Raffaello Bianco

List of Publications by Year
in descending order

22 papers	1,338 citations	430874 18 h-index	677142 22 g-index
22 all docs	22 docs citations	22 times ranked	1434 citing authors

#	Article	IF	Citations
1	Anomalous Highâ€Temperature Superconductivity in YH₆. Advanced Materials, 2021, 33, e2006832.	21.0	196
2	Strong anharmonic and quantum effects in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>P</mml:mi><mml:mi>m</mml:mi><mml:mover accent="true"><mml:mn>3</mml:mn><mml:mo>Â¯</mml:mo></mml:mover><mml:mi>n</mml:mi></mml:mrow></mml:math> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>AlH</mml:mi><mml:mn>3</mml:mn></mml:msub></mml under high pressure: A first-principles study. Physical Review B, 2021, 103, .	3.2	19
3	The stochastic self-consistent harmonic approximation: calculating vibrational properties of materials with full quantum and anharmonic effects. Journal of Physics Condensed Matter, 2021, 33, 363001.	1.8	70
4	van der Waals driven anharmonic melting of the 3D charge density wave in VSe2. Nature Communications, 2021, 12, 598.	12.8	28
5	Dominant Role of Quantum Anharmonicity in the Stability and Optical Properties of Infinite Linear Acetylenic Carbon Chains. Journal of Physical Chemistry Letters, 2021, 12, 10339-10345.	4.6	10
6	Quantum anharmonic enhancement of superconductivity in P63/mmc ScH6 at high pressures: A first-principles study. Journal of Applied Physics, 2021, 130, .	2.5	9
7	Weak Dimensionality Dependence and Dominant Role of Ionic Fluctuations in the Charge-Density-Wave Transition of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>NbSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></ Physical Review Letters, 2020, 125, 106101.	7.8	37
8	Anharmonicity and Doping Melt the Charge Density Wave in Single-Layer TiSe₂. Nano Letters, 2020, 20, 4809-4815.	9.1	24
9	Quantum crystal structure in the 250-kelvin superconducting lanthanum hydride. Nature, 2020, 578, 66-69.	27.8	193
10	Theory of the thickness dependence of the charge density wave transition in 1 T-TiTe₂. 2D Materials, 2020, 7, 045032.	4.4	17
11	Quantum Enhancement of Charge Density Wave in NbS₂ in the Two-Dimensional Limit. Nano Letters, 2019, 19, 3098-3103.	9.1	62
12	Phonon Collapse and Second-Order Phase Transition in Thermoelectric SnSe. Physical Review Letters, 2019, 122, 075901.	7.8	92
13	Strong anharmonicity and high thermoelectric efficiency in high-temperature SnS from first principles. Physical Review B, 2019, 100, .	3.2	35
14	Strong anharmonicity in the phonon spectra of PbTe and SnTe from first principles. Physical Review B, 2018, 97, .	3.2	63
15	High-pressure phase diagram of hydrogen and deuterium sulfides from first principles: Structural and vibrational properties including quantum and anharmonic effects. Physical Review B, 2018, 97, .	3.2	38
16	Second-order structural phase transitions, free energy curvature, and temperature-dependent anharmonic phonons in the self-consistent harmonic approximation: Theory and stochastic implementation. Physical Review B, 2017, 96, .	3.2	100
17	Critical Role of the Exchange Interaction for the Electronic Structure and Charge-Density-Wave Formation in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>TiSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml:m Physical Review Letters, 2017, 119, 176401.	7.8	55
18	Orbital magnetization in insulators: Bulk versus surface. Physical Review B, 2016, 93, .	3.2	10

#	Article	IF	Citations
19	Electronic and vibrational properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>TiSe</mml:mi><mml:mn>2</mml:mn></mml:msub></m the charge-density-wave phase from first principles. Physical Review B, 2015, 92, .	3.2	56
20	How disorder affects the Berry-phase anomalous Hall conductivity: A reciprocal-space analysis. Physical Review B, 2014, 90, .	3.2	21
21	Orbital Magnetization as a Local Property. Physical Review Letters, 2013, 110, 087202.	7.8	48
22	Mapping topological order in coordinate space. Physical Review B, 2011, 84, .	3.2	155