Oleg Vasylkiv

List of Publications by Year in Descending Order

109 papers	1,925 citations	25 h-index	38 g-index
114 ext. papers	2,194 ext. citations	3.6 avg, IF	5 L-index

#	Paper	IF	Citations
109	Fracture peculiarities and high-temperature strength of bulk polycrystalline boron. *Materialia*, **2022**, 21, 101346	3.2	0
108	Ultra-high temperature flexure and strain driven amorphization in polycrystalline boron carbide bulks. *Scripta Materialia*, **2022**, 210, 114487	5.6	1
107	Partially-oriented MgB2 superconducting bulks with addition of B4C and cubic BN obtained by slip casting under high magnetic field and spark plasma sintering. *Materials Research Bulletin*, **2021**, 134, 111103	5.1	0
106	High-temperature deformation in bulk polycrystalline hafnium carbide consolidated using spark plasma sintering. *Journal of the European Ceramic Society*, **2021**, 41, 7442-7442	6	1
105	Allotropic strengthening and in situ phase transformations during ultra-high-temperature flexure of bulk tantalum nitride. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 826, 141954	5.3	0
104	Synthesis of medium-entropy (Zr1/3Hf1/3Ta1/3)B2 using the spark plasma consolidation of diboride powders. *Journal of the Ceramic Society of Japan*, **2020**, 128, 977-980	1	1
103	High-temperature strength of boron carbide with Pt grain-boundary framework in situ synthesized during spark plasma sintering. *Ceramics International*, **2020**, 46, 9136-9144	5.1	2
102	High-temperature toughening in ternary medium-entropy (Ta1/3Ti1/3Zr1/3)C carbide consolidated using spark-plasma sintering. *Journal of Asian Ceramic Societies*, **2020**, 8, 1262-1270	2.4	7
101	Hierarchical composites of B4C□iB2 eutectic particles reinforced with Ti. *Ceramics International*, **2020**, 46, 28132-28144	5.1	4
100	Synthesis and high-temperature properties of medium-entropy (Ti,Ta,Zr,Nb)C using the spark plasma consolidation of carbide powders. *Open Ceramics*, **2020**, 2, 100015	3.3	9
99	High-temperature flexural strength performance of ternary high-entropy carbide consolidated via spark plasma sintering of TaC, ZrC and NbC. *Scripta Materialia*, **2019**, 164, 12-16	5.6	58
98	Microstructure and flexural strength of hafnium diboride via flash and conventional spark plasma sintering. *Journal of the European Ceramic Society*, **2019**, 39, 898-906	6	5
97	Fracture and property relationships in the double diboride ceramic composites by spark plasma sintering of TiB2 and NbB2. *Journal of the American Ceramic Society*, **2019**, 102, 4259-4271	3.8	8
96	Superconducting MgB2 textured bulk obtained by ex situ spark plasma sintering from green compacts processed by slip casting under a 12 T magnetic field. *Superconductor Science and Technology*, **2019**, 32, 125001	3.1	5
95	Bulks of Al-B-C obtained by reactively spark plasma sintering and impact properties by Split Hopkinson Pressure Bar. *Scientific Reports*, **2019**, 9, 19484	4.9	1
94	Flexural strength behavior of a ZrB2□aB2 composite consolidated by non-reactive spark plasma sintering at 2300 □C. *International Journal of Refractory Metals and Hard Materials*, **2017**, 66, 31-35	4.1	12
93	Analysis of the high-temperature flexural strength behavior of B 4 C□aB 2 eutectic composites produced by in situ spark plasma sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 697, 71-78	5.3	16

92	Spark plasma sintering and high-temperature strength of B 6 O□aB 2 ceramics. *Journal of the European Ceramic Society*, **2017**, 37, 3009-3014	6	7
91	Precipitation synthesis and magnetic properties of self-assembled magnetite-chitosan nanostructures. *Journal of Magnetism and Magnetic Materials*, **2017**, 428, 406-411	2.8	15
90	High-temperature strength and plastic deformation behavior of niobium diboride consolidated by spark plasma sintering. *Journal of the American Ceramic Society*, **2017**, 100, 5295-5305	3.8	14
89	Ultra-high elevated temperature strength of TiB2-based ceramics consolidated by spark plasma sintering. *Journal of the European Ceramic Society*, **2017**, 37, 393-397	6	40
88	Hot-spots generation, exaggerated grain growth and mechanical performance of silicon carbide bulks consolidated by flash spark plasma sintering. *Journal of Alloys and Compounds*, **2017**, 691, 466-473	5.7	17
87	High temperature flexural strength in monolithic boron carbide ceramic obtained from two different raw powders by spark plasma sintering. *Journal of the Ceramic Society of Japan*, **2016**, 124, 587-592	1	10
86	Hardness and toughness control of brittle boron suboxide ceramics by consolidation of star-shaped particles by spark plasma sintering. *Ceramics International*, **2016**, 42, 3525-3530	5.1	11
85	High-strength TiB 2 □aC ceramic composites prepared using reactive spark plasma consolidation. *Ceramics International*, **2016**, 42, 1298-1306	5.1	36
84	High-Temperature Strength of Boron Suboxide Ceramic Consolidated by Spark Plasma Sintering. *Journal of the American Ceramic Society*, **2016**, 99, 2769-2777	3.8	11
83	High-Strength B4C□aB2 Eutectic Composites Obtained via In Situ by Spark Plasma Sintering. *Journal of the American Ceramic Society*, **2016**, 99, 2436-2441	3.8	23
82	Synthesis of iron oxide nanoparticles with different morphologies by precipitation method with and without chitosan addition. *Journal of the Ceramic Society of Japan*, **2016**, 124, 489-494	1	9
81	Reactive spark plasma sintering of MgB2in nitrogen atmosphere for the enhancement of the high-field critical current density. *Superconductor Science and Technology*, **2016**, 29, 105020	3.1	2
80	Microstructure and mechanical properties of boron suboxide ceramics prepared by pressureless microwave sintering. *Ceramics International*, **2016**, 42, 14282-14286	5.1	9
79	Flash spark plasma sintering of ultrafine yttria-stabilized zirconia ceramics. *Scripta Materialia*, **2016**, 121, 32-36	5.6	40
78	Room and high temperature flexural failure of spark plasma sintered boron carbide. *Ceramics International*, **2016**, 42, 7001-7013	5.1	23
77	Highly ordered nano-scale structure in nacre of green-lipped mussel Perna canaliculus. *CrystEngComm*, **2016**, 18, 7501-7505	3.3	2
76	Consolidation and grain growth of tantalum diboride during spark plasma sintering. *Ceramics International*, **2016**, 42, 16396-16400	5.1	20
75	Mechanical properties of SiC□bB2 eutectic composites by in situ spark plasma sintering. *Ceramics International*, **2016**, 42, 19372-19385	5.1	17

74	Consolidation of B4C–VB2 eutectic ceramics by spark plasma sintering. *Journal of the Ceramic Society of Japan*, **2015**, 123, 1051-1054	1	6
73	Synthesis of Multilayered Star-Shaped B6O Particles Using the Seed-Mediated Growth Method. *Journal of the American Ceramic Society*, **2015**, 98, 3635-3638	3.8	11
72	High-temperature reactive spark plasma consolidation of TiB2–NbC ceramic composites. *Ceramics International*, **2015**, 41, 10828-10834	5.1	45
71	Consolidation of B4C-TaB2 eutectic composites by spark plasma sinteringPeer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society.View all notes. *Journal of Asian Ceramic Societies*, **2015**, 3, 369-372	2.4	15
70	Cyclic formation of boron suboxide crystallites into star-shaped nanoplates. *Scripta Materialia*, **2015**, 99, 69-72	5.6	6
69	Abnormal thermal conductivity in tetragonal tungsten bronze Ba6–xSrxNb10O30. *Applied Physics Letters*, **2014**, 104, 111903	3.4	10
68	A dense and tough (B4C–TiB2)–B4C composite within a composite produced by spark plasma sintering. *Scripta Materialia*, **2014**, 71, 17-20	5.6	27
67	Structure and physical properties of EuTa2O6 tungsten bronze polymorph. *Applied Physics Letters*, **2014**, 105, 062902	3.4	5
66	Toughness control of boron carbide obtained by spark plasma sintering in nitrogen atmosphere. *Ceramics International*, **2014**, 40, 3053-3061	5.1	32
65	Tough and dense boron carbide obtained by high-pressure (300 MPa) and low-temperature (1600°C) spark plasma sintering. *Journal of the Ceramic Society of Japan*, **2014**, 122, 271-275	1	21
64	B6O ceramic by in-situ reactive spark plasma sintering of a B2O3 and B powder mixture. *Journal of the Ceramic Society of Japan*, **2014**, 122, 336-340	1	10
63	Metal-ceramic/ceramic nanostructured layered composites for solid oxide fuel cells by spark plasma sintering. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 4218-23	1.3	3
62	Nano-Blast Synthesis of Nano-Size CeO2–Gd2O3 Powders **2014**, 141-145		
61	Challenges of nanostructuring and functional properties for selected bulk materials obtained by reactive spark plasma sintering. *Japanese Journal of Applied Physics*, **2014**, 53, 05FB22	1.4	8
60	Bio-inspired structured boron carbide-boron nitride composite by reactive spark plasma sintering. *Virtual and Physical Prototyping*, **2013**, 8, 253-258	10.1	0
59	Spark plasma sintered Ni-YSZ/YSZ bi-layers for solid oxide fuel cell. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 4150-7	1.3	2
58	Room and high temperature toughening in directionally solidified B4C–TiB2 eutectic composites by Si doping. *Journal of Alloys and Compounds*, **2013**, 570, 94-99	5.7	28
57	Synthesis of B6O powder and spark plasma sintering of B6O and B6O–B4C ceramics. *Journal of the Ceramic Society of Japan*, **2013**, 121, 950-955	1	29

56	Effect of carbon content on the tribological behavior of TiCxN1 films prepared by arc-vapor deposition. *Journal of the Ceramic Society of Japan*, **2013**, 121, 961-967	1	3
55	Spark plasma sintering of MgB2 in the two-temperature route. *Physica C: Superconductivity and Its Applications*, **2012**, 477, 43-50	1.3	45
54	Microwave Synthesis of Fullerene-Doped MgB2. *Industrial & Engineering Chemistry Research*, **2012**, 51, 11005-11010	3.9	11
53	Densification kinetics of nanocrystalline zirconia powder using microwave and spark plasma sintering--a comparative study. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 4577-82	1.3	13
52	Peculiarities of the neck growth process during initial stage of spark-plasma, microwave and conventional sintering of WC spheres. *Journal of Alloys and Compounds*, **2012**, 523, 1-10	5.7	74
51	Grain boundary diffusion driven spark plasma sintering of nanocrystalline zirconia. *Ceramics International*, **2012**, 38, 4385-4389	5.1	23
50	Hard polycrystalline eutectic composite prepared by spark plasma sintering. *Ceramics International*, **2012**, 38, 3947-3953	5.1	19
49	Effect of grain size on the electrical properties of samaria-doped ceria solid electrolyte. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 1871-9	1.3	5
48	High hardness BaCb-(BxOy/BN) composites with 3D mesh-like fine grain-boundary structure by reactive spark plasma sintering. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 959-65	1.3	22
47	Non-catalytic facile synthesis of superhard phase of boron carbide (B13C2) nanoflakes and nanoparticles. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 596-603	1.3	13
46	A novel non-catalytic synthesis method for zero- and two-dimensional B13C2 nanostructures. *CrystEngComm*, **2011**, 13, 1299-1303	3.3	12
45	Synthesis and consolidation of TiN/TiB2 ceramic composites via reactive spark plasma sintering. *Journal of Alloys and Compounds*, **2011**, 509, 1601-1606	5.7	27
44	Nanometric La0.9Sr0.1Ga0.8Mg0.2O3 ceramic prepared by low-pressure reactive spark-plasma-sintering. *Journal of Alloys and Compounds*, **2011**, 509, 2535-2539	5.7	9
43	The bending strength temperature dependence of the directionally solidified eutectic LaB6 rB2 composite. *Journal of Alloys and Compounds*, **2011**, 509, 6123-6129	5.7	43
42	Modeling of the temperature distribution of flash sintered zirconia. *Journal of the Ceramic Society of Japan*, **2011**, 119, 144-146	1	96
41	Phase Relation Studies in the ZrO2 eO2 a2O3 System at 1500 C. *Journal of the American Ceramic Society*, **2011**, 94, 1911-1919	3.8	10
40	High-hardness B4C textured by a strong magnetic field technique. *Scripta Materialia*, **2011**, 64, 256-259	5.6	42
39	Microstructure evolution during field-assisted sintering of zirconia spheres. *Scripta Materialia*, **2011**, 65, 683-686	5.6	25

38	Beautiful unconventional synthesis and processing technologies of superconductors and some other materials. *Science and Technology of Advanced Materials*, **2011**, 12, 013001	7.1	26
37	Tough yttria-stabilized zirconia ceramic by low-temperature spark plasma sintering of long-term stored nanopowders. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 7901-9	1.3	4
36	'Beautiful' unconventional synthesis and processing technologies of superconductors and some other materials. *Science and Technology of Advanced Materials*, **2011**, 12, 013001	7.1	2
35	Mechanism of nucleation and growth of directionally crystallized alloys of the B4C–MeB2 system. *Journal of Alloys and Compounds*, **2010**, 490, 557-561	5.7	12
34	High-temperature strength of directionally reinforced LaB6–TiB2 composite. *Journal of Alloys and Compounds*, **2010**, 505, 130-134	5.7	42
33	Zirconia nanoceramic via redispersion of highly agglomerated nanopowder and spark plasma sintering. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 6634-40	1.3	4
32	Nanoblast synthesis and consolidation of (La0.8Sr0.2)(Ga0.9Mg0.1)O(3-delta) under Spark plasma sintering conditions. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 141-9	1.3	5
31	Bulk Ti1−xAlxN nanocomposite via spark plasma sintering of nanostructured Ti1−xAlxN–AlN powders. *Scripta Materialia*, **2009**, 61, 1020-1023	5.6	19
30	Nanoblast synthesis and SPS of nanostructured oxides for SOFC. *Journal of Electroceramics*, **2009**, 22, 47-54	1.5	
29	Microstructure and high-temperature strength of B4C–TiB2 composite prepared by a crucibleless zone melting method. *Journal of Alloys and Compounds*, **2009**, 485, 677-681	5.7	56
28	Si3N4-TiN nanocomposite by nitration of TiSi2 and consolidation by hot pressing and spark plasma sintering. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 6381-9	1.3	14
27	Nanoreactor engineering and spark plasma sintering of Gd20Ce80O1.90 nanopowders. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 3077-84	1.3	6
26	Nanoreactor engineering and SPS densification of multimetal oxide ceramic nanopowders. *Journal of the European Ceramic Society*, **2008**, 28, 919-927	6	15
25	Nano-explosion synthesis of multi-component ceramic nano-composites. *Journal of the European Ceramic Society*, **2007**, 27, 585-592	6	6
24	Synthesis and Properties of Multimetal Oxide Nanopowders via Nano-Explosive Technique. *Materials Science Forum*, **2007**, 534-536, 125-128	0.4	1
23	High-Toughness Tetragonal Zirconia/Alumina Nano-Ceramics. *Key Engineering Materials*, **2006**, 317-318, 615-618	0.4	
22	Multiple nano-blast synthesis of PT/8Y-ZP composite nanopowders. *Journal of Nanoscience and Nanotechnology*, **2006**, 6, 1625-31	1.3	3
21	Nano-Blast Synthesis of Nano-size CeO2–Gd2O3 Powders. *Journal of the American Ceramic Society*, **2006**, 89, 1822-1826	3.8	17

20	Nanoexplosion synthesis of multimetal oxide ceramic nanopowders. *Nano Letters*, **2005**, 5, 2598-604	11.5	28
19	Synthesis and Characterization of Nanosize Ceria-Gadolinia Powders. *Journal of the Ceramic Society of Japan*, **2005**, 113, 101-106		10
18	Sonochemical Preparation and Properties of Pt□3Y-TZP Nano-Composites. *Journal of the American Ceramic Society*, **2005**, 88, 639-644	3.8	19
17	Features of Preparing Nano-Size Powders of Tetragonal Zirconium Dioxide Stabilized with Yttrium. *Powder Metallurgy and Metal Ceramics*, **2005**, 44, 228-239	0.8	9
16	High-Toughness Tetragonal Zirconia and Zirconia/Alumina Nano-Ceramics. *Key Engineering Materials*, **2004**, 264-268, 2347-2350	0.4	1
15	Nano-Engineering and Catalytic Properties of Zirconia □Noble Metals Composite Powders. *Key Engineering Materials*, **2004**, 264-268, 93-96	0.4	
14	Nonisothermal Synthesis of Yttria-Stabilized Zirconia Nanopowder through Oxalate Processing: I, Characteristics of Y-Zr Oxalate Synthesis and Its Decomposition. *Journal of the American Ceramic Society*, **2004**, 83, 2196-2202	3.8	42
13	Nano-engineering of zirconia□oble metals composites. *Journal of the European Ceramic Society*, **2004**, 24, 469-473	6	25
12	Hardness and Fracture Toughness of Alumina-Doped Tetragonal Zirconia with Different Yttria Contents. *Materials Transactions*, **2003**, 44, 2235-2238	1.3	28
11	Low-Temperature Processing and Mechanical Properties of Zirconia and Zirconia□Alumina Nanoceramics. *Journal of the American Ceramic Society*, **2003**, 86, 299-304	3.8	104
10	Preparation and Properties of 3Y-TZP □Al2O3 Nano-Composites. *Key Engineering Materials*, **2003**, 253, 243-254	0.4	
9	Nonisothermal Synthesis of Yttria-Stabilized Zirconia Nanopowder through Oxalate Processing: II, Morphology Manipulation. *Journal of the American Ceramic Society*, **2001**, 84, 2484-2488	3.8	30
8	Synthesis and Colloidal Processing of Zirconia Nanopowder. *Journal of the American Ceramic Society* , **2001**, 84, 2489-2494	3.8	146
7	Hydroxide synthesis, colloidal processing and sintering of nano-size 3Y-TZP powder. *Scripta Materialia*, **2001**, 44, 2219-2223	5.6	32
6	Low-Temperature Sintering of Zirconia and Zirconia-Alumina Composite Nano-Powders. *Key Engineering Materials*, **2001**, 206-213, 39-42	0.4	
5	Synthesis and Sintering of Zirconia Nano-Powder by Non-Isothermal Decomposition from Hydroxide.. *Journal of the Ceramic Society of Japan*, **2001**, 109, 500-505		16
4	On Peculiarities of Non-Isothermal Synthesis of fine Ferroelectric Powders. *Key Engineering Materials*, **1997**, 132-136, 244-247	0.4	
3	Synthesis and sintering of nanocrystalline barium titanate powder under nonisothermal conditions. I. Control of dispersity of barium titanate during its synthesis from barium titanyl oxalate. *Powder Metallurgy and Metal Ceramics*, **1997**, 36, 170-175	0.8	6

2	Synthesis and sintering of nanocrystalline barium titanate powder under nonisothermal conditions. III. Chromatographic analysis of barium titanyl-oxalate gaseous decomposition products. *Powder Metallurgy and Metal Ceramics*, **1997**, 36, 575-578	0.8	3
1	Synthesis and sintering of nanocrystalline barium titanate powder under nonisothermal conditions. II. Phase analysis of the decomposition products of barium titanyl-oxalate and the synthesis of barium titanate. *Powder Metallurgy and Metal Ceramics*, **1997**, 36, 277-282	0.8	8