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CORRECTION

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Correction: Artificial intelligence-driven dynamic regulation for high-efficiency gentamicin C1a production

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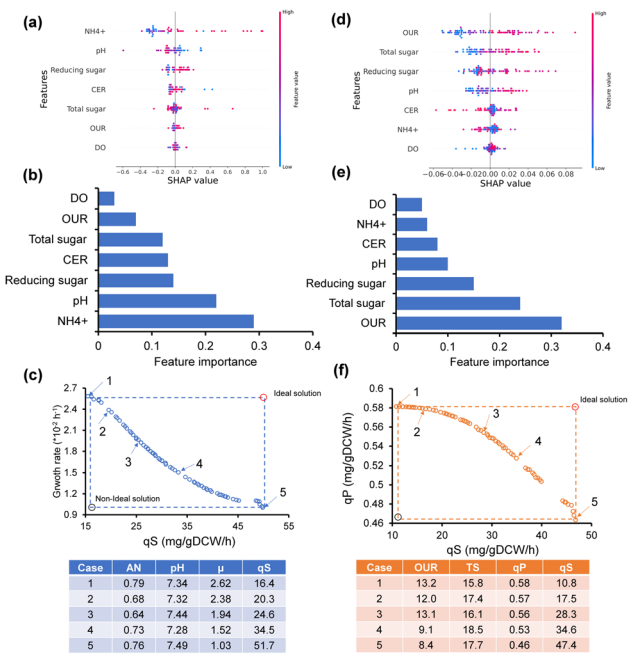
Correction for 'Artificial intelligence-driven dynamic regulation for high-efficiency gentamicin C1a production' by Feng Xu *et al.*, *Green Chem.*, 2025, **27**, 13436–13454, https://doi.org/10.1039/D5GC02507A.

The authors note that the original article had an error in the sentence 'The number of neurons in the input layer was determined based on key variables influencing the fermentation process, including total sugar concentration (TS), reducing sugar (RS), ammonium ion concentration (AN), DO, pH, OUR, and CER (Fig. 1b)'. The correct sentence is 'The number of neurons in the input layer was determined based on key variables influencing the fermentation process, including total sugar concentration (TS), reducing sugar (RS), ammonium ion concentration (AN), DO, pH, OUR, and CER (Fig. S1b)'.

The authors also note an error in the layout of Fig. 3. The correct figure with the caption is given here.



Case	AN	pH	μ	qS
1	0.79	7.34	2.62	16.4
2	0.68	7.32	2.38	20.3
3	0.64	7.44	1.94	24.6
4	0.73	7.28	1.52	34.5
5	0.76	7.49	1.03	51.7

Case	OUR	TS	qP	qS
1	13.2	15.8	0.58	10.8
2	12.0	17.4	0.57	17.5
3	13.1	16.1	0.56	28.3
4	9.1	18.5	0.53	34.6
5	8.4	17.7	0.46	47.4

Fig. 3 Feature importance analysis and NSGA-II optimization. (a) Feature importance analysis with μ as prediction matrix; (b) feature importance ranking and index with μ as prediction matrix; (c) Pareto front analysis of q_S and μ for multi-objective optimization; (d) feature importance analysis with q_P as prediction matrix; (e) feature importance ranking and index with q_P as prediction matrix; (f) Pareto front analysis of q_S and q_P for multi-objective optimization.

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In addition, the authors also note an error in the caption of Fig. 4 in the original article. Fig. 4 and the correct caption are given here.

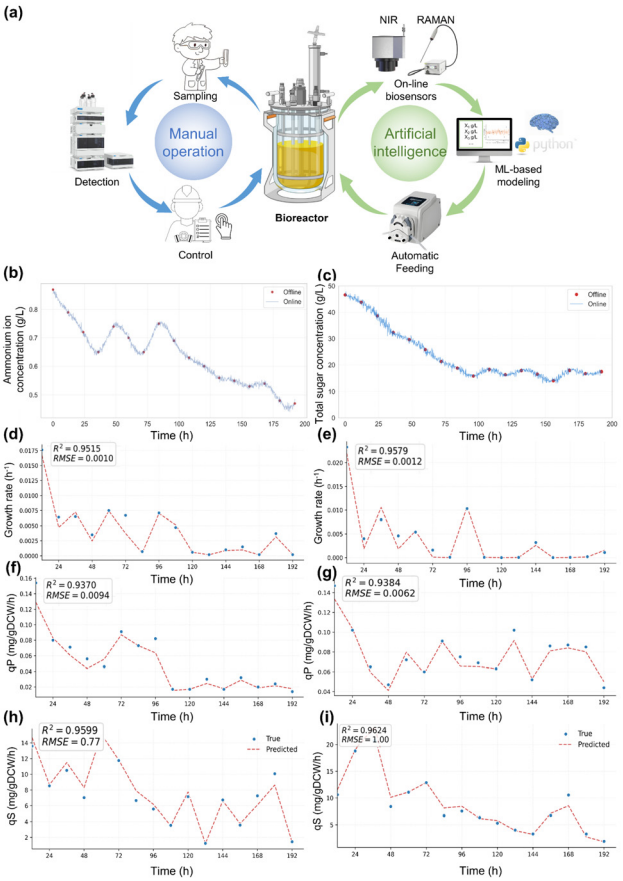

Fig. 4 Online spectral monitoring model validation and BPNN model prediction validation. (a) Development of a multi-source spectral model. (b) Predicted AN based on multi-source spectral model *versus* offline values; (c) predicted total sugars based on multi-source spectral model *versus* offline values; (d) trend of μ in the control group; (e) trend of μ in the experimental group; (f) trend of q_P in the control group; (g) trend of q_P in the experimental group; (h) trend of q_S in the control group; (i) trends of q_S in the experimental group.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.