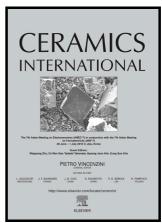
## Author's Accepted Manuscript

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### **ACCEPTED MANUSCRIPT**

## Synthesis and Dielectric Properties of Layered-Perovskite $KCa_2Na_{n\text{-}3}Nb_nO_{3n+1}$ Ceramics

Jong-Un Woo<sup>a</sup>, Sang-Hyo Kweon<sup>b</sup>, Mir Im<sup>a</sup>, Woong-Hee Lee<sup>b</sup>, Chong-Yoon Kang<sup>a,c</sup>,

Sahn Nahm<sup>a,b\*</sup>

<sup>a</sup>KU-KIST Graduate School of Converging Science and Technology, Korea University, 145 Anam-ro, Seongbuk-gu, Seoul, 02841, Republic of Korea

<sup>b</sup>Department of Materials Science and Engineering, Korea University, 145 Anam-ro, Seongbuk-gu, Seoul, 02841, Republic of Korea

<sup>c</sup>Electronic Materials Research Center, Korea Institute of Science and Technology (KIST), Seoul 02792, Republic of Korea

\*Corresponding author. postal address: Korea University, 145 Anam-ro, Seongbuk-gu, Seoul, 02841, Republic of Korea. telephone number: +82 2-3290-3279, fax number: +82 2-928-3584, e-mail address: snahm@korea.ac.kr

### Abstract

 $KCa_2NaNb_4O_{13}$  (4KCNNO)<sup>1</sup> ceramics are well-sintered at  $1325^{\circ}C$  without any secondary phase. However,  $K_2O$  evaporation occurs in  $KCa_2Na_2Nb_5O_{16}$  (5KCNNO)<sup>2</sup> ceramics calcined at temperatures higher than  $1200^{\circ}C$ , resulting in the formation of the  $KCa_2Na_3Nb_6O_{19}$  (6KCNNO)<sup>3</sup> secondary phase. Excess- $K_2O$  was added to the 5KCNNO specimen to synthesize pure 5KCNNO ceramics by compensating for the

<sup>&</sup>lt;sup>1</sup> KCa<sub>2</sub>NaNb<sub>4</sub>O<sub>13</sub> defined as 4KCNNO

<sup>&</sup>lt;sup>2</sup> KCa<sub>2</sub>Na<sub>2</sub>Nb<sub>5</sub>O<sub>16</sub> defined as 5KCNNO

<sup>&</sup>lt;sup>3</sup> KCa<sub>2</sub>Na<sub>3</sub>Nb<sub>6</sub>O<sub>19</sub> defined as 6KCNNO

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