

# Dorothea Vinga Szabó<sup>3</sup>

## List of Publications by Year in descending order

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79  
papers

2,771  
citations

186209

28  
h-index

182361

51  
g-index

82  
all docs

82  
docs citations

82  
times ranked

3746  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microstructural Study of MgB <sub>2</sub> in the LiBH <sub>4</sub> -MgH <sub>2</sub> Composite by Using TEM. <i>Nanomaterials</i> , 2022, 12, 1893.	1.9	5
2	The influence of Y and Nb addition on the corrosion resistance of Fe-Cr-Al-Ni model alloys exposed to oxygen-containing molten Pb. <i>Corrosion Science</i> , 2021, 179, 109152.	3.0	27
3	Compatibility and microstructure evolution of Al-Cr-Fe-Ni high entropy model alloys exposed to oxygen-containing molten lead. <i>Corrosion Science</i> , 2021, 189, 109593.	3.0	18
4	Nano- and Microstructured Copper/Copper Oxide Composites on Laser-Induced Carbon for Enzyme-Free Glucose Sensors. <i>ACS Applied Nano Materials</i> , 2021, 4, 13747-13760.	2.4	27
5	Local Structure and Magnetism of Fe <sub>2</sub> O <sub>3</sub> Maghemite Nanocrystals: The Role of Crystal Dimension. <i>Nanomaterials</i> , 2020, 10, 867.	1.9	37
6	One step <i>in situ</i> synthesis of ZnS/N and S co-doped carbon composites <i>via</i> salt templating for lithium-ion battery applications. <i>New Journal of Chemistry</i> , 2019, 43, 13038-13047.	1.4	9
7	Crystallographic ordering in a series of Al-containing refractory high entropy alloys Ta-Nb-Mo-Cr-Ti-Al. <i>Acta Materialia</i> , 2019, 176, 123-133.	3.8	63
8	Disordered and Frustrated Magnetization in Coated MnFe <sub>2</sub> O <sub>4</sub> Nanoparticles Prepared by Microwave Plasma Synthesis. <i>Solid State Phenomena</i> , 2019, 289, 127-133.	0.3	0
9	Reduced surface effects in weakly interacting ZrO <sub>2</sub> coated MnFe <sub>2</sub> O <sub>4</sub> nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 469, 580-586.	1.0	12
10	Development of Oxidation Resistant Refractory High Entropy Alloys for High Temperature Applications: Recent Results and Development Strategy. <i>Minerals, Metals and Materials Series</i> , 2018, , 647-659.	0.3	5
11	High-Resolution Surface Analysis on Aluminum Oxide-Coated Li <sub>1.2</sub> Mn <sub>0.55</sub> Ni <sub>0.15</sub> Co <sub>0.10</sub> O <sub>2</sub> with Improved Capacity Retention. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 43131-43143.	4.0	30
12	Reduced surface spin disorder in ZrO <sub>2</sub> coated <sup>57</sup> Fe-Fe <sub>2</sub> O <sub>3</sub> nanoparticles. <i>Solid State Communications</i> , 2018, 284-286, 69-74.	0.9	6
13	<i>Bombyx mori</i> silk/titania/gold hybrid materials for photocatalytic water splitting: combining renewable raw materials with clean fuels. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 187-204.	1.5	3
14	Peculiarities of deformation of CoCrFeMnNi at cryogenic temperatures. <i>Journal of Materials Research</i> , 2018, 33, 3287-3300.	1.2	56
15	Role of surface spins on magnetization of Cr <sub>2</sub> O <sub>3</sub> coated <sup>57</sup> Fe-Fe <sub>2</sub> O <sub>3</sub> nanoparticles. <i>Solid State Sciences</i> , 2018, 83, 43-48.	1.5	10
16	Combinatorial exploration of the High Entropy Alloy System Co-Cr-Fe-Mn-Ni. <i>Surface and Coatings Technology</i> , 2017, 325, 174-180.	2.2	43
17	Surface Analytical Study Regarding the Solid Electrolyte Interphase Composition of Nanoparticulate SnO <sub>2</sub> Anodes for Li-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24706-24714.	1.5	29
18	Comprehensive analysis of TEM methods for LiFePO <sub>4</sub> /FePO <sub>4</sub> phase mapping: spectroscopic techniques (EFTEM, STEM-EELS) and STEM diffraction techniques (ACOM-TEM). <i>Ultramicroscopy</i> , 2016, 170, 10-18.	0.8	30

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19	Structural characterisation of Fe <sub>2</sub> O <sub>3</sub> nanoparticles. Journal of Physics: Conference Series, 2016, 712, 012105.	0.3	2
20	Microstructure Evolution in a New Refractory High-Entropy Alloy W-Mo-Cr-Ti-Al. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 961-970.	1.1	28
21	Memory effect versus exchange bias for maghemite nanoparticles. Journal of Magnetism and Magnetic Materials, 2015, 393, 239-242.	1.0	7
22	Microwave Plasma Synthesis of Materials – From Physics and Chemistry to Nanoparticles: A Materials Scientist's Viewpoint. Inorganics, 2014, 2, 468-507.	1.2	53
23	Electrochemical performance of tin-based nano-composite electrodes using a vinylene carbonate-containing electrolyte for Li-ion cells. Journal of Power Sources, 2014, 263, 145-153.	4.0	10
24	Investigation of the degradation of SnO <sub>2</sub> electrodes for use in Li-ion cells. Journal of Power Sources, 2013, 233, 139-147.	4.0	34
25	Synthesis and characterization of thorium, uranium and cerium oxide nanoparticles. Radiochimica Acta, 2013, 101, 233-240.	0.5	16
26	SQUID magnetometry combined with in situ cyclic voltammetry: A case study of tunable magnetism of $\text{Fe}_2\text{O}_3$ nanoparticles. Journal of Magnetism and Magnetic Materials, 2013, 329, 43-48.	1.0	16
27	Influence of surface spins on the magnetization of fine maghemite nanoparticles. , 2013, , .		0
28	Polymer nanocomposites for optical applications. , 2012, , 567-604.		7
29	Spin-glass freezing of maghemite nanoparticles prepared by microwave plasma synthesis. Journal of Applied Physics, 2012, 111, .	1.1	47
30	Structural and chemical characterization of SnO <sub>2</sub> -based nanoparticles as electrode material in Li-ion batteries. Journal of Materials Science, 2012, 47, 4383-4391.	1.7	16
31	Magnetization of Fe-oxide based nanocomposite tuned by surface charging. Physica Status Solidi - Rapid Research Letters, 2011, 5, 150-152.	1.2	19
32	Hafnia nanoparticles – a model system for graphene growth on a dielectric. Physica Status Solidi - Rapid Research Letters, 2011, 5, 341-343.	1.2	25
33	Nanoparticles in polymer-matrix composites. Microsystem Technologies, 2011, 17, 183-193.	1.2	9
34	Structural and optical properties of nanoparticulate Y <sub>2</sub> O <sub>3</sub> :Eu <sub>2</sub> O <sub>3</sub> made by microwave plasma synthesis. Applied Physics A: Materials Science and Processing, 2011, 105, 709-712.	1.1	6
35	Development of nanocomposites for anode materials in Li-ion batteries. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 471-473.	0.8	10
36	Effect of dipolar and exchange interactions on magnetic blocking of maghemite nanoparticles. Journal of Magnetism and Magnetic Materials, 2011, 323, 1998-2004.	1.0	92

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37	Structure and electrical properties of nanoparticulate tungsten oxide prepared by microwave plasma synthesis. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 334206.	0.7	6
38	Synthesis and optical properties of organic semiconductor: zirconia nanocomposites. <i>Journal of Nanoparticle Research</i> , 2010, 12, 2541-2551.	0.8	7
39	Characterization of core/shell nanoparticle thin films for gas analytical applications. <i>Surface and Interface Analysis</i> , 2010, 42, 1131-1134.	0.8	14
40	Polymer-Nanoparticle Composites: From Synthesis to Modern Applications. <i>Materials</i> , 2010, 3, 3468-3517.	1.3	669
41	Structure, phase transformations, and defects of HfO <sub>2</sub> and ZrO <sub>2</sub> nanoparticles studied by Ta181 and Cd111 perturbed angular correlations, H1 magic-angle spinning NMR, XPS, and x-ray and electron diffraction. <i>Physical Review B</i> , 2008, 77, .	1.1	35
42	In situ dispersion of ZrO <sub>2</sub> nanoparticles coated with pentacene. <i>Physica Status Solidi - Rapid Research Letters</i> , 2008, 2, 203-205.	1.2	8
43	Properties and application potential of nanoparticles produced by a non-equilibrium microwave plasma. , 2008, , .		0
44	Analytical TEM Investigation of Size Effects in SnO <sub>2</sub> Nanoparticles Produced by Microwave Plasma Synthesis. <i>Microscopy and Microanalysis</i> , 2007, 13, 430-431.	0.2	6
45	New Core/Shell Ta <sub>2</sub> O <sub>5</sub> -PMMA Nanocomposites for Applications as Polymer Waveguides. <i>Materials Research Society Symposia Proceedings</i> , 2007, 1056, 1.	0.1	0
46	Zirconia and titania nanoparticles studied by electric hyperfine interactions, XRD and TEM. <i>Journal of Alloys and Compounds</i> , 2007, 434-435, 590-593.	2.8	13
47	Nanogranular SnO <sub>2</sub> Layers for Gas Sensing Applications by In Situ Deposition of Nanoparticles Produced by the Karlsruhe Microwave Plasma Process. <i>Plasma Processes and Polymers</i> , 2007, 4, S865-S870.	1.6	10
48	Microwave plasma synthesis of nano-crystalline YSZ. <i>Physica Status Solidi - Rapid Research Letters</i> , 2007, 1, 107-109.	1.2	11
49	The Microwave plasma process "a versatile process to synthesise nanoparticulate materials. <i>Journal of Nanoparticle Research</i> , 2006, 8, 417-428.	0.8	55
50	Phases and phase transformations in nanocrystalline ZrO <sub>2</sub> . <i>Journal of Nanoparticle Research</i> , 2006, 8, 1003-1016.	0.8	38
51	Structure and grain growth of TiO <sub>2</sub> nanoparticles investigated by electron and x-ray diffractions and Ta181 perturbed angular correlations. <i>Journal of Applied Physics</i> , 2006, 100, 024305.	1.1	12
52	Nanoparticle SnO <sub>2</sub> films as gas sensitive membranes. <i>Materials Research Society Symposia Proceedings</i> , 2005, 900, 1.	0.1	3
53	Oxide/polymer nanocomposites as new luminescent materials. <i>Journal of Nanoparticle Research</i> , 2004, 6, 181-191.	0.8	76
54	Synthesis and Properties of Nanocomposites. <i>Advanced Engineering Materials</i> , 2004, 6, 117-127.	1.6	49

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55	Ceramic nanoparticles coated with polymers based on acrylic derivatives. <i>Macromolecular Symposia</i> , 2002, 181, 107-112.	0.4	19
56	Complex high frequency properties of ceramic-polymer nanocomposites: comparison of fluoro-polymers and acrylic-based compounds. <i>Macromolecular Symposia</i> , 2002, 181, 393-398.	0.4	9
57	SYNTHESIS OF NANOPOWDERS BY THE MICROWAVE PLASMA PROCESS - BASIC CONSIDERATIONS AND PERSPECTIVES FOR SCALING UP. , 2002, , 219-251.		9
58	Structural Disorder in the Anion Lattice of Nanocrystalline Zirconia and Hafnia Particles. <i>Materials Research Society Symposia Proceedings</i> , 2000, 634, 771.	0.1	2
59	Nanoparticles from compounds with layered structures. <i>Acta Materialia</i> , 2000, 48, 953-967.	3.8	45
60	Coated Nanoparticles: A New Way to Improved Nanocomposites. <i>Journal of Nanoparticle Research</i> , 1999, 1, 235-242.	0.8	65
61	Nonocomposites from Coated Nanoparticles. <i>Advanced Materials</i> , 1999, 11, 1313-1316.	11.1	72
62	Synthesis and properties of ceramic-polymer composites. <i>Scripta Materialia</i> , 1999, 12, 433-438.	0.5	25
63	Morphological characterisation of nanocrystals with layered structures. <i>Scripta Materialia</i> , 1999, 12, 597-600.	0.5	11
64	Synthesis of nanocrystalline MoS <sub>2</sub> and WS <sub>2</sub> in a microwave plasma. <i>Materials Letters</i> , 1998, 35, 236-244.	1.3	85
65	Synthesis and Magnetic Properties of Nanostructured Magnetite. <i>Journal of Materials Research</i> , 1997, 12, 2175-2182.	1.2	122
66	Microwave plasma synthesis of ceramic nanopowders. <i>Journal of Aerosol Science</i> , 1997, 28, S685-S688.	1.8	7
67	Synthesis and properties of ceramic nanoparticles and nanocomposites. <i>Journal of the European Ceramic Society</i> , 1997, 17, 1317-1324.	2.8	75
68	Magnetic properties of nanocrystalline Cr <sub>2</sub> O <sub>3</sub> synthesized in a microwave plasma. <i>Materials Letters</i> , 1996, 29, 271-279.	1.3	86
69	Polymer-derived Si-based bulk ceramics, part I: Preparation, processing and properties. <i>Journal of the European Ceramic Society</i> , 1995, 15, 703-715.	2.8	111
70	Polymer-derived Si-based bulk ceramics, part II: Microstructural characterisation by electron spectroscopic imaging. <i>Journal of the European Ceramic Society</i> , 1995, 15, 717-727.	2.8	34
71	Synthesis and properties of nanocrystalline superparamagnetic $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> . <i>Scripta Materialia</i> , 1995, 6, 941-944.	0.5	49
72	Nanocoated particles: A special type of ceramic powder. <i>Scripta Materialia</i> , 1994, 4, 927-938.	0.5	61

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73	Hydroboration of polymethylvinylsilane " a novel route to silicon boron carbide ceramics. Journal of Materials Science, 1993, 28, 3931-3938.	1.7	35
74	Effects of heat treatments on the microstructure of a yttria/alumina-doped hot-pressed Si <sub>3</sub> N <sub>4</sub> ceramic. Journal of Materials Science, 1993, 28, 2089-2096.	1.7	10
75	Crystallization of Amorphous Silicon Carbonitride Investigated by Transmission Electron Microscopy (TEM). Key Engineering Materials, 1993, 89-91, 95-100.	0.4	7
76	Heterogeneous Nucleation in the Intergranular Phase of a SiAlON. Journal of the American Ceramic Society, 1992, 75, 249-252.	1.9	8
77	Elektronenmikroskopische und mikroanalytische Untersuchungen von Korngrenzenphasen in SiAlON-Keramiken. Materialwissenschaft Und Werkstofftechnik, 1990, 21, 113-115.	0.5	1
78	Nanocomposites als Funktionswerkstoffe mit neuen Eigenschaften. , 0, , 35-44.		0
79	Microwave Plasma Synthesis of Ceramic Powders. , 0, , 619-626.		0