

A D Caviglia

List of Publications by Year in descending order

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65
papers

6,820
citations

147801

31
h-index

123424

61
g-index

67
all docs

67
docs citations

67
times ranked

6385
citing authors

#	ARTICLE	IF	CITATIONS
1	Gate-tunable pairing channels in superconducting non-centrosymmetric oxides nanowires. Npj Quantum Materials, 2022, 7, .	5.2	8
2	Electrostatically Driven Polarization Flop and Strain-Induced Curvature in Free-Standing Ferroelectric Superlattices. Advanced Materials, 2022, 34, e2106826.	21.0	18
3	Self-Sealing Complex Oxide Resonators. Nano Letters, 2022, 22, 1475-1482.	9.1	10
4	Ultrafast phononic switching of magnetization. Nature Physics, 2021, 17, 489-492.	16.7	85
5	Quasi-two-dimensional electron gas at the oxide interfaces for topological quantum physics. Europhysics Letters, 2021, 133, 17001.	2.0	10
6	Nanopatterning of Weak Links in Superconducting Oxide Interfaces. Nanomaterials, 2021, 11, 398.	4.1	6
7	Ultrafast control of magnetic interactions via light-driven phonons. Nature Materials, 2021, 20, 607-611.	27.5	112
8	Controlling the anisotropy of a van der Waals antiferromagnet with light. Science Advances, 2021, 7, .	10.3	59
9	Non-universal current flow near the metal-insulator transition in an oxide interface. Nature Communications, 2021, 12, 3311.	12.8	9
10	Coherent spin-wave transport in an antiferromagnet. Nature Physics, 2021, 17, 1001-1006.	16.7	61
11	Coupling Charge and Topological Reconstructions at Polar Oxide Interfaces. Physical Review Letters, 2021, 127, 127202.	7.8	20
12	Ultrathin complex oxide nanomechanical resonators. Communications Physics, 2020, 3, .	5.3	24
13	Anisotropic magnetoresistance in spin-orbit semimetal SrIrO_3 . European Physical Journal Plus, 2020, 135, 627.	2.6	6
14	Temperature dependent inverse spin Hall effect in Co/Pt spintronic emitters. Applied Physics Letters, 2020, 116, .	3.3	17
15	Extraordinary Hall balance in ultrathin SrRuO_3 bilayers. JPhys Materials, 2020, 3, 025005.	4.2	8
16	Coupling Lattice Instabilities Across the Interface in Ultrathin Oxide Heterostructures. , 2020, 2, 389-394.		15
17	Ultrafast strain engineering and coherent structural dynamics from resonantly driven optical phonons in LaAlO_3 . Npj Quantum Materials, 2020, 5, .	5.2	13
18	Berry phase engineering at oxide interfaces. Physical Review Research, 2020, 2, .	3.6	64

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19	A spin-orbit playground: surfaces and interfaces of transition metal oxides. Reports on Progress in Physics, 2019, 82, 012501.	20.1	29
20	Large Tunability of Strain in WO_3 Single-Crystal Microresonators Controlled by Exposure to H_2 Gas. ACS Applied Materials & Interfaces, 2019, 11, 44438-44443.	8.0	9
21	Bimodal Phase Diagram of the Superfluid Density in $\text{LaAlO}_3/\text{SrTiO}_3$ Revealed by an Interfacial Waveguide Resonator. Physical Review Letters, 2019, 122, 036801.	11.8	8
22	Band inversion driven by electronic correlations at the (111) $\text{LaAlO}_3/\text{SrTiO}_3$ interface. Physical Review B, 2019, 99, .	11.8	19
23	Ultrafast Spin Dynamics in Photodoped Spin-Orbit Mott Insulator Sr_2VO_4 . Physical Review X, 2019, 9, .	8.9	19
24	Balanced electron-hole transport in spin-orbit semimetal SrIrO_3 heterostructures. Physical Review B, 2018, 97, .	3.2	24
25	Single-Crystal Pt-Decorated WO_3 Ultrathin Films: A Platform for Sub-ppm Hydrogen Sensing at Room Temperature. ACS Applied Nano Materials, 2018, 1, 3446-3452.	5.0	29
26	Transport regimes of a split gate superconducting quantum point contact in the two-dimensional $\text{LaAlO}_3/\text{SrTiO}_3$ superfluid. Nature Communications, 2018, 9, 2276.	12.8	23
27	Transport Properties of TMO Interfaces. Springer Series in Materials Science, 2018, , 37-53.	0.6	0
28	Charge doping and large lattice expansion in oxygen-deficient heteroepitaxial WO_3 . Physical Review Materials, 2018, 2, .	2.4	18
29	Light control of the nanoscale phase separation in heteroepitaxial nickelates. Physical Review Materials, 2018, 2, .	2.4	5
30	Side Gate Tunable Josephson Junctions at the $\text{LaAlO}_3/\text{SrTiO}_3$ Interface. Nano Letters, 2017, 17, 715-720.	9.1	36
31	Selective High-Frequency Mechanical Actuation Driven by the VO_2 Electronic Instability. Advanced Materials, 2017, 29, 1701618.	21.0	32
32	Two-dimensional superconductivity at the (111) $\text{LaAlO}_3/\text{SrTiO}_3$ interface. Physical Review B, 2017, 96, .	3.2	47
33	Insulator-to-Metal Transition at Oxide Interfaces Induced by WO_3 Overlayers. ACS Applied Materials & Interfaces, 2017, 9, 42336-42343.	8.0	6
34	Quantum paraelectricity probed by superconducting resonators. Physical Review B, 2017, 95, .	3.2	8
35	Multiple Supersonic Phase Fronts Launched at a Complex-Oxide Heterointerface. Physical Review Letters, 2017, 118, 027401.	7.8	21
36	Spin-Orbit Semimetal SrIrO_3 in the Two-Dimensional Limit. Physical Review Letters, 2017, 119, 256403.	7.8	83

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37	Quantum interference in an interfacial superconductor. Nature Nanotechnology, 2016, 11, 861-865.	31.5	33
38	Epitaxial growth and thermodynamic stability of SrIrO ₃ /SrTiO ₃ heterostructures. Applied Physics Letters, 2016, 109, .	3.3	46
39	Striped nanoscale phase separation at the metal-insulator transition of heteroepitaxial nickelates. Nature Communications, 2016, 7, 13141.	12.8	58
40	Nanoscale Electrostatic Control of Oxide Interfaces. Nano Letters, 2015, 15, 2627-2632.	9.1	40
41	Growth-induced electron mobility enhancement at the LaAlO ₃ /SrTiO ₃ interface. Applied Physics Letters, 2015, 106, 051604.	3.3	40
42	Spatially resolved ultrafast magnetic dynamics initiated at a complex oxide heterointerface. Nature Materials, 2015, 14, 883-888.	27.5	109
43	Giant Negative Magnetoresistance Driven by Spin-Orbit Coupling at the LaAlO ₃ /SrTiO ₃ Interface. Physical Review Letters, 2015, 115, 016802.	7.8	63
44	Heterogeneous Magnetic Order Melting Triggered by Ultrafast Lattice Control at the LaAlO ₃ /NdNiO ₃ Interface. , 2014, , .		0
45	Melting of Charge Stripes in Vibrationally Driven LaAlO ₃ /SrTiO ₃ Interface. Physical Review Letters, 2014, 112, 157002.	7.8	82
46	Photoinduced melting of magnetic order in the correlated electron insulator NdNiO ₃ . Physical Review B, 2013, 88, .	3.2	57
47	Ultrafast Strain Engineering in Complex Oxide Heterostructures. Physical Review Letters, 2012, 108, 136801.	7.8	131
48	In-plane electronic confinement in superconducting LaAlO ₃ /SrTiO ₃ nanostructures. Applied Physics Letters, 2012, 101, .	3.3	58
49	Rashba induced magnetoconductance oscillations in the LaAlO ₃ /SrTiO ₃ interface. Physical Review B, 2012, 86, .	3.2	92
50	Electrostriction at the LaAlO ₃ /SrTiO ₃ interface. Physical Review Letters, 2011, 107, 056102.	7.8	227
51	Superconductivity and magnetism living apart together?. Physics Magazine, 2011, 4, .	0.1	1
52	Influence of the growth conditions on the LaAlO ₃ /SrTiO ₃ interface electronic properties. Europhysics Letters, 2010, 91, 17004.	2.0	103
53	Two-Dimensional Quantum Oscillations of the Conductance at the LaAlO ₃ /SrTiO ₃ interface. Physical Review Letters, 2010, 105, 236802.	7.8	227
54	Diodes with breakdown voltages enhanced by the metal-insulator transition of LaAlO ₃ /SrTiO ₃ interfaces. Applied Physics Letters, 2010, 96, 183504.	3.3	21

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55	Tunable Rashba Spin-Orbit Interaction at Oxide Interfaces. Physical Review Letters, 2010, 104, 126803.	7.8	785
56	Seebeck effect in the conducting LaAlO ₃ /SrTiO ₃ interface. Physical Review B, 2010, 81, .	3.2	43
57	Anisotropy of the superconducting transport properties of the LaAlO ₃ /SrTiO ₃ interface. Applied Physics Letters, 2009, 94, .	3.3	110
58	Electron Scattering at Dislocations in LaAlO ₃ /SrTiO ₃ interface. Physical Review Letters, 2009, 102, 046809.	7.8	45
59	Electrostatically-tuned superconductor-metal-insulator quantum transition at the LaAlO ₃ /SrTiO ₃ interface. Physical Review B, 2009, 79, .	3.2	44
60	Superconductivity at the LaAlO ₃ /SrTiO ₃ interface. Journal of Physics Condensed Matter, 2009, 21, 164213.	1.8	86
61	Electric field control of the LaAlO ₃ /SrTiO ₃ interface ground state. Nature, 2008, 456, 624-627.	27.8	1,068
62	Transport properties of non magnetic and magnetic ZnO thin films under field effect. , 2007, , .		1
63	Superconducting Interfaces Between Insulating Oxides. Science, 2007, 317, 1196-1199.	12.6	2,374
64	Planar spin valves fabricated on manganite epitaxial thin films. Journal of Applied Physics, 2006, 99, 114508.	2.5	5
65	Current-driven hysteresis effects in manganite spintronics devices. Physical Review B, 2006, 74, .	3.2	26