Pascal Puech

List of Publications by Year
in descending order

105	3,040	147726	175177
papers	citations	31 h-index	52 g-index

107	107	107	4797
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The X-ray, Raman and TEM Signatures of Cellulose-Derived Carbons Explained. Journal of Carbon Research, 2022, 8, 4.	1.4	8
2	Texture, Nanotexture, and Structure of Carbon Nanotube-Supported Carbon Cones. ACS Nano, 2022, 16, 9287-9296.	7.3	7
3	Intense Raman D Band without Disorder in Flattened Carbon Nanotubes. ACS Nano, 2021, 15, 596-603.	7.3	44
4	Progress on Diamane and Diamanoid Thin Film Pressureless Synthesis. Journal of Carbon Research, 2021, 7, 9.	1.4	11
5	Embedded carbon nanotubes on surface of thermoplastic poly(ether ether ketone). Polymer, 2021, 226, 123807.	1.8	0
6	Mechanical properties of graphene. Applied Physics Reviews, 2021, 8, .	5.5	37
7	Combining low and high electron energy diffractions as a powerful tool for studying 2D materials. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	1
8	Towards a better understanding of the structure of diamanoÃ¯ds and diamanoÃ¯d/graphene hybrids. Carbon, 2020, 156, 234-241.	5.4	40
9	Optimizing metal-support interphase for efficient fuel cell oxygen reduction reaction catalyst. Journal of Colloid and Interface Science, 2020, 561, 439-448.	5.0	13
10	Raman evidence for the successful synthesis of diamane. Carbon, 2020, 169, 129-133.	5.4	49
11	Molecular nature of breakdown of the folic acid under hydrothermal treatment: a combined experimental and DFT study. Scientific Reports, 2020, 10, 19668.	1.6	10
12	Mo thio and oxo-thio molecular complexes film as self-healing catalyst for photocatalytic hydrogen evolution on 2D materials. Applied Catalysis B: Environmental, 2020, 278, 119288.	10.8	10
13	Reversible Pressure-Induced Partial Phase Transition in Few-Layer Black Phosphorus. Nano Letters, 2020, 20, 5929-5935.	4.5	21
14	Role of Electronâ€“Phonon Coupling in the Thermal Evolution of Bulk Rashba-Like Spin-Split Lead Halide Perovskites Exhibiting Dual-Band Photoluminescence. ACS Energy Letters, 2019, 4, 2205-2212.	8.8	58
15	Sizeâ€controlled grapheneâ€based materials prepared by annealing of pitchâ€based cokes: G band phonon line broadening effects due to high pressure, crystallite size, and merging with Dâ€² band. Journal of Raman Spectroscopy, 2019, 50, 1861-1866.	1.2	8
16	Indirect tail states formation by thermal-induced polar fluctuations in halide perovskites. Nature Communications, 2019, 10, 484.	5.8	88
17	Fermi level shift in carbon nanotubes by dye confinement. Carbon, 2019, 149, 772-780.	5.4	17
18	New insight on carbonisation and graphitisation mechanisms as obtained from a bottom-up analytical approach of X-ray diffraction patterns. Carbon, 2019, 147, 602-611.	5.4	39

#	Article	IF	Citations
19	Analyzing the Raman Spectra of Graphenic Carbon Materials from Kerogens to Nanotubes: What Type of Information Can Be Extracted from Defect Bands?. Journal of Carbon Research, 2019, 5, 69.	1.4	91
20	Low temperature, pressureless sp2 to sp3 transformation of ultrathin, crystalline carbon films. Carbon, 2019, 145, 10-22.	5.4	64
21	Resolving the Framework Position of Organic Structure-Directing Agents in Hierarchical Zeolites via Polarized Stimulated Raman Scattering. Journal of Physical Chemistry Letters, 2018, 9, 1778-1782.	2.1	14
22	Intralayer and interlayer electronâ€“phonon interactions in twisted graphene heterostructures. Nature Communications, 2018, 9, 1221.	5.8	93
23	Reversibility of defect formation during oxygenâ€assisted electronâ€beamâ€induced etching of graphene. Journal of Raman Spectroscopy, 2018, 49, 317-323.	1.2	3
24	High robustness of epitaxial 4H-SiC graphene to oxidation processes. Journal of Physics: Conference Series, 2018, 1124, 081020.	0.3	1
25	Initial stage of C60 cation formation in superacids. Chemical Physics, 2018, 513, 13-16.	0.9	0
26	Giant Electronâ€“Phonon Coupling and Deep Conduction Band Resonance in Metal Halide Double Perovskite. ACS Nano, 2018, 12, 8081-8090.	7.3	190
27	Conductive graphene coatings synthesized from graphenide solutions. Carbon, 2017, 121, 217-225.	5.4	11
28	Advanced spectroscopic analyses on a:C-H materials: Revisiting the EELS characterization and its coupling with multi-wavelength Raman spectroscopy. Carbon, 2017, 112, 149-161.	5.4	51
29	Chemical insights into the formation of Cu2ZnSnS4films from all-aqueous dispersions for low-cost solar cells. Nanotechnology, 2017, 28, 445709.	1.3	2
30	Charged iodide in chains behind the highly efficient iodine doping in carbon nanotubes. Physical Review Materials, 2017, 1, .	0.9	25
31	Ecotoxicology of Carbon Nanotubes Toward Amphibian Larvae. , 2016, , 931-940.		0
32	Polarized Raman backscattering selection rules for (hhl)-oriented diamond- and zincblende-type crystals. Journal of Applied Physics, 2016, 120, .	1.1	17
33	Efficient cleaning of graphene from residual lithographic polymers by ozone treatment. Carbon, 2016, 109, 221-226.	5.4	24
34	Enlightening the ultrahigh electrical conductivities of doped double-wall carbon nanotube fibers by Raman spectroscopy and first-principles calculations. Nanoscale, 2016, 8, 19668-19676.	2.8	18
35	Spatial confinement model applied to phonons in disordered graphene-based carbons. Carbon, 2016, 105, 275-281.	5.4	26
36	Water-soluble, heterometallic chalcogenide oligomers as building blocks for functional films. Inorganic Chemistry Frontiers, 2016, 3, 689-701.	3.0	3

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37	Optical signatures of bulk and solutions of KC8 and KC24. Journal of Applied Physics, 2015, 118, 044304.	1.1	8
38	Theoretical Study of Graphene Doping Mechanism by Iodine Molecules. Journal of Physical Chemistry C, 2015, 119, 12071-12078.	1.5	35
39	A gas-templating strategy to synthesize CZTS nanocrystals for environment-friendly solar inks. Solar Energy Materials and Solar Cells, 2015, 141, 364-371.	3.0	3
40	Synthesis and structure of free-standing germanium quantum dots and their application in live cell imaging. RSC Advances, 2015, 5, 20566-20573.	1.7	32
41	Theoretical study of polyiodide formation and stability on monolayer and bilayer graphene. Physical Chemistry Chemical Physics, 2015, 17, 30045-30051.	1.3	25
42	Properties of Carbon Nanotubes. , 2014, , 1-49.		3
43	Origin of mechanical modifications in poly (ether ether ketone)/carbon nanotube composite. Journal of Applied Physics, 2014, 115, .	1.1	5
44	Behavior of Raman D band for pyrocarbons with crystallite size in the 2â€“5 nm range. Applied Physics A: Materials Science and Processing, 2014, 114, 759-763.	1.1	38
45	Resonant Raman scattering of graphite intercalation compounds KC₈, KC₂₄, and KC₃₆. Journal of Raman Spectroscopy, 2014, 45, 219-223.	1.2	15
46	A Raman study to obtain crystallite size of carbon materials: A better alternative to the Tuinstraâ€“Koenig law. Carbon, 2014, 80, 629-639.	5.4	186
47	The effect of twin screw extrusion on structural, electrical, and rheological properties in carbon nanotube polyâ€etherâ€etherâ€ketone nanocomposites. Journal of Applied Polymer Science, 2013, 129, 2527-2535.	1.3	12
48	Uniform dispersion of nanotubes in thermoplastic polymer through thermal annealing. Carbon, 2013, 53, 399-402.	5.4	8
49	The preparation of carbon nanotube (CNT)/copper composites and the effect of the number of CNT walls on their hardness, friction and wear properties. Carbon, 2013, 58, 185-197.	5.4	105
50	Electronic coupling in fullerene-doped semiconducting carbon nanotubes probed by Raman spectroscopy and electronic transport. Carbon, 2013, 57, 498-506.	5.4	8
51	Resonant Laserâ€Induced Formation of Doubleâ€Walled Carbon Nanotubes from Peapods under Ambient Conditions. Small, 2012, 8, 2045-2052.	5.2	9
52	Charge transfer between carbon nanotubes and sulfuric acid as determined by Raman spectroscopy. Physical Review B, 2012, 85, .	1.1	24
53	Surfactant-free CZTS nanoparticles as building blocks for low-cost solar cell absorbers. Nanotechnology, 2012, 23, 185402.	1.3	52
54	The effect of adsorbed species and exposure to sulfuric acid on the electrical conductance of individual single-wall carbon nanotube transistors. Carbon, 2012, 50, 3953-3956.	5.4	4

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55	Comparative Raman spectroscopy of individual and bundled double wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2011, 248, 974-979.	0.7	3
56	International amphibian micronucleus standardized procedure (ISO 21427â€1) for in vivo evaluation of doubleâ€walled carbon nanotubes toxicity and genotoxicity in water. Environmental Toxicology, 2011, 26, 136-145.	2.1	51
57	Electrical conductivity and Raman imaging of double wall carbon nanotubes in a polymer matrix. Composites Science and Technology, 2011, 71, 1326-1330.	3.8	29
58	Thermodynamic analysis of a Stirling engine including regenerator dead volume. Renewable Energy, 2011, 36, 872-878.	4.3	47
59	Formation mechanism of peapod-derived double-walled carbon nanotubes. Physical Review B, 2010, 82, .	1.1	29
60	Double Wall Carbon Nanotubes as a Molecular Sensor in Polymer Composites. , 2010, , .		0
61	Carbon nanotube ecotoxicity in amphibians: assessment of multiwalled carbon nanotubes and comparison with double-walled carbon nanotubes. Nanomedicine, 2010, 5, 963-974.	1.7	63
62	UV Raman Spectroscopy Study of Strain Induced by Buried Silicon Nitride Layer in the BOX of Silicon On Insulator Substrates. Materials Research Society Symposia Proceedings, 2009, 1185, 43.	0.1	0
63	Raman<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>G</mml:mi></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>D</mml:mi></mml:math>band in strongly photoexcited carbon nanotubes. Physical Review B, 2009, 79, .	1.1	7
64	Influence of nitrogen doping on the radial breathing mode in carbon nanotubes. Physical Review B, 2009, 79, .	1.1	22
65	Brittle and ductile removal modes observed during diamond turning of carbon nanotube composites. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2009, 223, 1-8.	1.5	3
66	Characterisation and in vivo ecotoxicity evaluation of double-wall carbon nanotubes in larvae of the amphibian Xenopus laevis. Aquatic Toxicology, 2008, 87, 127-137.	1.9	133
67	RamanGband in double-wall carbon nanotubes combiningpdoping and high pressure. Physical Review B, 2008, 78, .	1.1	27
68	Ultraviolet photon absorption in single- and double-wall carbon nanotubes and peapods: Heating-induced phonon line broadening, wall coupling, and transformation. Physical Review B, 2007, 76, .	1.1	9
69	Raman bands of double-wall carbon nanotubes: comparison with single- and triple-wall carbon nanotubes, and influence of annealing and electron irradiation. Journal of Raman Spectroscopy, 2007, 38, 714-720.	1.2	37
70	Pressure dependence of Raman modes in DWCNT filled with PbI2 semiconductor. Physica Status Solidi (B): Basic Research, 2007, 244, 136-141.	0.7	4
71	Thermal transfer in SWNTs and peapods under UV-irradiation. Physica Status Solidi (B): Basic Research, 2007, 244, 4064-4068.	0.7	2
72	Controlled laser heating of carbon nanotubes. Applied Physics Letters, 2006, 88, 173113.	1.5	47

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73	Laser Induced Modifications of Carbon Nanotube Composite Surfaces. Japanese Journal of Applied Physics, 2006, 45, 7776-7779.	0.8	1
74	Nanoscale pressure effects in individual double-wall carbon nanotubes. Physical Review B, 2006, 73, .	1.1	32
75	Spectroscopic detection of carbon nanotube interaction with amphiphilic molecules in epoxy resin composites. Journal of Applied Physics, 2005, 97, 034303.	1.1	26
76	Similarities in the Raman RBM and D bands in double-wall carbon nanotubes. Physical Review B, 2005, 72, .	1.1	13
77	Is there a link between very high strain and metastable phases in semiconductors: cases of Si and GaAs?. Journal of Physics Condensed Matter, 2004, 16, S39-S47.	0.7	2
78	Discontinuous Tangential Stress in Double Wall Carbon Nanotubes. Physical Review Letters, 2004, 93, 095506.	2.9	66
79	GaN nanoindentation: A micro-Raman spectroscopy study of local strain fields. Journal of Applied Physics, 2004, 96, 2853-2856.	1.1	62
80	Enhanced Raman signal of CH3 on carbon nanotubes. Materials Research Society Symposia Proceedings, 2004, 858, 107.	0.1	1
81	Strain Determination Around Vickers Indentation on Silicon Surface by Raman Spectroscopy. Journal of Materials Research, 2004, 19, 1273-1280.	1.2	9
82	Light scattering of double wall carbon nanotubes under hydrostatic pressure: pressure effects on the internal and external tubes. Physica Status Solidi (B): Basic Research, 2004, 241, 3360-3366.	0.7	14
83	Residual strain field in indented GaAs. Journal of Materials Research, 2003, 18, 1474-1480.	1.2	9
84	Narrow diameter double-wall carbon nanotubes: synthesis, electron microscopy and inelastic light scattering. New Journal of Physics, 2003, 5, 131-131.	1.2	30
85	Chirality of internal metallic and semiconducting carbon nanotubes. Physical Review B, 2002, 65, .	1.1	52
86	Measurement of stress gradients in hydrogenated microcrystalline silicon thin films using Raman spectroscopy. Journal of Non-Crystalline Solids, 2002, 299-302, 280-283.	1.5	11
87	Raman Mapping Devoted to the Phase Transformation and Strain Analysis in Si Micro-Indentation. Advanced Engineering Materials, 2002, 4, 543-546.	1.6	7
88	Measurement of the in-depth stress profile in hydrogenated microcrystalline silicon thin films using Raman spectrometry. Journal of Applied Physics, 2001, 90, 3276-3279.	1.1	49
89	Spatial Distribution of Strain and Phases in Si Nano-Indentation Analysed by Raman Mapping. Solid State Phenomena, 2001, 82-84, 777-782.	0.3	2
90	Anharmonic frequency shift of long-wavelength phonons in As and Sb. Applied Physics Letters, 2000, 77, 2924-2925.	1.5	8

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91	Mapping the three-dimensional strain field around a microindentation on silicon using polishing and Raman spectroscopy. Journal of Applied Physics, 2000, 88, 4582.	1.1	24
92	Non-stoichiometry in (001) low temperature GaAs by Raman spectroscopy. Journal of Physics Condensed Matter, 2000, 12, 2895-2902.	0.7	2
93	Diameter of As clusters in LT-GaAs by Raman spectroscopy. Journal of Applied Physics, 1999, 85, 2929-2933.	1.1	25
94	Improved characterization of polycrystalline silicon film, by resonant Raman scattering. Thin Solid Films, 1999, 337, 93-97.	0.8	6
95	Improved one-phonon confinement model for an accurate size determination of silicon nanocrystals. Journal of Applied Physics, 1999, 86, 1921-1924.	1.1	231
96	Structure of mixed-phase LPCVD silicon films as a function of operating conditions. European Physical Journal Special Topics, 1999, 09, Pr8-1091-Pr8-1098.	0.2	0
97	Resonant Raman scattering in polycrystalline silicon thin films. Applied Physics Letters, 1998, 73, 1718-1720.	1.5	68
98	Mechanical lapping, handling and transfer of ultra-thin wafers. Journal of Micromechanics and Microengineering, 1998, 8, 338-342.	1.5	16
99	Strain effects on optical phonons in ã€˜111ã€‰ GaAs layers analyzed by Raman scattering. Journal of Applied Physics, 1997, 82, 4493-4499.	1.1	17
100	Local stress measurements in laterally oxidized GaAs/AlxGa1â^'xAs heterostructures by micro-Raman spectroscopy. Applied Physics Letters, 1997, 71, 2520-2522.	1.5	27
101	MBE growth and Raman analysis of [hhk]GaAs/(Si or CaF2) highly strained hetero-structures. Microelectronics Journal, 1995, 26, 789-795.	1.1	6
102	Strain relaxation in [001]â€•and [111]â€GaAs/CaF2analyzed by Raman spectroscopy. Journal of Applied Physics, 1995, 77, 1126-1132.	1.1	17
103	Raman scattering study of [hhk]â€GaAs/(Si or CaF2) strained heterostructures. Journal of Applied Physics, 1994, 76, 2773-2780.	1.1	12
104	Long-wavelength optical phonons of CdxZn1-xSb mixed crystals. Semiconductor Science and Technology, 1994, 9, 333-337.	1.0	9
105	Mechanical lapping of ultra-thin wafers for 3D integration. , 0, , .		4