

Time	Coherence	Qubit	Material	Host	Date	Reference	Source	
57 s	T_1	LD/e	GaAs/AlGaAs	2D	2018-08	1	p3 and Fig. 4a	1
43 s	T_1	LD/i	Si:P	imp	2024-03	2	Tab. 2 and Fig. 4	2
30 s	T_1	LD/i	Si:P	imp	2017-03	3	Fig. 2b the lowest point	3
30 s ^a	T_1	LD/h	BLG	2D	2025-02	4	p3	4
16 s	T_1	LD/i	Si:P	imp	2023-11	5	Tab. I	5
11 s ^b	T_1	LD/i	Si:P	imp	2023-02	6	p6	6
11 s	T_1	ST/e	Si/SiO ₂	2D	2024-03	7	p4	7
10 s	T_1	LD/e	GaAs/AlGaAs	2D	2017-10	8	Fig. 2 the lowest green point	8
9.8 s	T_1	LD/i	Si:P	imp	2019-05	9	Fig. 2c	9
9.3 s	T_1	LD/i	Si:P	imp	2018-03	10	p3 and Fig. 1f	10
9 s	T_1	LD/e	Si/SiO ₂	1D	2021-03	11	p3 and Fig. 3a the leftmost blue point	11
6.5 s	T_1	LD/i	²⁸ Si:P	imp	2023-02	12	Fig. 3c	12
6 s	T_1	LD/i	Si:P	imp	2010-09	13	p2	13
5 s ^c	T_1	LD/e	Si/SiGe	2D	2019-04	14	p4	14
4.2 s	T_1	LD/i	Si:P	imp	2019-01	15	p3	15
3.4 s	T_1	LD/i	²⁸ Si:P	imp	2021-01	16	p6 and SFig. 3c	16
3 s	T_1	LD/i	²⁸ Si:P	imp	2016-10	17	p3	17
3 s	T_1	ST/e	Si/SiGe	2D	2012-01	18	p4	18
2.8 s	T_1	LD/e	Si/SiGe	2D	2011-04	19	p3 and Fig. 3	19
2.6 s	T_1	LD/e	Si/SiO ₂	2D	2013-06	20	p3	20
1.8 s	T_1	LD/i	Si:P	imp	2013-06	21	Fig. 3	21
1.6 s	T_1	LD/e	²⁸ Si/SiO ₂	2D	2022-03	22	p4 and Fig. 3c	22
1.3 s	T_1	LD/i ^d	²⁸ Si:P	imp	2016-10	23	p4	23
1.3 s	T_1	LD/i	Si:P	imp	2018-11	24	p3 and Fig. 2b	24
1 s	T_1	LD/e	²⁸ Si/SiGe	2D	2020-03	25	p6 and Fig. 4a	25
1 s	T_1	LD/e	²⁸ Si/SiO ₂	2D	2018-10	26	p2	26
1 s	T_1	LD/e	GaAs/AlGaAs	2D	2008-01	27	p4 and Fig. 3c the leftmost blue point	27
0.7 s	T_1	LD/i	Si:P	imp	2012-09	28	p3	28
0.6 s ^e	T_1	LD/e	Si/SiGe	2D	2009-08	29	Fig. 5	29
0.5 s ^f	T_1	ST/e	²⁸ Si/SiO ₂	2D	2020-04	30	Fig. 4 the leftmost black point	30
0.4 s	T_1	LD/h	BLG	2D	2025-02	4	p4	31
0.35 s ^g	T_1	HY/e	BLG	2D	2024-01	31	Fig. 3b	32
0.17 s	T_1	LD/e	Si/SiGe	2D	2016-11	32	Fig. 6	33
0.16 s ^h	T_1	LD/e	Si/SiGe	2D	2019-04	14	Fig. 2	34
0.15 s ⁱ	T_1	LD/e	²⁸ Si/SiO ₂	2D	2018-08	33	p2 and p4	35
0.14 s	T_1	ST/e	Si/SiGe	2D	2012-04	34	Fig. 2d	36
0.13 s	T_1	LD/e	²⁸ Si/SiGe	2D	2019-11	35	p4	37
90 ms	T_1	LD/e	Si/SiO ₂	2D	2020-06	36	Fig. 1c	38
85 ms	T_1	LD/e	GaAs/AlGaAs	2D	2014-12	37	p2 and Fig. 3	39
50 ms	T_1	LD/e	Si/SiGe	2D	2018-02	38	p1 and ED Fig. 3b	40
40 ms	T_1	LD/e	Si/SiO ₂	2D	2010-03	39	p4 and Fig. 4 the leftmost red point	41
34 ms	T_1	ST/e	BLG	2D	2024-01	31	Fig. 3b	42
32 ms	T_1	LD/h	Ge/SiGe	2D	2020-08	40	p3	43
32 ms	T_1	LD/e	²⁸ Si/SiGe	2D	2022-12	41	p3	44
22 ms ^j	T_1	LD/e	Si/SiGe	2D	2022-08	42	p2 and ED Fig. 4b-d	45
20 ms	T_1	HY/e ^k	²⁸ Si/SiGe	2D	2022-03	43	p5	46
16 ms	T_1	LD/h	Ge/SiGe	2D	2021-03	44	Fig. S5 dot 3	47
15 ms ^l	T_1	ST/e	²⁸ Si/SiO ₂	2D	2020-04	30	Fig. 4 the rightmost black point	48
11 ms ^m	T_1	LD/e	²⁸ Si/SiO ₂	2D	2024-03	45	p3	49
10 ms	T_1	LD/e	Si/SiO ₂	1D	2022-03	46	p2 and Fig. 2a	50

TABLE I-1. Spin coherence times (part 1). Superscripts stand for the following. ^a: Spin-valley relaxation. ^b: Dot D3. ^c: No micromagnet. ^d: Qubit defined in the rotating frame. ^e: (*estimated*) Fig. 5 the lowest point. ^f: At 0.04 K. ^g: Valley degree of freedom. ^h: With micromagnet. ⁱ: At 0.1 K. ^j: The average over the three qubits. ^k: EO qubit. ^l: At 1.5 K. ^m: At 1 K.

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