Ekaterina S Marchenko

List of Publications by Year
in descending order

50	382	758635 12	940134 16
papers	citations	h-index	g-index

52	52	52	144
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biocompatibility and Clinical Application of Porous TiNi Alloys Made by Self-Propagating High-Temperature Synthesis (SHS). Materials, 2019, 12, 2405.	1.3	39
2	Formation of pores and amorphous-nanocrystalline phases in porous TiNi alloys made by self-propagating high-temperature synthesis (SHS). Advanced Powder Technology, 2019, 30, 673-680.	2.0	27
3	Structural, tribological and antibacterial properties of (Î± + Î²) based ti-alloys for biomedical applications. Journal of Materials Research and Technology, 2020, 9, 14061-14074.	2.6	22
4	Secondary phases strengthening-toughening effects in the Moâ€“TiCâ€“La2O3 alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142271.	2.6	18
5	Formation of mineral phases in self-propagating high-temperature synthesis (SHS) of porous TiNi alloy. Materials Research Express, 2019, 6, 056522.	0.8	17
6	Repair of Orbital Post-Traumatic Wall Defects by Custom-Made TiNi Mesh Endografts. Journal of Functional Biomaterials, 2019, 10, 27.	1.8	16
7	Influence of Silver Addition on Structure, Martensite Transformations and Mechanical Properties of TiNiâ€“Ag Alloy Wires for Biomedical Application. Materials, 2020, 13, 4721.	1.3	15
8	Fertility-Sparing Surgery Using Knitted TiNi Mesh Implants and Sentinel Lymph Nodes: A 10-Year Experience. Journal of Investigative Surgery, 2020, 34, 1-9.	0.6	15
9	Study of the knitted TiNi mesh graft in a rabbit cranioplasty model. Biomedical Physics and Engineering Express, 2019, 5, 027005.	0.6	14
10	Changes in the Stressâ€“Strain States of Subsurface Layers of Steel During Loading. Russian Physics Journal, 2018, 60, 1577-1585.	0.2	13
11	Study on tensile, bending, fatigue, and in vivo behavior of porous SHSâ€“TiNi alloy used as a bone substitute. Biomedical Materials (Bristol), 2021, 16, 021001.	1.7	13
12	The Influence of the Surface Layer on the Combination of Properties of Thin TiNi Alloy Wires. Technical Physics Letters, 2018, 44, 811-813.	0.2	12
13	Evaluation of Clinical Performance of TiNi-Based Implants Used in Chest Wall Repair after Resection for Malignant Tumors. Journal of Functional Biomaterials, 2021, 12, 60.	1.8	12
14	Study of structural phase transitions in quinary TiNi(MoFeAg)-based alloys. Materials Research Express, 2017, 4, 105702.	0.8	11
15	The Structure and Properties of Microcrystalline and Submicrocrystalline Titanium Alloy VT1-0 in the Area of the Electron Beam Welding Seam. Russian Physics Journal, 2017, 60, 990-1000.	0.2	10
16	Metal-Glass-Ceramic Phases on the Surface of Porous TiNi-Based SHS-Material for Carriers of Cells. Russian Physics Journal, 2019, 61, 1734-1740.	0.2	10
17	Biocompatibility of Porous SHS-TiNi. Materials Science Forum, 0, 970, 320-327.	0.3	8
18	Gradient crystalline coating on a biomedical TiNi alloy prepared by magnetron sputtering and annealing. Vacuum, 2020, 181, 109652.	1.6	8

#	Article	IF	Citations
19	Study of the Effect of Diamond Nanoparticles on the Structure and Mechanical Properties of the Medical Mgâ€“Caâ€“Zn Magnesium Alloy. Metals, 2022, 12, 206.	1.0	8
20	Phase equilibrium, structure, mechanical and biocompatible properties of TiNi-based alloy with silver. Materials Research Express, 2019, 6, 066559.	0.8	7
21	Phase formation during air annealing of Ti-Ni-Ti laminate. Surface and Coatings Technology, 2020, 388, 125543.	2.2	7
22	Softening Effects in Biological Tissues and NiTi Knitwear during Cyclic Loading. Materials, 2021, 14, 6256.	1.3	7
23	Improved mechanical properties of porous nitinol by aluminum alloying. Journal of Alloys and Compounds, 2022, 918, 165617.	2.8	6
24	MOCVD of Noble Metal Film Materials for Medical Implants: Microstructure and Biocompatibility of Ir and Au/Ir Coatings on TiNi. Coatings, 2021, 11, 638.	1.2	5
25	Effect of stress-induced martensite ageing on the one-way and two-way shape memory effect of [0 1 1]-oriented TiNiCu crystals under tension. Materials Letters, 2021, 305, 130773.	1.3	5
26	Exploring the role of surface modifications of TiNi-based alloys in evaluating in vitro cytocompatibility: a comparative study. Surface Topography: Metrology and Properties, 2020, 8, 045015.	0.9	5
27	The influence of phase hardening on premartensitic states and on martensitic transformation in multicomponent alloys Ti(Ni, Co, Mo) with shape memory effects. Inorganic Materials: Applied Research, 2011, 2, 387-394.	0.1	4
28	Physical properties of the TiNi-based alloys doped with silver. Materials Today: Proceedings, 2017, 4, 4727-4731.	0.9	4
29	The effect of thermal cycling on the martensitic transformations of (TiNiMoFe)Ag alloys. Technical Physics Letters, 2017, 43, 940-943.	0.2	4
30	Superelasticity and two-way shape memory effect in [0 0 1]-oriented TiNiCu single crystals under compression. Materials Letters, 2020, 281, 128646.	1.3	4
31	Impact of annealing temperature on martensite transformations and structure of quaternary Ti50Ni47.7Mo0.3V2 alloy. Advanced Materials Letters, 2017, 8, 122-127.	0.3	4
32	Portable universal tensile testing machine for studying mechanical properties of superelastic biomaterials. Engineering Research Express, 2021, 3, 045055.	0.8	4
33	In Vitro Bio-Testing Comparative Analysis of NiTi Porous Alloys Modified by Heat Treatment. Metals, 2022, 12, 1006.	1.0	4
34	Effect of Alloying of Titanium Nickelide-Based Alloys with Group V Elements (Vanadium, Niobium) on Their Mechanical Properties. Russian Metallurgy (Metally), 2018, 2018, 990-994.	0.1	3
35	The Effect of Silver Doping on the Structure and Shape Memory Effect in Biocompatible TiNi Alloys. Technical Physics Letters, 2018, 44, 749-752.	0.2	3
36	Structural-phase surface composition of porous TiNi produced by SHS. Materials Research Express, 2019, 6, 1165b1.	0.8	3

#	Article	IF	Citations
37	Martensitic Transformations of the Titaniumâ€“Nickelide Alloys with Different Alloying Additions. Technical Physics, 2020, 65, 737-740.	0.2	3
38	Repair of huge thoracic defect combined with hernia after multimodality treatment of breast cancer. Respiratory Medicine Case Reports, 2021, 34, 101558.	0.2	2
39	Effect of an isothermal action on the functional properties and the shape memory effect parameters of a TiNi(Mo, V) alloy. Russian Metallurgy (Metally), 2017, 2017, 267-270.	0.1	1
40	Structure feature of ternary state diagrams of Cr-Ti-V and Cr-Mn-V systems. MATEC Web of Conferences, 2018, 243, 00014.	0.1	1
41	Effect of the Size Factor on the Strength and Plastic Properties, the Shape Memory Effect, and the Superelasticity of TiNi-Based Thin Filaments. Russian Metallurgy (Metally), 2020, 2020, 1116-1121.	0.1	1
42	Viscoelastic Deformation and Fracture of Porous Nickel Titanium after Tension and Cyclic Bending. Russian Physics Journal, 2020, 63, 1243-1248.	0.2	1
43	Comparative study on the high-temperature oxidation resistance of porous and solid TiNi-based alloys. Surface Topography: Metrology and Properties, 2021, 9, 025007.	0.9	1
44	Possibilities of using cryotherapy in patients with ocular rosacea. Ophthalmology Journal, 2018, 11, 7-14.	0.1	1
45	Influence of Wire Geometry on the Mechanical Behavior of the TiNi Design. Metals, 2022, 12, 1131.	1.0	1
46	Bain strain upon thermoelastic martensitic transformation in intermetallic compounds based on titanium nickelide. Bulletin of the Russian Academy of Sciences: Physics, 2008, 72, 1033-1036.	0.1	0
47	Evolution of the reinforced I-beam strain state. MATEC Web of Conferences, 2018, 143, 01017.	0.1	0
48	The Effect of Subsequent Stress-Induced Martensite Aging on the Viscoelastic Properties of Aged NiTiHf Polycrystals. Metals, 2021, 11, 1890.	1.0	0
49	Study of macroplastic flow in surface layers of porous titanium nickelide by digital image correlation. AIP Conference Proceedings, 2022, , .	0.3	0
50	Combination of Solid and Porous Nitinol Implants in Surgical Treatment of Extensive Post-Excision Thoracic Defects in Cancer Patients. , 2022, , .		0