

# Stéphane Berciaud

## List of Publications by Year in descending order

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65  
papers

5,854  
citations

94269

37  
h-index

133063

59  
g-index

66  
all docs

66  
docs citations

66  
times ranked

9103  
citing authors

#	ARTICLE	IF	CITATIONS
1	Picosecond energy transfer in a transition metal dichalcogenide-graphene heterostructure revealed by transient Raman spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119726119.	3.3	16
2	OD/2D Heterostructures Vertical Single Electron Transistor. Advanced Functional Materials, 2021, 31, 2008255.	7.8	12
3	Electrical read-out of light-induced spin transition in thin film spin crossover/graphene heterostructures. Journal of Materials Chemistry C, 2021, 9, 2712-2720.	2.7	40
4	Single- and narrow-line photoluminescence in a boron nitride-supported MoSe <sub>2</sub> /graphene heterostructure. Comptes Rendus Physique, 2021, 22, 77-88.	0.3	1
5	Many-Body Effects in Suspended Graphene Probed through Magneto-Phonon Resonances. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000345.	1.2	0
6	Dynamically-enhanced strain in atomically thin resonators. Nature Communications, 2020, 11, 5526.	5.8	22
7	Filtering the photoluminescence spectra of atomically thin semiconductors with graphene. Nature Nanotechnology, 2020, 15, 283-288.	15.6	76
8	Reconfigurable 2D/OD Graphene/HgTe Nanocrystal Heterostructure for Infrared Detection. ACS Nano, 2020, 14, 4567-4576.	7.3	60
9	Single-molecule tautomerization tracking through space- and time-resolved fluorescence spectroscopy. Nature Nanotechnology, 2020, 15, 207-211.	15.6	77
10	Scanning Tunneling Microscope-Induced Excitonic Luminescence of a Two-Dimensional Semiconductor. Physical Review Letters, 2019, 123, 027402.	2.9	36
11	Quasi-two-dimensional electron-hole droplets. Nature Photonics, 2019, 13, 225-226.	15.6	7
12	Charge Versus Energy Transfer in Atomically Thin Graphene-Transition Metal Dichalcogenide van der Waals Heterostructures. Physical Review X, 2018, 8, .	2.8	63
13	Room Temperature Chiral Coupling of Valley Excitons with Spin-Momentum Locked Surface Plasmons. ACS Photonics, 2018, 5, 1281-1287.	3.2	126
14	Rigid-layer Raman-active modes in N-layer transition metal dichalcogenides: interlayer force constants and hyperspectral Raman imaging. Journal of Raman Spectroscopy, 2018, 49, 91-99.	1.2	17
15	Room-Temperature Valley Polarization and Coherence in Transition Metal Dichalcogenide-Graphene van der Waals Heterostructures. ACS Photonics, 2018, 5, 5047-5054.	3.2	41
16	Quantum Interference Effects in Resonant Raman Spectroscopy of Single- and Triple-Layer MoTe <sub>2</sub> from First-Principles. Nano Letters, 2017, 17, 2381-2388.	4.5	37
17	Vibronic Spectroscopy with Submolecular Resolution from STM-Induced Electroluminescence. Physical Review Letters, 2017, 118, 127401.	2.9	102
18	Monitoring electrostatically-induced deflection, strain and doping in suspended graphene using Raman spectroscopy. 2D Materials, 2017, 4, 014004.	2.0	11

#	ARTICLE	IF	CITATIONS
19	Tuning contact transport mechanisms in bilayer MoSe <sub>2</sub> transistors up to Interface dipole and band bending in the hybrid heterojunction	2.0	22
20	MoS <sub>2</sub> /GaN heterojunction	1.1	57
21	Conductance Oscillations in a Graphene/Nanocluster Hybrid Material: Toward Single-Electron Devices. Advanced Materials, 2017, 29, 1604837.	11.1	17
22	Graphene hybrid optomechanical platform for probing interplay between internal and macroscopic degree of freedom. , 2017, , .		0
23	Direct versus indirect band gap emission and exciton-exciton annihilation in atomically thin molybdenum ditelluride	1.1	57
24	Splitting of Interlayer Shear Modes and Photon Energy Dependent Anisotropic Raman Response in N-Layer ReSe <sub>2</sub> and ReS <sub>2</sub> . ACS Nano, 2016, 10, 2752-2760.	7.3	150
25	Raman spectroscopy of electrochemically gated graphene transistors: Geometrical capacitance, electron-phonon, electron-electron, and electron-defect scattering. Physical Review B, 2015, 91, .	1.1	145
26	Tunable electronic correlation effects in nanotube-light interactions. Physical Review B, 2015, 92, .	1.1	13
27	Doping- and interference-free measurement of I <sub>2D</sub> /I <sub>G</sub> in suspended monolayer graphene blisters. Physica Status Solidi (B): Basic Research, 2015, 252, 2390-2394.	0.7	11
28	Room temperature dry processing of patterned CVD graphene devices. Carbon, 2015, 86, 256-263.	5.4	22
29	Distance Dependence of the Energy Transfer Rate from a Single Semiconductor Nanostructure to Graphene. Nano Letters, 2015, 15, 1252-1258.	4.5	78
30	Landau Level Spectroscopy of Electron-Electron Interactions in Graphene. Physical Review Letters, 2015, 114, 126804.	2.9	52
31	Unified Description of the Optical Phonon Modes in N-Layer MoTe <sub>2</sub> . Nano Letters, 2015, 15, 6481-6489.	4.5	122
32	All-Optical Blister Test of Suspended Graphene Using Micro-Raman Spectroscopy. Physical Review Applied, 2014, 2, .	1.5	56
33	Size-induced enhanced magnetoelectric effect and multiferroicity in chromium oxide nanoclusters. Nature Communications, 2014, 5, 3167.	5.8	32
34	Probing Electronic Excitations in Mono- to Pentalayer Graphene by Micro Magneto-Raman Spectroscopy. Nano Letters, 2014, 14, 4548-4553.	4.5	35
35	Epitaxy of MgO magnetic tunnel barriers on epitaxial graphene. Nanotechnology, 2013, 24, 475708.	1.3	5
36	Biexciton, single carrier, and trion generation dynamics in single-walled carbon nanotubes. Physical Review B, 2013, 87, .	1.1	76

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37	Intrinsic Line Shape of the Raman 2D-Mode in Freestanding Graphene Monolayers. Nano Letters, 2013, 13, 3517-3523.	4.5	75
38	Probing built-in strain in freestanding graphene monolayers by Raman spectroscopy. Physica Status Solidi (B): Basic Research, 2013, 250, 2681-2686.	0.7	17
39	All-optical structure assignment of individual single-walled carbon nanotubes from Rayleigh and Raman scattering measurements. Physica Status Solidi (B): Basic Research, 2012, 249, 2436-2441.	0.7	10
40	Excitonic signatures in the optical response of single-wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2012, 249, 900-906.	0.7	9
41	Observation of Electronic Raman Scattering in Metallic Carbon Nanotubes. Physical Review Letters, 2011, 107, 157401.	2.9	44
42	All-Optical Trion Generation in Single-Walled Carbon Nanotubes. Physical Review Letters, 2011, 107, 187401.	2.9	115
43	High-resolution spatial mapping of the temperature distribution of a Joule self-heated graphene nanoribbon. Applied Physics Letters, 2011, 99, .	1.5	62
44	Low Bias Electron Scattering in Structure-Identified Single Wall Carbon Nanotubes: Role of Substrate Polar Phonons. Physical Review Letters, 2011, 107, 146601.	2.9	16
45	Temperature dependence of the anharmonic decay of optical phonons in carbon nanotubes and graphite. Physical Review B, 2011, 83, .	1.1	54
46	Atmospheric Oxygen Binding and Hole Doping in Deformed Graphene on a SiO <sub>2</sub> Substrate. Nano Letters, 2010, 10, 4944-4951.	4.5	706
47	Excitons and high-order optical transitions in individual carbon nanotubes: A Rayleigh scattering spectroscopy study. Physical Review B, 2010, 81, .	1.1	55
48	Infrared spectra of individual semiconducting single-walled carbon nanotubes: Testing the scaling of transition energies for large diameter nanotubes. Physical Review B, 2010, 82, .	1.1	9
49	Energy Transfer from Individual Semiconductor Nanocrystals to Graphene. ACS Nano, 2010, 4, 2964-2968.	7.3	329
50	Electron and Optical Phonon Temperatures in Electrically Biased Graphene. Physical Review Letters, 2010, 104, 227401.	2.9	190
51	Probing the Intrinsic Properties of Exfoliated Graphene: Raman Spectroscopy of Free-Standing Monolayers. Nano Letters, 2009, 9, 346-352.	4.5	498
52	Luminescence Decay and the Absorption Cross Section of Individual Single-Walled Carbon Nanotubes. Physical Review Letters, 2008, 101, 077402.	2.9	158
53	Photothermal Methods for Single Nonluminescent Nano-Objects. Analytical Chemistry, 2008, 80, 2288-2294.	3.2	97
54	Photothermal detection and tracking of individual non-fluorescent nano-objects in live cells. , 2008, , .		0

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55	Absorption Spectroscopy of Individual Single-Walled Carbon Nanotubes. Nano Letters, 2007, 7, 1203-1207.	4.5	154
56	Single Nanoparticle Photothermal Tracking (SNaPT) of 5-nm Gold Beads in Live Cells. Biophysical Journal, 2006, 91, 4598-4604.	0.2	223
57	Optical Readout of Gold Nanoparticle-Based DNA Microarrays without Silver Enhancement. Biophysical Journal, 2006, 90, L13-L15.	0.2	53
58	Absorption and scattering microscopy of single metal nanoparticles. Physical Chemistry Chemical Physics, 2006, 8, 3486.	1.3	308
59	Single molecule CdSe/ZnS quantum dot and gold nanoparticle detection in live neurons. , 2006, , .		0
60	Absorption spectroscopy of individual nano-objects and improved readout of DNA microarrays using photothermal detection. , 2006, 6092, 57.		0
61	Photothermal absorption spectroscopy of individual gold nanoparticles and CdSe/ZnS semiconductor nanocrystals. , 2006, , .		0
62	Photothermal heterodyne imaging of individual metallic nanoparticles: Theory versus experiment. Physical Review B, 2006, 73, .	1.1	207
63	Photothermal Absorption Spectroscopy of Individual Semiconductor Nanocrystals. Nano Letters, 2005, 5, 2160-2163.	4.5	89
64	Observation of Intrinsic Size Effects in the Optical Response of Individual Gold Nanoparticles. Nano Letters, 2005, 5, 515-518.	4.5	380
65	Photothermal Heterodyne Imaging of Individual Nonfluorescent Nanoclusters and Nanocrystals. Physical Review Letters, 2004, 93, 257402.	2.9	302