

# Simona Cavalu

## List of Publications by Year in descending order

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109  
papers

2,048  
citations

236612

25  
h-index

344852

36  
g-index

109  
all docs

109  
docs citations

109  
times ranked

976  
citing authors

#	ARTICLE	IF	CITATIONS
1	Exploring the Journey of Zinc Oxide Nanoparticles (ZnO-NPs) toward Biomedical Applications. <i>Materials</i> , 2022, 15, 2160.	1.3	122
2	Applications of Phyto-Nanotechnology for the Treatment of Neurodegenerative Disorders. <i>Materials</i> , 2022, 15, 804.	1.3	85
3	The Multifunctional Role of Herbal Products in the Management of Diabetes and Obesity: A Comprehensive Review. <i>Molecules</i> , 2022, 27, 1713.	1.7	79
4	Green Metallic Nanoparticles: Biosynthesis to Applications. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 874742.	2.0	67
5	The Gut Microbiota (Microbiome) in Cardiovascular Disease and Its Therapeutic Regulation. <i>Frontiers in Cellular and Infection Microbiology</i> , 0, 12, .	1.8	65
6	Metal Nanoparticles and Carbon-Based Nanomaterials for Improved Performances of Electrochemical (Bio)Sensors with Biomedical Applications. <i>Materials</i> , 2021, 14, 6319.	1.3	60
7	Exploring the plant-derived bioactive substances as antidiabetic agent: An extensive review. <i>Biomedicine and Pharmacotherapy</i> , 2022, 152, 113217.	2.5	57
8	Natural Small Molecules in Breast Cancer Treatment: Understandings from a Therapeutic Viewpoint. <i>Molecules</i> , 2022, 27, 2165.	1.7	47
9	Recent Advancements in Microneedle Technology for Multifaceted Biomedical Applications. <i>Pharmaceutics</i> , 2022, 14, 1097.	2.0	43
10	Perspectives on the Combined Effects of <i>Ocimum basilicum</i> and <i>Trifolium pratense</i> Extracts in Terms of Phytochemical Profile and Pharmacological Effects. <i>Plants</i> , 2021, 10, 1390.	1.6	41
11	Microbiome in cancer: Role in carcinogenesis and impact in therapeutic strategies. <i>Biomedicine and Pharmacotherapy</i> , 2022, 149, 112898.	2.5	41
12	Exploring Pharmacological Mechanisms of Essential Oils on the Central Nervous System. <i>Plants</i> , 2022, 11, 21.	1.6	37
13	The dynamic interplay between AMPK/NF $\kappa$ B signaling and NLRP3 is a new therapeutic target in inflammation: Emerging role of dapagliflozin in overcoming lipopolysaccharide-mediated lung injury. <i>Biomedicine and Pharmacotherapy</i> , 2022, 147, 112628.	2.5	36
14	Raman and surface enhanced Raman spectroscopy of 2,2,5,5-tetramethyl-3-pyrrolin-1-yloxy-3-carboxamide labeled proteins: Bovine serum albumin and cytochrome c. <i>Biopolymers</i> , 2001, 62, 341-348.	1.2	35
15	A gold nanoparticles - Graphene based electrochemical sensor for sensitive determination of nitrazepam. <i>Journal of Electroanalytical Chemistry</i> , 2018, 830-831, 63-71.	1.9	34
16	Preparation and Characterization of Two Different Liposomal Formulations with Bioactive Natural Extract for Multiple Applications. <i>Processes</i> , 2021, 9, 432.	1.3	34
17	Improved cytocompatibility and antibacterial properties of zinc-substituted brushite bone cement based on $\text{I}^2$ -tricalcium phosphate. <i>Journal of Materials Science: Materials in Medicine</i> , 2021, 32, 99.	1.7	34
18	Nanoparticles and Nanostructured Surface Fabrication for Innovative Cranial and Maxillofacial Surgery. <i>Materials</i> , 2020, 13, 5391.	1.3	32

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19	Novel Hybrid Composites Based on PVA/SeTiO <sub>2</sub> Nanoparticles and Natural Hydroxyapatite for Orthopedic Applications: Correlations between Structural, Morphological and Biocompatibility Properties. <i>Materials</i> , 2020, 13, 2077.	1.3	32
20	Novel Formulation Based on Chitosan-Arabic Gum Nanoparticles Entrapping Propolis Extract Production, physico-chemical and structural characterization. <i>Revista De Chimie (discontinued)</i> , 2019, 69, 3756-3760.	0.2	31
21	An Overview of Antimicrobial Stewardship Optimization: The Use of Antibiotics in Humans and Animals to Prevent Resistance. <i>Antibiotics</i> , 2022, 11, 667.	1.5	31
22	Multidrug Resistance of Cancer Cells and the Vital Role of P-Glycoprotein. <i>Life</i> , 2022, 12, 897.	1.1	31
23	Spark plasma sintered Al <sub>2</sub> O <sub>3</sub> -YSZ-TiO <sub>2</sub> composites: Processing, characterization and in vivo evaluation. <i>Materials Science and Engineering C</i> , 2014, 40, 16-23.	3.8	30
24	Pentoxifylline and berberine mitigate diclofenac-induced acute nephrotoxicity in male rats via modulation of inflammation and oxidative stress. <i>Biomedicine and Pharmacotherapy</i> , 2022, 152, 113225.	2.5	30
25	Microscopic and spectroscopic investigation of bioactive glasses for antibiotic controlled release. <i>Journal of Molecular Structure</i> , 2013, 1040, 47-52.	1.8	29
26	Surface modifications of the titanium mesh for cranioplasty using selenium nanoparticles coating. <i>Journal of Adhesion Science and Technology</i> , 2018, 32, 2509-2522.	1.4	29
27	Preparation, structural characterisation and release study of novel hybrid microspheres entrapping nanoselenium, produced by green synthesis. <i>IET Nanobiotechnology</i> , 2017, 11, 426-432.	1.9	28
28	Fungal Mushrooms: A Natural Compound With Therapeutic Applications. <i>Frontiers in Pharmacology</i> , 0, 13, .	1.6	28
29	Evolution of Diagnostic Methods for Helicobacter pylori Infections: From Traditional Tests to High Technology, Advanced Sensitivity and Discrimination Tools. <i>Diagnostics</i> , 2022, 12, 508.	1.3	27
30	Combination of Vitamin C and Curcumin Safeguards Against Methotrexate-Induced Acute Liver Injury in Mice by Synergistic Antioxidant Effects. <i>Frontiers in Medicine</i> , 2022, 9, 866343.	1.2	27
31	EPR study of non-covalent spin labeled serum albumin and hemoglobin. <i>Biophysical Chemistry</i> , 2002, 99, 181-188.	1.5	26
32	Revisiting Therapeutic Strategies for H. pylori Treatment in the Context of Antibiotic Resistance: Focus on Alternative and Complementary Therapies. <i>Molecules</i> , 2021, 26, 6078.	1.7	26
33	Rotational Correlation Times of 3-Carbamoyl-2,2,5,5-tetramethyl-3-pyrrolin-1-yloxy Spin Label with Respect to Heme and Nonheme Proteins. <i>Biomacromolecules</i> , 2003, 4, 1630-1635.	2.6	25
34	Potentiality of Nanoenzymes for Cancer Treatment and Other Diseases: Current Status and Future Challenges. <i>Materials</i> , 2021, 14, 5965.	1.3	25
35	An Overview of Diabetic Foot Ulcers and Associated Problems with Special Emphasis on Treatments with Antimicrobials. <i>Life</i> , 2022, 12, 1054.	1.1	25
36	New Evidences of Key Factors Involved in "Silent Stones" Etiopathogenesis and Trace Elements: Microscopic, Spectroscopic, and Biochemical Approach. <i>Biological Trace Element Research</i> , 2015, 168, 311-320.	1.9	24

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37	Nano Selenium-Enriched Probiotics as Functional Food Products against Cadmium Liver Toxicity. <i>Materials</i> , 2021, 14, 2257.	1.3	24
38	Evaluation of In Vitro Wound-Healing Potential, Antioxidant Capacity, and Antimicrobial Activity of <i>Stellaria media</i> (L.) Vill. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 11526.	1.3	24
39	Surface functionalisation of sol-gel derived aluminosilicates in simulated body fluids. <i>Solid State Ionics</i> , 2009, 180, 764-769.	1.3	23
40	Growth, Photosynthetic Pigments, Phenolic, Glucosinolates Content and Antioxidant Capacity of Broccoli Sprouts in Response to Nanoselenium Particles Supply. <i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i> , 2019, 47, .	0.5	23
41	PRGF-Modified Collagen Membranes for Guided Bone Regeneration: Spectroscopic, Microscopic and Nano-Mechanical Investigations. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1035.	1.3	23
42	Raman and surface-enhanced Raman spectroscopy of tempyo spin labelled ovalbumin. <i>Journal of Molecular Structure</i> , 2001, 565-566, 225-229.	1.8	22
43	Synergic effect of selenium nanoparticles and lactic acid bacteria in reduction cadmium toxicity. <i>Journal of Molecular Structure</i> , 2022, 1247, 131325.	1.8	22
44	Eco-friendly, Facile and Rapid Way for Synthesis of Selenium Nanoparticles Production, structural and morphological characterisation. <i>Revista De Chimie (discontinued)</i> , 2018, 68, 2963-2966.	0.2	21
45	Evaluation of Wound Healing Potential of Novel Hydrogel Based on <i>Ocimum basilicum</i> and <i>Trifolium pratense</i> Extracts. <i>Processes</i> , 2021, 9, 2096.	1.3	19
46	Surface Modification of Alumina/ Zirconia Ceramics Upon Different Fluoride-Based Treatments. <i>International Journal of Applied Ceramic Technology</i> , 2014, 11, 402-411.	1.1	18
47	Electrospun Nanofibers Revisited: An Update on the Emerging Applications in Nanomedicine. <i>Materials</i> , 2022, 15, 1934.	1.3	18
48	Therapeutic efficacy of <i>Clompanus pubescens</i> leaves fractions via downregulation of neuronal cholinesterases/Na <sup>+</sup> -K <sup>+</sup> -ATPase/IL-1 $\beta$ , and improving the neurocognitive and antioxidants status of streptozotocin-induced diabetic rats. <i>Biomedicine and Pharmacotherapy</i> , 2022, 148, 112730.	2.5	18
49	Novel Green Approaches for the Preparation of Gold Nanoparticles and Their Promising Potential in Oncology. <i>Processes</i> , 2022, 10, 426.	1.3	16
50	Multidrug Resistance in Cancer Cells: Focus on a Possible Strategy Plan to Address Colon Carcinoma Cells. <i>Life</i> , 2022, 12, 811.	1.1	16
51	Canagliflozin-loaded chitosan-hyaluronic acid microspheres modulate AMPK/NF- $\kappa$ B/NLRP3 axis: A new paradigm in the rectal therapy of ulcerative colitis. <i>Biomedicine and Pharmacotherapy</i> , 2022, 153, 113409.	2.5	15
52	Optimization of Hyaluronate-Based Liposomes to Augment the Oral Delivery and the Bioavailability of Berberine. <i>Materials</i> , 2021, 14, 5759.	1.3	14
53	Carbocisteine as a Modulator of Nrf2/HO-1 and NF- $\kappa$ B Interplay in Rats: New Inspiration for the Revival of an Old Drug for Treating Ulcerative Colitis. <i>Frontiers in Pharmacology</i> , 0, 13, .	1.6	14
54	Genome centric engineering using ZFNs, TALENs and CRISPR-Cas9 systems for trait improvement and disease control in Animals. <i>Veterinary Research Communications</i> , 2023, 47, 1-16.	0.6	14

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55	Nano-Scale Modifications of Amniotic Membrane Induced by UV and Antibiotic Treatment: Histological, AFM and FTIR Spectroscopy Evidence. <i>Materials</i> , 2021, 14, 863.	1.3	13
56	Bioactive Compounds and Nanodelivery Perspectives for Treatment of Cardiovascular Diseases. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 11031.	1.3	13
57	Coomassie brilliant blue G-250 dye attenuates bleomycin-induced lung fibrosis by regulating the NF- $\kappa$ B and NLRP3 crosstalk: A novel approach for filling an unmet medical need. <i>Biomedicine and Pharmacotherapy</i> , 2022, 148, 112723.	2.5	13
58	Nanomedicines in the Management of Alzheimer's Disease: Current View and Future Prospects. <i>Frontiers in Aging Neuroscience</i> , 0, 14, .	1.7	12
59	Nifuroxazide-loaded cubosomes exhibit an advancement in pulmonary delivery and attenuate bleomycin-induced lung fibrosis by regulating the STAT3 and NF- $\kappa$ B signaling: A new challenge for unmet therapeutic needs. <i>Biomedicine and Pharmacotherapy</i> , 2022, 148, 112731.	2.5	11
60	Changes in the Blood Viscosity in Patients With SARS-CoV-2 Infection. <i>Frontiers in Medicine</i> , 0, 9, .	1.2	11
61	Functional Food Product Based on Nanoselenium-Enriched <i>Lactobacillus casei</i> against Cadmium Kidney Toxicity. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4220.	1.3	10
62	The prospective of liquid crystals in nano formulations for drug delivery systems. <i>Journal of Molecular Structure</i> , 2021, 1245, 131117.	1.8	10
63	Bioactive Based Nanocarriers for the Treatment of Viral Infections and SARS-CoV-2. <i>Nanomaterials</i> , 2022, 12, 1530.	1.9	10
64	Freeze-dried and spray-dried zinc-containing silica microparticles entrapping insulin. <i>Journal of Biomaterials Applications</i> , 2014, 28, 1190-1199.	1.2	9
65	Severe Cardiac and Metabolic Pathology Induced by Steroid Abuse in a Young Individual. <i>Diagnostics</i> , 2021, 11, 1313.	1.3	9
66	A Prospective Viewpoint on Neurological Diseases and Their Biomarkers. <i>Molecules</i> , 2022, 27, 3516.	1.7	9
67	Nanotechnology in the Diagnostic and Therapy of Hepatocellular Carcinoma. <i>Materials</i> , 2022, 15, 3893.	1.3	9
68	Combining the HSP90 inhibitor TAS-116 with metformin effectively degrades the NLRP3 and attenuates inflammasome activation in rats: A new management paradigm for ulcerative colitis. <i>Biomedicine and Pharmacotherapy</i> , 2022, 153, 113247.	2.5	9
69	Acrylic Bone Cements: New Insight and Future Perspective. <i>Key Engineering Materials</i> , 0, 745, 39-49.	0.4	8
70	The Behavior of Two Types of Upper Removable Retainers—Our Clinical Experience. <i>Children</i> , 2020, 7, 295.	0.6	8
71	Supersaturation-Based Drug Delivery Systems: Strategy for Bioavailability Enhancement of Poorly Water-Soluble Drugs. <i>Molecules</i> , 2022, 27, 2969.	1.7	8
72	Electrochemical Methods for Evaluation of Antioxidant Properties of Propolis Extract Incorporated in Chitosan Nanoparticles. <i>Materiale Plastice</i> , 2021, 57, 96-108.	0.4	6

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73	Natural Polymeric Film Encapsulating Propolis Nano-Formulation for Cutaneous Wound Healing. <i>Materiale Plastice</i> , 2019, 56, 479-483.	0.4	6
74	Ameliorative Effect of Oxytocin on FBN1 and PEPCK Gene Expression, and Behavioral Patterns in Rats' Obesity-Induced Diabetes. <i>Frontiers in Public Health</i> , 2022, 10, 777129.	1.3	6
75	Emerging Approach for the Application of Hibiscus sabdariffa Extract Ointment in the Superficial Burn Care. <i>Scientia Pharmaceutica</i> , 2022, 90, 41.	0.7	6
76	Rapid Screening of Retrieved Knee Prosthesis Components by Confocal Raman Micro-Spectroscopy. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 5343.	1.3	5
77	Carbon Nanotubes for Improved Performances of Endodontic Sealer. <i>Materials</i> , 2021, 14, 4248.	1.3	5
78	Preparation, Physico-chemical Characterization and Photocatalytic Properties of Se Doped TiO <sub>2</sub> Nanoparticles. <i>Revista De Chimie (discontinued)</i> , 2020, 71, 22-27.	0.2	5
79	Sarcopenia, a major clinical problem in old age, potential causes, clinical consequences and therapeutic possibilities. <i>Balneo and PRM Research Journal</i> , 2022, , 492.	0.1	5
80	Size-Dependent Antibacterial, Antidiabetic, and Toxicity of Silver Nanoparticles Synthesized Using Solvent Extraction of Rosa indica L. Petals. <i>Pharmaceuticals</i> , 2022, 15, 689.	1.7	5
81	Surface properties of collagen-functionalized aluminosilicate particles embedding iron and dysprosium designed for cancer therapy. <i>Journal of Molecular Structure</i> , 2021, 1236, 130341.	1.8	4
82	Assessment of Antibiotic Influence on Structural Modifications of Amniotic Membrane by FTIR Spectroscopy. <i>Materiale Plastice</i> , 2019, 57, 191-198.	0.4	4
83	Enhanced Plasmon Based Ag and Au Nanosystems and Their Improved Biomedical Impacts. <i>Crystals</i> , 2022, 12, 589.	1.0	4
84	Advantages of Cubosomal Formulation for Gatifloxacin Delivery in the Treatment of Bacterial Keratitis: In Vitro and In Vivo Approach Using Clinical Isolate of Methicillin-Resistant Staphylococcus aureus. <i>Materials</i> , 2022, 15, 3374.	1.3	4
85	Successful management of spontaneous bone regeneration after jaws cystectomy using PRGF approach; case series. <i>Romanian Journal of Morphology and Embryology</i> , 2021, 61, 833-840.	0.4	3
86	Correlation between Structural Properties and <i>In Vivo</i> Biocompatibility of Alumina/Zirconia Bioceramics. <i>Key Engineering Materials</i> , 0, 493-494, 1-6.	0.4	2
87	Sarcopenia of Iliopsoas and Abdominal Muscles and Coexistence with Osteoporosis - Case Presentation. <i>Pharmacophore</i> , 2021, 12, 61-66.	0.2	2
88	Improving the Bioactivity and Biocompatibility of Acrylic Cements by Collagen Coating. <i>Key Engineering Materials</i> , 0, 493-494, 391-396.	0.4	1
89	Naturally Derived Matrix for Controlled Selenium Nanoparticles Delivery. <i>Key Engineering Materials</i> , 2016, 695, 284-288.	0.4	1
90	Bioactive Compounds Diffusion from Grapes to Wines under High Frequency Electromagnetic Field Treatments. <i>Key Engineering Materials</i> , 2016, 695, 289-294.	0.4	1

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91	The Glass Ionomer Cement Reinforced with Silver - Premise in Choosing the Teeth Proposed for Orthodontic Purpose Extraction. <i>Revista De Chimie (discontinued)</i> , 2019, 70, 324-326.	0.2	1
92	Histological evidence of novel ceramic implant: evaluation of tolerability in rabbit femur. <i>Romanian Journal of Morphology and Embryology</i> , 2015, 56, 1455-60.	0.4	1
93	Assessing the Role of Lipopolysaccharide (LPS) Receptor (CD14) in Septic Cardiomyopathy: The Value of Immunohistochemical Diagnostics. <i>Diagnostics</i> , 2022, 12, 781.	1.3	1
94	Identification of Linomide Derivatives as Potential Anticancer Therapeutics using Molecular Docking Studies. <i>Frontiers in Pharmacology</i> , 0, 13, .	1.6	1
95	Grafting Materials for Major Sinus Lift. <i>Key Engineering Materials</i> , 0, 493-494, 609-614.	0.4	0
96	Autologous Bone vs. Allograft Bone in Ridge Augmentation. <i>Key Engineering Materials</i> , 0, 529-530, 270-274.	0.4	0
97	Titania &lt;i>versus</i> Ceria Alumina/Zirconia Composites: Structural Aspects and Biological Tolerance. <i>Key Engineering Materials</i> , 0, 529-530, 595-600.	0.4	0
98	New Devices for Optimization of Renouretal Lithiasis Treatment Using ESWL. <i>Key Engineering Materials</i> , 2013, 583, 155-159.	0.4	0
99	Alternative Approaches Using Animal Model for Implant Biomaterials: Advantages and Disadvantages. <i>Key Engineering Materials</i> , 2013, 583, 101-106.	0.4	0
100	Small Bone Defects Augmentation. <i>Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca: Veterinary Medicine</i> , 2014, 71, .	0.1	0
101	Adherence Properties of Acrylic Bone Cement to Alumina Ceramics Designed for Clinical Applications. <i>Acta Physica Polonica A</i> , 2014, 125, 603-605.	0.2	0
102	Immediate Loading of Dental Implants - A Case Study. <i>Key Engineering Materials</i> , 0, 695, 31-34.	0.4	0
103	Zirconia Neck Implants vs Bone Augmentation. <i>Key Engineering Materials</i> , 0, 695, 35-40.	0.4	0
104	The Assessment of Ceramic Dental Materials during the Treatment of Severe Adult Cleft Palate: A Case Study. <i>Key Engineering Materials</i> , 0, 695, 46-49.	0.4	0
105	The Assessment of Acrylic Infantile Overdenture during the Treatment of Anodontia in Children: A Case Study. <i>Key Engineering Materials</i> , 0, 752, 41-45.	0.4	0
106	Green Biosynthesis Silver Nanoparticles Using Leaf Extract. <i>Natural Resources and Sustainable Development</i> , 2018, 8, 59-66.	0.1	0
107	ENCAPSULATION OF STELLARIA MEDIA EXTRACT IN ALGINATE BEADS BY USING A NOVEL METHOD FOR CONTROLLED RELEASE. <i>Natural Resources and Sustainable Development</i> , 2020, 10, 200-209.	0.1	0
108	Two case reports of vertical and horizontal augmentation with autogenous bone blocks; seven years follow-up. <i>Romanian Journal of Morphology and Embryology</i> , 2019, 60, 261-266.	0.4	0

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109	Scrutinizing the role of Genetically Modified Herbs (GMHs) in the Treatment of Various Diseases. Recent Patents on Biotechnology, 2022, 16, .	0.4	0