Vitaly P Pilyugin

List of Publications by Year in Descending Order

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64 587 13 21 g-index

67 654 1.4 3.43 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
64	Silicon Dxygen Quartz Tetrahedra and Consolidation Processes during High-Pressure Torsion. Russian Metallurgy (Metally), 2021 , 2021, 449-453	0.5	
63	Processes of Self-Organization and Evolution of the Microstructure of Metals and Intermetallic Compounds under a Strong External Action. <i>Physics of Metals and Metallography</i> , 2018 , 119, 1338-1341	1.2	
62	Microstructural Analysis of the Ni3Ge Intermetallic Compound after High Pressure Torsion. <i>Russian Metallurgy (Metally)</i> , 2018 , 2018, 929-934	0.5	1
61	Microstructural Evolution in Ceramics and Glasses during High Pressure Torsion. <i>Russian Metallurgy</i> (Metally), 2018 , 2018, 935-940	0.5	
60	Is it possible for dislocations to self-lock after high-pressure torsion?. <i>Physics of Metals and Metallography</i> , 2017 , 118, 802-809	1.2	2
59	Role of crushing-induced fragmentation in the consolidation of quartz ceramic and glass powders during high-pressure torsion. <i>Russian Metallurgy (Metally)</i> , 2017 , 2017, 821-830	0.5	
58	Influence of high-pressure deformation and annealing on the structure and properties of a bulk MgB2 superconductor. <i>Physics of Metals and Metallography</i> , 2016 , 117, 772-782	1.2	5
57	Dynamic aging in an FeNiAl alloy upon megaplastic deformation. Effect of the temperature and deformation rate. <i>Physics of Metals and Metallography</i> , 2016 , 117, 805-816	1.2	12
56	Evolution of the Microstructure of Polycrystalline Magnesium at Mega Plastic Deformation in Bridgeman Anvils. <i>Russian Physics Journal</i> , 2016 , 59, 412-421	0.7	1
55	On the Possibility of Formation and Properties of CopperBilver Solid Solutions Under Severe Plastic Deformation. <i>Russian Physics Journal</i> , 2016 , 58, 1339-1346	0.7	1
54	Thermal diffusivity of submicro- and nanocrystalline Zra.5% Nb and Zrao% Nb alloys at high temperatures. <i>High Temperature</i> , 2016 , 54, 294-296	0.8	5
53	Variations in martensitic transformation parameters due to grains evolution during post-deformation heating of Ti-50.2 at.% Ni alloy amorphized by HPT. <i>Thermochimica Acta</i> , 2016 , 627-629, 20-30	2.9	12
52	Effect of temperature of HPT deformation and the initial orientation on the structural evolution in single-crystal niobium. <i>Physics of Metals and Metallography</i> , 2016 , 117, 336-347	1.2	12
51	The formation, structure, and properties of the Auto alloys produced by severe plastic deformation under pressure. <i>Physics of Metals and Metallography</i> , 2016 , 117, 135-142	1.2	10
50	Deformation-induced dissolution of the intermetallics Ni3Ti and Ni3Al in austenitic steels at cryogenic temperatures. <i>Philosophical Magazine</i> , 2016 , 96, 1724-1742	1.6	16
49	Effect of water intercalation on the structure and electrophysical properties of YBa2Cu3O6.9. <i>Physics of Metals and Metallography</i> , 2016 , 117, 870-875	1.2	1
48	Effect of deformation with Bridgman anvils on the structure, hardness, and critical current of a massive MgB2-based sample. <i>Physics of Metals and Metallography</i> , 2015 , 116, 475-481	1.2	3

(2013-2015)

47	Structure and mechanical properties of aging Al-Li-Cu-Zr-Sc-Ag alloy after severe plastic deformation by high-pressure torsion. <i>Physics of Metals and Metallography</i> , 2015 , 116, 346-355	1.2	12	
46	Effect of annealing on the structure and properties of AlliitularBcAg alloy subjected to severe plastic deformation. <i>Physics of Metals and Metallography</i> , 2015 , 116, 932-941	1.2	6	
45	Structure of aging AlliluurBcAg alloy after severe plastic deformation and long-term storage. <i>Physics of Metals and Metallography</i> , 2015 , 116, 1108-1115	1.2	4	
44	Mechanical alloying of Al E e alloys using severe deformation by high-pressure torsion. <i>Physics of Metals and Metallography</i> , 2015 , 116, 942-950	1.2	8	
43	Effect of severe plastic deformation on the structure and crystal-lattice distortions in the Ni3(Al,X) (X = Ti, Nb) intermetallic compound. <i>Physics of Metals and Metallography</i> , 2015 , 116, 501-508	1.2	3	
42	Effect of plastic deformation on the electrophysical properties and structure of YBa2Cu3O y ceramics subjected to low-temperature treatment. <i>Physics of Metals and Metallography</i> , 2015 , 116, 121	3 ⁻¹ 1 ² 22	o 3	
41	Evolution of the structure of an \text{\text{\text{titanium single crystal during high-pressure torsion.}}} \text{Technical Physics, 2015, 60, 1005-1013}	0.5	6	
40	Structural transformations in single-crystalline titanium under high-pressure cold and cryogenic deformation. <i>Physics of Metals and Metallography</i> , 2015 , 116, 1203-1212	1.2	5	
39	Optimal deformation and ion irradiation modes for production of a uniform submicrograin structure in molybdenum. <i>High Pressure Research</i> , 2015 , 35, 300-309	1.6	8	
38	Structure and hardness of molybdenum upon deformation under pressure at room and cryogenic temperatures. <i>International Journal of Refractory Metals and Hard Materials</i> , 2014 , 43, 59-63	4.1	13	
37	Thermal stability of nickel structure obtained by high-pressure torsion in liquid nitrogen. <i>Physics of Metals and Metallography</i> , 2014 , 115, 682-691	1.2	16	
36	Nanostructuring of pure metals by severe plastic deformation at cryogenic temperatures. <i>IOP Conference Series: Materials Science and Engineering</i> , 2014 , 63, 012096	0.4	6	
35	Effect of a nanosized state on the magnetic properties of Ni3(Al,Fe) and Ni3(Al,Co). <i>Physics of Metals and Metallography</i> , 2014 , 115, 243-247	1.2	2	
34	Model of formation of texture in A Nd IFe IB alloy under severe plastic deformation. <i>Metal Science and Heat Treatment</i> , 2013 , 55, 73-77	0.6		
33	Structure and Properties of TiNi Alloy Subjected to Severe Plastic Deformation and Subsequent Annealing. <i>Materials Science Forum</i> , 2013 , 738-739, 518-524	0.4	1	
32	Structure of an AMts aluminum alloy after high-pressure torsion in liquid nitrogen. <i>Physics of Metals and Metallography</i> , 2013 , 114, 667-671	1.2	5	
31	Thermal diffusivity of submicro- and nanocrystalline niobium, titanium, and zirconium at high temperatures. <i>High Temperature</i> , 2013 , 51, 482-485	0.8	11	
30	The Influence of Nanocrystalline Structure of Iron on #Phase Transformations under Pressure. Materials Science Forum, 2013, 738-739, 108-112	0.4		

29	Amorphization of Titanium Nickelide by means of Shear under Pressure and Crystallization at the Subsequent Heating. <i>Materials Science Forum</i> , 2013 , 738-739, 525-529	0.4	4
28	Phase and structural transformations in the aluminum amts alloy upon severe plastic deformation using various techniques. <i>Physics of Metals and Metallography</i> , 2012 , 113, 170-175	1.2	8
27	Nanostructurization of Nb by high-pressure torsion in liquid nitrogen and the thermal stability of the structure obtained. <i>Physics of Metals and Metallography</i> , 2012 , 113, 295-301	1.2	26
26	Effect of preliminary deformation of austenite in an iron-nickel alloy on the martensitic transformation upon cooling. <i>Physics of Metals and Metallography</i> , 2012 , 113, 672-680	1.2	
25	Effect of storage on the stability of the grained structure and phase transformations in the nanocrystalline alloy 1450 doped with Sc and Mg. <i>Physics of Metals and Metallography</i> , 2012 , 113, 867-87	7 <mark>7</mark> 2	10
24	Severe plastic deformation and hydrogenation of the titanium aluminides. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 9307-9311	5.7	15
23	Effect of severe plastic deformation on the formation of the nanocrystalline structure and the aging of the multicomponent aluminum-lithium alloy with small additions of Sc and Mg. <i>Physics of Metals and Metallography</i> , 2011 , 111, 72-79	1.2	10
22	Evolution of the structure of V95 aluminum alloy upon high-pressure torsion. <i>Physics of Metals and Metallography</i> , 2011 , 111, 630-638	1.2	15
21	Formation of the nanocrystalline structure in the Ti50Ni25Cu25 shape-memory alloy under severe thermomechanical treatment. <i>Physics of Metals and Metallography</i> , 2011 , 112, 603-612	1.2	10
20	Thermal stability of nanocrystalline structure in niobium processed by high pressure torsion at cryogenic temperatures. <i>Materials Science & Discourse in Grand Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 1491-1496	5.3	36
19	The Structure of Nb Obtained by Severe Plastic Deformation and its Thermal Stability. <i>Materials Science Forum</i> , 2010 , 667-669, 409-414	0.4	3
18	Deformation-induced crystallization in amorphous Al85Ni10La5 alloy. <i>Journal of Alloys and Compounds</i> , 2010 , 493, 683-691	5.7	17
17	The Ephase formation in titanium upon deformation under pressure. <i>Physics of Metals and Metallography</i> , 2010 , 109, 30-38	1.2	8
16	Structure evolution of pure iron upon low-temperature deformation under high pressure. <i>Physics of Metals and Metallography</i> , 2010 , 110, 564-573	1.2	14
15	Effect of severe plastic deformation on the electronic properties of the Cu72Au24Ag4 alloy. <i>Physics of the Solid State</i> , 2010 , 52, 12-17	0.8	2
14	Martensitic transitions in nanocrystalline metastable materials. <i>Materials Science & Materials Science & Microstructure and Processing</i> , 2009 , 503, 114-117	5.3	10
13	Structural state of Ni-Mn solid solutions in a wide range of concentrations based on the data of scattering and absorption of X-rays. <i>Physics of Metals and Metallography</i> , 2009 , 107, 179-184	1.2	3
12	Structural transformations in the deuterium-containing intermetallic compound (Ti3Al)D1.2 induced by high-pressure torsion. <i>Physics of Metals and Metallography</i> , 2009 , 107, 594-600	1.2	3

LIST OF PUBLICATIONS

11	Accommodation stresses and structural-phase transitions in Fe-Ni alloys upon compression in Bridgman anvils. <i>Physics of Metals and Metallography</i> , 2009 , 108, 475-483	1.2	6
10	Specific features of the local atomic structure of a Fe-Si alloy in the 🗗 rea of the phase diagram. <i>Physics of the Solid State</i> , 2009 , 51, 1236-1242	0.8	6
9	Optical and magneto-optical properties of nanostructured yttrium iron garnet. <i>Physics of the Solid State</i> , 2009 , 51, 1836-1842	0.8	14
8	Plastic Deformation of Polycrystalline Iridium at Room Temperature. <i>Platinum Metals Review</i> , 2009 , 53, 138-146		11
7	Effect of contact stresses on the phase composition, strength, and tribological properties of nanocrystalline structures formed in steels and alloys under sliding friction. <i>Metal Science and Heat Treatment</i> , 2008 , 50, 583-592	0.6	14
6	Evolution of the structure and hardness of nickel upon cold and low-temperature deformation under pressure. <i>Physics of Metals and Metallography</i> , 2008 , 105, 409-419	1.2	29
5	Influence of the relaxation processes on the structure formation in pure metals and alloys under high-pressure torsion. <i>Acta Materialia</i> , 2007 , 55, 6039-6050	8.4	82
4	Effect of the degree of deformation on the structure and thermal stability of nanocrystalline niobium produced by high-pressure torsion. <i>Physics of Metals and Metallography</i> , 2007 , 103, 407-413	1.2	36
3	Nanocrystalline Ni-Mn solid solutions: New materials with competing exchange interaction. <i>Journal of Surface Investigation</i> , 2007 , 1, 359-361	0.5	
2	Effect of plastic deformation on disordering and ordering processes in the intermetallic compound Ti3Al. <i>Physics of Metals and Metallography</i> , 2006 , 102, 611-618	1.2	4

Martensitic Transformations in Nanocrystalline Fe-Cr-Ni and Fe-Mn Alloys **2006**, 121-126