

Vladimir Turkevich

List of Publications by Year in descending order

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papers

928
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430874

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69
docs citations

69
times ranked

864
citing authors

#	ARTICLE	IF	CITATIONS
1	Refined Phase Diagram of Boron Nitride. <i>Journal of Physical Chemistry B</i> , 1999, 103, 2903-2905.	2.6	159
2	Kinetics of Diamond Crystallization from the Melt of the Fe-Ni-C System. <i>Journal of Physical Chemistry B</i> , 2002, 106, 6634-6637.	2.6	45
3	Phase Diagram of the B-B ₂ O ₃ System at 5 GPa: Experimental and Theoretical Studies. <i>Journal of Physical Chemistry B</i> , 2008, 112, 6683-6687.	2.6	44
4	The challenge of decomposition and melting of gallium nitride under high pressure and high temperature. <i>Journal of Physics and Chemistry of Solids</i> , 2015, 85, 138-143.	4.0	34
5	On Nucleation of Cubic Boron Nitride in the BN-MgB ₂ System. <i>Journal of Physical Chemistry B</i> , 1999, 103, 8137-8140.	2.6	33
6	High pressure phase equilibria in the Li ₃ N-BN system: in situ studies. <i>Materials Letters</i> , 1997, 32, 179-184.	2.6	30
7	Phase Diagram of the B-BN System at 5 GPa. <i>Journal of Physical Chemistry B</i> , 2010, 114, 5819-5822.	2.6	27
8	Synchrotron radiation study of MgB ₂ formation under high pressure. <i>Superconductor Science and Technology</i> , 2003, 16, 1147-1151.	3.5	24
9	On chemical and diffusional interactions between PCBN and superalloy Inconel 718: Imitational experiments. <i>Journal of the European Ceramic Society</i> , 2019, 39, 2658-2665.	5.7	24
10	Phase diagrams and synthesis of cubic boron nitride. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 10963-10968.	1.8	23
11	Thermoanalytical study of the polymorphic transformation of cubic into graphite-like boron nitride. <i>Journal of Thermal Analysis</i> , 1992, 38, 1181-1188.	0.6	22
12	Phase Stability of Graphitelike BC ₄ N up to 2100 K and 7 GPa. <i>Journal of the American Ceramic Society</i> , 1997, 80, 3229-3232.	3.8	22
13	Y ₃ Al ₅ O ₁₂ translucent nanostructured ceramics—Obtaining and optical properties. <i>Ceramics International</i> , 2011, 37, 2477-2484.	4.8	21
14	An approach to Y ₂ O ₃ :Eu ³⁺ optical nanostructured ceramics. <i>Journal of the European Ceramic Society</i> , 2012, 32, 257-260.	5.7	21
15	Kinetics of diamond spontaneous crystallization from the melt of the Fe-Al-C system at 6.5 GPa. <i>Diamond and Related Materials</i> , 2002, 11, 1769-1773.	3.9	20
16	In situ studies of boron nitride crystallization from BN solutions in supercritical N ₂ -H fluid at high pressures and temperatures. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 5386-5393.	2.8	20
17	Kinetics of cBN crystallization in the Li ₃ N-BN system at 6.6 GPa. <i>Diamond and Related Materials</i> , 1998, 7, 43-46.	3.9	18
18	Transformation-assisted consolidation of Y ₂ O ₃ :Eu ³⁺ nanospheres as a concept to optical nanograin ceramics. <i>Ceramics International</i> , 2014, 40, 3561-3569.	4.8	18

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19	Studies of the oxidation stability, mechanical characteristics of materials based on max phases of the Ti-Al-(C, N) systems, and of the possibility of their use as tool bonds and materials for polishing. Journal of Superhard Materials, 2014, 36, 9-17.	1.2	18
20	On the problem of the phase relations in the B-BN system at high pressures and temperatures. Journal of Superhard Materials, 2009, 31, 1-6.	1.2	17
21	Comparative study of the luminescence of Y3Al5O12 nanoceramics and single crystals under excitation by synchrotron radiation. Optical Materials, 2013, 35, 2049-2052.	3.6	17
22	High pressure influence on the phase diagram construction of 3-d transition metals with carbon systems. High Pressure Research, 1995, 14, 175-180.	1.2	16
23	Formation of Higher Borides During High-Pressure Synthesis and Sintering of Magnesium Diboride and Their Positive Effect on Pinning and Critical Current Density. IEEE Transactions on Applied Superconductivity, 2009, 19, 2780-2783.	1.7	15
24	Kinetics of the graphite?diamond transformation in aqueous fluid determined by in-situ X-ray diffractions at high pressures and temperatures. Physics and Chemistry of Minerals, 2004, 31, 261-268.	0.8	13
25	High-pressure formation of Mg _x Zn _{1-x} O solid solutions with rock salt structure. Solid State Communications, 2006, 138, 534-537.	1.9	13
26	Phase Equilibria in the B ₂ O ₃ System at 5 GPa. Journal of Physical Chemistry C, 2013, 117, 18642-18647.	3.1	13
27	Phase Diagram of the BN System at Pressures up to 24 GPa: Experimental Study and Thermodynamic Analysis. Journal of Physical Chemistry C, 2018, 122, 8505-8509.	3.1	13
28	Superhard pcBN materials with chromium compounds as a binder. Procedia Manufacturing, 2018, 25, 322-329.	1.9	13
29	Investigation of the mechanical properties and cutting performance of cBN-based cutting tools with Cr3C2 binder phase.. Procedia CIRP, 2018, 72, 1433-1438.	1.9	12
30	Synthesis of Boron Nitride by Self-Propagating Reactions at High Pressure. Journal of the American Ceramic Society, 1996, 79, 2798-2800.	3.8	11
31	Kinetics and mechanism of cubic boron nitride formation in the AlN-BN system at 6 GPa. Diamond and Related Materials, 2004, 13, 64-68.	3.9	10
32	Production of the Y3Al5O12 transparent nanostructured ceramics. Journal of Superhard Materials, 2009, 31, 252-259.	1.2	10
33	HP-HT sintering, microstructure, and properties of B6O- and TiC-containing composites based on cBN. Journal of Superhard Materials, 2015, 37, 143-154.	1.2	10
34	The Influence of VC-Al Additive on Wear Resistance of cBN-based Composites. Journal of Superhard Materials, 2018, 40, 226-227.	1.2	10
35	Effects of High Pressure on the Physical Properties of MgB2. Journal of Superconductivity and Novel Magnetism, 2011, 24, 137-150.	1.8	8
36	Diffusion of oxygen in bulk GaN crystals at high temperature and at high pressure. Journal of Crystal Growth, 2016, 449, 35-42.	1.5	8

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37	Phase diagram of the B ² O ₃ system at pressures to 24 GPa. Journal of Superhard Materials, 2016, 38, 216-218.	1.2	8
38	On the cubic boron nitride crystallization in fluid systems. Physical Chemistry Chemical Physics, 2004, 6, 3900.	2.8	7
39	High-pressure synthesis of MnO ² -ZnO solid solutions with rock salt structure: <i>in situ</i> X-ray diffraction studies. High Pressure Research, 2011, 31, 43-47.	1.2	7
40	Structure and Current-Voltage Characteristics of Islet Gold Films on High-Heat Conducting Pressureless Sintered AlN Ceramics. Journal of Superhard Materials, 2018, 40, 432-434.	1.2	7
41	The Influence of SiC and Al ₂ O ₃ Whiskers on the Properties of Whisker-Reinforced cBN-Based Composites. Journal of Superhard Materials, 2019, 41, 377-387.	1.2	7
42	Melting of tetrahedrally bonded semiconductors: an anomaly of the phase diagram of GaN?. Journal of Crystal Growth, 2019, 505, 5-9.	1.5	7
43	Dielectric characteristics of pressureless sintered AlN-based composites in the 3-37 GHz frequency range. Journal of Materials Science: Materials in Electronics, 2021, 32, 2524-2534.	2.2	7
44	hBN ↔ cBN equilibrium line calculated from experimental data on the cBN-to-hBN transformation to 1.4 GPa. High Pressure Research, 1999, 16, 179-185.	1.2	6
45	Phase diagram of the Mg ² -B system at 2 GPa and peculiarities of high-pressure manufacture of MgB ₂ -based blocks with high critical currents. High Pressure Research, 2009, 29, 87-92.	1.2	5
46	Superhard pcBN tool materials with Ti ₃ SiC ₂ MAX-phase binder: Structure, properties, application. Journal of Superhard Materials, 2017, 39, 155-165.	1.2	5
47	On the diathermal calorimetry theory. Thermochimica Acta, 1985, 92, 249-252.	2.7	3
48	Thermophysical devices for high temperature measurements. Journal of Thermal Analysis, 1995, 44, 1067-1071.	0.6	3
49	Phase formation in the Al-B-C ternary system at high pressures and temperatures. Journal of Superhard Materials, 2011, 33, 285-292.	1.2	3
50	Thermodynamic calculation of the phase diagram of the Si ³ -C system up to 8 GPa. Journal of Superhard Materials, 2016, 38, 145-147.	1.2	3
51	Fabrication and luminescent properties of (Y _{0.99} Eu _{0.01}) ₂ O ₃ transparent nanostructured ceramics. Optical Materials, 2018, 78, 285-291.	3.6	3
52	Effect of grain size on the strength of Y ₃ Al ₅ O ₁₂ optical ceramics. Inorganic Materials, 2011, 47, 1160-1167.	0.8	2
53	Thermodynamic calculation of the Al-B system at pressures to 8 GPa. Journal of Superhard Materials, 2014, 36, 437-439.	1.2	2
54	Thermodynamic calculation of the phase diagram for the Al ³ -B ² -C system at pressure 7.7 GPa. Journal of Superhard Materials, 2016, 38, 423-426.	1.2	2

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55	The Influence of in situ Formed TiB ₂ -B ₂ Borides on the Structure and Properties of Hot-Pressed B ₄ C-(TiH ₂ -VC) Ceramic System. Journal of Superhard Materials, 2018, 40, 365-373.	1.2	2
56	Mechanism of Cubic Boron Nitride Formation and Phase Equilibria in the Mg-BN and AlN-BN Systems. , 2005, , 309-318.		2
57	The crystal structure of aluminum diborides synthesized under high pressures and temperatures. Journal of Superhard Materials, 2012, 34, 299-304.	1.2	1
58	Thermodynamic calculation of the B-C system at pressures to 24 GPa. Journal of Superhard Materials, 2014, 36, 358-360.	1.2	1
59	On the Achievements of the Bakul Institute for Superhard Materials in the Field of Synthesis and Sintering of Superhard Materials for the Period of the Activity in the Composition of the National Academy of Science of Ukraine. Journal of Superhard Materials, 2018, 40, 299-303.	1.2	1
60	Physical properties of Ga-Fe-N system relevant for crystallization of GaN – Initial studies. Journal of Crystal Growth, 2019, 507, 77-86.	1.5	1
61	cBN-based cutting tools with niobium compounds as a binder phase.. Procedia CIRP, 2021, 101, 254-257.	1.9	1
62	Effect of the dispersion of silicon carbide on the nature of interaction of the components of the Ti-SiC system. Soviet Powder Metallurgy and Metal Ceramics (English Translation of Poroshkovaya) Tj ETQqO 0 0 rg 0.1/Overlook 10 Tf 50	1.2	0
63	Thermodynamic calculation of the melting diagram of the Mg-MgO-B system at a pressure of 2 GPa. Journal of Superhard Materials, 2009, 31, 78-81.	1.2	0
64	Formation of superhard phases in the Cdiam-AlB ₁₂ and Cdiam-AlB ₂ systems at high pressures and temperatures. Journal of Superhard Materials, 2011, 33, 70-72.	1.2	0
65	High-Pressure Phase Diagrams of the Systems Containing Carbon and BN. , 2014, , 35-57.		0
66	Corrosion Resistance of the Hot-Pressed B ₄ C-VC Ceramic System. Journal of Superhard Materials, 2018, 40, 222-225.	1.2	0