

Pankaj Attri

List of Publications by Year in descending order

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123
papers

5,818
citations

61984

43
h-index

82547

72
g-index

129
all docs

129
docs citations

129
times ranked

6440
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomedical Importance of Indoles. <i>Molecules</i> , 2013, 18, 6620-6662.	3.8	927
2	Generation mechanism of hydroxyl radical species and its lifetime prediction during the plasma-initiated ultraviolet (UV) photolysis. <i>Scientific Reports</i> , 2015, 5, 9332.	3.3	367
3	Biogenic reductive preparation of magnetic inverse spinel iron oxide nanoparticles for the adsorption removal of heavy metals. <i>Chemical Engineering Journal</i> , 2017, 307, 74-84.	12.7	226
4	Activity and stability of $\hat{\text{I}}^{\pm}$ -chymotrypsin in biocompatible ionic liquids: enzyme refolding by triethyl ammonium acetate. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 2788-2796.	2.8	185
5	Effect of Ionic Liquids on the Physical Properties of the Newly Synthesized Conducting Polymer. <i>International Journal of Polymer Science</i> , 2018, 2018, 1-8.	2.7	142
6	Plasma Agriculture from Laboratory to Farm: A Review. <i>Processes</i> , 2020, 8, 1002.	2.8	125
7	Influence of Osmolytes and Denaturants on the Structure and Enzyme Activity of $\hat{\text{I}}^{\pm}$ -Chymotrypsin. <i>Journal of Physical Chemistry B</i> , 2010, 114, 1471-1478.	2.6	112
8	Bacterial inactivation by plasma treated water enhanced by reactive nitrogen species. <i>Scientific Reports</i> , 2018, 8, 11268.	3.3	101
9	Influence of reactive species on the modification of biomolecules generated from the soft plasma. <i>Scientific Reports</i> , 2015, 5, 8221.	3.3	100
10	Thermodynamic characterization of the biocompatible ionic liquid effects on protein model compounds and their functional groups. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 6566.	2.8	98
11	Measurements and Molecular Interactions for N,N-Dimethylformamide with Ionic Liquid Mixed Solvents. <i>Journal of Physical Chemistry B</i> , 2010, 114, 6126-6133.	2.6	92
12	A protic ionic liquid attenuates the deleterious actions of urea on $\hat{\text{I}}^{\pm}$ -chymotrypsin. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 17023.	2.8	85
13	Unexpected effects of the alteration of structure and stability of myoglobin and hemoglobin in ammonium-based ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 5514.	2.8	84
14	Thermophysical properties of dimethylsulfoxide with ionic liquids at various temperatures. <i>Fluid Phase Equilibria</i> , 2011, 304, 35-43.	2.5	77
15	The action of microsecond-pulsed plasma-activated media on the inactivation of human lung cancer cells. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 115401.	2.8	74
16	A comparative study for the inactivation of multidrug resistance bacteria using dielectric barrier discharge and nano-second pulsed plasma. <i>Scientific Reports</i> , 2015, 5, 13849.	3.3	73
17	Mechanism and comparison of needle-type non-thermal direct and indirect atmospheric pressure plasma jets on the degradation of dyes. <i>Scientific Reports</i> , 2016, 6, 34419.	3.3	71
18	Influence of ionic liquid and ionic salt on protein against the reactive species generated using dielectric barrier discharge plasma. <i>Scientific Reports</i> , 2015, 5, 17781.	3.3	70

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19	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. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	69
20	Influence of Alkyl Chain Length and Temperature on Thermophysical Properties of Ammonium-Based Ionic Liquids with Molecular Solvent. <i>Journal of Physical Chemistry B</i> , 2012, 116, 4561-4574.	2.6	68
21	Temperature Dependence Measurements and Structural Characterization of Trimethyl Ammonium Ionic Liquids with a Highly Polar Solvent. <i>Journal of Physical Chemistry B</i> , 2011, 115, 10086-10097.	2.6	65
22	Influence of Reactive Oxygen Species on the Enzyme Stability and Activity in the Presence of Ionic Liquids. <i>PLoS ONE</i> , 2013, 8, e75096.	2.5	65
23	Induced apoptosis in melanocytes cancer cell and oxidation in biomolecules through deuterium oxide generated from atmospheric pressure non-thermal plasma jet. <i>Scientific Reports</i> , 2015, 4, 7589.	3.3	65
24	Exploring the thermal stability of $\hat{1}\pm$ -chymotrypsin in protic ionic liquids. <i>Process Biochemistry</i> , 2013, 48, 462-470.	3.7	64
25	Thermophysical Properties of Aqueous Solution of Ammonium-Based Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2014, 118, 5971-5982.	2.6	64
26	Effects of plasma irradiation using various feeding gases on growth of <i>Raphanus sativus</i> L.. <i>Archives of Biochemistry and Biophysics</i> , 2016, 605, 129-140.	3.0	64
27	Carbon Nanotubes (CNTs): A Potential Nanomaterial for Water Purification. <i>Journal of Composites Science</i> , 2020, 4, 135.	3.0	63
28	Temperature Effect on the Molecular Interactions between Ammonium Ionic Liquids and <i>N,N</i> -Dimethylformamide. <i>Journal of Physical Chemistry B</i> , 2010, 114, 13415-13425.	2.6	62
29	Triethylammonium acetate ionic liquid assisted one-pot synthesis of dihydropyrimidinones and evaluation of their antioxidant and antibacterial activities. <i>Arabian Journal of Chemistry</i> , 2017, 10, 206-214.	4.9	61
30	Effect of anion variation on the thermophysical properties of triethylammonium based protic ionic liquids with polar solvent. <i>Thermochimica Acta</i> , 2013, 556, 75-88.	2.7	56
31	Variation in the structural changes of myoglobin in the presence of several protic ionic liquid. <i>International Journal of Biological Macromolecules</i> , 2014, 69, 114-123.	7.5	52
32	Synthesis and Antiproliferative Activity of Ammonium and Imidazolium Ionic Liquids against T98G Brain Cancer Cells. <i>Molecules</i> , 2012, 17, 13727-13739.	3.8	51
33	Water and a protic ionic liquid acted as refolding additives for chemically denatured enzymes. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 7475.	2.8	51
34	Structural and functional analysis of lysozyme after treatment with dielectric barrier discharge plasma and atmospheric pressure plasma jet. <i>Scientific Reports</i> , 2017, 7, 1027.	3.3	51
35	Evaluation of Thermophysical Properties of Ionic Liquids with Polar Solvent: A Comparable Study of Two Families of Ionic Liquids with Various Ions. <i>Journal of Physical Chemistry B</i> , 2013, 117, 12535-12548.	2.6	49
36	Impact of Gamma rays and DBD plasma treatments on wastewater treatment. <i>Scientific Reports</i> , 2018, 8, 2926.	3.3	49

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37	Highly Conductive Aromatic Functionalized Multi-Walled Carbon Nanotube for Inkjet Printable High Performance Supercapacitor Electrodes. PLoS ONE, 2015, 10, e0131475.	2.5	48
38	Printable multi-walled carbon nanotubes thin film for high performance all solid state flexible supercapacitors. Materials Research Bulletin, 2016, 83, 167-171.	5.2	48
39	Effect of polyols on the native structure of $\hat{I}\pm$ -chymotrypsin: A comparable study. Thermochemica Acta, 2012, 536, 55-62.	2.7	47
40	A Preliminary Study of the Effect of DBD Plasma and Osmolytes on T98G Brain Cancer and HEK Non-Malignant Cells. Molecules, 2013, 18, 4917-4928.	3.8	47
41	Temperature effect on the molecular interactions between two ammonium ionic liquids and dimethylsulfoxide. Journal of Molecular Liquids, 2011, 164, 218-225.	4.9	44
42	Triethylammonium acetate (TEAA): a recyclable inexpensive ionic liquid promotes the chemoselective aza- and thia-Michael reactions. Monatshefte für Chemie, 2008, 139, 1041-1047.	1.8	43
43	Temperature dependence measurements and molecular interactions for ammonium ionic liquid with N-methyl-2-pyrrolidone. Journal of Chemical Thermodynamics, 2012, 54, 223-237.	2.0	42
44	Structural Basis for the Enhanced Stability of Protein Model Compounds and Peptide Backbone Unit in Ammonium Ionic Liquids. Journal of Physical Chemistry B, 2012, 116, 11968-11978.	2.6	42
45	Influence of anion on thermophysical properties of ionic liquids with polar solvent. Journal of Chemical Thermodynamics, 2013, 58, 269-278.	2.0	41
46	Variation in structure of proteins by adjusting reactive oxygen and nitrogen species generated from dielectric barrier discharge jet. Scientific Reports, 2016, 6, 35883.	3.3	40
47	Trehalose protects urea-induced unfolding of $\hat{I}\pm$ -chymotrypsin. International Journal of Biological Macromolecules, 2010, 47, 540-545.	7.5	39
48	Influence of protic ionic liquids on the structure and stability of succinylated Con A. International Journal of Biological Macromolecules, 2012, 51, 119-128.	7.5	38
49	Ammonium ionic liquids as convenient co-solvents for the structure and stability of succinylated Con A. Journal of Chemical Thermodynamics, 2012, 52, 78-88.	2.0	37
50	Analysis of the antimicrobial effects of nonthermal plasma on fungal spores in ionic solutions. Free Radical Biology and Medicine, 2014, 72, 191-199.	2.9	37
51	Chemical Crosslinking: Role in Protein and Peptide Science. Current Protein and Peptide Science, 2017, 18, 946-955.	1.4	37
52	Influence of Hydroxyl Group Position and Temperature on Thermophysical Properties of Tetraalkylammonium Hydroxide Ionic Liquids with Alcohols. PLoS ONE, 2014, 9, e86530.	2.5	36
53	Influence of temperature on thermophysical properties of ammonium ionic liquids with N-methyl-2-pyrrolidone. Thermochemica Acta, 2012, 545, 131-140.	2.7	35
54	Influence of plasma-activated compounds on melanogenesis and tyrosinase activity. Scientific Reports, 2016, 6, 21779.	3.3	35

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55	Thermodynamic contributions of peptide backbone unit from water to biocompatible ionic liquids at T=298.15K. <i>Journal of Chemical Thermodynamics</i> , 2012, 45, 122-136.	2.0	34
56	Bionanocomposites: Green materials for a sustainable future. , 2018, , 699-712.		33
57	The Solubility and Stability of Amino Acids in Biocompatible Ionic Liquids. <i>Protein and Peptide Letters</i> , 2013, 21, 15-24.	0.9	32
58	Alterations of DNA Methylation Caused by Cold Plasma Treatment Restore Delayed Germination of Heat-Stressed Rice (<i>Oryza sativa</i> L.) Seeds. <i>ACS Agricultural Science and Technology</i> , 2021, 1, 5-10.	2.3	32
59	How Does Plasma Activated Media Treatment Differ From Direct Cold Plasma Treatment?. <i>Anti-Cancer Agents in Medicinal Chemistry</i> , 2018, 18, 805-814.	1.7	32
60	Influence of water vapour with non-thermal plasma jet on the apoptosis of SK-BR-3 breast cancer cells. <i>RSC Advances</i> , 2015, 5, 14670-14677.	3.6	30
61	Transition Metal Oxides and Their Composites for Photocatalytic Dye Degradation. <i>Journal of Composites Science</i> , 2021, 5, 82.	3.0	29
62	Impact of seed color and storage time on the radish seed germination and sprout growth in plasma agriculture. <i>Scientific Reports</i> , 2021, 11, 2539.	3.3	28
63	Inactivation of human pancreatic ductal adenocarcinoma with atmospheric plasma treated media and water: a comparative study. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 255401.	2.8	27
64	Influence of biocompatible ammonium ionic liquids on the solubility of L-alanine and L-valine in water. <i>Fluid Phase Equilibria</i> , 2012, 335, 39-45.	2.5	26
65	Effects of atmospheric-pressure non-thermal plasma jets on enzyme solutions. <i>Journal of the Korean Physical Society</i> , 2012, 60, 959-964.	0.7	25
66	CAP modifies the structure of a model protein from thermophilic bacteria: mechanisms of CAP-mediated inactivation. <i>Scientific Reports</i> , 2018, 8, 10218.	3.3	25
67	Potential Antioxidant Anthraquinones Isolated from <i>Rheum emodi</i> Showing Nematicidal Activity against <i>Meloidogyne incognita</i> . <i>Journal of Chemistry</i> , 2014, 2014, 1-9.	1.9	24
68	Impact of atmospheric pressure plasma treated seeds on germination, morphology, gene expression and biochemical responses. <i>Japanese Journal of Applied Physics</i> , 2021, 60, 040502.	1.5	24
69	Ammonium based ionic liquids act as compatible solvents for glycine peptides. <i>Journal of Chemical Thermodynamics</i> , 2013, 56, 21-31.	2.0	23
70	Simple ammonium ionic liquid catalyses the 1,5-benzodiazepine derivatives under mild conditions. <i>Green Chemistry Letters and Reviews</i> , 2010, 3, 249-256.	4.7	22
71	TMAO and sorbitol attenuate the deleterious action of atmospheric pressure non-thermal jet plasma on β -chymotrypsin. <i>RSC Advances</i> , 2012, 2, 7146.	3.6	21
72	Plasma treatment causes structural modifications in lysozyme, and increases cytotoxicity towards cancer cells. <i>International Journal of Biological Macromolecules</i> , 2021, 182, 1724-1736.	7.5	21

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73	Impact of radish sprouts seeds coat color on the electron paramagnetic resonance signals after plasma treatment. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SHHF01.	1.5	20
74	The protective action of osmolytes on the deleterious effects of gamma rays and atmospheric pressure plasma on protein conformational changes. <i>Scientific Reports</i> , 2017, 7, 8698.	3.3	19
75	Impact of an ionic liquid on protein thermodynamics in the presence of cold atmospheric plasma and gamma rays. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 25277-25288.	2.8	19
76	Structural modification of NADPH oxidase activator (Noxa 1) by oxidative stress: An experimental and computational study. <i>International Journal of Biological Macromolecules</i> , 2020, 163, 2405-2414.	7.5	19
77	Interaction studies of carbon nanomaterials and plasma activated carbon nanomaterials solution with telomere binding protein. <i>Scientific Reports</i> , 2017, 7, 2636.	3.3	17
78	Green methodology for the preparation of disulfide. <i>Green Chemistry Letters and Reviews</i> , 2012, 5, 33-42.	4.7	16
79	Elucidating Interactions and Conductivity of Newly Synthesised Low Bandgap Polymer with Protic and Aprotic Ionic Liquids. <i>PLoS ONE</i> , 2013, 8, e68970.	2.5	16
80	Cocktail of reactive species generated by cold atmospheric plasma: oral administration induces non-small cell lung cancer cell death. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 185202.	2.8	15
81	Refolding of urea-induced denaturation of model proteins by trimethylamine N-oxide. <i>Thermochimica Acta</i> , 2011, 526, 143-150.	2.7	14
82	Perspectives of Plasma-treated Solutions as Anticancer Drugs. <i>Anti-Cancer Agents in Medicinal Chemistry</i> , 2019, 19, 436-438.	1.7	14
83	Effect of nanosecond-pulsed plasma on the structural modification of biomolecules. <i>RSC Advances</i> , 2015, 5, 47300-47308.	3.6	13
84	Influence of osmolytes and ionic liquids on the Bacteriorhodopsin structure in the absence and presence of oxidative stress: A combined experimental and computational study. <i>International Journal of Biological Macromolecules</i> , 2020, 148, 657-665.	7.5	13
85	Possible impact of plasma oxidation on the structure of the C-terminal domain of SARS-CoV-2 spike protein: a computational study. <i>Applied Physics Express</i> , 2021, 14, 027002.	2.4	13
86	Functional nitrogen science based on plasma processing: quantum devices, photocatalysts and activation of plant defense and immune systems. <i>Japanese Journal of Applied Physics</i> , 2022, 61, SA0805.	1.5	13
87	Plasma modification of poly(2-heptadecyl-4-vinylthieno[3,4-d]thiazole) low bandgap polymer and its application in solar cells. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 27043-27052.	2.8	12
88	Optical and Structural Properties of Nanobiomaterials. <i>Journal of Nanoscience and Nanotechnology</i> , 2014, 14, 221-249.	0.9	12
89	Influence of Nitric Oxide generated through microwave plasma on L6 skeletal muscle cell myogenesis via oxidative signaling pathways. <i>Scientific Reports</i> , 2017, 7, 542.	3.3	12
90	Enhancement of cellular glucose uptake by reactive species: a promising approach for diabetes therapy. <i>RSC Advances</i> , 2018, 8, 9887-9894.	3.6	12

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91	Outcomes of Pulsed Electric Fields and Nonthermal Plasma Treatments on Seed Germination and Protein Functions. <i>Agronomy</i> , 2022, 12, 482.	3.0	12
92	Effect of temperature on the interactions between low bandgap polymer and ionic liquids. <i>Thermochimica Acta</i> , 2014, 579, 15-21.	2.7	11
93	Treatment of organic wastewater by a combination of non-thermal plasma and catalyst: a review. <i>Reviews of Modern Plasma Physics</i> , 2022, 6, .	4.1	11
94	Synthetic Strategies for Free & Stable N-Heterocyclic Carbenes and Their Precursors. <i>Mini-Reviews in Organic Chemistry</i> , 2013, 10, 180-197.	1.3	10
95	Molecular interactions between carbon nanotubes and ammonium ionic liquids and their catalysis properties. <i>Materials Research Bulletin</i> , 2014, 58, 6-9.	5.2	9
96	Green route for ammonium nitrate synthesis: fertilizer for plant growth enhancement. <i>RSC Advances</i> , 2021, 11, 28521-28529.	3.6	9
97	Influence of alkyl chain substitution of ammonium ionic liquids on the activity and stability of tobacco etch virus protease. <i>International Journal of Biological Macromolecules</i> , 2020, 155, 439-446.	7.5	8
98	Physicochemical Properties of Polyaniline-Ionic Liquid Mixtures and Their Application in Dye-Sensitized Solar Cells. <i>Science of Advanced Materials</i> , 2015, 7, 2583-2595.	0.7	8
99	Influence of nanosecond pulsed plasma on the non-enzymatic pathway for the generation of nitric oxide from L-arginine and the modification of graphite oxide to increase the solar cell efficiency. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 18375.	2.8	7
100	Photovoltaic properties of novel thiophene- and selenophene-based conjugated low bandgap polymers: a comparative study. <i>New Journal of Chemistry</i> , 2017, 41, 6315-6321.	2.8	7
101	Adhesion and differentiation of human mesenchymal stem cells on plasma-functionalized graphenes with different feeding gases. <i>Carbon</i> , 2014, 77, 302-310.	10.3	6
102	Highly efficient and transparent counter electrode for application in bifacial solar cells. <i>Chemical Physics Letters</i> , 2021, 768, 138369.	2.6	6
103	Impact of Reactive Oxygen and Nitrogen Species Produced by Plasma on Mdm2-p53 Complex. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9585.	4.1	5
104	Effects of concentrated light on the performance and stability of a quasi-solid electrolyte in dye-sensitized solar cells. <i>Chemical Physics Letters</i> , 2021, 781, 138986.	2.6	5
105	Time of Flight Size Control of Carbon Nanoparticles Using Ar+CH4 Multi-Hollow Discharge Plasma Chemical Vapor Deposition Method. <i>Processes</i> , 2021, 9, 2.	2.8	5
106	Mechanistic Insight into Permeation of Plasma-Generated Species from Vacuum into Water Bulk. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6330.	4.1	5
107	Cold Atmospheric Plasma Activated Solution: A New Approach for Cancer Treatment. <i>Anti-Cancer Agents in Medicinal Chemistry</i> , 2018, 18, 768-768.	1.7	4
108	Effect of plasma-induced oxidative stress on the glycolysis pathway of Escherichia coli. <i>Computers in Biology and Medicine</i> , 2020, 127, 104064.	7.0	4

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109	Plasma Treatment Effect on the Paramagnetic Species of Barley Seed Radical's Intensity: An EPR Study. Plasma Medicine, 2020, 10, 159-168.	0.6	4
110	Improved luminescence performance of Yb ³⁺ -Er ³⁺ -Zn ²⁺ : Y ₂ O ₃ phosphor and its application to solar cells. Optical Materials, 2022, 123, 111928.	3.6	4
111	Single-walled Carbon Nanotube-triethylammonium Ionic Liquid as a New Catalytic System for Michael Reaction. Bulletin of the Korean Chemical Society, 2014, 35, 3035-3040.	1.9	3
112	Interaction Studies between Newly Synthesized Photosensitive Polymer and Ionic Liquids. International Journal of Polymer Science, 2015, 2015, 1-8.	2.7	2
113	Changes in the physical properties of low bandgap polymer after interaction with ionic liquids. Journal of Saudi Chemical Society, 2021, 25, 101227.	5.2	2
114	Role of Polymer Nanocomposites in Wastewater Treatment. , 2014, , 139-156.		2
115	Improvement in the diffraction efficiency of a polymer using an ionic liquid. Journal of the Serbian Chemical Society, 2018, 83, 213-220.	0.8	2
116	Performance Characteristics of Bifacial Dye-Sensitized Solar Cells with a V-Shaped Low-Concentrating Light System. ACS Applied Energy Materials, 0, , .	5.1	2
117	3. Black but gold: carbon nanomaterials for waste water purification. , 2020, , 42-92.		1
118	Effect of DBD plasma on human cells in presence of osmolytes and denaturant. Materials Research Society Symposia Proceedings, 2012, 1469, 1.	0.1	0
119	Single-Walled Carbon Nanotube-Ammonium Ionic Liquid a New Catalyst for Synthesis of 3,4-Dihydropyrimidinones. Advanced Science, Engineering and Medicine, 2014, 6, 405-411.	0.3	0
120	Special Issue on "Advances in Plasma Diagnostics and Applications": Processes, 2022, 10, 654.	2.8	0
121	The Effects of Spin-Coating Rate on Surface Roughness, Thickness, and Electrochemical Properties of a Pt Polymer Counter Electrode. Advanced Engineering Forum, 0, 45, 1-13.	0.3	0
122	Performance comparison of nitrile-based liquid electrolytes on bifacial dye-sensitized solar cells under low-concentrated light. MRS Advances, 0, , 1.	0.9	0
123	The increase in diffraction efficiency of an azobenzene side-chain polymer using imidazolium and ammonium ionic liquids. Journal of Saudi Chemical Society, 2022, , 101485.	5.2	0