard University Center of Mathematical Sciences and Applications Series on Mathematics* **1**, 33–48. Somerville, MA: International Press, 2017.9:5841
- Chen, P.-N., P.-K. Hung, M.-T. Wang, and Shing-Tung Yau. “The Rest Mass of an Asymptotically Anti-de Sitter Spacetime.” *Annales Henri Poincaré* **18**, no. 5 (2017): 1493–1518.9:6073
- Chen, P.-N., M.-T. Wang, and Shing-Tung Yau. “Evaluating Small Sphere Limit of the Wang-Yau Quasi-local Energy.” *Communications in Mathematical Physics* **357**, no. 2 (2018): 731–774.9:6179
- Chen, P.-N., M.-T. Wang, Y.-K. Wang, and Shing-Tung Yau. “Quasi-local Energy with Respect to a Static Spacetime.” *Advances in Theoretical and Mathematical Physics* **22**, no. 1 (2018): 1–23.9:6343

- Yau, Shing-Tung. “Geometry Motivated by Physics.” *Notices of the International Consortium of Chinese Mathematicians* **6**, no. 2 (2018): 3–8. **10:6553**
- Chen, P.-N., M.-T. Wang, and Shing-Tung Yau. “The Minkowski Formula and the Quasi-local Mass.” *Annales Henri Poincaré* **20**, no. 3 (2019): 889–904. **10:6597**
- Chen, P.-N., M.-T. Wang, Y.-K. Wang, and Shing-Tung Yau. “Quasi-local Mass at Axially Symmetric Null Infinity.” *International Journal of Modern Physics D* **28**, no. 8 (2019): 1930013. **10:6635**
- Chen, P.-N., M.-T. Wang, Y.-K. Wang, and Shing-Tung Yau. “Quasi-local Mass at Null Infinity in Bondi-Sachs Coordinates.” *Pure and Applied Mathematics Quarterly* **15**, no. 3 (2019): 875–895. **10:6715**
- Alaee, A., M. Khuri, and Shing-Tung Yau. “Geometric Inequalities for Quasi-local Masses.” *Communications in Mathematical Physics* **378**, no. 1 (2020): 467–505. **10:6947**
- Chen, P.-N., Wang, M.-T., and Shing-Tung Yau. “Quasi-local Energy with Respect to de Sitter/Anti-de Sitter Reference.” *Communications in Analysis and Geometry* **28**, no. 7 (2020): 1489–1531. **10:7053**
- Yau, Shing-Tung. “Geometry of Spacetime and Mass in General Relativity.” *Notices of the International Consortium of Chinese Mathematicians* **8**, no. 2 (2020): 1–9. **10:7097**
- Keler, J., Y.-K. Wang, and Shing-Tung Yau. “Evaluating Quasi-local Angular Momentum and Center-of-Mass at Null Infinity.” *Advances in Theoretical and Mathematical Physics* **24**, no. 6 (2020): 1423–1473. **10:7107**

GRAPH THEORY

- Chung, F.R.K., and S.-T. Yau. “A Harnack Inequality for Homogeneous Graphs and Subgraphs.” *Turkish Journal of Mathematics* **19**, no. 2 (1995): 119–129. **1:659**
- Chung, F.R.K., and S.-T. Yau. “Eigenvalues of Graphs and Sobolev Inequalities.” *Combinatorics, Probability and Computing* **4** (1995): 11–25. **1:673**
- Chung, F. R. K., A. Grigor’yan, and S.-T. Yau. “Upper Bounds for Eigenvalues of the Discrete and Continuous Laplace Operator.” *Advances in Mathematics* **117** (1996): 165–178. **2:1077**
- Chung, F. and S.-T. Yau. “A Combinatorial Trace Formula.” In *Tsing Hua Lectures on Geometry & Analysis*, edited by Shing-Tung Yau, 107–116. International Press, 1997. **2:1157**
- Chung, F., A. Grigor’yan, and S.-T. Yau. “Eigenvalues and Diameters for Manifolds and Graphs.” In *Tsing Hua Lectures on Geometry & Analysis*, edited by Shing-Tung Yau, 79–105. International Press, 1997. **2:1167**

- Chung, Fan, and S.-T. Yau. “Discrete Green’s Functions.” *Journal of Combinatorial Theory, Series A* **91**, no. 1–2 (2000): 191–214.**3:1969**
- Chung, Fan, and S.-T. Yau. “A Harnack Inequality for Dirichlet Eigenvalues.” *Journal of Graph Theory* **34** (2000): 247–257.**3:1991**
- (with B. Chen and Y.N. Yeh) “Graph homotopy and Graham homotopy”. *Discrete Math.* **241** (2001), 153–170.....**3:2053**
- Lin, Y., G. Lippner, D. Mangoubi, and Shing-Tung Yau. “Nodal Geometry of Graphs on Surfaces.” *Discrete and Continuous Dynamical Systems* **28**, no. 3 (2010): 1291–1298.**6:3967**
- Xu, H., and Shing-Tung Yau. “Nodal Domain and Eigenvalue Multiplicity of Graphs.” *Journal of Combinatorics* **3**, no. 4 (2012): 609–622.....**7:4463**
- Xu, H., and Shing-Tung Yau. “Discrete Green’s Functions and Random Walks on Graphs.” *Journal of Combinatorial Theory, Series A* **120**, no. 2 (2013): 483–499.....**7:4601**
- Grigor’yan, A., Y. Muranov, and Shing-Tung Yau. “Graphs Associated with Simplicial Complexes.” *Homology, Homotopy and Applications* **16**, no. 1 (2014): 295–311.....**7:4709**
- Xu, H., and Shing-Tung Yau. “An Explicit Formula of Hitting Times for Random Walks on Graphs.” *Pure and Applied Mathematics Quarterly* **10**, no. 3 (2014): 567–581.**7:4769**
- Lin, Y., L. Lu, and Shing-Tung Yau. “Ricci-flat Graphs with Girth at Least Five.” *Communications in Analysis and Geometry* **22**, no. 4 (2014): 671–687.....**7:4875**
- Bauer, F. B. Hua, and Shing-Tung Yau. “Davies-Gaffney-Grigor’yan Lemma on Graphs.” *Communications in Analysis and Geometry* **23**, no. 5 (2015): 1031–1068.....**7:4983**
- Grigor’yan, A., Y. Lin, Y. Muranov, and Shing-Tung Yau. “Cohomology of Digraphs and (Undirected) Graphs.” *Asian Journal of Mathematics* **19**, no. 5 (2015): 887–931.**8:5021**
- Huang, A., and Shing-Tung Yau. “On Cohomology Theory of (di)graphs.” *Homology, Homotopy and Applications* **17**, no. 2 (2015): 383–398.....**8:5067**
- Bauer, F., P. Horn, Y. Lin, G. Lippner, D. Mangoubi, and Shing-Tung Yau. “Li-Yau Inequality on Graphs.” *Journal of Differential Geometry* **99**, no. 3 (2015): 359–405.**8:5323**
- Chang, X., H. Xu, and Shing-Tung Yau. “Spanning Trees and Random Walks on Weighted Graphs.” *Pacific Journal of Mathematics* **273**, no. 1 (2015): 241–255.....**8:5371**
- Hod, R., A. Huang, M. Kempton, and Shing-Tung Yau. “Strong Embeddings and 2-isomorphism.” *Notices of the International Consortium of Chinese Mathematicians* **4**, no. 2 (2016): 5–13.....**8:5395**
- Grigor’yan, A., Y. Muranov, and Shing-Tung Yau. “Homologies of Digraphs and Kunnetth Formulas.” *Communications in Analysis and Geometry* **25**, no. 5 (2017): 969–1018.**9:5757**

- Kempton, M., G. Lippner, and Shing-Tung Yau. “Perfect State Transfer on Graphs with a Potential.” *Quantum Information and Computation* **17**, no. 3–4 (2017): 303–327.**9:5857**
- Chung, F., and Shing-Tung Yau. “A Strong Harnack Inequality for Graphs.” *Communications in Analysis and Geometry* **25**, no. 3 (2017): 557–588.**9:5895**
- Kempton, M., G. Lippner, and Shing-Tung Yau. “Perfect Quantum State Transfer in Symmetric Spin Networks via Magnetic Field.” *Quantum Information Processing* **16**, no. 9 (2017).**9:6013**
- Bauer, F., B. Hua, and Shing-Tung Yau. “Sharp Davies-Gaffney-Grigor’yan Lemma on Graphs.” *Mathematische Annalen* **368**, no. 3–4 (2017): 1429–1437.**9:6037**
- Grigor’yan, A., R. Jimenez, Y. Muranov, and Shing-Tung Yau. “On the Path Homology Theory of Digraphs and Eilenberg-Steenrod Axioms.” *Homology, Homotopy and Applications* **20**, no. 2 (2018): 179–205.**9:6223**
- Grigor’yan, A., Y. Muranov, V. Vershinin, and Shing-Tung Yau. “Path Homology Theory of Multigraphs and Quivers.” *Forum Mathematicum* **30**, no. 5 (2018): 1319–1337.**9:6317**
- Huang, W.-Q., W.-W. Lin, H.-S. Lu, and Shing-Tung Yau. “iSIRA: Integrated Shift–invert Residual Arnoldi Method for Graph Laplacian Matrices from Big Data.” *Journal of Computational and Applied Mathematics* **346** (2019): 518–531. **10:6559**
- Gong, C., Y. Lin, S. Liu, and Shing-Tung Yau. “Li-Yau Inequality for Unbounded Laplacian on Graphs.” *Advances in Mathematics* **357** (2019): 106–822. **10:6573**

STRING THEORY: MATHEMATICAL ASPECTS

- Greene, Brian R., Alfred Shapere, Cumrun Vafa, and Shing-Tung Yau. “Stringy Cosmic Strings and Noncompact Calabi-Yau Manifolds.” *Nuclear Physics B* **337**, no. 1 (1990): 1–36. ... **1:1**
- Greene, B. R., S.S. Roan, and S.-T. Yau. “Geometric Singularities and Spectra of Landau-Ginzburg Models.” *Communications in Mathematical Physics* **142** (1991): 245–259. **1:225**
- Hübsch, Tristan, and Shing-Tung Yau. “An $SL(2, \mathbb{C})$ Action on Chiral Rings and the Mirror Map.” *Modern Physics Letters A* **7**, no. **35** (1992): 3277–3289. **1:273**
- Lian, Bong and S.-T. Yau. “Mirror Symmetry, Rational Curves on Algebraic Manifolds and Hypergeometric Series.” In *XIth International Congress of Mathematical Physics* (Paris, 1994), edited by D. Iagolnitzer et al., 163–184. Cambridge, MA: International Press, 1995. **1:611**
- Hosono, S., A. Klemm, S. Theisen, and S.-T. Yau. “Mirror Symmetry, Mirror Map and Applications to Complete Intersection Calabi-Yau Spaces.” *Nuclear Physics B* **433**, no. 3 (1995): 501–552. **2:695**

- Hosono, S., A. Klemm, S. Theisen, and S.-T. Yau. “Mirror Symmetry, Mirror Map and Applications to Calabi-Yau Hypersurfaces.” *Communications in Mathematical Physics* **167** (1995): 301–350.2:745
- Strominger, Andrew, Shing-Tung Yau, and Eric Zaslow. “Mirror Symmetry Is T-Duality.” *Nuclear Physics B* **479**, no. 1–2 (1996): 243–259.2:795
- Lian, Bong H., and S.-T. Yau. “Mirror Maps, Modular Relations and Hypergeometric Series. II.” In *S-Duality and Mirror Symmetry* (Trieste, 1995), edited by K. Markov and P. Ramond, 248–262. *Nuclear Physics B - Proceedings Supplements* **46** (1996).2:813
- Yau, Shing-Tung, and Eric Zaslow. “BPS States, String Duality, and Nodal Curves on $K3$.” *Nuclear Physics B* **471**, no. 3 (1996): 503–512.2:829
- Lian, Bong H., and Shing-Tung Yau. “Arithmetic Properties of Mirror Map and Quantum Coupling.” *Communications in Mathematical Physics* **176**, no. 1 (1996): 163–191.2:845
- Hosono, S., B. H. Lian, and S.-T. Yau. “GKZ-Generalized Hypergeometric Systems in Mirror Symmetry of Calabi-Yau Hypersurfaces.” *Communications in Mathematical Physics* **182**, no. 3 (1996): 535–577.2:943
- Klemm, A., B. H. Lian, S.S. Roan and S.-T. Yau. “A Note on ODEs from Mirror Symmetry.” In *Functional Analysis on the Eve of the 21st Century, Vol. II*, edited by S. Gindikin et al., 301–323. Progress in Mathematics, vol. 132. Birkhäuser, 1996.2:1053
- Yau, Shing-Tung, and Eric Zaslow. “BPS States as Symplectic Invariants from String Theory.” In *Geometry and Physics* (Aarhus, 1995), edited by J. P. Bourguignon et al., 177–186. Lecture Notes in Pure and Applied Mathematics, **184**. Dekker, 1997.2:1147
- Hosono, S., B. H. Lian, and S.-T. Yau. “Maximal Degeneracy Points of GKZ Systems.” *Journal of the American Mathematical Society* **10** (1997): 427–443.2:1195
- Lian, B. and S.-T. Yau. “On Mirror Symmetry.” In *Algebra and Geometry* (Taipei, 1995), 207–213. International Press, 1998.2:1299
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. “The Candelas-de la Ossa-Green-Parkes Formula.” In *String Theory, Gauge Theory and Quantum Gravity* (Trieste, 1997). *Nuclear Physics B Proceedings Supplements* **67** (1998): 106–114.2:1307
- Klemm, A., B. Lian, S.-S. Roan, and S.-T. Yau. “Calabi-Yau Four-Folds for M- and F-Theory Compactifications.” *Nuclear Physics B* **518**, no. 3 (1998): 515–574.2:1317
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. “Mirror Principle, A Survey.” In *Current Developments in Mathematics*, 1998, edited by D. Jerison et al., (Cambridge, MA: Int. Press, 1999): 35–82.2:1377

- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. "Mirror Principle. I." In *Surveys in Differential Geometry: Differential Geometry Inspired by String Theory*, 405–454. Surveys in Differential Geometry, **5**. Somerville, MA: International Press, 1999.**3:1425**
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. "Mirror Principle. II." In *Surveys in Differential Geometry: Differential Geometry Inspired by String Theory*, 455–509. Surveys in Differential Geometry, **5**. Somerville, MA: International Press, 1999.**3:1475**
- Lian, Bong H., and Shing-Tung Yau. "Differential Equations from Mirror Symmetry." In *Surveys in Differential Geometry: Differential Geometry Inspired by String Theory*, 510–526. Surveys in Differential Geometry, **5**. Somerville, MA: International Press, 1999. **3:1513**
- "Introduction to enumerative invariants", in *Mirror symmetry, III*, pp. 69–75, AMS/IP Stud. Adv. Math., **10**, Amer. Math. Soc., 1999.**3:1591**
- Chiang, T.-M., A. Klemm, S.-T. Yau, and E. Zaslow. "Local Mirror Symmetry: Calculations and Interpretations." *Advances in Theoretical and Mathematical Physics* **3**, no. 3 (1999): 495–565.**3:1613**
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. "Mirror principle. III." In *Surveys in Differential Geometry*, 433–474. Surveys in Differential Geometry, **7**. Somerville, MA: International Press, 2000.**3:1723**
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. "Mirror principle. IV." In *Surveys in Differential Geometry*, 475–496, Surveys in Differential Geometry, **7**. Somerville, MA: International Press, 2000.**3:1765**
- (with B. Lian) "A tour of mirror symmetry", in *First International Congress of Chinese Mathematicians*, 115–127, AMS/IP Stud. Adv. Math., **20**, Amer. Math. Soc., 2001.**3:2071**
- Andreas, Björn, Shing-Tung Yau, Gottfried Curio, and Daniel Hernández Ruipérez. "Fibrewise T-duality for D-branes on Elliptic Calabi-Yau." *Journal of High Energy Physics* no. **3** (2001): Paper 020.**3:2085**
- Lian, Bong H., Kefeng Liu, and Shing-Tung Yau. "Some Applications of Mirror Principle." In *Topology and Geometry: Commemorating SISTAG*, 161–167. Contemporary Mathematics, **314**. Providence, RI: American Mathematical Society, 2002.**4:2177**
- (with B. Lian and K. Liu) "Towards a mirror principle for higher genus, in Geometry and nonlinear partial differential equations", pp. 77–86, AMS/IP Stud. Adv. Math., **29**, Amer. Math. Soc., 2002.**4:2199**
- Thomas, Richard P., and Shing-Tung Yau. "Special Lagrangians, Stable Bundles and Mean Curvature Flow." *Communications in Analysis and Geometry* **10** (2002): 1075–1113.**4:2227**
- Smith, Ivan, Richard P. Thomas, and Shing-Tung Yau. "Symplectic Conifold Transitions." *Journal of Differential Geometry* **62**, no. 2 (2002): 209–242.**4:2311**

- Lian, Bong H., and Shing-Tung Yau. “The n th Root of the Mirror Map.” In *Calabi-Yau Varieties and Mirror Symmetry*, 195–199. Fields Institute Communications, **38**. Providence, RI: American Mathematical Society, 2003.**4:2373**
- Hosono, Shinobu, Bong H. Lian, Keiji Oguiso, and Shing-Tung Yau. “ $c = 2$ Rational Toroidal Conformal Field Theories via the Gauss Product.” *Communications in Mathematical Physics* **241** (2003): 245–286.**4:2407**
- Lian, Bong H., Chien-Hao Liu, Kefeng Liu, and Shing-Tung Yau. “The S^1 Fixed Points in Quot-Schemes and Mirror Principle Computations.” In *Vector Bundles and Representation Theory*, 165–194. Contemporary Mathematics, **322**. Providence, RI: American Mathematical Society, 2003.**4:2501**
- Gukov, S., E. Zaslow, and Shing-Tung Yau. “Duality and Fibrations on G_2 Manifolds.” *Turkish Journal of Mathematics* **27**, (2003): 61–97.**4:2545**
- Lian, B., C.-H. Liu, and Shing-Tung Yau. “A Reconstruction of Euler Data.” *Journal of Algebraic Geometry* **12**, (2003): 269–284.**4:2587**
- Yamaguchi, S., and Shing-Tung Yau. “Topological String Partition Functions as Polynomials.” *Journal of High Energy Physics* **047**, no. 7 (2004): 20.**4:2761**
- Liu, C.-H., K. Liu, and Shing-Tung Yau. “On A-Twisted Moduli Stack for Curves from Witten’s Gauged Linear Sigma Models.” *Communications in Analysis and Geometry* **12** (2004): 233–280.**4:2781**
- Hosono S., B. Lian, K. Oguiso, and Shing-Tung Yau. “Autoequivalences of Derived Category of a K3 Surface and Monodromy Transformations.” *Journal of Differential Geometry* **13** (2004): 513–545.**4:2829**
- Loftin, J., E. Zaslow, and Shing-Tung Yau. “Affine Manifolds, SYZ Geometry and the Y Vertex.” *Journal of Differential Geometry* **71**, no. 1 (2005): 129–158.**5:2863**
- Lian, B., A. Todorov, and Shing-Tung Yau. “Maximal Unipotent Monodromy or Complete Intersection CY Manifolds.” *American Journal of Mathematics* **127** (2005): 1–50.**5:3065**
- (with C.-H. Liu) “Extracting Gromov–Witten invariants of a conifold from semi-stable reduction and relative GW-invariants of pairs”, in *Mirror symmetry. V*, pp. 441–456, AMS/IP Stud. Adv. Math., **38**, Amer. Math. Soc., Providence, RI, 2006.**5:3115**
- Liu, C.C.M., C.-H. Liu, K. Liu, and Shing-Tung Yau. “Mirror Symmetry and Localizations.” In *The Unity of Mathematics*, 421–442. Progress in Mathematics **244**. Birkhäuser, 2006.**5:3237**
- Becker, M., L.-S. Tseng, and Shing-Tung Yau. “Heterotic Kähler/non-Kähler Transitions.” *Advances in Theoretical and Mathematical Physics* **12**, no. 5 (2008): 1147–1162.**5:3495**
- Becker, M., L.-S. Tseng, and Shing-Tung Yau. “New Heterotic Non-Kähler Geometries.” *Advances in Theoretical and Mathematical Physics* **13**, no. 6 (2009): 1815–1845.**6:3699**