

Aaron M Lindenberg

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8728727/publications.pdf>

Version: 2024-02-01

62
papers

5,474
citations

117625

34
h-index

133252

59
g-index

62
all docs

62
docs citations

62
times ranked

8428
citing authors

#	ARTICLE	IF	CITATIONS
1	A Bismuth-Halide Double Perovskite with Long Carrier Recombination Lifetime for Photovoltaic Applications. <i>Journal of the American Chemical Society</i> , 2016, 138, 2138-2141.	13.7	1,514
2	Mechanism for Broadband White-Light Emission from Two-Dimensional (110) Hybrid Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2258-2263.	4.6	428
3	Structural origins of broadband emission from layered Pb ²⁺ /Br hybrid perovskites. <i>Chemical Science</i> , 2017, 8, 4497-4504.	7.4	419
4	An ultrafast symmetry switch in a Weyl semimetal. <i>Nature</i> , 2019, 565, 61-66.	27.8	307
5	Observation of Transient Structural-Transformation Dynamics in a Cu ₂ S Nanorod. <i>Science</i> , 2011, 333, 206-209.	12.6	220
6	Reversible Optical Switching of Infrared Antenna Resonances with Ultrathin Phase-Change Layers Using Femtosecond Laser Pulses. <i>ACS Photonics</i> , 2014, 1, 833-839.	6.6	181
7	Ultrafast Photovoltaic Response in Ferroelectric Nanolayers. <i>Physical Review Letters</i> , 2012, 108, 087601.	7.8	150
8	Light-induced picosecond rotational disordering of the inorganic sublattice in hybrid perovskites. <i>Science Advances</i> , 2017, 3, e1602388.	10.3	149
9	Femtosecond x-ray diffraction reveals a liquid-liquid phase transition in phase-change materials. <i>Science</i> , 2019, 364, 1062-1067.	12.6	120
10	Steam-created grain boundaries for methane C-H activation in palladium catalysts. <i>Science</i> , 2021, 373, 1518-1523.	12.6	105
11	Berry curvature memory through electrically driven stacking transitions. <i>Nature Physics</i> , 2020, 16, 1028-1034.	16.7	100
12	Visualization of dynamic polaronic strain fields in hybrid lead halide perovskites. <i>Nature Materials</i> , 2021, 20, 618-623.	27.5	96
13	Dynamic Structural Response and Deformations of Monolayer MoS ₂ Visualized by Femtosecond Electron Diffraction. <i>Nano Letters</i> , 2015, 15, 6889-6895.	9.1	93
14	A setup for ultrafast time-resolved x-ray absorption spectroscopy. <i>Review of Scientific Instruments</i> , 2004, 75, 24-30.	1.3	91
15	Terahertz Emission from Hybrid Perovskites Driven by Ultrafast Charge Separation and Strong Electron-Phonon Coupling. <i>Advanced Materials</i> , 2018, 30, 1704737.	21.0	86
16	Electrochemical ion insertion from the atomic to the device scale. <i>Nature Reviews Materials</i> , 2021, 6, 847-867.	48.7	84
17	Single-cycle terahertz pulses with >0.2 V/Å... field amplitudes via coherent transition radiation. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	74
18	Color Switching with Enhanced Optical Contrast in Ultrathin Phase-Change Materials and Semiconductors Induced by Femtosecond Laser Pulses. <i>ACS Photonics</i> , 2015, 2, 178-182.	6.6	74

#	ARTICLE	IF	CITATIONS
19	Probing the hydrogen-bond network of water via time-resolved soft X-ray spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 3951.	2.8	71
20	Subterahertz collective dynamics of polar vortices. <i>Nature</i> , 2021, 592, 376-380.	27.8	66
21	Picosecond Electric-Field-Induced Threshold Switching in Phase-Change Materials. <i>Physical Review Letters</i> , 2016, 117, 067601.	7.8	59
22	Universal phase dynamics in VO ₂ switches revealed by ultrafast operando diffraction. <i>Science</i> , 2021, 373, 352-355.	12.6	53
23	Direct observation of ultrafast hydrogen bond strengthening in liquid water. <i>Nature</i> , 2021, 596, 531-535.	27.8	53
24	Recording interfacial currents on the subnanometer length and femtosecond time scale by terahertz emission. <i>Science Advances</i> , 2019, 5, eaau0073.	10.3	50
25	Ultrafast Electronic and Structural Response of Monolayer MoS ₂ under Intense Photoexcitation Conditions. <i>ACS Nano</i> , 2014, 8, 10734-10742.	14.6	49
26	Ultrafast Terahertz Gating of the Polarization and Giant Nonlinear Optical Response in BiFeO ₃ Thin Films. <i>Advanced Materials</i> , 2015, 27, 6371-6375.	21.0	47
27	Transient terahertz photoconductivity measurements of minority-carrier lifetime in tin sulfide thin films: Advanced metrology for an early stage photovoltaic material. <i>Journal of Applied Physics</i> , 2016, 119, .	2.5	47
28	Ultrafast conversions between hydrogen bonded structures in liquid water observed by femtosecond x-ray spectroscopy. <i>Journal of Chemical Physics</i> , 2009, 131, 234505.	3.0	46
29	THz-Pulse-Induced Selective Catalytic CO Oxidation on Ru. <i>Physical Review Letters</i> , 2015, 115, 036103.	7.8	46
30	Dynamic Optical Tuning of Interlayer Interactions in the Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2017, 17, 7761-7766.	9.1	46
31	How Supercooled Liquid Phase-Change Materials Crystallize: Snapshots after Femtosecond Optical Excitation. <i>Chemistry of Materials</i> , 2015, 27, 5641-5646.	6.7	44
32	Bulk and Nanocrystalline Cesium Lead-Halide Perovskites as Seen by Halide Magnetic Resonance. <i>ACS Central Science</i> , 2020, 6, 1138-1149.	11.3	43
33	Visualization of Atomic-Scale Motions in Materials via Femtosecond X-Ray Scattering Techniques. <i>Annual Review of Materials Research</i> , 2017, 47, 425-449.	9.3	39
34	Ultrafast terahertz-induced response of GeSbTe phase-change materials. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	38
35	Light-Induced Currents at Domain Walls in Multiferroic BiFeO ₃ . <i>Nano Letters</i> , 2020, 20, 145-151.	9.1	36
36	Twist-Angle-Dependent Ultrafast Charge Transfer in MoS ₂ -Graphene van der Waals Heterostructures. <i>Nano Letters</i> , 2021, 21, 8051-8057.	9.1	30

#	ARTICLE	IF	CITATIONS
37	Anisotropic structural dynamics of monolayer crystals revealed by femtosecond surface X-ray scattering. <i>Nature Photonics</i> , 2019, 13, 425-430.	31.4	28
38	Visualization of nanocrystal breathing modes at extreme strains. <i>Nature Communications</i> , 2015, 6, 6577.	12.8	26
39	Real-Time Visualization of Nanocrystal Solid-Solid Transformation Pathways. <i>Nano Letters</i> , 2014, 14, 1995-1999.	9.1	24
40	Time- and Temperature-Independent Local Carrier Mobility and Effects of Regioregularity in Polymer-Encapsulated Fullerene Organic Semiconductors. <i>Advanced Electronic Materials</i> , 2016, 2, 1500351.	5.1	23
41	High-speed all-optical terahertz polarization switching by a transient plasma phase modulator. <i>Applied Physics Letters</i> , 2010, 96, 161103.	3.3	22
42	Interlayer magnetophononic coupling in MnBi ₂ Te ₄ . <i>Nature Communications</i> , 2022, 13, 1929.	12.8	22
43	High-pressure Raman spectroscopy of phase change materials. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	21
44	Nonequilibrium Thermodynamics of Colloidal Gold Nanocrystals Monitored by Ultrafast Electron Diffraction and Optical Scattering Microscopy. <i>ACS Nano</i> , 2020, 14, 4792-4804.	14.6	20
45	Dynamic lattice distortions driven by surface trapping in semiconductor nanocrystals. <i>Nature Communications</i> , 2021, 12, 1860.	12.8	19
46	Ultrafast light-induced symmetry changes in single BaTiO ₃ nanowires. <i>Journal of Materials Chemistry C</i> , 2017, 5, 1522-1528.	5.5	16
47	Highly Efficient Uniaxial In-Plane Stretching of a 2D Material via Ion Insertion. <i>Advanced Materials</i> , 2021, 33, e2101875.	21.0	16
48	Ultrafast Polarization Response of an Optically Trapped Single Ferroelectric Nanowire. <i>Nano Letters</i> , 2014, 14, 4322-4327.	9.1	13
49	Visualizing Energy Transfer at Buried Interfaces in Layered Materials Using Picosecond X-Rays. <i>Advanced Functional Materials</i> , 2020, 30, 2002282.	14.9	11
50	Atomic-scale imaging of ultrafast materials dynamics. <i>MRS Bulletin</i> , 2018, 43, 485-490.	3.5	10
51	Observation of a Novel Lattice Instability in Ultrafast Photoexcited SnSe. <i>Physical Review X</i> , 2022, 12, .	8.9	10
52	Nanoscale Disorder Generates Subdiffusive Heat Transport in Self-Assembled Nanocrystal Films. <i>Nano Letters</i> , 2021, 21, 3540-3547.	9.1	7
53	Q-Chem, a Modern GPU-Accelerated Computational Framework for (Time-Dependent) Density Functional Theory. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 7447-7467.	5.3	7
54	Dynamically Tunable Terahertz Emission Enabled by Anomalous Optical Phonon Responses in Lead Telluride. <i>ACS Photonics</i> , 2021, 8, 3633-3640.	6.6	7

#	ARTICLE	IF	CITATIONS
55	Acceleration of Crystallization Kinetics in GeSbTe-Based Phase-Change Materials by Substitution of Ge by Sn. <i>Advanced Functional Materials</i> , 2021, 31, 2004803.	14.9	5
56	Dynamic structural views in solar energy materials by femtosecond electron diffraction. <i>MRS Bulletin</i> , 2021, 46, 704-710.	3.5	5
57	Structural imaging of nanoscale phonon transport in ferroelectrics excited by metamaterial-enhanced terahertz fields. <i>Physical Review Materials</i> , 2017, 1, .	2.4	5
58	Terahertz Emission: Terahertz Emission from Hybrid Perovskites Driven by Ultrafast Charge Separation and Strong Electron-Phonon Coupling (<i>Adv. Mater.</i> 11/2018). <i>Advanced Materials</i> , 2018, 30, 1870079.	21.0	2
59	Thermal Boundary Conductance: Visualizing Energy Transfer at Buried Interfaces in Layered Materials Using Picosecond X-Rays (<i>Adv. Funct. Mater.</i> 34/2020). <i>Advanced Functional Materials</i> , 2020, 30, 2070232.	14.9	1
60	Synthesis of Macroscopic Single Crystals of Ge ₂ Sb ₂ Te ₅ via Single-Shot Femtosecond Optical Excitation. <i>Crystal Growth and Design</i> , 2020, 20, 6660-6667.	3.0	0
61	Monitoring Charge Separation Dynamics Using THz Emission Spectroscopy. , 2019, , .		0
62	Measuring Electron-Phonon Coupling induced Lattice Reorganization in Lead Halide Perovskite Nanocrystals through Femto-Second Resolved Optical-pump Diffraction-probe experiments. , 0, , .		0