David H Cobden

List of Publications by Year in Descending Order

50 papers	14,226 citations	39 h-index	55 g-index
55 ext. papers	17,159 ext. citations	20.2 avg, IF	6.3 L-index

#	Paper	IF	Citations
50	Electric control of a canted-antiferromagnetic Chern insulator.. *Nature Communications*, **2022**, 13, 1668	17.4	4
49	Evidence for equilibrium exciton condensation in monolayer WTe2. *Nature Physics*, **2022**, 18, 94-99	16.2	4
48	Unraveling Strain Gradient Induced Electromechanical Coupling in Twisted Double Bilayer Graphene Moiré Superlattices. *Advanced Materials*, **2021**, 33, e2105879	24	7
47	Electrically tunable correlated and topological states in twisted monolayer–bilayer graphene. *Nature Physics*, **2021**, 17, 374-380	16.2	64
46	Terahertz response of monolayer and few-layer WTe at the nanoscale. *Nature Communications*, **2021**, 12, 5594	17.4	8
45	Magnetic proximity and nonreciprocal current switching in a monolayer WTe helical edge. *Nature Materials*, **2020**, 19, 503-507	27	32
44	Voltage Control of a van der Waals Spin-Filter Magnetic Tunnel Junction. *Nano Letters*, **2019**, 19, 915-920	11.5	80
43	Atomically Thin CrCl: An In-Plane Layered Antiferromagnetic Insulator. *Nano Letters*, **2019**, 19, 3993-3998	11.5	120
42	Imaging quantum spin Hall edges in monolayer WTe. *Science Advances*, **2019**, 5, eaat8799	14.3	64
41	Visualizing electrostatic gating effects in two-dimensional heterostructures. *Nature*, **2019**, 572, 220-223	50.4	71
40	Switching 2D magnetic states via pressure tuning of layer stacking. *Nature Materials*, **2019**, 18, 1298-1302	27	194
39	Electrical control of 2D magnetism in bilayer CrI. *Nature Nanotechnology*, **2018**, 13, 544-548	28.7	626
38	Giant tunneling magnetoresistance in spin-filter van der Waals heterostructures. *Science*, **2018**, 360, 1214-1218	33.3	555
37	Ferroelectric switching of a two-dimensional metal. *Nature*, **2018**, 560, 336-339	50.4	280
36	Two-dimensional itinerant ferromagnetism in atomically thin FeGeTe. *Nature Materials*, **2018**, 17, 778-782	27	522
35	Ligand-field helical luminescence in a 2D ferromagnetic insulator. *Nature Physics*, **2018**, 14, 277-281	16.2	192
34	Gate-induced superconductivity in a monolayer topological insulator. *Science*, **2018**, 362, 922-925	33.3	143

33	Many-body effects in nonlinear optical responses of 2D layered semiconductors. *2D Materials*, **2017**, 4, 025024	5.9	28
32	Determination of band offsets, hybridization, and exciton binding in 2D semiconductor heterostructures. *Science Advances*, **2017**, 3, e1601832	14.3	208
31	Edge conduction in monolayer WTe2. *Nature Physics*, **2017**, 13, 677-682	16.2	320
30	Layer-dependent ferromagnetism in a van der Waals crystal down to the monolayer limit. *Nature*, **2017**, 546, 270-273	50.4	2210
29	Interlayer Exciton Optoelectronics in a 2D Heterostructure p-n Junction. *Nano Letters*, **2017**, 17, 638-643	11.5	193
28	Photo-Nernst current in graphene. *Nature Physics*, **2016**, 12, 236-239	16.2	15
27	Ultrafast Nanoimaging of the Photoinduced Phase Transition Dynamics in VO2. *Nano Letters*, **2016**, 16, 3029-35	11.5	67
26	Inhomogeneity of the ultrafast insulator-to-metal transition dynamics of VO2. *Nature Communications*, **2015**, 6, 6849	17.4	108
25	Surface electron perturbations and the collective behaviour of atoms adsorbed on a cylinder. *Nature Physics*, **2015**, 11, 398-402	16.2	5
24	Magnetic control of valley pseudospin in monolayer WSe2. *Nature Physics*, **2015**, 11, 148-152	16.2	529
23	Electrically tunable excitonic light-emitting diodes based on monolayer WSe2 p-n junctions. *Nature Nanotechnology*, **2014**, 9, 268-72	28.7	1202
22	Lateral heterojunctions within monolayer MoSe2-WSe2 semiconductors. *Nature Materials*, **2014**, 13, 1096-101	27	732
21	Vapor-transport growth of high optical quality WSe2 monolayers a. *APL Materials*, **2014**, 2, 101101	5.7	48
20	Measurement of a solid-state triple point at the metal-insulator transition in VO2. *Nature*, **2013**, 500, 431-4	50.4	328
19	Metal contacts on physical vapor deposited monolayer MoS2. *ACS Nano*, **2013**, 7, 11350-7	16.7	233
18	Electrical tuning of valley magnetic moment through symmetry control in bilayer MoS2. *Nature Physics*, **2013**, 9, 149-153	16.2	451
17	Vapor-solid growth of high optical quality MoS_2 monolayers with near-unity valley polarization. *ACS Nano*, **2013**, 7, 2768-72	16.7	340
16	Kr and 4He Adsorption on Individual Suspended Single-Walled Carbon Nanotubes. *Journal of Low Temperature Physics*, **2012**, 169, 338-349	1.3	11

15	Photoresponse of a strongly correlated material determined by scanning photocurrent microscopy. *Nature Nanotechnology*, **2012**, 7, 723-7	28.7	58
14	Ultrafast hot-carrier-dominated photocurrent in graphene. *Nature Nanotechnology*, **2012**, 7, 114-8	28.7	312
13	Nano-optical investigations of the metal-insulator phase behavior of individual VO(2) microcrystals. *Nano Letters*, **2010**, 10, 1574-81	11.5	204
12	New aspects of the metal-insulator transition in single-domain vanadium dioxide nanobeams. *Nature Nanotechnology*, **2009**, 4, 420-4	28.7	255
11	Tip-modulation scanned gate microscopy. *Nano Letters*, **2008**, 8, 2161-5	11.5	19
10	Oriented growth of single-wall carbon nanotubes using alumina patterns. *Nanotechnology*, **2004**, 15, 473-476	3.4	11
9	Shell filling in closed single-wall carbon nanotube quantum dots. *Physical Review Letters*, **2002**, 89, 046803	7.4	143
8	Single-Wall Carbon Nanotube Conducting Probe Tips. *Journal of Physical Chemistry B*, **2002**, 106, 13102-13105	3.4	46
7	Quantum dots in suspended single-wall carbon nanotubes. *Applied Physics Letters*, **2001**, 79, 4216-4218	3.4	63
6	Fluctuations and Evidence for Charging in the Quantum Hall Effect. *Physical Review Letters*, **1999**, 82, 4695-4698	7.4	60
5	One dimensional transport in carbon nanotubes. *Microelectronic Engineering*, **1999**, 47, 417-420	2.5	17
4	Luttinger-liquid behaviour in carbon nanotubes. *Nature*, **1999**, 397, 598-601	50.4	1242
3	Disorder, Pseudospins, and Backscattering in Carbon Nanotubes. *Physical Review Letters*, **1999**, 83, 5098-5101	7.4	371
2	Spin Splitting and Even-Odd Effects in Carbon Nanotubes. *Physical Review Letters*, **1998**, 81, 681-684	7.4	194
1	Single-Electron Transport in Ropes of Carbon Nanotubes. *Science*, **1997**, 275, 1922-5	33.3	1158