研究室名	黒沢研究室　論文発表

題名	Development of sound absorption coefficient prediction tool of laminated ultrafine fibers
掲載雑誌	Journal of Technology and Social Science, Vol.5, No.1, pp.16-23, 2021.
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概要	This report describes research regarding a sound-absorption coefficient prediction technique for laminated ultrafine fiber. As the sound-absorption material used for interior noise reduction in automobiles, we considered fiber with a diameter of several μm. When the fiber diameter decreases, the sound-absorption coefficient typically increases., but it is necessary to laminate it whether it is fiber materials with the fiber diameter and several levels to some extent that rigidity becomes small when fiber narrows and is destroyed. We calculated an acoustic feature from fiber diameter, fiber density, thickness, materials density in extra-fine fiber materials this time. In addition, in combination with Transfer Matrix method, we developed other fiber materials and the plural technique that we could predict when we laminated it. We compare the experimental and calculation results, and verify the usefulness of this technique. The prediction of the sound absorption coefficient of the product before the sample making in this way enabled it.