Raffaella Calarco

List of Publications by Year
in descending order

55 papers	1,650 citations	279798 23 h-index	289244 40 g-index
57 all docs	57 docs citations	57 times ranked	1478 citing authors

#	Article	IF	Citations
1	Hints for a General Understanding of the Epitaxial Rules for van der Waals Epitaxy from Geâ€Sbâ€Te Alloys. Advanced Materials Interfaces, 2022, 9, .	3.7	6
2	Crystallization and Electrical Properties of Ge-Rich GeSbTe Alloys. Nanomaterials, 2022, 12, 631.	4.1	12
3	Interface Formation during the Growth of Phase Change Material Heterostructures Based on Ge-Rich Ge-Sb-Te Alloys. Nanomaterials, 2022, 12, 1007.	4.1	4
4	Growth, Electronic and Electrical Characterization of Ge-Rich Geâ€“Sbâ€“Te Alloy. Nanomaterials, 2022, 12, 1340.	4.1	6
5	Structural and Electrical Properties of Annealed Ge2Sb2Te5 Films Grown on Flexible Polyimide. Nanomaterials, 2022, 12, 2001.	4.1	4
6	Evolution of Lowâ€Frequency Vibrational Modes in Ultrathin GeSbTe Films. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000434.	2.4	2
7	MOCVD Growth of GeTe/Sb2Te3 Coreâ€“Shell Nanowires. Coatings, 2021, 11, 718.	2.6	6
8	Room-temperature ferroelectric switching of spin-to-charge conversion in germanium telluride. Nature Electronics, 2021, 4, 740-747.	26.0	62
9	Phase Change Ge-Rich Geâ€“Sbâ€“Te/Sb2Te3 Core-Shell Nanowires by Metal Organic Chemical Vapor Deposition. Nanomaterials, 2021, 11, 3358.	4.1	5
10	Influence of Mg doping on In adsorption and In incorporation in (In,Ga)N superlattices. Journal of Applied Physics, 2020, 128, 085303.	2.5	1
11	Evidence for Thermalâ€Based Transition in Superâ€Lattice Phase Change Memory. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800634.	2.4	40
12	Crystallization Study of Geâ€Rich (GeTe)<i>_m</i>(Sb₂Te₃)<i>_n</i> Using Twoâ€Step Annealing Process. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800632.	2.4	5
13	Interplay between Structural and Thermoelectric Properties in Epitaxial Sb₂₊<i>_x</i>Te₃ Alloys. Advanced Functional Materials, 2019, 29, 1805184.	14.9	25
14	Electrical and optical properties of epitaxial binary and ternary GeTe-Sb2Te3 alloys. Scientific Reports, 2018, 8, 5889.	3.3	17
15	Ferroelectric Control of the Spin Texture in GeTe. Nano Letters, 2018, 18, 2751-2758.	9.1	114
16	2D or Not 2D: Strain Tuning in Weakly Coupled Heterostructures. Advanced Functional Materials, 2018, 28, 1705901.	14.9	49
17	Tailoring the epitaxy of Sb₂Te₃ and GeTe thin films using surface passivation. CrystEngComm, 2018, 20, 340-347.	2.6	12
18	InN and GaN/InN monolayers grown on ZnO(0001Â¯) and ZnO(0001). Journal of Applied Physics, 2018, 124, .	2.5	3

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19	Designing epitaxial GeSbTe alloys by tuning the phase, the composition, and the vacancy ordering. Journal of Applied Physics, 2018, 123, .	2.5	9
20	Investigation of charge-to-spin conversion in GeTe. , 2018, , .		0
21	Textured Sb2Te3 films and GeTe/Sb2Te3 superlattices grown on amorphous substrates by molecular beam epitaxy. AIP Advances, 2017, 7, .	1.3	20
22	Modulation of van der Waals and classical epitaxy induced by strain at the Si step edges in GeSbTe alloys. Scientific Reports, 2017, 7, 1466.	3.3	21
23	Dynamic reconfiguration of van der Waals gaps within GeTeâ€“Sb₂Te₃ based superlattices. Nanoscale, 2017, 9, 8774-8780.	5.6	71
24	Improved structural and electrical properties in native Sb2Te3/GexSb2Te3+x van der Waals superlattices due to intermixing mitigation. APL Materials, 2017, 5, .	5.1	26
25	Chemical and structural arrangement of the trigonal phase in GeSbTe thin films. Nanotechnology, 2017, 28, 065706.	2.6	39
26	Thermal annealing studies of GeTe-Sb2Te3 alloys with multiple interfaces. AIP Advances, 2017, 7, .	1.3	7
27	GeTe: a simple compound blessed with a plethora of properties. CrystEngComm, 2017, 19, 5324-5335.	2.6	41
28	Growth of crystalline phase change materials by physical deposition methods. Advances in Physics: X, 2017, 2, 675-694.	4.1	12
29	Formation of resonant bonding during growth of ultrathin GeTe films. NPG Asia Materials, 2017, 9, e396-e396.	7.9	25
30	Giant Rashbaâ€Type Spin Splitting in Ferroelectric GeTe(111). Advanced Materials, 2016, 28, 560-565.	21.0	155
31	Laser induced structural transformation in chalcogenide based superlattices. Applied Physics Letters, 2016, 108, .	3.3	14
32	Investigation of interface abruptness and In content in (In,Ga)N/GaN superlattices. Journal of Applied Physics, 2016, 120, 125307.	2.5	14
33	Atomic stacking and van-der-Waals bonding in GeTeâ€“Sb₂Te₃ superlattices. Journal of Materials Research, 2016, 31, 3115-3124.	2.6	53
34	Metal - Insulator Transition Driven by Vacancy Ordering in GeSbTe Phase Change Materials. Scientific Reports, 2016, 6, 23843.	3.3	93
35	Intermixing during Epitaxial Growth of van der Waals Bonded Nominal GeTe/Sb₂Te₃ Superlattices. Crystal Growth and Design, 2016, 16, 3596-3601.	3.0	51
36	Interband characterization and electronic transport control of nanoscaled<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mi>GeTe</mml:mi><mml:mo>/</m Physical Review B, 2016, 94, .	3.2	9

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37	Ordered Peierls distortion prevented at growth onset of GeTe ultra-thin films. Scientific Reports, 2016, 6, 32895.	3.3	20
38	Coincident-site lattice matching during van der Waals epitaxy. Scientific Reports, 2016, 5, 18079.	3.3	31
39	Sub-nanometre resolution of atomic motion during electronic excitation in phase-change materials. Scientific Reports, 2016, 6, 20633.	3.3	29
40	Revisiting the Local Structure in Ge-Sb-Te based Chalcogenide Superlattices. Scientific Reports, 2016, 6, 22353.	3.3	63
41	Impact of substrate nitridation on the growth of InN on In 2 O 3 (111) by plasma-assisted molecular beam epitaxy. Applied Surface Science, 2016, 369, 159-162.	6.1	5
42	Laser-driven switching dynamics in phase change materials investigated by time-resolved X-ray absorption spectroscopy. Phase Transitions, 2015, 88, 82-89.	1.3	3
43	Interface formation of two- and three-dimensionally bonded materials in the case of GeTeâ€"Sb₂Te₃ superlattices. Nanoscale, 2015, 7, 19136-19143.	5.6	145
44	Electrical performance of phase change memory cells with Ge3Sb2Te6 deposited by molecular beam epitaxy. Applied Physics Letters, 2015, 106, .	3.3	17
45	Long-range crystal-lattice distortion fields of epitaxial Ge-Sb-Te phase-change materials. Physica Status Solidi (B): Basic Research, 2014, 251, 769-773.	1.5	3
46	Picosecond strain dynamics in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ge</mml:mi><mml:mn>2</mml:mn></mml: by time-resolved x-ray diffraction. Physical Review B, 2014, 90, .	3.2	19
47	Toward Truly Single Crystalline GeTe Films: The Relevance of the Substrate Surface. Journal of Physical Chemistry C, 2014, 118, 29724-29730.	3.1	61
48	Long-range crystal-lattice distortion fields of epitaxial Ge-Sb-Te phase-change materials (Phys. Status) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.5	0
49	Growth control of epitaxial GeTeâ€"Sb2Te3 films using a line-of-sight quadrupole mass spectrometer. Journal of Crystal Growth, 2014, 396, 50-53.	1.5	8
50	Surface Reconstruction-Induced Coincidence Lattice Formation Between Two-Dimensionally Bonded Materials and a Three-Dimensionally Bonded Substrate. Nano Letters, 2014, 14, 3534-3538.	9.1	70
51	Evidence for topological band inversion of the phase change material Ge2Sb2Te5. Applied Physics Letters, 2013, 103, .	3.3	28
52	Growth of wurtzite InN on bulk In2O3(111) wafers. Applied Physics Letters, 2012, 101, .	3.3	16
53	Epitaxial phaseâ€change materials. Physica Status Solidi - Rapid Research Letters, 2012, 6, 415-417.	2.4	29
54	On the epitaxy of germanium telluride thin films on silicon substrates. Physica Status Solidi (B): Basic Research, 2012, 249, 1939-1944.	1.5	35

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55	Insight into the Growth and Control of Single-Crystal Layers of Geâ€"Sbâ€"Te Phase-Change Material. Crystal Growth and Design, 2011, 11, 4606-4610.	3.0	34