

Supporting Information

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Figure S1

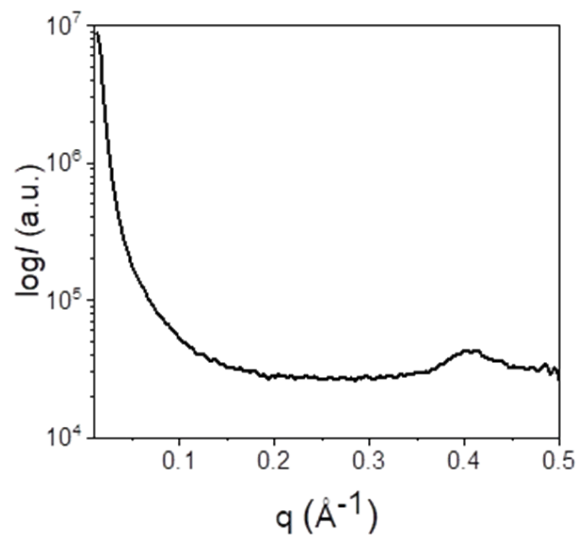


Figure S2

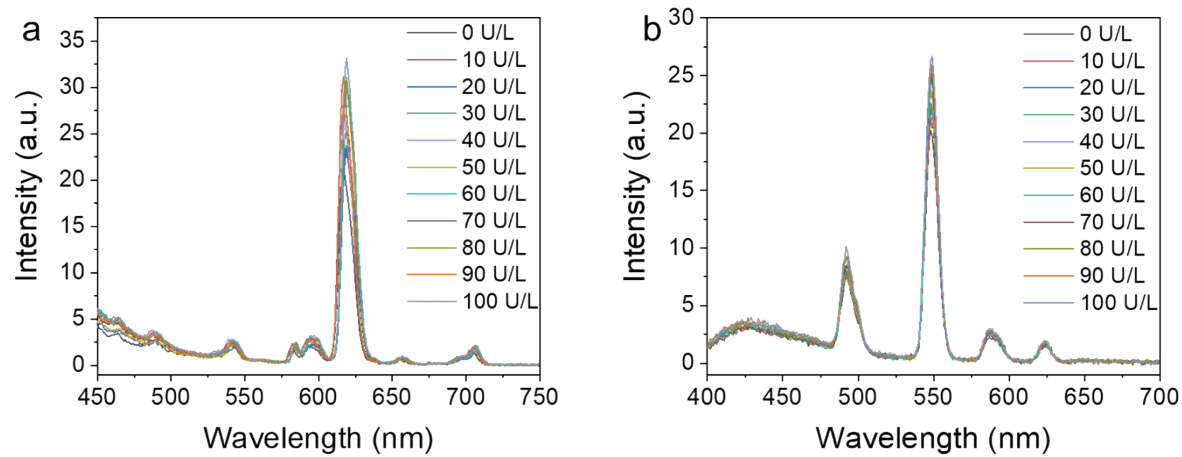


Figure S3

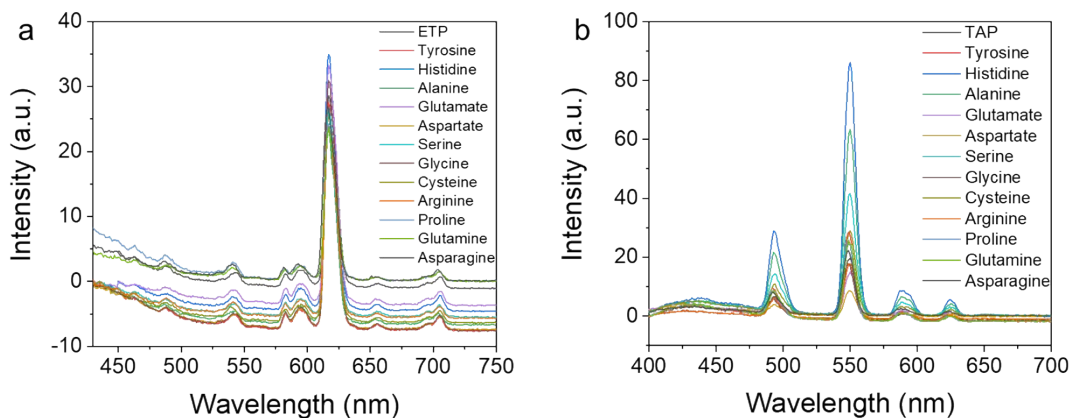


Figure S4

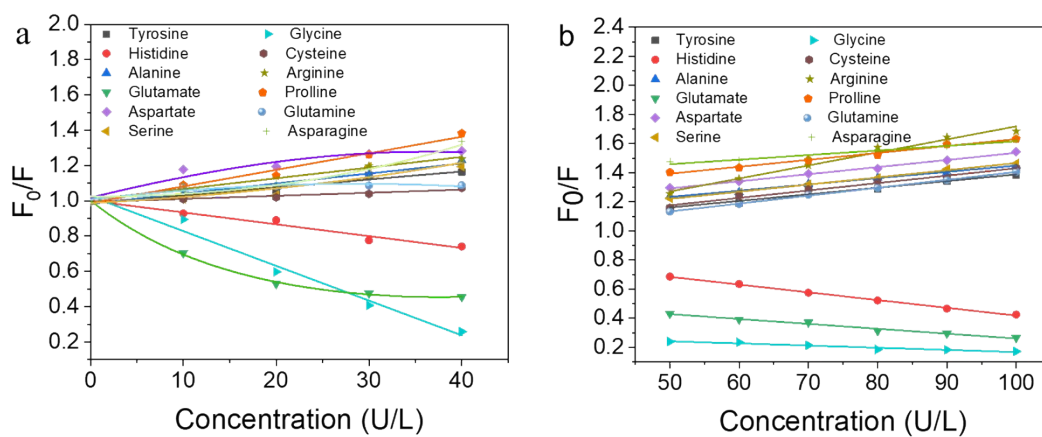


Figure S5

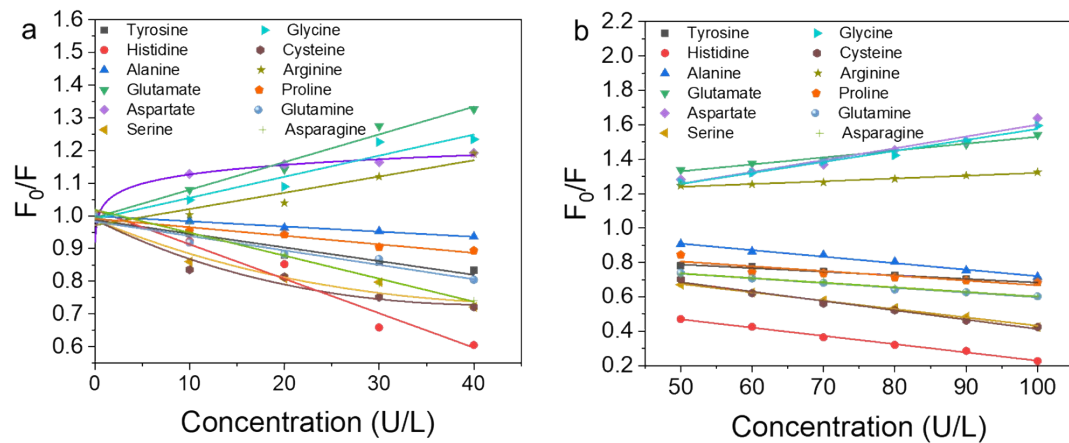


Figure S6

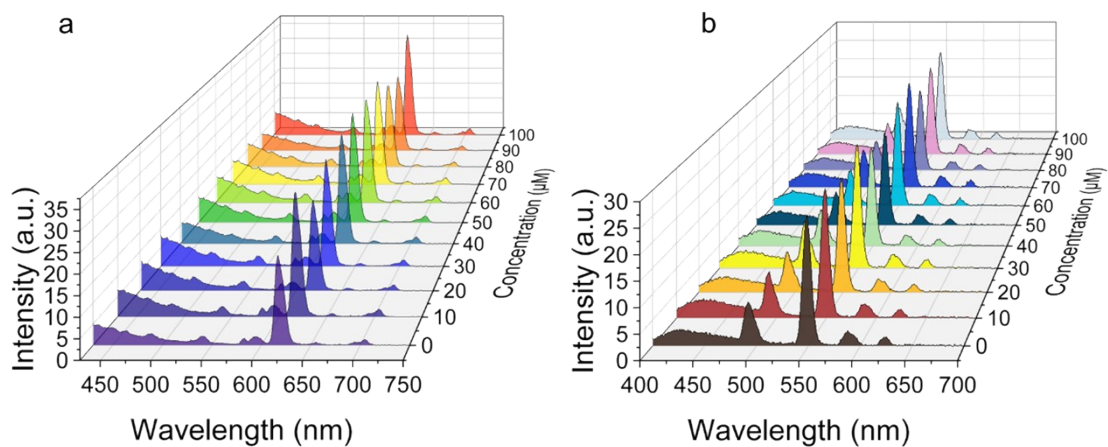


Figure S7

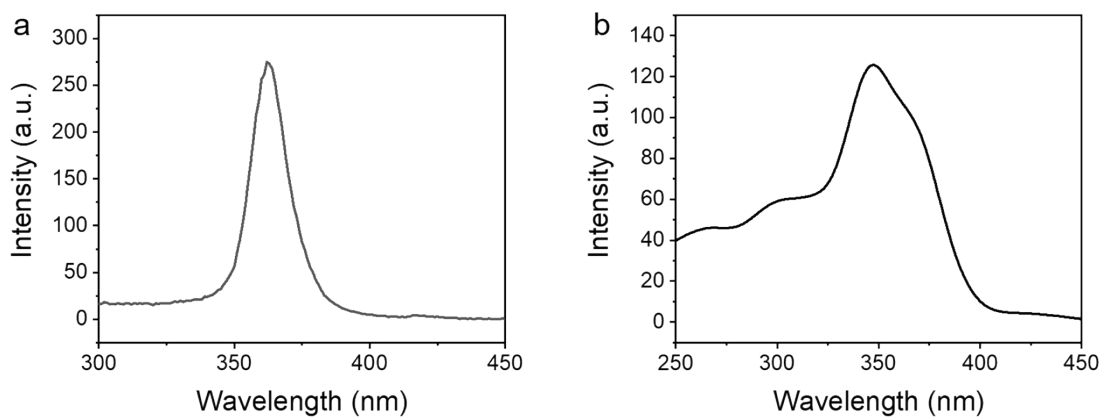


Figure S8

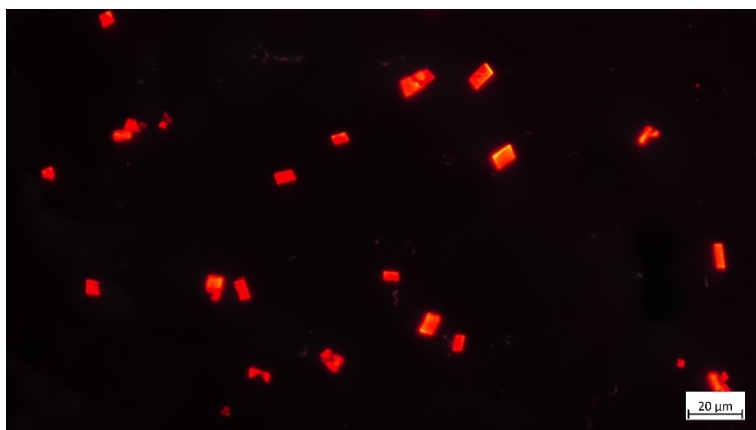


Table S1

amino acid	A	K	a	B	b ₁	b ₂	b ₃	R ²
Tryptophane	0			1	0.01921	-15.16754	0.98264	0.99793
Threonine					-0.16230	7.05220	1.146328	0.97052
Valine					-0.00518	-11.35278	1.00566	0.99135
Phenylalanine					0.03331	-22.69949	0.96863	0.99312
Leucine					0.06035	-23.61215	0.92632	0.94132
Methionine	1	0.00839	1	0				0.99226
Lysine	0			1	-0.08560	14.90085	1.08518	0.99779
Isoleucine					-0.22556	22.86966	1.21870	0.94446

Table S2

amino acid	A	K	a	B	b ₁	b ₂	b ₃	R ²
Tryptophane	0			1	0.00124	1.5253	1.27674	0.99203
Threonine	1	0.00108	1.11545	0				0.96936
Valine		-0.00215	0.94634					0.95689
Phenylalanine		0.00792	0.84452					0.97334
Leucine		0.00375	1.05820					0.94050
Methionine		0.00362	1.20406					0.95747
Lysine		0.00372	0.88091					0.94282
Isoleucine		0.00674	0.83907					0.93721

Table S3

amino acid	A	K	a	B	b ₁	b ₂	b ₃	R ²
Tryptophane	1	-0.00520	1	0				0.94418
Threonine		-0.00480						0.96583
Valine		-0.00402						0.97682
Phenylalanine		-0.00384						0.93268
Leucine		-0.00480						0.96421
Methionine		-0.00156						0.98057
Lysine		-0.00674						0.97080
Isoleucine		0						1

Table S4

amino acid	A	K	a	B	b ₁	b ₂	b ₃	R ²
Tryptophane	1	-0.00546	1.08047	0				0.97503
Threonine		-0.00434	0.86732					0.98354
Valine		-0.00355	0.99316					0.99268
Phenylalanine		0.00248	1.02724					0.96484
Leucine		-0.00515	1.01590					0.98906
Methionine		-0.00260	1.04444					0.94411
Lysine		-0.00273	0.85678					0.93990
Isoleucine		0.00254	1.82019					0.93399

Table S5

	T (μs)
Eu(TTA)3phen	219.3
Eu(TTA)3phen +Tryptophane	197.7
Eu(TTA)3phen +Threonine	208.3
Eu(TTA)3phen +Valine	190.4
Eu(TTA)3phen +Phenylalanine	205.7
Eu(TTA)3phen +Leucine	202.4
Eu(TTA)3phen +Methionine	202.6
Eu(TTA)3phen +Lysine	200.5
Eu(TTA)3phen +Isoleucine	183.3

Table S6

	T (μ s)
Tb(ACAC)3phen	333.0
Tb(ACAC)3phen +Tryptophane	250.4
Tb(ACAC)3phen +Threonine	305.8
Tb(ACAC)3phen +Valine	316.1
Tb(ACAC)3phen +Phenylalanine	319.5
Tb(ACAC)3phen +Leucine	316.0
Tb(ACAC)3phen +Methionine	321.9
Tb(ACAC)3phen +Lysine	313.8
Tb(ACAC)3phen +Isoleucine	312.2

[Video S1](#)