Gabriel SÃ¡nchez Santolino

List of Publications by Year
in descending order

46 papers	1,234 citations	361413 20 h-index	361022 35 g-index
48 all docs	48 docs citations	48 times ranked	2245 citing authors

#	Article	IF	Citations
1	Electric field imaging of single atoms. Nature Communications, 2017, 8, 15631.	12.8	144
2	Hybridization-controlled charge transfer and induced magnetism at correlated oxide interfaces. Nature Physics, 2016, 12, 484-492.	16.7	122
3	Resonant electron tunnelling assisted by charged domain walls in multiferroic tunnel junctions. Nature Nanotechnology, 2017, 12, 655-662.	31.5	92
4	Direct electric field imaging of graphene defects. Nature Communications, 2018, 9, 3878.	12.8	74
5	Direct Visualization of Local Electromagnetic Field Structures by Scanning Transmission Electron Microscopy. Accounts of Chemical Research, 2017, 50, 1502-1512.	15.6	72
6	Reversible electric-field control of magnetization at oxide interfaces. Nature Communications, 2014, 5, 4215.	12.8	59
7	Formation of titanium monoxide (001) single-crystalline thin film induced by ion bombardment of titanium dioxide (110). Nature Communications, 2015, 6, 6147.	12.8	44
8	Probing the Internal Atomic Charge Density Distributions in Real Space. ACS Nano, 2018, 12, 8875-8881.	14.6	43
9	Anisotropic magnetotransport in SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>surface electron gases generated by Ar<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow />	3.2	40
10	Mechanical and liquid phase exfoliation of cylindrite: a natural van der Waals superlattice with intrinsic magnetic interactions. 2D Materials, 2019, 6, 035023.	4.4	38
11	Tailoring Interface Structure in Highly Strained YSZ/STO Heterostructures. Advanced Materials, 2011, 23, 5268-5274.	21.0	36
12	Quantitative electric field mapping in thin specimens using a segmented detector: Revisiting the transfer function for differential phase contrast. Ultramicroscopy, 2017, 182, 258-263.	1.9	36
13	Paving the way to nanoionics: atomic origin of barriers for ionic transport through interfaces. Scientific Reports, 2015, 5, 17229.	3.3	35
14	Applications of STEM-EELS to complex oxides. Materials Science in Semiconductor Processing, 2017, 65, 49-63.	4.0	35
15	Large intrinsic anomalous Hall effect in SrIrO3 induced by magnetic proximity effect. Nature Communications, 2021, 12, 3283.	12.8	34
16	In-plane anisotropic optical and mechanical properties of two-dimensional MoO3. Npj 2D Materials and Applications, 2021, 5, .	7.9	33
17	Direct Determination of Atomic Structure and Magnetic Coupling of Magnetite Twin Boundaries. ACS Nano, 2018, 12, 2662-2668.	14.6	30
18	Symmetry Breakdown in Franckeite: Spontaneous Strain, Rippling, and Interlayer MoirÃ©. Nano Letters, 2020, 20, 1141-1147.	9.1	25

#	Article	IF	Citations
19	Full picture discovery for mixed-fluorine anion effects on high-voltage spinel lithium nickel manganese oxide cathodes. NPG Asia Materials, 2017, 9, e398-e398.	7.9	22
20	A new method to detect and correct sample tilt in scanning transmission electron microscopy bright-field imaging. Ultramicroscopy, 2017, 173, 76-83.	1.9	21
21	Atomistic Origin of Li-Ion Conductivity Reduction at (Li_{3x}La_{2/3â€“x})TiO₃ Grain Boundary. Nano Letters, [illegible]	9.1	20
22	Thermally assisted tunneling transport in La<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.7</mml:mn></mml:mrow></mml:msub></mml:math>Ca<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.3</mml:mn></mml:mrow></mml:msub></mml:math>MnO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:	3.2	19
23	An artificial photosynthesis anode electrode composed of a nanoparticulate photocatalyst film in a visible light responsive GaN-ZnO solid solution system. Scientific Reports, 2016, 6, 35593.	3.3	19
24	Characterization of surface metallic states in SrTiO3 by means of aberration corrected electron microscopy. Ultramicroscopy, 2013, 127, 109-113.	1.9	17
25	Metastable oxysulfide surface formation on LiNi_{0.5}Mn_{1.5}O₄ single crystal particles by carbothermal reaction with sulfur-doped heterocarbon nanoparticles: new insight into their structural and electrochemical characteristics, and their potential applications. Journal of Materials Chemistry A, 2020, 8, 22302-22314.	10.3	17
26	Strongly Anisotropic Strainâ€Tunability of Excitons in Exfoliated ZrSe₃. Advanced Materials, 2022, 34, e2103571.	21.0	16
27	Controlled Sign Reversal of Electroresistance in Oxide Tunnel Junctions by Electrochemical-Ferroelectric Coupling. Physical Review Letters, 2020, 125, 266802.	7.8	15
28	Oxygen Octahedral Distortions in LaMO₃/SrTiO₃ Superlattices. Microscopy and Microanalysis, 2014, 20, 825-831.	0.4	13
29	Large angle illumination enabling accurate structure reconstruction from thick samples in scanning transmission electron microscopy. Ultramicroscopy, 2019, 197, 112-121.	1.9	12
30	Localization of Yttrium Segregation within YSZ Grain Boundary Dislocation Cores. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800349.	1.8	10
31	Magnetic phase diagram, magnetotransport and inverse magnetocaloric effect in the noncollinear antiferromagnet Mn5Si3. Journal of Magnetism and Magnetic Materials, 2019, 489, 165451.	2.3	8
32	Ferroionic inversion of spin polarization in a spin-memristor. APL Materials, 2021, 9, .	5.1	7
33	Photovoltaic sensing of a memristor based in LSMO/BTO/ITO ferroionic tunnel junctions. Applied Physics Letters, 2022, 120, .	3.3	7
34	Franckeite as an Exfoliable Naturally Occurring Topological Insulator. Nano Letters, 2021, 21, 7781-7788.	9.1	6
35	X-ray absorption and x-ray magnetic circular dichroism in bulk and thin films of ferrimagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>GdTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Materials, 2021, 5, .	2.4	4
36	Linear imaging theory for differential phase contrast and other phase imaging modes in scanning transmission electron microscopy. Ultramicroscopy, 2022, , 113580.	1.9	3

#	Article	IF	Citations
37	Direct Transformation of Crystalline MoO3 into Few-Layers MoS2. Materials, 2020, 13, 2293.	2.9	2
38	Direct Electromagnetic Structure Observation by Aberration-corrected Differential Phase Contrast Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2016, 22, 906-907.	0.4	1
39	Quantitative Atomic Resolution Differential Phase Contrast Imaging Using a Segmented Area All Field Detector. Microscopy and Microanalysis, 2016, 22, 504-505.	0.4	1
40	Phase-Contrast-Based Structure Retrieval Methods in Atomic Resolution Scanning Transmission Electron Microscopy â€“ When They Hold and When They Don't. Microscopy and Microanalysis, 2020, 26, 442-443.	0.4	1
41	Strongly Anisotropic Strainâ€Tunability of Excitons in Exfoliated ZrSe₃ (Adv. Mater. 1/2022). Advanced Materials, 2022, 34, .	21.0	1
42	Study of Oxygen Distortions in Titanate - Manganite Interfaces by Aberration Corrected STEM-EELS. Microscopy and Microanalysis, 2014, 20, 54-55.	0.4	0
43	Atomic Resolution STEM-EELS Studies of Defects and Local Structural Distortions in Oxide Interfaces. Microscopy and Microanalysis, 2017, 23, 372-373.	0.4	0
44	Quantitative Relation Between Differential Phase Contrast Images Obtained by Segmented and Pixelated Detectors. Microscopy and Microanalysis, 2017, 23, 440-441.	0.4	0
45	High Resolution Studies of Oxide Multiferroic Interfaces in the Aberration-Corrected STEM. Microscopy and Microanalysis, 2017, 23, 1592-1593.	0.4	0
46	Electric Field Imaging at Atomic Resolution by DPC STEM. Materia Japan, 2019, 58, 104-104.	0.1	0