

# Petrica Vizureanu

## List of Publications by Year in descending order

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128  
papers

1,341  
citations

331642

21  
h-index

454934

30  
g-index

128  
all docs

128  
docs citations

128  
times ranked

728  
citing authors

#	ARTICLE	IF	CITATIONS
1	XRD and TG-DTA Study of New Alkali Activated Materials Based on Fly Ash with Sand and Glass Powder. <i>Materials</i> , 2020, 13, 343.	2.9	63
2	Geopolymers and Their Uses: Review. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 374, 012019.	0.6	48
3	Relation between Density and Compressive Strength of Foamed Concrete. <i>Materials</i> , 2021, 14, 2967.	2.9	47
4	Potential of Soil Stabilization Using Ground Granulated Blast Furnace Slag (GGBFS) and Fly Ash via Geopolymerization Method: A Review. <i>Materials</i> , 2022, 15, 375.	2.9	46
5	Characterization and Mechanical Proprieties of New TiMo Alloys Used for Medical Applications. <i>Materials</i> , 2019, 12, 2973.	2.9	44
6	Synthesis and Characteristics of Local Fly Ash Based Geopolymers Mixed with Natural Aggregates. <i>Revista De Chimie (discontinued)</i> , 2019, 70, 1262-1267.	0.4	43
7	Biocompatible Titanium Alloys used in Medical Applications. <i>Revista De Chimie (discontinued)</i> , 2019, 70, 1302-1306.	0.4	43
8	Strength Development and Elemental Distribution of Dolomite/Fly Ash Geopolymer Composite under Elevated Temperature. <i>Materials</i> , 2020, 13, 1015.	2.9	42
9	A State-of-the-Art Review on Innovative Geopolymer Composites Designed for Water and Wastewater Treatment. <i>Materials</i> , 2021, 14, 7456.	2.9	42
10	XRD and TG-DTA Study of New Phosphate-Based Geopolymers with Coal Ash or Metakaolin as Aluminosilicate Source and Mine Tailings Addition. <i>Materials</i> , 2022, 15, 202.	2.9	38
11	Evaluation of the Corrosion Resistance of Phosphate Coatings Deposited on the Surface of the Carbon Steel Used for Carabiners Manufacturing. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2753.	2.5	34
12	New Titanium Alloys, Promising Materials for Medical Devices. <i>Materials</i> , 2021, 14, 5934.	2.9	33
13	Revealing the Influence of Microparticles on Geopolymers's™ Synthesis and Porosity. <i>Materials</i> , 2020, 13, 3211.	2.9	32
14	Experimental and Theoretical Aspects of Aluminum Expanding Laser Plasma. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 066001.	1.5	31
15	New Ti-Mo-Si materials for bone prosthesis applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 113, 104198.	3.1	31
16	Microstructural Analysis and Tribological Behavior of Ti-Based Alloys with a Ceramic Layer Using the Thermal Spray Method. <i>Coatings</i> , 2020, 10, 1216.	2.6	27
17	Effect of Ta on the electrochemical behavior of new TiMoZrTa alloys in artificial physiological solution simulating in vitro inflammatory conditions. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2016, 67, 1314-1320.	1.5	26
18	Biomimetic Deposition of Hydroxyapatite Layer on Titanium Alloys. <i>Micromachines</i> , 2021, 12, 1447.	2.9	24

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19	Phosphate Surface Treatment for Improving the Corrosion Resistance of the C45 Carbon Steel Used in Carabiners Manufacturing. <i>Materials</i> , 2020, 13, 3410.	2.9	23
20	In-depth assessment of new Ti-based biocompatible materials. <i>Materials Chemistry and Physics</i> , 2021, 258, 123959.	4.0	23
21	Properties of a New Insulation Material Glass Bubble in Geopolymer Concrete. <i>Materials</i> , 2021, 14, 809.	2.9	23
22	Obtaining shape memory alloy thin layer using PLD technique. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2014, 50, 69-76.	0.8	21
23	Effect of Unmodified and Modified Nanocrystalline Cellulose Reinforced Polylactic Acid (PLA) Polymer Prepared by Solvent Casting Method Morphology, mechanical and thermal properties. <i>Materiale Plastice</i> , 2017, 54, 91-97.	0.8	21
24	Mechanical and Durability Analysis of Fly Ash Based Geopolymer with Various Compositions for Rigid Pavement Applications. <i>Materials</i> , 2022, 15, 3458.	2.9	21
25	Ti-Mo Alloys Used in Medical Applications. <i>Advanced Materials Research</i> , 0, 1128, 105-111.	0.3	20
26	Preliminary Tests for Ti-Mo-Zr-Ta Alloys as Potential Biomaterials. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 374, 012023.	0.6	20
27	Assessment of the Effects of Si Addition to a New TiMoZrTa System. <i>Materials</i> , 2021, 14, 7610.	2.9	20
28	Microstructural Analysis and Tribological Behavior of AMDRY 1371 (Mo-NiCrFeBSiC) Atmospheric Plasma Spray Deposited Thin Coatings. <i>Coatings</i> , 2020, 10, 1186.	2.6	18
29	Design, Synthesis, and Preliminary Evaluation for Ti-Mo-Zr-Ta-Si Alloys for Potential Implant Applications. <i>Materials</i> , 2021, 14, 6806.	2.9	18
30	A Theoretical Approach of the Heat Transfer in Nanofluids. <i>Materials Transactions</i> , 2007, 48, 3021-3023.	1.2	16
31	Potential Applications of Geopolymer Cement-Based Composite as Self-Cleaning Coating: A Review. <i>Coatings</i> , 2022, 12, 133.	2.6	16
32	Mechanical Characterization and In Vitro Assay of Biocompatible Titanium Alloys. <i>Micromachines</i> , 2022, 13, 430.	2.9	16
33	The Influence of Sintering Temperature on the Pore Structure of an Alkali-Activated Kaolin-Based Geopolymer Ceramic. <i>Materials</i> , 2022, 15, 2667.	2.9	16
34	Investigations on Thermal Conductivity of Carbon Nanotubes Reinforced Composites. <i>Experimental Heat Transfer</i> , 2015, 28, 37-57.	3.2	15
35	Mechanical tests for Ti-based alloys as new medical materials. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 572, 012029.	0.6	14
36	Improving Indoor Air Quality by Using Sheep Wool Thermal Insulation. <i>Materials</i> , 2021, 14, 2443.	2.9	14

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37	Recent Developments in Steelmaking Industry and Potential Alkali Activated Based Steel Waste: A Comprehensive Review. <i>Materials</i> , 2022, 15, 1948.	2.9	14
38	Potential of Rapid Tooling in Rapid Heat Cycle Molding: A Review. <i>Materials</i> , 2022, 15, 3725.	2.9	14
39	Electrochemical Analysis and In Vitro Assay of Mg-0.5Ca-xY Biodegradable Alloys. <i>Materials</i> , 2020, 13, 3082.	2.9	12
40	MATERIALS PROCESSING USING SOLAR ENERGY. <i>Environmental Engineering and Management Journal</i> , 2009, 8, 301-306.	0.6	12
41	Improvement of the Turbine Blade Surface Phase Structure Recovered by Plasma Spraying. <i>Coatings</i> , 2020, 10, 62.	2.6	11
42	Fractal Characteristics of the Solidification Process. <i>Materials Transactions</i> , 2004, 45, 972-975.	1.2	10
43	Synthesis and Characterization of TiO <sub>2</sub> /SiO <sub>2</sub> Thin Film via Sol-Gel Method. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 209, 012002.	0.6	10
44	Compressive Strength and Thermal Conductivity of Fly Ash Geopolymer Concrete Incorporated with Lightweight Aggregate, Expanded Clay Aggregate and Foaming Agent. <i>Revista De Chimie (discontinued)</i> , 2019, 70, 4021-4028.	0.4	10
45	Improvements of Flexural Properties and Thermal Performance in Thin Geopolymer Based on Fly Ash and Ladle Furnace Slag Using Borax Decahydrates. <i>Materials</i> , 2022, 15, 4178.	2.9	10
46	Formation and Growth of Intermetallic Compounds in Lead-Free Solder Joints: A Review. <i>Materials</i> , 2022, 15, 1451.	2.9	9
47	Performance of Sn-3.0Ag-0.5Cu Composite Solder with Kaolin Geopolymer Ceramic Reinforcement on Microstructure and Mechanical Properties under Isothermal Ageing. <i>Materials</i> , 2021, 14, 776.	2.9	8
48	El Naschie's superconductivity in the time dependent Ginzburg-Landau model. <i>Chaos, Solitons and Fractals</i> , 2007, 34, 1060-1074.	5.1	7
49	Obtaining and Mechanical Properties of Ti-Mo-Zr-Ta Alloys. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 209, 012019.	0.6	7
50	Preliminary Microstructural and Microscratch Results of Ni-Cr-Fe and Cr <sub>3</sub> C <sub>2</sub> -NiCr Coatings on Magnesium Substrate. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 209, 012024.	0.6	7
51	Noninvasive Evaluation of Special Alloys for Prostheses Using Complementary Methods. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 374, 012030.	0.6	7
52	Effects of the chemical composition on the microstructural characteristics of Ti-Nb-Ta-Zr alloys. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 572, 012022.	0.6	7
53	Investigation into the Effect of Thermal Treatment on the Obtaining of Magnetic Phases: Fe <sub>5</sub> Y, Fe <sub>23</sub> B <sub>6</sub> , Y <sub>2</sub> Fe <sub>14</sub> B and $\frac{1}{2}$ Fe within the Amorphous Matrix of Rapidly-Quenched Fe <sub>61+x</sub> Co <sub>10</sub> W <sub>1</sub> Y <sub>8</sub> B <sub>20</sub> Alloys (Where x = 0, 1 or 2). <i>Materials</i> , 2020, 13, 835.	2.9	7
54	Effect of Electromigration and Thermal Ageing on the Tin Whiskers Formation in Thin Sn <sub>0.7</sub> Cu <sub>0.05</sub> Ga Lead (Pb)-Free Solder Joints. <i>Coatings</i> , 2021, 11, 935.	2.6	7

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55	Tribological characterization of phosphate conversion coating and rubber paint coating deposited on carbon steel carabiners surfaces. <i>Materials Today: Proceedings</i> , 2019, 19, 969-978.	1.8	6
56	Microstructural Analysis and Mechanical Properties of TiMo20Zr7Ta15Si Alloys as Biomaterials. <i>Materials</i> , 2020, 13, 4808.	2.9	6
57	Wave-particle duality through an extended model of the scale relativity theory. <i>Physica Scripta</i> , 2008, 78, 065101.	2.5	5
58	Active Screen Plasma Nitriding Efficiency and Ecology. <i>Applied Mechanics and Materials</i> , 0, 657, 369-373.	0.2	5
59	Damage detection of carbon reinforced composites using nondestructive evaluation with ultrasound and electromagnetic methods. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 133, 012013.	0.6	5
60	Corrosion-Resistance Analysis of HA Layer Deposited through Electrophoresis on Ti4Al4Zr Metallic Substrate. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4198.	2.5	5
61	Structural Conductivity of Carbon Nanotubes. <i>Revista De Chimie (discontinued)</i> , 2008, 59, 1169-1171.	0.4	5
62	Experimental Study on the Influence of Zirconia Surface Preparation on Deposition of Hydroxyapatite. <i>Revista De Chimie (discontinued)</i> , 2019, 70, 2273-2275.	0.4	5
63	Remote Field Eddy Current Control Using Rotating Magnetic Field Transducer: Application to Pressure Tubes Examination. <i>Research in Nondestructive Evaluation</i> , 2008, 19, 202-218.	1.1	4
64	Improvement of Properties of Aluminum Bronze CuAl <sub>7</sub> Mn <sub>3</sub> by Heat Treatments. <i>Applied Mechanics and Materials</i> , 2014, 657, 412-416.	0.2	4
65	ESD morphology deposition with WZr8 electrode on austenitic stainless steel support. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 133, 012025.	0.6	4
66	In Vitro study for new Ti-Mo-Zr-Ta alloys for medical use. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 572, 012030.	0.6	4
67	Performance of local fly ash geopolymers under different types of acids. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 572, 012026.	0.6	4
68	Properties of Cu-xFe3O4 Nanocomposites for Electrical Application. <i>Materials</i> , 2020, 13, 3086.	2.9	4
69	Biocompatibility Evaluation of New TiMoSi Alloys. <i>Acta Physica Polonica A</i> , 2020, 138, 283-286.	0.5	4
70	Behavior of Alkali-Activated Fly Ash through Underwater Placement. <i>Materials</i> , 2021, 14, 6865.	2.9	4
71	On the Fatigue of Shape Memory Alloys. <i>Key Engineering Materials</i> , 0, 594-595, 133-139.	0.4	3
72	Quality Surface Modification for Refractory Stainless Steel by Tungsten Deposition, Using Electro-Spark Deposition Method. <i>Applied Mechanics and Materials</i> , 0, 809-810, 417-422.	0.2	3

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73	Study on structure and properties of CuZn40Pb alloy. IOP Conference Series: Materials Science and Engineering, 2016, 133, 012015.	0.6	3
74	Study of the Spatial Distribution of Forces and Stresses on Wear Surfaces at Optimization of the Excavating Part of an Earthmoving Machine Transverse Profile. Coatings, 2021, 11, 182.	2.6	3
75	Investigation of the Strength Parameters of Drilling Pumps during the Formation of Contact Stresses in Gears. Applied Sciences (Switzerland), 2021, 11, 7076.	2.5	3
76	Influence of 1.5 wt.% Bi on the Microstructure, Hardness, and Shear Strength of Sn-0.7Cu Solder Joints after Isothermal Annealing. Materials, 2021, 14, 5134.	2.9	3
77	Study of Wear and Redistribution Dynamic Forces of Wheel Pairs Restored by a Wear-Resistant Coating 15Cr17Ni12V3F. Coatings, 2021, 11, 1441.	2.6	3
78	Effect of Kaolin Geopolymer Ceramics Addition on the Microstructure and Shear Strength of Sn-3.0Ag-0.5Cu Solder Joints during Multiple Reflow. Materials, 2022, 15, 2758.	2.9	3
79	Forecasting Daytime Ground-Level Ozone Concentration in Urbanized Areas of Malaysia Using Predictive Models. Sustainability, 2022, 14, 7936.	3.2	3
80	International Conference on Innovative Research - ICIR Euroinvent 2016. IOP Conference Series: Materials Science and Engineering, 2016, 133, 011001.	0.6	2
81	Thermal Processing of a Titanium Alloy for Aeronautical Applications. Materials Science Forum, 2017, 907, 214-219.	0.3	2
82	Assessment of Hard Thin Layers Deposited by Plasma Spray on Hydroboration. IOP Conference Series: Materials Science and Engineering, 2018, 374, 012029.	0.6	2
83	The Effect of Heat Treatment and Corrosion Behavior of AISI420. IOP Conference Series: Materials Science and Engineering, 2018, 374, 012039.	0.6	2
84	Preparation of Heat Treated Titanium Dioxide (TiO <sub>2</sub> ) Nanoparticles for Water Purification. IOP Conference Series: Materials Science and Engineering, 2018, 374, 012084.	0.6	2
85	Experimental Research on the Cutting of Metal Materials by Electrical Discharge Machining with Contact Breaking with Metal Band as Transfer Object. Materials, 2020, 13, 5257.	2.9	2
86	The Influence of MMA Esterification on Interfacial Adhesion and Mechanical Properties of Hybrid Kenaf Bast/Glass Fiber Reinforced Unsaturated Polyester Composites. Materials, 2021, 14, 2276.	2.9	2
87	Materials types and selection for carabiners manufacturing: a review. IOP Conference Series: Materials Science and Engineering, 0, 572, 012027.	0.6	2
88	Advanced Surface Treatment Technologies for Metallic Alloys. Materials, 2022, 15, 1464.	2.9	2
89	Clean Water Production Enhancement through the Integration of Small-Scale Solar Stills with Solar Dish Concentrators (SDCs) – A Review. Sustainability, 2022, 14, 5442.	3.2	2
90	Obtaining hydroxyapatite (HA) by sol-gel method on Ti6Al4V alloys aiming the implant's surface bio-functionalization. , 2013, , .		1

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91	On the Structure of Shape Memory Alloys. Key Engineering Materials, 2013, 594-595, 140-145.	0.4	1
92	Technological Development Perspectives and Experimental Results of MIG Welding Soldering. Advanced Materials Research, 0, 814, 54-59.	0.3	1
93	Study of Various Thin Films Obtained by Several Deposition Methods &lt;sup>&lt;/sup>. Advanced Materials Research, 0, 1036, 201-206.	0.3	1
94	Electromagnetic Sensors for Improvement of Damage Detection in Composite Materials Reinforced with Carbon Woven Fibers. Key Engineering Materials, 0, 660, 317-322.	0.4	1
95	Corrosion Behavior in Saline Medium for a Cu-Zn Casting Alloy. Key Engineering Materials, 0, 660, 68-74.	0.4	1
96	Complementary methods for nondestructive testing of composite materials reinforced with carbon woven fibers. IOP Conference Series: Materials Science and Engineering, 2015, 95, 012091.	0.6	1
97	Some aspects over the quality of thin films deposited on special steels used in hydraulic blades. IOP Conference Series: Materials Science and Engineering, 2016, 147, 012040.	0.6	1
98	The structural characterization of some biomaterials, type AISI 310, used in medicine. IOP Conference Series: Materials Science and Engineering, 2016, 133, 012019.	0.6	1
99	Quality Control of Thin Films Deposited on Special Steels Used in Hydraulic Blades. Advanced Materials Research, 0, 1138, 62-68.	0.3	1
100	Structural Analysis of CoCrMoSi6 Alloy Used in Medical Applications. Key Engineering Materials, 2016, 700, 86-92.	0.4	1
101	Investigations of Thin Films Obtained by Plasma Jet Method on a Stainless Steel Used in Turbine Blades Construction. Key Engineering Materials, 2017, 750, 85-90.	0.4	1
102	Ti-Mo-Zr-Ta Alloy for Biomedical Applications: Microstructures and Mechanical Properties. Key Engineering Materials, 2017, 750, 184-188.	0.4	1
103	International Conference on Innovative Research - ICIR Euroinvent 2017. IOP Conference Series: Materials Science and Engineering, 2017, 209, 011001.	0.6	1
104	Morpho-Structural Characterization of WC20Co Deposited Layers. IOP Conference Series: Materials Science and Engineering, 2017, 209, 012020.	0.6	1
105	Surface Characterization of New Biomaterials. IOP Conference Series: Materials Science and Engineering, 2017, 209, 012022.	0.6	1
106	Aspects Regarding Thermal-Mechanical Fatigue of Shape Memory Alloys. , 2018, , .		1
107	Development of New Advanced Ti-Mo Alloys for Medical Applications. , 0, , .		1
108	The Physical and Mechanical Characteristics of Geopolymers Using Mine Tailings as Precursors. , 0, , .		1

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109	Influence of Co and Zr Content on Creation of Crystalline Phases in Rapidly-Cooled, Injection-Cast Alloys Fe <sub>70</sub> Zr <sub>8-x</sub> Co <sub>x</sub> Nb <sub>2</sub> B <sub>20</sub> (where x=0,) Tj ETQq151	0.784314	rgB7
110	The Study of Magnetization in Strong Magnetic Fields for Fe <sub>62</sub> -XCo <sub>10</sub> Nb <sub>XY</sub> 8B <sub>20</sub> (X=0,1,2) Alloys. Revista De Chimie (discontinued), 2017, 68, 265-268.	0.4	1
111	Microstructural Analysis of Ti/W/WC Deposition by ESD Method. Acta Physica Polonica A, 2020, 138, 214-217.	0.5	1
112	Electrochemical deposition of hydroxyapatite (HA) on titanium alloys for the implant surface bio-functionalization. , 2013, , .		0
113	Study on Quenching and Artificial Ageing on Al-Si Alloy. Materials Science Forum, 2014, 803, 209-215.	0.3	0
114	Synthesis of Nanosized Silica and Silver-Doped Silica Nanoparticles for Heat Transfer Fluids Applications. Key Engineering Materials, 2015, 660, 155-160.	0.4	0
115	Risk factors of titanium locking plate osteosynthesis. , 2015, , .		0
116	Study on Al-Si Alloys Properties Enhancement. Applied Mechanics and Materials, 2015, 754-755, 634-638.	0.2	0
117	Behavior of CuPb <sub>12</sub> Sn <sub>6</sub> Alloys subjected to Heat Treatments. MATEC Web of Conferences, 2016, 78, 01082.	0.2	0
118	The Analysis of Metallic Materials Subjected to Cycles of Thermal and Mechanical Fatigue. Key Engineering Materials, 0, 700, 78-85.	0.4	0
119	Nondestructive evaluation of the interface between ceramic coating and stainless steel by electromagnetic method. IOP Conference Series: Materials Science and Engineering, 2016, 147, 012030.	0.6	0
120	Zirconia Dental Implant Materials. Materials Science Forum, 2017, 907, 99-103.	0.3	0
121	Electromagnetic Nondestructive Evaluation of Tubes using Data Mining Procedure. IOP Conference Series: Materials Science and Engineering, 2017, 209, 012005.	0.6	0
122	Improvement of Structural Characteristics for CuZn Alloy through Heat Treatments. Key Engineering Materials, 0, 750, 3-8.	0.4	0
123	Ecological process of energy growth of hydraulic turbines used in protected areas in Romania. IOP Conference Series: Materials Science and Engineering, 2019, 572, 012082.	0.6	0
124	Change of Magnetic Saturation Polarisation as a Function of Temperature in Bulk Fe-Based Amorphous Alloys. Acta Physica Polonica A, 2021, 139, 510-512.	0.5	0
125	REDUCING OF POLLUTANTS EMISSIONS AND HEAVY LIQUID FUELS CONSUMPTION IN BOILERS BY USING OF ADDITIVES. Environmental Engineering and Management Journal, 2009, 8, 1241-1246.	0.6	0
126	Electrochemical Evaluation of AISI 420 Steel after Several Heat Treatments. Acta Physica Polonica A, 2019, 135, 115-118.	0.5	0



#	ARTICLE	IF	CITATIONS
127	Material properties mapping using complementary methods in titanium alloys TiMoSi used in medical application. , 2020, , .		0
128	Surface Treatment of Metals. Coatings, 2022, 12, 560.	2.6	0