

## Publication List of Tohru Ozawa

### I. Research Papers

1. Remarks on the space-time behavior of scattering solutions to the Schrödinger equations, Publ. RIMS, Kyoto Univ., **23**(1987), 479-486.
2. (with N. Hayashi) Time decay of solutions to the Cauchy problem for time-dependent Schrödinger-Hartree equations, Commun. Math. Phys., **110**(1987), 467-478.
3. (with N. Hayashi) Scattering theory in the weighted  $L^2(\mathbb{R}^n)$  spaces for some Schrödinger equations, Ann. Inst. Henri Poincaré, Physique théorique, **48**(1988), 17-37.
4. New  $L^p$ -estimates for solutions to the Schrödinger equations and time-asymptotic behavior of observables, Publ. RIMS, Kyoto Univ., **25**(1989), 521-577.
5. Lower  $L^p$  bounds for scattering solutions of the Schrödinger equations, Publ. RIMS, Kyoto Univ., **25**(1989), 579-586.
6. (with N. Hayashi) Smoothing effect for some Schrödinger equations, J. Funct. Anal., **85**(1989), 307-348.
7. (with N. Hayashi) Time decay for some Schrödinger equations, Math. Z., **200** (1989), 467-483.
8. (with N. Hayashi) Lower bounds for order of decay or of growth in time for solutions to linear and nonlinear Schrödinger equations, Publ. RIMS, Kyoto Univ., **25**(1989), 847-859.
9. Smoothing effects and dispersion of singularities for the Schrödinger evolution group, Arch. Rat. Mech. Anal., **110** (1990), 165-186.
10. (with H. Kozono) Relative bounds of closable operators in nonreflexive Banach spaces, Hokkaido Math. J., **19**(1990), 241-248.
11. Non-existence of positive commutators, Hiroshima Math. J., **20**(1990), 209-211.
12. (with H. Kozono) Stability in  $L^r$  for the Navier-Stokes flow in an  $n$ -dimensional bounded domain, J. Math. Anal. Appl., **152**(1990), 35-45.
13. Smoothing effect for the Schrödinger evolution equations with electric fields, in "Functional-Analytic Methods for Partial Differential Equations," Lecture Notes in Math., **1450**(1990), 226-235. Springer-Verlag.
14. Invariant subspaces for the Schrödinger evolution group, Ann. Inst. Henri Poincaré, Physique théorique, **54**(1991), 43-57.

15. Space-time behavior of propagator for Schrödinger evolution equations with Stark effect, *J. Funct. Anal.*, **97**(1991), 264-292.
16. (with T. Ogawa) Trudinger type inequalities and uniqueness of weak solutions for the nonlinear Schrödinger mixed problem, *J. Math. Anal. Appl.*, **155**(1991), 531-540.
17. Non-existence of wave operators for Stark effect Hamiltonians, *Math. Z.*, **207**(1991), 335-339.
18. (with A. Jensen) Classical and quantum scattering for Stark Hamiltonians with slowly decaying potentials, *Ann. Inst. Henri Poincaré, Physique théorique*, **54**(1991), 229-243.
19. Long range scattering for nonlinear Schrödinger equations in one space dimension, *Commun. Math. Phys.*, **139**(1991), 479-493.
20. (with N. Hayashi) On the derivative nonlinear Schrödinger equation, *Physica D* **55** (1992), 14-36.
21. Exact blow-up solutions to the Cauchy problem for the Davey-Stewartson systems, *Proc. Royal Soc. London, A* **436**(1992), 345-349.
22. (with Y. Tsutsumi) The nonlinear Schrödinger limit and the initial layer of the Zakharov equations, *Differential and Integral Eqs.*, **5**(1992), 721-745.
23. (with Y. Tsutsumi) Existence and smoothing effect of solutions for the Zakharov equations, *Publ. RIMS, Kyoto Univ.*, **28**(1992), 329-361.
24. (with H. Nawa) Nonlinear scattering with nonlocal interaction, *Commun. Math. Phys.*, **146**(1992), 259-276.
25. (with Y. Tsutsumi) On the initial value problem for the Zakharov equations, *Matemática Contemporânea*, **3**(1992), 149-164.
26. (with J. Ginibre) Long-range scattering for nonlinear Schrödinger and Hartree equations in space dimension  $n \geq 2$ , *Commun. Math. Phys.*, **151**(1993), 619-645.
27. (with Y. Tsutsumi) Asymptotic behavior of solutions for the coupled Klein-Gordon-Schrödinger equations, *Advanced Studies in Pure Math.*, **23**(1993), 295-305.
28. (with A. Jensen) Existence and non-existence results for wave operators for perturbations of the Laplacian, *Rev. Math. Phys.*, **5** (1993), 601-629.
29. (with Y. Tsutsumi) Global existence and asymptotic behavior of solutions for the Zakharov equations in three space dimensions, *Adv. Math. Sci. Appl.*, **3**(1994), 301-334.

30. (with N. Hayashi) Remarks on nonlinear Schrödinger equations in one space dimension, *Differential and Integral Eqs.*, **7**(1994), 453-461.
31. (with N. Hayashi) Modified wave operators for the derivative nonlinear Schrödinger equations, *Math. Annalen*, **298**(1994), 557-576.
32. (with J. Ginibre, G. Velo) On the existence of the wave operators for a class of nonlinear Schrödinger equations, *Ann. Inst. Henri Poincaré, Physique théorique*, **60**(1994), 211-239.
33. Wave propagation in even dimensional spaces, *Asymptotic Analysis*, **9**(1994), 163-176.
34. (with N. Hayashi) Finite energy solutions of nonlinear Schrödinger equations of derivative type, *SIAM J. Math. Anal.*, **25**(1994), 1488-1503.
35. Local decay estimates for Schrödinger operators with long-range potentials, *Ann. Inst. Henri Poincaré, Physique théorique*, **61**(1994), 135-151.
36. On critical cases of Sobolev's inequalities, *J. Funct. Anal.*, **127**(1995), 259-269.
37. Remarks on quadratic nonlinear Schrödinger equations, *Funkcialaj Ekvacioj* **38**(1995), 217-232.
38. (with K. Tsutaya, Y. Tsutsumi) Normal form and global solutions for the Klein-Gordon-Zakharov equations, *Ann. Inst. Henri Poincaré, Analyse non linéaire*, **12**(1995), 459-503.
39. (with N. Hayashi) Global, small radially symmetric solutions to nonlinear Schrödinger equations and a gauge transformation, *Differential and Integral Eqs*, **8**(1995), 1061-1072.
40. (with N. Hayashi, K. Kato) Dilation method and smoothing effect of the Schrödinger evolution group, *Rev. Math. Phys.*, **7**(1995), 1123-1132.
41. (with N. Hayashi) Schrödinger equations with nonlinearity of integral type, *Discrete and Continuous Dynamical Systems*, **1**(1995), 475-484.
42. (with K. Tsutaya, Y. Tsutsumi) Global existence and asymptotic behavior of solutions for the Klein-Gordon equations with quadratic nonlinearity in two space dimensions, *Math. Z.*, **222**(1996), 341-362.
43. (with N. Hayashi, K. Kato) Dilation method and smoothing effect of solutions to the Benjamin-Ono equation, *Proceedings of the Royal Society of Edinburgh*, **126**(1996), 273-285.
44. On the nonlinear Schrödinger equations of derivative type, *Indiana Univ. Math. J.*, **45**(1996), 137-163.

45. (with M. Nakamura) Low energy scattering for nonlinear Schrödinger equations in fractional order Sobolev spaces, *Rev. Math. Phys.*, **9**(1997), 397-410.
46. (with K. Tsutaya, Y. Tsutsumi) Remarks on the Klein-Gordon equation with quadratic nonlinearity in two space dimensions, *GAKUTO International Series, Math. Sci. Appl.*, **10**(1997), 383-392.
47. Characterization of Trudinger's inequality, *J. Inequal. Appl.*, **1**(1997), 369-374.
48. (with Y. Tsutsumi) Space-time estimates for null gauge forms and nonlinear Schrödinger equations, *Differential and Integral Eqs.*, **11**(1998), 201-222.
49. (with N. Hayashi, P. I. Naumkin) Scattering theory of the Hartree equation, *SIAM J. Math. Anal.*, **29**(1998), 1256-1267.
50. (with M. Nakamura) Nonlinear Schrödinger equations in the Sobolev space of critical order, *J. Funct. Anal.*, **155**(1998), 364-380.
51. Finite energy solutions for the Schrödinger equations with quadratic nonlinearity in one space dimension, *Funkcialaj Ekvacioj* **41**(1998), 451-468.
52. (with M. Nakamura) The Cauchy problem for nonlinear wave equations in the homogeneous Sobolev space, *Ann. Inst. Henri Poincaré, Physique théorique*, **71** (1999), 199-215.
53. (with M. Nakamura) The Cauchy problem for nonlinear wave equations in the Sobolev space of critical order, *Discrete and Continuous Dynamical Systems*, **5**(1999), 215-231.
54. (with K. Tsutaya, Y. Tsutsumi) Well-posedness in energy space for the Cauchy problem of Klein-Gordon-Zakharov equations with different propagation speeds in three space dimensions, *Math. Annalen*, **313**(1999), 127-140.
55. (with M. Nakamura) Global solutions in the critical Sobolev space for the wave equations with nonlinearity of exponential growth, *Math. Z.*, **231** (1999), 479-487.
56. (with M. Nakamura) Small solutions to nonlinear Schrödinger equations in the Sobolev spaces, *J. d'Anal. Math.*, **81**(2000), 305-329.
57. (with K. Tsutaya and Y. Tsutsumi) On the coupled system of nonlinear wave equations with different propagation speeds, *Banach Center Publications*, **52** (2000), 181-188.
58. (with M. Nakamura) Small solutions to nonlinear wave equations in the Sobolev spaces, *Houston J. Math.*, **27**(2001), 613-632.
59. (with M. Nakamura) The Cauchy problem for nonlinear Klein-Gordon equations in the Sobolev spaces, *Publ. RIMS, Kyoto Univ.*, **37**(2001), 255-293.
60. (with S. Machihara, K. Nakanishi) Nonrelativistic limit in the energy space for nonlinear Klein-Gordon equations, *Math. Annalen*, **322**(2002), 603-621.

61. (with K. Nakanishi) Remarks on scattering for nonlinear Schrödinger equations, *NoDEA*, **9**(2002), 45-68.
62. (with K. Nakanishi) Global solutions for nonlinear Schrödinger equations with arbitrarily growing nonlinearity and contracted initial data, *Kyushu J. Math.*, **56**(2002), 221-224.
63. (with M. Nakamura) Small data scattering for nonlinear Schrödinger, wave and Klein-Gordon equations, *Ann. Scuola Norm. Sup. Pisa Serie V*, **1**(2002), 435-460.
64. (with S. Machihara) Interpolation inequalities in Besov spaces, *Proc. AMS*, **131** (2002), 1553-1556.
65. (with S. Machihara, K. Nakanishi) Small global solutions and the nonrelativistic limit for the nonlinear Dirac equation, *Revista Matemática Iberoamericana*, **19** (2003), 179-194.
66. (with Y. Yamazaki) Life-span of smooth solutions to the complex Ginzburg-Landau type equation on torus, *Nonlinearity*, **16** (2003), 2029-2034.
67. (with J. Kato) Weighted Strichartz estimates and existence of self-similar solutions for semilinear wave equations, *Indiana Univ. Math. J.*, **52** (2003), 1615-1630.
68. (with J. Kato) On solutions of the wave equation with homogeneous Cauchy data, *Asymptotic Analysis*, **37** (2004), 93-107.
69. (with S. Machihara, M. Nakamura) Small global solutions for nonlinear Dirac equations, *Differential and Integral Eqs.*, **17** (2004), 623-636.
70. (with J. Kato) Weighted Strichartz estimates for the wave equation in even space dimensions, *Math. Z.*, **247** (2004), 747-764.
71. (with K. Yamauchi) Structure of Dirac matrices and invariants for nonlinear Dirac equations, *Differential and Integral Equations*, **17** (2004), 971-982.
72. (with Y. Yamazaki) Smoothing effect and large time behavior of solutions to Schrödinger equations with nonlinearity of integral type, *Commun. Contemporary Math.*, **6** (2004), 681-703.
73. (with S. Machihara, M. Nakamura, K. Nakanishi) Endpoint Strichartz estimates and global solutions for the nonlinear Dirac equation, *J. Funct. Anal.*, **219** (2005), 1-20.
74. (with N. Kita) Sharp asymptotic behavior of solutions to nonlinear Schrödinger equations with repulsive interactions, *Commun. Contemporary Math.*, **7** (2005), 167-176.
75. (with R. Fukuizumi) Exponential decay of solutions to nonlinear elliptic equations with potentials, *Zeit. Angew. Math. Phys.*, **56** (2005), 1000-1011.

76. (with K. Yamauchi, Y. Yamazaki) Analytic smoothing effect for solutions to Schrödinger equations with nonlinearity of integral type, *Osaka J. Math.*, **42** (2005), 737-750.
77. (with R. Fukuizumi) On a decay property of solutions to the Haraux-Weissler equation, *J. Differential Equations*, **221** (2006), 134-142.
78. Remarks on proofs of conservation laws for nonlinear Schrödinger equation, *Calculus of Variations and PDE*, **25** (2006), 403-408.
79. (with Y. Cho) Remarks on modified improved Boussinesq equations in one space dimension, *Proceedings of the Royal Society A*, **462** (2006), 1949-1963.
80. (with Y. Cho) On the semi-relativistic Hartree type equation, *SIAM J. Math. Anal.*, **38** (2006), 1060-1074.
81. (with Y. Cho) Global existence on nonlinear Schrödinger-IMBQ equations, *J. Math. Kyoto Univ.*, **46** (2006), 535-552.
82. (with J. Kato and M. Nakamura) A generalization of the weighted Strichartz estimates for the wave equations and an application to self-similar solutions, *Commun. Pure Appl. Math.*, **60** (2007), 164-186.
83. (with Y. Cho) On small amplitude solutions to the generalized Boussinesq equations, *Discrete and Continuous Dynamical Systems*, **17** (2007), 691-711.
84. (with Y. Cho) Global solutions of semirelativistic Hartree type equations, *J. Korean Math. Soc.*, **44** (2007), 1065-1078.
85. (with K. Tsutaya) On the Cauchy problem for Schrödinger-improved Boussinesq equations, *Advanced Studies in Pure Math.*, **47** (2007), 291-301.
86. (with Y. Cho) On radial solutions of semi-relativistic Hartree equations, *Discrete and Continuous Dynamical Systems Series S.*, **1** (2008), 71-82.
87. (with J. Zhai) Global existence of small classical solutions to nonlinear Schrödinger equations, *Ann. Inst. Henri Poincaré, Analyse nonlinéaire*, **25** (2008), 303-311.
88. (with R. Carles) On the wave operators for the critical nonlinear Schrödinger equation, *Math. Res. Lett.*, **15** (2008), 185-195.
89. (with J. Fan) On the regularity criteria for the generalized Navier-Stokes equations and Lagrangian averaged Euler equations, *Differential and Integral Equations*, **21** (2008), 443-457.
90. (with R. Carles) A Poisson formula for the Schrödinger operator, *J. Fourier Anal. Appl.*, **14** (2008), 475-483.

91. (with J. Fan) Asymptotic stability for the Navier-Stokes equations, *J. Evolution Equations*, **8** (2008), 379-389.
92. (with J. Fan) Regularity criteria for the generalized Navier-Stokes and related equations, *Differential and Integral Equations*, **21** (2008), 681-691.
93. (with R. Fukuizumi and M. Ohta) Nonlinear Schrödinger equation with a point defect, *Ann. Inst. Henri Poincaré, Analyse nonlinéaire*, **25** (2008), 837-845.
94. (with J. Fan) Regularity criterion for weak solutions to the Navier-Stokes equations in terms of the gradient of the pressure, *Journal of Inequalities and Applications* **2008** (2008), Article ID 412678, 6 pages.
95. (with Y. Cho, H. Sasaki, Y.-S. Shim) Remarks on the semirelativistic Hartree equations, *Discrete and Continuous Dynamical Systems A*, **23** (2009), 1277-1294.
96. (with J. Fan) Uniqueness of weak solutions to the Cauchy problem for the 3-D time-dependent Ginzburg-Landau model for superconductivity, *Differential and Integral Equations*, **22** (2009), 27-34.
97. (with Y. Cho and Y.-S. Shim) Elliptic estimates independent of domain expansion, *Calculus of Variations and PDE*, **34** (2009), 321-339.
98. (with K. Yamauchi) Remarks on analytic smoothing effect for the Schrödinger equation, *Math. Z.*, **261** (2009), 511-524.
99. (with J. Fan) Regularity criteria for the 3D density-dependent Boussinesq equations, *Nonlinearity*, **22** (2009), 553-568.
100. (with H. Sasaki) Inequalities associated with dilations, *Commun. Contemporary Math.*, **11** (2009), 265-277.
101. (with J. Fan) Regularity criteria for the magnetohydrodynamic equations with partial viscous terms and the Leray- $\alpha$ -MHD model, *Kinetic and Related Models*, **2** (2009), 293-305.
102. (with J. Fan) Regularity criterion for a Bona-Colin-Lannes system, *Nonlinear Analysis Series A: Theory, Methods & Applications*, **71** (2009), 2634-2639.
103. (with Y. Cho) Sobolev inequalities with symmetry, *Commun. Contemporary Math.*, **11** (2009), 355-365.
104. (with J. Fan) Regularity criteria for a simplified Ericksen-Leslie system modeling the flow of liquid crystals, *Discrete and Continuous Dynamical Systems A* **25** (2009), 859-867.

105. (with J. Fan) Logarithmically improved regularity criteria for Navier-Stokes and related equations, *Math. Meth. Appl. Sci.*, **32** (2009), 2309-2318.
106. (with K. Yamauchi) Analytic smoothing effect for global solutions to nonlinear Schrödinger equations, *J. Math. Anal. Appl.*, **364** (2010), 492-497.
107. (with J. Fan) On regularity criterion for the 2D wave maps and the 4D biharmonic wave maps, *GAKUTO International Series, Math. Sci. Appl.*, **32** (2010), 69-83.
108. (with J. Fan) Global Cauchy problem for the 2-D magnetohydrodynamic- $\alpha$  models with partial viscous terms, *J. Math. Fluid Mech.*, **12** (2010), 306-319.
109. (with J. Fan) Global Cauchy problems of certain magnetohydrodynamic- $\alpha$  models, *Advances Appl. Math. Sci.*, **6** (2010), 169-190.
110. (with J. Kato) Endpoint Strichartz estimates for the Klein-Gordon equation in two space dimensions and some applications, *J. Math. Pures Appl.*, **95** (2011), 48-71.
111. (with Y. Cho and S. Lee) On Hartree equations with derivatives, *Nonlinear Analysis Series A: Theory, Methods & Applications*, **74**(2011), 2094-2108.
112. (with Y. Yamauchi) Life span of positive solutions for a semilinear heat equation with general non-decaying initial data, *J. Math. Anal. Appl.*, **379**(2011), 518-523.
113. (with Y. Cho and S. Xia) Remarks on some dispersive estimates, *Commun. Pure and Appl. Anal.*, **10**(2011), 1121-1128.
114. (with J. Fan) Regularity criterion for the incompressible viscoelastic fluid system, *Houston J. Math.*, **37**(2011), 627-636.
115. (with Y. Cho and Y.-S. Shim) Invariant elliptic estimates, *J. Math. Anal. Appl.*, **382**(2011), 162-171.
116. (with J. Fan) Local Cauchy problem for the MHD equations with mass diffusion, *Differential and Integral Equations*, **24**(2011), 1037-1046.
117. (with N. Hayashi and C. Li) Small data scattering for a system of nonlinear Schrödinger equations, *Differential Equations and Applications - DEA*, **3**(2011), 415-426.
118. (with J. Fan) Uniqueness of weak solutions to the 3D Ginzburg-Landau model for superconductivity, *International Journal of Mathematical Analysis*, **6**(2012), 1095-1104.
119. (with J. Fan) Continuation criterion for the 2D liquid crystal flows, *ISRN Mathematical Analysis*, **2012**(2012), Article ID 248473, 7pages, DOI : 10.5402/2012/248473
120. (with J. Fan) Regularity criterion for the 3D nematic crystal flows, *ISRN Mathematical Analysis*, **2012**(2012), Article ID 935045, 10pages, DOI : 10.5402/2012/935045



121. (with J. Fan) Global strong solutions of the time-dependent Ginzburg-Landau model for superconductivity with a new gauge, *International Journal of Mathematical Analysis*, **6**(2012), 1679-1684.
122. (with J. Fan) Uniqueness of weak solutions to the Ginzburg-Landau model for superconductivity, *Zeit. Angew. Math. Phys.*, **63**(2012), 453-459.
123. (with S. Katayama and H. Sunagawa) A note on the null condition for quadratic nonlinear Klein-Gordon systems in two space dimensions, *Commun. Pure Appl. Math.*, **65**(2012), 1285-1302.
124. (with J. Fan) Regularity criteria for hyperbolic Navier-Stokes and related system, *ISRN Mathematical Analysis*, **2012**(2012), Article ID 796368, 7pages, DOI : 10.5402/2012/796368
125. (with H. Sunagawa) Small data blow-up for a system of nonlinear Schrödinger equations, *J. Math. Anal. Appl.*, **399**(2013), 147-155.
126. (with K. Nakamura) Finite charge solutions to cubic Schrödinger equations with a nonlocal nonlinearity in one space dimension, *Discrete and Continuous Dynamical Systems A*, **33**(2013), 789-801.
127. (with Y. Cho and G. Hwang) Global well-posedness of critical nonlinear Schrödinger equations below  $L^2$ , *Discrete and Continuous Dynamical Systems A*, **33**(2013), 1389-1405. DOI: 10.3934/dcds.2013.33.1389
128. (with Y. Cho) A note on the existence of nontrivial solutions to a semilinear elliptic problem, *Kyushu J. Math.*, **67**(2013), 227-236.
129. (with J. Fan) Regularity criteria for a coupled Navier-Stokes and  $Q$ -tensor system, *International Journal of Analysis*, **2013**(2013), Article ID 718173, 5pages, DOI : 10.1155/2013/718173
130. (with S. Machihara) Some inequalities related to the Lorentz spaces, *Hokkaido Math. J.*, **42**(2013), 247-267.
131. (with G. Hoshino) Analytic smoothing effect for a system of nonlinear Schrödinger equations, *Differential Equations and Applications - DEA*, **5**(2013), 395-408.
132. (with N. Hayashi and K. Tanaka) On a system of nonlinear Schrödinger equations with quadratic interaction, *Ann. Inst. Henri Poincaré, Analyse non linéaire*, **30**(2013), 661-690.
133. (with S. Machihara and H. Wadade) Generalizations of the logarithmic Hardy inequality in critical Sobolev-Lorentz spaces, *J. Ineq. Appl.*, **2013**(2013) : 381  
DOI : 10.1186/1029-242X-2013-381
134. (with S. Machihara and H. Wadade) Hardy inequalities on balls, *Tohoku Math. J.*, **65**(2013), 321-330.

135. (with Y. Cho, H. Hajaiej, and G. Hwang) On the Cauchy problem of fractional Schrödinger equation with Hartree type nonlinearity, *Funkcialaj Ekvacioj*, **56**(2013), 193-224.
136. (with J. Fan) A regularity criterion for compressible nematic liquid crystal flows, *ISRN Mathematical Analysis*, **2013**(2013), Article ID 271324, 4pages, DOI:10.1155/2013/271324
137. (with J. Fan) Global existence of strong solutions to a time-dependent 3D Ginzburg-Landau model for superconductivity with partial viscous terms, *Math. Nachr.*, **286**(2013), 1792-1796. DOI:10.1002/mana.201200050
138. (with K. Rogers) Sharp Morawetz estimates, *J. d' Anal. Math.*, **121**(2013), 163-175. DOI:10.1007/s11854-013-0031-0
139. (with K. Fujiwara) Exact remainder formula for the Young inequality and applications, *International Journal of Mathematical Analysis*, **7**(2013), 2723-2735. DOI:10.12988/ijma.2013.39230
140. (with J. Fan) Regularity criteria for the 2D MHD system with horizontal dissipation and horizontal magnetic diffusion, *Kinetic and Related Models*, **7**(2014), 45-56. DOI:10.3934/krm.2014.7.45
141. (with Y. Cho, H. Hajaiej, and G. Hwang) On the orbital stability of fractional Schrödinger equations, *Commun. Pure Appl. Anal.*, **13**(2014), 1267-1282. DOI:10.3934/cpaa.2014.13.1267
142. (with J. Fan) A blow-up criterion for the 3D full magnetohydrodynamic equations, *International Journal of Mathematical Analysis*, **8**(2014), 101-108. DOI:10.12988/ijma.2014.312298
143. (with G. Hoshino) Analytic smoothing effect for nonlinear Schrödinger equation in two space dimensions, *Osaka J. Math.*, **51**(2014), 609-618.
144. (with K. Rogers) A sharp bilinear estimate for the Klein-Gordon equation in  $\mathbb{R}^{1+1}$ , *Int. Math. Res. Not. IMRN* **2014**(2014), 1367-1378. DOI:10.1093/imrn/rns254
145. (with K. Fujiwara) Stability of the Young and Hölder inequalities, *J. Ineq. Appl.*, **2014**(2014) : 162  
DOI:10.1186/1029-242X-2014-162
146. (with J. Fan) Regularity criteria for the density-dependent Hall-magnetohydrodynamics, *Applied Math. Letters*, **36**(2014), 14-18. DOI:10.1016/j.aml.2014.04.010
147. (with G. Hoshino) Analytic smoothing effect for nonlinear Schrödinger equation with quintic nonlinearity, *J. Math. Anal. Appl.*, **419**(2014), 285-297. DOI:10.1016/j.jmaa.2014.04.057

148. (with K. Fujiwara) Identities for the difference between the arithmetic and geometric means, *International Journal of Mathematical Analysis*, **8**(2014), 1525-1542.  
<http://dx.doi.org/10.12988/ijma.2014.46170>
149. (with S. Machihara and H. Wadade) Notes on the paper entitled ‘Generalizations of the logarithmic Hardy inequality in critical Sobolev-Lorentz spaces’, *J. Ineq. Appl.*, **2014**(2014) : 253  
 DOI:10.1186/1029-242X-2014-253
150. (with J. Fan) Uniform regularity for the Landau-Lifshitz-Maxwell system without dissipation, *Applied Mathematical Sciences*, **8**(2014), 8547-8557.  
<http://dx.doi.org/10.12988/ams.2014.410874>
151. (with T. Gonda and S. Machihara) On the semilinear Schrödinger equation with time dependent coefficients, *Math. Nachr.*, **287**(2014), 1986-2001.  
 DOI:10.1002/mana.201200108
152. (with R. Carles) Finite time extinction for nonlinear Schrödinger equation in 1D and 2D, *Commun. PDE.*, **40**(2015), 897-917.  
 DOI:10.1080/03605302.2014.967356
153. (with K. Fujiwara and S. Machihara) Well-posedness for the Cauchy problem for a system of semirelativistic equations, *Commun. Math. Phys.*, **338**(2015), 367-391.  
 DOI:10.1007/s00220-015-2347-3
154. (with K. Fujiwara and S. Machihara) On a system of semirelativistic equations in the energy space, *Commun. Pure Appl. Anal.*, **14**(2015), 1343-1355.
155. (with J. Fan) Regularity criteria for the incompressible MHD with the Hall or ion-slip effects, *International Journal of Mathematical Analysis*, **9**(2015), 1173-1186.  
<http://dx.doi.org/10.12988/ijma.2015.5253>
156. (with G. Hoshino) Analytic smoothing effect for a system of Schrödinger equations with two wave interaction, *Adv. Differential Equations*, **20**(2015), 697-716.
157. (with G. Hoshino) Analytic smoothing effect for a system of Schrödinger equations with three wave interaction, *Journal of Mathematical Physics*, **56**(2015), 091513,  
 DOI:10.1063/1.4931659
158. (with K. Fujiwara) Remarks on global solutions to the Cauchy problem for semirelativistic equations with power type nonlinearity, *International Journal of Mathematical Analysis*, **9**(2015), 2599-2610.  
<http://dx.doi.org/10.12988/ijma.2015.58211>
159. (with S. Machihara and H. Wadade) Scaling invariant Hardy inequalities of multiple logarithmic type on the whole space, *Journal of Inequalities and Applications*, (2015) 2015:281, DOI:10.1186/s13660-015-0806-1

160. (with J. Fan) Weak solutions to the Ginzburg-Landau model in superconductivity with the temporal gauge, *Applicable Analysis*, **95**(2016), 2029-2038.  
DOI:10.1080/00036811.2015.1084415
161. (with N. Ioku and M. Ishiwata) Sharp remainder of a critical Hardy inequality, *Archiv der Mathematik*, **106**(2016), 65-71.  
DOI:10.1007/s00013-015-0841-7
162. (with K. Fujiwara) Weighted  $L^p$ -boundedness of convolution type integral operators associated with bilinear estimates in the Sobolev spaces, *Journal of the Mathematical Society of Japan*, **68**(2016), 169-191.
163. (with J. Fan) Regularity criteria for harmonic heat flow and related system, *Mathematische Nachrichten*, **289**(2016), 28-33.  
DOI:10.1002/mana.201200219
164. (with G. Hoshino) Analytic smoothing effect for the cubic hyperbolic Schrödinger equation in two space dimensions, *Electronic Journal of Differential Equations*, **2016**(2016), 1-8.
165. (with G. Hoshino) Space-time analytic smoothing effect for the pseudo-conformally invariant Schrödinger equations, *Nonlinear Differ. Equ. Appl., NoDEA*, (2016),  
DOI:10.1007/s00030-016-0362-5.
166. (with N. Bez and C. Jeavons) Some sharp bilinear space-time estimates for the wave equation, *Mathematika*, **62**(2016), 719-737. DOI:10.1112/S0025579316000012
167. (with Y. Cho and C. Wang) Finite Time blowup for the fourth-order NLS, *Bulletin of the Korean Mathematical Society*, **53**(2016), 615-640.  
<http://dx.doi.org/10.4134/BKMS.2016.53.2.615>
168. (with J. Fan) Remarks on regularity criteria for harmonic heat flow and related system, *International Journal of Mathematical Analysis*, **10**(2016), no.16, 749-755.  
<http://dx.doi.org/10.12988/ijma.2016.6351>
169. (with J. Bellazzini and M. Ghimenti) Sharp lower bounds for Coulomb energy, *Math. Research Letters*, **23**(2016), 621-632. <http://dx.doi.org/10.4310/MRL.2016.v23.n3.a2>
170. (with Y. Cho and G. Hwang) On small data scattering of Hartree equations with short-range interaction, *Comm. Pure Appl. Anal.*, **15**(2016), 1809-1823.
171. (with N. Visciglia) An improvement on the Brézis-Gallouët technique for 2D NLS and 1D half-wave equation, *Ann. Inst. Henri Poincaré, Analyse non linéaire*, **33**(2016), 1069-1079.
172. (with J. Fan) Global strong solutions to the time-dependent Ginzburg-Landau model in superconductivity with four new gauges, *Nonlinear Analysis and Differential Equations*, **4**(2016), no.11, 513-519. <http://dx.doi.org/10.12988/nade.2016.6754>

173. (with K. Fujiwara) Finite time blowup of solutions to the nonlinear Schrödinger equation without gauge invariance, *J. Math. Phys.*, **57**(2016), No.8, 082103, 8pp.  
<http://dx.doi.org/10.1063/1.4960725>
174. (with M. Hayashi) Well-posedness for a generalized derivative nonlinear Schrödinger equation, *J. Differential Equations*, **261**(2016), 5425-5445.  
<http://doi.org/10.1016/j.jde.2016.08.018>
175. (with J. Fan) Some remarks on gauge choice and Navier-Stokes equations, *Nonlinear Analysis and Differential Equations*, **4**(2016), no.14, 659-667.  
<https://doi.org/10.12988/nade.2016.6982>
176. (with K. Yuasa) Uncertainty relations in the framework of equalities, *J. Math. Anal. Appl.*, **445**(2017), No.1, 998-1012.
177. (with M. Hayashi) On Landau-Kolmogorov inequalities for dissipative operators, *Proc. AMS*, **145**(2017), 847-852.
178. (with N. Ioku and M. Ishiwata) Hardy type inequalities in  $L^p$  with sharp remainders, *J. Inequalities and Applications*, (2017) 2017:5, DOI:10.1186/s13660-016-1271-1
179. (with J. Fan) Regularity criteria for Navier-Stokes and related systems, *Differential and Integral Equations*, **30**(2017), 101-114.
180. (with J. Fan) Global well-posedness of weak solutions to the time-dependent Ginzburg-Landau model for superconductivity in  $\mathbb{R}^2$ , *International Journal of Mathematical Analysis*, **11**, no.4,(2017), 199-207. <https://doi.org/10.12988/ijma.2017.7110>
181. (with Y. Cho) Short-range scattering of Hartree type fractional NLS II, *Nonlinear Analysis*, **157**(2017), 62-75. DOI:10.1016/j.na.2017.03.005
182. (with S. Machihara and H. Wadade) Remarks on the Rellich inequality, *Math.Z.*, **286**(2017), 1367-1373. DOI:10.1007/s00209-016-1805-8
183. (with J. Fan) Uniform existence and uniqueness for a time-dependent Ginzburg-Landau model for superconductivity, *Nonlinear Analysis and Differential Equations*, **5**, no.6, (2017), 249-259. <https://doi.org/10.12988/nade.2017.7713>
184. (with J. Fan) Local well-posedness for an Ericksen-Leslie's parabolic-hyperbolic compressible non-isothermal model for liquid crystals, *Electron. J. Differential Equations*, **2017**, No. 232, (2017), 1-8.
185. (with K. Fujiwara) Lifespan of strong solutions to the periodic nonlinear Schrödinger equation without gauge invariance, *Journal of Evolution Equations*, **17**(2017), 1023-1030.
186. (with J. Bellazzini and N. Visciglia) Ground states for semi-relativistic Schrödinger-Poisson-Slater energy, *Funkcialaj Ekvacioj*, **60**(2017), 353-369. DOI:10.1619/fesi.60.353

187. (with Y. Cho and G. Hwang) On the focusing energy-critical fractional nonlinear Schrödinger equations, *Adv. Differential Equations*, **23**, No.3-4, (2018), 161-192.
188. (with Y. Cho) Small data scattering of Hartree type fractional Schrödinger equations in dimension 2 and 3, *J. Korean Math. Soc.*, **55**, No.2, (2018), 373-390.  
<https://doi.org/10.4134/JKMS.j170224>
189. (with K. Li and B. Wang) Dynamical behavior for the solutions of the Navier-Stokes equation, *Comm. Pure Appl. Anal.*, **17**, Number 4, (2018), 1511-1560.  
 DOI:10.3934/cpaa.2018073
190. (with N. Bez, C. Jeavons, and M. Sugimoto) Stability of trace theorems on the sphere, *J. Geom. Anal.*, **28** (2018), 1456-1476. DOI:10.1007/s12220-017-9870-8
191. (with K. Fujiwara) Lifespan of strong solutions to the periodic derivative nonlinear Schrödinger equation, *Evolution Equations and Control Theory*, **7**, Number 2, (2018), 275-280. DOI:10.3934/eect.2018013
192. (with K. Fujiwara and V. Georgiev) Higher order fractional Leibniz rule, *J. Fourier Anal. Appl.*, **24** (2018), 650-665. DOI:10.1007/s00041-017-9541-y
193. (with K. Fujiwara and V. Georgiev) Blow-up for self-interacting fractional Ginzburg-Landau equation, *Dynamics of PDE*, **15**, No.3, (2018), 175-182.  
 DOI:10.4310/DPDE.2018.v15.n3.a1
194. (with J. Fan) Global well-posedness of weak solutions to the time-dependent Ginzburg-Landau model for superconductivity, *Taiwanese J. Math.*, **22**, No.4, (2018), 851-858.  
 DOI:10.11650/tjm/180102
195. (with K. Fujiwara and V. Georgiev) Note for global existence of semilinear heat equation in weighted  $L^\infty$  space, *Pliska Stud. Math.*, **30**, (2019), 7-20.
196. (with L. Forcella, K. Fujiwara, and V. Georgiev) Local well-posedness and blow-up for the half Ginzburg-Landau-Kuramoto equation with rough coefficients and potential, *Discrete and Continuous Dynamical Systems A*, **39**, (2019), 2661-2678.  
 DOI:10.3934/dcds.2019111
197. (with M. Ruzhansky and D. Suragan)  $L^p$ -Caffarelli-Kohn-Nirenberg type inequalities on homogeneous groups, *Quarterly J. Math.*, **70**, Issue 1, (2019), 305-318.  
 DOI:10.1093/qmath/hay040
198. (with S. Machihara and H. Wadade) Remarks on the Hardy type inequalities with remainder terms in the framework of equalities, *Adv. Studies Pure Math.*, **81**, (2019), 247-258.
199. (with J. Fan) A note on bilinear estimates in the Sobolev spaces, *International Journal of Mathematical Analysis*, **13**, no.12, (2019), 551-554.  
<https://doi.org/10.12988/ijma.2019.91064>

200. (with J. Fan) Cauchy problem and vanishing dispersion limit for Schrödinger-improved Boussinesq equations, *J. Math. Anal. Appl.*, **485**, Issue 2, (2020), 123857.  
<https://doi.org/10.1016/j.jmaa.2020.123857>
201. (with N. Bez and S. Machihara) Hardy type inequalities with spherical derivatives, *SN Partial Differ. Equ. Appl.*, **1**, Issue 1, (2020), Article 5.  
<https://doi.org/10.1007/s42985-019-0001-1>
202. (with J. Fan) A blow-up criterion for the modified Navier-Stokes-Fourier equations, *Journal of Mathematical Fluid Mechanics*, **22**, (2020), Article number 16.  
<https://doi.org/10.1007/s00021-019-0477-7>
203. (with K. Fujiwara and V. Georgiev) On global well-posedness for nonlinear semirelativistic equations in some scaling subcritical and critical cases, *J. Math. Pures Appl.*, **136**, (2020), 239-256. <https://doi.org/10.1016/j.matpur.2019.10.003>
204. (with K. Fujiwara and V. Georgiev) Self-similar solutions to the derivative nonlinear Schrödinger equation, *Journal of Differential Equations*, **268**, Issue 12, (2020), 7940-7961. <https://doi.org/10.1016/j.jde.2019.11.089>
205. (with K. Narita) Existence and uniqueness of classical paths under quadratic potentials, *Calculus of Variations and PDE's*, **59**, 128 (2020).  
<https://doi.org/10.1007/s00526-020-01791-9>
206. (with J. Fan) Global solutions to the Maxwell-Navier-Stokes system in a bounded domain in 2D, *Zeitschrift für angewandte Mathematik und Physik*, **71**, 136 (2020).  
<https://doi.org/10.1007/s00033-020-01364-y>
207. (with D. Suragan) Sharp remainder of the Poincaré inequality, *Proceedings of the American Mathematical Society*, **148**, Number 10, (2020), 4235-4239.  
<https://doi.org/10.1090/proc/15119>
208. (with M. Karazym and D. Suragan) Multidimensional inverse Cauchy problems for evolution equations, *Inverse Problems in Science and Engineering*, **28**, 11, (2020), 1582-1590. <https://doi.org/10.1080/17415977.2020.1739034>
209. (with J. Fan) Well-posedness of a 2D time-dependent Ginzburg-Landau superconductivity model, *Nonlinear Analysis and Differential Equations*, **8**, No.1, (2020), 89-97.
210. (with Y. Cho, C. Yang) Small data scattering of Hartree type fractional Schrödinger equations in a scaling critical space, *Funkcialaj Ekvacioj*, **64**, (2021), 1-15.  
<https://doi.org/10.1619/fesi.64.1>
211. (with D. Suragan) Poincaré inequalities with exact missing terms on homogeneous groups, *Journal of the Mathematical Society of Japan*, **73**, No.2, (2021), 497-503.
212. (with J. Fan) Regularity criteria for a Ginzburg-Landau-Navier-Stokes system, *Funkcialaj Ekvacioj*, **64**, (2021), 349-360.

213. (with J. Fan) A note on 2D Navier-Stokes equations, *SN Partial Differential Equations and Applications*, **2** (2021), Article 73. <https://doi.org/10.1007/s42985-021-00129-0>
214. (with Y. Cho, K. Lee) Small data scattering of 2D Hartree type Dirac equations, *J. Math. Anal. Appl.*, **506**, (2022), 125549. <https://doi.org/10.1016/j.jmaa.2021.125549>
215. (with K. Tomioka) Zakharov system in two space dimensions, *Nonlinear Analysis*, **214**, (2022), 112532. <https://doi.org/10.1016/j.na.2021.112532>
216. (with K. Tomioka) Schrödinger-improved Boussinesq system in two space dimensions, *Journal of Evolution Equations*, **22**, Article number: 35 (2022). <https://doi.org/10.1007/s00028-022-00793-8>
217. (with J. Fan) Uniform well-posedness of the compressible full magneto micropolar system, *AIMS Mathematics*, **7**, Issue 9, (2022), 16037-16053. <https://doi.org/10.3934/math.2022878>
218. (with J. Fan) Remarks on the Navier-Stokes equations in space dimension  $n \geq 3$ , *Proceedings of the American Mathematical Society, Series B*, **9**, (2022), 317-324. <https://doi.org/10.1090/bproc/135>
219. (with J. Fan) Well-posedness for the Chern-Simons-Schrödinger equations, *AIMS Mathematics*, **7**, Issue 9, (2022), 17349-17356. <https://doi.org/10.3934/math.2022955>
220. (with J. Restrepo, D. Suragan) Inverse abstract Cauchy problem, *Applicable Analysis*, **101**, NO. 14, (2022) 4965-4969. <https://doi.org/10.1080/00036811.2021.1877679>
221. (with K. Tomioka) Vanishing dispersion limit for Schrödinger-improved Boussinesq system in two space dimensions, *Asymptotic Analysis*, **130**, (2022) 427-437. DOI: 10.3233/ASY-221758
222. (with J. Zhai, B. Zheng) Blow-up solutions for a class of divergence Schrödinger equations with intercritical inhomogeneous nonlinearity, *J. Math. Phys.*, **64**, 011502 (2023). <https://doi.org/10.1063/5.0098298>
223. (with N. Bez, S. Machihara) Revisiting the Rellich inequality, *Mathematische Zeitschrift*, **303**, Article number: 49 (2023). <https://doi.org/10.1007/s00209-022-03203-4>
224. (with Y. Cho, S. Hong) Charge conjugation approach to scattering for the Hartree type Dirac equations with chirality, *J. Math. Phys.*, **64**, 021508 (2023). <https://doi.org/10.1063/5.0118132>
225. (with J. Fan) Long time behavior of a 2D Ginzburg-Landau model with fixed total magnetic flux, *International Journal of Mathematical Analysis*, **17**, (2023), 109-117. <https://doi.org/10.12988/ijma.2023.912516>



226. (with R. Kusaba) Weighted estimates and large time behavior of small amplitude solutions to the semilinear heat equation, *Differential Equations & Applications - DEA*, **15**, Number 3, (2023), 235-268. <https://dx.doi.org/10.7153/dea-2023-15-13>
227. (with T. Takeuchi) Refined decay estimate and analyticity of solutions to the linear heat equation in homogeneous Besov spaces, *Journal of Fourier Analysis and Applications*, **29**, Issue 5, (2023), Article 61. <https://doi.org/10.1007/s00041-023-10042-2>
228. (with M. Ismailov, D. Suragan) Inverse problems of identifying the time-dependent source coefficient for subelliptic heat equations, *Inverse Problems and Imaging*, **18**, Issue 4, (2024), 813-823. <https://doi.org/10.3934/ipi.2023056>
229. (with T. Takeuchi) A new proof of the Gagliardo-Nirenberg and Sobolev inequalities: Heat semigroup approach, *Proc. Amer. Math. Soc. Ser. B*, **11**, (2024), 371-377. <https://doi.org/10.1090/bproc/211>
230. (with A. Chatziafratis, S.-F. Tian) Rigorous analysis of the unified transform method and long-range instabilities for the inhomogeneous time-dependent Schrödinger equation on the quarter-plane, *Math. Annalen*, **389**, (2024), 3535-3602. <https://doi.org/10.1007/s00208-023-02698-4>
231. (with D. Suragan) Representation formulae for the higher-order Steklov and  $L^{2m}$ -Friedrichs inequalities, *Asian J. Math.*, **28**, No. 1, (2024), 093-102.
232. (with J. Fan) A note on 2D Navier-Stokes system in a bounded domain, *AIMS Mathematics*, **9**, Issue 9, (2024), 24908-24911. <https://doi.org/10.3934/math.20241213>
233. (with A. Chatziafratis) New instability, blow-up and break-down effects for Sobolev-type evolution equations: Asymptotic analysis of the novel unified-transform-method solution for a celebrated pseudo-parabolic model on the quarter-plane, *PDE & Appl.*, **5**, article number 30, (2024), <https://doi.org/10.1007/s42985-024-00296-w>
234. (with R. Carles, M. Hayashi) Low regularity solutions to the logarithmic Schrödinger equation, *Pure and Applied Analysis*, **6** (2024), No. 3, 859-871. <https://doi.org/10.2140/paa.2024.6.859>
235. (with K. Tomioka) Global strong solutions of the coupled Klein-Gordon-Schrödinger equations, *Funkcialaj Ekvacioj*, **67** (2024), 229-265.
236. (with R. Kusaba) Asymptotic behavior of global solutions to the complex Ginzburg-Landau type equation in the super Fujita-critical case, *Evolution Equations and Control Theory*, **14**, Issue 2, (2025), 210-245. <https://doi.org/10.3934/eect.2024051>
237. (with T. Takeuchi) Refined interpolation inequality in Besov spaces with applications to the Gagliardo-Nirenberg inequality, *Asymptotic Analysis*, (2025), **141**(2), 119-131. <https://doi.org/10.1177/09217134241308362>

238. (with M. Hayashi, N. Visciglia) Global  $H^2$ -solutions for the generalized derivative NLS on  $\mathbb{T}$ , *SIAM Journal on Mathematical Analysis*, (2025), **57**:2, 1483-1501  
<https://doi.org/10.1137/24m1668317>
239. (with M. Hayashi) The Cauchy problem for the logarithmic Schrödinger equation revisited, *Annales Henri Poincaré*, (2025), **26**, 1209-1238. <https://doi.org/10.1007/s00023-024-01460-z>
240. (with P. Roychowdhury, D. Suragan) One-dimensional integral Rellich type inequalities, *Eurasian Mathematical Journal*, (in press)

## II. Editorial works

1. T. Ozawa (Ed.), *Colloquium Lectures 1993-1994*, Hokkaido University Technical Report Series in Mathematics, **32**, 1994, 113pp.
2. R. Agemi, Y. Giga, T. Ozawa (Eds.) : “Nonlinear Waves,” *Proceedings of the Fourth MSJ International Research Institute, GAKUTO International Series, Mathematical Sciences and Applications* **10**, 1997, 542pp.
3. T. Ozawa (Ed.), *Proceedings of the 22nd Sapporo Symposium on Partial Differential Equations*, Hokkaido University Technical Report Series in Mathematics, **49**, 1997, 67pp.
4. T. Ozawa and H.-F. Yamada (Eds.), *Colloquium Lectures 1997-1998*, Hokkaido University Technical Report Series in Mathematics, **55**, 1998, 83pp.
5. Y. Giga and T. Ozawa (Eds.), *Proceedings of the 24th Sapporo Symposium on Partial Differential Equations*, Hokkaido University Technical Report Series in Mathematics, **59**, 1999. 61pp.
6. T. Ozawa (Ed.), *Proceedings of Sapporo Guest House Minisymposium on Nonlinear Wave Equations*, Hokkaido University Technical Report Series in Mathematics, **61**, 1999, 67pp.
7. Y. Giga and T. Ozawa (Eds.), *Proceedings of the 25th Sapporo Symposium on Partial Differential Equations*, Hokkaido University Technical Report Series in Mathematics, **64**, 2000, 55pp.
8. Y. Giga and T. Ozawa (Eds.), *Proceedings of the 26th Sapporo Symposium on Partial Differential Equations*, Hokkaido University Technical report series in Mathematics, **68**, 2001, 67pp.
9. T. Ozawa, Y. Giga, S. Jimbo and G. Nakamura (Eds.), *Proceedings of the 27th Sapporo Symposium on Partial Differential Equations*, Hokkaido University Technical Report Series in Mathematics, **74**, 2002, 51pp.

10. T. Ozawa, Y. Giga, S. Jimbo, K. Tsutaya, Y. Tonegawa and G. Nakamura (Eds.),  
Proceedings of the 28th Sapporo Symposium on Partial Differential Equations, Hokkaido  
University Technical Report Series in Mathematics, **77**, 2003, 76pp.
11. H. Kubo and T. Ozawa (Eds.), Proceedings of Sapporo Guest House Symposium on  
Mathematics 15 “Evolution Equations,” Hokkaido University Technical Report Series  
in Mathematics, **79**, 2003, 31pp.
12. D. Kim and T. Ozawa (Eds.), The 2nd HU and SNU Symposium on Mathematics  
Abstracts on the occasion of the 7th SNU-HU Joint Symposium, Hokkaido University  
Technical Report Series in Mathematics, **83**, 2004, 22pp.
13. T. Ozawa, Y. Giga, S. Jimbo, G. Nakamura, Y. Tonegawa and K. Tsutaya (Eds.),  
Proceedings of the 29th Sapporo Symposium on Partial Differential Equations, Hokkaido  
University Technical Report Series in Mathematics, **84**, 2004, 77pp.
14. T. Ozawa and Y. Tsutsumi (Eds.), Lectures on Nonlinear Dispersive Equations I,  
Hokkaido University Technical Report Series in Mathematics, **85**, 2004, 147pp.
15. T. Ozawa and Y. Tsutsumi (Eds.), Lectures on Nonlinear Dispersive Equations II,  
Hokkaido University Technical Report Series in Mathematics, **86**, 2004, 47pp.
16. T. Ozawa and Y. Tsutsumi (Eds.), COE Symposium “Nonlinear Dispersive  
Equations,” Hokkaido University Technical Report Series in Mathematics, **87**, 2004,  
84pp.
17. T. Ozawa, Y. Giga, S. Jimbo, G. Nakamura, Y. Tonegawa and K. Tsutaya (Eds.),  
Proceedings of the 30th Sapporo Symposium on Partial Differential Equations, Hokkaido  
University Technical Report Series in Mathematics, **96**, 2005, 78pp.
18. H. Kubo, T. Ozawa and K. Yamauchi (Eds.), Proceedings of Sapporo Guest House  
Symposium on Mathematics 20 “Nonlinear Wave Equations,” Hokkaido University  
Technical Report Series in Mathematics, **102**, 2005, 60pp.
19. T. Ozawa, Y. Giga, S. Jimbo, G. Nakamura, Y. Tonegawa, K. Tsutaya and T. Sakajo,  
Proceedings of the 31st Sapporo Symposium on Partial Differential Equations, Hokkaido  
University Technical Report Series in Mathematics, **111**, 2006, 95pp.
20. H. Okamoto, D. Sheen, Z. Shi, T. Ozawa, T. Sakajo and Y. Chen, Book of Abstracts  
of the First China-Japan-Korea Joint Conference on Numerical Mathematics & The  
Second East Asia SIAM Symposium, Hokkaido University Technical Report Series in  
Mathematics, **112**, 2006, 78pp.
21. H. Kubo and T. Ozawa, Sapporo Guest House Symposium on Mathematics 22 “Non-  
linear Wave Equations,” Hokkaido University Technical Report Series in Mathematics,  
**115**, 2006, 67pp.

22. T. Ozawa and Y. Tsutsumi (Eds.), “Nonlinear Dispersive Equations”, GAKUTO International Series, Mathematical Sciences and Applications, **26**, 2006, 237pp.
23. T. Ozawa, F. Planchon, P. Raphaël, Y. Tsutsumi and N. Tzvetkov, “Lectures on Nonlinear Dispersive Equations”, GAKUTO International Series, Mathematical Sciences and Applications, **27**, 2006, 176pp.
24. T. Ozawa, Y. Giga, S. Jimbo, G. Nakamura, Y. Tonegawa, K. Tsutaya, T. Sakajo, Proceedings of the 32nd Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **122**, 2007, 73pp.
25. H. Kubo, T. Ozawa, H. Takamura and K. Tsutaya, “Nonlinear Wave Equations”, Hokkaido University Technical Report Series in Mathematics, **123**, 2007, 53pp.
26. H. Kubo and T. Ozawa, Sapporo Guest House Symposium on Mathematics, Final “Nonlinear Partial Differential Equations,” Hokkaido University Technical Report Series in Mathematics, **131**, 2008, 67pp.
27. T. Ozawa, Y. Giga, S. Jimbo, G. Nakamura, Y. Tonegawa, K. Tsutaya, T. Sakajo, Proceedings of the 33rd Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **135**, 2008, 72pp.
28. Y. Giga, K. Ishii, S. Koike, T. Ozawa and N. Yamada (Eds.), “International Conference for the 25th Anniversary of Viscosity Solutions”, GAKUTO International Series, Mathematical Sciences and Applications, **30**, 2008, 255pp.
29. T. Ozawa, Y. Giga, T. Sakajo, S. Jimbo, H. Takaoka, K. Tsutaya, Y. Tonegawa, and G. Nakamura (Eds.), Proceedings of the 34th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **141**, 2009, 67pp.
30. T. Ozawa and M. Sugimoto, “Harmonic Analysis and Nonlinear Partial Differential Equations”, RIMS Kokyuroku Bessatsu **B14**, 2009, 173pp.
31. T. Ozawa and M. Sugimoto, “Harmonic Analysis and Nonlinear Partial Differential Equations”, RIMS Kokyuroku Bessatsu **B18**, 2010, 146pp.
32. T. Ozawa, Y. Giga, T. Sakajo, S. Jimbo, H. Takaoka, K. Tsutaya, Y. Tonegawa, and G. Nakamura (Eds.), Proceedings of the 35th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **146**, 2010, 61pp.
33. T. Ozawa and M. Sugimoto, “Harmonic Analysis and Nonlinear Partial Differential Equations”, RIMS Kokyuroku Bessatsu **B26**, 2011, 175pp.

34. T. Ozawa, Y. Giga, T. Sakajo, S. Jimbo, H. Takaoka, K. Tsutaya, Y. Tonegawa, and G. Nakamura (Eds.), Proceedings of the 36th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **150**, 2011, 63pp.
35. T. Ozawa and M. Sugimoto, “Harmonic Analysis and Nonlinear Partial Differential Equations”, RIMS Kokyuroku Bessatsu **B33**, 2012, 121pp.
36. T. Ozawa, Y. Giga, T. Sakajo, S. Jimbo, H. Takaoka, K. Tsutaya, Y. Tonegawa, and G. Nakamura (Eds.), Proceedings of the 37th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **153**, 2012, 81pp.
37. Y. Giga, S. Jimbo, T. Ozawa, K. Tsutaya, Y. Tonegawa, H. Kubo, T. Sakajo, and H. Takaoka (Eds.), Proceedings of the 38th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **159**, 2013, 84pp.
38. M. Sugimoto and T. Ozawa, “Harmonic Analysis and Nonlinear Partial Differential Equations”, RIMS Kokyuroku Bessatsu **B42**, 2013, 170pp.
39. S. Ei, Y. Giga, S. Jimbo, H. Kubo, T. Ozawa, T. Sakajo, H. Takaoka, Y. Tonegawa, and K. Tsutaya (Eds.), Proceedings of the 39th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **161**, 2014, 137pp.
40. T. Ogawa and T. Ozawa, Special Issue dedicated to Professor Gustavo Ponce on the occasion of his sixtieth birthday, Comm. Pure Appl. Anal., **14**, Number 4, July 2015.
41. T. Ogawa and T. Ozawa, Special Issue “Quantization, Blow-up, and Concentration in Mathematical Physics Viewpoint”, Differential and Integral Equations, **28**, Number 7/8, July/August 2015.
42. S. Ei, Y. Giga, S. Jimbo, H. Kubo, T. Ozawa, T. Sakajo, H. Takaoka, Y. Tonegawa, and K. Tsutaya (Eds.), Proceedings of the 40th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **164**, 2015, 112pp.
43. S. Ei, Y. Giga, S. Jimbo, H. Kubo, T. Ozawa, T. Sakajo, H. Takaoka, Y. Tonegawa, and K. Tsutaya (Eds.), Proceedings of the 41st Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **166**, 2016, 99pp.
44. H. Kubo, T. Ozawa, and H. Takamura (Eds.), Mathematical Analysis for Stability in Nonlinear Dynamics, Hokkaido University Technical Report Series in Mathematics, **167**, 2016, 73pp.

45. S. Ei, Y. Giga, N. Hamamuki, S. Jimbo, H. Kubo, T. Ozawa, T. Sakajo, Y. Tonegawa, and K. Tsutaya (Eds.), Proceedings of the 42nd Sapporo Symposium on Partial Differential Equations -In memory of Professor Taira Shirota-, Hokkaido University Technical Report Series in Mathematics, **171**, 2017, 94pp.
46. H. Kubo, T. Ozawa, and H. Takamura (Eds.), Special Issue dedicated to Professor Vladimir Georgiev on the occasion of his sixtieth birthday, *Commun. Pure Appl. Anal.*, **17**, Number 4, July 2018.
47. Y. Giga, H. Kubo, and T. Ozawa (Eds.), The 11th Mathematical Society of Japan - Seasonal Institute -The Role of Metrics in the Theory of Partial Differential Equations-, Hokkaido University Technical Report Series in Mathematics, **174**, 2018, 154pp.
48. S. Ei, Y. Giga, N. Hamamuki, S. Jimbo, H. Kubo, H. Kuroda, T. Ozawa, T. Sakajo, and K. Tsutaya (Eds.), Proceedings of 43rd Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **175**, 2018, 93pp.
49. M. D'Abicco, M. R. Ebert, V. Georgiev, and T. Ozawa (Eds.), *New Tools for Non-linear PDEs and Application*, Trends in Mathematics, Birkhäuser 2019, viii+390pp.
50. S. Ei, Y. Giga, N. Hamamuki, S. Jimbo, H. Kubo, H. Kuroda, T. Ozawa, T. Sakajo, and K. Tsutaya (Eds.), Proceedings of 44th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **177**, 2019, 107pp.
51. K. Kato, T. Ogawa, and T. Ozawa (Eds.), *Asymptotic Analysis of Nonlinear Dispersive and Wave Equations*, Advanced Studies in Pure Mathematics, **81**, 2019, Mathematical Society of Japan, 419pp.
52. S. Ei, Y. Giga, N. Hamamuki, S. Jimbo, H. Kubo, H. Kuroda, T. Ozawa, T. Sakajo, and K. Tsutaya (Eds.), Proceedings of 45th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **179**, 2020, 98pp.
53. V. Georgiev, T. Ozawa, M. Ruzhansky, and J. Wirth (Eds.), *Advances in Harmonic Analysis and Partial Differential Equations*, Trends in Mathematics, Birkhäuser, 2020, 317pages.
54. Y. Giga, N. Hamamuki, H. Kubo, H. Kuroda, and T. Ozawa (Eds.), *The Role of Metrics in the Theory of Partial Differential Equations*, Advanced Studies in Pure Mathematics, **85**, 2020, Mathematical Society of Japan, 543pp.
55. S. Ei, Y. Giga, N. Hamamuki, S. Jimbo, H. Kubo, H. Kuroda, Y. Liu, T. Ozawa, T. Sakajo, and K. Tsutaya (Eds.), Proceedings of 46th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **181**, 2021, 108pp.

56. K. Ishige, S. Koike, T. Ozawa, and S. Shimizu (Eds.), Viscosity solutions - Dedicated to Hitoshi Ishii on the award of the 1st Kodaira Kunihiko Prize, SN Partial Differential Equations and Applications, 2022.
57. K. Ishige, T. Ozawa, S. Shimizu, and Y. Taniuchi (Eds.), Mathematical Fluid Mechanics and Related Topics: In Honor of Professor Hideo Kozono's 60th Birthday, SN Partial Differential Equations and Applications, 2022.
58. S. Ei, Y. Giga, N. Hamamuki, S. Jimbo, H. Kubo, H. Kuroda, Y. Liu, T. Ozawa, T. Sakajo, and K. Tsutaya (Eds.), Proceedings of 47th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **183**, 2022, 111pp.
59. T. Ozawa (Ed.), Collected Papers in Honor of Yoshihiro Shibata, Birkhäuser, 2023, 394pages.
60. M. Fila, K. Ishige, T. Ozawa, and S. Shimizu (Eds.), Qualitative properties of solutions to nonlinear parabolic problems - in honor of Professor Eiji Yanagida on the occasion of his 65th birthday -, SN Partial Differential Equations and Applications, June 2023.
61. S. Ei, Y. Giga, N. Hamamuki, S. Jimbo, H. Kubo, H. Kuroda, Y. Liu, T. Ozawa, T. Sakajo, K. Tsutaya and S. Masaki (Eds.), Proceedings of 48th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **185**, 2023, 130pp.
62. S. Ei, Y. Giga, N. Hamamuki, S. Jimbo, H. Kubo, H. Kuroda, S. Masaki, T. Ozawa, T. Sakajo and K. Tsutaya (Eds.), Proceedings of 49th Sapporo Symposium on Partial Differential Equations, Hokkaido University Technical Report Series in Mathematics, **187**, 2024, 106pp.

### III. Conferences and others

1. Invariant domain and smoothing effect for the Schrödinger evolution group, in "Spectral and scattering theory for differential operators and related topics," RIMS Kokyuroku **692**(1989), 22-31.
2. (with H. Kozono) Stability in  $L^r$  for the Navier-Stokes flow in an  $n$ -dimensional bounded domain, in "Mathematical analysis of fluid and plasma dynamics," RIMS Kokyuroku **734**(1990), 24-42.
3. (with Y. Tsutsumi) The nonlinear Schrödinger limit and the initial layer of the Zakharov equations, Proc. Japan Acad., **67**(1991), 113-116.
4. (with Y. Tsutsumi) The nonlinear Schrödinger limit and the initial layer of the Zakharov equations, in "Mathematical analysis of fluid and plasma dynamics," RIMS Kokyuroku **745** (1991), 1-10.

5. (with Y. Tsutsumi) Global existence and asymptotic behavior of solutions for the Zakharov equations, in “Mathematical analysis of fluid and plasma dynamics,” RIMS Kokyuroku **824**(1993), 11-18.
6. Long-range Stark scattering, in “Spectrum, scattering and related topics,” RIMS Kokyuroku **873**(1994), 93-96.
7. (with K. Tsutaya, Y. Tsutsumi) Normal form and global solutions for the Zakharov equations, in “Spectral and scattering theory,” M. Ikawa (Ed.), Lecture Notes in Pure and Applied Math., Marcel Dekker, **161**(1994), 153-179.
8. (with K. Tsutaya, Y. Tsutsumi) Normal form and global solutions for Klein-Gordon-Zakharov equations, in “Nonlinear evolution equations and their applications,” RIMS Kokyuroku **898**(1995), 94-105.
9. (with K. Tsutaya, Y. Tsutsumi) Global existence and asymptotic behavior of solutions for the Klein-Gordon equations with quadratic nonlinearity in two space dimensions, in “Mathematical analysis of phenomena in fluid and plasma dynamics,” RIMS Kokyuroku **914** (1995), 112-118.
10. (with N. Hayashi, K. Kato) Dilation method and smoothing effect of the Schrödinger evolution group, in “Komaba PDE Seminar I,” A. Kaneko, K. Yajima (Eds.), Lectures in Mathematical Sciences, The University of Tokyo, **8**(1995), 61-70.
11. Nonlinear Schrödinger equations in fractional order Sobolev spaces, in “Nonlinear evolution equations and applications,” RIMS Kokyuroku **1009**(1997), 121-131.
12. Nonlinear Schrödinger equations, Mathematical Science **413**(1997), 36-44.
13. Critical nonlinear wave equations in fractional order Sobolev spaces, in “Structure of solutions of PDE,” RIMS Kokyuroku **1056**(1998), 19-28.
14. Scattering theory for nonlinear Schrödinger equations, Sugaku **50**(1998), 337-349.
15. (with M. Nakamura) Nonlinear Schrödinger equations in the Sobolev space, in “Harmonic analysis and nonlinear partial differential equations,” RIMS Kokyuroku **1162** (2000), 18-28.
16. (with J. Kato) On solutions of the wave equation with homogeneous Cauchy data, in “Harmonic analysis and nonlinear partial differential equations,” RIMS Kokyuroku **1201** (2001), 96-110.
17. (with K. Nakanishi) Scattering problem for nonlinear Schrödinger and Hartree equations, in “Tosio Kato’s Method and Principle for Evolution Equations in Mathematical Physics,” H. Fujita, S. T. Kuroda, H. Okamoto (Eds.), Yurinsha, Tokyo, 2002, 105-112; RIMS Kokyuroku **1234** (2001), 105-112.



18. (with J. Kato) Weighted Strichartz estimates and existence of self-similar solutions for semilinear wave equations, in “Tosio Kato’s Method and Principle for Evolution Equations in Mathematical Physics,” H. Fujita, S. T. Kuroda, H. Okamoto (Eds.), Yurinsha, Tokyo, 2002, 227-238; RIMS Kokyuroku **1234** (2001), 228-239.
19. (with S. Machihara, M. Nakamura) Small global solutions for the nonlinear Dirac equation, in “Harmonic analysis and nonlinear partial differential equations,” RIMS Kokyuroku **1388** (2004), 81-87.
20. (with J. Kato, M. Nakamura) On some generalization of the Strichartz estimates for the wave equation and self-similar solutions to nonlinear wave equations, in “Harmonic analysis and nonlinear partial differential equations,” RIMS Kokyuroku **1389** (2004), 78-89.
21. The work of Hideo Takaoka, Sugaku **60** (2008), 400-404.
22. (with J. Kato) A remark on global solutions to nonlinear Klein-Gordon equation with a special quadratic nonlinearity in two space dimensions, RIMS Kokyuroku Bessatsu **14** (2009), 17-25.
23. (with H. Hajaiej, L. Molinet, B. Wang) Necessary and sufficient conditions for the fractional Gagliardo-Nirenberg inequalities and applications to Navier- Stokes and generalized Boson equations, RIMS Kokyuroku Bessatsu **26** (2011), 159-175.
24. (with J. Fan) Global Cauchy problem of an ideal density-dependent MHD- $\alpha$  model, Discrete and Continuous Dynamical Systems, Suppl. (2011), 400-409.
25. (with J. Fan) An approximation model for the density-dependent magnetohydrodynamic equations, Discrete and Continuous Dynamical Systems, Suppl. (2013), 207-216.
26. (with J. Fan) Regularity criteria for Hall-magnetohydrodynamics and the space-time Monopole equation in Lorenz gauge, “Harmonic Analysis and Partial Differential Equations,” Contemporary Math. **612** (2014), 81-89.
27. (with G. Hoshino) Analytic smoothing effect for nonlinear Schrödinger equations with quadratic interaction, RIMS Kokyuroku Bessatsu **49**(2014), 1-12.
28. (with S. Machihara and H. Wadade) On the Hardy type inequality in critical Sobolev-Lorentz spaces, RIMS Kokyuroku Bessatsu **49**(2014), 103-118.
29. (with J. Fan) A regularity criterion for the Schrödinger map, “Current Trends in Analysis and Its Applications,” Trends in Mathematics, Springer (2015), 217-223.
30. (with J. Fan) A regularity criterion for 3D density-dependent MHD system with zero viscosity, Discrete and Continuous Dynamical Systems, Suppl. (2015), 395-399.  
DOI:10.3934/proc.2015.0395

31. (with K. Fujiwara and S. Machihara) Remark on a semirelativistic equation in the energy space, *Discrete and Continuous Dynamical Systems, Suppl.* (2015), 473-478.  
DOI:10.3934/proc.2015.0473
32. (with J. Fan) Blow-up criterion for 3D Navier-Stokes equations and Landau-Lifshitz system in a bounded domain, "Recent Developments of Mathematical Fluid Mechanics," *Advances in Mathematical Fluid Mechanics*, Birkhäuser-Verlag (2016), 175-182.  
DOI:10.1007/978-3-0348-0939-9\_10
33. (with K. Fujiwara) Remarks on bilinear estimates in the Sobolev spaces, *RIMS Kokyuroku Bessatsu* **56**(2016), 1-9.
34. (with J. Fan) Weak solutions to the time-dependent Ginzburg-Landau-Maxwell equations, *RIMS Kokyuroku Bessatsu* **63**(2017), 23-30.
35. (with N. Bez, C. Jeavons, H. Saito) A conjecture regarding optimal Strichartz estimates for the wave equation, "New Trends in Analysis and Interdisciplinary Applications," *Trends in Mathematics*, Springer (2017), 293-300.
36. (with J. Fan) Uniform regularity for the time-dependent Ginzburg-Landau-Maxwell equations, "New Trends in Analysis and Interdisciplinary Applications," *Trends in Mathematics*, Springer (2017), 301-306.
37. (with J. Fan) A note on regularity criteria for Navier-Stokes system, "Mathematics for Nonlinear Phenomena," Springer (2017), 47-50.
38. (with S. Machihara, H. Wadade) Remarks on the Caffarelli-Kohn-Nirenberg inequalities of the logarithmic type, "The structure of function spaces and its environment," *RIMS Kokyuroku* **2041**(2017), 154-161.
39. (with K. Fujiwara) Lifespan of periodic solutions to nonlinear Schrödinger equations, "Nonlinear Wave and Dispersive Equations," *RIMS Kokyuroku* **2093**(2018), 38-46.
40. (with L. Forcella, K. Fujiwara, V. Georgiev) Blow-up or global existence for the fractional Ginzburg-Landau equation in multi-dimensional case, "New Tools for Nonlinear PDEs and Applications," *Trends in Mathematics*, Birkhäuser (2019), 179-202.
41. (with J. Fan) Well-posedness for a generalized Klein-Gordon-Schrödinger equations, "Advances in Harmonic Analysis and Partial Differential Equations," *Trends in Mathematics*, Birkhäuser, (2020), 309-317.
42. (with J. Fan) Uniform regularity for a compressible Gross-Pitaevskii-Navier-Stokes system, "Nonlinear Partial Differential Equations for Future Applications," *Springer Proceedings of Mathematics and Statistics*, (2021), 95-102.  
[https://doi.org/10.1007/978-981-33-4822-6\\_3](https://doi.org/10.1007/978-981-33-4822-6_3)
43. (with J. Fan) A note on bilinear estimates in the homogeneous Triebel-Lizorkin spaces, *RIMS Kokyuroku Bessatsu*, **B88**(2021), 147-150.

44. (with D. Suragan) The Poincaré-Wirtinger inequality in the framework of equalities, D. Cardona and B. Grajales (Eds.): ICMAM 2022, TM 10, (2024), 139-143.  
[https://doi.org/10.1007/978-3-031-73274-4\\_18](https://doi.org/10.1007/978-3-031-73274-4_18)
45. (with H. Nakazato) Characterization of the time-dependent free Schrödinger operator by the Galilei invariance, Proceedings of ICIAM2023, Springer, (in press)