Dayun Yan

List of Publications by Year
in descending order

134 papers	5,808 citations	76196 40 h-index	79541 73 g-index
140 all docs	140 docs citations	140 times ranked	3960 citing authors

#	Article	IF	Citations
1	Reinforcement Learning With Safe Exploration for Adaptive Plasma Cancer Treatment. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 482-492.	2.7	3
2	Selfâ€Adaptive Plasma Chemistry and Intelligent Plasma Medicine. Advanced Intelligent Systems, 2022, 4, 2100112.	3.3	12
3	Low-Temperature Plasma for Biology, Hygiene, and Medicine: Perspective and Roadmap. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 127-157.	2.7	64
4	Improving Seed Germination by Cold Atmospheric Plasma. Plasma, 2022, 5, 98-110.	0.7	13
5	Wettability Improvement in Oilâ€"Water Separation by Nano-Pillar ZnO Texturing. Nanomaterials, 2022, 12, 740.	1.9	5
6	BCL2A1 regulates Canady Helios Cold Plasma-induced cell death in triple-negative breast cancer. Scientific Reports, 2022, 12, 4038.	1.6	9
7	Cold Plasma Discharge Tube Enhances Antitumoral Efficacy of Temozolomide. ACS Applied Bio Materials, 2022, 5, 1610-1623.	2.3	11
8	Nanosynthesis by atmospheric arc discharges excited with pulsed-DC power: a review. Nanotechnology, 2022, 33, 342001.	1.3	2
9	The Granger Causal Effects of Canady Helios Cold Plasma on the Inhibition of Breast Cancer Cell Proliferation. Applied Sciences (Switzerland), 2022, 12, 4622.	1.3	1
10	Preclinical Cold Atmospheric Plasma Cancer Treatment. Cancers, 2022, 14, 3461.	1.7	15
11	A map of control for cold atmospheric plasma jets: From physical mechanisms to optimizations. Applied Physics Reviews, 2021, 8, .	5.5	46
12	Plasma-Treated Solutions (PTS) in Cancer Therapy. Cancers, 2021, 13, 1737.	1.7	70
13	On the selective killing of cold atmospheric plasma cancer treatment: Status and beyond. Plasma Processes and Polymers, 2021, 18, 2100020.	1.6	13
14	Non-thermal plasma multi-jet platform based on a flexible matrix. Review of Scientific Instruments, 2021, 92, 083505.	0.6	4
15	Cold Atmospheric Plasma Cancer Treatment, a Critical Review. Applied Sciences (Switzerland), 2021, 11, 7757.	1.3	22
16	Canady Helios Cold Plasma Induces Breast Cancer Cell Death by Oxidation of Histone mRNA. International Journal of Molecular Sciences, 2021, 22, 9578.	1.8	13
17	Multi-Modal Biological Destruction by Cold Atmospheric Plasma: Capability and Mechanism. Biomedicines, 2021, 9, 1259.	1.4	20
18	In Vitro and In Vivo Enhancement of Temozolomide Effect in Human Glioblastoma by Non-Invasive Application of Cold Atmospheric Plasma. Cancers, 2021, 13, 4485.	1.7	26

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19	A comparative study of cold atmospheric plasma treatment, chemical versus physical strategy. Journal Physics D: Applied Physics, 2021, 54, 095207.	1.3	15
20	Anti-Melanoma Capability of Contactless Cold Atmospheric Plasma Treatment. International Journal of Molecular Sciences, 2021, 22, 11728.	1.8	5
21	The Periodic Cellular Behaviors Under the Physical Effects of Plasma Medicine. , 2021, , .		0
22	The activation of cancer cells by a nanosecond-pulsed magnetic field generator. Journal Physics D: Applied Physics, 2020, 53, 125401.	1.3	11
23	A Physically Triggered Cell Death via Transbarrier Cold Atmospheric Plasma Cancer Treatment. ACS Applied Materials & Interfaces, 2020, 12, 34548-34563.	4.0	47
24	Energy considerations regarding pulsed arc production of nanomaterials. Journal of Applied Physics, 2020, 128, 033303.	1.1	4
25	Sensitization of glioblastoma cells to temozolomide by a helium gas discharge tube. Physics of Plasmas, 2020, 27, .	0.7	13
26	Combination therapy of cold atmospheric plasma (CAP) with temozolomide in the treatment of U87MG glioblastoma cells. Scientific Reports, 2020, 10, 16495.	1.6	39
27	The anti-glioblastoma effect of cold atmospheric plasma treatment: physical pathway v.s. chemical pathway. Scientific Reports, 2020, 10, 11788.	1.6	30
28	Cold atmospheric plasma cancer treatment, direct <i>versus</i> indirect approaches. Materials Advances, 2020, 1, 1494-1505.	2.6	37
29	Anodic arc discharge: Why pulsed?. Physics of Plasmas, 2020, 27, 054501.	0.7	3
30	Introducing adaptive cold atmospheric plasma: The perspective of adaptive cold plasma cancer treatments based on real-time electrochemical impedance spectroscopy. Physics of Plasmas, 2020, 27, .	0.7	26
31	Tracking nanoparticle growth in pulsed carbon arc discharge. Journal of Applied Physics, 2020, 127, 243301.	1.1	5
32	Preparation of underwater superoleophobic membranes via TiO2 electrostatic self-assembly for separation of stratified oil/water mixtures and emulsions. Journal of Membrane Science, 2020, 602, 117976.	4.1	63
33	Integrating cold atmospheric plasma with 3D printed bioactive nanocomposite scaffold for cartilage regeneration. Materials Science and Engineering C, 2020, 111, 110844.	3.8	22
34	Cold Atmospheric Plasma as a Novel Therapeutic Tool for the Treatment of Brain Cancer. Current Pharmaceutical Design, 2020, 26, 2195-2206.	0.9	13
35	Model for deformation of cells from external electric fields at or near resonant frequencies. Biomedical Physics and Engineering Express, 2020, 6, 065022.	0.6	2
36	Cold plasma-based control of the activation of pancreatic adenocarcinoma cells. Journal Physics D: Applied Physics, 2019, 52, 445202.	1.3	13

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37	Atmospheric Plasma Meets Cell: Plasma Tailoring by Living Cells. ACS Applied Materials & Interfaces, 2019, 11, 30621-30630.	4.0	25
38	Continuousâ€wave plasmaâ€generated electric field in 3D collagen gel during cold atmospheric plasma treatment. Plasma Processes and Polymers, 2019, 16, 1900129.	1.6	5
39	Cold Atmospheric Plasma as an Adjunct to Immunotherapy for Glioblastoma Multiforme. World Neurosurgery, 2019, 130, 369-376.	0.7	18
40	Micro-propulsion based on vacuum arcs. Journal of Applied Physics, 2019, 125, .	1.1	38
41	Cold atmospheric helium plasma jet in humid air environment. Journal of Applied Physics, 2019, 125, .	1.1	30
42	Plasma-enabled healing of graphene nano-platelets layer. Frontiers of Chemical Science and Engineering, 2019, 13, 350-359.	2.3	12
43	Mathematical modeling and control for cancer treatment with cold atmospheric plasma jet. Journal Physics D: Applied Physics, 2019, 52, 185202.	1.3	21
44	The impact of radicals in cold atmospheric plasma on the structural modification of gap junction: a reactive molecular dynamics study. International Journal of Smart and Nano Materials, 2019, 10, 144-155.	2.0	21
45	Cold atmospheric plasma and iron oxide-based magnetic nanoparticles for synergetic lung cancer therapy. Free Radical Biology and Medicine, 2019, 130, 71-81.	1.3	83
46	Microstructure changes in radiochromic films due to magnetic field and radiation. Medical Physics, 2019, 46, 293-301.	1.6	7
47	Adaptation of Operational Parameters of Cold Atmospheric Plasma for in Vitro Treatment of Cancer Cells. ACS Applied Materials & Interfaces, 2018, 10, 9269-9279.	4.0	67
48	Space micropropulsion systems for Cubesats and small satellites: From proximate targets to furthermost frontiers. Applied Physics Reviews, 2018, 5, .	5.5	242
49	Selective Treatment of Pancreatic Cancer Cells by Plasma-Activated Saline Solutions. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 116-120.	2.7	19
50	Atomic scale simulation of H₂O₂permeation through aquaporin: toward the understanding of plasma cancer treatment. Journal Physics D: Applied Physics, 2018, 51, 125401.	1.3	42
51	Guest Editorial Special Issue on Micropropulsion and Cubesats. IEEE Transactions on Plasma Science, 2018, 46, 210-213.	0.6	1
52	Metamaterials: Hierarchical Multicomponent Inorganic Metamaterials: Intrinsically Driven Selfâ€Assembly at the Nanoscale (Adv. Mater. 2/2018). Advanced Materials, 2018, 30, 1870009.	11.1	0
53	Plasmas for Treating Cancer: Opportunities for Adaptive and Self-Adaptive Approaches. Trends in Biotechnology, 2018, 36, 586-593.	4.9	131
54	Single-step synthesis of carbon encapsulated magnetic nanoparticles in arc plasma and potential biomedical applications. Journal of Colloid and Interface Science, 2018, 509, 414-421.	5.0	23

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55	Hierarchical Multicomponent Inorganic Metamaterials: Intrinsically Driven Selfâ€Assembly at the Nanoscale. Advanced Materials, 2018, 30, 1702226.	11.1	91
56	Materials for Space Technology: Advanced Materials for Nextâ€Generation Spacecraft (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	11.1	1
57	The Correlation Between the Cytotoxicity of Cold Atmospheric Plasma and the Extracellular H₂O₂-Scavenging Rate. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 618-623.	2.7	17
58	Advanced Materials for Nextâ€Generation Spacecraft. Advanced Materials, 2018, 30, e1802201.	11.1	92
59	Paclitaxel-Loaded Coreâ€"Shell Magnetic Nanoparticles and Cold Atmospheric Plasma Inhibit Non-Small Cell Lung Cancer Growth. ACS Applied Materials & Interfaces, 2018, 10, 43462-43471.	4.0	45
60	Special Issue on Plasma Medicine. Plasma, 2018, 1, 259-260.	0.7	2
61	The Cell Activation Phenomena in the Cold Atmospheric Plasma Cancer Treatment. Scientific Reports, 2018, 8, 15418.	1.6	67
62	A prospectus on innovations in the plasma treatment of cancer. Physics of Plasmas, 2018, 25, .	0.7	61
63	The Application of the Cold Atmospheric Plasma-Activated Solutions in Cancer Treatment. Anti-Cancer Agents in Medicinal Chemistry, 2018, 18, 769-775.	0.9	45
64	INTRACRANIAL TARGETING OF GLIOBLASTOMA MULTIFORME WITH COLD ATMOSPHERIC PLASMA. FASEB Journal, 2018, 32, .	0.2	0
65	Model Feedback Control for Adaptive Cold Atmospheric Plasma. , 2018, , .		0
66	The Strong Cell-based Hydrogen Peroxide Generation Triggered by Cold Atmospheric Plasma. Scientific Reports, 2017, 7, 10831.	1.6	56
67	In vitro Demonstration of Cancer Inhibiting Properties from Stratified Self-Organized Plasma-Liquid Interface. Scientific Reports, 2017, 7, 12163.	1.6	42
68	The Specific Vulnerabilities of Cancer Cells to the Cold Atmospheric Plasma-Stimulated Solutions. Scientific Reports, 2017, 7, 4479.	1.6	83
69	Enhancing cold atmospheric plasma treatment of cancer cells by static magnetic field. Bioelectromagnetics, 2017, 38, 53-62.	0.9	15
70	An Investigation of the Immediate Effect of Cold Atmospheric Plasma on Cancer Cells. , 2017, , .		1
71	Cold atmospheric plasma, a novel promising anti-cancer treatment modality. Oncotarget, 2017, 8, 15977-15995.	0.8	393
72	Paclitaxel and quercetin nanoparticles co-loaded in microspheres to prolong retention time for pulmonary drug delivery. International Journal of Nanomedicine, 2017, Volume 12, 8239-8255.	3.3	50

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73	A Novel Micro Cold Atmospheric Plasma Device for Glioblastoma Both In Vitro and In Vivo. Cancers, 2017, 9, 61.	1.7	103
74	Killing malignant melanoma cells with protoporphyrin IX-loaded polymersome-mediated photodynamic therapy and cold atmospheric plasma. International Journal of Nanomedicine, 2017, Volume 12, 4117-4127.	3.3	40
75	Strong H<inf>2</inf>O<inf>2</inf> Generation by Cancer Cells During the Cold Plasma Treatment. , 2017, , .		0
76	Application of a Micro-Cold Atmospheric Plasma Device (Î¼CAP) in Vitro and Vivo for Brain Cancer Therapy. , 2017, , .		1
77	Cold Atmospheric Plasma Inhibits HIV-1 Replication in Macrophages by Targeting Both the Virus and the Cells. PLoS ONE, 2016, 11, e0165322.	1.1	36
78	Synergistic Effect of Cold Atmospheric Plasma and Drug Loaded Core-shell Nanoparticles on Inhibiting Breast Cancer Cell Growth. Scientific Reports, 2016, 6, 21974.	1.6	70
79	Treatment of gastric cancer cells with nonthermal atmospheric plasma generated in water. Biointerphases, 2016, 11, 031010.	0.6	31
80	Cold atmospheric plasma (CAP) surface nanomodified 3D printed polylactic acid (PLA) scaffolds for bone regeneration. Acta Biomaterialia, 2016, 46, 256-265.	4.1	150
81	Effects of cold atmospheric plasma generated in deionized water in cell cancer therapy. Plasma Processes and Polymers, 2016, 13, 1151-1156.	1.6	49
82	Thruster Subsystem for the United States Naval Academy's (USNA) Ballistically Reinforced Communication Satellite (BRICSat-P). Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2016, 14, Pb_157-Pb_163.	0.1	18
83	Stabilizing the cold plasma-stimulated medium by regulating mediumâ€™s composition. Scientific Reports, 2016, 6, 26016.	1.6	105
84	Nanoscaled Metamaterial as an Advanced Heat Pump and Cooling Media. Advanced Materials Technologies, 2016, 1, 1600008.	3.0	28
85	Scalable graphene production: perspectives and challenges of plasma applications. Nanoscale, 2016, 8, 10511-10527.	2.8	97
86	Therapeutic Approaches Based on Plasmas and Nanoparticles. Journal of Nanomedicine Research, 2016, 3, .	1.8	12
87	Principles of using Cold Atmospheric Plasma Stimulated Media for Cancer Treatment. Scientific Reports, 2015, 5, 18339.	1.6	204
88	Protein retention on plasma-treated hierarchical nanoscale gold-silver platform. Scientific Reports, 2015, 5, 13379.	1.6	10
89	Toward understanding the selective anticancer capacity of cold atmospheric plasmaâ€”A model based on aquaporins (Review). Biointerphases, 2015, 10, 040801.	0.6	168
90	Formation of the self-assembled structures by the ultrasonic cavitation erosion-corrosion effect on carbon steel. AIP Advances, 2015, 5, 117132.	0.6	4

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91	Inhibition of the ultrasonic microjet-pits on the carbon steel in the particles-water mixtures. AIP Advances, 2015, 5, .	0.6	14
92	Cold Plasma Accelerates the Uptake of Gold Nanoparticles Into Glioblastoma Cells. Plasma Processes and Polymers, 2015, 12, 1364-1369.	1.6	26
93	Cold Atmospheric Plasma Modified Electrospun Scaffolds with Embedded Microspheres for Improved Cartilage Regeneration. PLoS ONE, 2015, 10, e0134729.	1.1	29
94	Enhanced human bone marrow mesenchymal stem cell functions on cathodic arc plasma-treated titanium. International Journal of Nanomedicine, 2015, 10, 7385.	3.3	8
95	Arcjet Ablation of Tungsten-Based Nuclear Rocket Fuel. Journal of Spacecraft and Rockets, 2015, 52, 1003-1008.	1.3	1
96	Plasma treatment for next-generation nanobiointerfaces. Biointerphases, 2015, 10, 029405.	0.6	9
97	Electric discharge during electrosurgery. Scientific Reports, 2015, 5, 9946.	1.6	25
98	Plasma for cancer treatment. Plasma Sources Science and Technology, 2015, 24, 033001.	1.3	331
99	Effect of Cold Plasma on Glial Cell Morphology Studied by Atomic Force Microscopy. PLoS ONE, 2015, 10, e0119111.	1.1	30
100	Differential Effects of Cold Atmospheric Plasma in the Treatment of Malignant Glioma. PLoS ONE, 2015, 10, e0126313.	1.1	63
101	The Effect of Tuning Cold Plasma Composition on Glioblastoma Cell Viability. PLoS ONE, 2014, 9, e98652.	1.1	155
102	Micro-Cathode Arc Thruster for small sattelites attitude control. , 2014, , .		0
103	Controlling plasma stimulated media in cancer treatment application. Applied Physics Letters, 2014, 105, .	1.5	90
104	Antiâ€Cancer Therapies of 21st Century: Novel Approach to Treat Human Cancers Using Cold Atmospheric Plasma. Plasma Processes and Polymers, 2014, 11, 1128-1137.	1.6	163
105	Enhanced Human Bone Marrow Mesenchymal Stem Cell Chondrogenic Differentiation on Cold Atmospheric Plasma Modified Cartilage Scaffold. Materials Research Society Symposia Proceedings, 2014, 1723, 1.	0.1	3
106	Cold atmospheric plasma treatment selectively targets head and neck squamous cell carcinoma cells. International Journal of Molecular Medicine, 2014, 34, 941-946.	1.8	164
107	Deflection of Streamer Path in DC Electric Potential. IEEE Transactions on Plasma Science, 2014, 42, 2402-2403.	0.6	5
108	Paper-based ultracapacitors with carbon nanotubes-graphene composites. Journal of Applied Physics, 2014, 115, 164301.	1.1	32

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109	Modeling of a Plasma Layer in Vicinity of a Hypersonic Vehicle Using Cathodic Arc. IEEE Transactions on Plasma Science, 2014, 42, 2660-2661.	0.6	2
110	Temporal Evolution of the Discharge in U.S. Medical Innovations Electrosurgical System SS-200E/Argon-2. IEEE Transactions on Plasma Science, 2014, 42, 2742-2743.	0.6	2
111	Plasma diagnostics of non-equilibrium atmospheric plasma jets. , 2014, , .		1
112	Cold atmospheric plasma for the ablative treatment of neuroblastoma. Journal of Pediatric Surgery, 2013, 48, 67-73.	0.8	100
113	Cold atmospheric plasma in cancer therapy. Physics of Plasmas, 2013, 20, .	0.7	396
114	On applicability of the â€œthermalized potentialâ€• solver in simulations of the plasma flow in Hall thrusters. Journal of Applied Physics, 2013, 114, 103305.	1.1	5
115	Method for graphene production in anodic arc. , 2013, , .		0
116	Micro-cathode thruster for cube satellite propulsion. , 2012, , .		0
117	Design a Biologically Inspired Nanostructured Coating for Better Osseointegration. Materials Research Society Symposia Proceedings, 2012, 1418, 111.	0.1	0
118	Plasma-wall interaction in Hall thrusters with magnetic lens configuration. Journal of Applied Physics, 2012, 111, .	1.1	13
119	Correlation Between Formation of the Plasma Jet and Synthesis of Graphene in Arc Discharge. IEEE Transactions on Plasma Science, 2011, 39, 2366-2367.	0.6	13
120	Microcathode Thruster $(muhbox{CT})$ Plume Characterization. IEEE Transactions on Plasma Science, 2011, 39, 2936-2937.	0.6	15
121	Simulation of Carbon Arc Discharge for the Synthesis of Nanotubes. IEEE Transactions on Plasma Science, 2011, 39, 2876-2877.	0.6	7
122	Kinetic Analysis of Electron Transport in a Cylindrical Hall Thruster. IEEE Transactions on Plasma Science, 2011, 39, 2946-2947.	0.6	3
123	Influence of Cold Plasma Atmospheric Jet on Surface Integrin Expression of Living Cells. Plasma Processes and Polymers, 2010, 7, 294-300.	1.6	74
124	Magnetic effect on the size distribution of catalyst and nanotubes under arc discharge system. , 2010, , .		0
125	Sheath and boundary conditions for plasma simulations of a Hall thruster discharge with magnetic lenses. Applied Physics Letters, 2009, 94, .	1.5	34
126	Effect of a magnetic field in simulating the plume field of an anode layer Hall thruster. Journal of Applied Physics, 2009, 105, .	1.1	15

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127	Progress Towards an End-to-End Model of an Electrothermal Chemical Gun. IEEE Transactions on Magnetics, 2009, 45, 412-416.	1.2	12
128	Numerical Parametric Study of the Capillary Plasma Source for Electrothermalâ€“Chemical Guns. IEEE Transactions on Magnetics, 2009, 45, 574-577.	1.2	16
129	Increasing the length of single-wall carbon nanotubes in a magnetically enhanced arc discharge. Applied Physics Letters, 2008, 92, .	1.5	135
130	Magnetic-field-enhanced synthesis of single-wall carbon nanotubes in arc discharge. Journal of Applied Physics, 2008, 103, .	1.1	51
131	Progress Towards an End-to-End Model of an Electrothermal Chemical Gun. , 2008, , .		3
132	Anodic plasma in Hall thrusters. Journal of Applied Physics, 2008, 103, 053309.	1.1	13
133	Electrostatic Manipulation of a Hypersonic Plasma Layer: Images of the Two-Dimensional Sheath. IEEE Transactions on Plasma Science, 2008, 36, 1198-1199.	0.6	40
134	Study on effect of microparticleâ€™s size on cavitation erosion in solid-liquid system. Journal of Applied Physics, 2007, 101, 103510.	1.1	38