

## 【著 書】

1. Nishigami K, Nakatani T, Chiku M, Mori H: A Novel Micro-Angiography Detecting Angiogenesis, Application for Autologous Bone Marrow Mononuclear Cells Transplantation in the Patients with Critical Limb Ischemia. *Cardiovascular Regeneration Therapies Using Tissue Engineering Approaches* (Ed by Mori H, Matsuda H), Springer, 東京, 2005.

## (研究業績「和文」)

### 【原 著】

1. 佐藤英一, 林保臣, 小原春雄, 田中越郎, 盛英三, 河合敏昭, 井上敬, 小川彰, 佐藤成大, 市丸俊夫, 高山和喜, 臼杵辰巳, 佐藤公悦: シンクロトロンにかわる医用単色 X 線装置の開発と応用 (総説). *医学物理*. 25(supl.4): 25-38, 2005.
2. 宮原義典, 盛英三, 永谷憲歳: 日本型移植医療をどう作るか—細胞・組織・臓器 心血管疾患における細胞—遺伝子ハイブリッド治療(総説). *循環器専門医*. 13: 33-39, 2005.
3. 竹下聡: 血管新生療法. *治療学*. 39: 775-777, 2005.
4. 盛英三, 武田壮一, 五十嵐智子, 柴田洋之: 特発性心筋症の原因解明と治療法開発に向けた構造生物学的アプローチ (総説). *医学のあゆみ*. 217(8): 819-824, 2006.
5. 盛英三, 望月直樹, 武田壮一, 井上裕康, 中村俊, 土屋利江: 特集: ナノテクノロジーと医療 ナノレベルイメージングによる分子構造と機能の解析 (総説). *日本臨床*. 64: 358-364, 2006.
6. 菅弘之, 盛英三, 馬場嘉信, 杉町勝: ナノメディスン・プロジェクト—厚生労働省指定型ナノメディスン・プロジェクトを中心にして—. *分子心血管病*. 7(4): 327-339, 2006.
7. 盛英三, 武田壮一, 若林繁夫, 井上裕康, ユーセフベンアマー, 松原孝宜, 五十嵐智子, 柴田洋之:

疾患関連蛋白のサブナノ構造イメージングと分子標的薬剤の開発; ナノイメージング構造(総説). *分子心血管病*. 7(4): 340-346, 2006.

8. 石田良雄, 福島和人, 木曾啓祐, 佐合正義, 三宅義徳: FDG-PET の臨床—循環器. *臨床画像*. 23(11): 76-91, 2007.
9. 石田良雄, 木曾啓祐, 福島和人, 西村圭弘: [心筋機能評価] 心筋イメージング法を用いた心機能評価. *Clinical Engineering*. 18(9): 960-966, 2007.
10. 飯田秀博, 渡部浩司, 赤松哲哉, 中澤真弓, 松原佳亮, 竹内朝子, 岩田倫明, 林拓也, 横田千晶, 福島和人, 福本真司: SPECT を使った脳機能画像の定量化と標準化【脳虚血と SPECT/PET】. *脳神経外科ジャーナル*. 16(10): 742-752, 2007.

## 【著 書】

1. 知久正明, 西上和宏, 内藤博昭, 盛英三, 佐藤英一: 細胞, 組織, 臓器の評価法 画像解析 微小血管造影 (解説・特集), *再生医療へのブレイクスルー その革新技术と今後の方向性, 遺伝子医学 MOOK*, (Ed by 田畑泰彦), メディカルドゥ, 大阪, 1: 223-227, 2004.

## (学会発表)

### 【海外】

1. Akiyama T, Yamazaki T, Mori H: "Large-conductance Ca<sup>2+</sup>-activated K<sup>+</sup> channels regulate the in vivo sympathetic ganglionic transmission", 78th Annual Scientific Session of the American Heart Association (AHA), Dallas (Texas), 2005.11.
2. Mori H, Chiku M, Nishigami K: "Novel micro-angiography for clinical therapeutic angiogenesis (一般演題)", 2nd World Congress on Regenerative medicine, Leipzig (Germany),

- 2005.5.
3. Sukmawan R, Yada T, Neishi Y, Kume T, Toyota E, Shinozaki Y, Mori H, Akasaka T, Ogasawara Y, Yoshida K: "Edaravone preserves coronary microvascular endothelial function under ischemia reperfusion injury in vivo beating canine heart by scavenging reactive oxygen species ", 78th Annual Scientific Session of the American Heart Association (AHA), Dallas (Texas), 2005.11.
  4. Yada T, Shimokawa H, Hiramatsu O, Goto M, Ogasawara Y, Kajiya F, Mori H, Shinozaki Y: "Cardioprotective role of hydrogen peroxide as an endogenous EDHF, during ischemia-reperfusion injury in canine coronary microcirculation in vivo", 78th Annual Scientific Session of the American Heart Association (AHA), Dallas (Texas), 2005.11.
  5. Yada T, Shimokawa H, Hiramatsu O, Goto M, Ogasawara Y, Shinozaki Y, Mori H: "Role of hydrogen peroxide as an Endogenous EDHF during pacing-induced metabolic dilatation in canine coronary microcirculation in vivo", 78th Annual Scientific Session of the American Heart Association (AHA), Dallas (Texas), 2005.11.
  6. Mori H: "Structural Biological Approach to Fundamental Protein in Human Diseases Explores Nanophysiology and Nanomedicine", 2nd Annual Meeting of the American Academy of Nanomedicine, Washington DC, 2006.9.
  7. Amino M, Yoshioka K, Matsuzaki A, Tanabe T, Tanaka E, Mori H, Furusawa Y, Zareba W, Honjo H, Yamazaki M, Nakagawa H, Yasui K, Kodama I: "Antiarrhythmic Cx43 up-regulation by radiation in rabbit", Scientific Sessions 2006, Illinois (Chicago), 2006.11.
  8. Obata H, Sakai Y, Ohnishi S, Takeshita S, Mori H, Kodama M, Aizawa Y, Nagaya N: "Single administration of novel sustained-release prostacyclin analogue attenuates monocrotaline-induced pulmonary hypertension in rats", Scientific sessions 2006, Illinois (Chicago), 2006.11.
  9. Sukmawan R, Yada T, Toyota E, Neishi Y, Kume T, Haruna Y, Kashihara N, Mori H, Shinozaki Y, Ogasawara Y, Okura H, Yoshida K: "Edaravone preserves coronary microvascular nitric oxide availability and myocardial eNOS on ischemia/reperfusion injury in canine heart", Scientific sessions 2006, Illinois (Chicago), 2006.11.
  10. Yada T, Shimokawa H, Hiramatsu O, Shinozaki Y, Mori H, Goto M, Ogasawara Y, Kajiya F: "Crucial role of hydrogen peroxide as an endogenous endothelium-derived hyperpolarizing factor during pacing-induced metabolic dilatation in canine coronary microvessels in vivo", Scientific sessions 2006, Illinois (Chicago), 2006.11.
- 【国内】
1. Ben Ammar Y, Takeda S, Mori H, Wakabayashi S: "Crystal structure of CHP2 complexed with cytoplasmic binding region of Na<sup>+</sup>/H<sup>+</sup> exchanger NHE1", 第五回日本蛋白質科学会, 福岡市, 2005.6.
  2. Igarashi T, Takeda S, Araki S, Oishi Y, Mori H: "血管内皮細胞のアポトーシスを誘導するヘビ毒メタロプロテアーゼの X 線結晶構造解析", 第五回日本蛋白質科学会年会, 福岡, 2005.6.
  3. Masuda M, Takeda S, Sone M, Kamioka Y, Ohki T, Mori H, Mochizuki N: "Endophilin BAR domain uses two mechanisms to drive

- membrane curvature." 日本細胞生物学会, 大宮市, 2005.6.
4. Takeda S, Masuda M, Sone M, Kamioka Y, Ohki T, Mori H, Mochizuki N: "Crystal structure of Endophilin BAR domain: two mechanisms to drive membrane curvature", 第五回日本蛋白質科学会, 福岡市, 2005.6.
  5. 五十嵐智子, 武田壮一, 荒木聡彦, 大石裕子, 盛英三: "血管内皮細胞のアポトーシスを誘導するヘビ毒メタロプロテアーゼの X 線結晶構造析", 日本生物物理学会第 43 回年会, 北海道, 2005.11.
  6. 武田壮一, 増田道隆, 曾根麻奈美, 上岡雄治, 大木高志, 盛英三, 望月直樹: "エンドフィリン BAR ドメインの結晶構造: 脂質二重膜を曲げる二つの機構", 日本生物物理学会第 43 回年会, 札幌市, 2005.11.
  7. 五十嵐智子, 武田壮一, 盛英三: "Crystal structure of the N-terminal domain of human cardiac troponin C in complex with acalcium-sensitizer trifluoperazine", The 22nd Annual Meeting of the Japanese Section of the International Society of Heart Research, 大阪, 2005.12.
  8. Chiku M: "Evaluation of novel micro-angiography for clinical therapeutic angiogenesis", 日本循環器学会総会, 横浜, 2005.3.19.
  9. 神谷千津子, 林富貴雄, 田中良一, 坏宏一, 竹下聡, 野々木宏: "浅大腿膝窩動脈領域を主病変とする閉塞性動脈硬化症への治療戦略", 第 46 回日本脈管学会総会, 大阪, 2005.12.1.
  10. 神谷千津子, 林富貴雄, 坏宏一, 竹下聡, 野々木宏: "日本語 WIQ による症状転帰からみた PTA 適応の検討", 第 46 回日本脈管学会総会, 大阪, 2005.12.1.
  11. 竹下聡: "血管を診るー末梢動脈疾患の診断と治療ー", 心血管病・病診連携講演会, 長崎, 2005.10.14.
  12. 竹下聡: "末梢動脈疾患の診断と治療ーカテーテル合併症から再生医療までー", 第 53 回県央循環器検討会, 長崎, 2005.9.22.
  13. 竹下聡: "虚血下肢に対する血管新生療法", 厚生労働科学研究推進事業: 一般向け講演会 ここまできた心臓と血管を蘇らせる再生医療, 大阪, 2005.9.12.
  14. 林富貴雄, 竹下聡, 坏宏一, 野々木宏: "エビデンスに基づく閉塞性動脈硬化症の治療戦略" 間歇性跛行肢に対する運動療法の有用性", 第 46 回日本脈管学会総会, 大阪, 2005.12.1.
  15. Mori H: "Structural biological approach to approach cardiovascular disease (Invited Lecture)", 13th World Congress on Heart Disease, Vancouver, Canada, 2007.7.
  16. Yada T, Shimokawa H, Hiramatsu O, Shinozaki Y, Mori H, Goto M, Ogasawara Y, Kajiya F: "Protective role of hydrogen peroxide and erythropoietin during acute coronary occlusion/Reperfusion in native coronary collateral circulation in dogs in vivo", American Heart Association, Orland, Florida, 2007.11.
  17. Yada T, Shimokawa H, Morikawa K, Takaki A, Shinozaki Y, Mori H, Goto M, Ogasawara Y, Kajiya F: "Crucial role of Cu/Zn-SOD in the synthesis of endothelium-derived hyperpolarizing factor (EDHF) during reactive hyperemia in mouse mesenteric microcirculation in vivo", American Heart Association, Orland, Florida, 2007.11.
  18. 松原孝宜, 金相佑, 盛英三, 井上裕康: "Expression and purification of proteins related to arachidonate cascade for development of novel drugs", 第 4 回ナノテクノロジー総合シンポジウム, 東京, 2006.2.

19. Akiyama T, Yamazaki T, Mori H: "Intravenous Mg<sup>2+</sup> infusion inhibits adrenal catecholamine release by acting on both pre- and post-ganglionic sites", 第 83 回日本生理学会大会, S134, 群馬, 2006.3.
20. Nishiura N, Mori H: "The modification of traditional device to record the force and length in small animal's isolated papillary muscle", 第 83 回日本生理学会大会, S134, 群馬, 2006.3.
21. Schwenke DO, Pearson JT, Mori H, Shirai M: "Long-term monitoring of pulmonary arterial pressure in conscious, unrestrained mice", 第 83 回日本生理学会大会, S134, 群馬, 2006.3.
22. Amino M, Yoshioka K, Matsuzaki A, Tanabe T, Mori H, Tanaka E, Furusawa Y, Yamazaki M, Nakagawa H, Honjou H, Lee J-k, Yasui K, Kamiya K, Kodama I: "Heavy Ion Radiation Upregulates Connexin43 and Ameliorates the Substrates for VT/VF in Rabbit Hearts after Myocardial Infarction", 第 70 回日本循環器学会・学術集会, 415, 名古屋, 2006.03.
23. Kataoka M, Nagaya N, Tanaka K, Miyahara Y, Mori H: "Adipose Tissue-derived Endothelial Like Cells for Treatment of Pulmonary Hypertension in Rats", 第 70 回日本循環器学会・学術集会, 279, 名古屋, 2006.03.
24. Kataoka M, Nagaya N, Tanaka K, Miyahara Y, Mori H: "Transplantation of Adipose Tissue-derived Endothelial Like Cells Improves Cardiac Function in Rats with Acute Myocardial Infarction through Angiogenesis and Myogenesis", 第 70 回日本循環器学会・学術集会, 52, 名古屋, 2006.3.
25. Miyahara Y, Nagaya N, Mori H: "Therapeutic Potency of Intramyocardial Sustained Delivery of Insulin-like Growth Factor-1 for Myocardial Infarction", 第 70 回日本循環器学会・学術集会, 315, 名古屋, 2006.03.
26. Miyahara Y, Nagaya N, Mori H: "Insulin-like Growth Factor-1 Enhances Therapeutic Potency of Mesenchymal Stem Cell Transplantation for Myocardial Infarction", 第 70 回日本循環器学会・学術集会, 408, 名古屋, 2006.03.
27. Miyamoto K, Takeshita S, Kasai S, Akutsu K, Hayashi T, Chiku M, Nishigami K, Mori H, Nakatani T, Nonogi H, Tomoike H: "Long-term Results of Autologous Transplantation of Bone Marrow Mononuclear Cells for Patients with Thromboangiitis Obliterans", 第 70 回日本循環器学会・学術集会, 630-631, 名古屋, 2006.03.
28. Sukmawan R, Yada T, Toyota E, Kume T, Mori H, Ogasawara Y, Yoshida K: "Scavenging Reactive Oxygen Species by Edaravone Preserves Coronary Microvascular Endothelial Function Myocardial eNOS Expression on Ischemia/Reperfusion Injury In Vivo Beating Canine Heart", 第 70 回日本循環器学会・学術集会, 52, 名古屋, 2006.03.
29. Tanaka K, Mori H, Nagaya N: "Mesenchymal Stem Cells Not Only Regenerate Functional Cardiomyocytes but Also Have Paracrine Effects on Resident Myocytes in the Infarcted Myocardium", 第 70 回日本循環器学会・学術集会, 558, 名古屋, 2006.03.
30. Yada T, Shimokawa H, Hiramatsu O, Shinozaki Y, Mori H, Goto M, Ogasawara Y, Kajiyama F: "Crucial Role of Hydrogen Peroxide as an Endogenous EDHF during Pacing-Induced Metabolic Dilatation in Canine Coronary Microvessels in Vivo", 第 70 回日本循環器学会・学術集会, 201, 2006.03.
31. Yada T, Shimokawa H, Hiramatsu O,

- Shinozaki Y, Mori H, Goto M, Ogasawara Y, Kajiya F: "Cardioprotective Role of Hydrogen Peroxide as an Endogenous EDHF during Ischemia-reperfusion Injury in Canine Coronary Microvessels in Vivo", 第70回日本循環器学会・学術集会, 472, 名古屋, 2006.03.
32. 小幡裕明, 酒井芳紀, 大西俊介, 竹下聡, 盛英三, 小玉誠, 相澤義房, 永谷憲歳: "長期作用型プロスタサイクリンアゴニストの開発と肺高血圧モデルに対する効果の検討", 第79回日本内分泌学会学術総会, 511, 神戸, 2006.05.
33. 松原孝宜, 竹内悠, 金相佑, 盛英三, 井上裕康: "植物性ポリフェノールと核内受容体 PPAR の相互作用の検討", 日本ビタミン学会第58回大会, 246, 2006.05.
34. 福島和人, 盛英三, 杉村和朗: "脈管画像診断の最近の進歩 放射光微小血管造影装置による諸臓器の微細血管構築の観察", 第47回日本脈管学総会, S78, 神戸, 2006.10.21.
35. 福島和人, 盛英三, 川嶋成乃亮, 杉村和朗: "糖尿病ラットおよび高血圧ラットにおける冠血管機能の評価:放射光単色 X線微小血管造影法による検討", 第47回日本脈管学総会, S122, 神戸, 2006.10.21.
36. Kuroko Y, Yamazaki T, Tokunaga N, Akiyama T, Ishino K, Sano S, Mori H: "ポスター: Cariporide reduces myocardial norepinephrine efflux and myoglobin release evoked by ischemia and reperfusion", 第71回日本循環器学会総会・学術集会, 兵庫・神戸, 2007.3.
37. Nishiura N, Mori H: "ポスター: The modification of the measuring system in small animal isolated papillary muscle (II)", 第84回日本生理学会大会, 大阪, 2007.3.
38. Yada T, Hiramatsu O, Shinozaki Y, Mori H, Goto M, Ogasawara Y, Kajiya F: "一般演題: Role of endogenous hydrogen peroxide in tachypacing-induced metabolic coronary vasodilatation in canine coronary microcirculation in vivo", 第71回日本循環器学会総会・学術集会, 兵庫・神戸, 2007.3.
39. Yada T, Shimokawa H, Morikawa K, Takaki A, Shinozaki Y, Mori H, Goto M, Ogasawara Y, Kajiya F: "一般演題: Role of Cu,Zn-SOD in the synthesis of endothelium-derived hyperpolarizing factor (EDHF) during reactive hyperemia in mouse mesenteric microcirculation in vivo", 第71回日本循環器学会総会・学術集会, 兵庫・神戸, 2007.3.
40. Mori H, Nagaya N, Miyahara Y, Fujii T: "Two cell therapies to treat myocardial infarction in rats (一般演題)", World Congress of the ISHR, Bologna, Italy, 2007.6.
41. Nagaya N, Ohgushi H, Shimizu W, Yamagishi M, Noguchi T, Noda T, Doi K, Ishida Y, Ohnishi S, Kitakaze M, Nakatani T, Mori H, Kamakura S, Kangawa K, Miyatake K, Tomoike H, Kitamura S: "Clinical trial of autologous bone marrow esenchymal stem cell transplantation for severe chronic heart failure", American Heart Association, Orland, Florida, 2007.11.

#### H. 知的財産権の出願・登録

##### 【盛 英三】

1. 国際特許出願 PCT/JP00/07882 : 核酸含有複合体
2. 特願平 11-187091 : X線診断システム
3. 特願 2005-19802 : Mono-layered mesenchymal stem cells
4. 特願 2007-123841 : 血管内皮型一酸化窒素合成酵素活性剤、及び一酸化窒素欠乏に起因疾病の予防または治療剤

G.研究発表 (上坂 充)

【研究業績】

1. Dobashi K, Uesaka M, Fukasawa A, Sakamoto F, Ebina F, Ogino H, Urakawa J, Higo T, Akemoto M, Hayano H, Nakagawa K: X-band RF gun and linac for medical Compton scattering X-ray source. American Institute of Physics Conference Proceedings: 11th Advanced Accelerator Concepts Workshop, 737: 684-690, 2004.
2. Dobashi K, Uesaka M, Fukasawa A, Ebina F, Kaneyasu T, Ogino H, Sakamoto F, Yamamoto T, Urakawa J, Higo T, Akemoto M, Hayano H: X-Band Linac Beam-Line for Medical Compton Scattering X-Ray Source. 005 Particle Accelerator Conference (PAC05), 2: 994-996, 2005.
3. Kaneyasu T, Uesaka M, Dobashi K, Torikoshi M: Dual Energy X-Ray CT by Compton Scattering Hard X-Ray Source. 2005 Particle Accelerator Conference (PAC05), 1291-1293, 2005.
4. Fukasawa A, Kaneyasu T, Sakamoto F, Ebina F, Ogino H, Uesaka M, Dobashi K, Dobashi K, Urakawa J, Higo T, Akemoto M, Hayano H, Sakae H, Matsuo K: X-BAND THERMIONIC CATHODE RF GUN AT UTNL. American Institute of Physics Conference Proceedings Particle Accelerator Conference (PAC05), 1646-1648, 2005.
5. Ebina F, Fukasawa A, Sakamoto F, Ogino H, Uesaka M, Dobashi K: Laser pulse circulation system for a compact monochromatic hard X-ray source. Nuclear Instruments and Methods in Physics Research. B(241): 905-908, 2005.
6. Fukasawa A, Uesaka M, Sakamoto F, Ebina F, Dobashi K, Urakawa J, Akemoto M, Higo T, Hayano H: A tunable monochromatic hard X-ray CT composed of an X-band linear accelerator and a Q-switched laser. Nuclear Instruments and Methods in Physics Research. B(241): 921-925, 2005.
7. Kaneyasu T, Uesaka M, Dobashi K, Torikoshi M: Dual Energy X-Ray CT by Compton Scattering Hard X-Ray Source. 2005 Particle Accelerator Conference (PAC05), 1291-1293, 2005.2. Dobashi K, Fukasawa A, Uesaka M, Iijima H, Imai T, Sakamoto F, Ebina F, Urakawa J, Akemoto M, Higo T, Hayano H: Design of Compact Monochromatic Tunable Hard X-Ray Source Based on X-band Linac %Japanese Journal of Applied Physics. 44(4A): 1999-2005, 2005.
8. Sakamoto F, Uesaka M, Dobashi K, Fukasawa A, Yamamoto T, Urakawa J, Higo T, Akemoto M, Matsuo K, Sakae H, Yamamoto M: X-band Thermionic Cathode RF Gun and Multi-Beam Compton Scattering Monochromatic X-ray Source. Journal of the Korean Physical Society. 49 (1): 286-297, 2006.
9. Sakamoto F, Uesaka M, Yamamoto T, Natsui T, Taniguchi Y, Sakae H, Ishida D, Nose H, Kaneko N, Sakai H, Higo T, Akemoto M, Urakawa J, Yamamoto M: Beam generation and acceleration experiments of X-band linac and monochromatic keV X-ray source of the University of Tokyo. 22nd Particle Accelerator Conference, THPMN032: Albuquerque, New Mexico(USA), 2007.
10. 坂本文人, 上坂充, 土橋克広, 山本智彦, 孟徳, 夏井拓也, 浦川順治, 肥後寿泰, 明本光生, 栄久晴, 松尾健一, 山本昌志: 東大 X-band 電子線形加速器における電子ビーム発生・加速試験. 日本

物理学会 2007 年春季大会, 東京大学,

11. Sakamoto F, Uesaka M, Yamamoto T, Natsui T, Taniguchi Y, Urakawa J, Higo T, Akemoto M, Sakae H, Yamamoto M: 東大逆コンプトン散乱準単色 X 線源における X-band 電子ライナックビーム加速試験. 第 4 回日本加速器学会, FP74: 和光(埼玉), 2007.
12. Uesaka M, Sakamoto F, Dobashi K, Kaneyasu T, Yamamoto T, Meng D, Urakawa J, Higo T, Akemoto M, Hayano H: Monochromatic tunable Compton scattering X-ray source using X-band multi-bunch linac and YAG laser circulation system. Nuclear Instruments and Methods in Physics Research. Section B(261): 867-870, 2007.
13. Meng D, Sakamoto F, Yamamoto T, Dobashi K, Uesaka M, Nose H, Ishida D, Kaneko N, Sakai Y: High power laser pulse circulation experiment for compact quasi-monochromatic tunable X-ray source. Nuclear Instruments and Methods in Physics Research. Section B(261): 52-55, 2007.

(学会発表)

【海外】

1. Ogino H, Fukasawa A, Sakamoto F, Yamamoto T, Takao K, De M, Dobashi K, Miyoshi T, Uesaka M: "Laser pulse circulation system for monochromatic hard X-ray source", The physics and applications of high brightness electron beams, Sicily (Italy), 2005.10.9-14.
2. Uesaka M, Dobashi K, Sakamoto F, Fukasawa A, Ogino H, Yamamoto T, Meng D, Miyoshi T, Urakawa J, Higo T, Akemoto M: "Medical Application of Multi-Beam Compton Scattering Monochromatic Tunable Hard X-ray Source [Invited]", Workshop on The

Physics and Applications of High-brightness Electron Beam, Sicily(Italy), 2005.10.

3. Uesaka M: "Medical Application of Multi-beam Compton Scattering Monochromatic Tunable Hard X-ray Source [Invited]", 13th International Symposium on Laser Spectroscopy, Daejeon (KAERI), Seoul, 2005.11.
4. Uesaka M, Sakamoto F, Fukasawa A, Ogino H, Yamamoto T, Meng D, Dobashi K, Miyoshi M, Higo T, Akemoto M, Urakawa J: "MULTI-BEAM COMPTON SCATTERING MONOCHROMATIC TUNABLE HARD X-RAY SOURCE", Proc. of ICFA (International Committee for Future Accelerator) Workshop on Laser-Beam Interaction, Taiwan(ROC), 2005.
5. Sakamoto F, Uesaka M, Dobashi K, Yamamoto T, Meng D, Urakawa J, Higo T, Akemoto M, Matsuo K, Sakae H, Yamamoto M: "High Power Experiment of X-band Thermionic Cathode RF Gun for Compton Scattering X-ray Source", Advanced Accelerator Concepts Workshop, Lake Geneva, Wisconsin, USA, 2006.7.
6. Sakamoto F, Uesaka M, Yamamoto T, Natsui T, Taniguchi Y, Sakae H, Ishida D, Nose H, Kaneko N, Sakai H, Higo T, Akemoto M, Urakawa J, Yamamoto M: "Beam generation and acceleration experiments of X-band linac and monochromatic keV X-ray source of the University of Tokyo", 22nd Particle Accelerator Conference, Albuquerque, New Mexico(USA), 2007.6.

【国内】

1. 山本智彦, 鮫名風太郎, 深澤篤, 金安達夫, 坂本

- 文人, 荻野晴之, 上坂充, 土橋克広, 浦川順治, 肥後寿泰, 明本光生, 早野仁司: "コンプトン散乱 X線源へのレーザー周回システムの適用", 第7回応用加速器・関連技術シンポジウム (ARTA2005), 東京工業大学, 2005.6.9-10.
2. Sakamoto F, Dobashi K, Kaneyasu T, Fukasawa A, Ogino H, Yamamoto T, Uesaka M, Urakawa J, Higo T, Akemoto M, Hayano H: "X-band 電子線形加速器を用いたコンプトン散乱硬 X線源 -X-band 熱カソード高周波電子銃試験の現状-", 第7回応用加速器・関連技術シンポジウム (ARTA2005), 東京工業大学, 2005.6.9-10.
  3. 土橋克広, 上坂充, 深澤篤, 金安達夫, 荻野晴之, 坂本文人, 山本智彦, 浦川順治, 肥後寿泰, 明本光生, 早野仁司: "Xバンド小型硬 X線実証試験ビームラインの構築", 第2回日本加速器学会年会・第30回リニアック技術研究会, 佐賀県鳥栖市, 2005.7.20-22.
  4. Sakamoto F, Dobashi K, Kaneyasu T, Fukasawa A, Ogino H, Yamamoto T, Uesaka M, Urakawa J, Higo T, Akemoto M, Hayano H: "東大小型単色硬 X線源におけるコンプトン散乱硬 X線生成システム", 第2回日本加速器学会年会・第30回リニアック技術研究会, 佐賀県鳥栖市, 2005.7.20-22.
  5. 荻野晴之, 深澤篤, 金安達夫, 坂本文人, 山本智彦, 上坂充, 土橋克広: "レーザー周回システム", 日本原子力学会 2005 年秋の年会, 八戸工業大学, 2005.9.13-16.
  6. 土橋克広, 明本光生, 東悟史, 深澤篤, 早野仁司, 肥後寿泰, 孟徳, 荻野晴之, 坂本文人, 高尾和孝, 上坂充, 浦川順治, 山本智彦: "医療用小型単色硬 X線源実証ビームラインの構築", 日本物理学会 第60回秋季大会, 大阪市立大学杉本キャンパス, 2005.9.12-15.
  7. 山本智彦, 金安達夫, 深澤篤, 坂本文人, 荻野晴之, 上坂充, 土橋克広, 浦川順治, 肥後寿泰, 明本光生, 早野仁人: "東大 X-band Linac における RF・ビーム試験", 日本原子力学会 2005 年秋の年会, 八戸工業大学, 2005.9.13-16.
  8. Sakamoto F, Dobashi K, Miyoshi T, Fukasawa A, Ogino H, Takao K, Meng D, Yamamoto T, UESAKA M, Hayano H, Urakawa J, Higo T, Akemoto M: "Development and application of Compton scattering hard X-ray source based on X-band electron linear accelerator", NanoBeam2005, 京都大学宇治キャンパス, 2005.10.17-21.10.
  9. 坂本文人, 土橋克広, 深澤篤, 荻野晴之, 山本智彦, 孟徳, 上坂充, 肥後寿泰, 明本光生, 浦川順治: "東大原子力専攻コンプトン散乱硬 X線源における X-band 電子線形加速器ビームラインの構築", 原子力シンポジウム, 東京大学, 2006.3.15-16.
  10. 坂本文人, 深澤篤, 山本智彦, 荻野晴之, 孟徳, 高尾和孝, 上坂充, 土橋克広, 三好敏喜, 肥後寿泰, 明本光生, 浦川順治: "東大原子力専攻小型硬 X線源における X-band 電子ライナックビームラインの構築", 日本原子力学会・2006 年春の年会, 日本原子力研究機構大洗研究開発センター, 2006.3.24-26.
  11. 山本智彦, 上坂充, 肥後寿泰, 土橋克広, 三好敏喜, 田辺英二: "非破壊検査用 9.4GHz X-band Linac の設計", 日本原子力学会・2006 年春の年会, 日本原子力研究機構大洗研究開発センター, 2006.3.24-26.
  12. 土橋克広, 明本光生, 深澤篤, 早野仁司, 肥後寿泰, 三好敏喜, 孟徳, 荻野晴之, 坂本文人, 高尾和孝, 上坂充, 浦川順治, 山本智彦: "Xバンド医療用小型硬 X線源実証ビームラインでの電子銃ビーム試験", 日本物理学会・第61回年次大会, 愛媛大学・松山大学, 2006.3.27-30.
  13. 孟徳, 坂本文人, 荻野晴之, 山本智彦, 上坂充,



- 土橋克広, 浦川順治, 肥後寿泰, 明本光生, 野瀬裕之, 石田大典, 酒井康雄, 金子七三雄: "小型単色可変 X 線源における X バンドライナックとレーザー一周回システム", 第 8 回応用加速器・関連技術研究シンポジウム, 東京工業大学百年記念館, 2006.6.8-9.
14. 坂本文人, 土橋克広, 上坂充, 山本智彦, 孟徳, 夏井拓也, 浦川順治, 肥後寿泰, 明本光生, 栄久晴, 山本昌志: "東大 X-band 電子ライナックにおける電子ビーム発生・加速試験", 第 3 回日本加速器学会, 仙台, 2006.8.
15. 上坂充, 土橋克広, 坂本文人, 山本智彦, 孟徳, 夏井拓也, 栄久晴, 酒井康雄, 金子七三雄, 野瀬裕之, 石田大典, 浦川順治, 肥後寿泰, 明本光生, 早野仁司, 山本昌志: "東大 X-band ライナックコンプトン散乱単色 X 線実験", 日本原子力学会秋の年会, 北海道大学, 2006.9.
16. Sakamoto F, Uesaka M, Yamamoto T, Natsui T, Taniguchi Y, Urakawa J, Higo T, Akemoto M, Sakae H, Yamamoto M: "東大逆コンプトン散乱準単色 X 線源における X-band 電子ライナックビーム加速試験", 第 4 回日本加速器学会, 和光(埼玉), 2007.8.
17. 坂本文人, 上坂充, 土橋克広, 孟徳, 山本智彦, 夏井拓也, 浦川順治, 肥後寿泰, 明本光生, 栄久晴, 酒井康雄, 金子七三雄, 石田大典, 野瀬裕之: "東大逆コンプトン散乱準単色 X 線源における X-band 電子ライナック電子ビーム試験", 日本物理学会 2007 年秋季大会, 北海道大学, 2007.9.
- 5254-5262, 2006.
2. Momose A, Yashiro W, Moritake M, Takeda Y, Uesugi K, Takeuchi A, Suzuki Y, Tanaka M, Hattori T: Biomedical imaging by Talbot-type x-ray phase tomography. SPIE, 6318: 63180T, 2006.
3. Takeda Y, Yashiro W, Suzuki Y, Momose A: X-Ray Phase Microtomography by Single Transmission Grating. Synchrotron Radiation Instrumentation: 9th International Conference, 1361-1364, 2006.
4. Momose A, Yashiro W, Takeda Y, Moritake M, Uesugi K, Suzuki Y, Hattori T: Phase Tomography Using X-ray Talbot Interferometer. The 9th international conference on synchrotron radiation instrumentation: 1365-1368, 2006.
5. Takeda Y, Yashiro W, Suzuki Y, Aoki S, Hattori T, Momose A: X-Ray Phase Imaging with Single Phase Grating. Jpn. J. Appl. Phys., 46: L89-L91, 2007.
6. Shinohara M, Yamashita T, Tawa H, Takeda M, Sasaki N, Takaya T, Toh R, Takeuchi A, Ohigashi T, Shinohara K, Kawashima S, Yokoyama M, Hirata KI, Momose A: Atherosclerotic Plaque Imaging using Phase-contrast X-ray Computed Tomography. Am J Physiol Heart Circ Physiol. 2007.

(研究業績「欧文」)

【解説】

G. 研究発表 (百生 敦)

(研究業績「欧文」)

【原著】

1. Momose A, Yashiro W, Takeda Y, Suzuki Y, Hattori T: Phase Tomography by X-ray Talbot Interferometry for Biological Imaging. Japanese Journal of Applied Physics, 45(6A): 5254-5262, 2006.
2. Momose A, Yashiro W, Moritake M, Takeda Y, Uesugi K, Takeuchi A, Suzuki Y, Tanaka M, Hattori T: Biomedical imaging by Talbot-type x-ray phase tomography. SPIE, 6318: 63180T, 2006.
3. Takeda Y, Yashiro W, Suzuki Y, Momose A: X-Ray Phase Microtomography by Single Transmission Grating. Synchrotron Radiation Instrumentation: 9th International Conference, 1361-1364, 2006.
4. Momose A, Yashiro W, Takeda Y, Moritake M, Uesugi K, Suzuki Y, Hattori T: Phase Tomography Using X-ray Talbot Interferometer. The 9th international conference on synchrotron radiation instrumentation: 1365-1368, 2006.
5. Takeda Y, Yashiro W, Suzuki Y, Aoki S, Hattori T, Momose A: X-Ray Phase Imaging with Single Phase Grating. Jpn. J. Appl. Phys., 46: L89-L91, 2007.
6. Shinohara M, Yamashita T, Tawa H, Takeda M, Sasaki N, Takaya T, Toh R, Takeuchi A, Ohigashi T, Shinohara K, Kawashima S, Yokoyama M, Hirata KI, Momose A: Atherosclerotic Plaque Imaging using Phase-contrast X-ray Computed Tomography. Am J Physiol Heart Circ Physiol. 2007.
1. 百生敦: 光のコヒーレンスを使う(解説). 放射光. 20: 43-49, 2007.
2. 百生敦: 医用画像分野における X 線位相イメージングの期待(解説). 応用物理. 76: 363-368, 2007.

(学会発表)

【海外】

1. Momose A, Yashiro W, Takeda Y, Moritake M, Uesugi K, Suzuki Y, Hattori T: "Phase Tomography by X-ray Talbot Interferometer", The 9th international conference on synchrotron radiation instrumentation, Daegu, Korea, 2006.5.29-6.2.
2. Takeda Y, Yashiro W, Suzuki Y, Momose A: "X-ray Phase Microtomography by Single Transmission Grating", The 9th international conference on synchrotron radiation instrumentation, Daegu, Korea, 2006.5.29-6.2.
3. Momose A, Yashiro W, Moritake M, Takeda Y, Tanaka M, Hattori T: "Biological Phase Imaging with X-ray Talbot Interferometer", International Symposium on the Methodological Study of Phase Contrast Hard X-Ray Imaging of Nanobiological and Medical Samples with Synchrotron Radiation, Beijing, China, 2006.6.5-9.
4. Momose A, Yashiro W, Moritake M, Takeda Y, Tanaka M, Hattori T: "Biomedical Imaging by Talbot-type X-ray phase tomography", SPIE Optics & Photonics (co-located with SPIE's 51st Annual Meeting), San Diego, USA, 2006.8.13-17.
5. Takeda Y, Sawano M, Yashiro W, Hattori T, Takeuchi A, Uesugi K, Suzuki Y, Momose A: "Differential Phase Imaging Microscopy with X-ray Talbot Interferometer", The 16th International Microscopy Congress, Sapporo, Japan, 2006.9.3-8.
6. Momose A, Takeda Y, Shinohara M, Wan K, Yashiro W, Noda D, Hattori T: "Full-body phase tomography of a mouse by X-ray Talbot

interferometry", 9th International Conference on Biology and Synchrotron Radiation, Manchester, UK, 2007.8.13-17.

7. Momose A, Takeda Y, Yashiro W, Noda D, Hattori T: "X-ray Talbot interferometer consisting of two transmission X-ray gratings for X-ray phase imaging", International 21st Century COE Symposium 2007 on Atomistic Fabrication Technology, Osaka, 2007.10.15-17.
8. Momose A: "X-ray phase imaging with gratings (tentative)", 2nd international symposium on X-ray phase contrast imaging, China, 2008.3.24-28.

【国内】

1. 百生敦, 矢代航, 森竹雅史, 武田佳彦, 服部正: "X線タルボ干渉計による生体組織の位相イメージング", 日本放射光学会, 2006.1.
2. 百生敦, 矢代航, 森竹雅史, 武田佳彦, 服部正, 鈴木芳生: "X線タルボ干渉計による生体位相イメージング", 応用物理学会, 2006.3.
3. 矢代航, 武田佳彦, 百生敦: "コーンビームタルボ干渉計のための光学設計", 応用物理学会, 2006.3.
4. 百生敦: "X線位相撮像法の現状と将来", 日本医学放射線学会, 横浜, 2006.4.8.
5. 百生敦: "X線の位相を使った高感度撮像技術", 日本放射線技術学会中国・四国部会, 第7回夏季学術大会, 岡山, 2006.7.9.
6. 百生敦, 森竹雅史, 武田佳彦, 宇野万里恵, 矢代航, 田中誠人, 野田大二, 服部正, 上杉健太郎, 鈴木芳生: "X線タルボ干渉計による大視野位相イメージング", 日本放射光学会, 広島, 2007.1.14.
7. 武田佳彦, 澤野正和, 矢代航, 服部正, 竹内晃久, 鈴木芳生, 百生敦: "X線タルボ干渉計を用いた微分位相 X線結像顕微鏡", 日本放射光学

- 会, 広島, 2007.1.14.
8. 百生敦, 森竹雅史, 万克樹, 矢代航, 武田佳彦, 宇野万里恵, 田中誠人, 野田大二, 服部正: "マイクロフォーカスX線源を用いた球面波X線タルボ干渉計と位相イメージング", 応用物理学会, 相模原, 2007.3.27.
  9. 武田佳彦, 澤野正和, 鈴木芳生, 竹内晃久, 服部正, 百生敦: "X線タルボ干渉計を利用した位相コントラストX線結像顕微鏡", 応用物理学会, 相模原, 2007.3.27.
  10. 百生敦: "タルボ型干渉計を用いたイメージング", PF研究会・ERL研究会「コンパクトERLが拓く世界」, つくば, 2007.7.9.
  11. 百生敦: "X線位相イメージングの現状", 日本物理学会, 札幌, 2007.9.22.
  12. 百生敦, 矢代航, 武田佳彦, Wan K, 野田大二, 服部正: "X線タルボ干渉計を用いた位相イメージング装置開発", 日本医学物理学会, 新潟, 2007.9.29.
  13. 百生敦: "X線 Talbot 干渉計による 位相イメージング", 第9回X線結像光学シンポジウム, 名古屋, 2007.11.3.
  14. 百生敦: "X線位相コントラスト撮像法", 埼玉医科大学卒業教育委員会講演学術集会, 埼玉, 2007.11.13.
  15. 百生敦: "X線イメージングに必要な干渉性", 物性研短期研究会, 柏, 2007.11.27.
  16. 百生敦: "レーザー逆コンプトン散乱X線源によるX線イメージングへの応用", 日本放射光学会, 滋賀, 2008.1.14.
  17. 百生敦, 武田佳彦, 矢代航: "X線 Talbot 干渉計による位相イメージングの感度", 日本放射光学会, 滋賀, 2008.1.14.
  18. 武田佳彦, 高倉樹, 矢代航, 竹内晃久, 鈴木芳生, 百生敦: "X線タルボ干渉計を用いた位相コントラストX線結像顕微鏡によるポリマーブレンド相分離構造の観察", 日本放射光学会, 滋賀, 2008.1.14.
  19. 百生敦, 武田佳彦, 矢代航, 篠原正和, 野田大二, 服部正: "大視野X線 Talbot 干渉計によるマウスの位相トモグラフィ", 日本放射光学会, 滋賀, 2008.1.14.
  20. 百生敦: "X線 Talbot 干渉計の実用化に向けて", PF研究会「X線位相利用計測の将来展望」, つくば, 2008.1.18.
  21. 百生敦: "極限コヒーレント光で狙うイメージング技術", 極限コヒーレントワークショップ, 本郷, 2008.3.4.
  22. 百生敦, 武田佳彦, 矢代航, 野田大二, 服部正: "Talbot 干渉計用 10cm 角格子の評価", PFシンポジウム, つくば, 2008.3.19.
  23. 百生敦, 武田佳彦, 矢代航, 万克樹, 野田大二, 服部正: "X線透過格子を用いた位相イメージング装置開発", 応用物理学会, 千葉, 2008.3.28.
  24. 武田佳彦, 高倉樹, 芳生 鈴, 竹内晃久, 百生敦: "微分位相X線結像顕微鏡を利用したポリマーブレンド相分離構造の観察", 応用物理学会, 千葉, 2008.3.28.

## 研究成果の刊行に関する一覧表

## 書籍

著者氏名	論文タイトル名	書籍全体編集者名	書籍名	出版社名	出版地	出版年	ページ
Nishigami K., Nakatani T., Chiku M., Mori H.	A novel micro-angiography detecting angiogenesis, Application for autologous bone marrow mononuclear cells transplantation in the patients with critical limb ischemia	Mori H., Matsuda H.	Cardiovascular Regeneration Therapies Using Tissue Engineering Approaches	Springer	Tokyo	2005	191-199
知久正明、西上和宏、内藤博昭、盛英三、佐藤英一	画像解析-微小血管造影-	田畑泰彦	遺伝子医学MOOK 1 再生医療へのブレイクスルー(その革新技术と今後の方向性)	メディカルドゥ		2005	223-227

## 雑誌

	発表者氏名	論文タイトル	発表雑誌名	巻名	ページ	出版年
1	Ben Ammar Y, Takeda S, Sugawara M, Miyano M, <u>Mori H</u> , Wakabayashi S	Crystallization and preliminary crystallographic analysis of the human calcineurin homologous protein CHP2 bound to the cytoplasmic region of the Na <sup>+</sup> /H <sup>+</sup> exchanger NHE1	Acta Cryst.	F61	956-958	1
2	Kawada T, Yamazaki T, Akiyama T, Shishido T, <u>Mori H</u> , Sugimachi M	Myocardial interstitial choline and glutamate levels during acute myocardial ischaemia and local ouabain administration	Acta Physiol Scand	184 (3)	187-193	2
3	Fujii T, Nagaya N, Iwase T, Murakami S, Miyahara Y, Nishigami K, Ishibashi-Ueda H, Shirai M, Itoh T, Ishino K, Sano S, Kangawa K, <u>Mori H</u>	Adrenomedullin enhances therapeutic potency of bone marrow transplantation for myocardial infarction in rats	Am J Physiol Heart Circ Physiol	288 (3)	H1444-1450	3

4	Kitagawa H, Yamazaki T, Akiyama T, Sugimachi M, Sunagawa K, <u>Mori H</u>	Microdialysis separately monitors myocardial interstitial myoglobin during ischemia and reperfusion	Am J Physiol Heart Circ Physiol	289 (2)	H924-930	4
5	Nagaya N, <u>Mori H</u> , Murakami S, Kangawa K, Kitamura S	Adrenomedullin: angiogenesis and gene therapy (Invited Review)	Am J Physiol Regul Integr Comp Physiol	288 (6)	R1432-1437	5
6	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Takahashi K, Sato S, Takayama K	X-ray spectra from characteristic x-ray generator with a molybdenum tube	Ann. Rep. Iwate Med. Univ. Lib. Arts and Sci.	40	1-7	6
7	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Takahashi K, Sato S, Takayama K	Measurement of cerium x-ray spectra using a cerium oxide powder filter and enhanced K-edge angiography	Ann. Rep. Iwate Med. Univ. Lib. Arts and Sci.	40	9-15	7
8	Ichimaru T, Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Sato S, Takayama K	Quasi-monochromatic fine polycapillary imaging utilizing a computed radiography system	Bull. Health, Sci. Hirosaki	4	83-91	8
9	Ichimaru T, Yamadera A, Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Sato S, Takayama K	Cone-beam K-edge angiography utilizing cerium x-ray tube in conjunction with cerium oxide filter	Bull. Health, Sci. Hirosaki	4	93-100	9
10	Hirata A, Minamino T, Asanuma H, Sanada S, Fujita M, Tsukamoto O, Wakeno M, Myoishi M, Okada K, Koyama H, Komamura K, Takashima S, Shinozaki Y, Mori H, Tomoike H, Hori M, Kitakaze M	Erythropoietin just before reperfusion reduces both lethal arrhythmias and infarct size via the phosphatidylinositol-3 kinase-dependent pathway in canine hearts	Cardiovasc Drugs Ther	19 (1)	33-40	10
11	Hattan N, Kawaguchi H, Ando K, Kuwabara E, Fujita J, Murata M, Suematsu M, <u>Mori H</u> , Fukuda K	Purified cardiomyocytes from bone marrow mesenchymal stem cells produce stable intracardiac grafts in mice	Cardiovasc Res	65 (2)	334-344	2005
12	Nagaya N, Kangawa K, Itoh T, Iwase T, Murakami S,	Transplantation of mesenchymal stem cells improves cardiac function in a rat model of dilated	Circulation	112 (8)	1128-1135	2005

	Miyahara Y, Fujii T, Uematsu M, Ohgushi H, Yamagishi M, Tokudome T, <u>Mori H</u> , Miyatake K, Kitamura S	cardiomyopathy				
13	Schwenke DO, Pearson JT, Tsuchimochi H, <u>Mori H</u> , Shirai M	Exogenous nitric oxide centrally enhances pulmonary reactivity in the normal and hypertensive rat	Clin Exp Pharmacol Physiol	32 (11)	952-959	2005
14	Yada T, Shimokawa H, Hiramatsu O, Kajita T, Shigeto F, Tanaka E, Shinozaki Y, <u>Mori H</u> , Kiyooka T, Katsura M, Ohkuma S, Goto M, Ogasawara Y, Kajiya F	Beneficial effect of hydroxyfasudil, a specific Rho-kinase inhibitor, on ischemia/reperfusion injury in canine coronary microcirculation in vivo	J Am Coll Cardiol	45 (4)	599-607	2005
15	Inoue S, Hori S, Adachi T, Miyazaki K, Kyotani S, Fukuda K, <u>Mori H</u> , Nakazawa H, Aikawa N, Ogawa S	Flow-independent myocardial ischemia induced by endothelin-1: an NADH fluorescence analysis	J Cardiovasc Pharmacol	46 (6)	810-816	2005
16	Sagae M, Sato E, Tanaka E, Hayasi Y, <u>Mori H</u> , Kawai T, Ichimaru T, Sato S, Takayama K, Ido H	Quasi-Monochromatic X-Ray Generator Utilizing Graphite Cathode Diode with Transmission-Type Molybdenum Target	Jpn. J. Appl. Phys.	44 (1A)	446-449	2005
17	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Yamadera A, Sato S, Ito F, Takayama K, Onagawa J, Ido H	Variations in Cerium X-ray Spectra and Enhanced K-Edge Angiography	Jpn. J. Appl. Phys.	44 (11)	8204-8209	2005
18	Sato E, Hayasi Y, Kimura K, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Onagawa J, Ido H	Enhanced K-edge Angiography Utilizing Tantalum Plasma X-ray Generator in Conjunction with Gadolinium-Based Contrast Media	Jpn. J. Appl. Phys.	44 (12)	8716-8721	2005
19	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Ichimaru T, Sato S, Takayama K,	Compact monochromatic flash x-ray generator utilizing a disk-cathode molybdenum tube	Med. Phys.	32 (1)	49-54	2005

	Ido H					
20	Kuroko Y, Fujii T, Yamazaki T, Akiyama T, Ishino K, Sano S, <u>Mori H</u>	Contribution of catechol O-methyltransferase to the removal of accumulated interstitial catecholamines evoked by myocardial ischemia	Neurosci Lett	388 (2)	61-64	2005
21	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Sato S, Takayama K	Clean monochromatic x-ray irradiation from weakly ionized linear copper plasma	Opt. Eng.	44 (049002)	1-6	2005
22	Sato E, Hayashi Y, Germer R, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Ichimaru T, Takayama K, Onagawa J, Ido H	Monochromatic flash x-ray generator utilizing a disk-cathode silver tube	Opt. Eng.	44 (096501)	1-6	2005
23	Sato E, Yamadera A, Tanaka E, <u>Mori H</u> , Kawai T, Ito F, Inoue T, Ogawa A, Sato S, Takayama K, Onagawa J, Ido H	X-ray spectra from a cerium target and their application to cone beam K-edge angiography	Opt. Eng.	44 (096502)	1-6	2005
24	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Sato S, Takayama K	High-speed enhanced K-edge angiography utilizing cerium plasma x-ray generator	Opt. Eng.	44 (049001)	1-6	2005
25	Sato E, Germer R, Tanaka E, <u>Mori H</u> , Kawai T, Ichimaru T, Sato S, Ojima H, Takayama K, Ido H	Quasi-monochromatic cerium flash angiography	SPIE	5580	146-152	2005
26	Sato E, Hayasi Y, Germer R, Tanaka E, <u>Mori H</u> , Kawai T, Ichimaru T, Sato S, Ojima H, Takayama K, Ido H	Weakly ionized linear plasma x-ray generator with molybdenum-target triode	SPIE	5580	535-542	2005
27	Sato E, Sagae M, Komatsu M, Germer R, Tanaka E, <u>Mori H</u> , Kawai T, Ichimaru T, Sato S, Ojima H, Takayama K, Ido H	Monochromatic flash x-ray generator utilizing copper-target diode	SPIE	5580	579-585	2005

28	Sagae M, Sato E, Obara H, Tanaka E, <u>Mori H</u> , Kawai T, Sato S, Ojima H, Takayama K, Ido H	Intense quasi-monochromatic flash x-ray generator utilizing molybdenum-target diode	SPIE	5580	674-680	2005
29	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Sato S, Ojima H, Takayama K, Ido H	Energy-selective high-speed radiography utilizing stroboscopic x-ray generator	SPIE	5580	765-771	2005
30	Sato E, Sagae M, Obara H, Germer R, Tanaka E, <u>Mori H</u> , Kawai T, Ichimaru T, Sato S, Ojima H, Takayama K, Ido H	Demonstration of flash K-edge angiography utilizing gadolinium-based contrast medium	SPIE	5580	817-823	2005
31	Obara H, Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Sato S, Ojima H, Takayama K, Ido H	Superposition of x-ray spectra using double-target plasma triode	SPIE	5580	824-831	2005
32	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Ido H	High-speed K-edge angiography achieved with tantalum K-series characteristic x rays (Honorable Mention Poster Award)	SPIE	5745	810-817	2005
33	Sato E, Tanaka E, <u>Mori H</u> , Kawakami H, Kawai T, Inoue T, Ogawa A, Sato S, Ichimaru T, Takayama K, Ido H	Enhanced magnification angiography including phase-contrast effect using a 100- $\mu$ m focus x-ray tube	SPIE	5918 (591811)	1-9	2005
34	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Ichimaru T, Takayama K, Ido H	Monochromatic x-ray generator utilizing angle dependence of bremsstrahlung x-ray distribution	SPIE	5918 (591819)	1-7	2005
35	Sato E, Hayasi Y, Germer R, Kimura K, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Ido H	Energy-selective gadolinium angiography utilizing a stroboscopic x-ray generator	SPIE	5920 (59200V)	1-8	2005



36	Sato E, Hayasi Y, Germer R, Kimura K, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Ido H	Enhanced K-edge plasma angiography achieved with tungsten K $\alpha$ rays utilizing gadolinium-based contrast media	SPIE	5920 (592012)	1-8	2005
37	Sato E, Hayasi Y, Germer R, Obara H, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Ido H	Preliminary study for producing higher harmonic hard x-rays from weakly ionized copper plasma	SPIE	5920 (59200U)	1-7	2005
38	Obara H, Sato E, Hayashi J, Tanaka E, Mori H, Kawai T, Inoue T, Ogawa A, Takayama K, Ido H	Superposition of x-ray spectra using a brass-target plasma triode	SPIE	5920(59200W)	1-8	2005
39	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Ido H	Preliminary experiment for producing higher harmonic x rays utilizing copper plasma triode	原子核研究	49 (5)	61-67	2005
40	Sato E, Yamadera A, Ichimaru T, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, et al.	Conventional Enhanced K-edge angiography Utilizing cerium x-ray generator	原子核研究	49	69-74	2005
41	佐藤英一, 林保臣, 小原春雄, 田中越郎, 盛英三, 河合敏昭, 井上敬, 小川彰, 佐藤成大, 市丸俊夫, 高山和喜, 臼杵辰巳, 佐藤公悦	シンクロトロンにかわる医用単色 X 線装置の開発と応用	医学物理	25 (suppl.4)	25-38	2005
42	宮原義典, 盛英三, 永谷憲歳	日本型移植医療をどう作るかー細胞・組織・臓器 心血管疾患における細胞ー遺伝子ハイブリッド治療(総説)	循環器専門医	13	33-39	2005
43	竹下聡	血管新生療法	治療学	39	775-777	2005
44	Igarashi T, Oishi Y, Araki S, <u>Mori H</u> , Takeda S	Crystallization and preliminary X-ray crystallographic analysis of two vascular apoptosis-inducing proteins (VAPs) from <i>Crotalus atrox</i> venom	Acta Crystallograph Sect F Struct Biol Cryst Commun	62 (Pt 7)	688-691	2006

45	Kawada T, Yamazaki T, Akiyama T, Uemura K, Kamiya A, Shishido T, <u>Mori H</u> , Sugimachi M	Effects of Ca <sup>2+</sup> channel antagonists on nerve stimulation-induced and ischemia-induced myocardial interstitial acetylcholine release in cats	Am J Physiol Heart Circ Physiol	291 (5)	H2187-2191	2006
46	Yada T, Shimokawa H, Hiramatsu O, Haruna Y, Morita Y, Kashihara N, Shinozaki Y, <u>Mori H</u> , Goto M, Ogasawara Y, Kajiya F	Cardioprotective role of endogenous hydrogen peroxide during ischemia-reperfusion injury in canine coronary microcirculation in vivo	Am J Physiol Heart Circ Physiol	291 (3)	H1138-1146	2006
47	Miyahara Y, Ohnishi S, Obata H, Ishino K, Sano S, <u>Mori H</u> , Kangawa K, Kitamura S, Nagaya N	Beraprost sodium enhances neovascularization in ischemic myocardium by mobilizing bone marrow cells in rats	Biochem Biophys Res Commun	349 (4)	1242-1249	2006
48	Takahama H, Minamino T, Hirata A, Ogai A, Asanuma H, Fujita M, Wakeno M, Tsukamoto O, Okada K, Komamura K, Takashima S, Shinozaki Y, <u>Mori H</u> , Mochizuki N, Kitakaze M	Granulocyte colony-stimulating factor mediates cardioprotection against ischemia/reperfusion injury via phosphatidylinositol-3-kinase/Akt pathway in canine hearts	Cardiovasc Drugs Ther	20 (3)	159-165	2006
49	Amino M, Yoshioka K, Tanabe T, Tanaka E, <u>Mori H</u> , Furusawa Y, Zareba W, Yamazaki M, Nakagawa H, Honjo H, Yasui K, Kamiya K, Kodama I	Heavy ion radiation up-regulates Cx43 and ameliorates arrhythmogenic substrates in hearts after myocardial infarction	Cardiovasc Res	72 (3)	412-421	2006
50	Ben Ammar Y, Takeda S, Hisamitsu T, <u>Mori H</u> , Wakabayashi S	Crystal structure of CHP2 complexed with NHE1-cytosolic region and an implication for pH regulation	EMBO J	25 (11)	2315-2325	2006
51	Masuda M, Takeda S, Sone M, Ohki T, <u>Mori H</u> , Kamioka Y, Mochizuki N	Endophilin BAR domain drives membrane curvature by two newly identified structure-based	EMBOJ	25(12)	2889-97	2006

		mechanisms				
52	Takeda S, Igarashi T, <u>Mori H</u> , Araki S	Crystal structures of VAP1 reveal ADAMs' MDC domain architecture and its unique C-shaped scaffold	EMBOJ	25 (11)	2388-2396	2006
53	Hirata A, Minamino T, Asanuma H, Fujita M, Wakeno M, Myoishi M, Tsukamoto O, Okada K, Koyama H, Komamura K, Takashima S, Shinozaki Y, <u>Mori H</u> , Shiraga M, Kitakaze M, Hori M	Erythropoietin enhances neovascularization of ischemic myocardium and improves left ventricular dysfunction after myocardial infarction in dogs	J Am Coll Cardiol	48 (1)	176-184	2006
54	Schwenke DO, Pearson JT, <u>Mori H</u> , Shirai M	Long-term monitoring of pulmonary arterial pressure in conscious, unrestrained mice	J Pharmacol Toxicol Methods	53 (3)	277-283	2006
55	Kimura K, Goto T, Yagi K, Furuya H, Jujo S, Itoh J, Sawamura S, Koide S, <u>Mori H</u> , Fukuyama N	Biphasic of inducible nitric oxide synthase in a hind limb ischemia model	J.Clin.Biochem.Nutr.	38 (2)	1-8	2006
56	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Onagawa J	Characteristic X-ray Generator Utilizing Angle Dependence of Bremsstrahlung X-ray Distribution	Jpn. J. Appl. Phys.	45 (No. 4A)	2845-2849	2006
57	Sato E, Hayashi Y, Germer R, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Onagawa J	X-ray Spectra from Weakly Ionized Linear Copper Plasma	Jpn. J. Appl. Phys.	45 (6A)	5301-5306	2006
58	Enomoto T, Sato E, Sumiyama Y, Aizawa K, Watanabe M, Tanaka E, <u>Mori H</u> , Kawakami H, Kawai T, Inoue T, Ogawa A, Sato S	Enhanced magnification angiography using 20-um-focus tungsten tube	Jpn. J. Appl. Phys.	45	8005-8009	2006
59	Kawada T, Yamazaki T, Akiyama T, Li M, Ariumi H, <u>Mori H</u> , Sunagawa K, Sugimachi M	Vagal stimulation suppresses ischemia-induced myocardial interstitial norepinephrine release	Life Sci	78 (8)	882-887	2006

60	Suenaga M, Kaneko Y, Kadokawa J, Nishikawa T, <u>Mori H</u> , Tabata M	Amphiphilic poly(N-propargylamide) with galactose and lauryloyl groups: synthesis and properties	Macromol Biosci	6 (12)	1009-1018	2006
61	Miyahara Y, Nagaya N, Kataoka M, Yanagawa B, Tanaka K, Hao H, Ishino K, Ishida H, Shimizu T, Kangawa K, Sano S, Okano T, Kitamura S, <u>Mori H</u>	Monolayered mesenchymal stem cells repair scarred myocardium after myocardial infarction	Nat Med	12 (4)	459-465	2006
62	Kuroko Y, Tokunaga N, Yamazaki T, Akiyama T, Ishino K, Sano S, <u>Mori H</u>	Effect of sustained limb ischemia on norepinephrine release from skeletal muscle sympathetic nerve endings	Neurochem Int	49	448-453	2006
63	Sato E, Sugiyama H, Ando M, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Takayama K, Onagawa J, Ido H	Tunable narrow-photon-energy x-ray generator utilizing a tungsten-target tube	Rad. Phys. Chem.	75	2008-2013	2006
64	Sato E, Hayasi Y, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Ido H	K-edge angiography utilizing a tungsten plasma x-ray generator in conjunction with gadolinium-based contrast media	Rad. Phys. Chem.	75	1841-1849	2006
65	Sato E, Hayasi Y, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Sato S, Takayama K, Onagawa J, Ido H	Preliminary study for producing higher harmonic hard x-rays from weakly ionized nickel plasma	Rad. Phys. Chem.	75	1812-1818	2006
66	Schwenke DO, Pearson JT, <u>Mori H</u> , Shirai M	Does central nitric oxide elicit pulmonary hypertension in conscious rats?	Respir Physiol Neurobiol	153 (3)	250-260	2006
67	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Izumisawa M, Takahashi K, Sato S, Ichimaru T, Takayama K	Enhanced real-time magnification angiography utilizing a 100- $\mu$ m-focus x-ray generator in conjunction with an image intensifier	SPIE	6319 (63190J)	1-7	2006
68	Sato E, Tanaka E, <u>Mori H</u> , Kawai T, Inoue T, Ogawa A, Izumisawa M,	Demonstration of enhanced K-edge angiography using a samarium target x-ray	SPIE	6319 (63190L)	1-6	2006