Riccardo Comin

List of Publications by Year
in descending order

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84	22,517	46984 47	56687 83
papers	citations	h-index	g-index

87	87	87	23270
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Twofold van Hove singularity and origin of charge order in topological kagome superconductor CsV3Sb5. Nature Physics, 2022, 18, 301-308.	6.5	176
2	Randomized probe imaging through deep k-learning. Optics Express, 2022, 30, 2247.	1.7	2
3	Ferromagnetic helical nodal line and Kane-Mele spin-orbit coupling in kagome metal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>Fe</mml:mi></mml:mrow><mml:mn>3</mml:mn> Physical Review B, 2022, 105, .	1.7	10
4	Carrier Doping Physics of Rare Earth Perovskite Nickelates RENiO3. Frontiers in Physics, 2022, 10, .	1.0	7
5	Evidence for a single-layer van der Waals multiferroic. Nature, 2022, 602, 601-605.	13.7	104
6	Maskless Fourier transform holography. Optics Express, 2022, 30, 403.	1.7	2
7	Electronic Band Tuning and Multivalley Raman Scattering in Monolayer Transition Metal Dichalcogenides at High Pressures. ACS Nano, 2022, 16, 8064-8075.	7.3	13
8	Hard, transparent, sp3-containing 2D phase formed from few-layer graphene under compression. Carbon, 2021, 173, 744-757.	5.4	31
9	Sudden Collapse of Magnetic Order in Oxygen-Deficient Nickelate Films. Physical Review Letters, 2021, 126, 187602.	2.9	16
10	Evolution of spin excitations from bulk to monolayer FeSe. Nature Communications, 2021, 12, 3122.	5.8	29
11	Reply to: Perovskite decomposition and missing crystal planes in HRTEM. Nature, 2021, 594, E8-E9.	13.7	2
12	Local electronic structure of rutile <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>RuO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml Physical Review Research, 2021, 3, .	1.3	13
13	First-principles calculation of oxygen vacancy effects on the magnetic properties of the perovskite <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>SrNiO</mml:mi><mml:mn>3</mml:mn></mml Physical Review Materials, 2021, 5, .	0.9	7
14	Dirac fermions and flat bands in the ideal kagome metal FeSn. Nature Materials, 2020, 19, 163-169.	13.3	367
15	High-valence metals improve oxygen evolution reaction performance by modulating 3d metal oxidation cycle energetics. Nature Catalysis, 2020, 3, 985-992.	16.1	390
16	Topological flat bands in frustrated kagome lattice CoSn. Nature Communications, 2020, 11, 4004.	5.8	203
17	Electron Microscopy to Probe Flat Band Topological Systems of 2D and Pseudo 2D Quantum Materials. Microscopy and Microanalysis, 2020, 26, 2376-2377.	0.2	0
18	Voltage Control of Magnetism above Room Temperature in Epitaxial SrCo_{1â€“x}Fe_xO_{3â^Î´}. ACS Nano, 2020, 14, 8949-8957.	7.3	31

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19	Multiorbital charge-density wave excitations and concomitant phonon anomalies in Bi ₂ Sr ₂ LaCuO _{6+Î´}. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16219-16225.	3.3	29
20	Distinction between pristine and disorder-perturbed charge density waves in ZrTe3. Nature Communications, 2020, 11, 98.	5.8	21
21	Single-frame far-field diffractive imaging with randomized illumination. Optics Express, 2020, 28, 37103.	1.7	10
22	de Haas-van Alphen effect of correlated Dirac states in kagome metal Fe3Sn2. Nature Communications, 2019, 10, 4870.	5.8	48
23	Carrier localization in perovskite nickelates from oxygen vacancies. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21992-21997.	3.3	71
24	Scale-invariant magnetic textures in the strongly correlated oxide NdNiO3. Nature Communications, 2019, 10, 4568.	5.8	30
25	Enhancement of interlayer exchange in an ultrathin two-dimensional magnet. Nature Physics, 2019, 15, 1255-1260.	6.5	165
26	Evolution of charge order topology across a magnetic phase transition in cuprate superconductors. Nature Physics, 2019, 15, 335-340.	6.5	21
27	Putting the gap on the map. Nature Physics, 2019, 15, 736-738.	6.5	3
28	Temperature-independent thermal radiation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26402-26406.	3.3	69
29	Anomalous Antiferromagnetism in Metallic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>RuO</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Determined by Resonant X-ray Scattering. Physical Review Letters, 2019, 122, 017202.	2.9	53
30	Resolving the nature of electronic excitations in resonant inelastic x-ray scattering. Physical Review B, 2019, 99, .	1.1	11
31	XMCD study of magnetism and valence state in iron-substituted strontium titanate. Physical Review Materials, 2019, 3, .	0.9	7
32	Perovskite nickelates as electric-field sensors in salt water. Nature, 2018, 553, 68-72.	13.7	146
33	Massive Dirac fermions in a ferromagnetic kagome metal. Nature, 2018, 555, 638-642.	13.7	544
34	Theory-driven design of high-valence metal sites for water oxidation confirmed using in situ soft X-ray absorption. Nature Chemistry, 2018, 10, 149-154.	6.6	476
35	Thermal conductivity in self-assembled CoFe2O4/BiFeO3 vertical nanocomposite films. Applied Physics Letters, 2018, 113, .	1.5	5
36	Electronâ€“phonon interaction in efficient perovskite blue emitters. Nature Materials, 2018, 17, 550-556.	13.3	472

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37	Charge crystallization in a Fermi liquid. Nature Materials, 2018, 17, 661-662.	13.3	0
38	Mottness at finite doping and charge instabilities in cuprates. Nature Physics, 2017, 13, 806-811.	6.5	19
39	Tailoring the Energy Landscape in Quasi-2D Halide Perovskites Enables Efficient Green-Light Emission. Nano Letters, 2017, 17, 3701-3709.	4.5	409
40	Habituation based synaptic plasticity and organismic learning in a quantum perovskite. Nature Communications, 2017, 8, 240.	5.8	84
41	The Inâ€Gap Electronic State Spectrum of Methylammonium Lead Iodide Singleâ€Crystal Perovskites. Advanced Materials, 2016, 28, 3406-3410.	11.1	187
42	Lattice dynamics and the nature of structural transitions in organolead halide perovskites. Physical Review B, 2016, 94, .	1.1	46
43	Highly Efficient Perovskiteâ€Quantumâ€Dot Lightâ€Emitting Diodes by Surface Engineering. Advanced Materials, 2016, 28, 8718-8725.	11.1	917
44	Pure Cubicâ€Phase Hybrid Iodobismuthates AgBi₂I₇ for Thinâ€Film Photovoltaics. Angewandte Chemie - International Edition, 2016, 55, 9586-9590.	7.2	201
45	Pure Cubicâ€Phase Hybrid Iodobismuthates AgBi₂I₇ for Thinâ€Film Photovoltaics. Angewandte Chemie, 2016, 128, 9738-9742.	1.6	42
46	Amineâ€Free Synthesis of Cesium Lead Halide Perovskite Quantum Dots for Efficient Lightâ€Emitting Diodes. Advanced Functional Materials, 2016, 26, 8757-8763.	7.8	344
47	Tracking local magnetic dynamics via high-energy charge excitations in a relativistic Mott insulator. Physical Review B, 2016, 94, .	1.1	13
48	Crosslinked Remoteâ€Doped Holeâ€Extracting Contacts Enhance Stability under Accelerated Lifetime Testing in Perovskite Solar Cells. Advanced Materials, 2016, 28, 2807-2815.	11.1	108
49	Perovskite energy funnels for efficient light-emitting diodes. Nature Nanotechnology, 2016, 11, 872-877.	15.6	1,868
50	Resonant X-Ray Scattering Studies of Charge Order in Cuprates. Annual Review of Condensed Matter Physics, 2016, 7, 369-405.	5.2	282
51	Response to Comment on â€œBroken translational and rotational symmetry via charge stripe order in underdoped YBa ₂ Cu ₃ O _{6+y} â€• Science, 2016, 351, 235-235.	6.0	7
52	Homogeneously dispersed multimetal oxygen-evolving catalysts. Science, 2016, 352, 333-337.	6.0	1,948
53	Highly efficient quantum dot near-infrared light-emitting diodes. Nature Photonics, 2016, 10, 253-257.	15.6	361
54	Ligand-Stabilized Reduced-Dimensionality Perovskites. Journal of the American Chemical Society, 2016, 138, 2649-2655.	6.6	1,157

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55	Heterovalent Dopant Incorporation for Bandgap and Type Engineering of Perovskite Crystals. Journal of Physical Chemistry Letters, 2016, 7, 295-301.	2.1	332
56	Perovskite Quantum Dots Modeled Using ab Initio and Replica Exchange Molecular Dynamics. Journal of Physical Chemistry C, 2015, 119, 13965-13971.	1.5	28
57	Symmetry of charge order in cuprates. Nature Materials, 2015, 14, 796-800.	13.3	195
58	Halide-Dependent Electronic Structure of Organolead Perovskite Materials. Chemistry of Materials, 2015, 27, 4405-4412.	3.2	305
59	Self-Assembled PbSe Nanowire:Perovskite Hybrids. Journal of the American Chemical Society, 2015, 137, 14869-14872.	6.6	11
60	Planar-integrated single-crystalline perovskite photodetectors. Nature Communications, 2015, 6, 8724.	5.8	617
61	Low trap-state density and long carrier diffusion in organolead trihalide perovskite single crystals. Science, 2015, 347, 519-522.	6.0	4,156
62	Charge ordering in the electron-doped superconductor Nd _{2â€“} _x Ce _x CuO ₄. Science, 2015, 347, 282-285.	6.0	182
63	Two-Photon Absorption in Organometallic Bromide Perovskites. ACS Nano, 2015, 9, 9340-9346.	7.3	254
64	Structural, optical, and electronic studies of wide-bandgap lead halide perovskites. Journal of Materials Chemistry C, 2015, 3, 8839-8843.	2.7	161
65	Quantum-dot-in-perovskite solids. Nature, 2015, 523, 324-328.	13.7	468
66	Record Charge Carrier Diffusion Length in Colloidal Quantum Dot Solids via Mutual Dotâ€Toâ€Dot Surface Passivation. Advanced Materials, 2015, 27, 3325-3330.	11.1	118
67	Broken translational and rotational symmetry via charge stripe order in underdoped YBa ₂ Cu ₃ O ₆₊ _y . Science, 2015, 347, 1335-1339.	6.0	149
68	Perovskiteâ€“fullerene hybrid materials suppress hysteresis in planar diodes. Nature Communications, 2015, 6, 7081.	5.8	948
69	Snapshots of the retarded interaction of charge carriers with ultrafast fluctuations in cuprates. Nature Physics, 2015, 11, 421-426.	6.5	92
70	Efficient Luminescence from Perovskite Quantum Dot Solids. ACS Applied Materials & Interfaces, 2015, 7, 25007-25013.	4.0	481
71	Cleavable Ligands Enable Uniform Close Packing in Colloidal Quantum Dot Solids. ACS Applied Materials & Interfaces, 2015, 7, 21995-22000.	4.0	9
72	Colloidal Quantum Dot Photovoltaics Enhanced by Perovskite Shelling. Nano Letters, 2015, 15, 7539-7543.	4.5	173

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73	Ubiquitous Interplay Between Charge Ordering and High-Temperature Superconductivity in Cuprates. Science, 2014, 343, 393-396.	6.0	506
74	Charge Order Driven by Fermi-Arc Instability in Bi ₂ Sr _{2â^' x} La _x CuO _{6+Î´}. Science, 2014, 343, 390-392.	6.0	512
75	Photo-enhanced antinodal conductivity in the pseudogap state of high-Tc cuprates. Nature Communications, 2014, 5, 4353.	5.8	35
76	Bond order and the role of ligand states in stripe-modulated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">IrTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2014, 90, .	1.1	21
77	Materials Processing Routes to Trap-Free Halide Perovskites. Nano Letters, 2014, 14, 6281-6286.	4.5	671
78	Studying Correlated Electron Systems With a New Tunable (<25 eV) Tabletop XUV Source. , 2014, , .		0
79	Surface-enhanced charge-density-wave instability in underdoped Bi2Sr2-xLaxCuO6+Î´. Nature Communications, 2013, 4, 1977.	5.8	21
80	Determining the Surface-To-Bulk Progression in the Normal-State Electronic Structure of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Sr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>RuO</mml:mi><mml:mn> Angle-Resolved Photoemission and Density Functional Theory. Physical Review Letters, 2013, 110, 097004.	2.9	84
81	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Na</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>IrO</mml:mi><mml:mn> a Novel Relativistic Mott Insulator with a 340-meV Gap. Physical Review Letters, 2012, 109, 266406.	2.9	102
82	Rashba Spin-Splitting Control at the Surface of the Topological Insulator<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Se</mml:mi><mml:mn> Physical Review Letters, 2011, 107, 186405.	2.9	169
83	Structural Origin of Apparent Fermi Surface Pockets in Angle-Resolved Photoemission of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Sr</mml:mi><mml:mn> Physical Review Letters, 2011, 106, 127005.	2.9	40
84	Surface core level shifts of clean and oxygen covered Ir(111). New Journal of Physics, 2009, 11, 063002.	1.2	57