

Table S1. Optimized temperature program used to generate and monitor the SrF molecule with liquid-phase fluorinating agents.

Step	Temperature (°C)	Ramp (°C s ⁻¹)	Hold (s)	Ar gas flow (L min ⁻¹)
Drying	80	6	30	2
Drying	90	3	60	2
Drying	120	5	20	2
Pyrolysis	800	300	10	2
Gas adaption	800	0	5	0
Vaporization	2400	2000	5	0
Cleaning	2600	500	5	2

Table S2. Software conditions introduced to perform the temperature program collected in **Table 2** for gas-phase fluorinating agents.

Step	Temp (°C)	Ramp (°C/s)	Hold (s)	Gas	
				Purge	Add
Drying	80	6	20	Max	Stop
Drying	90	3	50	Max	Stop
Drying	120	5	10	Max	Stop
Pyrolysis	800	300	10	Max	Stop
Gas adaption	800	0	5	Stop	Max
Atomize	800	0	1	Stop	Max
Clean	2400	2000	5	Stop	Stop
Clean	2600	500	4	Max	Stop