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## Correction: Recent advances and perspectives for solar-driven water splitting using particulate photocatalysts

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Correction for 'Recent advances and perspectives for solar-driven water splitting using particulate photocatalysts' by Xiaoping Tao *et al.*, *Chem. Soc. Rev.*, 2022, **51**, 3561–3608, <https://doi.org/10.1039/d1cs01182k>.

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The authors regret that there were some errors in the references in Tables 1 and 2 in the original article. The corrected Tables 1 and 2 are presented here, and the additional references which should have been included (ref. 299–317) are provided below.

**Table 1** Representative particulate one-step overall water-splitting systems

Photocatalyst	Absorption range/nm	Cocatalyst	Efficiency	Ref.
<b>Ultraviolet light</b>				
TiO <sub>2</sub>	<385 nm	Pt/RuO <sub>2</sub>	QE: 30 ± 10% at 310 nm	299
SrTiO <sub>3</sub> :Al	<390 nm	Rh/Cr <sub>2</sub> O <sub>3</sub> /CoOOH	AQE: 95.7% at 350 nm, 95.9% at 360 nm, 91.6% at 365 nm STH: 0.65%	179
La <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> :Ba	<385 nm	NiO <sub>x</sub>	QE: 35% (<360 nm)	300
Sr <sub>2</sub> Nb <sub>2</sub> O <sub>7</sub>	<300 nm	Ni	QE: 23% (<300 nm)	301
NaTaO <sub>3</sub> :La	<300 nm	NiO	AQE: 56% at 270 nm	84
Ga <sub>2</sub> O <sub>3</sub> :Zn	<280 nm	Rh <sub>2–y</sub> Cr <sub>y</sub> O <sub>3</sub>	AQY: 71% at 254 nm	302
Polytriazine imides	<400 nm	Pt/Co	AQY: 7.9% at 365 nm, 6.2% at 380 nm, 0.26% at 405 nm	268
<b>Visible light</b>				
(Zn <sub>0.12</sub> Ga <sub>0.88</sub> )(N <sub>0.88</sub> O <sub>0.12</sub> )	<475 nm	Rh <sub>2–y</sub> Cr <sub>y</sub> O <sub>3</sub>	AQE: 5.9% at 420–440 nm	264
GaN:Mg/InGaN:Mg	<475 nm	Rh/Cr <sub>2</sub> O <sub>3</sub>	AQE: 12.3% at 400–475 nm, STH: 1.8%	303
ZrO <sub>2</sub> /TaON	<495 nm	RuO <sub>x</sub> /Cr <sub>2</sub> O <sub>3</sub> /IrO <sub>2</sub>	AQE: <0.1% at 420 nm	304
LaMg <sub>1/3</sub> Ta <sub>2/3</sub> O <sub>2</sub> N	<600 nm	Rh <sub>2–y</sub> Cr <sub>y</sub> O <sub>3</sub> /TiO <sub>2</sub> /SiO <sub>2</sub>	AQE: 0.18% at 440 ± 30 nm	243
Ta <sub>3</sub> N <sub>5</sub>	<590 nm	Rh/Cr <sub>2</sub> O <sub>3</sub>	AQE: 2.2% at 320 nm, 0.22% at 420 nm, 0.024% at 500 nm, STH: 0.014%	85
BiYWO <sub>6</sub>	<470 nm	RuO <sub>2</sub>	AQE: 0.17% at 420 nm	305
BiVO <sub>4</sub> :In,Mo	<496 nm	RuO <sub>2</sub>	AQE: 3.2% at 420–800 nm	306
Y <sub>2</sub> Ti <sub>2</sub> O <sub>5</sub> S <sub>2</sub>	<650 nm	Rh/Cr <sub>2</sub> O <sub>3</sub> /IrO <sub>2</sub>	AQE: 0.36% at 420 nm, 0.23% at 500 nm, 0.05% at 600 nm, STH: 0.007%	50
g-C <sub>3</sub> N <sub>4</sub>	<440 nm	Pt/CoO <sub>x</sub>	AQE: 0.3% at 405 nm	267
g-C <sub>3</sub> N <sub>4</sub> (nanosheet)	<410 nm	Co <sub>1</sub> -phosphide	QE: 3.6% at 420 nm, 2.2% at 500 nm and 0.35% at 580 nm	307
CDots-C <sub>3</sub> N <sub>4</sub>	<620 nm		AQE: 16% at 420 nm, STH: 2%	308

There was also a minor error in Fig. 3, where the vertical axis should have been labelled “Potential/*vs.* NHE (pH = 0)”. The corrected Fig. 3 is also presented here.

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Table 2 Representative particulate Z-scheme overall water-splitting systems

HEP	OEP	Electron mediator	Efficiency	Ref.
<b>Soluble electron mediator</b>				
Pt/SrTiO <sub>3</sub> (Cr,Ta) (<700 nm)	PtO <sub>x</sub> /WO <sub>3</sub> (<450 nm)	IO <sub>3</sub> <sup>-</sup> /I <sup>-</sup>	AQE: 0.1% at 420 nm	271
Pt/ZrO <sub>2</sub> /TaON (<500 nm)	PtO <sub>x</sub> /WO <sub>3</sub> (<600 nm)	IO <sub>3</sub> <sup>-</sup> /I <sup>-</sup>	AQE: 6.3% at 420 nm	273
Pt/MgTa <sub>2</sub> O <sub>6-x</sub> N <sub>y</sub> /TaON (<570 nm)	PtO <sub>x</sub> /WO <sub>3</sub> (<600 nm)	IO <sub>3</sub> <sup>-</sup> /I <sup>-</sup>	AQE: 6.8% at 420 nm	274
IrO <sub>2</sub> /Sm <sub>2</sub> Ti <sub>2</sub> S <sub>2</sub> O <sub>5</sub> (<590 nm); Pt/La <sub>5</sub> Ti <sub>2</sub> CuS <sub>5</sub> O <sub>7</sub> (<650 nm); Rh/La <sub>6</sub> Ti <sub>2</sub> S <sub>8</sub> O <sub>5</sub> (<630 nm)	PtO <sub>x</sub> /H-Cs-WO <sub>3</sub> (<450 nm)	I <sub>3</sub> <sup>-</sup> /I <sup>-</sup>	STH: 0.003%	309
Dye-adsorbed Pt/H <sub>4</sub> Nb <sub>6</sub> O <sub>17</sub> (<700 nm)	IrO <sub>2</sub> /PtO <sub>x</sub> /WO <sub>3</sub> (<450 nm)	I <sub>3</sub> <sup>-</sup> /I <sup>-</sup>	AQE: 0.05% at 480 nm	310
Ru/SrTiO <sub>3</sub> :Rh (<520 nm)	BiVO <sub>4</sub> (<520 nm)	Fe <sup>3+</sup> /Fe <sup>2+</sup>	AQE: 4.2% at 420 nm, STH: 0.1%	311
Ru/SrTiO <sub>3</sub> :Rh (<520 nm)	Bi <sub>4</sub> NbO <sub>8</sub> Cl (<498 nm)	Fe <sup>3+</sup> /Fe <sup>2+</sup>	AQE: 0.4% at 420 nm	76
Rh <sub>y</sub> Cr <sub>2-y</sub> O <sub>3</sub> /ZrO <sub>2</sub> /TaON (<530 nm)	Ir-FeCoO <sub>x</sub> /BiVO <sub>4</sub> (<530 nm)	[Fe(CN) <sub>6</sub> ] <sup>3-/4-</sup>	AQE: 12.3% at 420 ± 10 nm, STH: 0.6%	275 and 298
Pt/SrTiO <sub>3</sub> :Rh (<520 nm)	BiVO <sub>4</sub> (<520 nm)	[Co(bpy) <sub>3</sub> ] <sup>3+/2+</sup> or [Co(phen) <sub>3</sub> ] <sup>3+/2+</sup>	AQE: 2.1% at 420 nm	312
0.5 wt% Ru/SrTiO <sub>3</sub> :Rh (<520 nm)	Photosystem II (400–520 and 600–700 nm)	[Fe(CN) <sub>6</sub> ] <sup>3-/4-</sup>	STH: 0.012%	282 and 313
Ru/SrTiO <sub>3</sub> :Rh (<520 nm)	PtO <sub>x</sub> /WO <sub>3</sub> (<450 nm)	[SiW <sub>11</sub> O <sub>39</sub> Mn <sup>III</sup> (H <sub>2</sub> O)] <sup>5-</sup> / [SiW <sub>11</sub> O <sub>39</sub> Mn <sup>II</sup> (H <sub>2</sub> O)] <sup>6-</sup>	AQE: 0.24% at 400 nm (H <sub>2</sub> evolution) AQE: 0.36% at 400 nm (O <sub>2</sub> evolution)	314
<b>Solid-state electron mediator</b>				
Ru/SrTiO <sub>3</sub> :Rh (<520 nm)	BiVO <sub>4</sub> (<520 nm)	None	AQE: 1.7% at 420 nm, STH: 0.12%	277
Pt/g-C <sub>3</sub> N <sub>4</sub> (nanosheet) (<450 nm)	Co(OH) <sub>2</sub> /B doped g-C <sub>3</sub> N <sub>4</sub> (nanosheet) (<900 nm)	None	STH: 1.16%	276
Ru/SrTiO <sub>3</sub> :La,Rh (<520 nm)	CoO <sub>x</sub> /Ta <sub>3</sub> N <sub>5</sub> (<600 nm)	Ir	AQE: 1.1% at 420 nm, STH: 0.037%	315
Ru/SrTiO <sub>3</sub> :Rh (<520 nm)	BiVO <sub>4</sub> (<520 nm)	RGO	AQE: 1.03% at 420 nm	316
ZnRh <sub>2</sub> O <sub>4</sub> (<1030 nm)	Bi <sub>4</sub> V <sub>2</sub> O <sub>11</sub> (<750 nm)	Ag	AQE: ~0.003% at 740 nm	317
Pt/TiO <sub>2</sub> /CdS/(ZnSe) <sub>0.5</sub> (CuGa <sub>2.5</sub> Se <sub>4.25</sub> ) <sub>0.5</sub> (<720 nm)	BiVO <sub>4</sub> :Mo (<520 nm)	Au	AQE: 1.5% at 420 nm	281

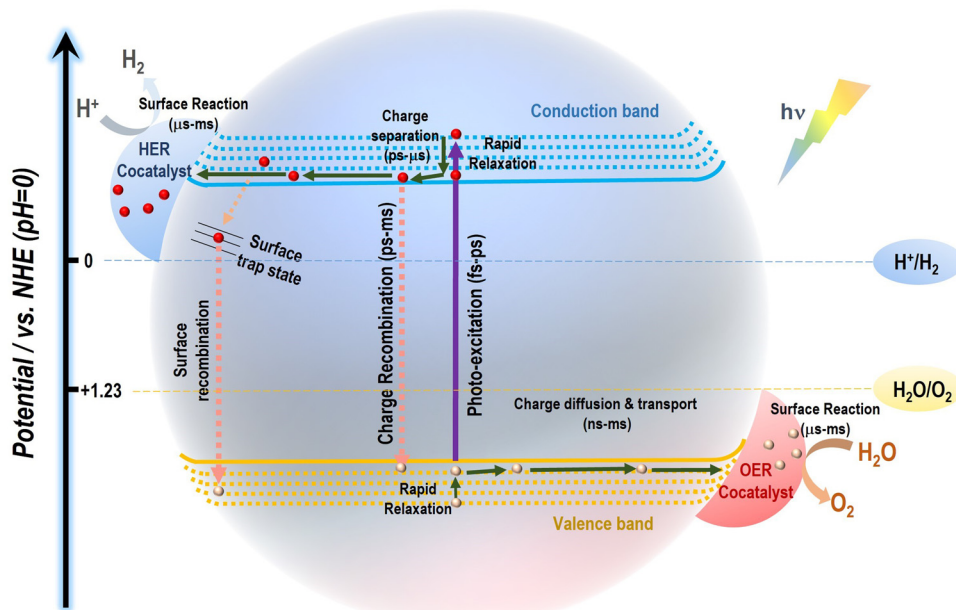


Fig. 3 Mechanism of photocatalytic water splitting on a semiconductor-based photocatalyst.

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



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