Endre J Szili

List of Publications by Year
in descending order

#	ARTICLE	IF	CITATIONS
1	A â€˜tissue modelâ€™ to study the plasma delivery of reactive oxygen species. Journal Physics D: Applied Physics, 2014, 47, 152002.	2.8	103
2	Transcutaneous plasma stress: From soft-matter models to living tissues. Materials Science and Engineering Reports, 2019, 138, 36-59.	31.8	101
3	Tracking the Penetration of Plasma Reactive Species in Tissue Models. Trends in Biotechnology, 2018, 36, 594-602.	9.3	90
4	Probing the transport of plasma-generated RONS in an agarose target as surrogate for real tissue: dependency on time, distance and material composition. Journal Physics D: Applied Physics, 2015, 48, 202001.	2.8	83
5	How to assess the plasma delivery of RONS into tissue fluid and tissue. Journal Physics D: Applied Physics, 2016, 49, 304005.	2.8	81
6	Thin calcium phosphate coatings on titanium by electrochemical deposition in modified simulated body fluid. Journal of Biomedical Materials Research - Part A, 2006, 76A, 347-355.	4.0	79
7	Combination of iCVD and Porous Silicon for the Development of a Controlled Drug Delivery System. ACS Applied Materials & Interfaces, 2012, 4, 3566-3574.	8.0	75
8	The role of UV photolysis and molecular transport in the generation of reactive species in a tissue model with a cold atmospheric pressure plasma jet. Applied Physics Letters, 2019, 114, .	3.3	69
9	UVâ€“vis spectroscopy study of plasma-activated water: Dependence of the chemical composition on plasma exposure time and treatment distance. Japanese Journal of Applied Physics, 2018, 57, 0102B9.	1.5	62
10	Combined Immunocapture and Laser Desorption/Ionization Mass Spectrometry on Porous Silicon. Analytical Chemistry, 2010, 82, 4201-4208.	6.5	58
11	Combined effect of protein and oxygen on reactive oxygen and nitrogen species in the plasma treatment of tissue. Applied Physics Letters, 2015, 107, .	3.3	58
12	Enhancement of hydrogen peroxide production from an atmospheric pressure argon plasma jet and implications to the antibacterial activity of plasma activated water. Plasma Sources Science and Technology, 2021, 30, 035009.	3.1	58
13	Modelling the helium plasma jet delivery of reactive species into a 3D cancer tumour. Plasma Sources Science and Technology, 2018, 27, 014001.	3.1	57
14	A biochip platform for cell transfection assays. Biosensors and Bioelectronics, 2004, 19, 1395-1400.	10.1	53
15	Fabrication and Characterization of a Porous Silicon Drug Delivery System with an Initiated Chemical Vapor Deposition Temperature-Responsive Coating. Langmuir, 2016, 32, 301-308.	3.5	53
16	Controlling the Spatial Distribution of Polymer Surface Treatment Using Atmosphericâ€Pressure Microplasma Jets. Plasma Processes and Polymers, 2011, 8, 38-50.	3.0	51
17	Microplasma patterning of bonded microchannels using high-precision â€œinjectedâ€• electrodes. Lab on A Chip, 2011, 11, 541-544.	6.0	50
18	Interferometric porous silicon transducers using an enzymatically amplified optical signal. Sensors and Actuators B: Chemical, 2011, 160, 341-348.	7.8	50

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19	Ionized gas (plasma) delivery of reactive oxygen species (ROS) into artificial cells. Journal Physics D: Applied Physics, 2014, 47, 362001.	2.8	42
20	Studying the cytolytic activity of gas plasma with self-signalling phospholipid vesicles dispersed within a gelatin matrix. Journal Physics D: Applied Physics, 2013, 46, 185401.	2.8	36
21	Plasma medicine: Opportunities for nanotechnology in a digital age. Plasma Processes and Polymers, 2020, 17, e2000097.	3.0	35
22	In-situ UV Absorption Spectroscopy for Monitoring Transport of Plasma Reactive Species through Agarose as Surrogate for Tissue. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 439-444.	0.3	33
23	On the effect of serum on the transport of reactive oxygen species across phospholipid membranes. Biointerphases, 2015, 10, 029511.	1.6	33
24	Slow Molecular Transport of Plasma-Generated Reactive Oxygen and Nitrogen Species and O2 through Agarose as a Surrogate for Tissue. Plasma Medicine, 2015, 5, 125-143.	0.6	29
25	Onâ€demand Antimicrobial Treatment with Antibioticâ€Loaded Porous Silicon Capped with a pHâ€Responsive Dual Plasma Polymer Barrier. Chemistry - an Asian Journal, 2017, 12, 1605-1614.	3.3	29
26	Nanomechanical Characterization of Phospholipid Bilayer Islands on Flat and Porous Substrates: A Force Spectroscopy Study. Journal of Physical Chemistry B, 2009, 113, 10339-10347.	2.6	28
27	How membrane lipids influence plasma delivery of reactive oxygen species into cells and subsequent DNA damage: an experimental and computational study. Physical Chemistry Chemical Physics, 2019, 21, 19327-19341.	2.8	28
28	How plasma induced oxidation, oxygenation, and de-oxygenation influences viability of skin cells. Applied Physics Letters, 2016, 109, .	3.3	25
29	Modulating the concentrations of reactive oxygen and nitrogen species and oxygen in water with helium and argon gas and plasma jets. Japanese Journal of Applied Physics, 2019, 58, SAAB01.	1.5	25
30	On the effects of atmospheric-pressure microplasma array treatment on polymer and biological materials. RSC Advances, 2013, 3, 13437.	3.6	24
31	Fabrication and Operation of a Microcavity Plasma Array Device for Microscale Surface Modification. Plasma Processes and Polymers, 2012, 9, 638-646.	3.0	23
32	The assessment of cold atmospheric plasma treatment of DNA in synthetic models of tissue fluid, tissue and cells. Journal Physics D: Applied Physics, 2017, 50, 274001.	2.8	21
33	Genotoxicity and cytotoxicity of the plasma jet-treated medium on lymphoblastoid WIL2-NS cell line using the cytokinesis block micronucleus cytome assay. Scientific Reports, 2017, 7, 3854.	3.3	21
34	Generation of a stable surface concentration of amino groups on silica coated onto titanium substrates by the plasma enhanced chemical vapour deposition method. Applied Surface Science, 2009, 255, 6846-6850.	6.1	20
35	Polyoctanediol Citrate/Sebacate Bioelastomer Films: Surface Morphology, Chemistry and Functionality. Journal of Biomaterials Science, Polymer Edition, 2010, 21, 237-251.	3.5	20
36	Gradient Technology for High-Throughput Screening of Interactions between Cells and Nanostructured Materials. Journal of Nanomaterials, 2012, 2012, 1-7.	2.7	20

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37	Microplasma arrays: a new approach for maskless and localized patterning of materials surfaces. RSC Advances, 2012, 2, 12007.	3.6	20
38	The use of a micro-cavity discharge array at atmospheric pressure to investigate the spatial modification of polymer surfaces. Surface and Coatings Technology, 2010, 204, 2279-2288.	4.8	19
39	Design of a Microplasma Device for Spatially Localised Plasma Polymerisation. Plasma Processes and Polymers, 2011, 8, 695-700.	3.0	19
40	On-demand cold plasma activation of acetyl donors for bacteria and virus decontamination. Applied Physics Letters, 2021, 119, .	3.3	18
41	On cold atmospheric-pressure plasma jet induced DNA damage in cells. Journal Physics D: Applied Physics, 2021, 54, 035203.	2.8	17
42	The hormesis effect of plasma-elevated intracellular ROS on HaCaT cells. Journal Physics D: Applied Physics, 2015, 48, 495401.	2.8	16
43	Plasma enhanced chemical vapour deposition of silica onto titanium: Analysis of surface chemistry, morphology and hydroxylation. Surface Science, 2008, 602, 2402-2411.	1.9	14
44	Tailoring the Chemistry of Plasma-Activated Water Using a DC-Pulse-Driven Non-Thermal Atmospheric-Pressure Helium Plasma Jet. Plasma, 2019, 2, 127-137.	1.8	13
45	The influence of a second ground electrode on hydrogen peroxide production from an atmospheric pressure argon plasma jet and correlation to antibacterial efficacy and mammalian cell cytotoxicity. Journal Physics D: Applied Physics, 2022, 55, 125207.	2.8	13
46	Plasmaâ€“liquid interactions. Journal of Applied Physics, 2021, 130, .	2.5	11
47	Surface modification of biomaterials by plasma polymerization. , 2011, , 3-39.		9
48	Surface protein gradients generated in sealed microchannels using spatially varying helium microplasma. Biomicrofluidics, 2015, 9, 014124.	2.4	8
49	Osteoblast Biocompatibility on Poly(octanediol citrate)/Sebacate Elastomers with Controlled Wettability. Journal of Biomaterials Science, Polymer Edition, 2010, 21, 1039-1050.	3.5	7
50	Development of surface modification techniques for the covalent attachment of insulin-like growth factor-1 (IGF-1) on PECVD silica-coated titanium. Surface and Coatings Technology, 2010, 205, 1630-1635.	4.8	5
51	Oxidative Stress Pathways Linked to Apoptosis Induction by Low-Temperature Plasma Jet Activated Media in Bladder Cancer Cells: An In Vitro and In Vivo Study. Plasma, 2022, 5, 233-246.	1.8	5
52	Electrolysis-assisted sonication for removal of proteinaceous contamination from surgical grade stainless steel. Journal of Hospital Infection, 2012, 81, 41-49.	2.9	4
53	Porous silicon biosensor for the detection of autoimmune diseases. Proceedings of SPIE, 2007, 6799, 66.	0.8	3
54	Microplasma jet treatment of bovine serum albumin coatings for controlling enzyme and cell attachment. European Physical Journal: Special Topics, 2017, 226, 2873-2885.	2.6	3

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55	Mass Spectrometry Analysis of the Real-Time Transport of Plasma-Generated Ionic Species Through an Agarose Tissue Model Target. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2017, 30, 317-323.	0.3	3
56	Integration of microplasma and microfluidic technologies for localised microchannel surface modification. Proceedings of SPIE, 2011, , .	0.8	2
57	Electrical and optical properties of a gradient microplasma for microfluidic chips. Plasma Processes and Polymers, 2017, 14, 1600194.	3.0	2
58	A microarray platform for the creation of a matrix of site-specific transformed cells. , 2002, , .		2
59	Chemical and biomolecule patterning on 2D surfaces using atmospheric pressure microcavity plasma array devices. Proceedings of SPIE, 2011, , .	0.8	1
60	Investigation of Helium Plasma Jet-Treated Serum and Cell Media on the Viability of Skin Cells. Journal of Biomaterials and Tissue Engineering, 2018, 8, 892-899.	0.1	1
61	Gradient technologies for optimising biomaterials for cell screening. Cytotherapy, 2015, 17, S72.	0.7	0
62	Microplasma Array Patterning of Reactive Oxygen and Nitrogen Species onto Polystyrene. Frontiers in Physics, 2017, 5, .	2.1	0