

# Sergei Stepanov

## List of Publications by Year in descending order

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51  
papers

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citations

933447

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888059

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52  
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52  
docs citations

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times ranked

262  
citing authors

#	ARTICLE	IF	CITATIONS
1	Radio, cathodo and photoluminescence investigations of high density WO <sub>3</sub> -Gd <sub>2</sub> O <sub>3</sub> -B <sub>2</sub> O <sub>3</sub> glass doped with Tb <sup>3+</sup> . Radiation Physics and Chemistry, 2019, 164, 108350.	2.8	34
2	Luminescent properties of MgAl <sub>2</sub> O <sub>4</sub> ceramics doped with rare earth ions fabricated by spark plasma sintering technique. Ceramics International, 2018, 44, 20768-20773.	4.8	33
3	The effect of Ce <sup>3+</sup> concentration and heat treatment on the luminescence efficiency of YAG phosphor. Journal of Physics and Chemistry of Solids, 2018, 116, 1-6.	4.0	31
4	Synthesis and optical properties of Tb <sup>3+</sup> or Dy <sup>3+</sup> -doped MgAl <sub>2</sub> O <sub>4</sub> transparent ceramics. Optical Materials, 2019, 91, 396-400.	3.6	25
5	Luminescence spectroscopy of scintillating glasses doped with Tb <sup>3+</sup> /Ce <sup>3+</sup> with different concentrations of cerium under photo- and electron excitation. Journal of Luminescence, 2015, 162, 128-133.	3.1	24
6	The luminescence performance of Tb <sup>3+</sup> doped ABS-BGP glasses excited by different type of energy sources. Journal of Luminescence, 2020, 226, 117514.	3.1	16
7	Pulse Cathodoluminescence of the Impurity Centers in Ceramics Based on the MgAl <sub>2</sub> O <sub>4</sub> Spinel. Journal of Applied Spectroscopy, 2018, 85, 416-421.	0.7	13
8	Tunable orange, yellow and white emission of Pr <sup>3+</sup> -doped tungsten gadolinium borate glasses. Journal of Non-Crystalline Solids, 2021, 554, 120603.	3.1	12
9	Effect of technological parameters on optical and mechanical properties of Spark Plasma Sintered transparent YSZ ceramics. Ceramics International, 2021, 47, 11169-11175.	4.8	12
10	Scintillation properties of phosphate-borate-fluoride glass doped with Tb <sup>3+</sup> /Pr <sup>3+</sup> . Radiation Physics and Chemistry, 2018, 147, 59-63.	2.8	11
11	Influence of the Tb <sup>3+</sup> concentration on the luminescent properties of high silica glass. Optical Materials, 2018, 86, 606-610.	3.6	11
12	The effect of BaF <sub>2</sub> concentration and particle size distribution on the luminescence efficiency of YAG:Ce <sup>3+</sup> phosphors. Materials Research Express, 2018, 5, 096201.	1.6	11
13	White LEDs with limit luminous efficacy. AIP Conference Proceedings, 2016, , .	0.4	10
14	Steady state and time-resolved luminescence of Tb <sup>3+</sup> /Ce <sup>3+</sup> doped ABS-BGP glasses. Journal of Luminescence, 2019, 207, 310-315.	3.1	9
15	Structural and Spectroscopic Characterization of Tb <sup>3+</sup> -Doped MgAl <sub>2</sub> O <sub>4</sub> Spinel Ceramics Fabricated by Spark Plasma Sintering Technique. Physica Status Solidi (B): Basic Research, 2020, 257, 1900471.	1.5	8
16	The influence of intense ultrasound applied during pressing on the optical and cathodoluminescent properties of conventionally sintered YSZ ceramics. Ultrasonics Sonochemistry, 2019, 50, 166-171.	8.2	7
17	Effect of Spark Plasma Sintering Temperature on the Properties of Transparent YSZ Ceramics. Refractories and Industrial Ceramics, 2019, 60, 154-159.	0.6	6
18	Manufacturing Optically Transparent Thick Zirconia Ceramics by Spark Plasma Sintering with the Use of Collector Pressing. Applied Sciences (Switzerland), 2021, 11, 1304.	2.5	6

#	ARTICLE	IF	CITATIONS
19	Defects formation in YSZ ceramics with different Y <sub>2</sub> O <sub>3</sub> content irradiated with 0.25 MeV electrons energy. Radiation Physics and Chemistry, 2021, 189, 109736.	2.8	6
20	Two possible causes of the stage of emission buildup after excitation by a nanosecond electron flux pulse. Optical Materials, 2015, 42, 325-330.	3.6	5
21	The Criteria for Optimization of Spark Plasma Sintering of Transparent MgAl <sub>2</sub> O <sub>4</sub> Ceramics. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2018, 65, 513-518.	0.2	5
22	Luminescence performance of yttrium-stabilized zirconia ceramics doped with Eu <sup>3+</sup> ions fabricated by Spark Plasma Sintering technique. Ceramics International, 2021, 47, 6608-6613.	4.8	5
23	MoS <sub>2</sub> @ZnO Nanoheterostructures Prepared by Electrospark Erosion for Photocatalytic Applications. Nanomaterials, 2021, 11, 157.	4.1	5
24	Spatial distribution of dynamic mechanical stresses in ionic crystals under the action of a pulsed electron beam. Technical Physics, 2012, 57, 225-229.	0.7	4
25	Photoluminescence Characteristics of Yag:Ce, Gd Based Phosphors with Different Prehistories. Russian Physics Journal, 2017, 60, 862-869.	0.4	3
26	Natural Oxidation of Ultra-Thin Copper Films. Russian Physics Journal, 2018, 60, 1559-1564.	0.4	3
27	Influence of Temperature on the Luminescence Properties of MgAl <sub>2</sub> O <sub>4</sub> :Dy <sup>3+</sup> Ceramics Synthesized by Spark Plasma Sintering. Physics of the Solid State, 2019, 61, 1829-1834.	0.6	3
28	Luminescent Yttrium-Aluminum Garnet Ceramics Obtained by Conventional Sintering on Air. Nanotechnologies in Russia, 2019, 14, 113-117.	0.7	3
29	Effect of Annealing on the Luminescence of YAG:Ce and YAGG:Ce Ceramics Synthesized in a Radiation Field. Bulletin of the Russian Academy of Sciences: Physics, 2020, 84, 799-802.	0.6	3
30	Luminescent Properties of Borosilicate Glass Doped with Cerium. Physics of the Solid State, 2019, 61, 1835-1839.	0.6	2
31	MgAl <sub>2</sub> O <sub>4</sub> ceramics doped with rare earth ions: Synthesis and luminescent properties. AIP Conference Proceedings, 2019, , .	0.4	2
32	Complex study on photoluminescence properties of YAG:Ce,Gd phosphors. Journal of Physics: Conference Series, 2017, 830, 012160.	0.4	2
33	Optical absorption of BaF <sub>2</sub> crystals with different prehistory when irradiated by high-energy electrons. IOP Conference Series: Materials Science and Engineering, 2016, 110, 012050.	0.6	1
34	Luminescent properties of lithium-phosphate-borate glasses doped with Tb <sup>3+</sup> /Eu <sup>3+</sup> ions. IOP Conference Series: Materials Science and Engineering, 2016, 110, 012053.	0.6	1
35	Optical Spectroscopy of Barium Fluoride Crystals under Simultaneous Pulsed Excitation. Key Engineering Materials, 0, 712, 338-342.	0.4	1
36	Luminescence Spectrum of Yttrium Aluminum Garnet Based Phosphors with Initiating by Different Sources of Optical Excitation. Key Engineering Materials, 0, 712, 362-366.	0.4	1

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37	Kinetic characteristics of the luminescence decay for industrial yttrium-gadolinium-aluminium garnet based phosphors. IOP Conference Series: Materials Science and Engineering, 2016, 110, 012051.	0.6	1
38	Effect of Tb4O7 content on the optical and mechanical properties of transparent ceramics based on MgAl2O4. Materials Today: Proceedings, 2019, 19, 2089-2092.	1.8	1
39	Time-resolved luminescence of YAG:Ce3+, Tb3+ ceramics. AIP Conference Proceedings, 2019, , .	0.4	1
40	Intrinsic luminescence of CaF2 crystals under simultaneous excitation of pulsed accelerated electrons and stimulated emission of semiconductor CdSSe. Radiation Physics and Chemistry, 2020, 168, 108619.	2.8	1
41	Density and microstructural investigation of Ce:YAG ceramic subjected to powerful ultrasonic treatment during the compaction process. IOP Conference Series: Materials Science and Engineering, 2020, 754, 012011.	0.6	1
42	Emission properties of YAG: Ce ceramics with barium fluoride flux. IOP Conference Series: Materials Science and Engineering, 0, 1019, 012018.	0.6	1
43	Application of collector pressing method to manufacture various optically transparent oxide ceramics using SPS technique. Optical Materials, 2022, 128, 112332.	3.6	1
44	Kinetics Flash Cathodoluminescence in Crystals with Nonstationary Defectiveness. Advanced Materials Research, 2014, 1040, 218-224.	0.3	0
45	Inhomogeneous change of temperature of ionic crystals under the action of a pulsed electron beam. Journal of Physics: Conference Series, 2014, 552, 012045.	0.4	0
46	Mathematical modelling of energy conversion of pulsed electron beam in BaF2crystal. IOP Conference Series: Materials Science and Engineering, 2016, 110, 012052.	0.6	0
47	Studying radiation hardness of a cadmium tungstate crystal based radiation detector. IOP Conference Series: Materials Science and Engineering, 2016, 135, 012042.	0.6	0
48	Dispersion characteristic of photoluminescence decay times of phosphor YAG: Ce, Gd. Journal of Physics: Conference Series, 2017, 830, 012161.	0.4	0
49	Study of luminescent properties of Al-Si-N films. Journal of Physics: Conference Series, 2018, 1115, 052003.	0.4	0
50	Transient optical absorption in calcium fluoride crystals. Radiation Physics and Chemistry, 2022, 191, 109889.	2.8	0
51	Yttrium-aluminum garnet ceramics with variable compositions for lighting applications. , 2021, , .		0