Effect of composition deviation on microstructure and luminescence property of Nd:YAG ceramics

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Supplementary information

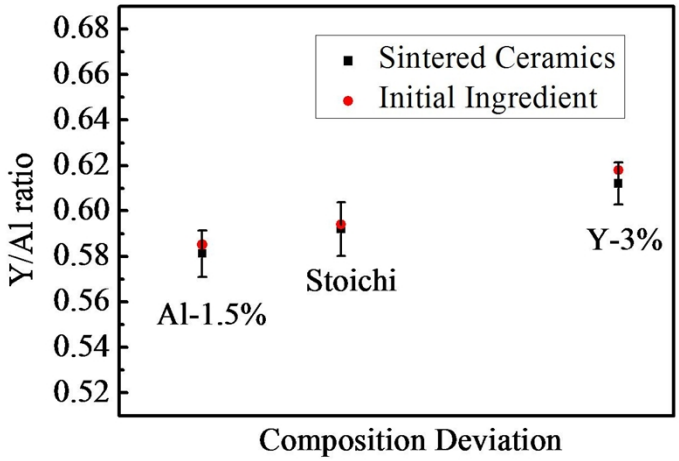

Figure S1. Y/Al molar ratio of selected sintered samples according to the characterization of inductively coupled plasma mass spectrometry

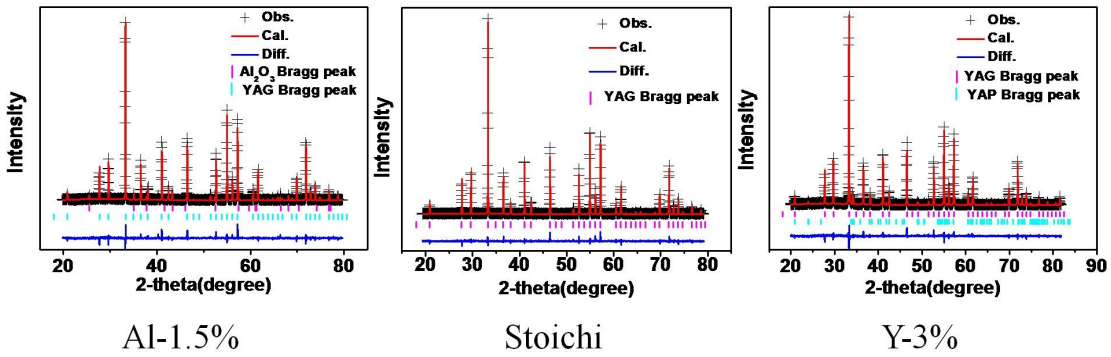

Figure S2. Rietveld refinement of the XRD patterns

Table R1. Components of selected samples calculated according to Rietveld refinement of the XRD patterns

Sample	Refined Composition (wt%)	Calculated Y/Al Ratio (molar ratio)	Y/Al Ratio of Initial Ingredient (molar ratio)	GOF	Rwp
S3	Al_2O_3 0.61% (0.09%); YAG 99.39% (0.19%)	0.592	0.585	1.40	6.2%
Stoichiometric Nd:YAG	YAG 100%	0.600	0.594	1.22	5.6%
Y3	YAG 93.3% (0.07%) YAP 6.7% (0.13%)	0.618	0.612	1.38	7.4%