Ian Dean Hosein

List of Publications by Year
in descending order

50	1,134	304743 22	414414 32
papers	citations	h-index	g-index

51	51	51	1251
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Convectively Assembled Nonspherical Mushroom Cap-Based Colloidal Crystals. Langmuir, 2007, 23, 8810-8814.	3.5	86
2	Convectively Assembled Asymmetric Dimer-Based Colloidal Crystals. Langmuir, 2007, 23, 10479-10485.	3.5	68
3	Homogeneous, Coreâ^'Shell, and Hollow-Shell ZnS Colloid-Based Photonic Crystals. Langmuir, 2007, 23, 2892-2897.	3.5	61
4	Dimerâ€Based Threeâ€Dimensional Photonic Crystals. Advanced Functional Materials, 2010, 20, 3085-3091.	14.9	56
5	Dimer Shape Anisotropy: A Nonspherical Colloidal Approach to Omnidirectonal Photonic Band Gaps. Langmuir, 2010, 26, 2151-2159.	3.5	48
6	The Promise of Calcium Batteries: Open Perspectives and Fair Comparisons. ACS Energy Letters, 2021, 6, 1560-1565.	17.4	46
7	Evaluation of a pulsed xenon ultraviolet light device for isolation room disinfection in a United Kingdom hospital. American Journal of Infection Control, 2016, 44, e157-e161.	2.3	45
8	A novel calcium-ion solid polymer electrolyte based on crosslinked poly(ethylene glycol) diacrylate. Journal of Power Sources, 2019, 414, 302-307.	7.8	44
9	Magnetically responsive and hollow colloids from nonspherical coreâ€“shell particles of peanut-like shape. Journal of Materials Chemistry, 2009, 19, 350-355.	6.7	38
10	Rotator and crystalline films viaself-assembly of short-bond-length colloidal dimers. Journal of Materials Chemistry, 2009, 19, 344-349.	6.7	37
11	Plating and Stripping Calcium at Room Temperature in an Ionic-Liquid Electrolyte. ACS Applied Energy Materials, 2020, 3, 2310-2314.	5.1	36
12	Control of Morphology in Polymer Blends through Light Self-Trapping: An in Situ Study of Structure Evolution, Reaction Kinetics, and Phase Separation. Macromolecules, 2017, 50, 3617-3626.	4.8	33
13	Increasing light capture in silicon solar cells with encapsulants incorporating air prisms to reduce metallic contact losses. Optics Express, 2016, 24, A1419.	3.4	31
14	Correlation between native defects and dopants in colloidal lanthanide-doped Ga2O3nanocrystals: a path to enhance functionality and control optical properties. Journal of Materials Chemistry C, 2014, 2, 3212-3222.	5.5	30
15	Plating and Stripping of Calcium in an Alkyl Carbonate Electrolyte at Room Temperature. ACS Applied Energy Materials, 2019, 2, 7738-7743.	5.1	30
16	A Highly Conductive and Thermally Stable Ionic Liquid Gel Electrolyte for Calcium-Ion Batteries. ACS Applied Polymer Materials, 2020, 2, 2111-2118.	4.4	30
17	Evolution of the faceting, morphology and aspect ratio of gallium oxide nanowires grown by vaporâ€“solid deposition. Journal of Crystal Growth, 2014, 396, 24-32.	1.5	29
18	Tuning Manganese Dopant Spin Interactions in Single GaN Nanowires at Room Temperature. ACS Nano, 2011, 5, 6365-6373.	14.6	28

#	Article	IF	Citations
19	Synthesis of Micropillar Arrays via Photopolymerization: An in Situ Study of Light-Induced Formation, Growth Kinetics, and the Influence of Oxygen Inhibition. Macromolecules, 2017, 50, 5767-5778.	4.8	25
20	Electronic structure and magnetism of Mn dopants in GaN nanowires: Ensemble vs single nanowire measurements. Applied Physics Letters, 2011, 99, 222504.	3.3	24
21	Tunable Nonlinear Optical Pattern Formation and Microstructure in Cross-Linking Acrylate Systems during Free-Radical Polymerization. Journal of Physical Chemistry C, 2016, 120, 4517-4528.	3.1	24
22	A solid polymer electrolyte for aluminum ion conduction. Results in Physics, 2018, 10, 529-531.	4.1	24
23	A Solid Polymer Electrolyte from Cross-Linked Polytetrahydrofuran for Calcium Ion Conduction. ACS Applied Polymer Materials, 2019, 1, 1837-1844.	4.4	23
24	Superhydrophobic Microporous Substrates via Photocuring: Coupling Optical Pattern Formation to Phase Separation for Process-Tunable Pore Architectures. ACS Applied Materials & Interfaces, 2018, 10, 3094-3105.	8.0	19
25	Optical Autocatalysis Establishes Novel Spatial Dynamics in Phase Separation of Polymer Blends during Photocuring. ACS Macro Letters, 2016, 5, 1237-1241.	4.8	17
26	Waveguide Encoded Lattices (WELs): Slim Polymer Films with Panoramic Fields of View (FOV) and Multiple Imaging Functionality. Advanced Functional Materials, 2017, 27, 1702242.	14.9	16
27	Coupling nonlinear optical waves to photoreactive and phase-separating soft matter: Current status and perspectives. Chaos, 2017, 27, 104611.	2.5	15
28	Polymer Encapsulants Incorporating Lightâ€Guiding Architectures to Increase Optical Energy Conversion in Solar Cells. Advanced Materials, 2018, 30, 1705382.	21.0	14
29	Microfiber Optic Arrays as Top Coatings for Front-Contact Solar Cells toward Mitigation of Shading Loss. ACS Applied Materials & Interfaces, 2019, 11, 47422-47427.	8.0	13
30	Gel Polymer Electrolytes Based on Cross-Linked Poly(ethylene glycol) Diacrylate for Calcium-Ion Conduction. ACS Omega, 2021, 6, 17095-17102.	3.5	13
31	Molecular Origin of Valence Band Anisotropy in Single Î²-Ga₂O₃ Nanowires Investigated by Polarized X-ray Absorption Imaging. Journal of Physical Chemistry C, 2015, 119, 17450-17457.	3.1	11
32	Direct Lightâ€Writing of Nanoparticleâ€Based Metalloâ€Dielectric Optical Waveguide Arrays Over Silicon Solar Cells for Wideâ€Angle Light Collecting Modules. Advanced Optical Materials, 2019, 7, 1900661.	7.3	10
33	A study of calcium ion intercalation in perovskite calcium manganese oxide. Journal of Electroanalytical Chemistry, 2020, 874, 114453.	3.8	10
34	Magnetic property characterization of magnetite (Fe3O4) nanorod cores for integrated solenoid rf inductors. Journal of Applied Physics, 2006, 99, 08R903.	2.5	9
35	Waveguide-Imprinted Slim Polymer Films: Beam Steering Coatings for Solar Cells. ACS Photonics, 2019, 6, 878-885.	6.6	9
36	Enhanced Wideâ€Angle Energy Conversion Using Structureâ€Tunable Waveguide Arrays as Encapsulation Materials for Silicon Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800716.	1.8	9

#	Article	IF	Citations
37	Prototyping of Superhydrophobic Surfaces from Structureâ€Tunable Micropillar Arrays Using Visible Light Photocuring. Advanced Engineering Materials, 2019, 21, 1801150.	3.5	9
38	Light-Directed Organization of Polymer Materials from Photoreactive Formulations. Chemistry of Materials, 2020, 32, 2673-2687.	6.7	8
39	Effect of Coordination Behavior in Polymer Electrolytes for Sodium-Ion Conduction: A Molecular Dynamics Study of Poly(ethylene oxide) and Poly(tetrahydrofuran). Macromolecules, 2021, 54, 8553-8562.	4.8	8
40	A Slim Polymer Film with a Seamless Panoramic Field of View: The Radially Distributed Waveguide Encoded Lattice (RDWEL). Advanced Optical Materials, 2019, 7, 1801091.	7.3	7
41	Observation of intensity dependent phase-separation in photoreactive monomerâ€“nanoparticle formulations under non-uniform visible light irradiation. Soft Matter, 2020, 16, 7256-7269.	2.7	7
42	Simulations of Morphology Evolution in Polymer Blends during Light Self-Trapping. Journal of Physical Chemistry C, 2017, 121, 11717-11726.	3.1	7
43	Multidirectional waveguide arrays in a planar architecture. Proceedings of SPIE, 2014, , .	0.8	6
44	Microtruss structures with enhanced elasticity fabricated through visible light photocuring. Results in Physics, 2017, 7, 2194-2196.	4.1	5
45	A Solid Polymer Electrolyte from Photo-Crosslinked Polytetrahydrofuran and a Cycloaliphatic Epoxide for Lithium-Ion Conduction. MRS Advances, 2020, 5, 2467-2476.	0.9	4
46	Superhydrophobic Polymer Composite Surfaces Developed via Photopolymerization. ACS Applied Polymer Materials, 2021, 3, 4661-4672.	4.4	4
47	Lightâ€“induced Selfâ€“Writing of polymer composites: A novel approach to develop coreâ€“shellâ€–type structures. Composites Communications, 2022, 30, 101058.	6.3	4
48	Enhancing Solar Energy Light Capture with Multi-Directional Waveguide Lattices. , 2013, , .		2
49	Simulations of Structure and Morphology in Photoreactive Polymer Blends under Multibeam Irradiation. Journal of Physical Chemistry C, 2022, 126, 6700-6715.	3.1	2
50	Introducing and manipulating magnetic dopant exchange interactions in semiconductor nanowires. , 2013, , .		0