Anthony S R Chesman

List of Publications by Year
in descending order

98	4,322	109137	114278
papers	citations	35 h-index	63 g-index

103	103	103	7202
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An Alkylated Indacenodithieno[3,2â€b]thiopheneâ€Based Nonfullerene Acceptor with High Crystallinity Exhibiting Single Junction Solar Cell Efficiencies Greater than 13% with Low Voltage Losses. Advanced Materials, 2018, 30, 1705209.	11.1	474
2	The Heat-Up Synthesis of Colloidal Nanocrystals. Chemistry of Materials, 2015, 27, 2246-2285.	3.2	313
3	Stabilizing the cubic perovskite phase of CsPbI₃ nanocrystals by using an alkyl phosphinic acid. Chemical Communications, 2017, 53, 232-235.	2.2	235
4	Wafer-scale two-dimensional semiconductors from printed oxide skin of liquid metals. Nature Communications, 2017, 8, 14482.	5.8	219
5	Perovskite and Organic Solar Cells Fabricated by Inkjet Printing: Progress and Prospects. Advanced Functional Materials, 2017, 27, 1703704.	7.8	149
6	Non-injection Synthesis of Doped Zinc Oxide Plasmonic Nanocrystals. ACS Nano, 2014, 8, 9154-9163.	7.3	112
7	Sonicationâ€Assisted Synthesis of Gallium Oxide Suspensions Featuring Trap State Absorption: Test of Photochemistry. Advanced Functional Materials, 2017, 27, 1702295.	7.8	110
8	Alkylated Selenophene-Based Ladder-Type Monomers via a Facile Route for High-Performance Thin-Film Transistor Applications. Journal of the American Chemical Society, 2017, 139, 8552-8561.	6.6	105
9	Degenerately Hydrogen Doped Molybdenum Oxide Nanodisks for Ultrasensitive Plasmonic Biosensing. Advanced Functional Materials, 2018, 28, 1706006.	7.8	105
10	Cu₂ZnSnS_{4x}Se_{4(1â€“x)} Solar Cells from Polar Nanocrystal Inks. Journal of the American Chemical Society, 2014, 136, 5237-5240.	6.6	102
11	Silver Bismuth Sulfoiodide Solar Cells: Tuning Optoelectronic Properties by Sulfide Modification for Enhanced Photovoltaic Performance. Advanced Energy Materials, 2019, 9, 1803396.	10.2	100
12	Inverted perovskite solar cells with high fill-factors featuring chemical bath deposited mesoporous NiO hole transporting layers. Nano Energy, 2018, 49, 163-171.	8.2	91
13	LiTFSIâ€Free Spiroâ€OMeTADâ€Based Perovskite Solar Cells with Power Conversion Efficiencies Exceeding 19%. Advanced Energy Materials, 2019, 9, 1901519.	10.2	85
14	Visualizing Phase Segregation in Mixedâ€Halide Perovskite Single Crystals. Angewandte Chemie - International Edition, 2019, 58, 2893-2898.	7.2	77
15	The chemistry and complexes of small cyano anions. Chemical Communications, 2011, 47, 10189.	2.2	73
16	Lanthaballs: Chiral, Structurally Layered Polycarbonate Tridecanuclear Lanthanoid Clusters. Chemistry - A European Journal, 2009, 15, 5203-5207.	1.7	66
17	Dipole-field-assisted charge extraction in metal-perovskite-metal back-contact solar cells. Nature Communications, 2017, 8, 613.	5.8	66
18	Crystallisation control of drop-cast quasi-2D/3D perovskite layers for efficient solar cells. Communications Materials, 2020, 1, .	2.9	66

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19	In Situ Formation of Reactive Sulfide Precursors in the One-Pot, Multigram Synthesis of Cu₂ZnSnS₄ Nanocrystals. Crystal Growth and Design, 2013, 13, 1712-1720.	1.4	57
20	Photonic Sintering of Copper through the Controlled Reduction of Printed CuO Nanocrystals. ACS Applied Materials & Interfaces, 2015, 7, 25473-25478.	4.0	57
21	Back-contacted hybrid organicâ€“inorganic perovskite solar cells. Journal of Materials Chemistry C, 2016, 4, 3125-3130.	2.7	54
22	Controlled Growth of Monocrystalline Organoâ€Lead Halide Perovskite and Its Application in Photonic Devices. Angewandte Chemie - International Edition, 2017, 56, 12486-12491.	7.2	54
23	Hot-Carrier Organic Synthesis via the Near-Perfect Absorption of Light. ACS Catalysis, 2018, 8, 10331-10339.	5.5	54
24	Enhancement of the intrinsic light harvesting capacity of Cs₂AgBiBr₆double perovskiteviamodification with sulphide. Journal of Materials Chemistry A, 2020, 8, 2008-2020.	5.2	54
25	Alternating 5,5-Dimethylcyclopentadiene and Diketopyrrolopyrrole Copolymer Prepared at Room Temperature for High Performance Organic Thin-Film Transistors. Journal of the American Chemical Society, 2017, 139, 8094-8097.	6.6	49
26	Semi-transparent perovskite solar cells with a cross-linked hole transport layer. Nano Energy, 2020, 71, 104635.	8.2	49
27	Spray deposition of AgBiS₂ and Cu₃BiS₃ thin films for photovoltaic applications. Journal of Materials Chemistry C, 2018, 6, 2483-2494.	2.7	48
28	Back-contact perovskite solar cells with honeycomb-like charge collecting electrodes. Nano Energy, 2018, 50, 710-716.	8.2	44
29	Cu2ZnGeS4 Nanocrystals from Air-Stable Precursors for Sintered Thin Film Alloys. Chemistry of Materials, 2014, 26, 5482-5491.	3.2	42
30	Homoleptic 12-coordinate lanthanoids with Î·2-nitroso ligands. Dalton Transactions, 2007, , 1371-1373.	1.6	40
31	A Lab-to-Fab Study toward Roll-to-Roll Fabrication of Reproducible Perovskite Solar Cells under Ambient Room Conditions. Cell Reports Physical Science, 2021, 2, 100293.	2.8	39
32	Solvothermal vs. bench-top reactions: Control over the formation of discrete complexes and coordination polymers. Chemical Communications, 2007, , 3541.	2.2	38
33	Non-injection synthesis of Cu₂ZnSnS₄nanocrystals using a binary precursor and ligand approach. RSC Advances, 2013, 3, 1017-1020.	1.7	38
34	Tetradecanuclear polycarbonatolanthanoid clusters: Diverse coordination modes of carbonate providing access to novel core geometries. Dalton Transactions, 2012, 41, 10903.	1.6	37
35	Millimeterâ€Sized Clusters of Triple Cation Perovskite Enables Highly Efficient and Reproducible Rollâ€toâ€Roll Fabricated Inverted Perovskite Solar Cells. Advanced Functional Materials, 2022, 32, .	7.8	36
36	Transformation of a 1D to 3D coordination polymer mediated by low temperature lattice solvent loss. Chemical Communications, 2010, 46, 4899.	2.2	35

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37	LnIII2MnIII2 heterobimetallic â€œbutterflyâ€• complexes displaying antiferromagnetic coupling (Ln = Eu, Gd,) Tj ETQq1 1 0.784314 rgBT	1.6	35
38	Nucleophilic Addition of Water and Alcohols to Dicyanonitrosomethanide: Ligands with Diverse Bonding Modes in Magnetically Coupled dâ€Block Complexes. European Journal of Inorganic Chemistry, 2010, 2010, 59-73.	1.0	32
39	Effect of Grain Cluster Size on Backâ€Contact Perovskite Solar Cells. Advanced Functional Materials, 2018, 28, 1805098.	7.8	32
40	Detection of Halomethanes Using Cesium Lead Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 1454-1464.	7.3	32
41	In situ ligand formation in the synthesis of an octanuclear dysprosium â€˜double cubaneâ€™ cluster displaying single molecule magnet features. Dalton Transactions, 2012, 41, 3751.	1.6	31
42	Solution-processed antireflective coating for back-contact perovskite solar cells. Optics Express, 2020, 28, 12650.	1.7	30
43	Plasmonic Ge-doped ZnO nanocrystals. Chemical Communications, 2015, 51, 12369-12372.	2.2	28
44	Transparent Quasi-Interdigitated Electrodes for Semitransparent Perovskite Back-Contact Solar Cells. ACS Applied Energy Materials, 2018, 1, 4473-4478.	2.5	27
45	Melting point suppression in new lanthanoid(iii) ionic liquids by trapping of kinetic polymorphs: an in situsynchrotron powder diffraction study. Chemical Communications, 2012, 48, 124-126.	2.2	25
46	Lanthanoidâ€Based Ionic Liquids Incorporating the Dicyanonitrosomethanide Anion. Chemistry - A European Journal, 2012, 18, 9580-9589.	1.7	25
47	Anionâ€“Anion Interactions in the Crystal Packing of Functionalized Methanide Anions: An Experimental and Computational Study. Crystal Growth and Design, 2014, 14, 1922-1932.	1.4	25
48	Flashâ€Assisted Processing of Highly Conductive Zinc Oxide Electrodes from Water. Advanced Functional Materials, 2015, 25, 7263-7271.	7.8	25
49	Solution-Processed CuSbS₂ Thin Films and Superstrate Solar Cells with CdS/In₂S₃ Buffer Layers. ACS Applied Energy Materials, 2020, 3, 7885-7895.	2.5	25
50	New Approaches to 12â€Coordination: Structural Consequences of Steric Stress, Lanthanoid Contraction and Hydrogen Bonding. European Journal of Inorganic Chemistry, 2010, 2010, 2798-2812.	1.0	23
51	Highly Luminescent and Temperature Stable Quantum Dot Thin Films Based on a ZnS Composite. Chemistry of Materials, 2012, 24, 2117-2126.	3.2	23
52	Mimicry of Sputtered i-ZnO Thin Films Using Chemical Bath Deposition for Solution-Processed Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 22519-22526.	4.0	23
53	Fabrication of Back-Contact Electrodes Using Modified Natural Lithography. ACS Applied Energy Materials, 2018, 1, 1077-1082.	2.5	23
54	Plasmene Metasurface Absorbers: Electromagnetic Hot Spots and Hot Carriers. ACS Photonics, 2019, 6, 314-321.	3.2	23

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55	Metalâ€Promoted Nucleophilic Addition and Cyclization of Diamines with Dicyanonitrosomethanide, [C(CN)₂(NO)]^{â^'}. Chemistry - an Asian Journal, 2009, 4, 761-769.	1.7	22
56	Theoretical and Experimental Insights into the Mechanism of the Nucleophilic Addition of Water and Methanol to Dicyanonitrosomethanide. Journal of Physical Chemistry B, 2010, 114, 16517-16527.	1.2	22
57	Improving the Stability of Ambient Processed, SnO₂â€Based, Perovskite Solar Cells by the UVâ€Treatment of Subâ€Cells. Solar Rrl, 2020, 4, 2000262.	3.1	21
58	Aqueous Synthesis of Cu₂ZnSnSe₄ Nanocrystals. Chemistry of Materials, 2019, 31, 2138-2150.	3.2	19
59	Balancing Charge Extraction for Efficient Backâ€Contact Perovskite Solar Cells by Using an Embedded Mesoscopic Architecture. Advanced Energy Materials, 2021, 11, 2100053.	10.2	19
60	Honeycomb-shaped charge collecting electrodes for dipole-assisted back-contact perovskite solar cells. Nano Energy, 2020, 67, 104223.	8.2	17
61	Solution Processable Direct Bandgap Copperâ€Silverâ€Bismuth Iodide Photovoltaics: Compositional Control of Dimensionality and Optoelectronic Properties. Advanced Energy Materials, 2022, 12, .	10.2	17
62	Solution-processed CdS thin films from a single-source precursor. Journal of Materials Chemistry C, 2014, 2, 3247-3253.	2.7	16
63	Perovskite solar cells with a hybrid electrode structure. AIP Advances, 2019, 9, 125037.	0.6	16
64	Highâ€Performance and Stable Semiâ€Transparent Perovskite Solar Cells through Composition Engineering. Advanced Science, 2022, 9, .	5.6	16
65	High-Performance Unipolar n-Type Conjugated Polymers Enabled by Highly Electron-Deficient Building Blocks Containing F and CN Groups. Macromolecules, 2022, 55, 4429-4440.	2.2	16
66	An Octanuclear Iron(III) Cluster Complex Containing the Nitroso Bridging Ligand Carbamoylcyanonitrosomethanide. Australian Journal of Chemistry, 2009, 62, 1137.	0.5	15
67	Aqueous Synthesis of High-Quality Cu₂ZnSnS₄ Nanocrystals and Their Thermal Annealing Characteristics. Langmuir, 2018, 34, 1655-1665.	1.6	15
68	Self-Assembly of Plasmonic Near-Perfect Absorbers of Light: The Effect of Particle Size. Journal of Physical Chemistry Letters, 2020, 11, 8378-8385.	2.1	15
69	Synthesis and magnetic properties of a series of 3d/4f/3d heterometallic trinuclear complexes incorporating in situ ligand formation. Inorganica Chimica Acta, 2012, 389, 99-106.	1.2	13
70	Soluble Xanthate Compounds for the Solution Deposition of Metal Sulfide Thin Films. ChemPlusChem, 2015, 80, 107-118.	1.3	13
71	Multiple Roles of Cobalt Pyrazol-Pyridine Complexes in High-Performing Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 4675-4682.	2.1	13
72	Facile purification of CsPbX3 (X = Clâ^', Brâ^', Iâ^') perovskite nanocrystals. Journal of Chemical Physics, 2019, 151, 121105.	1.2	13

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73	Tetramethylammonium hexanitratoneodymiate(III). Structural variations of the [Nd(NO₃)₆]^{3â^'} anion in a single crystal. Journal of Coordination Chemistry, 2007, 60, 2191-2196.	0.8	12
74	Synthesis and Structure of New Lanthanoid Carbonate â€œLanthaballsâ€. Inorganic Chemistry, 2015, 54, 792-800.	1.9	11
75	Precursor Route Poly(1,4-phenylenevinylene)-Based Interlayers for Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 889-899.	2.5	11
76	Microfluidic Processing of Ligandâ€Engineered NiO Nanoparticles for Lowâ€Temperature Holeâ€Transporting Layers in Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100342.	3.1	11
77	Chains, helices, sheets and unusual 3D nets: Diverse structures of the flexible, ditopic ligand 1,2-bis(3-(4-pyridyl)pyrazolyl)ethane. Polyhedron, 2010, 29, 2-9.	1.0	10
78	Controlled Growth of Monocrystalline Organoâ€Lead Halide Perovskite and Its Application in Photonic Devices. Angewandte Chemie, 2017, 129, 12660-12665.	1.6	10
79	Unconventional, Gram-Scale Synthesis of a Molecular Dimer Organic Luminogen with Aggregation-Induced Emission. ACS Applied Materials & Interfaces, 2021, 13, 40441-40450.	4.0	9
80	Durable Electrooxidation of Acidic Water Catalysed by a Cobaltâ€Bismuthâ€based Oxide Composite: An Unexpected Role of the Fâ€doped SnO₂ Substrate. ChemCatChem, 2022, 14, .	1.8	9
81	Structure and magnetism of a mixed-valence octanuclear manganese(<scp>ii</scp>/<scp>iii</scp>) cluster derived from carbamoylcyanonitrosomethanide (ccnm). Dalton Transactions, 2013, 42, 1400-1405.	1.6	8
82	Hydrogen Bonding of O-Ethylxanthate Compounds and Neutron Structural Determination of Câ€“HÂ·Â·Â·S Interactions. Australian Journal of Chemistry, 2014, 67, 1829.	0.5	8
83	Tetramethylammonium hexanitratolanthanate(III) methanol solvate. Acta Crystallographica Section E: Structure Reports Online, 2006, 62, m1942-m1943.	0.2	7
84	The formation mechanism of Janus nanostructures in one-pot reactions: the case of Agâ€“Ag₈GeS₆. Journal of Materials Chemistry A, 2016, 4, 7060-7070.	5.2	7
85	Non-Aqueous One-Pot SnO₂ Nanoparticle Inks and Their Use in Printable Perovskite Solar Cells. Chemistry of Materials, 2022, 34, 5535-5545.	3.2	7
86	Cadmium tris(dithiocarbamate) ionic liquids as single source, solvent-free cadmium sulfide precursors. Chemical Communications, 2018, 54, 8925-8928.	2.2	6
87	Chemical passivation of the perovskite layer and its real-time effect on the device performance in back-contact perovskite solar cells. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	6
88	Dual Photolytic Pathways in an Alloyed Plasmonic Near-Perfect Absorber: Implications for Photoelectrocatalysis. ACS Applied Nano Materials, 2021, 4, 2702-2712.	2.4	5
89	Two-Dimensional Nanoassemblies from Plasmonic Matryoshka Nanoframes. Journal of Physical Chemistry C, 2021, 125, 27753-27762.	1.5	5
90	Effect of Thionation on the Performance of PNDIT2-Based Polymer Solar Cells. Journal of Physical Chemistry C, 2019, 123, 12062-12072.	1.5	4

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91	Visualisierung der Phasensegregation in Gemischthalogenidâ€•Perowskiteinkristallen. Angewandte Chemie, 2019, 131, 2919-2924.	1.6	4
92	Residual solvent additive enables the nanostructuring of PTB7-Th:PC71BM solar cells via soft lithography. AIP Advances, 2019, 9, .	0.6	3
93	Directing Energy into a Subwavelength Nonresonant Metasurface across the Visible Spectrum. ACS Applied Energy Materials, 2019, 2, 1155-1161.	2.5	2
94	Slot Die Coating of CIGS Nanoparticle Inks for Scalable Solution Processed Photovoltaics. , 2019, , .		1
95	Solution processing of next-generation nanocrystal solar cells. , 2013, , .		0
96	Some Products from C=O Condensations of Quinacridones. Australian Journal of Chemistry, 2021, 74, 111.	0.5	0
97	Revealing the Relationship between Design and Performance of Back-Contact Perovskite Solar Cells with Honeycomb Charge Collecting Electrode. , 0, , .		0
98	Some new 2,8-disubstituted-1,7-dicyano-3,9-diazaperylenes. Arkivoc, 2023, 2022, 24-45.	0.3	0