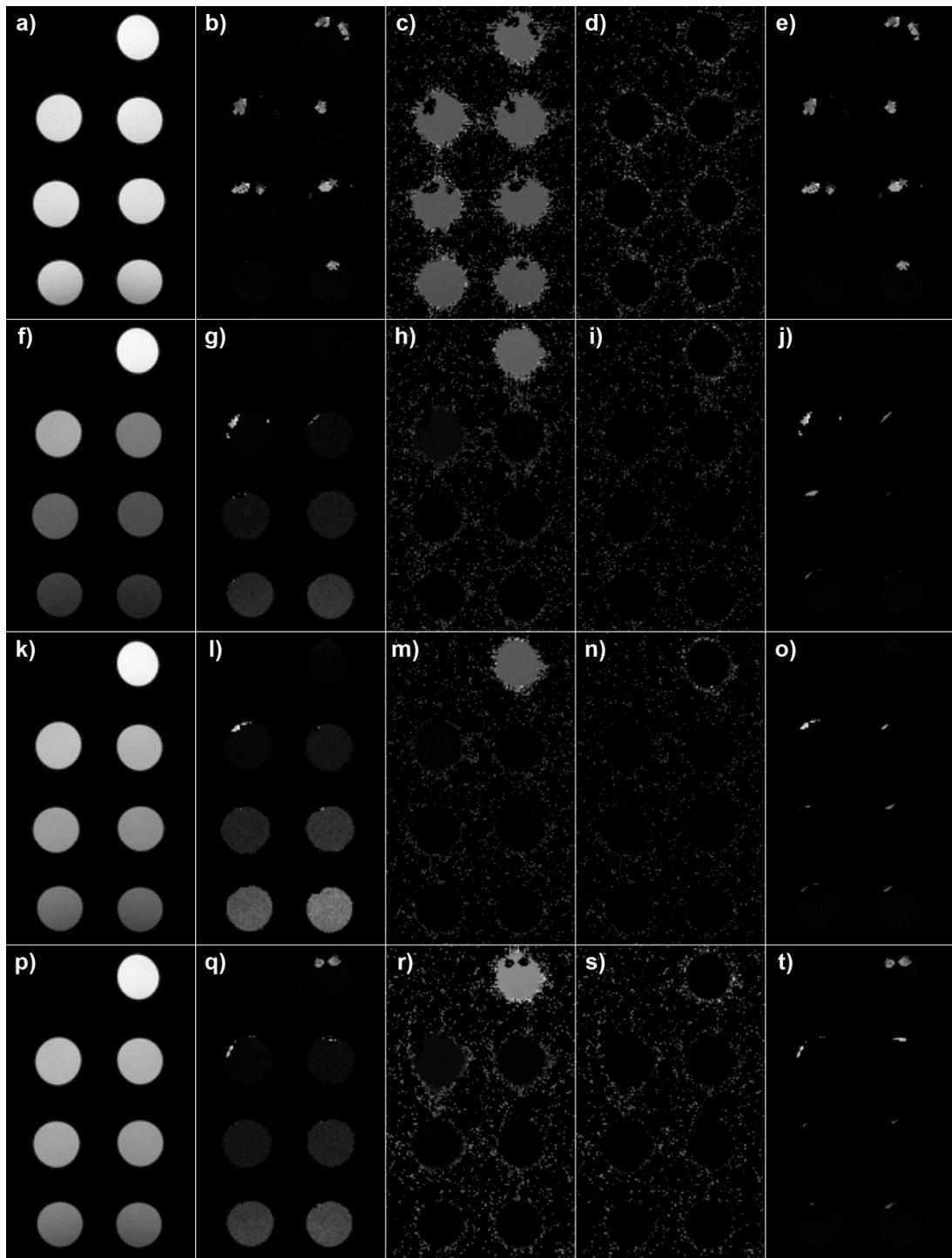
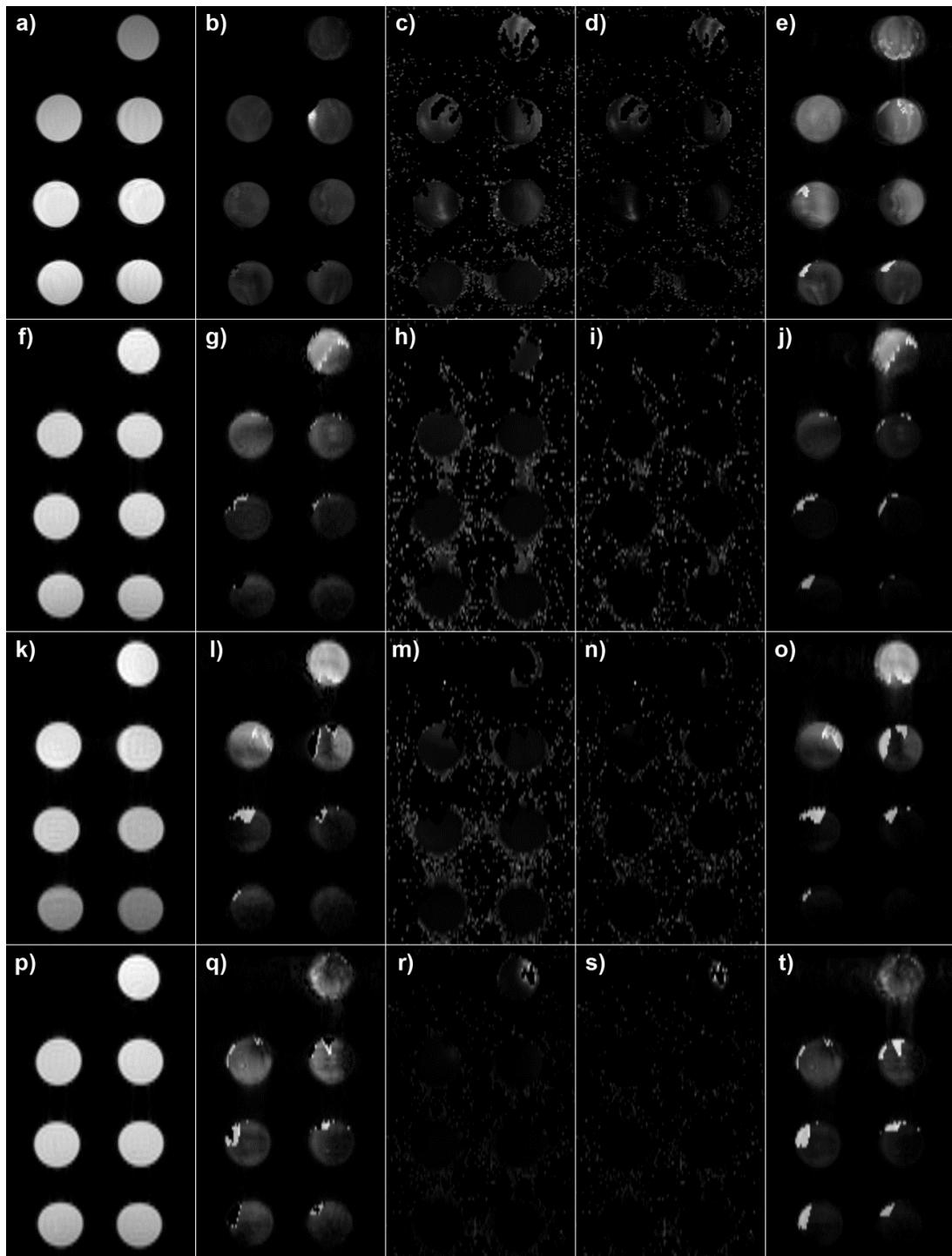


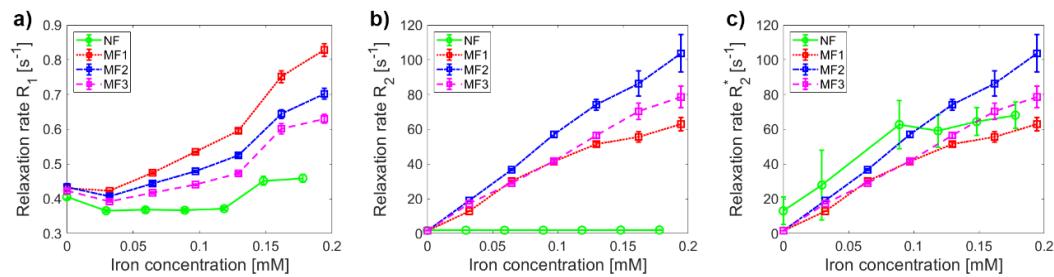
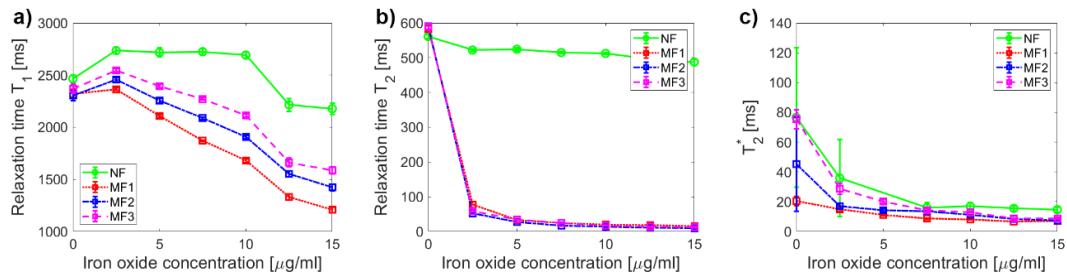
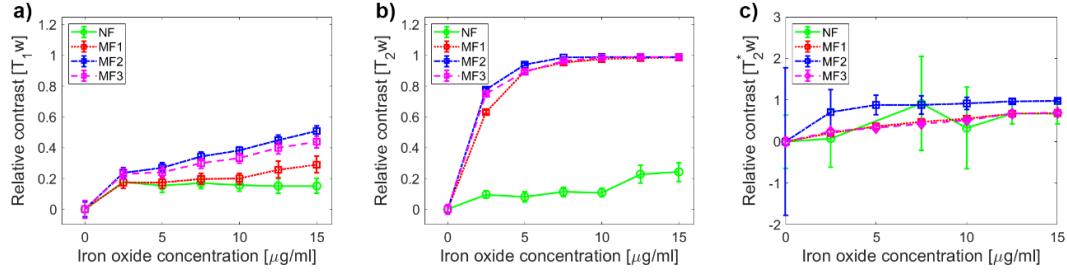
**Figure S1.**  $T_1$  - weighted image data: (a) NF - signal intensity; (b) NF - standard deviation of signal intensity; (c) NF - relaxation time  $T_1$ ; (d) NF - standard deviation of relaxation time  $T_1$ ; (e) NF - standard deviation of the fit; (f) MF1 - signal intensity; (g) MF1 - standard deviation of signal intensity; (h) MF1 - relaxation time  $T_1$ ; (i) MF1 - standard deviation of relaxation time  $T_1$ ; (j) MF1 - standard deviation of the fit; (k) MF2 - signal intensity; (l) MF2 - standard deviation of signal intensity; (m) MF2 - relaxation time  $T_1$ ; (n) MF2 - standard deviation of relaxation time  $T_1$ ; (o) MF2 - standard deviation of the fit; (p) MF3 - signal intensity; (q) MF3 - standard deviation of signal intensity; (r) MF3 - relaxation time  $T_1$ ; (s) MF3 - standard deviation of relaxation time  $T_1$ ; (t) MF3 - standard deviation of the fit.

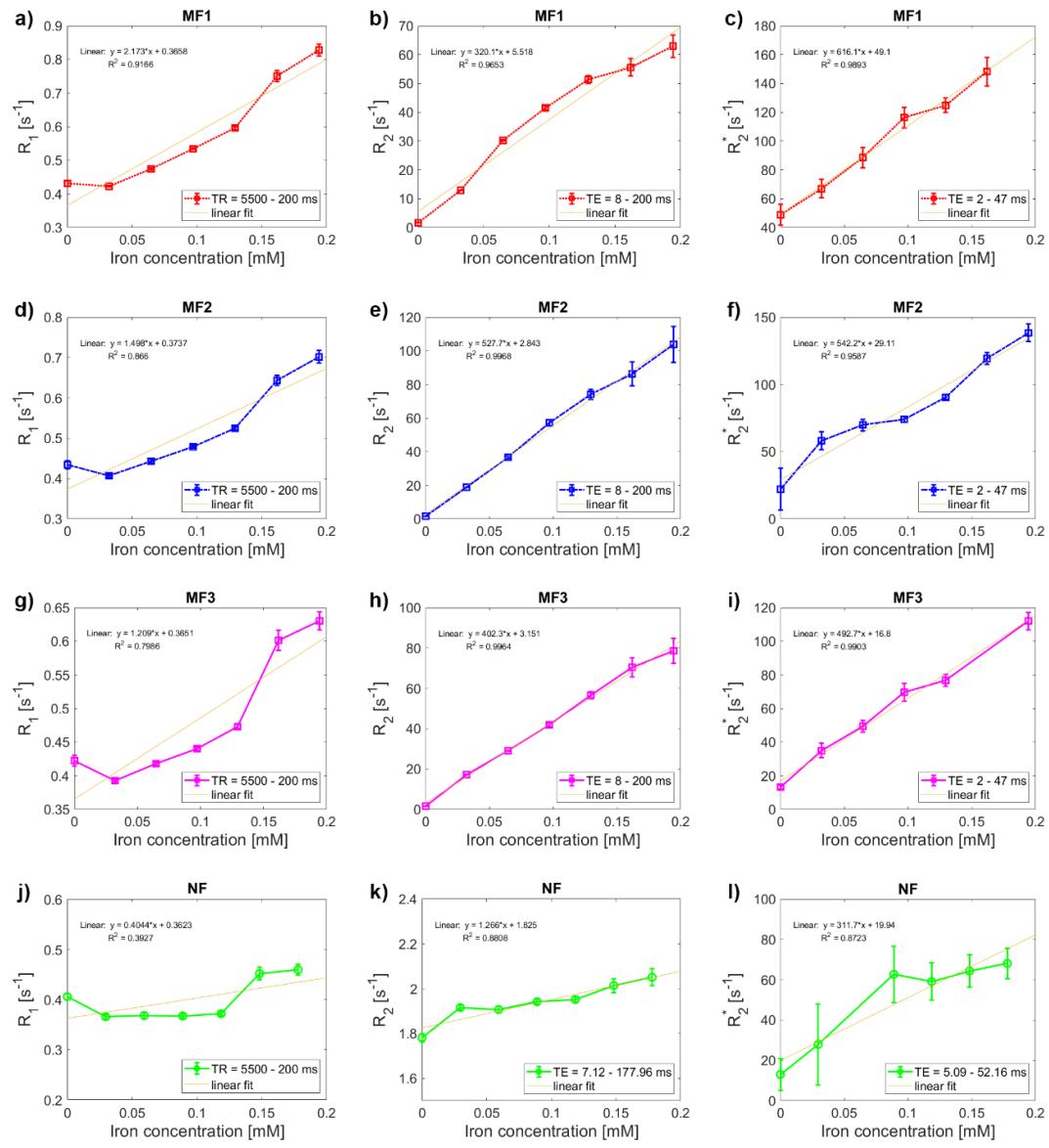


**Figure S2.**  $T_2$  - weighted image data: (a) NF - signal intensity; (b) NF - standard deviation of signal intensity; (c) NF - relaxation time  $T_2$ ; (d) NF - standard deviation of relaxation time  $T_2$ ; (e) NF - standard deviation of the fit; (f) MF1 - signal intensity; (g) MF1 - standard deviation of signal intensity; (h) MF1 - relaxation time  $T_2$ ; (i) MF1 - standard deviation of relaxation time  $T_2$ ; (j) MF1 - standard deviation of the fit; (k) MF2 - signal intensity; (l) MF2 - standard deviation of signal intensity; (m) MF2 - relaxation time  $T_2$ ; (n) MF2 - standard deviation of relaxation time  $T_2$ ; (o) MF2 - standard deviation of the fit; (p) MF3 - signal intensity; (q) MF3 - standard deviation of signal intensity; (r) MF3 - relaxation time  $T_2$ ; (s) MF3 - standard deviation of relaxation time  $T_2$ ; (t) MF3 - standard deviation of the fit.

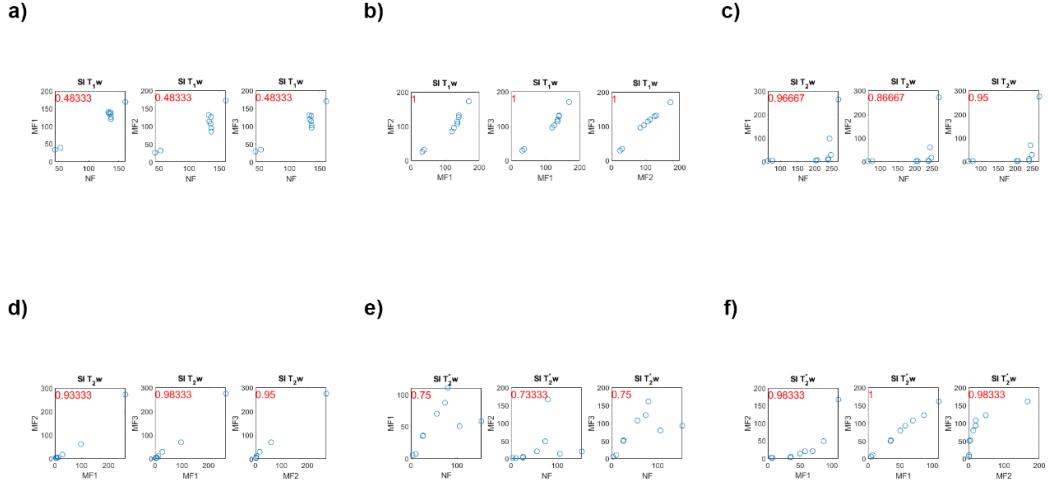


**Figure S3.**  $T_2^*$  - weighted image data: (a) NF - signal intensity; (b) NF - standard deviation of signal intensity; (c) NF - relaxation time  $T_2^*$ ; (d) NF - standard deviation of relaxation time  $T_2^*$ ; (e) NF - standard deviation of the fit; (f) MF1 - signal intensity; (g) MF1 - standard deviation of signal intensity; (h) MF1 - relaxation time  $T_2^*$ ; (i) MF1 - standard deviation of relaxation time  $T_2^*$ ; (j) MF1 - standard deviation of the fit; (k) MF2 - signal intensity; (l) MF2 - standard deviation of signal intensity; (m) MF2 - relaxation time  $T_2^*$ ; (n) MF2 - standard deviation of relaxation time  $T_2^*$ ; (o) MF2 - standard deviation of the fit; (p) MF3 - signal intensity; (q) MF3 - standard deviation of signal intensity; (r) MF3 - relaxation time  $T_2^*$ ; (s) MF3 - standard deviation of relaxation time  $T_2^*$ ; (t) MF3 - standard deviation of the fit.

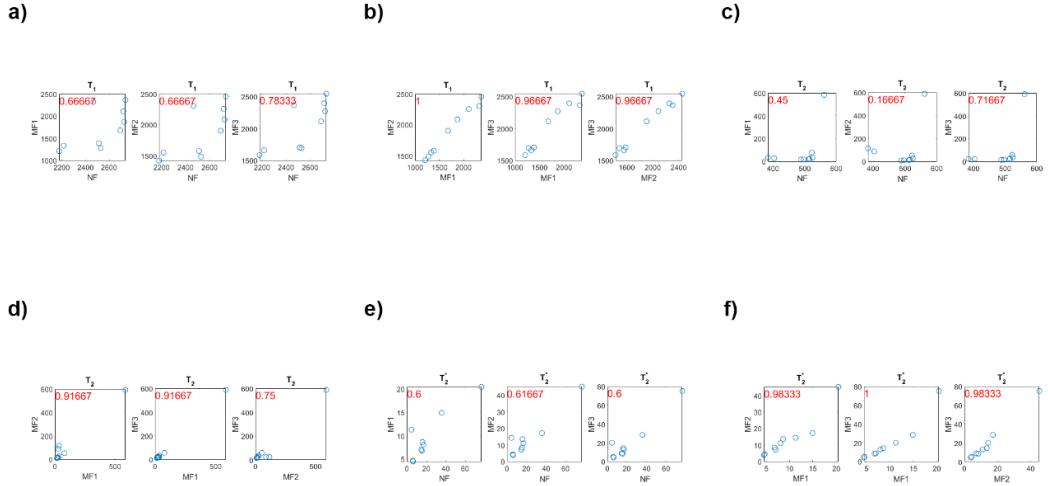




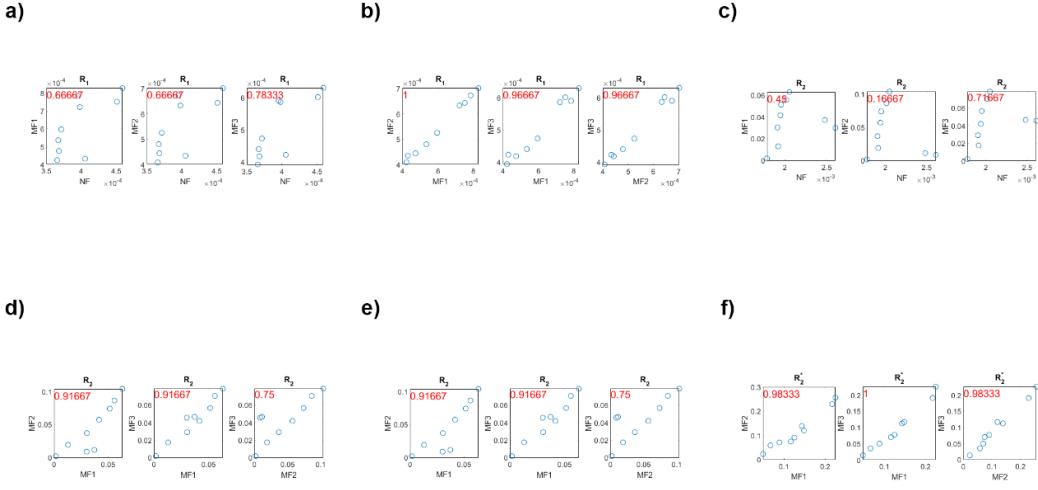
**Figure S7.** Relaxivity ( $r$ ) determination from the linear fit of relaxation rate ( $R$ ): (a) longitudinal relaxivity  $r_1$  for MF1; (b) transverse relaxivity  $r_2$  for MF1; (c) transverse relaxivity  $r_2^*$  for MF1; d) longitudinal relaxivity  $r_1$  for MF2; (e) transverse relaxivity  $r_2$  for MF2; (f) transverse relaxivity  $r_2^*$  for MF2; g) longitudinal relaxivity  $r_1$  for MF3; (h) transverse relaxivity  $r_2$  for MF3; (i) transverse relaxivity  $r_2^*$  for MF3; j) longitudinal relaxivity  $r_1$  for NF; (k) transverse relaxivity  $r_2$  for NF; (l) transverse relaxivity  $r_2^*$  for NF.



**Figure S8.** Relative contrast (RC)'s correlation coefficients: (a)  $T_1$ -weighted NF-MF; (b)  $T_1$ -weighted MF-MF; (c)  $T_2$ -weighted NF-MF; (d)  $T_2$ -weighted MF-MF; (e)  $T_2^*$ -weighted NF-MF; (f)  $T_2^*$ -weighted MF-MF.



**Figure S9.** Relaxation time ( $T$ )'s correlation coefficients: (a)  $T_1$ -weighted NF-MF; (b)  $T_1$ -weighted MF-MF; (c)  $T_2$ -weighted NF-MF; (d)  $T_2$ -weighted MF-MF; (e)  $T_2^*$ -weighted NF-MF; (f)  $T_2^*$ -weighted MF-MF.



**Figure S10.** Relaxation rate ( $R$ )'s correlation coefficients: (a)  $T_1$ -weighted NF-MF; (b)  $T_1$ -weighted MF-MF; (c)  $T_2$ -weighted NF-MF; (d)  $T_2$ -weighted MF-MF; (e)  $T_2^*$ -weighted NF-MF; (f)  $T_2^*$ -weighted MF-MF.