

Katsuro Tachibana

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6470140/publications.pdf>

Version: 2024-02-01

110
papers

4,815
citations

101543
36
h-index

98798
67
g-index

114
all docs

114
docs citations

114
times ranked

3440
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Local Delivery of Plasmid DNA Into Rat Carotid Artery Using Ultrasound. Circulation, 2002, 105, 1233-1239. | 1.6 | 475 |
| 2 | Induction of cell-membrane porosity by ultrasound. Lancet, The, 1999, 353, 1409. | 13.7 | 419 |
| 3 | Albumin Microbubble Echo-Contrast Material as an Enhancer for Ultrasound Accelerated Thrombolysis. Circulation, 1995, 92, 1148-1150. | 1.6 | 299 |
| 4 | Gene Transfer with Echo-enhanced Contrast Agents: Comparison between Albunex, Optison, and Levovist in Mice—Initial Results. Radiology, 2003, 229, 423-428. | 7.3 | 215 |
| 5 | Sonodynamic therapy. Ultrasonics, 2008, 48, 253-259. | 3.9 | 189 |
| 6 | Enhancement of ultrasound-induced apoptosis and cell lysis by echo-contrast agents. Ultrasound in Medicine and Biology, 2003, 29, 331-337. | 1.5 | 156 |
| 7 | Ultrasound activation of TiO ₂ in melanoma tumors. Journal of Controlled Release, 2011, 149, 190-195. | 9.9 | 145 |
| 8 | Transdermal delivery of insulin to alloxan-diabetic rabbits by ultrasound exposure. Pharmaceutical Research, 1992, 09, 952-954. | 3.5 | 144 |
| 9 | Induction of Reparative Dentin Formation by Ultrasound-Mediated Gene Delivery of Growth/Differentiation Factor 11. Human Gene Therapy, 2003, 14, 591-597. | 2.7 | 127 |
| 10 | The Use of Ultrasound for Drug Delivery. Echocardiography, 2001, 18, 323-328. | 0.9 | 111 |
| 11 | Gene Transfer to Corneal Epithelium and Keratocytes Mediated by Ultrasound with Microbubbles. , 2006, 47, 558. | | 106 |
| 12 | An efficient gene transfer method mediated by ultrasound and microbubbles into the kidney. Journal of Gene Medicine, 2005, 7, 108-116. | 2.8 | 103 |
| 13 | Enhancement of Fibrinolysis with Ultrasound Energy. Journal of Vascular and Interventional Radiology, 1992, 3, 299-303. | 0.5 | 102 |
| 14 | Transdermal delivery of insulin by ultrasonic vibration. Journal of Pharmacy and Pharmacology, 2011, 43, 270-271. | 2.4 | 101 |
| 15 | Enhanced cytotoxic effect of Ara-C by low intensity ultrasound to HL-60 cells. Cancer Letters, 2000, 149, 189-194. | 7.2 | 91 |
| 16 | A novel strategy utilizing ultrasound for antigen delivery in dendritic cell-based cancer immunotherapy. Journal of Controlled Release, 2009, 133, 198-205. | 9.9 | 85 |
| 17 | Use of Ultrasound to Enhance the Local Anesthetic Effect of Topically Applied Aqueous Lidocaine. Anesthesiology, 1993, 78, 1091-1096. | 2.5 | 81 |
| 18 | Gene therapy for hepatocellular carcinoma using sonoporation enhanced by contrast agents. Cancer Gene Therapy, 2005, 12, 884-889. | 4.6 | 80 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Application of Ultrasound Energy as a New Drug Delivery System. Japanese Journal of Applied Physics, 1999, 38, 3014-3019. | 1.5 | 76 |
| 20 | <i>In Vivo</i> Gene Transfer into Muscle via Electro-Sonoporation. Human Gene Therapy, 2002, 13, 2079-2084. | 2.7 | 73 |
| 21 | Local delivery of E2F decoy oligodeoxynucleotides using ultrasound with microbubble agent (Optison) inhibits intimal hyperplasia after balloon injury in rat carotid artery model. Biochemical and Biophysical Research Communications, 2004, 317, 508-514. | 2.1 | 73 |
| 22 | High-resolution scanning electron microscopic evaluation of cell-membrane porosity by ultrasound. Medical Electron Microscopy: Official Journal of the Clinical Electron Microscopy Society of Japan, 2001, 34, 249-253. | 1.8 | 63 |
| 23 | Identification of genes responsive to low intensity pulsed ultrasound in a human leukemia cell line Molt-4. Cancer Letters, 2007, 246, 149-156. | 7.2 | 63 |
| 24 | Enhancement of cell killing of HL-60 cells by ultrasound in the presence of the photosensitizing drug Photofrin II. Cancer Letters, 1993, 72, 195-199. | 7.2 | 61 |
| 25 | Microbubble-enhanced sonoporation: Efficient gene transduction technique for chick embryos. Genesis, 2003, 37, 91-101. | 1.6 | 57 |
| 26 | Cessation of gastrulation is mediated by suppression of epithelial-mesenchymal transition at the ventral ectodermal ridge. Development (Cambridge), 2007, 134, 4315-4324. | 2.5 | 57 |
| 27 | Scanning electron microscopic evaluation of the skin surface after ultrasound exposure. , 1997, 247, 455-461. | | 55 |
| 28 | Eliminating adult T-cell leukaemia cells with ultrasound. Lancet, The, 1997, 349, 325. | 13.7 | 54 |
| 29 | Optimized ultrasound-mediated gene transfection in cancer cells. Cancer Science, 2006, 97, 1111-1114. | 3.9 | 54 |
| 30 | Combination of ultrasound and bubble liposome enhance the effect of doxorubicin and inhibit murine osteosarcoma growth. Cancer Biology and Therapy, 2011, 12, 270-277. | 3.4 | 54 |
| 31 | Optical observation of cell sonoporation with low intensity ultrasound. Biochemical and Biophysical Research Communications, 2011, 413, 218-223. | 2.1 | 51 |
| 32 | Prophylactic immunization with Bubble liposomes and ultrasound-treated dendritic cells provided a four-fold decrease in the frequency of melanoma lung metastasis. Journal of Controlled Release, 2012, 160, 362-366. | 9.9 | 51 |
| 33 | Inhibition of melanoma by ultrasound-microbubble-aided drug delivery suggests membrane permeabilization. Cancer Biology and Therapy, 2007, 6, 1282-1289. | 3.4 | 46 |
| 34 | In vitro transfer of antisense oligodeoxynucleotides into coronary endothelial cells by ultrasound. Biochemical and Biophysical Research Communications, 2002, 298, 587-590. | 2.1 | 43 |
| 35 | Acute effects of sono-activated photocatalytic titanium dioxide nanoparticles on oral squamous cell carcinoma. Ultrasonics Sonochemistry, 2016, 32, 95-101. | 8.2 | 43 |
| 36 | Genetic networks responsive to low-intensity pulsed ultrasound in human lymphoma U937 cells. Cancer Letters, 2008, 270, 286-294. | 7.2 | 40 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Sound waves and antineoplastic drugs: The possibility of an enhanced combined anticancer therapy. <i>Journal of Medical Ultrasonics</i> (2001), 2002, 29, 173-187. | 1.3 | 38 |
| 38 | Reparable Cell Sonoporation in Suspension: Theranostic Potential of Microbubble. <i>Theranostics</i> , 2016, 6, 446-455. | 10.0 | 36 |
| 39 | Targeted sonodynamic therapy of cancer using a photosensitizer conjugated with antibody against carcinoembryonic antigen. <i>Anticancer Research</i> , 2002, 22, 1575-80. | 1.1 | 36 |
| 40 | Emerging Technologies in Therapeutic Ultrasound: Thermal Ablation to Gene Delivery. <i>Human Cell</i> , 2004, 17, 7-15. | 2.7 | 35 |
| 41 | Evaluation and comparison of three novel microbubbles: Enhancement of ultrasound-induced cell death and free radicals production. <i>Ultrasonics Sonochemistry</i> , 2009, 16, 372-378. | 8.2 | 31 |
| 42 | A study of the efficacy of ultrasonic waves in removing biofilms. <i>Gerodontology</i> , 2010, 27, 199-206. | 2.0 | 30 |
| 43 | Synergistic inhibition of malignant melanoma proliferation by melphalan combined with ultrasound and microbubbles. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 1218-1224. | 8.2 | 25 |
| 44 | Ultrasound stimulation restores impaired neovascularization-related capacities of human circulating angiogenic cells. <i>Cardiovascular Research</i> , 2012, 95, 448-459. | 3.8 | 25 |
| 45 | Elimination of adult T cell leukemia cells by ultrasound in the presence of porfimer sodium. <i>Anti-Cancer Drugs</i> , 1997, 8, 329-335. | 1.4 | 24 |
| 46 | Biomolecular Effects of Low-Intensity Ultrasound: Apoptosis, Sonotransfection, and Gene Expression. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 4435. | 1.5 | 24 |
| 47 | Liver tissue damage by ultrasound in combination with the photosensitizing drug, Photofrin II. <i>Cancer Letters</i> , 1994, 78, 177-181. | 7.2 | 23 |
| 48 | Use of ultrasound in drug delivery systems: emphasis on experimental methodology and mechanisms. <i>International Journal of Hyperthermia</i> , 2012, 28, 282-289. | 2.5 | 22 |
| 49 | Nanobubble Mediated Gene Delivery in Conjunction With a Hand-Held Ultrasound Scanner. <i>Frontiers in Pharmacology</i> , 2020, 11, 363. | 3.5 | 21 |
| 50 | Cavitation-threshold Determination and Rheological-parameters Estimation of Albumin-stabilized Nanobubbles. <i>Scientific Reports</i> , 2018, 8, 7472. | 3.3 | 20 |
| 51 | Antitumor effect of TNP-470, an angiogenesis inhibitor, combined with ultrasound irradiation for human uterine sarcoma xenografts evaluated using contrast color Doppler ultrasound. <i>Cancer Science</i> , 2007, 98, 929-935. | 3.9 | 19 |
| 52 | Selective Gene Transfer to the Retina Using Intravitreal Ultrasound Irradiation. <i>Journal of Ophthalmology</i> , 2012, 2012, 1-5. | 1.3 | 19 |
| 53 | Synergistic effect of ultrasound and antibiotics against <i>Chlamydia trachomatis</i> -infected human epithelial cells in vitro. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 425-430. | 8.2 | 18 |
| 54 | Therapeutic potential of low-intensity ultrasound (part 1): thermal and sonomechanical effects. <i>Journal of Medical Ultrasonics</i> (2001), 2008, 35, 153-160. | 1.3 | 17 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | High-Intensity Focused Ultrasound in the Treatment of Breast Cancer. <i>Current Medicinal Chemistry</i> , 2021, 28, 5179-5188. | 2.4 | 17 |
| 56 | Ultrasound-mediated interferon β gene transfection inhibits growth of malignant melanoma. <i>Biochemical and Biophysical Research Communications</i> , 2011, 411, 137-142. | 2.1 | 16 |
| 57 | Enhanced cell killing and apoptosis of oral squamous cell carcinoma cells with ultrasound in combination with cetuximab coated albumin microbubbles. <i>Journal of Drug Targeting</i> , 2018, 26, 278-288. | 4.4 | 16 |
| 58 | T-stem cell leukemia/lymphoma with both myeloid lineage conversion and T-specific γ recombination. <i>Leukemia Research</i> , 1997, 21, 763-773. | 0.8 | 15 |
| 59 | Low-intensity ultrasound adjuvant therapy: enhancement of doxorubicin-induced cytotoxicity and the acoustic mechanisms involved. <i>Journal of Medical Ultrasonics</i> (2001), 2009, 36, 61. | 1.3 | 15 |
| 60 | Effects of polyphenols on doxorubicin-induced oral keratinocyte cytotoxicity and anticancer potency against oral cancer cells. <i>Journal of Oral Pathology and Medicine</i> , 2018, 47, 368-374. | 2.7 | 15 |
| 61 | Sonothrombolysis for Intraocular Fibrin Formation in an Animal Model. <i>Ultrasound in Medicine and Biology</i> , 2009, 35, 1845-1853. | 1.5 | 13 |
| 62 | Hypotonia-induced cell swelling enhances ultrasound-induced mechanical damage to cancer cells. <i>Journal of Medical Ultrasonics</i> (2001), 2010, 37, 3-8. | 1.3 | 13 |
| 63 | Study of cellular response induced by low intensity ultrasound frequency sweep pattern on myelomonocytic lymphoma U937 cells. <i>Journal of Ultrasound</i> , 2016, 19, 167-174. | 1.3 | 12 |
| 64 | Echographic and physical characterization of albumin-stabilized nanobubbles. <i>Heliyon</i> , 2019, 5, e01907. | 3.2 | 12 |
| 65 | Metronomic irinotecan chemotherapy combined with ultrasound irradiation for a human uterine sarcoma xenograft. <i>Cancer Science</i> , 2011, 102, 452-459. | 3.9 | 10 |
| 66 | Bio-effects of non-ionizing electromagnetic fields in context of cancer therapy. <i>Frontiers in Bioscience - Elite</i> , 2014, E6, 175-184. | 1.8 | 10 |
| 67 | Predictors of safety margin for coracoid transfer: a cadaveric morphometric analysis. <i>Journal of Orthopaedic Surgery and Research</i> , 2019, 14, 174. | 2.3 | 10 |
| 68 | Anatomical study of the position and orientation of the coracoclavicular ligaments: Differences in bone tunnel position by gender. <i>Orthopaedics and Traumatology: Surgery and Research</i> , 2019, 105, 275-280. | 2.0 | 10 |
| 69 | Influence of Nanobubble Size Distribution on Ultrasound-Mediated Plasmid DNA and Messenger RNA Gene Delivery. <i>Frontiers in Pharmacology</i> , 2022, 13, . | 3.5 | 9 |
| 70 | Hyperthermia enhances bortezomib-induced apoptosis in human white blood cancer cells. <i>Journal of Thermal Biology</i> , 2017, 67, 9-14. | 2.5 | 8 |
| 71 | Optimization of enhancement of therapeutic efficacy of ultrasound: Frequency-dependent effects on iodine formation from KI-starch solutions and ultrasound-induced killing of rat thymocytes. <i>Journal of Medical Ultrasonics</i> (2001), 2003, 30, 93-101. | 1.3 | 7 |
| 72 | Therapeutic potential of low-intensity ultrasound (part 2): biomolecular effects, sonotransfection, and sonopermeabilization. <i>Journal of Medical Ultrasonics</i> (2001), 2008, 35, 161-167. | 1.3 | 7 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Differential cytotoxicity and sonosensitization by sanazole: effect of cell type and acoustic parameters. <i>Journal of Medical Ultrasonics</i> (2001), 2011, 38, 65-72. | 1.3 | 7 |
| 74 | Confirmation of enhanced expression of heme oxygenase-1 gene induced by ultrasound and its mechanism: analysis by cDNA microarray system, real-time quantitative PCR, and Western blotting. <i>Journal of Medical Ultrasonics</i> (2001), 2006, 33, 3-10. | 1.3 | 6 |
| 75 | Enhanced mechanical damage to in vitro cancer cells by high-intensity-focused ultrasound in the presence of microbubbles and titanium dioxide. <i>Journal of Medical Ultrasonics</i> (2001), 2015, 42, 449-455. | 1.3 | 6 |
| 76 | Ultrasound Energy for Enhancement of Fibrinolysis and Drug Delivery: Special Emphasis on the Use of a Transducer-Tipped Ultrasound System. <i>Developments in Cardiovascular Medicine</i> , 1996, , 121-133. | 0.1 | 6 |
| 77 | Azaspirene analogs inhibit the growth of human uterine carcinosarcoma in vitro and in vivo. <i>Anticancer Research</i> , 2015, 35, 2739-46. | 1.1 | 6 |
| 78 | The Sonochemical and Biological Effects of Three Clinically-Used Contrast Agents. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 07HF23. | 1.5 | 5 |
| 79 | Low-intensity pulsed ultrasound enhances cell killing induced by X-irradiation. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 40-42. | 8.2 | 5 |
| 80 | Apoptotic and genotoxic effects of low-intensity ultrasound on healthy and leukemic human peripheral mononuclear blood cells. <i>Journal of Medical Ultrasonics</i> (2001), 2018, 45, 31-39. | 1.3 | 5 |
| 81 | Where and what damage occurs at the acromial undersurface in patients with rotator cuff tears?. <i>Journal of Shoulder and Elbow Surgery</i> , 2020, 29, 2065-2071. | 2.6 | 5 |
| 82 | Efficient delivery of signal-responsive gene carriers for disease-specific gene expression via bubble liposomes and sonoporation. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 160, 60-64. | 5.0 | 4 |
| 83 | Enhanced effect of recombinant human soluble thrombomodulin by ultrasound irradiation in acute liver failure. <i>Scientific Reports</i> , 2020, 10, 1742. | 3.3 | 4 |
| 84 | Ultrasound therapy for stroke and regenerative medicine. <i>International Congress Series</i> , 2004, 1274, 153-158. | 0.2 | 3 |
| 85 | Molecular Therapy Using Ultrasound : Mechanisms Involved in Drug Activation, Apoptosis Induction, Gene Transfer, and Alterations of Gene Expression. <i>Thermal Medicine</i> , 2007, 23, 113-122. | 0.1 | 3 |
| 86 | Growth inhibition of neurofibroma by ultrasound-mediated interferon β transfection. <i>Journal of Medical Ultrasonics</i> (2001), 2009, 36, 3-8. | 1.3 | 3 |
| 87 | Advanced Chemoembolization by Anti-angiogenic Calcium-Phosphate Ceramic Microspheres Targeting the Vascular Heterogeneity of Cancer Xenografts. <i>Anticancer Research</i> , 2015, 35, 4757-64. | 1.1 | 3 |
| 88 | EMERGING TECHNOLOGIES USING ULTRASOUND FOR DRUG DELIVERY. , 2006, , 131-166. | | 2 |
| 89 | Study of cellular response induced by frequency change of low intensity ultrasound. , 2015, , . | | 2 |
| 90 | Recent Trends in Application of Encapsulated Ultrafine Bubbles in Medicine. , 2021, , 215-235. | | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Low-intensity ultrasound inhibits melanoma cell proliferation in vitro and tumor growth in vivo. Journal of Medical Ultrasonics (2001), 2021, 48, 451-461. | 1.3 | 2 |
| 92 | Emerging Technologies in Therapeutic Ultrasound. Choonpa Igaku, 2006, 33, 631-639. | 0.0 | 2 |
| 93 | Differences in the Behavior of Attached and Floating Cells Subjected to Low Intensity Ultrasound. International Journal of Pharma Medicine and Biological Sciences, 2017, 6, 7-10. | 0.2 | 2 |
| 94 | Biological Effects of Ultrasound: Sonomechanical Mechanism, and Its Implications on Therapy and Biosafety. AIP Conference Proceedings, 2006, , . | 0.4 | 1 |
| 95 | Sonoporation for Gene Transfer into Embryos. Cold Spring Harbor Protocols, 2011, 2011, prot5581. | 0.3 | 1 |
| 96 | Induction of Apoptosis in U937 Cells by Using a Combination of Bortezomib and Low-Intensity Ultrasound. Medical Science Monitor, 2016, 22, 5049-5057. | 1.1 | 1 |
| 97 | Therapeutic Ultrasound. Neurosonology, 2003, 16, 146-151. | 0.0 | 1 |
| 98 | Ultrasound-Induced DNA Damage and Cellular Response: Historical Review, Mechanisms Analysis, and Therapeutic Implications. Radiation Research, 2022, 197, . | 1.5 | 1 |
| 99 | In Vivo-Simulated Sonotransfection and the Effect of Gamma Interferon Gene on Neurofibroma Proliferation. AIP Conference Proceedings, 2007, , . | 0.4 | 0 |
| 100 | 1498: Hypotonia-Induced Cell Swelling Enhances Ultrasound-Induced Mechanical Damage on Cancers Cells. Ultrasound in Medicine and Biology, 2009, 35, S235. | 1.5 | 0 |
| 101 | Turbidity measurements on suspended lipid microbubble populations subjected to ultrasound. , 2011, , . | | 0 |
| 102 | Influence of Waveform on Cell Viability during Ultrasound Exposure. , 2011, , . | | 0 |
| 103 | Notice of Removal: Novel non-shelled nanobubbles as a new ultrasound imaging and drug delivery tool. , 2018, , . | | 0 |
| 104 | Research on gene therapy using ultrasound and nanobubbles. Neurosonology, 2021, 34, 77-79. | 0.0 | 0 |
| 105 | Development of therapeutics using ultrasound techniques. Neurosonology, 2010, 23, 97-100. | 0.0 | 0 |
| 106 | Abstract 139: Ultrasound Stimulation Restores Impaired Neovascularization-Related Capacities of Human Circulating Angiogenic Cells. Circulation Research, 2012, 111, . | 4.5 | 0 |
| 107 | Basic research on a new therapy system combining ultrasound and drug delivery. Choonpa Igaku, 2013, 40, 463-471. | 0.0 | 0 |
| 108 | 1A44 Cell membrane poration by microbubble oscillation. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 43. | 0.0 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Numerical Simulation for Generation Mechanism of Ultrafine Bubble by High-Speed Stirring. Japanese Journal of Multiphase Flow, 2018, 32, 247-253. | 0.3 | 0 |
| 110 | Part 19. How to become a good medical ultrasound scientist. Choonpa Igaku, 2019, 46, 333-336. | 0.0 | 0 |