

# Petrica Vizureanu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4116442/publications.pdf>

Version: 2024-02-01

128  
papers

1,341  
citations

331670

21  
h-index

454955

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. Materials, 2020, 13, 343.	2.9	63
2	Geopolymers and Their Uses: Review. IOP Conference Series: Materials Science and Engineering, 2018, 374, 012019.	0.6	48
3	Relation between Density and Compressive Strength of Foamed Concrete. Materials, 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. Materials, 2022, 15, 375.	2.9	46
5	Characterization and Mechanical Proprieties of New TiMo Alloys Used for Medical Applications. Materials, 2019, 12, 2973.	2.9	44
6	Synthesis and Characteristics of Local Fly Ash Based Geopolymers Mixed with Natural Aggregates. Revista De Chimie (discontinued), 2019, 70, 1262-1267.	0.4	43
7	Biocompatible Titanium Alloys used in Medical Applications. Revista De Chimie (discontinued), 2019, 70, 1302-1306.	0.4	43
8	Strength Development and Elemental Distribution of Dolomite/Fly Ash Geopolymer Composite under Elevated Temperature. Materials, 2020, 13, 1015.	2.9	42
9	A State-of-the-Art Review on Innovative Geopolymer Composites Designed for Water and Wastewater Treatment. Materials, 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. Materials, 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. Applied Sciences (Switzerland), 2020, 10, 2753.	2.5	34
12	New Titanium Alloys, Promising Materials for Medical Devices. Materials, 2021, 14, 5934.	2.9	33
13	Revealing the Influence of Microparticles on Geopolymers's™ Synthesis and Porosity. Materials, 2020, 13, 3211.	2.9	32
14	Experimental and Theoretical Aspects of Aluminum Expanding Laser Plasma. Japanese Journal of Applied Physics, 2009, 48, 066001.	1.5	31
15	New Ti-Mo-Si materials for bone prosthesis applications. Journal of the Mechanical Behavior of Biomedical Materials, 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. Coatings, 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. Materials and Corrosion - Werkstoffe Und Korrosion, 2016, 67, 1314-1320.	1.5	26
18	Biomimetic Deposition of Hydroxyapatite Layer on Titanium Alloys. Micromachines, 2021, 12, 1447.	2.9	24

#	ARTICLE	IF	CITATIONS
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

#	ARTICLE	IF	CITATIONS
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 $\text{Fe}_{1-x}\text{Co}_x$ 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-0.7Cu-0.05Ga Lead (Pb)-Free Solder Joints. <i>Coatings</i> , 2021, 11, 935.	2.6	7

#	ARTICLE	IF	CITATIONS
55	Tribological characterization of phosphate conversion coating and rubber paint coating deposited on carbon steel carabiners surfaces. Materials Today: Proceedings, 2019, 19, 969-978.	1.8	6
56	Microstructural Analysis and Mechanical Properties of TiMo20Zr7Ta15Six Alloys as Biomaterials. Materials, 2020, 13, 4808.	2.9	6
57	Waveâ€‘particle duality through an extended model of the scale relativity theory. Physica Scripta, 2008, 78, 065101.	2.5	5
58	Active Screen Plasma Nitriding Efficiency and Ecology. Applied Mechanics and Materials, 0, 657, 369-373.	0.2	5
59	Damage detection of carbon reinforced composites using nondestructive evaluation with ultrasound and electromagnetic methods. IOP Conference Series: Materials Science and Engineering, 2016, 133, 012013.	0.6	5
60	Corrosion-Resistance Analysis of HA Layer Deposited through Electrophoresis on Ti4Al4Zr Metallic Substrate. Applied Sciences (Switzerland), 2021, 11, 4198.	2.5	5
61	Structural Conductivity of Carbon Nanotubes. Revista De Chimie (discontinued), 2008, 59, 1169-1171.	0.4	5
62	Experimental Study on the Influence of Zirconia Surface Preparation on Deposition of Hydroxyapatite. Revista De Chimie (discontinued), 2019, 70, 2273-2275.	0.4	5
63	Remote Field Eddy Current Control Using Rotating Magnetic Field Transducer: Application to Pressure Tubes Examination. Research in Nondestructive Evaluation, 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. Applied Mechanics and Materials, 2014, 657, 412-416.	0.2	4
65	ESD morphology deposition with WZr8 electrode on austenitic stainless steel support. IOP Conference Series: Materials Science and Engineering, 2016, 133, 012025.	0.6	4
66	In Vitro study for new Ti-Mo-Zr-Ta alloys for medical use. IOP Conference Series: Materials Science and Engineering, 2019, 572, 012030.	0.6	4
67	Performance of local fly ash geopolymers under different types of acids. IOP Conference Series: Materials Science and Engineering, 2019, 572, 012026.	0.6	4
68	Properties of Cu-xFe3O4 Nanocomposites for Electrical Application. Materials, 2020, 13, 3086.	2.9	4
69	Biocompatibility Evaluation of New TiMoSi Alloys. Acta Physica Polonica A, 2020, 138, 283-286.	0.5	4
70	Behavior of Alkali-Activated Fly Ash through Underwater Placement. Materials, 2021, 14, 6865.	2.9	4
71	On the Fatigue of Shape Memory Alloys. Key Engineering Materials, 0, 594-595, 133-139.	0.4	3
72	Quality Surface Modification for Refractory Stainless Steel by Tungsten Deposition, Using Electro-Spark Deposition Method. Applied Mechanics and Materials, 0, 809-810, 417-422.	0.2	3

#	ARTICLE	IF	CITATIONS
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

#	ARTICLE	IF	CITATIONS
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

#	ARTICLE	IF	CITATIONS
109	Influence of Co and Zr Content on Creation of Crystalline Phases in Rapidly-Cooled, Injection-Cast Alloys $\text{Fe}_{70}\text{Zr}_{8-x}\text{Co}_x\text{Nb}_2\text{B}_{20}$ (where $x=0,1$ ). Tj ETQp151 0.784314 rgBf	0.4	1
110	The Study of Magnetization in Strong Magnetic Fields for $\text{Fe}_{62}\text{XCo}_{10}\text{Nb}_{10}\text{Y}_{8}\text{B}_{20}$ ( $X=0,1,2$ ) 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 $\text{CuPb}_{12}\text{Sn}_6$ 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