

Time	Coherence	Qubit	Material	Host	Date	Reference	Source	0
20 ms	T_1	HY/e ^a	²⁸ Si/SiGe	2D	2021-12	1	p4	1
50 μ s	T_1	LD/e	GaAs/AlGaAs	2D	2003-11	2	abstract	2
0.85 ms	T_1	LD/e	GaAs/AlGaAs	2D	2004-07	3	p4	3
1 s	T_1	LD/e	GaAs/AlGaAs	2D	2008-01	4	p4 and Fig. 3c the leftmost blue point	4
0.6 s ^b	T_1	LD/e	Si/SiGe	2D	2009-08	5	Fig. 5	5
40 ms	T_1	LD/e	Si/SiO ₂	2D	2010-03	6	p4 and Fig. 4 the leftmost red point	6
2.8 s	T_1	LD/e	Si/SiGe	2D	2011-04	7	p3 and Fig. 3	7
1 μ s	T_1	LD/e	InAs	1D	2012-10	8	Fig. 4d	8
2.6 s	T_1	LD/e	Si/SiO ₂	2D	2013-06	9	p3	9
85 ms	T_1	LD/e	GaAs/AlGaAs	2D	2014-12	10	p2 and Fig. 3	10
3.7 ms	T_1	LD/e	GaAs/AlGaAs	2D	2016-07	11	p3 and Fig. 2	11
0.17 s	T_1	LD/e	Si/SiGe	2D	2016-11	12	Fig. 6	12
10 s	T_1	LD/e	GaAs/AlGaAs	2D	2017-10	13	Fig. 2 the lowest green point	13
50 ms	T_1	LD/e	Si/SiGe	2D	2018-02	14	p1 and ED Fig. 3b	14
57 s	T_1	LD/e	GaAs/AlGaAs	2D	2018-08	15	p3 and Fig. 4a	15
0.15 s ^c	T_1	LD/e	²⁸ Si/SiO ₂	2D	2018-08	16	p2 and p4	16
2.8 ms ^d	T_1	LD/e	²⁸ Si/SiO ₂	2D	2018-08	16	p4 and Fig. 3a	17
1 s	T_1	LD/e	²⁸ Si/SiO ₂	2D	2018-10	17	p2	18
1.5 ms	T_1	LD/e	GaAs/AlGaAs	2D	2019-04	18	Fig. 2	19
0.16 s ^e	T_1	LD/e	Si/SiGe	2D	2019-04	19	Fig. 2	20
5 s ^f	T_1	LD/e	Si/SiGe	2D	2019-04	19	p4	21
0.13 s	T_1	LD/e	²⁸ Si/SiGe	2D	2019-11	20	p4	22
1 s	T_1	LD/e	²⁸ Si/SiGe	2D	2020-03	21	p6 and Fig. 4a	23
3.7 ms	T_1	LD/e ^g	²⁸ Si/SiO ₂	2D	2020-04	22	p2	24
90 ms	T_1	LD/e	Si/SiO ₂	2D	2020-06	23	Fig. 1c	25
9 s	T_1	LD/e	Si/SiO ₂	1D	2021-03	24	p3 and Fig. 3a the leftmost blue point	26
1.3 ms	T_1	LD/e	Si/SiGe	2D	2021-06	25	p1 for Q3	27
10 ms	T_1	LD/e	Si/SiO ₂	1D	2021-09	26	p2 and Fig. 2a	28
1.6 s	T_1	LD/e	²⁸ Si/SiO ₂	2D	2022-03	27	p4 and Fig. 3c	29
5 ns	T_1	LD/h	GaAs/AlGaAs	1D	2016-11	28	p4 and SM pS5	30
86 μ s	T_1	LD/h	Ge/Si	1D	2018-10	29	p3 and Fig. 3c the leftmost point	31
60 μ s	T_1	LD/h	GaAs/AlGaAs	2D	2019-02	30	abstract and Fig. 4	32
9 μ s	T_1	LD/h	Ge/SiGe	2D	2020-01	31	p3 and Fig. 2f	33
1.2 ms	T_1	LD/h	Ge/SiGe	2D	2020-07	32	p4 and Fig. 3a	34
32 ms	T_1	LD/h	Ge/SiGe	2D	2020-08	33	p3	35
16 ms	T_1	LD/h	Ge/SiGe	2D	2021-03	34	Fig. S5 dot 3	36
3 ms ^h	T_1	LD/h	BLG	2D	2021-12	35	p5	37
3.7 μ s	T_1	LD/h	Ge/Si	1D	2022-01	36	SM p13 and SFig. 7.1d	38
6 s	T_1	LD/i	Si:P	imp	2010-09	37	p2	39
0.7 s	T_1	LD/i	Si:P	imp	2012-09	38	p3	40
1.8 s	T_1	LD/i	Si:P	imp	2013-06	39	Fig. 3	41
1.3 s	T_1	LD/i ⁱ	²⁸ Si:P	imp	2016-10	40	p4	42
3 s	T_1	LD/i	²⁸ Si:P	imp	2016-10	41	p3	43
30 s	T_1	LD/i	Si:P	imp	2017-03	42	Fig. 2b the lowest point	44
9.3 s	T_1	LD/i	Si:P	imp	2018-03	43	p3 and Fig. 1f	45
1.3 s	T_1	LD/i	Si:P	imp	2018-11	44	p3 and Fig. 2b	46
4.2 s	T_1	LD/i	Si:P	imp	2019-01	45	p3	47
9.8 s	T_1	LD/i	Si:P	imp	2019-05	46	Fig. 2c	48
5 ms	T_1	LD/i	²⁸ Si:B	imp	2020-07	47	p3 and Fig. 3b	49
3.4 s	T_1	LD/i	²⁸ Si:P	imp	2021-01	48	p6 and SFig. 3c	50

TABLE I-1. Spin coherence times (part 1). Superscripts stand for the following. ^a: EO qubit. ^b: (*estimated*) Fig. 5 the lowest point. ^c: At 0.1 kelvin. ^d: At 1.1 kelvin. ^e: With micromagnet. ^f: No micromagnet. ^g: At 1 kelvin. ^h: The reference states “...the relaxation time is on the order of milliseconds”. We use 3 ms as a representative value, as it corresponds to the “load phase” in the measurement cycle. ⁱ: Qubit defined in the rotating frame.

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