Ivan H Bechtold

List of Publications by Year
in descending order

123	2,093	236925	289244
papers	citations	25 h-index	40 g-index

126	126	126	2466
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Novel selenoesters fluorescent liquid crystalline exhibiting a rich phase polymorphism. Journal of Materials Chemistry, 2010, 20, 715-722.	6.7	96
2	Order Induced Charge Carrier Mobility Enhancement in Columnar Liquid Crystal Diodes. ACS Applied Materials & Interfaces, 2013, 5, 11935-11943.	8.0	92
3	Persistent Solidâ€State Phosphorescence and Delayed Fluorescence at Room Temperature by a Twisted Hydrocarbon. Angewandte Chemie - International Edition, 2019, 58, 6982-6986.	13.8	77
4	Tristriazolotriazines: a core for luminescent discotic liquid crystals. Chemical Communications, 2008, , 5134.	4.1	71
5	New Luminescent Liquid Crystals Based on 2,1,3-Benzothiadiazole and Bent Five-memberedN-Heterocyclic Cores. Liquid Crystals, 2012, 39, 1099-1111.	2.2	70
6	Thermal Evaporation versus Spin-Coating: Electrical Performance in Columnar Liquid Crystal OLEDs. ACS Applied Materials & Interfaces, 2015, 7, 16374-16381.	8.0	68
7	Synthesis and Optical/Thermal Behavior of New Azo Photoisomerizable Discotic Liquid Crystals. Macromolecules, 2010, 43, 1319-1328.	4.8	66
8	Synthesis and optical/thermal properties of low molecular mass V-shaped materials based on 2,3-dicyanopyrazine. Tetrahedron, 2007, 63, 2851-2858.	1.9	61
9	Luminescent Columnar Liquid Crystals Based on Tristriazolotriazine. Langmuir, 2012, 28, 11590-11598.	3.5	61
10	Nonâ€symmetrical luminescent 1,2,4â€oxadiazoleâ€based liquid crystals. Liquid Crystals, 2008, 35, 857-863.	2.2	56
11	An Isoniazid Analogue Promotes Mycobacterium tuberculosis-Nanoparticle Interactions and Enhances Bacterial Killing by Macrophages. Antimicrobial Agents and Chemotherapy, 2012, 56, 2259-2267.	3.2	52
12	Luminescent liquid crystals containing a sulphur-based heterocyclic core. Liquid Crystals, 2014, 41, 1097-1108.	2.2	49
13	Lab-in-a-syringe using gold nanoparticles for rapid immunosensing of protein biomarkers. Lab on A Chip, 2015, 15, 399-405.	6.0	48
14	Room temperature columnar liquid crystalline phases of luminescent non-symmetric star-shaped molecules containing two 1,3,4-oxadiazole units. Journal of Materials Chemistry C, 2013, 1, 8011.	5.5	42
15	Luminescent columnar liquid crystals based on 1,3,4-oxadiazole. Tetrahedron, 2014, 70, 3355-3360.	1.9	39
16	Synthesis of Functionalized Organoselenium Materials: Selenides and Diselenides Containing Cholesterol. European Journal of Organic Chemistry, 2015, 2015, 3470-3476.	2.4	39
17	Columnar mesomorphism of bent-rod mesogens containing 1,2,4-oxadiazole rings. Tetrahedron, 2011, 67, 9491-9499.	1.9	37
18	Expeditious preparation of isoxazoles from Î”2-isoxazolines as advanced intermediates for functional materials. Tetrahedron Letters, 2011, 52, 6569-6572.	1.4	36

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19	Investigation of the energy transfer mechanism in OLEDs based on a new terbium Î²-diketonate complex. Organic Electronics, 2012, 13, 90-97.	2.6	34
20	Rubbing-induced charge domains observed by electrostatic force microscopy: effect on liquid crystal alignment. Liquid Crystals, 2003, 30, 591-598.	2.2	30
21	Synthesis, structural characterization, and photo and electroluminescence of a novel terbium(III) complex: {Tris(acetylacetonate) [1,2,5]thiadiazolo[3,4-f][1,10]phenanthroline}terbium(III). Inorganica Chimica Acta, 2011, 365, 152-158.	2.4	30
22	Investigation of thermal and luminescent properties in 4,7-diphenylethynyl-2,1,3-benzothiadiazole systems. Liquid Crystals, 2018, 45, 49-58.	2.2	30
23	Efficient terbium complex based on a novel pyrazolone derivative ligand used in solution-processed OLEDs. Journal of Luminescence, 2019, 208, 57-62.	3.1	29
24	Optical and thermal properties of unsymmetrical liquid crystalline compounds based on isoxazole. Liquid Crystals, 2009, 36, 839-845.	2.2	28
25	New liquid crystals derived from thiophene connected to the 1,2,4-oxadiazole heterocycle. Liquid Crystals, 2016, 43, 1768-1777.	2.2	27
26	Selenylated-oxadiazoles as promising DNA intercalators: Synthesis, electronic structure, DNA interaction and cleavage. Dyes and Pigments, 2020, 180, 108519.	3.7	26
27	Degradation of Methyl Paraoxon in the Presence of Mg²⁺-Al³⁺ Mixed Oxides. Journal of Physical Chemistry C, 2013, 117, 26097-26105.	3.1	25
28	Production and characterization of natural rubberâ€“Ca/P blends for biomedical purposes. Materials Science and Engineering C, 2014, 39, 29-34.	7.3	25
29	Polarized light emission from aligned luminescent liquid crystal films based on 4,7-disubstituted-2,1,3-benzothiadiazoles. Synthetic Metals, 2009, 159, 675-680.	3.9	24
30	Image processing as a tool for phase transitions identification. Journal of Molecular Liquids, 2010, 153, 162-166.	4.9	23
31	New Columnar Zn-Phthalocyanine Designed for Electronic Applications. Journal of Physical Chemistry B, 2012, 116, 13554-13560.	2.6	23
32	Synthesis and characterization of some novel tetrazole liquid crystals. Journal of Materials Chemistry C, 2013, 1, 5583.	5.5	23
33	Synthesis, structure and OLED application of a new europium(III) complex: {tris-(thenoyltrifluoroacetonate)[1,2,5]selenadiazolo[3,4-f][1,10]phenanthroline}europium(III). Inorganica Chimica Acta, 2018, 473, 75-82.	2.4	22
34	Highly luminescent liquid crystals by connecting 1,3,4-oxadiazole with thiazolo[5,4-d]thiazole units. Journal of Molecular Liquids, 2021, 321, 114887.	4.9	22
35	New liquid crystals derived from thiophene connected to the 1,2,3-triazole heterocycle. Liquid Crystals, 2015, 42, 1798-1807.	2.2	20
36	Reducing lifetime in Cu(<scp>i</scp>) complexes with thermally activated delayed fluorescence and phosphorescence promoted by chalcogenolateâ€“diimine ligands. Journal of Materials Chemistry C, 2020, 8, 14595-14604.	5.5	20

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37	Molecular alignment effects on spectroscopic properties 2,1,3-benzothiadiazole guested in liquidâ€“crystalline compounds. Chemical Physics Letters, 2010, 487, 263-267.	2.6	19
38	Development and characterization of multilayer films of polyaniline, titanium dioxide and CTAB for potential antimicrobial applications. Materials Science and Engineering C, 2014, 35, 449-454.	7.3	19
39	Thiophene-based bent-shaped luminescent liquid crystals: synthesis and characterisation. Liquid Crystals, 2017, 44, 1231-1239.	2.2	19
40	Self-assembled azo-dye film as an efficient liquid crystal aligning layer. Liquid Crystals, 2012, 39, 205-210.	2.2	17
41	Wettability Study on Natural Rubber Surfaces for Applications as Biomembranes. ACS Biomaterials Science and Engineering, 2018, 4, 2784-2793.	5.2	17
42	Electrochemical impedance biosensor for detection of saxitoxin in aqueous solution. Analytical and Bioanalytical Chemistry, 2021, 413, 6393-6399.	3.7	17
43	Halogenation of a twisted non-polar Ï€-system as a tool to modulate phosphorescence at room temperature. Chemical Science, 2021, 12, 15116-15127.	7.4	17
44	Luminescent liquid crystals based on 2,1,3-benzoxadiazole: conducive heterocycle or poor cousin of benzothiadiazole?. Liquid Crystals, 2019, 46, 1707-1717.	2.2	15
45	New Boron(III) Blue Emitters for All-Solution Processed OLEDs: Molecular Design Assisted by Theoretical Modeling. European Journal of Inorganic Chemistry, 2019, 2019, 2247-2257.	2.0	15
46	Emission ellipsometry used to probe aggregation of the luminescent 2,1,3-benzothiadiazole dyes and ordering in an E7 liquid crystal matrix. Physical Chemistry Chemical Physics, 2014, 16, 2892.	2.8	14
47	Triplet exciplex electroluminescence from two columnar liquid crystal perylene derivatives. Journal of Luminescence, 2016, 180, 31-37.	3.1	14
48	Alignment and phase transition induced by surface action in lyotropic nematic liquid crystals. Physical Review E, 2000, 62, 3775-3779.	2.1	12
49	Columnar bent-core liquid crystals with two oxadiazole units and two or four alkyl chains and their phase-dependent fluorescence. New Journal of Chemistry, 2017, 41, 11766-11777.	2.8	12
50	Bromine-terminated azobenzene liquid crystals. Liquid Crystals, 2019, 46, 655-665.	2.2	12
51	Speedingâ€up Thermally Activated Delayed Fluorescence in Cu(I) Complexes Using Aminophosphine Ligands. European Journal of Inorganic Chemistry, 2021, 2021, 3177-3184.	2.0	12
52	Liquid-Crystal Alignment on Anisotropic Homeotropic-Planar Patterned Substrates. Molecular Crystals and Liquid Crystals, 2005, 442, 41-49.	0.9	11
53	Layer-by-Layer Assembled Films Composed of â€œCharge Matchedâ€•and â€œLength Matchedâ€•Polysaccharides: Self-Patterning and Unexpected Effects of the Degree of Polymerization. Biointerphases, 2012, 7, 64.	1.6	11
54	Tricritical-like behavior of the nonlinear optical refraction at the nematic-isotropic transition in the E7 thermotropic liquid crystal. European Physical Journal E, 2012, 35, 4.	1.6	11

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55	Synthetic pathway for a new series of liquid crystal 2,6-disubstituted imidazo[2,1-b][1,3,4]thiadiazole. Liquid Crystals, 2013, 40, 570-580.	2.2	11
56	Optical Chemosensors and Chemodosimeters for Anion Detection Based on Merrifield Resin Functionalized with Brookerâ€™s Merocyanine Derivatives. ACS Applied Polymer Materials, 2019, 1, 1757-1768.	4.4	11
57	Shining rings: The effect of the rigid core and benzazole heterocycles on the properties of luminescent calamitic liquid crystals. Journal of Molecular Liquids, 2021, 338, 116614.	4.9	11
58	Characterization of natural rubber membranes using scaling laws analysis. European Polymer Journal, 2014, 50, 249-254.	5.4	10
59	The effect of spinâ€“orbit coupling on selenadiazolo- and thiadiazolo- fused 1,10-phenanthrolines. Dyes and Pigments, 2015, 117, 149-156.	3.7	10
60	Stability of ZnO quantum dots tuned by controlled addition of ethylene glycol during their growth. Materials Research Express, 2016, 3, 075018.	1.6	10
61	Mesomorphic and fluorescence properties of methyl 4-(4-alkoxystyryl)benzoates. Liquid Crystals, 2016, 43, 863-873.	2.2	10
62	Isoxazoline- and isoxazole-liquid crystalline schiff bases: A puzzling game dictated by entropy and enthalpy effects. Journal of Molecular Liquids, 2020, 298, 111750.	4.9	10
63	Effect of microtextured substrates on the molecular orientation of a nematic liquid-crystal sample. Physical Review E, 2005, 72, 031710.	2.1	9
64	High rectification in organic diodes based on liquid crystalline phthalocyanines. Physical Chemistry Chemical Physics, 2015, 17, 32390-32397.	2.8	9
65	Light polarization states of a cholesteric liquid crystal probed with optical ellipsometry. Optical Materials, 2015, 48, 7-11.	3.6	9
66	Phenomenological analysis of the light intensity dependence of the photoalignment process in azo-containing polymeric films. Physical Review E, 2006, 74, 011802.	2.1	8
67	Phase-dependent photoluminescence of non-symmetric 2,1,3-benzothiadiazole liquid crystals. Dyes and Pigments, 2019, 163, 300-307.	3.7	8
68	Liquid crystal alignment on isotropic submicroâ€textured surfaces of homeotropicâ€planar states. Liquid Crystals, 2005, 32, 343-347.	2.2	7
69	Synthesis and thermal behavior of new liquid crystals arylaldoxime esters. Journal of the Brazilian Chemical Society, 2012, 23, 880-888.	0.6	7
70	Implications of flexible spacer rotational processes on the liquid crystal behavior of 4,5-dihydroisoxazole benzoate dimers. New Journal of Chemistry, 2016, 40, 393-401.	2.8	7
71	Insight into Outâ€ofâ€Layer Fluctuations in the Smectic A Stability of 3,5â€Diarylisoxazole Liquid Crystals. ChemPhysChem, 2020, 21, 1408-1419.	2.1	7
72	Nematic Triphenyltriazine Triesters and the Induction of the Columnar Mesophase by Fluorine Substitution. Chemistry - A European Journal, 2021, 27, 9003-9010.	3.3	7

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73	Dynamical behavior of a nematic lyotropic liquid crystal in flat confined samples. Physical Review E, 2001, 65, 011704.	2.1	6
74	Cristais lÃquidos: um sistema complexo de simples aplicaÃ§Ã£o. Revista Brasileira De Ensino De Fisica, 2005, 27, 333-342.	0.2	6
75	The use of colloidal ferrofluid as building blocks for nanostructured layer-by-layer films fabrication. Journal of Nanoparticle Research, 2010, 12, 2779-2785.	1.9	6
76	OLEDs based on an europium(IIIrpar; complex:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 632 Td ({Tris(thenoyltrifluoroacetonate)[1,		
	mesomorphic and fluorescent properties. Liquid Crystals, 2017, 44, 628-642.	2.2	6
79	High efficient Light-Emitting Electrochemical Cells based on ionic liquids 1,2,3-triazolium. Organic Electronics, 2019, 73, 172-181.	2.6	6
80	Stabilization of ZnO quantum dots by preferred 1:2 interaction with a liquid crystal molecule. Journal of Molecular Liquids, 2020, 310, 113273.	4.9	6
81	Exploring Taxifolin Polymorphs: Insights on Hydrate and Anhydrous Forms. Pharmaceutics, 2021, 13, 1328.	4.5	6
82	Surface-induced orientational phase transition in a lyotropic liquid crystal observed by nonlinear optical techniques. Physical Review E, 2004, 69, 061707.	2.1	5
83	Transitions in the orientational order of liquid crystals induced by periodic patterned substrates. Physical Review E, 2006, 74, 021714.	2.1	5
84	Visible transmission windows in infrared hollow-core photonic bandgap fiber: characterization and response to pressure. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 977.	2.1	5
85	Inverse relaxation effect of azo-dye molecules: The role of the film anisotropy. Chemical Physics Letters, 2013, 588, 150-154.	2.6	5
86	Vulcanization, centrifugation, water-washing, and polymeric covering processes to optimize natural rubber membranes applied to microfluidic devices. Journal of Materials Science, 2016, 51, 3003-3012.	3.7	5
87	Nonlinear optical properties of dye-doped E7 liquid crystals at the nematicâ€“isotropic transition. Liquid Crystals, 2016, 43, 268-275.	2.2	5
88	Characterization of liquid crystalline phthalocyanines for OFET applications. Molecular Crystals and Liquid Crystals, 2017, 657, 81-88.	0.9	5
89	An unusual plank-shaped nematogen with a graphene nanoribbon core. Journal of Materials Chemistry C, 2019, 7, 12080-12085.	5.5	5
90	Emission ellipsometry as a tool for luminescent liquid crystal phase transition identification. Physical Review E, 2018, 98, 022702.	2.1	4

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91	Influence of nonradiative Auger process in the lanthanide complexes lifetime near interfaces in organic light-emitting diode structures. Journal of Applied Physics, 2019, 126, 165501.	2.5	4
92	Surface Wettability of a Natural Rubber Composite under Stretching: A Model to Predict Cell Survival. Langmuir, 2021, 37, 4639-4646.	3.5	4
93	The 2:1 cycloadducts from [3 + 2] 1,3-dipolar cycloaddition of nitrile oxide and vinylacetic acid. Synthesis and liquid crystal behaviour. Liquid Crystals, 2012, 39, 175-184.	2.2	3
94	SÃntese e caracterizaÃ§Ã£o de copolÃmeros de cadeia lateral derivados de acrilatos de 4,5-di-hidroisoxazol e do (-)-mentol. Quimica Nova, 2012, 35, 1527-1533.	0.3	3
95	Achromatic Ellipsometry: Theory and Applications. , 2017, , .		3
96	Molecular 5,8-Ï€-extended quinoxaline derivatives as chromophores for photoluminescence applications. Journal of Molecular Liquids, 2019, 296, 111763.	4.9	3
97	Blending with a phthalocyanine leads to improved P3HT donor layers for OPVs. Synthetic Metals, 2020, 263, 116367.	3.9	3
98	Strongly polarized light from highly aligned electrospun luminescent natural rubber fibers. Journal of Luminescence, 2022, 241, 118498.	3.1	3
99	Enhancing the phosphorescence decay pathway of Cu(<scp>i</scp>) emitters â€“ the role of copperâ€“iodide moiety. Dalton Transactions, 2022, 51, 1008-1018.	3.3	3
100	A aproximaÃ§Ã£o de lente fina Ã© sempre vÃ¡lida em experimentos para determinaÃ§Ã£o de distÂncias focais?. Revista Brasileira De Ensino De Fisica, 2007, 29, 299-304.	0.2	2
101	Lateral Flow Assay for Interleukin 6: A Technological and Scientific Prospection of a 10-Year Survey. Recent Patents on Biotechnology, 2018, 12, 221-228.	0.8	2
102	Pontos quÃ¢nticos ambientalmente amigÃ¡veis: destaque para o Ã³xido de zinco. Quimica Nova, 0, , .	0.3	2
103	Highly emissive MAPbBr3 perovskite QDs by ligand-assisted reprecipitation: the antisolvent effect. Nanotechnology, 2021, 33, .	2.6	2
104	Thermal annealing of natural rubber films controls wettability and enhances cytocompatibility. Surfaces and Interfaces, 2022, 31, 102048.	3.0	2
105	Inscription of local surface relief gratings with a Scanning Near-field Optical Microscope on an azo-polymer film. Polimeros, 2006, 16, 319-322.	0.7	1
106	Blueâ€phase liquidâ€crystal mixtures and their induced stabilization by photopolymerization. Journal of the Society for Information Display, 2011, 19, 781-786.	2.1	1
107	Enhancement of the Nonlinear Optical Absorption of the E7 Liquid Crystal at the Nematicâ€“Isotropic Transition. Brazilian Journal of Physics, 2012, 42, 355-359.	1.4	1
108	Luminescent elastomeric Janus particles. Journal of Colloid and Interface Science, 2013, 410, 124-130.	9.4	1

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109	Side-Chain Liquid-Crystalline Polymer Tetrazoles: Synthesis and Characterization. Journal of the Brazilian Chemical Society, 2014, , .	0.6	1
110	Nanostructured layer-by-layer films containing phaeophytin-b: Electrochemical characterization for sensing purposes. Materials Science and Engineering C, 2015, 47, 339-344.	7.3	1
111	When hydrogen bond tailors molecular packing in non-anisometric molecules. The case study of N-alkyl 1,3-diphenyl-4,5-dihydro-1H-pyrazole-5-carboximidamides. Liquid Crystals, 2021, 48, 395-404.	2.2	1
112	Enhanced Performance of Allâ€Solution Processed Multilayer OLEDs by Photoluminescence Lifetime Reduction of Cu(I) Complex Emitters Containing Chalcogenolateâ€Diimine Ligands. European Journal of Inorganic Chemistry, 2021, 2021, 3412-3418.	2.0	1
113	Electrospun natural rubber fibers-based flexible conductive membranes. Revista Materia, 2020, 25, .	0.2	1
114	Aroyloxycinnamates with wide mesophase temperature ranges. Liquid Crystals, 2022, 49, 812-820.	2.2	1
115	Advanced image characterization in scanning probe microscopy. , 0, , .		0
116	New Boron(III) Blue Emitters for All-Solution Processed OLEDs: Molecular Design Assisted by Theoretical Modeling. European Journal of Inorganic Chemistry, 2019, 2019, 2246-2246.	2.0	0
117	Columnar mesomorphism from a new luminescent thiazolo[5,4-d]thiazole-based core. Liquid Crystals, 2021, 48, 182-189.	2.2	0
118	Alkoxycarbonylphenyl 4-alkoxycinnamate liquid crystals with antiparallel packing. Liquid Crystals, 2021, 48, 1908-1918.	2.2	0
119	Tiliroside-Based Nanostructured Layer-by-Layer Films for Sensing Applications. Brazilian Journal of Physics, 0, , 1.	1.4	0
120	Processamento de imagens: conceitos bÃ¡sicos relacionados com o fenÃ´meno de difraÃ§Ã£o e uso de um computador Ã³ptico. Revista Brasileira De Ensino De Fisica, 2004, 26, .	0.0	0
121	Comportamento caÃ³tico em um circuito RLC nÃ£o-linear. Revista Brasileira De Ensino De Fisica, 2005, 27, 225-230.	0.2	0
122	BirrefringÃªncia em placas de onda e atividade Ã³ptica de uma soluÃ§Ã£o de aÃ§Ãºcar. Revista Brasileira De Ensino De Fisica, 2005, 27, 349-355.	0.2	0
123	Exploring Taxifolin Polymorphs: Insights on Hydrate and Anhydrous Forms. Pharmaceutics, 2021, 13, .	4.5	0