

# Katalin Balázs

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6668642/publications.pdf>

Version: 2024-02-01

39  
papers

573  
citations

567281

15  
h-index

642732

23  
g-index

39  
all docs

39  
docs citations

39  
times ranked

743  
citing authors

#	ARTICLE	IF	CITATIONS
1	High orientation degree of graphene nanoplatelets in silicon nitride composites prepared by spark plasma sintering. <i>Ceramics International</i> , 2016, 42, 1002-1006.	4.8	44
2	Spark plasma sintering of graphene reinforced hydroxyapatite composites. <i>Ceramics International</i> , 2015, 41, 3647-3652.	4.8	42
3	Tribological characterisation of silicon nitride/multilayer graphene nanocomposites produced by HIP and SPS technology. <i>Tribology International</i> , 2016, 93, 269-281.	5.9	39
4	Si <sub>3</sub> N <sub>4</sub> /graphene nanocomposites for tribological application in aqueous environments prepared by attritor milling and hot pressing. <i>Journal of the European Ceramic Society</i> , 2017, 37, 3797-3804.	5.7	39
5	Ceramic TiC/a:C protective nanocomposite coatings: Structure and composition versus mechanical properties and tribology. <i>Ceramics International</i> , 2016, 42, 12215-12220.	4.8	33
6	Highly wear-resistant and low-friction Si <sub>3</sub> N <sub>4</sub> composites by addition of graphene nanoplatelets approaching the 2D limit. <i>Scientific Reports</i> , 2017, 7, 10087.	3.3	33
7	Comparative Study of hydroxyapatite prepared from seashells and eggshells as a bone graft material. <i>Tissue Engineering and Regenerative Medicine</i> , 2014, 11, 113-120.	3.7	30
8	Preparation of iron tungstate (FeWO <sub>4</sub> ) nanosheets by hydrothermal method. <i>Materials Research Bulletin</i> , 2017, 95, 563-569.	5.2	29
9	The effect of graphene nanoplatelet thickness on the fracture toughness of Si <sub>3</sub> N <sub>4</sub> composites. <i>Ceramics International</i> , 2019, 45, 6858-6862.	4.8	26
10	Spark plasma sintering of Si <sub>3</sub> N <sub>4</sub> /multilayer graphene composites. <i>Open Chemistry</i> , 2015, 13, .	1.9	24
11	Silicon Nitride and Hydrogenated Silicon Nitride Thin Films: A Review of Fabrication Methods and Applications. <i>Materials</i> , 2021, 14, 5658.	2.9	22
12	Effect of the oxidization of Si <sub>3</sub> N <sub>4</sub> powder on the microstructural and mechanical properties of hot isostatic pressed silicon nitride. <i>Ceramics International</i> , 2018, 44, 14601-14609.	4.8	20
13	Influence of structure on the hardness and the toughening mechanism of the sintered 8YSZ/MWCNTs composites. <i>Ceramics International</i> , 2019, 45, 5058-5065.	4.8	19
14	Sputtered nanocrystalline ceramic TiC/amorphous C thin films as potential materials for medical applications. <i>Ceramics International</i> , 2015, 41, 5863-5871.	4.8	16
15	TiC crystallite formation and the role of interfacial energies on the composition during the deposition process of TiC/a:C thin films. <i>Surface and Coatings Technology</i> , 2016, 302, 410-419.	4.8	15
16	The influence of carbon nanotube addition on the phase composition, microstructure and mechanical properties of 316L stainless steel consolidated by spark plasma sintering. <i>Journal of Materials Research and Technology</i> , 2019, 8, 1141-1149.	5.8	15
17	The structural and mechanical characterization of TiC and TiC/Ti thin films grown by DC magnetron sputtering. <i>Journal of the European Ceramic Society</i> , 2018, 38, 2886-2892.	5.7	13
18	Influence of Graphene and Graphene Oxide on Properties of Spark Plasma Sintered Si <sub>3</sub> N <sub>4</sub> Ceramic Matrix. <i>Ceramics</i> , 2020, 3, 40-50.	2.6	12

#	ARTICLE	IF	CITATIONS
19	Graphene added multilayer ceramic sandwich (GMCS) composites: Structure, preparation and properties. <i>Journal of the European Ceramic Society</i> , 2020, 40, 4792-4798.	5.7	12
20	Examination of nanocrystalline TiC/amorphous C deposited thin films. <i>Journal of the European Ceramic Society</i> , 2014, 34, 3421-3425.	5.7	11
21	Biopolymer-Hydroxyapatite Scaffolds for Advanced Prosthetics. <i>Composite Interfaces</i> , 2009, 16, 191-200.	2.3	9
22	The influence of sintering on the dispersion of carbon nanotubes in ceramic matrix composites. <i>Chemical Physics Letters</i> , 2014, 614, 148-150.	2.6	8
23	On the origin of multilayered structure of W-B-C coatings prepared by non-reactive magnetron sputtering from a single segmented target. <i>Surface and Coatings Technology</i> , 2019, 377, 124864.	4.8	8
24	Examination of the Hydrogen Incorporation into Radio Frequency-Sputtered Hydrogenated SiN <sub>x</sub> Thin Films. <i>Coatings</i> , 2021, 11, 54.	2.6	6
25	Magnetron sputtered TiC/a:C nanocomposite thin films: Deposition parameters vs. properties. <i>Vacuum</i> , 2019, 164, 121-125.	3.5	5
26	Composition, Structure and Mechanical Properties of Industrially Sputtered Taâ€“Bâ€“C Coatings. <i>Coatings</i> , 2020, 10, 853.	2.6	5
27	Processing of Al <sub>2</sub> O <sub>3</sub> -AlN Ceramics and Their Structural, Mechanical, and Tribological Characterization. <i>Materials</i> , 2021, 14, 6055.	2.9	5
28	Mechanical Behavior of Bioactive TiC Nanocomposite Thin Films. <i>Materials Science Forum</i> , 2012, 729, 296-301.	0.3	4
29	Microstructural and magnetic characteristics of ceramic dispersion strengthened sintered stainless steels after thermal ageing. <i>Fusion Engineering and Design</i> , 2019, 145, 46-53.	1.9	4
30	The role of the attrition milling on the grain size and distribution of the carbon nanotubes in YSZ powders. <i>Boletin De La Sociedad Espanola De Ceramica Y Vidrio</i> , 2019, 58, 126-133.	1.9	4
31	Examination of novel electrosprayed biogenic hydroxyapatite coatings on si <sub>3</sub> n <sub>4</sub> and Si <sub>3</sub> N <sub>4</sub> /MWCNT ceramic composite. <i>Processing and Application of Ceramics</i> , 2019, 13, 132-138.	0.8	4
32	Comparison of the Morphological and Structural Characteristic of Bioresorbable and Biocompatible Hydroxyapatite-Loaded Biopolymer Composites. <i>Nanomaterials</i> , 2021, 11, 3194.	4.1	4
33	Microstructure and Fracture Mechanism Investigation of Porous Silicon Nitrideâ€“Zirconiaâ€“Graphene Composite Using Multi-Scale and In-Situ Microscopy. <i>Nanomaterials</i> , 2021, 11, 285.	4.1	3
34	Examination of milled h-BN addition on sintered Si <sub>3</sub> N <sub>4</sub> /h-BN ceramic composites. <i>Processing and Application of Ceramics</i> , 2018, 12, 357-365.	0.8	3
35	Properties of MWCNTs added Si <sub>3</sub> N <sub>4</sub> composites processed from oxidized silicon nitride powders. <i>Processing and Application of Ceramics</i> , 2020, 14, 25-31.	0.8	3
36	Application of sputtered ceramic TiC/a:C thin films with different structures by changing the deposition parameters. <i>International Journal of Applied Ceramic Technology</i> , 2022, 19, 753-761.	2.1	2

#	ARTICLE	IF	CITATIONS
37	The Effect of Neutron Irradiation on the Mechanical Properties of Advanced Silicon Nitride Nanocomposites. <i>Key Engineering Materials</i> , 2009, 409, 237-243.	0.4	1
38	Research on Technical Ceramics and their Industrial Application: Preparation Techniques and Properties of Transparent ALON Ceramics. <i>Acta Materialia Transylvanica</i> , 2019, 2, 7-12.	0.0	1
39	Influence of Microstructure on Mechanical Response of Silicon Nitride Ceramic Composites in Nano-, Micro- and Macro-Volume of Material. <i>Key Engineering Materials</i> , 2009, 409, 346-349.	0.4	0