

Table of Content (Shape Memory Biomaterials and Implants in Medicine)

The Directions of Creation of Unique Technologies in Medicine on the Basis of New Generation of Biocompatible Materials and Implants With Shape Memory

V.E. Gunther

Pages 1-9, <http://doi.org/10.18502/kms.v2i1.774>

The Features of Martensite Transformation in the (TiNiMo)Nb Alloys Under Loading

E.S. Marchenko, G.A. Baigonakova, A.L. Chernysheva, L.A. Kolomiets, A.A. Zheravin, A.A. Klopotov, V.E. Gunther

Pages 10-15, <http://doi.org/10.18502/kms.v2i1.775>

Structural Features of TiNi-based Textile Materials and Their Biocompatibility with Cell Culture

V.N. Khodorenko, S.G. Anikeev, O. V. Kokorev, M.R. Mukhamedov, E.B. Topolnitskiy, V.E. Gunther

Pages 16-24, <http://doi.org/10.18502/kms.v2i1.776>

A Study of the Pore Surface State of Porous TiNi-based Materials Obtained by SHS at Various Ignition Temperatures

S.G. Anikeev, V.N. Khodorenko, M.R. Mukhamedov, V.E. Gunther

Pages 25-33, <http://doi.org/10.18502/kms.v2i1.777>

Martensite Transformations in the TiNi(Fe,Mo)Ag Alloys After Thermal Cycling

G.A. Baigonakova, E.S. Marchenko, L.A. Kolomiets, A.L. Chernysheva, V.N. Iliushenov, V.E. Gunther

Pages 34-42, <http://doi.org/10.18502/kms.v2i1.778>

Study of Correlation of Structural Features in the Porous TiNi-based Materials Obtained by Sintering with the Integration Process of Bone Marrow Cell Populations

S.G. Anikeev, V.N. Khodorenko, O.V. Kokorev, V.I. Shtin, V.E. Gunther

Pages 43-51, <http://doi.org/10.18502/kms.v2i1.779>

Distinctive Features of the Phase Composition of Porous TiNi-based Alloys Obtained by Reaction and Diffusion Sintering

N.V. Artyukhova, Yu.F. Yasenchuk, K.V. Almaeva, A.S. Garin, V.A. Novikov, V.E. Gunther

Pages 52-61, <http://doi.org/10.18502/kms.v2i1.780>

Structure and Properties of Porous Alloys Based on NiTi Doped by Al, Fabricated by SHS-method

A.A. Monogenov, V.E. Gunther, O.A. Ivchenko, A.N. Stebluk, A.A. Radkewich, A.A. Ariamkin, S.G. Shtofin

Pages 62-71, <http://doi.org/10.18502/kms.v2i1.781>

Features of Cells Integration on TiNi-based Porous Scaffold

O.V. Kokorev, V.N. Khodorensko, S.G. Anikeev, G.Ts. Dambaev, V.E. Gunther

Pages 72-79, <http://doi.org/10.18502/kms.v2i1.782>

Crystallization Features of Porous TiNi Made by SHS

Yu.F. Yasenchuk Yu., N.V. Artyuhova, K.V. Almaeva, A.S. Garin, V.A. Novikov, V.E. Gunther

Pages 80-87, <http://doi.org/10.18502/kms.v2i1.783>

The Technology of The Manufacturing Thin Wire of TiNi-based Alloys by Using Infrared Radiation

S.V. Gunther, S.G. Anikeev S, Kim Ji-soon, A.N. Monogenov, V.E. Gunther

Pages 88-97, <http://doi.org/10.18502/kms.v2i1.784>

Effect of sintering methods and cobalt addition on the shape memory properties of porous TiNi-based alloy

N.V. Artyukhova, Yu.F. Yasenchuk, K.V. Almaeva, A.S. Garin, V.I. Shtin, V.E. Gunther

Pages 98-106, <http://doi.org/10.18502/kms.v2i1.785>

Diagnosis of Functional Disorders in Hollow Organs by Infrared Radiation Optoelectronic System

S.V. Gunther S, G.Ts. Dambaev G, V.F. Votyakov, E.B. Topolnitsky

Pages 107-114, <http://doi.org/10.18502/kms.v2i1.786>

A Study of Thin TiNi Fibers Superelasticity

A.A. Monogenov, M.R. Mukhamedov, V.I. Shtin, A.A. Radkevich, S.V. Gunther

Pages 115-120, <http://doi.org/10.18502/kms.v2i1.787>

Dilatation Changes in the Phase Transition Region in TiNi-based Al-loys

A.A. Klopotov, A.I. Potekaev, Yu.A. Kakushkin, E.S Marchenko, G.A. Baigonakova, V.E. Gunther

Pages 121-130, <http://doi.org/10.18502/kms.v2i1.788>

The Effect Infrared and Ultraviolet Radiation in the Development of the Cells in the Porous Permeable Titanium Nickel Based Alloy Scaffold

S.V. Gunther, G.Ts. Dambaev, O.V. Kokorev

Pages 131-139, <http://doi.org/10.18502/kms.v2i1.789>

Evaluation of Porous TiNi-based Alloy as a Scaffold for Liver Tissue Engineering

O.V. Kokorev, V.N. Hodorenko, G.Ts. Dambaev, V.E. Gunther

Pages 140-148, <http://doi.org/10.18502/kms.v2i1.790>

X-ray Diffraction Studies of Martensitic Transformations in Situ of the Parameters of a Thin Crystalline Structure in TiNi Under External Loading

A.A. Klopotov, A.I. Potekaev, E.S. Marchenko, O.M. Loskutov, G.A. Baygonakova, V.E. Gunther

Pages 149-158, <http://doi.org/10.18502/kms.v2i1.791>

The Device for the Treatment of Diabetes with Use of Infrared Radiation and Porous TiNi Based Alloy

S.V. Gunther, G.Ts. Dambaev, J.H Kang, V.E. Gunther

Pages 159-167, <http://doi.org/10.18502/kms.v2i1.792>

Segregation in Porous NiTi Made by SHS in Flow Reactor

Yu. Yasenchuk, N.V. Artyuhova, K.V. Almaeva, A.S. Garin, V.E Gunther

Pages 168-175, <http://doi.org/10.18502/kms.v2i1.793>

Compression Anastomoses Formation on the Digestive Tract Organs with Using TiNi Devices

G.Ts. Dambaev, V.E. Gunther, O.A. Fatushina, E.A. Avdoshina, M.M. Solovyov, A.M. Fatushina, T.A. Tomova

Pages 176-183, <http://doi.org/10.18502/kms.v2i1.794>

Replacement of Temporomandibular Joint Head Using the Shape Memory Materials

A.A. Radkevich, A.A. Gantimurov, V.E. Gunther, N.V. Platonova

Pages 184-192, <http://doi.org/10.18502/kms.v2i1.795>

Laparoscopic Hernia Repair with the Use of TiNi-based alloy

G.Ts. Dambaev, V.E. Gunther, A.V. Menschikov, M.M. Solovyov, E.A. Avdoshina, O.A. Fatushina, N.E. Kurtseitov

Pages 193-199, <http://doi.org/10.18502/kms.v2i1.796>

Long-Term Results of Chest Wall Reconstruction After Tumor Resection Using TiNi Implants

A.A. Zheravin, E.S. Marchenko, Gunther V.E

Pages 200-204, <http://doi.org/10.18502/kms.v2i1.797>

Sutureless Compression Anastomoses Formation with Use of TiNi Device on the Small Gut

G.Ts. Dambaev, V.E. Gunther, O.A. Fatushina, Ye.A. Avdoshina, M.M. Solovyov, A.M. Fatushina, D.A. Iablondchuc

Pages 205-210, <http://doi.org/10.18502/kms.v2i1.798>

Application of TiNi Dental Implants with Permeable Porosity in Patients Rehabilitation with Different Adentia Options

A.A. Radkevich, A.A. Gantimurov, N.G. Zhiglov, V.Y. Podgorny, D.N. Zhiglov, A.N. Zhiglov, V.E. Gunther

Pages 211-218, <http://doi.org/10.18502/kms.v2i1.799>

Analysis of Reconstructions Cardioresophageal Junction of the Teres Ligament in Treatment Hiatal Hernias

G.Ts. Dambaev, G.F. Petlin, M.M. Solovyov, A.M. Popov, V.V. Skidanenko, O.A. Nedelya, N.Yu. Fimushkina

Pages 219-226, <http://doi.org/10.18502/kms.v2i1.800>

Surgical Treatment of Fractures of Long Tubular Bones of Elderly and Old-Aged People with the Usage of Shape Memory Implants

V.N. Iliushenov, A.V. Iliushenov, S.V. Iliushenov, S.G. Anikeev, E.S. Marchenko, G.A. Baigonakova, V.E. Gunther

Pages 227-235, <http://doi.org/10.18502/kms.v2i1.801>

Surgery of False Joints of Long Tubular Bones in Children Using the Shape Memory Materials

A.A. Radkevich, V.P. Sinyuk, I.V. Sinyuk, V.E. Gunther

Pages 236-243, <http://doi.org/10.18502/kms.v2i1.802>

Reconstruction of Thoracic Postresection Defects by TiNi-based Implant

E.B. Topolnitskiy, G.Ts. Dambaev, V.N. Hodorenko, S.V. Shchadenko, V.E. Gunther

Pages 244-251, <http://doi.org/10.18502/kms.v2i1.803>

Peculiarities of Interaction Deserosed Organ and the Parietal Peritoneum of the Implants with Porous NiTi (Experimental Study)

A.N. Vusik, G.Ts. Dambaev, I.V. Suhodolo, V.E. Gunther, V.V. Skidanenko, M.V. Shvedova, V.R. Latypov, N.E. Kurtseitov, N.A. Vusik, N.Yu. Fimushkina

Pages 252-260, <http://doi.org/10.18502/kms.v2i1.804>

A New Method for Non-Invasive Surgery in Ophthalmology

A.N. Steblyuk, V.E. Gunther, V.N. Bodnia, R.A. Avakimyan, A.A. Tserkovnaya

Pages 261-266, <http://doi.org/10.18502/kms.v2i1.805>

Cleft Palate Surgery with the Removal of Ent Pathology

A.A. Radkevich, S.G. Vakhrushev, A.A. Gantimurov, V.E. Gunther

Pages 267-272, <http://doi.org/10.18502/kms.v2i1.806>

TiNi-based Mesh Implant Sternal Resynthesis in Patients with Postoperative Sterno-Mediastinitis

M.V. Shvedova, G.Ts. Dambaev, A.N. Vusyk, V.V. Skidanenko, Y. Anfinogenova

Pages 273-279, <http://doi.org/10.18502/kms.v2i1.807>

Mandibular TiNi-based Endograft in Patients with Toxic Jaw Osteonecrosis and Drug Abuse

Yu.A. Medvedev, E.M. Basin, D.Yu. Milyukova

Pages 280-285, <http://doi.org/10.18502/kms.v2i1.808>

Elimination of Mandibular Defects in Patients with Malignant Neoplasms Using the Poprus TiNi-alloys

A.A. Radkevich, A.A. Gantimurov, V.E. Gunther

Pages 286-295, <http://doi.org/10.18502/kms.v2i1.809>

Biometrics of Jaw Models Analysis in Treating Tooth Position Anomalies with the Use of Orthodontic Shape Memory Apparatus

I.A. Turetskova, M.A. Zvigintsev, V.E. Gunther

Pages 296-301, <http://doi.org/10.18502/kms.v2i1.810>

Antireflux Compression Biliodigestive Anastomoses Formation with the Usage of the TiNi Shape Memory Implant

G.Ts Dambaev, V.E. Gunther, E.A. Avdoshina, O.A. Fatushina, M.M. Solovyov, N.G. Sivtseva, S.A. Agaev

Pages 302-309, <http://doi.org/10.18502/kms.v2i1.811>

Development and Use of Endodontic TiNi-based Alloy Files

K.A. Krilova, M.A. Zviginzev, V.N. Olesova, S.V Gunther

Pages 310-316, <http://doi.org/10.18502/kms.v2i1.812>

Use of TiNi-based Alloy Implants in Repair the Zygomatic Bone and Arch

A.A. Radkevich, A.A. Gantimurov, N.V. Platonova, V.E. Gunther

Pages 317-322, <http://doi.org/10.18502/kms.v2i1.813>

Nickel-Titanium Shape Memory Alloy in Reconstructive Osteosynthesis in Patients With Zygomatico-Orbital Complex Fractures

P.S. Petruk, Yu.A. Medvedev, Zhang Show Yi, V.A. Volkova

Pages 323-326, <http://doi.org/10.18502/kms.v2i1.814>

Current Aspects in Reconstructive Surgery for Nasal Cavity and Paranasal Sinus Cancer

V.I. Shtin, V.A. Novikov, V.E. Gunther, E.I. Choinzonov, A.I. Ryabova, V.A. Sirkashev, P.V. Surkova, Yu.F. Yasenchuk, S.G. Anikeev, R.V. Vasilev

Pages 327-333, <http://doi.org/10.18502/kms.v2i1.815>

Porous TiNi Implants in Surgery of Spine Degenerative Diseases

A.E. Simonovich, N.G. Fomichev

Pages 334-342, <http://doi.org/10.18502/kms.v2i1.816>

Results of Subantral Augmentation with Application of Implants with Permeable Porosity

I.D. Tazin, D.I. Tazin, M.N. Shakirov

Pages 343-346, <http://doi.org/10.18502/kms.v2i1.817>

3-D Incubator Principle in Nikelid-Titanium Porous Plates Hemostasis

E.M. Parfirieva, A.O. Ivchenko, O.A. Ivchenko, E.V. Gavrilin, A.I. Chirev, I.O. Savel'ev, I.O. Savel'ev, V.E. Gunther

Pages 347-353, <http://doi.org/10.18502/kms.v2i1.818>

Surgical Removal of Defects in the Palate with the Use of TiNi Mesh

M.N. Shakirov, R.N. Dzhonibekova, I.D. Tazin, X.O. Gafarov, V.Y. Mitasov

Pages 354-359, <http://doi.org/10.18502/kms.v2i1.819>

Advantages of Porous TiNi Materials for Dental Implants in Diabetes Mellitus Patients

M.A. Zvigintsev, S.I. Starosvetsky, M.M. Vavilova, Yu.V. Doubrovina, A.M. Zvigintsev

Pages 360-365, <http://doi.org/10.18502/kms.v2i1.820>

Replantation of the Condylar Shoot of Fractured Temporomandibular Joint of the Articular Head by TiNi-based Materials

A.T. Karnaukhov, I.G. Alyoshkin, V.A. Karnaukhov

Pages 366-373, <http://doi.org/10.18502/kms.v2i1.821>

Removal of Temporomandibular Joint Bone Ankylosis by Shape Memory Materials

M.Sh. Mirzoev, D.I. Khushvakhtov, S.A. Safarov, I.Kh. Mangutov, A.M. Olimov, M.N. Schakirov

Pages 374-380, <http://doi.org/10.18502/kms.v2i1.822>

Formation of a Closing Apparatus of the Lower Uterine Segment in Patients with Invasive Cervical Cancer after Radical Transabdominal Trachelectomy

A.L. Chernyshova, L.A. Kolomiets, E.S. Marchenko, G.A. Baigonakova, V.E. Gyunter

Pages 381-392, <http://doi.org/10.18502/kms.v2i1.823>

TiNi Fixed Dentures with a Ceramic Coating

S.I. Starosvetsky, M.A. Zvigintsev, A.P. Vasilieva, V.A. Yefremov, T.A. Khabas, V.V. Klimova, V.E. Gunther

Pages 393-397, <http://doi.org/10.18502/kms.v2i1.824>

Operative Treatment Unoperative Chronic and Massive Rotator Cuff Tendon Rupture of the Shoulder

Lanshakov V.A.

Pages 398-403, <http://doi.org/10.18502/kms.v2i1.825>

Surgical Treatment of Atresia in the Nasal Cavity with Using a Superelastic TiNi Foil

M.N. Shakirov, M.M. Shakirov, A.M. Khodjaeva, V.J. Mitasov, I.D. Tazin

Pages 404-409, <http://doi.org/10.18502/kms.v2i1.826>

Clinical assessment of xenograft combined with knitted TiNi-based mesh implant in femoropopliteal bypass surgery: a Case Report

A.N. Shvedov, A.O. Ivchenko, O.A. Ivchenko, S.V. Bystrov, A.I. Chirev, E.V. Gavrilin, I.O. Savelev, A.N. Dvoryaninov, S. Skulkina, R. Avetisyan, V.E. Gunther

Pages 410-417, <http://doi.org/10.18502/kms.v2i1.827>

Modern Approach to Treatment of Patients with Odontogenic Cyst of Jaw

D.I. Hushvakhtov, M.Sh. Mirzoev, R.N. Jonibekova, Kh.O. Gafarov, M.N. Schakirov

Pages 418-423, <http://doi.org/10.18502/kms.v2i1.828>

Superelastic Active TiNi Elements of Removable Device in Orthodontic Treatment of Thin Periodontal Biotype

Ju.G. Smerdina, L.N. Smerdina, E.A. Tyo

Pages 424-430, <http://doi.org/10.18502/kms.v2i1.829>

Treatment of Bilateral Damages of Temporomandibular Joints by TiNi-based Materials

I.G Aleshkin, V.A Karnaughov, A.T. Karnaughov

Pages 431-435, <http://doi.org/10.18502/kms.v2i1.830>

Ultimate Venous Hemostasis Method

S.V. Bystrov, A.O. Ivchenko, O.A. Ivchenko, A.I. Chiryev, E.V. Gavrilin

Pages 436-439, <http://doi.org/10.18502/kms.v2i1.831>

Solving Post-traumatic Effects of Eye Socket Bone Structure

K.A. Sivolapov, M.A. Likhanova, J.V. Pitelgaupt

Pages 440-442, <http://doi.org/10.18502/kms.v2i1.832>

Reconstruction of Postoperative Calvarial and Skull Base byTiNi-based Implants in Cancer Patients

V.A. Novikov, V.A. Sirkashev, V.E. Gunther, A.I. Ryabova, E.Ts. Choinzonov, V.I. Shtin, O.G. Gribova, P.V. Surkova, Yu.F. Yasenchuk, R.V. Vasilev

Pages 443-447, <http://doi.org/10.18502/kms.v2i1.833>

Electrochemical Interaction of TiNi-based Implant with Overlay Denture

E.E. Olesov, D.A. Bronstein, A.Y. Lerner, R.S. Zaslavsky, K.V. Shmatov

Pages 448-452, <http://doi.org/10.18502/kms.v2i1.834>

Ways of Suture Material Perfection in Surgery

V.A. Arshakyan, S.G. Shtofin, A.N. Matunin, V.E. Gunther

Pages 453-458, <http://doi.org/10.18502/kms.v2i1.835>

Effect of Implantation and Construction Dental Materials on Fibroblast Cell Culture

V.N. Olesova, N.A. Uzunyan, M.R. Filonov, F.G. Shumakov, Y.A. Povstyanko

Pages 459-465, <http://doi.org/10.18502/kms.v2i1.836>

Surgical Correction of Dysplastic Coxarthrosis and Endoprosthesis Replacement by TiNi-based Implants

G.B. Slizovskiy, I.I. Kuzhelivskiy, L. A. Sitko, V.E. Gunther

Pages 466-471, <http://doi.org/10.18502/kms.v2i1.837>

Operative Treatment of Patients with Pancreatic Pseudocysts

G.Ts. Dambaev, V.E. Gunther, N.V. Merzlikin, N.A. Brazhnikova, O.S. Popov, V.R. Latypov, M.M. Solovev, Y.F. Bykova

Pages 472-479, <http://doi.org/10.18502/kms.v2i1.838>

Surgical Correction of Child Pectus Excavatum by TiNi-based Materials

G.B. Slizovskiy, I.I. Kuzhelivskiy, A.A. Kozirev, V.E. Gunther, L.A. Sitko

Pages 480-485, <http://doi.org/10.18502/kms.v2i1.839>

Surgical Correction of Child Planovalgus Deformity by Porous TiNi-based Implants

G.B. Slizovskiy, V.E. Gunther, I.I. Kuzhelivskiy, L.A. Sitko, M.A. Fedorov

Pages 486-492, <http://doi.org/10.18502/kms.v2i1.840>

Dynamics of Morphological Changes in Eyeball Components During Insertion of Shape Memory Implant in Experiment

S.S. Todorov, P.A. Khloponin, A.N. Steblyuk

Pages 493-496, <http://doi.org/10.18502/kms.v2i1.841>