

図1. 環境セルの中心部の構成

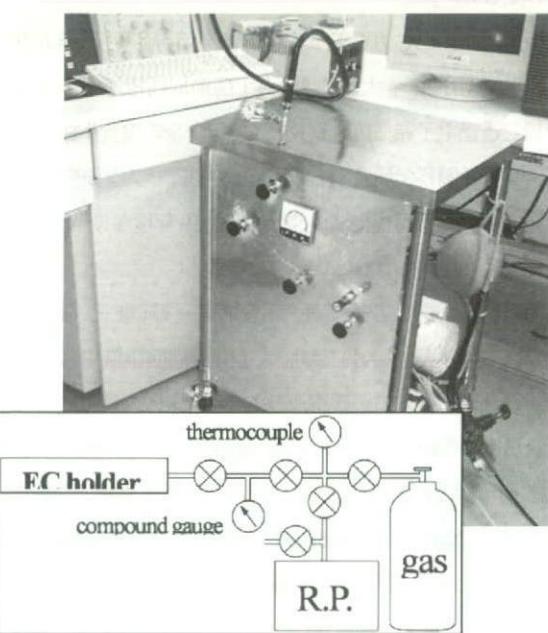


図2. 環境セルのシステム図

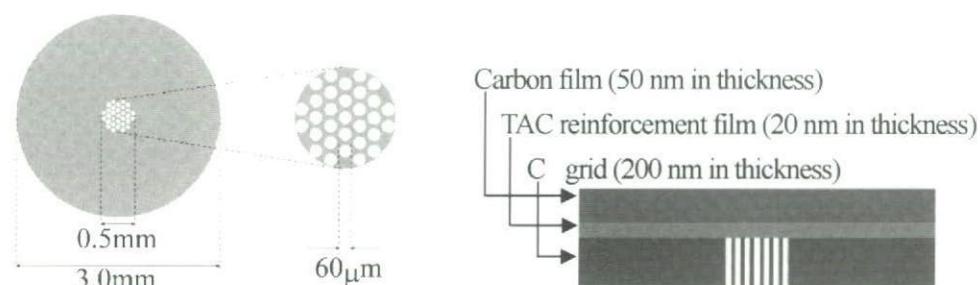


図3. ガス隔膜の詳細

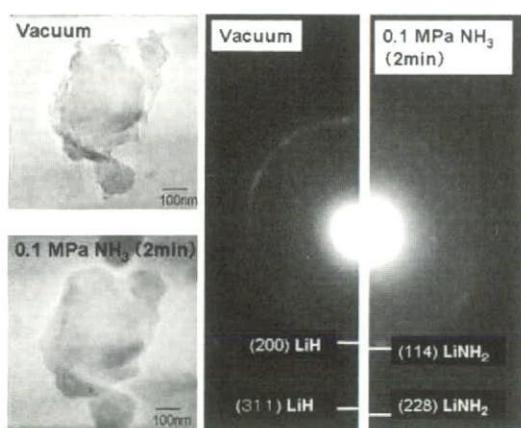


図4 アンモニアガスと反応前後のLiH粒子

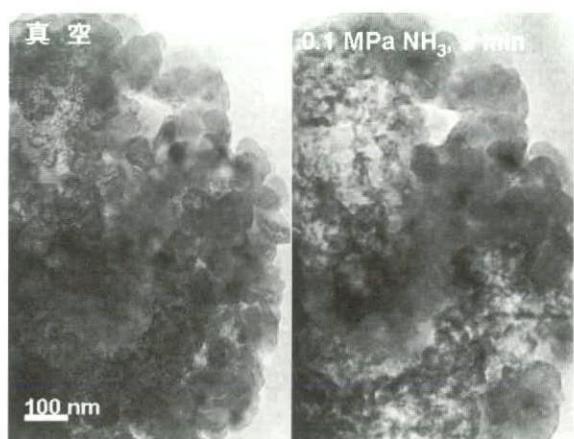


図5 アンモニアガス反応前後のNaH粒子

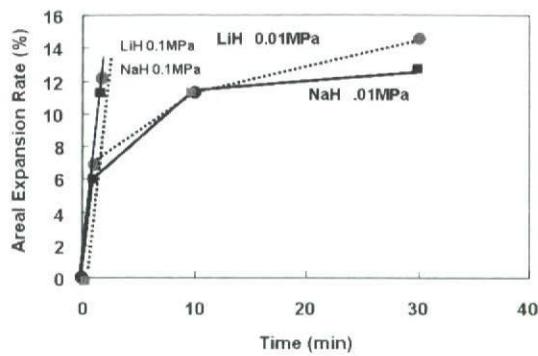


図6 NaH と LiH 粒子の膨張の時間依存性

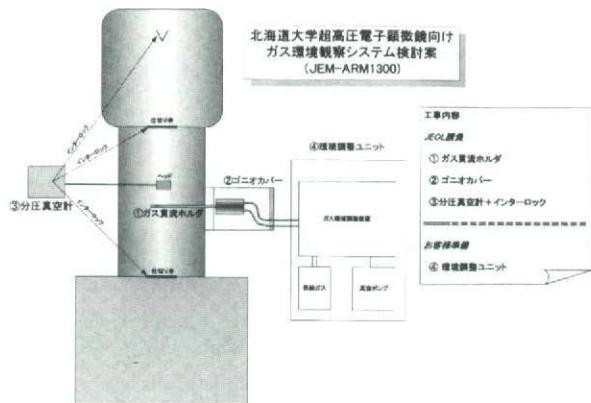


図7 超高圧電子顕微鏡用環境セルの設計概念

### III. 研究成果の刊行に関する一覧表

### III. 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	書籍全体の編集者名	書籍名	出版社名	出版地	出版年	ページ
編集 ○F.Watari		F.Watari, K.Tohji, K.Asaoka	Abst.Int.Symp. on "Nanotoxicology Assessment and Biomedical, Environmental Application of Fine Particles and Nanotubes (ISNT2008)		Japan	2008	1-78
○F.Watari, A.Yokoyama, M.Gelinsky, W.Pompe	Conversion of Functions by Nanosizing - from Osteoconductivity to Bone Substitutional Properties in Apatite	M.Watanabe, O.Okuno	Interface Oral Health Science 2007		Japan	2008	139-147
M.Gelinsky, A.Bernhardt, M.Eckert, T.Hanke, U.Konig, A.Lode, A.Reinstorf, C.Vater, A.Walther, A.Yokoyama, F.Watari	Biomaterials based on mineralised collagen an artificial extracellular bone matrix,	M.Watanabe and O.Okuno	Interface Oral Health Science 2007		Japan	2007	323-328
Y.Saito, H. Kai and K. Yada	High Resolution X-Ray Inspection Microscope Equipped with a Field Emission Gun, and Its Application	S.Aoki,Y. Kagoshima,Y. Suzuki	Proc.8th Int.Conf.X-Ray Microscopy	IPAP Conf. Series 7	Tokyo, Japan	2006	35-37
K.Yada, A.Itoand Y.Kinjyo	New Type of Targets for Projection X-Ray Microscopy of Samples consisting of Light Elements	S.Aoki,Y. Kagoshima,Y. Suzuki	Proc.8th Int.Conf.X-Ray Microscopy	IPAP Conf. Series 7	Tokyo Japan	2006	143-144
K.Oohasi, K.Yada, K.Shirota, H.Kai and Y. Saito	Low-Voltage Projection Microscope hor Inspection ofLighter Elements	H.Ichinose,T. Sasaki	Proceedings 16th Int. Microscopy Conf. .	Nire printing co., ltd	Tokyo, Jaoan	2006	1046
K.Yada	Recent Trends of Projection X- Ray Microscopy In Japan	Jun Kawai	Proc.19thInt. Conf. X-Ray Micro- analysis	Elsevier	Amsterd am, Holland	2009 in press	
米澤徹	金属クラスター集積薄膜	関 隆広	機能物質の集積膜 と応用展開	シーエム シー出版	東京	2006	119-125
米澤徹	小さな配位子に保護された 金属ナノ粒子	菅沼克昭	金属ナノ粒子ベー ストのインクジェ ット微細配線	シーエム シー出版	東京	2006	70-74
米澤徹	金属ナノ粒子の種類、合成 法分類と基本的な物性	菅沼克昭	金属ナノ粒子ベー ストのインクジェ ット微細配線	シーエム シー出版	東京	2006	7-19

米澤徹	金属ナノ粒子の配列	下村政嗣	自己組織化ナノマテリアルーフロントランナー85人が語るナノテクノロジーの新潮流	フロンティア出版	東京	2006-	222-226
米澤徹	超微粒子材料の新たな展開	丸善	エコマテリアルハンドブック	丸善	東京	2006	5.1.2節
Tetsu Yonezawa	Synthesis and applications of core-shell structured metals	Motonari Adachi and David Lockwood	Self-Organized Nanoscale Materials	Springer	NY	2006	251-269
米澤徹	試料調製法－コロイド粒子	丸善	実験化学講座24 改訂5版	丸善	東京	2007	79-91
編集 米澤徹		米澤徹	ナノ粒子の創製と応用展開	フロンティア出版	東京	2008	
米澤徹	ナノ粒子の創製と応用展開	米澤徹	ナノ粒子の創製と応用展開	フロンティア出版	東京	2008	1-8
米澤徹	ハイブリッド微粒子	日本化学会 コロイドおよび界面化 学部会	現代界面コロイド 化学の基礎	丸善	東京	印刷中	
米澤徹	微粒子の生体影響	日本化学会 コロイドおよび界面化 学部会	現代界面コロイド 化学の基礎	丸善	東京	印刷中	
米澤徹	金ナノ粒子の調製	春田正毅	金ナノテクノロジー：その基礎と応用	シーエム シー出版	東京	印刷中	
佐藤義倫	カーボンナノチューブの毒性評価	中山喜萬	カーボンナノチューブの機能・複合化の最新技術	CMC出版	東京	2006	45
遠山晴一, 安田和則	半月板切除	越智光夫	最新整形外科学体系17.膝関節・大腿	文光堂	東京	2006	327-331
遠山晴一, 安田和則	膝関節の診察	守屋秀繁、糸 満盛憲、内田 淳正、荻野利 彦、黒坂昌弘 戸山芳昭	整形外科診療実践 ガイド	文光堂	東京	2006	47-51
F. Watari, K. Tamura, A. YOKOYAMA, K. Shibata, T. Akasaka, B. Fugetsu, K. Asaoka, M.U o, Y. Totsuka, K. Tohji	Biochemical and Pathological Responses of Cells and Tissue to Micro- and Nanoparticles from Titanium and other Materials	M.Epple and E.Bauerlein	Handbook of Biominerilization	WELEY-VCH	Weinheim	2007	127-144
亘理文夫	各ナノ粒子・微粒子の毒性評価・安全性試験の動向	技術情報協会	ナノ粒子の有害性評価とリスク対策	倉敷印刷 株式会社	日本	2007	436-449
亘理文夫	CNTの生体影響(in-vitro)	エヌ・ティ ー・エス	ナノカーボンハ ンドブック	三報社印 刷株式会 社	日本	2007	887-893
佐藤義倫、田路 和幸	カーボンナノチューブ		ナノ粒子の有害性評価とリスク対策	技術情報 協会	東京	2007	392-415

F. Watari, K. Tamura, A. Yokoyama, K. -I. Shibata, T. Akasaka, B. Fugetsu, K. Asakura, M. Uo, Y. Totsuka, Y. Sato, K. Tohji	Biochemical and Pathological Responses of Cells and Tissue to Micro- and Nanoparticles from Titanium and other Materials	Matthia Epple and Edmund Baeuerlein	Handbook of Biominerilization -Medical and Clinical Aspects-	WILEY-VCH, Verlag, GmbH & Co.KgaA	Germany	2007	127-144
橋本雅美	酸化チタン・有機高分子複合人工骨の開発		マテリアルインテグレーション			2007	7-11
遠山晴一	ジャンパー膝	山口 徹、北原光夫、福井次矢	今日の治療指針 2007。私はこう治療している	医学書院	東京	2007	767-768
Tohyama H., Yasuda K	Growth Factors and Other New Methods for Graft Healing Enhancement	Chadwick Prodromos, Charles Brown, Freddie Fu	THE ANTERIOR CRUCIATE LIGAMENT: RECONSTRUCTION AND BASIC SCIENCE	WB Saunders Co		20071	625-633
淺岡憲三	チタン多孔体とリン酸カルシウムの修飾		多孔体の精密制御と機能・物性評価	サイエンス&テクノロジー	東京	2008 印刷中	
久保木芳徳 藤沢隆一 滝田裕子 川上俊之	硬組織再建の原理	久保木芳徳 川上俊之	骨と歯の再生医療	学際企画	東京	2007	5-14
藤沢隆一 久保木芳徳 滝田裕子	硬組織形成に必要な5大要素とその統合	久保木芳徳 川上俊之	骨と歯の再生医療	学際企画	東京	2007	15-50
久保木芳徳 藤沢隆一 滝田裕子	人工ECMの幾何学	久保木芳徳 川上俊之	骨と歯の再生医療	学際企画	東京	2007	51-66
久保木芳徳 滝田裕子、吉本良太、賀来亨	人工細胞外マトリックスの幾何学	田畠泰彦、岡野光夫、	ティッシュエンジニアリング 2006	日本医学館	東京、	2006	24-33.
久保木芳徳 藤沢隆一 滝田裕子	人工細胞外マトリックス	田畠泰彦、岡野光夫	ティッシュエンジニアリング 2007	日本医学館	東京	2007	100-108
田路和幸	カーボンナノチューブの切断と長さ制御	情報技術協会	最新フィラー技術全集	情報技術協会	東京	2008	95-107
淺岡憲三	チタン多孔体とリン酸カルシウムの修飾		多孔体の精密制御と機能・物性評価	サイエンス&テクノロジー	東京	2008	448-454
Asaoka K, Okuno O, J Tesk	High temperature investment	W.J. O'Brien,	Dental Materials and Their selection, 4th Ed	Quintessence Publishing Co Inc	Chicago	2008	262-271
淺岡憲三	歯冠修復材料 審美歯用材料		コア歯科理工学	医歯薬出版	東京	2008	81-88 136-138

## 雑誌

発表者氏名	論文タイトル	発表雑誌名	巻号	ページ	出版年
○F.Watari, N.Takashi, A.Yokoyama, M.Uo, T.Akasaka, Y.Sato,S.Abe, Y.Totsuka, K.Tohji	Material nanosizing effect on living organism: non-specific, biointeractive, physical size effect	J.Roy.Soc.Interface		doi:10.1098/rsif. 2008.0488.fo cus	2009
○亘理文夫	ナノマテリアルの生体反応 -リスクと活用-	ファルマシア	45 (3)	239-244	2009
Fumio Watari, Shigeaki Abe, Kazuchika Tamura, Motohiro Uo, Atsuro Yokoyama and Yasunori Totsuka	Internal Diffusion of Micro/Nanoparticles Inside Body	<i>Bioceramics 20</i> (Key Engineering Materials, 361-363,)	20	95-98	2008
Fumio Watari, Shigeaki Abe, Kazuchika Tamura, Atsuro Yokoyama, Tsukasa Akasaka and Motohiro Uo	Biological Reaction to Micro/Nano Particles of Titanium and Titanium Oxides	Proceedings of the 6th International Symposium on Titanium in Dentistry		68-69	2008
○Watari F., Abe S., Rosca I. D., Yokoyama, A. Uo M., Akasaka T., Takashi N., Totsuka Y., Hirata E., Matsuoka M., Ishikawa K., Itoh S. and Yawaka Y.	Visualization of invasion into the body and internal diffusion of nanoparticles,	<i>Bioceramics 21</i> (Key Engineering Materials, 396-398,)	21	569-572	2009
○F.Watari, T.Akasaka, Xiaoming Li, M.Uo, A.Yokoyama	Proliferation of osteoblast cells on nanotubes	Front. Mater. Sci	DOI 10.100 7/s117 06-00 9-003 4-z	2009	
○Watari F., Abe S., Koyama C., Yokoyama A., Akasaka T., Uo M., Matsuoka M., Totsuka Y., Esaki M., Morita M., and Yonezawa T.	Behavior of in vitro, in vivo and internal motion of micro/nano particles of titanium, titanium oxides and others,	<i>J. Ceram. Soc. Jpn.</i> ,	116(1)	1-5	2008
○ F.Watari, S.Inoue, N.Takashi, Y.Totsuka, A.Yokoyama	Reaction of cells and tissue to material nanosizing	Trans.Mat.Res.Soc.Jap	33	209-214	2008
○亘理文夫	ナノ粒子の生体反応性と為害性発現	金属	78 (9)	859-864	2008
F.Watari, T.Akasaka, M.Terada, M.Uo, K.Ishikawa, M.Matsuoka, Y.Kuboki, E.Hirata, A.Yokoyama, S.Itoh, Y.Yawaka, Y.Totsuka, Y.Kitagawa, S.Abe, M.Suzuki	Cell Culture on Nanotube Scaffolds for Implant Application	Proc. 4th Max-Bergmann Symposium 2008	C:39-40		2008
F.Watari, T.Akasaka, M.Matsuoka, K.Ishikawa, K.Nakanishi, M.Uo, S.Itoh, Y.Totsuka, M.Masaya, Y.Bando	Cell culture on nanotube scaffolds	10th Int.symp.on Biominerilization Abstract		F-13	2008
Wang, W., Yokoyama, A., Liao, S., Omori, M., Zhu, Y., Uo, M., Akasaka, T., Watari, F.	Preparation and Characteristics of a binderless carbon nanotube monolith and its biocompatibility.	Mat.Sci.Eng. C.	28	1082-1086	2008
F.Watari, S.Abe, C.Koyama, S.Inoue, T.Akasaka, M.Uo, M.Matsuoka, N.Takashi, Y.Totsuka, E.Hirata, A.Yokoyama, M.Esaki, M.Morita, T.Yonezawa	Effect of nanosizing of materials on living organism	Proc. International Symposium on Nano Science and Technology (ISNST) 2007		43-52	2007
○亘理文夫	ナノトキシコロジー入	現代化学	10	54-68	2006

	門				
亘理文夫	ナノテク以後	生体材料	24 (4)	235-23 6	2006
○亘理文夫	材料のナノサイジングと生体反応性	生体材料	24 (5)	300-31 0	2006
亘理文夫、崔福斎	高齢者のQOLを改善するナノバイオマテリアルの開発	日中医学	21 (2)	38	2006
亘理文夫	ナノテクとその健康	平成18年度厚生労働科学研究シンポジウム「家庭用化学物質の安心・安全に向けた取組み」抄録集		28-33	2006
<u>Abe S.</u> , Fukuzumi T., and Tachikawa T.	Ab-initio calculations on the structures and electronic states of dimethylsulfide-water clusters,	<i>Synth. React. Inorg. Met.-Org. Nano-Metal Chem.</i>	38(1)	105-110	2008
○ <u>Abe S.</u> , Koyama C., Akasaka T., Uo M., Kuboki Y. and Watari F.	Internal distribution of several inorganic microparticles in mice,	<i>Bioceramics 21 (Key Engineering Materials, 396-398.)</i>	21	539-542	2009
<u>Abe S.</u> , Koyama C., Uo M., Akasaka T., Kuboki Y. and Watari F.	Time dependence of TiO <sub>2</sub> and Pt particle's biodistribution in mice and its visualization using X-ray scanning analytical microscope	<i>J. Nanosci. Nanotech.</i>		in press	2009
<u>Abe S.</u> , Kida I., Esaki M., Akasaka T., Uo M., Sato Y., Jeyadevan B., Kuboki Y., Morita M., Tohji K., and Watari F.	Biodistribution imaging of magnetic nanoparticles in mice compared with X-ray scanning analytical microscopy and Magnetic Resonance imaging	<i>Bio-Med. Mater. Eng.</i>		in press	2009
<u>Abe S.</u> , Koyama C., Esaki M., Akasaka T., Uo M., Kuboki Y., Morita M., and Watari F.	<i>In vivo</i> internal diffusion of several inorganic microparticles through an oral administration	<i>Bio-Med. Mater. Eng.</i>		in press	2009
<u>Abe S.</u> , Watari F., Takada T., and Tachikawa H.	A DFT and MD study on the interaction of carbon nano-materials with metal ions,	<i>Liquid. Crys. Mol. Crys.</i>		in press	2009
Nakagawa H., Ohira M., Hayashi S., <u>Abe S.</u> , Saito S., Nagahori N., Monde K., Shinohara Y., Fujitani N., Kondo H., Akiyama S.-I., Nakagawara A., and Nishimura S.-I.	Alterations in the glycoform of cisplatin-resistant human carcinoma cells are caused by defects in the endoplasmic reticulum-associated degradation system	<i>Cancer Lett.</i> ,	270,	296-301, 2008	
N. Sakaguchi, F. Watari, A. Yokoyama, Y. Nodasaka	High-resolution electron microscopy of multi-wall carbon nanotube in the subcutaneous tissue of rats	Journal of Electron Microscopy	58	159	2008
N. Sakaguchi, F. Watari, A. Yokoyama, Y. Nodasaka, H. Ichinose	Low-voltage and high-voltage TEM observations on CNT of rat <i>in vivo</i>	Bio-Medical Materials and Engineering		in press	2009

Y. Takenaka, A. Yanagi, H. Masuda, Y. Mitsui, H. Mizuno and N. Haga	Direct observation of histone H2B-YFP fusion proteins and transport of their mRNA between conjugating <i>Paramecia</i> .	Gene	395	108-115	2007
○芳賀信幸	単細胞個体・ゾウリムシのカーボンナノチューブ細胞内摂取のリアルタイム観察	J. Japanese Society for Biomaterials	24	319-323	2006
○N. Haga and K. Haneda	Paramecium as a bioassay system for elucidation of cytotoxicity and biocompatibility of nanoparticles: effect of carbon nanofibers on proliferation and survival	Jpn. J. Protozool.	40,2	139-146	2007
Y. Takenaka, A. Yanagi, H. Masuda, Y. Mitsui, H. Mizuno and <u>N. Haga</u>	Random insertion of injected DNA molecules into the macronuclear chromosome of <i>Paramecium caudatum</i>	Jpn. J. Protozool.	41	159-168	2008
T. Abe and <u>N. Haga</u>	Cytotoxicity mechanism of Ag particles in <i>Paramecium</i>	Jpn. J. Protozool.	42	36-37	2009
H. Sasaki and <u>N. Haga</u>	Method for cryopreservation of <i>Paramecium caudatum</i>	Jpn. J. Protozool.	42	16-17	2009
N. Haga and T. Abe	Studies on immaturin, a sexual rejuvenescence molecule in <i>Paramecium</i> , by polyclonal antibody	Jpn. J. Protozool.	42	62-63	2009
K. Yada, T. Abe and <u>N. Haga</u>	Studies of <i>Paramecium caudatum</i> by means of scanning electron microscope and projection X-ray microscope	Bio-Medical Materials and Engineering	In press	1-6	2009
南 勝利・斎藤泰・矢田慶治	投影型X線顕微鏡の最前線	検査技術	13 (12)	63-66	2008
○Tsukasa Akasaka, Fumio Watari, Yoshinori Sato, Kazunori Tohji	Apatite formation on carbon nanotubes	Material science and Engineering C	26	675-678	2006
Tsukasa Akasaka, Fumio Watari	Carbohydrate coating of carbon nanotubes for biological recognition	Fullerenes, Nanotubes, and Carbon Nanostructure	16(2)	114-125	2008
○Akasaka T, Watari F	Capture of bacteria by flexible carbon nanotubes	Acta Biomaterialia	5	607-612	2009
Akasaka T, Yokoyama A, Matsuoka M, Hashimoto T, Abe S, Uo M, Watari F	Adhesion of human osteoblast-like cells (Saos-2) to carbon nanotube sheets	Bio-Medical Materials and Engineering		in press	2009
Akasaka T, Nakata K, Uo M, Watari F	Modification of the dentin surface by using carbon nanotubes	Bio-Medical Materials and Engineering		in press	2009
Miyaji H, Sugaya T, Kato K, Kawamura N, Tsuji H, Kawanami M.	Dentin resorption and cementum-like tissue formation by bone morphogenetic protein application.	J Periodont Res	41	311-315	2006

T. Yonezawa, T.Ito, N.Shirahata, Y. Masuda, K.Koumoto	Positioning of cationic silver nanoparticle by using AFM lithography and electrostatic interaction	Applied Surface Science	254	621-6	2007
T. Yonezawa, K. Kamoshita, M.Tanaka, T.Kinoshita	Easy preparation of stable iron oxide nanoparticles using gelatin as stabilizing molecules	J.J.Applied Physics	47	1389-92	2008
H. Kawasaki, T. Yonezawa, T. Watanabe, R. Arakawa	Pt nanoflowers for surface assisted laser desorption/ionization mass spectrometry	J.Phys.Chem	111	16278-8 3	2007
H. Kawasaki, T. Yonezawa, K. Nishimura, R. Arakawa	Fabrication of submillimeter sized gold plates from thermal decomposition of HAuCl4 in two component ionic liquids	Chem.Lett.	36	1038-9	2007
本郷哲也, 宮治裕史, 菅谷勉川浪雅光	BMP-2処理した象牙質表面におけるセメント質様硬組織形成のビスフォスフォネートによる抑制	日歯周誌	48	285-296	2006
Susan Liao, Fumio Watari, Guofu Xu, Michelle Ngiam, Seeram Ramakrishna, Casey K. Chan	Morphological effects of variant carbonates in biomimetic hydroxyapatite	Materials Letters	61	3624-3 628	2007
Susan Liao, Michelle Ngiam, Fumio Watari, Seeram Ramakrishna and Casey K Chan	Systematic fabrication of nano-carbonated hydroxyapatite collagen composites for biomimetic bone grafts	Bioinspiration & Biomimetics	2	37-41	2007
Susan Liao, Fumio Watari, Yuhe Zhu, Motohiro Uo, Tsukasa Akasaka, Wei Wang, Guofu Xu, Fuzhai Cui	The degradation of the three layered nano-carbonated hydroxyapatite/collagen / PLGA composite membrane in vitro	Dental Materials	23	1120-1 128	2007
○Susan Liao, Guofu Xu, Wei Wang, Fumio Watari, Fuzhai Cui, Seeram Ramakrishna, Casey K. Chan	Self-assembly of nano-hydroxyapatite on multi-walled,carbon nanotubes	Acta Biomaterialia	3	669-675	2007
X.M. Li, C.A. Van Blitterswijk, Q.L. Feng, F.Z. Cui, F. Watari	The effect of calcium phosphate microstructure on bone-related cells in vitro	Biomaterials	29	3306	2008
○X.M. Li, H. Gao, M. Uo, Y. Sato, T. Akasaka, Q.L. Feng, F.Z. Cui, X.H. Liu, F. Watari	Effect of carbon nanotubes on cellular functions in vitro	Journal of Biomedical Materials Research Part A	DOI: 10.10		2008
X.M. Li, X.H. Liu, W. Dong, Q.L. Feng, F.Z. Cui, M. Uo, T. Akasaka, F. Watari	In vitro evaluation of porous poly(L-lactic acid) scaffold reinforced by chitin fibers	Journal of Biomedical Materials Research Part B	DOI: 10.10 02/jb		2009
X.M. Li, X.H. Liu, G.P. Zhang, W. Dong, Z.Y. Sha, Q.L. Feng, F.Z. Cui, F. Watari	Repairing 25mm bone defect using fibres reinforced scaffolds as well as autograft bone	Bone	43	S94	2008
X.M. Li, X.H. Liu, M. Uo, Q.L. Feng, F.Z. Cui, F. Watari	Investigation on the mechanism of the osteoinduction for calcium phosphate	Bone	43	S111	2008
X.M. Li, X. Liu, Y.X. Yu, X.H. Qu, Q.L. Feng, F.Z. Cui, F. Watari	Recent patents on polymeric scaffolds for tissue engineering	Recent Patents on Biomedical Engineering	2	65	2009

○ Li X., Gao H., Uo M., Sato Y., Akasaka T., <u>Abe S.</u> , Feng Q., Cui F., and Watari F.	Maturation of osteoblast-like Saos2 induced by carbon nanotubes	<i>Biomed. Mater.</i> ,	4,	15005-1 5012	2009
○ <u>Tetsu Yonezawa</u> , Takashi Nomura, Takatoshi Kinoshita, and Kunihito Koumoto	Preparation and Characterization of Polypeptide-stabilized Gold Nanoparticles	<i>J. Nanosci. Nanotech.</i>	6(6)	1649-1654	2006
Shintaro Horinouchi, Yoshinori Yamanoi, <u>Tetsu Yonezawa</u> , Toshihiro Mouri, and Hiroshi Nishihara	Hydrogen Strage Properties of Isocyanide-stabilized Palladium Nanoparticles	<i>Langmuir</i>	22(4)	1880-1884	2006
Keiko Nunokawa, Satoru Onaka, Mitsuhiro Ito, Makoto Horibe, <u>Tetsu Yonezawa</u> , Hiroshi Nishihara, Tomoji Ozeki, Hirokazu Chiba, Seiji Watase, Masami Nakamoto	Synthesis, Single Crystal X-ray Analysis, and TEM for a Single-sized Au11 Cluster Stabilized by SR Ligands: the Interface between Molecules and Particle	<i>J. Organomet. Chem.</i>	691(4)	638-642	2006
Naoto Shirahata, Atsushi Hozumi, Yoshiko Miura, Kazukiyo Kobayashi, Yoshio Sakka, and <u>Tetsu Yonezawa</u>	An Efficient Matrix that Resists the Nonspecific Adsorption of Protein to Fabricate Carbohydrate Arrays on Silicon	<i>Thin Solid Films</i>	499(1-2)	213-218	2006
Yoshinori Yamanoi, Naoto Shirahata, <u>Tetsu Yonezawa</u> , Nao Terasaki, Noritaka Yamamoto, Yoshitaka Matsui, Kazuyuki Nishio, Hideki Masuda, Yuichi Ikuhara, and Hiroshi Nishihara	Detailed Structural Examinations of Covalently Immobilized Gold Nanoparticles onto Hydrogen-terminated Silicon Surface	<i>Chem. Eur. J.</i>	12(1)	314-323	2006
米澤 徹	金属ナノ粒子の製法と実分野への展開	化学工業	57(11)	839-844	2006
米澤 徹	導電ペーストを志向する金属ナノ粒子	マテリアルステージ	6(4)	65-54	2006
<u>Tetsu Yonezawa</u> , Tetsuya Itoh, Naoto Shirahata, Yoshitake Masuda, and Kunihito Koumoto	Positioning of Cationic Silver Nanoparticle by Using AFM Lithography and Electrostatic Interaction	<i>Appl. Surf. Sci.</i>	254	621-626	2007
Nao Terasaki, Noritaka Yamamoto, Kaoru Tamada, Mineyuki Hattori, Takashi Hiraga, Akihiko Tohri, Ikutaro Sato, Masako Iwai, Michinao Iwai, Shunpei Taguchi, Isao Enami, Yasunori Inoue, Yoshinori Yamanoi, <u>Tetsu Yonezawa</u> , Katsuya Mizuno, Masaki Murata, Hiroshi Nishihara, Satoshi Yoneyama, Makoto Minakata, Tsutomu Ohmori, Makoto Sakai, and Masaaki Fujii	Bio-photosensor: Cyanobacterial photosystem I coupled with transistor via molecular wire	<i>Biochim. Biophys. Acta</i>	1767	653-659	2007
Hideya Kawasaki, <u>Tetsu Yonezawa</u> , Takehiro Watanabe, and Ryuichi Arakawa	Platinum Nanoflowers for Surface-Assisted Laser Desorption/Ionization Mass Spectrometry of Biomolecules	<i>J. Phys. Chem. C</i>	111(44)	16278-16283	2007
Hideya Kawasaki, <u>Tetsu Yonezawa</u> , Kouhei Nishimura, and Ryuichi Arakawa	Fabrication of Sub-millimeter-sized Gold Plates from Thermal Decomposition of HAuCl <sub>4</sub> in Two-component Ionic	<i>Chem. Lett.</i>	36(8)	1038-1039	2007

	liquids				
米澤 徹	金属ナノ粒子の配列・固定化と機能	未来材料	7(3)	44-49	2007
米澤 徹	金属ナノ粒子の製造と基板上への固定化	日本写真学会誌	70(1)	26-29	2007
Ikuse Nakamura, Yoshinori Yamanoi, <u>Tetsu Yonezawa</u> , Takane Imaoka, Kimihisa Yamamoto, and Hiroshi Nishihara	Nanocage Catalyst ? Rhodium Nanoclusters Encapsulated with Dendrimers as Accessible and Stable Catalysts for Olefin and Nitroarene Hydrogenations	<i>Chem Commun.</i>	2008(44)	5716-5718	2008
<u>Tetsu Yonezawa</u> , Kazuki Uchida, Yoshinori Yamanoi, Shintaro Horinouchi, Nao Terasaki, and Hiroshi Nishihara	Room-Temperature Immobilization of Gold Nanoparticles on Si(111) Surface and Their ElectronBehaviou	<i>Phys Chem Chem Phys</i>	10(46)	6925-6927	2008
Hideya Kawasaki, Tsuyoshi Sugitani, Takehiro Watanabe, <u>Tetsu Yonezawa</u> , Hiroshi Moriwaki, and Ryuichi Arakawa	Layer-by-layer Self-assembled Multilayer Films of Gold Nanoparticles for Surface-Assisted Laser Desorption/Ionization Mass Spectrometry	<i>Anal. Chem.</i>	80(19)	7524-7533	2008
Misaki Nakai, Yoshinori Yamanoi, Yoshihiko Nishimori, <u>Tetsu Yonezawa</u> , and Hiroshi Nishihara	Observation of Electrochemical Single Electron Transfer Events of Au Nanoparticles in Aqueous Solution in the Presence of Both Amine and Sulfonate Surface-active Agents	<i>Angew. Chem. Int. Ed.</i>	47(35)	6699-6702	2008
Takehiro Watanabe, Hideya Kawasaki, <u>Tetsu Yonezawa</u> , and Ryuichi Arakawa	Surface-assisted Laser Desorption/Ionization Mass Spectrometry (SALDI-MS) of Low Molecular Weight Organic Compounds and Synthetic Polymers Using Zinc Oxide (ZnO) Nanoparticles	<i>J. Mass Spectrosc.</i>	43	1063-1071	2008
Masanori Tomonari, Kiyonobu Ida, Hiromi Yamashita, and <u>Tetsu Yonezawa</u>	Size-controlled Oxidation Resistant Copper Fine Particles Covered by Biopolymer Nanoskin	<i>J. Nanosci. Nanotech.</i>	8(5)	2468-2471	2008
米澤 徹	金属ナノ粒子の湿式合成とその応用	ケミカルエンジニアリング	53(8)	583-587	2008
<u>Tetsu Yonezawa</u> , Yoshinori Yamanoi, and Hiroshi Nishihara	Cross-sectional STEM Observation of Nanoparticle-Attached Silicon Wafer: Specimen Prepared by Focused Ion-Beam	<i>J. Nanosci. Nanotech.</i>	8(3)	1518-1522	2008
<u>Tetsu Yonezawa</u> , Keigo Kamoshita, Masayoshi Tanaka, and Takatoshi Kinoshita	Easy Preparation of Stable Iron Oxide Nanoparticles using Gelatin as Stabilizing Molecules	<i>Jpn. J. Appl. Phys.</i>	47(2)	1389-1392	2008

Fumio Watari, Shigeaki Abe, Chika Koyama, Atsuro Yokoyama, Tukasa Akasaka, Motohiro Uo, Makoto Matsuoka, Yasunori Totsuka, Mitsue Esaki, Manabu Morita, and <b>Tetsu Yonezawa</b>	Behavior of in vitro, in vivo, and internal motion of micro/nano particles of titanium, titanium oxides and others	J. Ceram. Soc. Jpn.	116(1)	1-5	2008
Mariko Miyachi, Makiko Ohta, Misaki Nakai, Yoshihiro Kubota, Yoshinori Yamanoi, <b>Tetsu Yonezawa</b> , and Hiroshi Nishihara	Surface Bottom-up Fabrication of Porphyrin-terminated Metal Complex Molecular Wires with Photo-electron Conversion Properties on ITO	Chem. Lett.	27(4)	404-405	2008
<b>Tetsu Yonezawa</b> , Shinsuke Takeoka, Hiroshi Kishi, Kiyonobu Ida, and Masanori Tomonari	Preparation of Copper Fine Particle Paste and Application of This Paste as Material of Inner Electrodes of Multilayered Ceramic Capacitor (MLCC)	Nanotechnology	19	145706/1-5	2008
<b>Tetsu Yonezawa</b> , Hideya Kawasaki, Akira Tarui, Takehiro Watanabe, Ryuichi Arakawa, Toshihiro Shimada, Fumitaka Mafune	Detailed Investigation on the Possibility of Various Metal Elements for Surface-Assisted Laser Desorption/ Ionization Mass Spectrometry	Anal. Sci.	25(3)	339-346	2009
Nao Terasaki, Noritaka Yamamoto, Takashi Hiraga, Yoshinori Yamanoi, <b>Tetsu Yonezawa</b> , Hiroshi Nishihara, Tsutomu Ohmori, Makoto Sakai, Masaaki Fujii, Akihiro Tohri, Masako Iwai, Yasunori Inoue, Satoshi Yoneyama, Makoto Minakata, and Isao Enami	Plugging a Molecular Wire into Photosystem I for Reconstitution of the Photoelectric Conversion System on a Gold Electrode	Angew. Chem. Int. Ed.		in press.	2009
Mariko Miyachi, Yoshinori Yamanoi, <b>Tetsu Yonezawa</b> , Hiroshi Nishihara, Michinao Iwai, Masae Konno, Masako Iwai, and Yasunori Inoue	Surface Immobilization of PSI Using Vitamin K <sub>1</sub> -like Molecular Wires for Fabrication of a Bio-photoelectrode	J. Nanosci. Nanotech.		in press.	2009
Akira Tarui, Hideya Kawasaki, Takuma Taiko, Takehiro Watanabe, <b>Tetsu Yonezawa</b> , and Ryuichi Arakawa	Aggregated gold-nanoparticle-supported silicon plate with cationic diblock copolymer micelles for surface-assisted laser desorption/ionization mass spectrometry of peptides	J. Nanosci. Nanotech.		in press	2009
Uo M., Asakura K., Kohgo T., Watari F.	Selenium distribution in human soft tissue determined by using X-ray scanning analytical microscope and X-ray absorption fine structure analysis	Chemistry Letters	35	66-67	2006
Uo M., Sjögren G., Sundh A., Goto M., Watari F., Bergman M.	Effect of surface condition of dental zirconia ceramic (Denzir) on bonding	Dental Materials Journal	25	626-631	2006
Uo M., Asakura K., Yokoyama A., Ishikawa M., Tamura K., Totsuka Y., Akasaka T., Watari F.	X-ray Absorption Fine Structure (XAFS) Analysis of Titanium-Implanted Soft Tissue	Dental Materials Journal	26	268-273	2007

○Uo M., Kachi H., Akasaka T., Watari F., Sato Y., Motomiya K., Tohji K.	The purity and thermal stability in air of metal-encapsulating carbon nanocapsules (MECNCs)	<i>Fullerenes, Nanotubes and Carbon Nanostructures</i>	15	303-309	2007
Uo M., Asakura K., Tamura K., Totsuka Y., Abe S., Akasaka T., and Watari F.	XAFS analysis of Ti and Ni dissolution from pure Ti, Ni-Ti alloy, and SUS304 in soft tissues,	<i>Chem. Lett.</i> ,	37	958-959	2008
宇尾基弘	X線による元素分析	<i>J. Dental Engineering</i>	167	34-25	2008
Hashimoto, M, Takadama, H, Mizuno, M, Kokubo, T	Mechanical Properties and Apatite Forming Ability of $\text{TiO}_2$ Nanoparticles / High Density Polyethylene Composite: Effect of Filler Content	<i>The Journal of Materials Science: Materials in Medicine</i>		661-668	2007
Hashimoto, M, Mizuno, M, Kitaoka, S	Influence of Lubricant on Morphology of UHMWPE Debris in Hip Joint Simulator	Proceeding of the Asian BioCeramics		55-58	2007
Hashimoto, M, Mizuno, M, Kitaoka, S, Kokubo, T, Goto, K, Nakamura, T	Mechanical and Bioactive Behaviors of PMMA/ $\text{TiO}_2$ Bone Cement	Proceedings of the 24 <sup>th</sup> International Japan-Korea Seminar on Ceramics		133-136	2007
M. Omori, T. Onoki, T. Hashida, A. Okubo, Y. Murakami	Low Temperature Synthesis of Hydroxyapatite from $\text{CHPO}_4 \cdot 2\text{H}_2\text{O}$ and $\text{Ca}(\text{OH})_2$ Based on Effect of the Spark Plasma System (SPS)	<i>Ceram. International</i>	32	617-621	2006
G. Yamamoto, M. Omori, K. Yokomizo, T. Hashida and K. Adachi	Structural Characterization and Frictional Properties of Carbon Nanotube/Alumina Composites Prepared by Precursor Method	<i>Mater. Sci. &amp; Engineering B</i> 1	48	265-269	2008
Y.Sakai, A.Haga, S.Sugita, S. Kita, S. Tanaka, and F. Okuyama	Electron gun using carbon-nanofiber field emitter	<i>Review of Scientific Instruments</i>	78	013305-1 ~ 013305-6	2007
T. Nakazato, M. Nakanishi, S. Kita, F. Okuyama, Y. Shibamoto, and T. Otsuka	Biological effects of Field emission-type X-rays generated by nanotechnology	<i>J. Radiation Research</i>	48	153 – 161	2007
Sergiy Korablov, Kazunori Yokosawa, Dmytro Korablov, Kazuyuki Tohji, Nakamichi Yamasaki	Hydrothermal formation of diamond from chlorinated organic compounds	<i>Materials Letters</i>	60	3041	2006
Go Yamamoto, Yoshinori Sato, Toru Takahashi, Mamoru Omori, Toshiyuki Hashida, Akira Okubo, Kazuyuki Tohji	Single-walled carbon nanotube-derived novel structural material	<i>J. Materials Research</i>	21	1537	2006

○ Go Yamamoto, Yoshinori Sato, Toru Takahashi, Mamoru Omori, Akira Okubo, Kazuyuki Tohji, Toshiyuki Hashida	Mechanical properties of binder-free single-walled carbon nanotube solids	Scripta Materialia	54	299	2006
Yutaka Maeda, Yoshinori Sato, Masahiro Kako, Takatsugu Wakahara, Takeshi Akasaka, Jing Lu, Shigeru Nagase, Yumiko Kobori, Tadashi Hasegawa, Kenichi Motomiya, Kazuyuki Tohji, Atsuo Kasuya, Dan Wang, Dapeng Yu, Zhengxiang Gao, Rushan Han, Hengqiang Ye	Preparation of Single-Walled Carbon Nanotubes-Organo-silicon Hybrids and Their Enhanced Field Emission Properties	Chemistry of Materials	18	4205	2006
Shin-ichi Ogino, Yoshinori Sato, Go Yamamoto, Kenichiro Sasamori, Hisamichi Kimura, Toshiyuki Hashida, Kenichi Motomiya, Balachandran Jeyadevan, Kazuyuki Tohji	Relation of the Number of Cross-Links and Mechanical Properties of Multi-Walled Carbon Nanotube Films Formed by a Dehydration Condensation Reaction	J. Physical Chemistry B	110	23159	2006
D. Kodama, K. Shinoda, K. Sato, Y. Sato, B. Jeyadevan, K. Tohji	Synthesis of Fe-Co alloy particles by modified polyol process	IEEE Transactions on Magnetics	42	2796	2006
B. Jeyadevan, K. Shinoda, R. J. Justin, T. Matsumoto, K. Sato, Y. Sato, K. Tohji	Polyol process for Fe-based hard (fct-FePt) and soft (FeCo) magnetic nanoparticles	IEEE Transactions on Magnetics	42	3030	2006
D. Kodama, K. Shinoda, K. Sato, K. Sato, Y. Konno, R. J. Joseyphus, K. Motomiya, H. Takahashi, T. Matsumoto, Y. Sato, K. Tohji, B. Jeyadevan	Chemical Synthesis of Sub-micrometer- to Nanometer-Sized Magnetic FeCo Dice	Advanced Materials	18	3154	2006
T. Kaneko, H. Matsuoka, T. Hirata, R. Hatakeyama, K. Tohji	Effects of strong magnetic field on carbon nanotube formation using rf glow-discharge plasma	Thin Solid Films	506-507	259	2006
R. Justin Joseyphus, A. Narayanasamy, K. Shinoda, B. Jeyadevan, K. Tohji-	Synthesis and magnetic properties of the size-controlled Mn-Zn ferrite nanoparticles by oxidation method	J. Physics and Chemistry of Solids	67	1510	2006
○ Takeru Okada, Toshiro Kaneko, Rikizo Hatakeyama, Kazuyuki Tohji	Electrically triggered insertion of single-stranded DNA into single-walled carbon nanotubes	Chemical Physics Letters	417	288	2006
○ G. Yamamoto, Y. Sato, T. Takahashi, M. Omori, K. Tohji and T. Hashida	Mechanical Properties of Single-Walled Carbon Nanotube Solids Prepared by Spark Plasma Sintering	J. Solid Mechanics and Materials Engineering	1	854-863	2007
G. Yamamoto, K. Yokomizo, M. Omori, <u>Y. Sato</u> , K. Motomiya, T. Hashida, T. Takahashi, A. Okubo, B. Jeyadevan, <u>K. Tohji</u>	Polycarbosilane-derived SiC/single-walled carbon nanotube nanocomposites	Nanotechnology	18	145614-145618	2007
R. Justin Joseyphus, D. Kodama, T. Matsumoto, <u>Y. Sato</u> , B. Jeyadevan, <u>K. Tohji</u>	Role of polyol in the synthesis of Fe particles	J. Magn. Magn. Mater.	310	2393-2395	2007
D. Kodama, K. Shinoda, K. Sato, <u>Y. Sato</u> , B. Jeyadevan, <u>K. Tohji</u>	Synthesis of size-controlled Fe-Co alloy nanoparticles by modified polyol process	J. Magn. Magn. Mater.	310	2396-2398	2007

T. Atsumi, B. Jeyadevan, <u>Y. Sato</u> , K. Tohji	Heating efficiency of magnetite particles exposed to AC magnetic field	<i>J. Magn. Magn. Mater.</i>	310	2841-2843	2007
○Y. -S. Park, A. Kasuya, A. Dmytruk, N. Yasuto, M. Takeda, N. Ohuchi, <u>Y. Sato</u> , <u>K. Tohji</u> , M. Uo, F. Watari	Concentrated Colloids of Silica-Encapsulated Gold Nanoparticles: Colloidal Stability, Cytotoxicity, and X-ray Absorption	<i>J. Nanosci. Nanotechnol</i>	7	2696-2708	2007
S. Iwata, <u>Y. Sato</u> , K. Nakai, S. Ogura, T. Okano, M. Namura, A. Kasuya, <u>K. Tohji</u> , K. Fukutani	Novel method to evaluate the carbon network of single-walled carbon nanotubes by hydrogen physisorption	<i>J. Phys. Chem. C</i>	111	14937-14941	2007
○佐藤義倫	カーボンナノチューブのリスク評価の動向	応用物理	76	1154-1158	2007
D. Kodama, K. Shinoda, K. Sato, <u>Y. Sato</u> , <u>K. Tohji</u> , B. Jeyadevan	Morphology control of FeCo alloy particles synthesized by polyol process	<i>Proceedings of 4th International Workshop on WATER DYNAMICS, AIP Conference Proceedings</i>	898	126-129	2007
T. Hosono, H. Takahashi, <u>Y. Sato</u> , <u>K. Tohji</u> , B. Jeyadevan	Magnetite nanoparticles for magnetic fluid hyperthermia using modified oxidation method	<i>Proceedings of 4th International Workshop on WATER DYNAMICS, AIP Conference Proceedings</i>	898	135-138	2007
N. Tsuchiya, <u>Y. Sato</u> , N. Aoki, A. Yokoyama, F. Watari, K. Motomiya, B. Jeyadevan, <u>K. Tohji</u>	Evaluation of multi-walled carbon nanotube scaffolds for osteoblast growth	<i>Proceedings of 4th International Workshop on WATER DYNAMICS, AIP Conference Proceedings</i>	898	166-169	2007
S. OGINO, <u>Y. Sato</u> , G. Yamamoto, K. Sasamori, H. Kimura, T. Hashida, K. Motomiya, B. Jeyadevan, <u>K. Tohji</u>	Estimation of the number of cross-links of multi-walled carbon nanotube films formed by a dehydration condensation reaction	<i>Proceedings of 4th International Workshop on WATER DYNAMICS, AIP Conference Proceedings</i>	898	175-178	2007
<u>Y. Sato</u> , A. Yokoyama, K. Motomiya, B. Jeyadevan, <u>K. Tohji</u>	Preparation of size-controlled hat-stacked carbon nanofiber	<i>Proceedings of 4th International Workshop on WATER DYNAMICS, AIP Conference Proceedings</i>	898	186-189	2007
I. Waki, <u>Y. Sato</u> , K. Motomiya, B. Jeyadevan, <u>K. Tohji</u>	Efficient synthesis of gadolinium carbide encapsulating carbon nanocapsules	<i>Proceedings of 4th International Workshop on WATER DYNAMICS, AIP Conference Proceedings</i>	898	139-142	2007
M. Uebayashi, Y. Sawada, <u>Y. Sato</u> , T. Itoh, B. Jeyadevan, <u>K. Tohji</u>	Characterization of Pt-based transition metal alloy electrodes for PEFC	<i>Proceedings of 4th International Workshop on WATER DYNAMICS, AIP Conference Proceedings</i>	898	162-165	2007
S. Yokoyama, H. Takahashi, <u>Y. Sato</u> , B. Jeyadevan, <u>K. Tohji</u>	Effect of crystalline structure of Cd(OH) <sub>2</sub> precursor on the photocatalytic activity of stratified CdS	<i>Proceedings of 4th International Workshop on WATER DYNAMICS, AIP Conference Proceedings</i>	898	179-181	2007
R. J. Joseyphus, K. Shinoda, <u>Y. Sato</u> , <u>K. Tohji</u> , B. Jeyadevan	Composition controlled synthesis of fcc-FePt nanoparticles using a modified polyol process	<i>J. Mater. Sci.</i>	43	2402-2406	2008

T. Arai, S. Senda, <u>Y. Sato</u> , H. Takahashi, K. Shinoda, B. Jeyadevan, <u>K. Tohji</u>	Cu-Doped ZnS Hollow Particle with High Activity for Hydrogen Generation from Alkaline Sulfide Solution under Visible Light	<i>Chem. Mater.</i>	20	1997-2000	2008
S. Samukawa, Y. Ishikawa, K. Okumura, <u>Y. Sato</u> , <u>K. Tohji</u> , T. Ishida	Damage-free surface treatment of carbon nanotubes and self-assembled monolayer devices using a neutral beam process for fusing top-down and bottom-up processes	<i>J. Phys. D</i>	41	24006 (1)-24006 (6)	2008
○ <u>Y. Sato</u> , A. Yokoyama, T. Kasai, S. Hashiguchi, M. Ootsubo, S. Ogino, N. Sashida, M. Namura, K. Motomiya, B. Jeyadevan, <u>K. Tohji</u>	In vivo rat subcutaneous tissue response of binder-free multi-walled carbon nanotube blocks cross-linked by de-fluorination	<i>Carbon</i>	46	1927-1934	2008
<u>Y. Sato</u> , K. Hasegawa, Y. Nodasaka, K. Motomiya, M. Namura, N. Ito, B. Jeyadevan, <u>K. Tohji</u>	Reinforcement of rubber using radial single-walled carbon nanotube soot and its shock dampening properties	<i>Carbon</i>	46	1509-1512	2008
<u>Y. Sato</u> , M. Ootsubo, G. Yamamoto, G. Van Lier, M. Terrones, S. Hashiguchi, H. Kimura, A. Okubo, K. Motomiya, B. Jeyadevan, T. Hashida, <u>K. Tohji</u>	Super-robust, lightweight, conducting carbon nanotube blocks cross-linked by de-fluorination	<i>ACS Nano</i>	2	348-356	2008
佐藤義倫	カーボンナノチューブの表面改質に関わる細胞毒性	<i>Material Stage</i>	7	98-105	2008
M. Namura, I. Waki, <u>Y. Sato</u> , G. Yamamoto, A. Okubo, H. Kimura, N. Osaka, K. Motomiya, T. Hashida, B. Jeyadevan, <u>K. Tohji</u>	Preparation and characterization of lanthanum carbide encapsulated carbon nanocapsules soot / lanthanum hexaboride nanocomposites	<i>Mater. Lett.</i>		in press	2009
名村 優、佐藤義倫、田路和幸	カーボンナノチューブの長さ制御	粉体技術	1	44-50	2009
○横山 敦郎	カーボンナノチューブの細胞内挙動	バイオマテリアル	24	324□33 2	2006
○N. Aoki, A. Yokoyama, Y. Nodasaka, T. Akasaka, M. Uo, Y. Sato, K. Tohji, F. Watari.	Strikingly Extended Morphology of Cells Grown on Carbon Nanotubes	<i>Chemistry Letters</i>	35	508-509	2006
○N. Aoki, T. Akasaka, F. Watari, A. Yokoyama.	Carbon nanotubes as scaffolds for cell culture and effect on cellular functions	<i>Dental Materials Journal</i>	26	178-185	2007
W. Wang, F. Watari, M. Omori, S. Liao, Y. Zhu, A. Yokoyama, M. Uo, H. Kimura, A. Ohkubo.	Mechanical properties and biological behavior of carbon nanotube/polycarbosilane composites for implant materials	<i>Journal of Biomedical Materials Research: Part B - Applied Biomaterials</i>	82B	223-230	2007
平田 恵理	カーボンナノチューブコートしたコラーゲンスポンジの3次元培養担体への応用	DE	168	32-33	2008

○Eri Hirata, Motohiro Uo, Hiroko Takita, Tsukasa Akasaka, Fumio Watari, Atsuro Yokoyama	Development of a 3D collagen scaffold coated with multiwalled carbon nanotubes	J Biomed Mater Res B	DOI: 10.1002/jbm.b.31327	2009
Onodera S, Ohshima S, Tohyama H, Yasuda K, Nishihira J, Iwakura Y, Matsuda I, Minami A, Koyama Y.	A novel DNA vaccine targeting macrophage migration inhibitory factor protects joints from inflammation and destruction in murine models of arthritis.	Arthritis Rheum.	56	521-530 2007
Tohyama H, Yasuda K, Uchida H, Nishihira J.	The responses of extrinsic fibroblasts infiltrating the devitalised patellar tendon to IL-1beta are different from those of normal tendon fibroblasts	J Bone Joint Surg Br.	89(9)	1261-7 2007
Shin Onodera, Shigeki Oshima, Jun Nishimura, Kazunori Yasuda, Harukazu Tohyama, Kazuharu Irie and Yoshikazu Koyama	Active immunization against macrophage migration inhibitory factor using a novel DNA vaccine prevents ovariectomy-induced bone loss in mice	Vaccine	26	829-836 2007
Maeda E, Noguchi H, Tohyama H, Yasuda K, Hayashi K.	The tensile properties of collagen fascicles harvested from regenerated and residual tissues in the patellar tendon after removal of the central third.	Biomed Mater Eng.	17(2)	77-85 2007
Onodera S, Ohshima S, Tohyama H, Yasuda K, Nishihira J, Iwakura Y, Matsuda I, Minami A, Koyama Y.	A novel DNA vaccine targeting macrophage migration inhibitory factor protects joints from inflammation and destruction in murine models of arthritis.	Arthritis Rheum.	56(2)	521-30 2007
Ikeda Y, Tohyama H, Yamamoto E, Kanaya F, Yasuda K.	Ex vivo infiltration of fibroblasts into the tendon deteriorates the mechanical properties of tendon fascicles but not those of tendon bundles	Clin Biomech (Bristol, Avon)	22(1)	120-6 2007
Azuma C, Tohyama H, Nakamura H, Kanaya F, Yasuda K.	Antibody neutralization of TGF-beta enhances the deterioration of collagen fascicles in a tissue-cultured tendon matrix with ex vivo fibroblast infiltration	J Biomech	40(10)	2184-90 2007
Kondo E, Yasuda K, Ichiyama H, Azuma C, Tohyama H.	Radiologic evaluation of femoral and tibial tunnels created with the transtibial tunnel technique for anatomic double-bundle anterior cruciate ligament reconstruction	Arthroscopy	23(8)	869-76 2007

Kondo E, Yasuda K, Tohyama H.	In vivo effects of partial electrothermal shrinkage on mechanical properties of the anterior cruciate ligament in rabbits.	Clin Biomech (Bristol, Avon).	22(9)	1037-44	2007
Hayashi R, Kondo E, Tohyama H, Saito T, Yasuda K.	In vivo local administration of osteogenic protein-1 increases structural properties of the overstretched anterior cruciate ligament with partial midsubstance laceration: a biomechanical study in rabbits.	J Bone Joint Surg Br.	90(10)	1392-400.	2008
Tohyama S, Onodera S, Tohyama H, Yasuda K, Nishihira J, Mizue Y, Hamasaki A, Abe R, Koyama Y.	A novel DNA vaccine-targeting macrophage migration inhibitory factor improves the survival of mice with sepsis.	Gene Ther	15(23)	1513-22	2008
Hayashi R, Kitamura N, Kondo E, Anaguchi Y, Tohyama H, Yasuda K.	Simultaneous anterior and posterior cruciate ligament reconstruction in chronic knee instabilities: surgical concepts and clinical outcome.	Knee Surg Sports Traumatol Arthrosc.	16(8)	763-9	2008
Onodera S, Oshima S, Nishihira J, Yasuda K, Tohyama H, Irie K, Koyama Y.	Active immunization against macrophage migration inhibitory factor using a novel DNA vaccine prevents ovariectomy-induced bone loss in mice.	Vaccine	26(6)	829-36	2008
Miyatake S, Tohyama H, Kondo E, Katsura T, Onodera S, Yasuda K.	Local administration of interleukin-1 receptor antagonist inhibits deterioration of mechanical properties of the stress-shielded patellar tendon.	J Biomech	41(4)	884-9	2008
Okamoto S, Tohyama H, Kondo E, Anaguchi Y, Onodera S, Hayashi K, Yasuda K.	Ex vivo supplementation of TGF-beta1 enhances the fibrous tissue regeneration effect of synovium-derived fibroblast transplantation in a tendon defect: a biomechanical study.	Knee Surg Sports Traumatol Arthrosc.	16(3)	333-9.	2008
K Yokoyama, T Ogawa, K Asaoka and J Sakai	Hydrogen Absorption of Titanium and Nickel-Titanium Alloys During Long-Term Immersion in Neutral Fluoride Solution	<i>Journal of Biomedical Materials Research Part B: Applied Biomaterials</i>	78B(1)	204-210	2006
○T Ogawa, K Yokoyama, K Asaoka and J Sakai	Effects of moisture and dissolved oxygen in methanol and ethanol solutions containing hydrochloric acid on hydrogen absorption and desorption behaviors of Ni-Ti superelastic alloy	<i>Materials Science and Engineering A</i>	422 (1-2)	218-226	2006

Y Sakamoto, K Asaoka, M Kon, T Matsubara and K Yoshida	Chemical surface modification of high-strength porous Ti compacts by spark plasma sintering	<i>Bio-Medical Materials and Engineering</i>	16(2)	83-91	2006
K Asaoka, K.Maejima	Effect of surface oxide films on degradation of titanium	Materials Science Forum	539-543	3649-3654	2006
Tomita M, Yokoyama <u>Asaoka K</u> , Sakai J	Hydrogen thermal desorption behavior of Ni-Ti superelastic alloy subjected to tensile deformation after hydrogen charging	Materials and Engineering A	476	308-315	2008
Yokoyama K, Ogawa T, Takashima K, <u>Asaoka K</u> , Sakai J	Hydrogen embrittlement of Ni-Ti superelastic alloy aged at room temperature after hydrogen charging	Materials Science and Engineering A	466 (1-2)	106-113	2007
Yokoyama K, Ogawa T, Fujita A, <u>Asaoka K</u> , Sakai J	Fracture of Ni-Ti superelastic alloy under sustained tensile load in physiological saline solution containing hydrogen peroxide	Journal of Biomedical Materials Research A	82A(3)	558-567	2007
浅岡 憲三	チタンのキャラクタリゼーションと生体内での遅れ破壊	歯科材料・器械	26(4)	334-339	2007
<u>Asaoka K</u>	Effects of surface oxide films on hydrogen absorption and mechanical properties of titanium	Dentistry in Japan	43	99-103	2007
Takashima K, Yokoyama K, <u>Asaoka K</u> , Sakai J	Effects of potential on hydrogen absorption and desorption behaviors of titanium in neutral fluoride solutions	Journal of Alloys and Compounds	431 (1-2)	203-207	2007
Yokoyama K, Tomita M, <u>Asaoka K</u> , Sakai J	Hydrogen absorption and thermal desorption behaviors of Ni-Ti superelastic alloy subjected to sustained tensile-straining test with hydrogen charging	Scripta Materia	57(5)	393-396	2007
Tomita M, Yokoyama K, Asaoka K, Sakai J.	Hydrogen thermal desorption behavior of Ni-Ti superelastic alloy subjected to tensile deformation after hydrogen charging.	Mater Sci Eng i A	476	308-315	2008
Kitazoe K, Abe M, Hiasa M, Oda A, Amou H, Harada T, Nakano A, Takeuchi K, Hashimoto T, Ozaki S, Matsumoto T.	Valproic acid exerts anti-tumor as well as anti-angiogenic effects on myeloma.	Int J Hematol	89	45-57	2009
Horiuchi S, Kaneko K, Mori H, Kawakami E, Tsukahara T, Yamamoto K, Hamada K, Asaoka K, Tanaka E.	Enamel bonding of self-etching and phosphoric acid-etching orthodontic adhesives: Shear bond strength and enamel surface.	Dent Mater J		In press	2009
Sultana R, Hamada K, Ichikawa T, Asaoka K.	Effects of heat treatment on the bioactivity of surface-modified titanium in calcium solution.	Biomed Mater.Eng.		In press	2009