

Lia A Stanciu

List of Publications by Year in descending order

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116
papers

5,461
citations

81900

39
h-index

88630

70
g-index

118
all docs

118
docs citations

118
times ranked

8650
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication of High-Surface-Area Graphene/Polyaniline Nanocomposites and Their Application in Supercapacitors. ACS Applied Materials & Interfaces, 2013, 5, 2685-2691.	8.0	309
2	Nanohybrids of a MXene and transition metal dichalcogenide for selective detection of volatile organic compounds. Nature Communications, 2020, 11, 1302.	12.8	294
3	Surface Functionalization of Ti ₃ C ₂ MXene with Highly Reliable Superhydrophobic Protection for Volatile Organic Compounds Sensing. ACS Nano, 2020, 14, 11490-11501.	14.6	247
4	Graphene-modified nanostructured vanadium pentoxide hybrids with extraordinary electrochemical performance for Li-ion batteries. Nature Communications, 2015, 6, 6127.	12.8	201
5	Structure of TRPV1 channel revealed by electron cryomicroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7451-7455.	7.1	194
6	Understanding Pt Nanoparticle Anchoring on Graphene Supports through Surface Functionalization. ACS Catalysis, 2016, 6, 2642-2653.	11.2	172
7	Covalently-grafted polyaniline on graphene oxide sheets for high performance electrochemical supercapacitors. Carbon, 2014, 71, 257-267.	10.3	171
8	Effect of temperature and moisture on the miscibility of amorphous dispersions of felodipine and poly(vinyl pyrrolidone). Journal of Pharmaceutical Sciences, 2010, 99, 169-185.	3.3	169
9	Natural Biopolymers: Novel Templates for the Synthesis of Nanostructures. Langmuir, 2010, 26, 8497-8502.	3.5	167
10	Enzyme functionalized nanoparticles for electrochemical biosensors: A comparative study with applications for the detection of bisphenol A. Biosensors and Bioelectronics, 2010, 26, 43-49.	10.1	123
11	Novel Pyrolyzed Polyaniline-Grafted Silicon Nanoparticles Encapsulated in Graphene Sheets As Li-Ion Battery Anodes. ACS Applied Materials & Interfaces, 2014, 6, 5996-6002.	8.0	114
12	Graphene based enzymatic bioelectrodes and biofuel cells. Nanoscale, 2015, 7, 6909-6923.	5.6	113
13	Aptamer-based SERS biosensor for whole cell analytical detection of E.Âcoli O157:H7. Analytica Chimica Acta, 2019, 1081, 146-156.	5.4	92
14	Sulfur-Doped Titanium Carbide MXenes for Room-Temperature Gas Sensing. ACS Sensors, 2020, 5, 2915-2924.	7.8	92
15	Investigation of the Interaction between Nafion Ionomer and Surface Functionalized Carbon Black Using Both Ultrasmall Angle X-ray Scattering and Cryo-TEM. ACS Applied Materials & Interfaces, 2017, 9, 6530-6538.	8.0	89
16	Microfluidic rapid and autonomous analytical device (microRAAD) to detect HIV from whole blood samples. Lab on A Chip, 2019, 19, 3375-3386.	6.0	86
17	Graphene-titanium dioxide nanocomposite based hypoxanthine sensor for assessment of meat freshness. Biosensors and Bioelectronics, 2017, 89, 518-524.	10.1	82
18	Surface Functionalization of Layered Molybdenum Disulfide for the Selective Detection of Volatile Organic Compounds at Room Temperature. ACS Applied Materials & Interfaces, 2019, 11, 34135-34143.	8.0	79

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19	AChE biosensor based on zinc oxide sol-gel for the detection of pesticides. <i>Analytica Chimica Acta</i> , 2010, 661, 195-199.	5.4	78
20	Competitive heavy metal adsorption onto new and aged polyethylene under various drinking water conditions. <i>Journal of Hazardous Materials</i> , 2020, 385, 121585.	12.4	77
21	An aqueous media based approach for the preparation of a biosensor platform composed of graphene oxide and Pt-black. <i>Biosensors and Bioelectronics</i> , 2012, 38, 314-320.	10.1	74
22	Effects of impaired membrane interactions on α -synuclein aggregation and neurotoxicity. <i>Neurobiology of Disease</i> , 2015, 79, 150-163.	4.4	73
23	Reusable photocatalytic titanium dioxide-cellulose nanofiber films. <i>Journal of Colloid and Interface Science</i> , 2013, 399, 92-98.	9.4	70
24	Magnetic Particle-Based Hybrid Platforms for Bioanalytical Sensors. <i>Sensors</i> , 2009, 9, 2976-2999.	3.8	69
25	Bisphenol A detection using gold nanostars in a SERS improved lateral flow immunochromatographic assay. <i>Sensors and Actuators B: Chemical</i> , 2018, 276, 222-229.	7.8	63
26	Investigation of a Catalyst Ink Dispersion Using Both Ultra-Small-Angle X-ray Scattering and Cryogenic TEM. <i>Langmuir</i> , 2010, 26, 19199-19208.	3.5	62
27	Cu ₂ O and Au/Cu ₂ O Particles: Surface Properties and Applications in Glucose Sensing. <i>Sensors</i> , 2012, 12, 13019-13033.	3.8	61
28	Preparation of high-surface-area carbon nanoparticle/graphene composites. <i>Carbon</i> , 2012, 50, 3845-3853.	10.3	57
29	Overexpression of alpha-synuclein at non-toxic levels increases dopaminergic cell death induced by copper exposure via modulation of protein degradation pathways. <i>Neurobiology of Disease</i> , 2015, 81, 76-92.	4.4	57
30	Core/shell nanoparticles as hybrid platforms for the fabrication of a hydrogen peroxide biosensor. <i>Journal of Materials Chemistry</i> , 2010, 20, 5030.	6.7	56
31	Aminolated and Thiolated PEG-Covered Gold Nanoparticles with High Stability and Antiaggregation for Lateral Flow Detection of Bisphenol A. <i>Small</i> , 2018, 14, 1702828.	10.0	56
32	Functionalized graphene oxide for the fabrication of paraoxon biosensors. <i>Analytica Chimica Acta</i> , 2014, 827, 86-94.	5.4	51
33	Multifunctional calcium carbonate microparticles: Synthesis and biological applications. <i>Journal of Materials Chemistry</i> , 2010, 20, 7728.	6.7	50
34	Hierarchical polybenzimidazole-grafted graphene hybrids as supports for Pt nanoparticle catalysts with excellent PEMFC performance. <i>Nano Energy</i> , 2015, 16, 281-292.	16.0	50
35	Au nanospheres and nanorods for enzyme-free electrochemical biosensor applications. <i>Biosensors and Bioelectronics</i> , 2011, 26, 4514-4519.	10.1	49
36	Microfluidic paper-based aptasensor devices for multiplexed detection of pathogenic bacteria. <i>Biosensors and Bioelectronics</i> , 2022, 207, 114214.	10.1	49

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37	Biomagnetic Glasses: Preparation, Characterization, and Biosensor Applications. <i>Langmuir</i> , 2010, 26, 4320-4326.	3.5	46
38	Hierarchical Nanocomposites of Vanadium Oxide Thin Film Anchored on Graphene as High-Performance Cathodes in Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 18894-18900.	8.0	46
39	Impedimetric Dengue Biosensor based on Functionalized Graphene Oxide Wrapped Silica Particles. <i>Electrochimica Acta</i> , 2016, 194, 422-430.	5.2	46
40	Recent Advances in Aptamer-Based Biosensors for Global Health Applications. <i>Annual Review of Biomedical Engineering</i> , 2021, 23, 433-459.	12.3	41
41	Fe ₃ O ₄ @SiO ₂ nanocomposites obtained via alkoxide and colloidal route. <i>Journal of Sol-Gel Science and Technology</i> , 2006, 40, 317-323.	2.4	40
42	CeO ₂ @MO _x (M: Zr, Ti, Cu) mixed metal oxides with enhanced oxygen storage capacity. <i>Journal of Materials Science</i> , 2015, 50, 3750-3762.	3.7	40
43	Novel CeO ₂ @CuO-decorated enzymatic lactate biosensors operating in low oxygen environments. <i>Analytica Chimica Acta</i> , 2016, 909, 121-128.	5.4	39
44	Bimetallic PdCu/SPCE non-enzymatic hydrogen peroxide sensors. <i>Sensors and Actuators B: Chemical</i> , 2015, 220, 968-976.	7.8	38
45	Self-assembly and alignment of semiconductor nanoparticles on cellulose nanocrystals. <i>Journal of Materials Science</i> , 2011, 46, 5672-5679.	3.7	37
46	Mechanical properties and corrosion behavior of powder metallurgy iron-hydroxyapatite composites for biodegradable implant applications. <i>Materials and Design</i> , 2016, 109, 556-569.	7.0	37
47	Hybrid plasmonic Au@TiN vertically aligned nanocomposites: a nanoscale platform towards tunable optical sensing. <i>Nanoscale Advances</i> , 2019, 1, 1045-1054.	4.6	37
48	Facile Preparation of Graphene/SnO ₂ Xerogel Hybrids as the Anode Material in Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 27087-27095.	8.0	36
49	Cold drawn bioabsorbable ferrous and ferrous composite wires: An evaluation of in vitro vascular cytocompatibility. <i>Acta Biomaterialia</i> , 2013, 9, 8574-8584.	8.3	35
50	In Vitro Study of α -Synuclein Protofibrils by Cryo-EM Suggests a Cu ²⁺ -Dependent Aggregation Pathway. <i>Biophysical Journal</i> , 2013, 104, 2706-2713.	0.5	35
51	Microarc oxidation discharge types and bio properties of the coating synthesized on zirconium. <i>Materials Science and Engineering C</i> , 2017, 77, 374-383.	7.3	35
52	Inkjet Printed Nanopatterned Aptamer-Based Sensors for Improved Optical Detection of Foodborne Pathogens. <i>Small</i> , 2019, 15, e1805342.	10.0	35
53	Spark Plasma Sintering of ZrB ₂ @SiC@ZrC ultra-high temperature ceramics at 1800°C. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 6079-6082.	5.6	34
54	Bioresorbable Fe-Mn and Fe-Mn-HA Materials for Orthopedic Implantation: Enhancing Degradation through Porosity Control. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700120.	7.6	33

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55	Investigation of porosity on mechanical properties, degradation and in-vitro cytotoxicity limit of Fe30Mn using space holder technique. <i>Materials Science and Engineering C</i> , 2019, 99, 1048-1057.	7.3	31
56	Influence of powder precursors on reaction sintering of Al ₂ TiO ₅ . <i>Scripta Materialia</i> , 2004, 50, 1259-1262.	5.2	30
57	Evolution of novel bioresorbable iron-manganese implant surfaces and their degradation behaviors in vitro. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 185-193.	4.0	30
58	A Sensitive Electrochemical H ₂ O ₂ Sensor Based on PdAg-Decorated Reduced Graphene Oxide Nanocomposites. <i>Journal of the Electrochemical Society</i> , 2016, 163, B379-B384.	2.9	30
59	Layer by layer construction of ascorbate interference-free amperometric lactate biosensors with lactate oxidase, ascorbate oxidase, and ceria nanoparticles. <i>Mikrochimica Acta</i> , 2016, 183, 1667-1675.	5.0	30
60	Inkjet printed electrochemical aptasensor for detection of Hg ²⁺ in organic solvents. <i>Electrochimica Acta</i> , 2019, 316, 33-42.	5.2	30
61	Direct fabrication of crystalline hydroxyapatite coating on zirconium by single-step plasma electrolytic oxidation process. <i>Surface and Coatings Technology</i> , 2016, 301, 74-79.	4.8	29
62	In Vivo Evaluation of Biodegradability and Biocompatibility of Fe30Mn Alloy. <i>Veterinary and Comparative Orthopaedics and Traumatology</i> , 2018, 31, 010-016.	0.5	29
63	Optical Biosensors for Diagnostics of Infectious Viral Disease: A Recent Update. <i>Diagnostics</i> , 2021, 11, 2083.	2.6	29
64	Field-assisted sintering of Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ solid-state electrolyte. <i>Solid State Ionics</i> , 2015, 278, 217-221.	2.7	27
65	Cold-Drawn Bioabsorbable Ferrous and Ferrous Composite Wires: An Evaluation of Mechanical Strength and Fatigue Durability. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2012, 43, 984-994.	2.1	26
66	DNA-Functionalized Ti ₃ C ₂ T _x MXenes for Selective and Rapid Detection of SARS-CoV-2 Nucleocapsid Gene. <i>ACS Applied Nano Materials</i> , 2022, 5, 1902-1910.	5.0	26
67	Protein-templated semiconductor nanoparticle chains. <i>Nanotechnology</i> , 2008, 19, 275602.	2.6	24
68	The effect of heating rate and composition on the properties of spark plasma sintered zirconium diboride based composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 538, 98-102.	5.6	24
69	Effects of microstructure and heat treatment on mechanical properties and corrosion behavior of powder metallurgy derived Fe ³⁰ Mn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 703, 214-226.	5.6	24
70	Roll-to-Roll Manufactured Sensors for Nitroaromatic Organophosphorus Pesticides Detection. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 35961-35971.	8.0	24
71	Polybenzimidazole (PBI) Functionalized Nanographene as Highly Stable Catalyst Support for Polymer Electrolyte Membrane Fuel Cells (PEMFCs). <i>Journal of the Electrochemical Society</i> , 2016, 163, F1228-F1236.	2.9	20
72	Origin of High Interfacial Resistances in Solid-State Batteries: Interdiffusion and Amorphous Film Formation in Li _{0.33} La _{0.57} TiO ₃ /LiMn ₂ O ₄ Half Cells. <i>ChemElectroChem</i> , 2019, 6, 4576-4585.	3.4	20

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73	Electric Field Effects on Sintering and Reaction to Form Aluminum Titanate from Binary Alumina-Titania Sol-Gel Powders. <i>Journal of the American Ceramic Society</i> , 2001, 84, 983-985.	3.8	19
74	Effect of microstructure and strain on the degradation behavior of novel bioresorbable iron-manganese alloy implants. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 738-745.	4.0	19
75	Nanoporous metals for biodegradable implants: Initial bone mesenchymal stem cell adhesion and degradation behavior. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 1747-1758.	4.0	19
76	Surface modifications through dealloying of Fe-Mn and Fe-Mn-Zn alloys developed to create tailorable, nanoporous, bioresorbable surfaces. <i>Acta Materialia</i> , 2016, 103, 115-127.	7.9	19
77	Gold decorated polystyrene particles for lateral flow immunodetection of Escherichia coli O157:H7. <i>Mikrochimica Acta</i> , 2017, 184, 4879-4886.	5.0	19
78	Simultaneous colorimetric and electrochemical detection of trace mercury (Hg ²⁺) using a portable and miniaturized aptasensor. <i>Biosensors and Bioelectronics</i> , 2023, 221, 114419.	10.1	19
79	Initial Stages of Sintering of Alumina by Thermo-Optical Measurements. <i>Journal of the American Ceramic Society</i> , 2007, 90, 2716-2722.	3.8	18
80	Synthesis of CeO ₂ -based core/shell nanoparticles with high oxygen storage capacity. <i>International Nano Letters</i> , 2017, 7, 187-193.	5.0	18
81	Selective Detection of Ethylene by MoS ₂ -Carbon Nanotube Networks Coated with Cu(I)-Pincer Complexes. <i>ACS Sensors</i> , 2020, 5, 1699-1706.	7.8	18
82	Fabrication of ZnS nanoparticle chains on a protein template. <i>Journal of Nanoparticle Research</i> , 2009, 11, 2031-2041.	1.9	14
83	Ionic Strength Influences on Biofunctional Au-Decorated Microparticles for Enhanced Performance in Multiplexed Colorimetric Sensors. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32397-32409.	8.0	14
84	Structural Evolution During Reaction to Form Aluminum Titanate from Sol-Gel Precursors. <i>Materials and Manufacturing Processes</i> , 2004, 19, 641-650.	4.7	13
85	Collagen Coating Effects on Fe-Mn Bioresorbable Alloys. <i>Journal of Orthopaedic Research</i> , 2020, 38, 523-535.	2.3	12
86	Versatile printed microheaters to enable low-power thermal control in paper diagnostics. <i>Analyst</i> , 2020, 145, 184-196.	3.5	12
87	An <i>in vitro</i> model for preclinical testing of thrombogenicity of resorbable metallic stents. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 2118-2125.	4.0	11
88	Reactive Hot Pressing and Properties of Zr-Ti-B-ZrC Composites. <i>Journal of the American Ceramic Society</i> , 2015, 98, 711-716.	3.8	11
89	Improving bioactivity of inert bioceramics by a novel Mg-incorporated solution treatment. <i>Applied Surface Science</i> , 2017, 425, 564-575.	6.1	10
90	Application of corn zein as an anchoring molecule in a carbon nanotube enhanced electrochemical sensor for the detection of gliadin. <i>Food Control</i> , 2020, 117, 107350.	5.5	10

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91	In Situ Synthesis and Characterization of Zr-Based Amorphous Composite by Laser Direct Deposition. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4316-4325.	2.2	9
92	Preparation and characterization of alumina supported silicalite membranes by sol-gel hydrothermal method. Journal of Membrane Science, 2002, 210, 197-207.	8.2	8
93	Biotemplated Silica and Titania Nanowires: Synthesis, Characterization and Potential Applications. Journal of Nanoscience and Nanotechnology, 2012, 12, 227-235.	0.9	8
94	Cu(II) promotes amyloid pore formation. Biochemical and Biophysical Research Communications, 2015, 464, 342-347.	2.1	8
95	An in-vitro study: The effect of surface properties on bioactivity of the oxide layer fabricated on Zr substrate by PEO. Surfaces and Interfaces, 2021, 22, 100884.	3.0	8
96	Origin of High Interfacial Resistance in Solid-State Batteries: LLTO/LCO Half-Cells**. ChemElectroChem, 2021, 8, 1847-1857.	3.4	8
97	Title is missing!. Journal of Sol-Gel Science and Technology, 2000, 19, 839-843.	2.4	7
98	Electrochemical Biosensors Fabricated with Polyelectrolyte Microspheres. Journal of the Electrochemical Society, 2012, 159, B783-B788.	2.9	7
99	Antidelaminating, Thermally Stable, and Cost-Effective Flexible Kapton Platforms for Nitrate Sensors, Mercury Aptasensors, Protein Sensors, and p-Type Organic Thin-Film Transistors. ACS Applied Materials & Interfaces, 2021, 13, 11369-11384.	8.0	7
100	ZrB ₂ -SiC and ZrB ₂ -ZrC Ceramics with High Secondary Phase Content. International Journal of Applied Ceramic Technology, 2015, 12, E44.	2.1	6
101	Two C-terminal sequence variations determine differential neurotoxicity between human and mouse I α -synuclein. Molecular Neurodegeneration, 2020, 15, 49.	10.8	6
102	Investigation of the Interaction of Nafion Ionomer and Carbon Black Using Small Angle X-ray and Small Angle Neutron Scattering. ECS Transactions, 2011, 41, 637-645.	0.5	5
103	Nisin infusion into surface cracks in oxide coatings to create an antibacterial metallic surface. Materials Science and Engineering C, 2019, 105, 110034.	7.3	5
104	Folding dynamics of phenylalanine hydroxylase depends on the enzyme's metallation state: the native metal, iron, protects against aggregate intermediates. European Biophysics Journal, 2011, 40, 959-968.	2.2	4
105	Tuning a Bisphenol A Lateral Flow Assay Using Multiple Gold Nanosystems. Particle and Particle Systems Characterization, 2019, 36, 1900133.	2.3	4
106	Interphases Formation and Analysis at the Lithium-Aluminum-Titanium-Phosphate (LATP) and Lithium-Manganese Oxide Spinel (LMO) Interface during High-Temperature Bonding. Energy Technology, 2020, 8, 2000634.	3.8	4
107	Investigation of Catalyst Ink Dispersion Using Small Angle X-ray and Small Angle Neutron Scattering. ECS Transactions, 2010, 33, 1335-1345.	0.5	2
108	Nanostructured Graphenes and Metal Oxides for Fuel Cell and Battery Applications. Advanced Materials Research, 0, 705, 126-131.	0.3	2

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109	Biodegradable materials for medical applications. , 2022, , 307-346.		2
110	Inkjet Printing platforms for DNA-based pathogen detection. NIP & Digital Fabrication Conference, 2018, 34, 107-112.	0.0	2
111	Effect of High Heating Rates on Microstructure of Alumina and Aluminum Titanate Ceramics. Microscopy and Microanalysis, 2001, 7, 414-415.	0.4	1
112	Preparation of biomolecule gel matrices for electron microscopy. Ultramicroscopy, 2008, 108, 309-313.	1.9	1
113	Structural Evolution During Reaction to Form Aluminum Titanate from Sol-Gel Precursors. Materials and Manufacturing Processes, 2004, 19, 641-650.	4.7	1
114	Bioâ€Nanopatterning: Inkjet Printed Nanopatterned Aptamerâ€Based Sensors for Improved Optical Detection of Foodborne Pathogens (Small 24/2019). Small, 2019, 15, 1970128.	10.0	0
115	Composite biomaterials. , 2022, , 149-169.		0
116	Materials and devices for sensors and detectors. , 2022, , 267-306.		0