Vijay Pratap Singh

List of Publications by Year
in descending order

244	5,843	94433	144013
papers	citations	37 h-index	57 g-index

271	271	271	3513
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Silicon Nanoparticles More Efficiently Alleviate Arsenate Toxicity than Silicon in Maize Cultiver and Hybrid Differing in Arsenate Tolerance. Frontiers in Environmental Science, 2016, 4, .	3.3	253
2	Impact of exogenous silicon addition on chromium uptake, growth, mineral elements, oxidative stress, antioxidant capacity, and leaf and root structures in rice seedlings exposed to hexavalent chromium. Acta Physiologiae Plantarum, 2012, 34, 279-289.	2.1	196
3	Silicon-mediated alleviation of Cr(VI) toxicity in wheat seedlings as evidenced by chlorophyll florescence, laser induced breakdown spectroscopy and anatomical changes. Ecotoxicology and Environmental Safety, 2015, 113, 133-144.	6.0	152
4	Rice seedlings under cadmium stress: effect of silicon on growth, cadmium uptake, oxidative stress, antioxidant capacity and root and leaf structures. Chemistry and Ecology, 2012, 28, 281-291.	1.6	129
5	Nitric oxide alleviates arsenic-induced toxic effects in ridged Luffa seedlings. Plant Physiology and Biochemistry, 2013, 71, 155-163.	5.8	122
6	Chlorpyrifos degradation by the cyanobacterium Synechocystis sp. strain PUPCCC 64. Environmental Science and Pollution Research, 2011, 18, 1351-1359.	5.3	97
7	Influence of Exogenous Silicon Addition on Aluminium Tolerance in Rice Seedlings. Biological Trace Element Research, 2011, 144, 1260-1274.	3.5	94
8	Nitric oxide and hydrogen sulfide: an indispensable combination for plant functioning. Trends in Plant Science, 2021, 26, 1270-1285.	8.8	90
9	Modification of chromium (VI) phytotoxicity by exogenous gibberellic acid application in Pisum sativum (L.) seedlings. Acta Physiologiae Plantarum, 2011, 33, 1385-1397.	2.1	86
10	Responses of photosynthesis, nitrogen and proline metabolism to salinity stress in Solanum lycopersicum under different levels of nitrogen supplementation. Plant Physiology and Biochemistry, 2016, 109, 72-83.	5.8	84
11	LIB spectroscopic and biochemical analysis to characterize lead toxicity alleviative nature of silicon in wheat (Triticum aestivum L.) seedlings. Journal of Photochemistry and Photobiology B: Biology, 2016, 154, 89-98.	3.8	75
12	Zinc Oxide (1% Cu) Nanoparticle in Nematic Liquid Crystal: Dielectric and Electro-Optical Study. Japanese Journal of Applied Physics, 2009, 48, 101501.	1.5	72
13	Exogenous nitric oxide requires endogenous hydrogen sulfide to induce the resilience through sulfur assimilation in tomato seedlings under hexavalent chromium toxicity. Plant Physiology and Biochemistry, 2020, 155, 20-34.	5.8	66
14	Effect of TiO₂nanoparticles dispersion on ionic behaviour in nematic liquid crystal. Liquid Crystals, 2015, 42, 1095-1101.	2.2	65
15	A brief appraisal of ethylene signaling under abiotic stress in plants. Plant Signaling and Behavior, 2020, 15, 1782051.	2.4	64
16	Regulation of ascorbate-glutathione cycle by exogenous nitric oxide and hydrogen peroxide in soybean roots under arsenate stress. Journal of Hazardous Materials, 2021, 409, 123686.	12.4	59
17	Hydrogen sulfide and nitric oxide signal integration and plant development under stressed/nonâ€stressed conditions. Physiologia Plantarum, 2020, 168, 239-240.	5.2	58
18	Interactive Effect of Silicon (Si) and Salicylic Acid (SA) in Maize Seedlings and Their Mechanisms of Cadmium (Cd) Toxicity Alleviation. Journal of Plant Growth Regulation, 2019, 38, 1587-1597.	5.1	55

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19	Silicon crosstalk with reactive oxygen species, phytohormones and other signaling molecules. Journal of Hazardous Materials, 2021, 408, 124820.	12.4	55
20	Regulation of cadmium toxicity in roots of tomato by indole acetic acid with special emphasis on reactive oxygen species production and their scavenging. Plant Physiology and Biochemistry, 2019, 142, 193-201.	5.8	54
21	Improved dielectric and electro-optical parameters of ZnO nano-particle (8% Cu2+) doped nematic liquid crystal. Journal of Molecular Structure, 2013, 1035, 371-377.	3.6	53
22	Avenues of the membrane transport system in adaptation of plants to abiotic stresses. Critical Reviews in Biotechnology, 2019, 39, 861-883.	9.0	53
23	Silicon induces adventitious root formation in rice under arsenate stress with involvement of nitric oxide and indole-3-acetic acid. Journal of Experimental Botany, 2021, 72, 4457-4471.	4.8	53
24	Dielectric and electro-optical study of ZnO nano rods doped ferroelectric liquid crystals. Journal of Materials Science, 2011, 46, 5969-5976.	3.7	51
25	Differential effect of UV-B radiation on growth, oxidative stress and ascorbateâ€“glutathione cycle in two cyanobacteria under copper toxicity. Plant Physiology and Biochemistry, 2012, 61, 61-70.	5.8	50
26	Nitrogen alleviates salinity toxicity in Solanum lycopersicum seedlings by regulating ROS homeostasis. Plant Physiology and Biochemistry, 2019, 141, 466-476.	5.8	48
27	Auxin metabolic network regulates the plant response to metalloids stress. Journal of Hazardous Materials, 2021, 405, 124250.	12.4	47
28	Synergistic action of silicon nanoparticles and indole acetic acid in alleviation of chromium (CrVI) toxicity in Oryza sativa seedlings. Journal of Biotechnology, 2022, 343, 71-82.	3.8	47
29	Silicon and plant growth promoting rhizobacteria differentially regulate AgNP-induced toxicity in Brassica juncea: Implication of nitric oxide. Journal of Hazardous Materials, 2020, 390, 121806.	12.4	46
30	Structural modifications of plant organs and tissues by metals and metalloids in the environment: A review. Plant Physiology and Biochemistry, 2021, 159, 100-112.	5.8	46
31	Application of zinc oxide nanoparticles as fertilizer boosts growth in rice plant and alleviates chromium stress by regulating genes involved in oxidative stress. Chemosphere, 2022, 303, 134554.	8.2	44
32	Room temperature discotic liquid crystalline triphenylene-pentaalkynylbenzene dyads as an emitter in blue OLEDs and their charge transfer complexes with ambipolar charge transport behaviour. Journal of Materials Chemistry C, 2019, 7, 5724-5738.	5.5	42
33	Nitric oxide in plants: an ancient molecule with new tasks. Plant Growth Regulation, 2020, 90, 1-13.	3.4	42
34	Ferroelectric liquid crystals versus dyed ferroelectric liquid crystals in SmCâˆ— phase. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 371, 490-498.	2.1	41
35	Plant Responses to Metal Stress. , 2014, , 215-248.		41
36	Quenching of photoluminescence and enhanced contrast of ferroelectric liquid crystal dispersed with Cd1â^'Zn S/ZnS core/shell nanocrystals. Journal of Luminescence, 2016, 173, 250-256.	3.1	39

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37	Study of an interesting physical mechanism of memory effect in nematic liquid crystal dispersed with quantum dots. Liquid Crystals, 2019, 46, 725-735.	2.2	39
38	Silicon and nitric oxideâ€mediated mechanisms of cadmium toxicity alleviation in wheat seedlings. Physiologia Plantarum, 2022, 174, .	5.2	39
39	Effect of Nitric Oxide on Seed Germination and Seedling Development of Tomato Under Chromium Toxicity. Journal of Plant Growth Regulation, 2021, 40, 2358-2370.	5.1	39
40	Recent progress and future perspectives on carbon-nanomaterial-dispersed liquid crystal composites. Journal Physics D: Applied Physics, 2022, 55, 083002.	2.8	39
41	Additional calcium and sulfur manages hexavalent chromium toxicity in Solanum lycopersicum L. and Solanum melongena L. seedlings by involving nitric oxide. Journal of Hazardous Materials, 2020, 398, 122607.	12.4	38
42	Cd 1â^'X Zn X S/ZnS core/shell quantum dots in nematic liquid crystals to improve material parameter for better performance of liquid crystal based devices. Journal of Molecular Liquids, 2018, 255, 93-101.	4.9	36
43	Kinetics and physico-chemical characterization of exopolysaccharides produced by the cyanobacterium Oscillatoria formosa. World Journal of Microbiology and Biotechnology, 2011, 27, 2139-2146.	3.6	35
44	Core/shell quantum dots in ferroelectric liquid crystals matrix: effect of spontaneous polarisation coupling with dopant. Liquid Crystals, 2016, 43, 980-993.	2.2	35
45	Glutathione and hydrogen sulfide are required for sulfurâ€mediated mitigation of Cr(VI) toxicity in tomato, pea and brinjal seedlings. Physiologia Plantarum, 2020, 168, 406-421.	5.2	35
46	Heavy metal induced regulation of plant biology: Recent insights. Physiologia Plantarum, 2022, 174, e13688.	5.2	35
47	Differential responses of pea seedlings to indole acetic acid under manganese toxicity. Acta Physiologiae Plantarum, 2011, 33, 451-462.	2.1	34
48	CdSe quantum dot-dispersed DOBAMBC: an electro-optical study. Liquid Crystals, 2013, 40, 528-533.	2.2	34
49	Dielectric, electro-optical, and photoluminescence characteristics of ferroelectric liquid crystals on a graphene-coated indium tin oxide substrate. Physical Review E, 2014, 90, 022501.	2.1	34
50	Sign inversion of dielectric anisotropy in nematic liquid crystal by dye doping. Journal of Physics and Chemistry of Solids, 2010, 71, 1311-1315.	4.0	33
51	Ferroelectric liquid crystal matrix dispersed with Cu doped ZnO nanoparticles. Journal of Non-Crystalline Solids, 2013, 363, 178-186.	3.1	33
52	Room temperature perylene based columnar liquid crystals as solid-state fluorescent emitters in solution-processable organic light-emitting diodes. Journal of Materials Chemistry C, 2020, 8, 12485-12494.	5.5	31
53	Mitigation of arsenate toxicity by indole-3-acetic acid in brinjal roots: Plausible association with endogenous hydrogen peroxide. Journal of Hazardous Materials, 2021, 405, 124336.	12.4	31
54	Cd_{1-x}Zn_xS/ZnS core/shell quantum dot ferroelectric liquid crystal composite system: analysis of faster optical response and lower operating voltage. Liquid Crystals, 2014, 41, 1811-1820.	2.2	30

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55	Role of Silicon in Enrichment of Plant Nutrients and Protection from Biotic and Abiotic Stresses. , 2014, , 39-56.		30
56	NaCl-induced physiological and biochemical changes in two cyanobacteria Nostoc muscorum and Phormidium foveolarum acclimatized to different photosynthetically active radiation. Journal of Photochemistry and Photobiology B: Biology, 2015, 151, 221-232.	3.8	30
57	Tuning of birefringence, response time, and dielectric anisotropy by the dispersion of fluorescent dye into the nematic liquid crystal. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	29
58	Ascorbic acid is essential for inducing chromium (VI) toxicity tolerance in tomato roots. Journal of Biotechnology, 2020, 322, 66-73.	3.8	29
59	Hydrogen sulfide (H2S) underpins the beneficial silicon effects against the copper oxide nanoparticles (CuO NPs) phytotoxicity in Oryza sativa seedlings. Journal of Hazardous Materials, 2021, 415, 124907.	12.4	29
60	Applicability of TiO2 nanoparticle towards suppression of screening effect in nematic liquid crystal. Journal of Molecular Liquids, 2015, 208, 34-37.	4.9	28
61	Nanoparticles alter the withanolide biosynthesis and carbohydrate metabolism in Withania somnifera (Dunal). Industrial Crops and Products, 2019, 127, 94-109.	5.2	28
62	Nitric oxide-mediated regulation of sub-cellular chromium distribution, ascorbateâ€“glutathione cycle and glutathione biosynthesis in tomato roots under chromium (VI) toxicity. Journal of Biotechnology, 2020, 318, 68-77.	3.8	28
63	Enhanced negative dielectric anisotropy and high electrical conductivity of the SWCNT doped nematic liquid crystalline material. Journal of Molecular Liquids, 2015, 204, 21-26.	4.9	27
64	Effect of ion trapping behavior of TiO2 nanoparticles on different parameters of weakly polar nematic liquid crystal. Journal of Theoretical and Applied Physics, 2018, 12, 191-198.	1.4	27
65	Extraction, purification and characterisation of Phycocyanin from Anabaena fertilissima PUPCCC 410.5: as a natural and food grade stable pigment. Journal of Applied Phycology, 2019, 31, 1685-1696.	2.8	27
66	Silicon tackles butachlor toxicity in rice seedlings by regulating anatomical characteristics, ascorbate-glutathione cycle, proline metabolism and levels of nutrients. Scientific Reports, 2020, 10, 14078.	3.3	27
67	Electrical And Polarization Behaviour Of Titania Nanoparticles Doped Ferroelectric Liquid Crystal. Advanced Materials Letters, 2015, 6, 68-72.	0.6	27
68	Modification in dielectric properties of SWCNT doped ferroelectric liquid crystals. Journal of Non-Crystalline Solids, 2011, 357, 1822-1826.	3.1	26
69	NO and ROS implications in the organization of root system architecture. Physiologia Plantarum, 2020, 168, 473-489.	5.2	26
70	Implication of nitric oxide and hydrogen sulfide signalling in alleviating arsenate stress in rice seedlings. Environmental Pollution, 2021, 291, 117958.	7.5	26
71	Anilofos Tolerance and Its Mineralization by the Cyanobacterium Synechocystis sp. Strain PUPCCC 64. PLoS ONE, 2013, 8, e53445.	2.5	25
72	Reduced ionic contaminations in CdSe quantum dot dispersed ferroelectric liquid crystal and its applications. Liquid Crystals, 2014, 41, 1356-1365.	2.2	25

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73	Enhancement of birefringence of liquid crystals with dispersion of poly (n-butyl methacrylate) (PBMA). Liquid Crystals, 2015, 42, 1465-1471.	2.2	25
74	Tuning phase retardation behaviour of nematic liquid crystal using quantum dot. Current Applied Physics, 2016, 16, 79-82.	2.4	25
75	Dielectric and electro-optical properties of zinc ferrite nanoparticles dispersed nematic liquid crystal 4â€™-Heptyl-4-biphenylcarbonnitrile. Liquid Crystals, 2020, 47, 1025-1040.	2.2	25
76	Dielectric and electro-optical parameters of two ferroelectric liquid crystals: a comparative study. Physica Scripta, 2008, 78, 065602.	2.5	24
77	Silicon in plant biology: from past to present, and future challenges. Journal of Experimental Botany, 2020, 71, 6699-6702.	4.8	24
78	Implication of Nitric Oxide Under Salinity Stress: The Possible Interaction with Other Signaling Molecules. Journal of Plant Growth Regulation, 2022, 41, 163-177.	5.1	24
79	Dielectric Relaxation of Dye-Doped Ferroelectric Liquid Crystal Mixture: A Comparative Study of Smectic C*and Smectic A Phase. Japanese Journal of Applied Physics, 2007, 46, 1100-1105.	1.5	23
80	Analysis of electro-optical and dielectric parameters of TiO₂ nanoparticles dispersed nematic liquid crystal. Soft Materials, 2018, 16, 126-133.	1.7	23
81	SiO2 nanoparticles doped nematic liquid crystal system: An experimental investigation on optical and dielectric properties. Chinese Journal of Physics, 2019, 57, 82-89.	3.9	23
82	Mitigation of chromium (VI) toxicity by additional sulfur in some vegetable crops involves glutathione and hydrogen sulfide. Plant Physiology and Biochemistry, 2020, 155, 952-964.	5.8	23
83	Nanoparticles as a potential protective agent for arsenic toxicity alleviation in plants. Environmental Pollution, 2022, 300, 118887.	7.5	23
84	Thermal and optical study of semiconducting CNTs-doped nematic liquid crystalline material. Phase Transitions, 2016, 89, 632-642.	1.3	22
85	The scientific duo of TiO2 nanoparticles and nematic liquid crystal E204: Increased absorbance, photoluminescence quenching and improving response time for electro-optical devices. Journal of Molecular Liquids, 2021, 325, 115130.	4.9	22
86	Early diagnosis of lung cancer using magnetic nanoparticles-integrated systems. Nanotechnology Reviews, 2022, 11, 544-574.	5.8	22
87	Dielectric Relaxation of FLC Showing Anomalous Behavior. Soft Materials, 2007, 5, 207-218.	1.7	21
88	Synthesis, molecular structure, and spectral analyses of ethyl-4-[(2,4-dinitrophenyl)-hydrazonomethyl]-3,5-dimethyl-1H-pyrrole-2-carboxylate. Structural Chemistry, 2013, 24, 713-724.	2.0	21
89	Effect of cadmium selenide quantum dots on the dielectric and physical parameters of ferroelectric liquid crystal. Journal of Applied Physics, 2014, 116, 034106.	2.5	21
90	Dielectric and electro-optical properties of polymer-stabilized liquid crystal system. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	21

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91	Ethylene needs endogenous hydrogen sulfide for alleviating hexavalent chromium stress in Vigna mungo L. and Vigna radiata L.. Environmental Pollution, 2021, 290, 117968.	7.5	21
92	Comparative study of dielectric and electro-optical properties of pure and polymer ferroelectric liquid crystal composites. Journal of Polymer Research, 2011, 18, 435-441.	2.4	20
93	Electro-optical, UV absorbance, and UV photoluminescence analysis of Se95In5 chalcogenide glass microparticle doped ferroelectric liquid crystal. Journal of Applied Physics, 2014, 115, .	2.5	20
94	Intracellular uptake and reduction of hexavalent chromium by the cyanobacterium Synechocystis sp. PUPCCC 62. Journal of Applied Phycology, 2015, 27, 827-837.	2.8	20
95	Manifestation of strong magneto-electric dipolar coupling in ferromagnetic nanoparticlesâ^'FLC composite: evaluation of time-dependent memory effect. Liquid Crystals, 2018, 45, 687-697.	2.2	20
96	Charge Transport in Novel Phenazine Fused Triphenylene Supramolecular Systems. ChemistrySelect, 2018, 3, 6551-6560.	1.5	20
97	Investigation of dielectric and electro-optical properties of nematic liquid crystal with the suspension of biowaste-based porous carbon nanoparticles. Liquid Crystals, 2019, 46, 1808-1820.	2.2	20
98	Carbon dot-dispersed hexabutyloxytriphenylene discotic mesogens: structural, morphological and charge transport behavior. Journal of Materials Chemistry C, 2020, 8, 9252-9261.	5.5	20
99	SWCNT doped ferroelectric liquid crystal: The electro-optical properties with enhanced dipolar contribution. Current Applied Physics, 2013, 13, 684-687.	2.4	19
100	CdTe quantum dot dispersed ferroelectric liquid crystal: Transient memory with faster optical response and quenching of photoluminescence. Journal of Molecular Liquids, 2017, 237, 71-80.	4.9	19
101	Phycobiliprotein production by a novel cold desert cyanobacterium Nodularia sphaerocarpa PUPCCC 420.1. Journal of Applied Phycology, 2017, 29, 1819-1827.	2.8	19
102	Investigation of thermodynamical, dielectric and electro-optical parameters of nematic liquid crystal doped with polyaniline and silver nanoparticles. Journal of Molecular Liquids, 2019, 290, 111241.	4.9	19
103	Improved dielectric and electro-optical parameters of nematic liquid crystal doped with magnetic nanoparticles. Chinese Physics B, 2019, 28, 034209.	1.4	19
104	The phenomenon of induced photoluminescence in ferroelectric mesophase. Journal of Luminescence, 2013, 139, 60-63.	3.1	18
105	Concentration Dependent Physical Parameters of Ferroelectric Liquid Crystal and ZnOS Nano Material Composite System. Soft Materials, 2013, 11, 305-314.	1.7	18
106	Effects of polymer doping on dielectric and electro-optical parameters of nematic liquid crystal. Polymer Engineering and Science, 2015, 55, 414-420.	3.1	18
107	Mn2+ doped ZnS quantum dots in ferroelectric liquid crystal matrix: Analysis of new relaxation phenomenon, faster optical response, and concentration dependent quenching in photoluminescence. Journal of Applied Physics, 2016, 119, .	2.5	18
108	Time-resolved fluorescence and absence of FÃ¶rster resonance energy transfer in ferroelectric liquid crystal-quantum dots composites. Journal of Luminescence, 2017, 190, 161-170.	3.1	18

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109	Dual photoluminescence and charge transport in an alkoxy biphenyl benzoate ferroelectric liquid crystallineâ€“graphene oxide composite. New Journal of Chemistry, 2018, 42, 16682-16693.	2.8	18
110	Dielectric properties and activation energies of Cu: ZnO dispersed nematic mesogen N-(4-methoxybenzylidene)-4-butylaniline liquid crystal. Journal of Dispersion Science and Technology, 2020, 41, 1283-1290.	2.4	18
111	Dose dependent differential effects of toxic metal cadmium in tomato roots: Role of endogenous hydrogen sulfide. Ecotoxicology and Environmental Safety, 2020, 203, 110978.	6.0	18
112	Silver nanoparticles dispersed in nematic liquid crystal: an impact on dielectric and electro-optical parameters. Journal of Theoretical and Applied Physics, 2020, 14, 237-243.	1.4	18
113	Effect of carbonaceous oil palm leaf quantum dot dispersion in nematic liquid crystal on zeta potential, optical texture and dielectric properties. Journal of Nanostructure in Chemistry, 2021, 11, 527-548.	9.1	18
114	Influence of CdSe quantum dot on molecular/ionic relaxation phenomenon and change in physical parameters of ferroelectric liquid crystal. Liquid Crystals, 2015, 42, 1159-1168.	2.2	17
115	Effect of graphene oxide interlayer electron-phonon coupling on the electro-optical parameters of a ferroelectric liquid crystal. RSC Advances, 2017, 7, 12479-12485.	3.6	17
116	A bridged ruthenium dimer (Ruâ€“Ru) for photoreduction of CO2 under visible light irradiation. Journal of Industrial and Engineering Chemistry, 2018, 61, 381-387.	5.8	17
117	CdSe quantum dots in chiral smectic C matrix: experimental evidence of smectic layer distortion by small and wide angle X-ray scattering and subsequent effect on electro-optical parameters. Liquid Crystals, 2019, 46, 376-385.	2.2	17
118	Effect of oil palm leaf-based carbon quantum dot on nematic liquid crystal and its electro-optical effects. Liquid Crystals, 2021, 48, 812-831.	2.2	16
119	Liquid crystal lens with doping of rutile titanium dioxide nanoparticles. Optics Express, 2020, 28, 22856.	3.4	16
120	Silica nanoparticles: the rising star in plant disease protection. Trends in Plant Science, 2022, 27, 7-9.	8.8	16
121	Light intensity determines the extent of mercury toxicity in the cyanobacterium Nostoc muscorum. Acta Physiologiae Plantarum, 2012, 34, 1119-1131.	2.1	15
122	Analysis of physical parameters and collective dielectric relaxations in core/shell quantum dot ferroelectric liquid crystal composite. Journal of Molecular Liquids, 2015, 211, 157-163.	4.9	15
123	InP/ZnS quantum-dot-dispersed nematic liquid crystal illustrating characteristic birefringence and enhanced electro-optical parameters. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	15
124	Kinetin Alleviates UV-B-Induced Damage in Solanum lycopersicum: Implications of Phenolics and Antioxidants. Journal of Plant Growth Regulation, 2019, 38, 831-841.	5.1	15
125	Differential effects of UV-B radiation fluence rates on growth, photosynthesis, and phosphate metabolism in two cyanobacteria under copper toxicity. Toxicological and Environmental Chemistry, 2012, 94, 1511-1535.	1.2	14
126	Reduction of optical response time for fluorescent dye doped ferroelectric liquid crystal. Journal of Molecular Liquids, 2012, 175, 67-71.	4.9	14

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127	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:mtext>Zn</mml:mtext><mml:msub><mml:mrow><mml:mtext>O</mml:mtext></mml:mrow><mml:mrow><mml:mi> in Ferroelectric Liquid Crystal Matrix: The Effect of Aggregation and Defects on the Dielectric and Electro-Optical Properties. Advances in Condensed Matter Physics, 2013, 2013, 1-10.	1.1	14
128	Influence of Fe₂O₃nanoparticles on the birefringence property of weakly polar nematic liquid crystal. Molecular Crystals and Liquid Crystals, 2019, 680, 65-74.	0.9	14
129	Orientation of 4-n-octyl-4â€²-cyanobiphenyl molecules on graphene oxide surface via electronâ€“phonon interaction and its applications in nonlinear electronics. Journal of Materials Chemistry C, 2019, 7, 2734-2743.	5.5	14
130	Carbon Nanotubes Blended Nematic Liquid Crystal for Display and Electro-Optical Applications. Electronic Materials, 2021, 2, 466-481.	1.9	14
131	Dielectric, thermal and optical study of an unusually shaped liquid crystal. Journal of Physics and Chemistry of Solids, 2010, 71, 1684-1689.	4.0	13
132	Polymerâ€induced improvements in ferroelectric liquid crystal. Polymer Composites, 2010, 31, 1776-1781.	4.6	13
133	Impact of low and high fluence rates of UV-B radiation on growth and oxidative stress in Phormidium foveolarum and Nostoc muscorum under copper toxicity: differential display of antioxidants system. Acta Physiologiae Plantarum, 2012, 34, 2225-2239.	2.1	13
134	Guestâ€“host interaction in ferroelectric liquid crystalâ€“nanoparticle composite system. Bulletin of Materials Science, 2014, 37, 511-518.	1.7	13
135	CuInS2/ZnS QD-ferroelectric liquid crystal mixtures for faster electro-optical devices and their energy storage aspects. Journal of Applied Physics, 2018, 123, .	2.5	13
136	Dielectric and spectroscopic study of nano-sized diamond dispersed ferroelectric liquid crystal. Journal of Molecular Liquids, 2018, 264, 510-514.	4.9	13
137	Effect of graphene oxide dispersion in nematic mesogen and their characterization results. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	13
138	Luminescent Conductive Columnar Ï€-Gelators for Fe(II) Sensing and Bio-Imaging Applications. Journal of Physical Chemistry B, 2020, 124, 10257-10265.	2.6	13
139	Spectroscopic, dielectric and nonlinear currentâ€“voltage characterization of a hydrogen-bonded liquid crystalline compound influenced via graphitic nanoflakes: An equilibrium between the experimental and theoretical studies. Journal of Molecular Liquids, 2020, 302, 112537.	4.9	13
140	Low and high doses of UV-B differentially modulate chlorpyrifos-induced alterations in nitrogen metabolism of cyanobacteria. Ecotoxicology and Environmental Safety, 2014, 107, 291-299.	6.0	12
141	Fluorescence, UV absorbance and dielectric studies of fluorescent dye doped ferroelectric liquid crystal. Journal of Non-Crystalline Solids, 2015, 412, 1-4.	3.1	12
142	Effect of metallic silver nanoparticles on the alignment and relaxation behaviour of liquid crystalline material in smectic C* phase. Journal of Applied Physics, 2017, 122, .	2.5	12
143	3-D vertically aligned few layer graphene â€“ partially reduced graphene oxide/sulfur electrodes for high performance lithiumâ€“sulfur batteries. Sustainable Energy and Fuels, 2017, 1, 1516-1523.	4.9	12
144	Ferroelectric liquid crystal mixture dispersed with tin oxide nanoparticles: Study of morphology, thermal, dielectric and optical properties. Materials Chemistry and Physics, 2019, 237, 121851.	4.0	12

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145	Magnetopriming effects on arsenic stressâ€induced morphological and physiological variations in soybean involving synchrotron imaging. Physiologia Plantarum, 2021, 173, 88-99.	5.2	12
146	Cytokinin alleviates cypermethrin toxicity in Nostoc muscorum by involving nitric oxide: Regulation of exopolysaccharides secretion, PS II photochemistry and reactive oxygen species homeostasis. Chemosphere, 2020, 259, 127356.	8.2	12
147	Ambipolar Charge Transport Properties of Naphthophenanthridine Discotic Liquid Crystals. Journal of Physical Chemistry B, 2021, 125, 10364-10372.	2.6	12
148	Silicon and nitric oxide interplay alleviates copper induced toxicity in mung bean seedlings. Plant Physiology and Biochemistry, 2021, 167, 713-722.	5.8	12
149	Molecular ordering dependent charge transport in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si11.svg"><mml:mrow><mml:mi>Ï€</mml:mi></mml:mrow></mml:math>-stacked triphenylene based discotic liquid crystals and its correlation with dielectric properties. Journal of Molecular Liquids, 2021, 342, 117353.	4.9	12
150	GABA Requires Nitric Oxide for Alleviating Arsenate Stress in Tomato and Brinjal Seedlings. Journal of Plant Growth Regulation, 2023, 42, 670-683.	5.1	12
151	Nematic liquid crystals blended ferroelectric nanoparticles (BaTiO3): A perspective way for improving the response time and photoluminescence for electro-optical devices. Journal of Applied Physics, 2022, 131, .	2.5	12
152	Guestâ€“host mode ferroelectric liquid crystals. Liquid Crystals, 2011, 38, 183-190.	2.2	11
153	Effect of dye dispersion on the relaxation modes of smectic C* phase. Liquid Crystals, 2013, 40, 1503-1511.	2.2	11
154	Enhancement of Dielectric and Electro-Optical Properties in SWCNT Dispersed Ferroelectric Liquid Crystals. Ferroelectrics, 2014, 468, 84-91.	0.6	11
155	Pico-ampere current sensitivity and CdSe quantum dots assembly assisted charge transport in ferroelectric liquid crystal. Journal Physics D: Applied Physics, 2017, 50, 325301.	2.8	11
156	Faster response and lesser threshold voltage of strontium hardystonite (Sr-HT) nematic liquid crystal: Photoluminescence and optical study. Optical Materials, 2019, 93, 19-24.	3.6	11
157	Photoluminescence modulation in the graphene oxide dispersed 4-n-octyl-4â€™-cyanobiphenyl molecular system. Journal of Luminescence, 2020, 226, 117509.	3.1	11
158	Time-resolved fluorescence and UV absorbance study on Elaeis guineensis/oil palm leaf based carbon nanoparticles doped in nematic liquid crystals. Journal of Molecular Liquids, 2020, 304, 112773.	4.9	11
159	Multiwall carbon nanotube-nematic liquid crystal composite system: preparation and characterization. Journal of Dispersion Science and Technology, 2021, 42, 707-714.	2.4	11
160	An Appraisal of Ancient Molecule GABA in Abiotic Stress Tolerance in Plants, and Its Crosstalk with Other Signaling Molecules. Journal of Plant Growth Regulation, 2023, 42, 614-629.	5.1	11
161	Refractive Indices, Order Parameter and Principal Polarizability of Cholesteric Liquid Crystals and Their Mixtures. Molecular Crystals and Liquid Crystals, 2006, 454, 225/[627]-234/[636].	0.9	10
162	ZnS quantum dot induced phase transitional changes and enhanced ferroelectric mesophase in QDs/FLC composites. Journal of Physics and Chemistry of Solids, 2017, 100, 134-142.	4.0	10

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163	Molecular p-doping in organic liquid crystalline semiconductors: influence of the charge transfer complex on the properties of mesophase and bulk charge transport. Physical Chemistry Chemical Physics, 2019, 21, 18686-18698.	2.8	10
164	Plasmonic resonance instigated enhanced photoluminescence in quantum dot dispersed nematic liquid crystal. Liquid Crystals, 2019, 46, 1224-1230.	2.2	10
165	Charge transport in phenazine-fused triphenylene discotic mesogens doped with CdS nanowires. New Journal of Chemistry, 2020, 44, 14872-14878.	2.8	10
166	Iron oxide nanoparticles impart cross tolerance to arsenate stress in rice roots through involvement of nitric oxide. Environmental Pollution, 2022, 307, 119320.	7.5	10
167	Dielectric behaviour of a ferroelectric liquid crystal dimer. Liquid Crystals, 2012, 39, 1125-1129.	2.2	9
168	Effect of Cd1â^'xZnxS/ZnS core/shell quantum dot on the optical response and relaxation behaviour of ferroelectric liquid crystal. Molecular Crystals and Liquid Crystals, 2017, 652, 195-205.	0.9	9
169	UV response on dielectric properties of nano nematic liquid crystal. Results in Physics, 2018, 8, 1119-1123.	4.1	9
170	Preparation and photophysical properties of soft-nano composites comprising guest anatase <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0003.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>TiO</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml: nanoparticle and host hekates mesogens. Journal of Luminescence, 2019, 205, 304-309.	3.1	9
171	Investigation of dielectric and optical properties of pure and diamond nanoparticles dispersed nematic liquid-crystal PCH5. Liquid Crystals, 2021, 48, 1257-1267.	2.2	9
172	Superior improvement in dynamic response of liquid crystal lens using organic and inorganic nanocomposite. Scientific Reports, 2021, 11, 17349.	3.3	9
173	Exogenous addition of silicon alleviates metsulfuron methyl induced stress in wheat seedlings. Plant Physiology and Biochemistry, 2021, 167, 705-712.	5.8	9
174	Ferroelectric liquid crystals: futuristic mesogens for photonic applications. European Physical Journal: Special Topics, 2022, 231, 673-694.	2.6	9
175	Dielectric relaxation study of a H shaped liquid crystal dimer. Physics and Chemistry of Liquids, 2012, 50, 605-616.	1.2	8
176	Goldstone and soft modes for fluorescent dye doped ferroelectric liquid crystal. Journal of Non-Crystalline Solids, 2013, 376, 7-11.	3.1	8
177	Quantum Dot Doped Ferroelectric Liquid Crystal System: Investigation of Electro-Optical Parameters and Relaxation Behavior. Molecular Crystals and Liquid Crystals, 2015, 610, 227-234.	0.9	8
178	Phase Contraction, fluorescence quenching and formation of topological defects in chiral smectic C matrix by Cd_{0.15}Zn_{0.85}S/ZnS core/shell quantum dots dispersion: Faster electro-optic response for gadget displays. Liquid Crystals, 2020, 47, 1638-1654.	2.2	8
179	Thermal, electrical and structural characterization of zinc phosphate glass matrix loaded with different volume fractions of the graphite particles. Journal of Non-Crystalline Solids, 2020, 536, 119989.	3.1	8
180	The molecular ordering phenomenon in dye-doped nematic liquid crystals. Physica Scripta, 2011, 83, 035704.	2.5	7

#	Article	IF	Citations
181	Dielectric relaxation studies in 5CB nematic liquid crystal at 9 GHz under the influence of external magnetic field using microwave cavity spectrometer. Pramana - Journal of Physics, 2011, 76, 621-628.	1.8	7
182	Abnormal switching behavior of nanoparticle composite systems. Phase Transitions, 2013, 86, 1241-1255.	1.3	7
183	Transmuting the blue fluorescence of hekates mesogens derived from tris(N-salicylideneaniline)s core via ZnS/ZnS:Mn2+ semiconductor quantum dots dispersion. Journal of Luminescence, 2019, 210, 7-13.	3.1	7
184	Investigation of dielectric and electro-optical parameters of high birefringent nematic liquid crystal doped with TiO₂ nanoparticles and its applicability toward liquid crystal displays. Molecular Crystals and Liquid Crystals, 2019, 691, 50-61.	0.9	7
185	Effect of graphene oxide dispersion in antiferroelectric liquid crystal mixture in the verge of SmC* to SmCA* phase transition. Chinese Journal of Physics, 2020, 67, 91-106.	3.9	7
186	Histochemical Techniques in Plant Science: More Than Meets the Eye. Plant and Cell Physiology, 2021, 62, 1509-1527.	3.1	7
187	Electro-optical characterization of a weakly polar liquid crystalline compound influenced polyvinyl pyrrolidone capped gold nanoparticles. Journal of Molecular Liquids, 2021, 325, 115172.	4.9	7
188	Ascorbate and glutathione independently alleviate arsenate toxicity in brinjal but both require endogenous nitric oxide. Physiologia Plantarum, 2021, 173, 276-286.	5.2	7
189	Modification in different physical parameters of orthoconic antiferroelectric liquid crystal mixture via the dispersion of hexanethiol capped silver nanoparticles. Journal of Molecular Liquids, 2021, 332, 115840.	4.9	7
190	RIPK: a crucial ROS signaling component in plants. Trends in Plant Science, 2022, 27, 214-216.	8.8	7
191	Investigation of dielectric, optical and zeta potential properties of pure and zinc ferrite nanoparticles dispersed nematic liquid crystal PCH5. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	7
192	Molecular dynamics in weakly polar nematic liquid crystal doped with dye. Canadian Journal of Physics, 2011, 89, 661-665.	1.1	6
193	Enhancement in Dielectric Properties of Nematic Liquid Crystal by Gamma Irradiation. Molecular Crystals and Liquid Crystals, 2013, 571, 77-85.	0.9	6
194	Dielectric study of Clove oil. Journal of Ayurveda and Integrative Medicine, 2018, 9, 53-56.	1.7	6
195	Hole transporting properties of discotic liquid-crystalline semiconductor confined in calamitic UV-crosslinked gel. Journal of Molecular Liquids, 2019, 276, 27-31.	4.9	6
196	Influence of SiO₂ nanoparticles on the dielectric properties and anchoring energy parameters of pure ferroelectric liquid crystal. Journal of Dispersion Science and Technology, 2020, 41, 2136-2142.	2.4	6
197	Hot and dry: how plants can thrive in future climates. Plant Cell Reports, 2022, 41, 497-499.	5.6	6
198	Nitric oxide and hydrogen peroxide independently act in mitigating chromium stress in Triticum aestivum L. seedlings: Regulation of cell death, chromium uptake, antioxidant system, sulfur assimilation and proline metabolism. Plant Physiology and Biochemistry, 2022, 183, 76-84.	5.8	6

#	Article	IF	Citations
199	Effect of pretilachlor on nitrogen uptake and assimilation by the cyanobacterium Desmonostoc muscorum PUPCCC 405.10. Acta Physiologiae Plantarum, 2015, 37, 1.	2.1	5
200	Optimization of the dielectric and optical parameters of 1,2,4-oxadiazole ferroelectric mesophase with the suspension of PVP capped gold nanoparticles. Optical Materials, 2020, 107, 110021.	3.6	5
201	Endogenous indoleâ€3â€acetic acid and nitric oxide are required for calciumâ€mediated alleviation of copper oxide nanoparticles toxicity in wheat seedlings. Physiologia Plantarum, 2021, 173, 2262-2275.	5.2	5
202	Dielectric Behavior of ZnO Nano Particle Dispersed Nematic Liquid Crystal. Ferroelectrics, 2014, 468, 132-142.	0.6	4
203	Formation of periodic domains and change in physical properties of paramagnetic copper doped ZnO nanoparticle dispersed ferroelectric liquid crystal system. Journal of Molecular Liquids, 2014, 198, 267-273.	4.9	4
204	Nano-doped weakly polar versus highly polar liquid crystal. Applied Nanoscience (Switzerland), 2016, 6, 141-148.	3.1	4
205	Dielectric Relaxation Spectroscopy of Liquid Crystal in Nematogenic Mesophase. Molecular Crystals and Liquid Crystals, 2016, 626, 160-168.	0.9	4
206	Polymer-doped ferroelectric liquid crystal: UV absorbance, fluorescence and electro-optical study. Phase Transitions, 2017, 90, 227-235.	1.3	4
207	Investigation of several essential display features for the low birefringent nematic liquid crystal dispersed with polymer. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	4
208	Study of the electrocaloric effect in ferroelectric liquid crystals. Liquid Crystals, 2019, 46, 1517-1526.	2.2	4
209	Effect of Doping of Cd1â^'xZnxS/ZnS Core/Shell Quantum Dots in Negative Dielectric Anisotropy Nematic Liquid Crystal p-Methoxybenzylidene p-Decylaniline. Crystals, 2021, 11, 605.	2.2	4
210	Arsenite: the umpire of arsenate perception and responses in plants. Trends in Plant Science, 2022, 27, 420-422.	8.8	4
211	Thermodynamic and spectroscopic characterization of a weakly polar liquid crystalline compound dispersed with polyvinyl pyrrolidone capped gold nanoparticles. Journal of Molecular Liquids, 2022, 354, 118889.	4.9	4
212	Isolation and characterization of temperature-sensitive mutants ofAnabaena variabilis impaired in nitrogen fixation. Folia Microbiologica, 1994, 39, 296-300.	2.3	3
213	Phase transition studies of polymerâ€“liquid crystal composite using dielectric and optical transmittance techniques. Polymer Composites, 2008, 29, 638-643.	4.6	3
214	Analysis of Mesogenic Characteristics of 6-Chloro-benzothiazol-2-yl-(4-hexadecyloxyphenyl) Diazeneâ€"A Smectic Liquid Crystal. Molecular Crystals and Liquid Crystals, 2011, 537, 3-21.	0.9	3
215	High-temperature chiral nematic phase in naphthalene and cholesterol derivative liquid crystal: characterisation and dielectric relaxation study. Physics and Chemistry of Liquids, 2013, 51, 663-676.	1.2	3
216	Electro-Optical Study of Fluorescent Dye-Doped Ferroelectric Liquid Crystal. Molecular Crystals and Liquid Crystals, 2014, 591, 25-33.	0.9	3

#	Article	IF	Citations
217	Dispersion of nanoparticles into the low birefringent nematic liquid crystal: study of optical and electro-optical parameters and its applicability towards liquid crystal displays. Journal of Theoretical and Applied Physics, 2020, 14, 51-59.	1.4	3
218	Metalloids in plant biology: New avenues in their research. Journal of Hazardous Materials, 2022, 422, 126738.	12.4	3
219	Dielectric Relaxation And Electrical Properties Of ZnO1-xSxÂnanoparticleÂdispersed Ferroelectric Mesophase. Advanced Materials Letters, 2013, 4, 556-561.	0.6	3
220	HPCA1 and HSL3: two plasma membrane proteins that probably cooperate to modulate H2O2 signalling under drought conditions. Plant Growth Regulation, 2022, 98, 1-3.	3.4	3
221	Changes in material parameters for dye-doped ferroelectric liquid crystal. Phase Transitions, 2013, 86, 977-986.	1.3	2
222	FLC diffraction grating: Efficiency enhancement by SWCNT doping. , 2013, , .		2
223	Effect of UV light irradiation on the dielectric behaviour of liquid crystal/nano composite. Molecular Crystals and Liquid Crystals, 2017, 656, 89-95.	0.9	2
224	Dielectric and electro-optical properties of ferric oxide nanoparticles doped 4-octyloxy-4â€™ cyanobiphenyl liquid crystal-based nanocomposites for advanced display systems. Liquid Crystals, 2021, 48, 923-934.	2.2	2
225	Analysis of faster optical response in core/shell nanocrystals ferroelectric liquid crystal composite. Photonics Letters of Poland, 2015, 7, .	0.4	2
226	Greenly synthesized porous carbon nanoparticle (bioâ€waste‐based)â€doped nematic liquid crystal composite with optimized electric and electroâ€optical properties for devices. Journal of the Society for Information Display, 2022, 30, 621-634.	2.1	2
227	Mn2+ transport in the unicellular cyanobacteriumAnacystis nidulans. Journal of Basic Microbiology, 1986, 26, 161-168.	3.3	1
228	Modification in nematic liquid crystal made by gamma irradiation: biasing voltage and electro-optical study. Radiation Effects and Defects in Solids, 2013, 168, 297-307.	1.2	1
229	Suppression of relaxation modes in dye dispersed SmC* phase. Phase Transitions, 2014, 87, 294-304.	1.3	1
230	Thermoelectric improvement of the figure of merit of zinc phosphate glass composites by a likely tunnel percolation mechanism. Journal of Applied Physics, 2021, 129, 155110.	2.5	1
231	Dielectric and electro-optical properties of nematic liquid crystal p-methoxybenzylidene p-decylaniline dispersed with oil palm leaf based porous carbon quantum dots. Journal of Dispersion Science and Technology, 2023, 44, 942-951.	2.4	1
232	Analysis of optical properties and mechanism of photoluminescence enhancement of quantum dot - ferroelectric liquid crystal composite. Photonics Letters of Poland, 2016, 8, .	0.4	1
233	Theoretical Aspect of Nanonematic Composite: Energy Functional and Threshold Voltage. Molecular Crystals and Liquid Crystals, 2013, 582, 88-97.	0.9	0
234	The phenomenon of nanomaterial induced photoluminescence in ferroelectric liquid crystals. , 2013, , .		0

#	Article	IF	Citations
235	Gamma-induced augmentation in EBHA: A dielectric and electro-optical study. Canadian Journal of Physics, 2013, 91, 433-437.	1.1	0
236	Dielectric relaxation of a ferroelectric liquid crystal showing anomalous behaviour due to polarization inversion. , 2013, , .		0
237	Dielectric investigation on newly synthesized H-shaped dimer. , 2013, , .		0
238	The nanosphere driven optical and dielectric changes in ferroelectric liquid crystal. , 2014, , .		0
239	Suppression of Surface Domains in Ferroelectric Liquid Crystals by Dye Dispersion. Ferroelectrics, 2014, 468, 123-131.	0.6	0
240	Tailoring of cholesteric plane spacing, dielectric relaxation and optical properties of high temperature chiral nematic phase by UV irradiation. Molecular Crystals and Liquid Crystals, 2016, 625, 1-10.	0.9	0
241	Full sunlight acclimation mechanisms in Riccia discolor thalli: Assessment at morphological, anatomical, and biochemical levels. Journal of Photochemistry and Photobiology B: Biology, 2020, 210, 111983.	3.8	0
242	New avenues of silicon research in plant biology. Plant Physiology and Biochemistry, 2021, 167, 955-957.	5.8	0
243	Fluorescence Spectrometry. Progress in Optical Science and Photonics, 2021, , 431-468.	0.5	0
244	Synthesis of Quantum Dot-Based Polymer Nanocomposites: Assessment of Their Thermoelectric Performances. Sustainable Energy and Fuels, 0, , .	4.9	0