Oleg Vasylkiv

List of Publications by Year
in descending order

113 papers	2,386 citations	201385 27 h-index	253896 43 g-index
114 all docs	114 docs citations	114 times ranked	1686 citing authors

#	Article	IF	Citations
1	Synthesis and Colloidal Processing of Zirconia Nanopowder. Journal of the American Ceramic Society, 2001, 84, 2489-2494.	1.9	156
2	Lowâ€Temperature Processing and Mechanical Properties of Zirconia and Zirconiaâ€“Alumina Nanoceramics. Journal of the American Ceramic Society, 2003, 86, 299-304.	1.9	116
3	Modeling of the temperature distribution of flash sintered zirconia. Journal of the Ceramic Society of Japan, 2011, 119, 144-146.	0.5	111
4	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.	2.6	109
5	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.	2.8	82
6	Spark plasma sintering of MgB2 in the two-temperature route. Physica C: Superconductivity and Its Applications, 2012, 477, 43-50.	0.6	62
7	Microstructure and high-temperature strength of B4Câ€“TiB2 composite prepared by a crucibleless zone melting method. Journal of Alloys and Compounds, 2009, 485, 677-681.	2.8	61
8	High-temperature reactive spark plasma consolidation of TiB2â€“NbC ceramic composites. Ceramics International, 2015, 41, 10828-10834.	2.3	52
9	Ultra-high elevated temperature strength of TiB2-based ceramics consolidated by spark plasma sintering. Journal of the European Ceramic Society, 2017, 37, 393-397.	2.8	51
10	The bending strength temperature dependence of the directionally solidified eutectic LaB6â€“ZrB2 composite. Journal of Alloys and Compounds, 2011, 509, 6123-6129.	2.8	50
11	High-temperature strength of directionally reinforced LaB6â€“TiB2 composite. Journal of Alloys and Compounds, 2010, 505, 130-134.	2.8	48
12	High-strength TiB 2 â€“TaC ceramic composites prepared using reactive spark plasma consolidation. Ceramics International, 2016, 42, 1298-1306.	2.3	48
13	Nonisothermal Synthesis of Yttriaâ€Stabilized Zirconia Nanopowder through Oxalate Processing: I, Characteristics of Yâ€Zr Oxalate Synthesis and Its Decomposition. Journal of the American Ceramic Society, 2000, 83, 2196-2202.	1.9	47
14	High-hardness B4C textured by a strong magnetic field technique. Scripta Materialia, 2011, 64, 256-259.	2.6	47
15	Flash spark plasma sintering of ultrafine yttria-stabilized zirconia ceramics. Scripta Materialia, 2016, 121, 32-36.	2.6	46
16	Hardness and Fracture Toughness of Alumina-Doped Tetragonal Zirconia with Different Yttria Contents. Materials Transactions, 2003, 44, 2235-2238.	0.4	39
17	Synthesis of B₆O powder and spark plasma sintering of B₆O and B₆Oâ€“B₄C ceramics. Journal of the Ceramic Society of Japan, 2013, 121, 950-955.	0.5	35
18	Hydroxide synthesis, colloidal processing and sintering of nano-size 3Y-TZP powder. Scripta Materialia, 2001, 44, 2219-2223.	2.6	34

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19	Toughness control of boron carbide obtained by spark plasma sintering in nitrogen atmosphere. Ceramics International, 2014, 40, 3053-3061.	2.3	34
20	A dense and tough (B4Câ€"TiB2)â€"B4C â€˜composite within a compositeâ€™ produced by spark plasma sintering. Scripta Materialia, 2014, 71, 17-20.	2.6	33
21	Room and high temperature toughening in directionally solidified B4Câ€"TiB2 eutectic composites by Si doping. Journal of Alloys and Compounds, 2013, 570, 94-99.	2.8	32
22	Nonisothermal Synthesis of Yttriaâ€Stabilized Zirconia Nanopowder through Oxalate Processing: II, Morphology Manipulation. Journal of the American Ceramic Society, 2001, 84, 2484-2488.	1.9	31
23	Nanoexplosion Synthesis of Multimetal Oxide Ceramic Nanopowders. Nano Letters, 2005, 5, 2598-2604.	4.5	30
24	Synthesis and consolidation of TiN/TiB2 ceramic composites via reactive spark plasma sintering. Journal of Alloys and Compounds, 2011, 509, 1601-1606.	2.8	30
25	Consolidation and grain growth of tantalum diboride during spark plasma sintering. Ceramics International, 2016, 42, 16396-16400.	2.3	30
26	â€˜Beautifulâ€™ unconventional synthesis and processing technologies of superconductors and some other materials. Science and Technology of Advanced Materials, 2011, 12, 013001.	2.8	29
27	Room and high temperature flexural failure of spark plasma sintered boron carbide. Ceramics International, 2016, 42, 7001-7013.	2.3	28
28	Analysis of the high-temperature flexural strength behavior of B 4 Câ€"TaB 2 eutectic composites produced by in situ spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 697, 71-78.	2.6	28
29	Microstructure evolution during field-assisted sintering of zirconia spheres. Scripta Materialia, 2011, 65, 683-686.	2.6	27
30	Nano-engineering of zirconiaâ€"noble metals composites. Journal of the European Ceramic Society, 2004, 24, 469-473.	2.8	26
31	Grain boundary diffusion driven spark plasma sintering of nanocrystalline zirconia. Ceramics International, 2012, 38, 4385-4389.	2.3	26
32	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.	2.8	26
33	Tough and dense boron carbide obtained by high-pressure (300 MPa) and low-temperature (1600Â°C) spark plasma sintering. Journal of the Ceramic Society of Japan, 2014, 122, 271-275.	0.5	25
34	High Hardness B_{<i>a</i>}C_{<i>b</i>}-(B_{<i>x</i>}O_{<i>y</i>}/BN) Composites with 3D Mesh-Like Fine Grain-Boundary Structure by Reactive Spark Plasma Sintering. Journal of Nanoscience and Nanotechnology, 2012, 12, 959-965.	0.9	24
35	Highâ€Strength B₄Câ€"TaB₂ Eutectic Composites Obtained via <i>In Situ</i> by Spark Plasma Sintering. Journal of the American Ceramic Society, 2016, 99, 2436-2441.	1.9	24
36	Highâ€temperature strength and plastic deformation behavior of niobium diboride consolidated by spark plasma sintering. Journal of the American Ceramic Society, 2017, 100, 5295-5305.	1.9	22

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37	Nano-Blast Synthesis of Nano-size CeO2-Gd2O3 Powders. Journal of the American Ceramic Society, 2006, 89, 1822-1826.	1.9	21
38	Precipitation synthesis and magnetic properties of self-assembled magnetite-chitosan nanostructures. Journal of Magnetism and Magnetic Materials, 2017, 428, 406-411.	1.0	21
39	Sonochemical Preparation and Properties of Pt-3Y-TZP Nano-Composites. Journal of the American Ceramic Society, 2005, 88, 639-644.	1.9	20
40	Mechanical properties of SiCâ€“NbB2 eutectic composites by in situ spark plasma sintering. Ceramics International, 2016, 42, 19372-19385.	2.3	20
41	Bulk Ti1âˆ’xAlxN nanocomposite via spark plasma sintering of nanostructured Ti1âˆ’xAlxNâ€“AlN powders. Scripta Materialia, 2009, 61, 1020-1023.	2.6	19
42	Hard polycrystalline eutectic composite prepared by spark plasma sintering. Ceramics International, 2012, 38, 3947-3953.	2.3	19
43	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.	1.0	19
44	Abnormal thermal conductivity in tetragonal tungsten bronze Ba6âˆ’xSrxNb10O30. Applied Physics Letters, 2014, 104, 111903.	1.5	18
45	Consolidation of B4C-TaB2 eutectic composites by spark plasma sintering. Journal of Asian Ceramic Societies, 2015, 3, 369-372.	1.0	18
46	Synthesis and Sintering of Zirconia Nano-Powder by Non-Isothermal Decomposition from Hydroxide.. Journal of the Ceramic Society of Japan, 2001, 109, 500-505.	1.3	17
47	Nanoreactor engineering and SPS densification of multimetal oxide ceramic nanopowders. Journal of the European Ceramic Society, 2008, 28, 919-927.	2.8	17
48	Si₃N₄â€“TiN Nanocomposite by Nitration of TiSi₂ and Consolidation by Hot Pressing and Spark Plasma Sintering. Journal of Nanoscience and Nanotechnology, 2009, 9, 6381-6389.	0.9	17
49	Microwave Synthesis of Fullerene-Doped MgB₂. Industrial & Engineering Chemistry Research, 2012, 51, 11005-11010.	1.8	17
50	Flexural strength behavior of a ZrB2â€“TaB2 composite consolidated by non-reactive spark plasma sintering at 2300 Â°C. International Journal of Refractory Metals and Hard Materials, 2017, 66, 31-35.	1.7	16
51	High-temperature toughening in ternary medium-entropy (Ta_{1/3}Ti_{1/3}Zr_{1/3})C carbide consolidated using spark-plasma sintering. Journal of Asian Ceramic Societies, 2020, 8, 1262-1270.	1.0	16
52	Mechanism of nucleation and growth of directionally crystallized alloys of the B4Câ€“MeB2 system. Journal of Alloys and Compounds, 2010, 490, 557-561.	2.8	15
53	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.	1.9	15
54	Densification Kinetics of Nanocrystalline Zirconia Powder Using Microwave and Spark Plasma Sinteringâ€"A Comparative Study. Journal of Nanoscience and Nanotechnology, 2012, 12, 4577-4582.	0.9	14

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55	Synthesis of <i>Multilayered</i> Starâ€Shaped B₆O Particles Using the Seedâ€Mediated Growth Method. Journal of the American Ceramic Society, 2015, 98, 3635-3638.	1.9	14
56	Spark plasma sintering and high-temperature strength of B 6 Oâ€“TaB 2 ceramics. Journal of the European Ceramic Society, 2017, 37, 3009-3014.	2.8	14
57	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.	0.4	13
58	Phase Relation Studies in the ZrO2-CeO2-La2O3 System at 1500Â°C. Journal of the American Ceramic Society, 2011, 94, 1911-1919.	1.9	13
59	Non-Catalytic Facile Synthesis of Superhard Phase of Boron Carbide (B₁₃C₂) Nanoflakes and Nanoparticles. Journal of Nanoscience and Nanotechnology, 2012, 12, 596-603.	0.9	13
60	Highâ€Temperature Strength of Boron Suboxide Ceramic Consolidated by Spark Plasma Sintering. Journal of the American Ceramic Society, 2016, 99, 2769-2777.	1.9	13
61	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.	0.5	13
62	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.	2.3	13
63	A novel non-catalytic synthesis method for zero- and two-dimensional B13C2nanostructures. CrystEngComm, 2011, 13, 1299-1303.	1.3	12
64	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.	0.5	12
65	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.	0.4	11
66	B₆O ceramic by <i>in-situ</i> reactive spark plasma sintering of a B₂O₃ and B powder mixture. Journal of the Ceramic Society of Japan, 2014, 122, 336-340.	0.5	11
67	Microstructure and flexural strength of hafnium diboride via flash and conventional spark plasma sintering. Journal of the European Ceramic Society, 2019, 39, 898-906.	2.8	11
68	Hierarchical composites of B4Câ€“TiB2 eutectic particles reinforced with Ti. Ceramics International, 2020, 46, 28132-28144.	2.3	11
69	Synthesis and Characterization of Nanosize Ceria-Gadolinia Powders. Journal of the Ceramic Society of Japan, 2005, 113, 101-106.	1.3	10
70	Microstructure and mechanical properties of boron suboxide ceramics prepared by pressureless microwave sintering. Ceramics International, 2016, 42, 14282-14286.	2.3	10
71	Superconducting MgB₂ textured bulk obtained by <i>ex situ</i> spark plasma sintering from green compacts processed by slip casting under a 12 T magnetic field. Superconductor Science and Technology, 2019, 32, 125001.	1.8	10
72	Features of Preparing Nano-Size Powders of Tetragonal Zirconium Dioxide Stabilized with Yttrium. Powder Metallurgy and Metal Ceramics, 2005, 44, 228-239.	0.4	9

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73	Nanometric La0.9Sr0.1Ga0.8Mg0.2O3â^'x ceramic prepared by low-pressure reactive spark-plasma-sintering. Journal of Alloys and Compounds, 2011, 509, 2535-2539.	2.8	9
74	Challenges of nanostructuring and functional properties for selected bulk materials obtained by reactive spark plasma sintering. Japanese Journal of Applied Physics, 2014, 53, 05FB22.	0.8	9
75	Consolidation of B₄C–VB₂ eutectic ceramics by spark plasma sintering. Journal of the Ceramic Society of Japan, 2015, 123, 1051-1054.	0.5	9
76	Cyclic formation of boron suboxide crystallites into star-shaped nanoplates. Scripta Materialia, 2015, 99, 69-72.	2.6	9
77	Nano-explosion synthesis of multi-component ceramic nano-composites. Journal of the European Ceramic Society, 2007, 27, 585-592.	2.8	8
78	Deformationâ€resistant Ta_{0.2}Hf_{0.8}C solidâ€solution ceramic with superior flexural strength at 2000Â°C. Journal of the American Ceramic Society, 2022, 105, 512-524.	1.9	8
79	Nanoreactor Engineering and Spark Plasma Sintering of Gd20Ce80O1.90 Nanopowders. Journal of Nanoscience and Nanotechnology, 2008, 8, 3077-3084.	0.9	7
80	Effect of Grain Size on the Electrical Properties of Samaria-Doped Ceria Solid Electrolyte. Journal of Nanoscience and Nanotechnology, 2012, 12, 1871-1879.	0.9	7
81	Synthesis of medium-entropy (Zr_{1/3}Hf_{1/3}Ta_{1/3})B₂ using the spark plasma consolidation of diboride powders. Journal of the Ceramic Society of Japan, 2020, 128, 977-980.	0.5	7
82	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.	0.4	6
83	Nanoblast Synthesis and Consolidation of (La_{0.8}Sr_{0.2})(Ga_{0.9}Mg_{0.1})O<SU Under Spark Plasma Sintering Conditions. Journal of Nanoscience and Nanotechnology, 2009, 9, 141-149.	0.9	6
84	Tough Yttria-Stabilized Zirconia Ceramic by Low-Temperature Spark Plasma Sintering of Long-Term Stored Nanopowders. Journal of Nanoscience and Nanotechnology, 2011, 11, 7901-7909.	0.9	5
85	Spark Plasma Sintered Ni-YSZ/YSZ Bi-Layers for Solid Oxide Fuel Cell. Journal of Nanoscience and Nanotechnology, 2013, 13, 4150-4157.	0.9	5
86	Structure and physical properties of EuTa2O6 tungsten bronze polymorph. Applied Physics Letters, 2014, 105, 062902.	1.5	5
87	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.	1.8	5
88	High-temperature strength of boron carbide with Pt grain-boundary framework in situ synthesized during spark plasma sintering. Ceramics International, 2020, 46, 9136-9144.	2.3	5
89	Zirconia Nanoceramic via Redispersion of Highly Agglomerated Nanopowder and Spark Plasma Sintering. Journal of Nanoscience and Nanotechnology, 2010, 10, 6634-6640.	0.9	4
90	High-temperature deformation in bulk polycrystalline hafnium carbide consolidated using spark plasma sintering. Journal of the European Ceramic Society, 2021, 41, 7442-7449.	2.8	4

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91	Multiple Nano-Blast Synthesis of PT/8Y-ZP Composite Nanopowders. Journal of Nanoscience and Nanotechnology, 2006, 6, 1625-1631.	0.9	3
92	Effect of carbon content on the tribological behavior of TiC<i>_x</i>N_{1âˆ'}<i>_x</i> films prepared by arc-vapor deposition. Journal of the Ceramic Society of Japan, 2013, 121, 961-967.	0.5	3
93	Metal-Ceramic/Ceramic Nanostructured Layered Composites for Solid Oxide Fuel Cells by Spark Plasma Sintering. Journal of Nanoscience and Nanotechnology, 2014, 14, 4218-4223.	0.9	3
94	Highly ordered nano-scale structure in nacre of green-lipped mussel Perna canaliculus. CrystEngComm, 2016, 18, 7501-7505.	1.3	3
95	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.	2.6	3
96	'Beautiful' unconventional synthesis and processing technologies of superconductors and some other materials. Science and Technology of Advanced Materials, 2011, 12, 013001.	2.8	3
97	Ultra-high temperature flexure and strain driven amorphization in polycrystalline boron carbide bulks. Scripta Materialia, 2022, 210, 114487.	2.6	3
98	Highâ€temperature reactive synthesis of the Zrâ€"Ta multiboride with a supercomposite structure. Journal of the American Ceramic Society, 2022, 105, 6989-7002.	1.9	3
99	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.	2.7	2
100	Fracture peculiarities and high-temperature strength of bulk polycrystalline boron. Materialia, 2022, 21, 101346.	1.3	2
101	Towards high degree of c-axis orientation in MgB2 bulks. Journal of Magnesium and Alloys, 2022, 10, 2173-2184.	5.5	2
102	Low-Temperature Sintering of Zirconia and Zirconia-Alumina Composite Nano-Powders. Key Engineering Materials, 2001, 206-213, 39-42.	0.4	1
103	High-Toughness Tetragonal Zirconia and Zirconia/Alumina Nano-Ceramics. Key Engineering Materials, 2004, 264-268, 2347-2350.	0.4	1
104	High-Toughness Tetragonal Zirconia/Alumina Nano-Ceramics. Key Engineering Materials, 2006, 317-318, 615-618.	0.4	1
105	Synthesis and Properties of Multimetal Oxide Nanopowders via Nano-Explosive Technique. Materials Science Forum, 2007, 534-536, 125-128.	0.3	1
106	Bio-inspired structured boron carbide-boron nitride composite by reactive spark plasma sintering. Virtual and Physical Prototyping, 2013, 8, 253-258.	5.3	1
107	Bulks of Al-B-C obtained by reactively spark plasma sintering and impact properties by Split Hopkinson Pressure Bar. Scientific Reports, 2019, 9, 19484.	1.6	1
108	Consolidation and highâ€temperature strength of monolithic lanthanum hexaboride. Journal of the American Ceramic Society, 0, , .	1.9	1

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109	On Peculiarities of Non-Isothermal Synthesis of fine Ferroelectric Powders. Key Engineering Materials, 1997, 132-136, 244-247.	0.4	0
110	Preparation and Properties of 3Y-TZP â€” Al₂O₃ Nano-Composites. Key Engineering Materials, 2003, 253, 243-254.	0.4	0
111	Nano-Engineering and Catalytic Properties of Zirconia â€“ Noble Metals Composite Powders. Key Engineering Materials, 2004, 264-268, 93-96.	0.4	0
112	Nanoblast synthesis and SPS of nanostructured oxides for SOFC. Journal of Electroceramics, 2009, 22, 47-54.	0.8	0
113	Boron Carbide-Based Nanostructured Composite by Spark Plasma Sintering. , 2014, , .		0