JAEA-Technology 2006-049

高速炉燃料の熱物性評価
―融点と熱伝導率―

Evaluation of Thermal Physical Properties for Fast Reactor Fuels
-Melting Point and Thermal Conductivities-

正誤表

	誤	正
P.5 *l*.29	・・・これらの計算結果を Fig.2.13 に示す。いずれの計算式も・・・	・・・これらの計算結果を Fig.2.12 に示す。いずれの計算式も・・・

頁	誤	正
P.17		

Table 2.1 Samples and results in melting temperature measurements

Sample Name	Composition				Type of Cell	Inflection point of heating temperature curve	
	U (%)	Pu (%)	Am (%)	O/M		Starting point (K)	Ending point (K)
$UO_{2.00}$	100			2.000	A	3140	3145
				2.000	A	3111	3130
				2.000	A	3134	3173
12%Pu-MOX	87.9	11.8	0.3	2.000	A	3077	3117
				1.989	A	3093	3135
				1.983	A	3084	3105
				1.975	A	3085	3107
				1.974	A	3054	3069
				1.971	A	3100	3124
20%Pu-MOX	79.7	19.9	0.4	2.000	A	3052	3090
				1.982	A	3059	3089
				1.967	A	3066	3079
				1.954	A	3074	3109
				1.950	A	3079	3097
				1.942	A	3092	3118
30%Pu-MOX	69.6	29.8	0.6	2.000	A	2967	3047
				2.000	C	3030	3074
0.7%Am-40%Pu-MOX	59.6	39.7	0.7	2.000	A	2910	3024
				2.000	C	2997	3029
				2.000	C	3001	3049
				1.925	C	3073	3102
				1.949	C	30094	3063
				1.959	C	3025	3037
				1.972	C	3054	3071
1.9%Am-40%Pu-MOX	58.5	39.6	1.9	2.000	C	3000	3052
				2.000	C	3006	3043
				1.961	C	3021	3071
3.3%Am-40%Pu-MOX	58.4	38.3	3.3	2.000	C	2988	2771
				2.000	C	2998	2777
46%Pu-MOX	51.4	46.3	2.4	2.000	C	2939	2974
60%Pu-MOX	37.7	60.0	2.3	2.000	C	2940	
80%Pu-MOX	17.8	80.0	2.2	2.000	C	2852	2952
PuO_2		97.9	2.1	2.000	C	2822	2908

Table 2.1 Samples and results in melting temperature measurements

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				2.000	A	3111	3130
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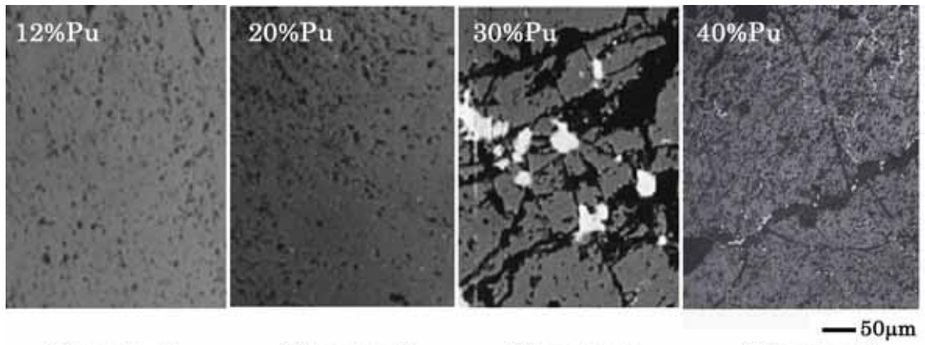
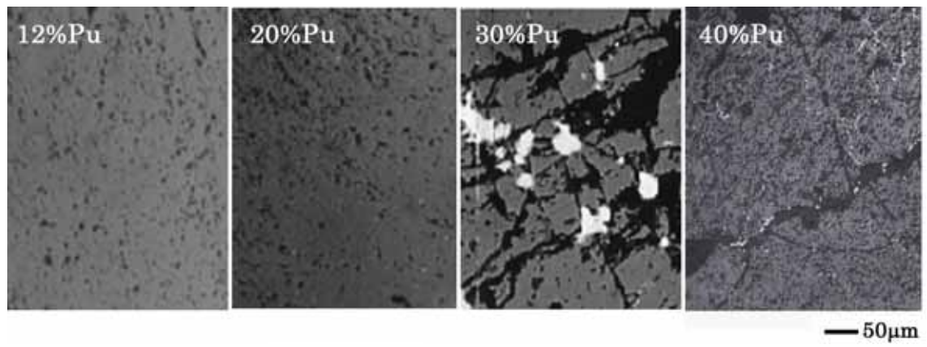
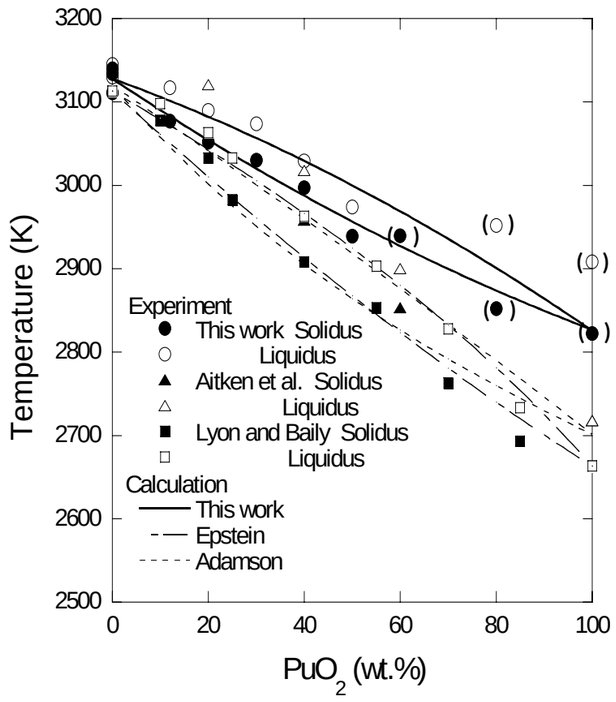
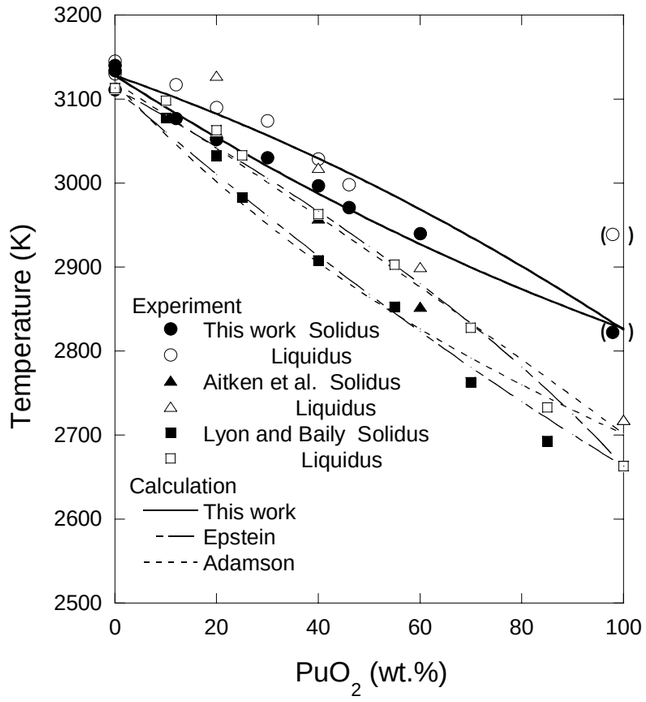
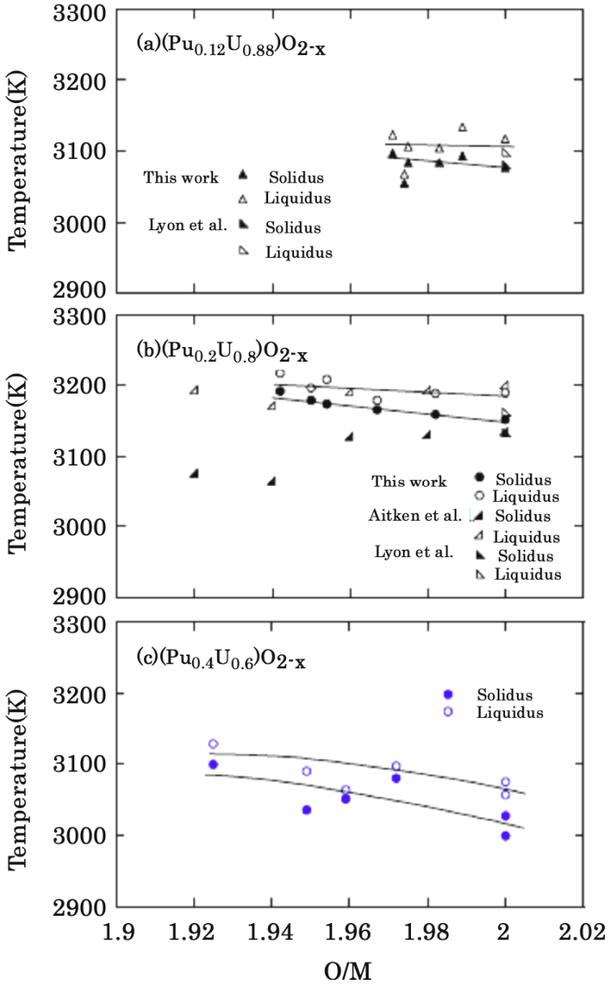
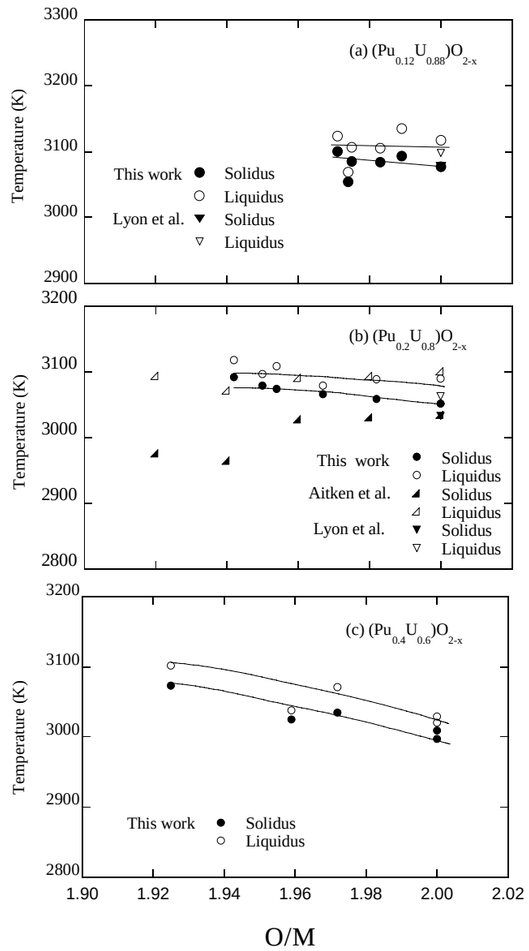
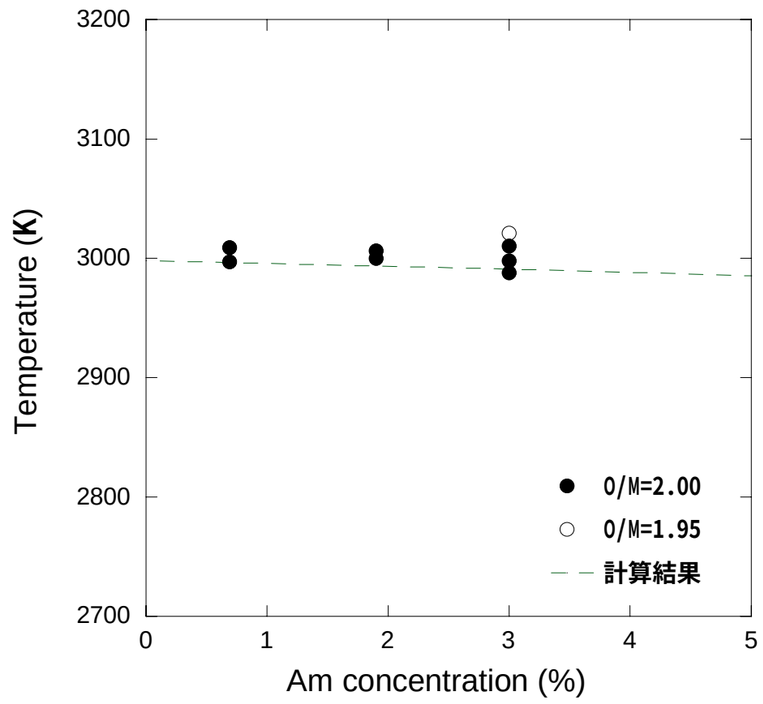
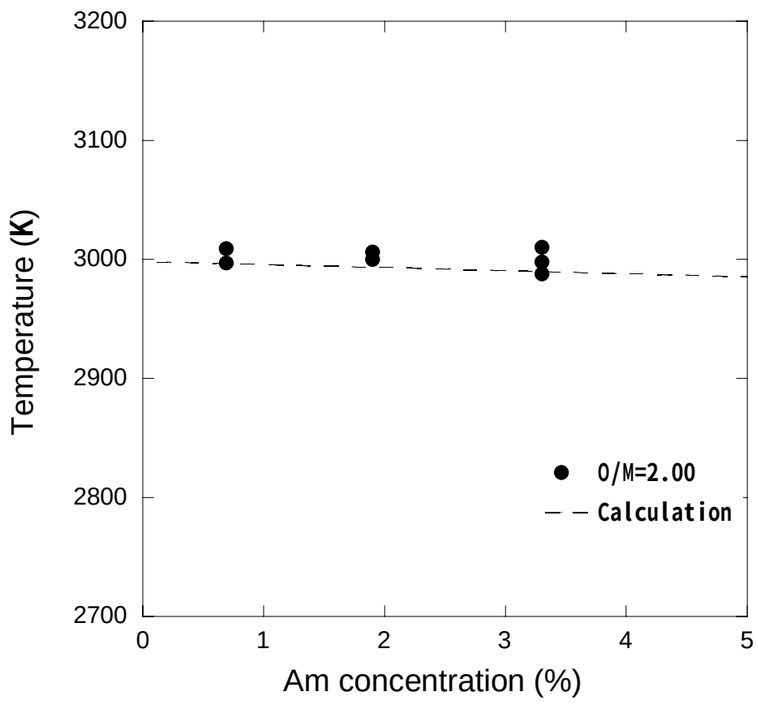
12%Pu-MOX	87.9	11.8	0.3	2.000	A	3077	3117
				1.989	A	3093	3135
				1.983	A	3084	3105
				1.975	A	3085	3107
				1.974	A	3054	3069
				1.971	A	3100	3124
20%Pu-MOX	79.7	19.9	0.4	2.000	A	3052	3090
				1.982	A	3059	3089
				1.967	A	3066	3079
				1.954	A	3074	3109
				1.950	A	3079	3097
				1.942	A	3092	3118
30%Pu-MOX	69.6	29.8	0.6	2.000	A	2967	3047
				2.000	C	3030	3074
0.7%Am-40%Pu-MOX	59.6	39.7	0.7	2.000	A	2910	3024
				2.000	C	2997	3029
				2.000	C	3009	3020
				1.972	C	3035	3071
				1.959	C	3025	3037
				1.925	C	3073	3102
1.9%Am-40%Pu-MOX	58.5	39.6	1.9	2.000	C	3000	3052
				2.000	C	3006	3043
				1.961	C	3021	3043
3.3%Am-40%Pu-MOX	58.4	38.3	3.3	2.000	C	2988	3044
				2.000	C	2998	3050
				2.000	C	3010	3039
46%Pu-MOX	51.4	46.3	2.4	2.000	C	2971	2998
60%Pu-MOX	37.7	60.0	2.3	2.000	C	2940	
PuO_2		97.9	2.1	2.000	C	2822	2939

頁	誤	正
P.19	 Fig.2.3 Microstructures of MOX after melting temperature measurement	 Fig.2.3 Microstructures of MOX after melting temperature measurement

頁	誤	正
P.23		
	Fig.2.12 Solidus and liquidus temperatures in the UO_2-PuO_2 system.	Fig.2.12 Solidus and liquidus temperatures in the UO_2-PuO_2 system.

頁	誤	正
P.24	 Fig.2.13 Effect of O/M ratio on solidus temperature of MOX	 Fig.2.13 Effect of O/M ratio on solidus temperature of MOX

頁	誤	正
P.25	 Fig.2.15 Effect of Am content on solidus temperature of MOX with 40%Pu	 Fig.2.15 Effect of Am content on solidus temperature of MOX with 40%Pu

頁	誤	正
P.28		

Table 3.1 List of samples of thermal diffusivity

No.	Pu/Metal	Am/Metal	O/M Before	O/M After	Density (%TD) Before	Density (%TD) After	Temperature	Comment
S02-MOX-04	29.4%	2.3%	2.00	2.00	93.56	93.58	873〜1773K	Porosity
S02-MOX-05	29.5%	2.2%	2.00		94.76	93.85	873〜1773K	
S02-MOX-06	29.5%	2.2%	2.00		91.99	92.04	873〜1773K	
S02-MOX-07	29.5%	2.2%	2.00		92.58	91.58	873〜1773K	
S02-MOX-08	29.5%	2.2%	2.00		95.17	95.23	873〜1773K	
S02-MOX-09	29.5%	2.2%	2.00		89.97	90.42	873〜1773K	
S02-MOX-20	29.5%	2.2%	2.00		87.16	90.14	873〜1773K	
S02-MOX-21	29.5%	2.2%	2.00		84.28	87.16	873〜1773K	
S02-MOX-01	29.8%	0.7%	2.00		91.52		873〜1773K	Am content
S02-MOX-02	29.8%	0.7%	2.00		91.52	91.48	873〜1773K	
S02-MOX-02	29.8%	0.7%	2.00		91.52		873〜1773K	
S02-MOX-03	29.5%	3.1%	2.00	2.00	92.88	92.88	873〜1773K	
S02-MOX-04	29.5%	2.2%	2.00	2.00	93.56	93.58	873〜1773K	
S02-MOX-05	29.5%	2.2%	2.00		94.76	93.85	873〜1773K	
S02-MOX-06	29.5%	2.2%	2.00		91.99	92.04	873〜1773K	
S02-MOX-07	29.5%	2.2%	2.00		92.58	91.58	873〜1773K	
S02-MOX-08	29.5%	2.2%	2.00		95.17	95.23	873〜1773K	
S02-MOX-09	29.5%	2.2%	2.00		89.97	90.42	873〜1773K	
S02-MOX-16	29.8%	0.7%	2.00		91.24	91.19	873〜1773K	
S02-MOX-17	29.5%	3.1%	2.00		91.71	91.71	873〜1773K	
S02-MOX-25	29.4%	3.1%	2.00		91.41	92.27	873〜1773K	
S02-MOX-04	29.4%	2.3%	2.00	2.00	93.56	93.58	873〜1773K	O/M ratio
S02-MOX-05	29.5%	2.2%	2.00		94.76	93.85	873〜1773K	
S02-MOX-06	29.5%	2.2%	2.00		91.99	92.04	873〜1773K	
S02-MOX-07	29.5%	2.2%	2.00		92.58	91.58	873〜1773K	
S02-MOX-08	29.5%	2.2%	2.00		95.17	95.23	873〜1773K	
S02-MOX-09	29.5%	2.2%	2.00		89.97	90.42	873〜1773K	
S02-MOX-10	29.5%	2.2%	1.98	1.98	94.23	94.25	873〜1773K	
S02-MOX-11	29.5%	2.2%	1.96	1.96	93.89	95.04	873〜1773K	
S02-MOX-12	29.5%	2.2%	1.94	1.95	94.19	95.08	873〜1773K	
S02-MOX-13	29.5%	2.2%	1.92	1.92	93.44	94.54	873〜1773K	
S02-MOX-14	29.5%	2.2%	1.90	1.93	93.08	95.32	873〜1773K	
S02-MOX-61	29.8%	0.7%	2.00	2.00	91.53	91.31	873〜1773K	
S02-MOX-62	29.8%	0.7%	1.97	1.97		94.38	873〜1773K	
S02-MOX-32	29.4%	2.3%	1.91	1.92	92.85	94.96	873〜2273K	High Temp.
S02-MOX-50	29.8%	0.7%	1.91	1.93	91.13	92.58	873〜2273K	
S02-MOX-51	29.4%	2.3%	1.92	1.93	93.37	95.19	873〜2273K	
S02-MOX-54	29.8%	0.7%	1.93	1.95	91.34	92.42	873〜2273K	
S02-MOX-56	29.5%	2.2%	1.95	1.95	93.00	93.23	873〜2273K	
S02-MOX-57	29.5%	2.2%	1.94	1.93	92.91	94.63	873〜2273K	
S01-UO2-06	0.0%	0.0%	2.00		92.83	93.03	873〜1773K	UO_2
S01-UO2-07	0.0%	0.0%	2.00		91.98		873〜2273K	

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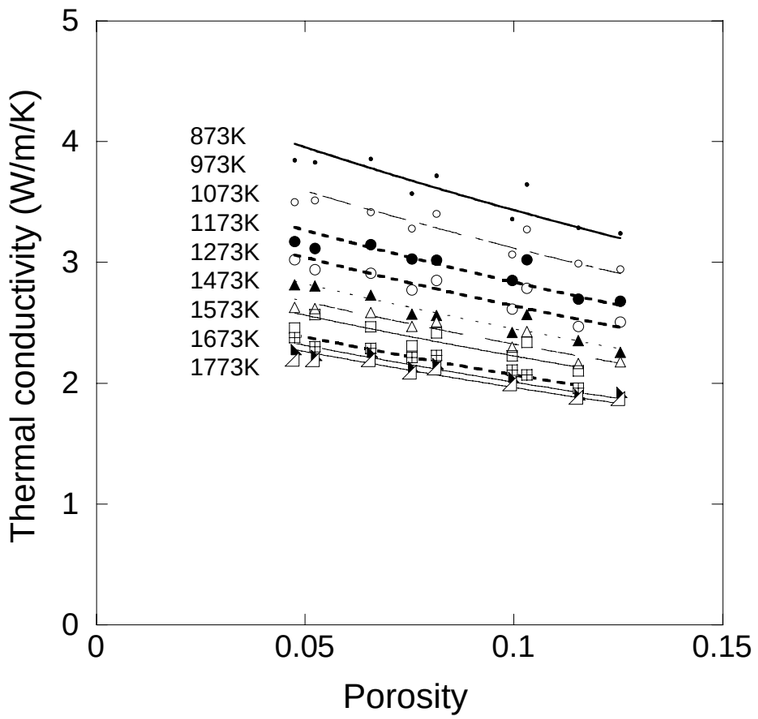
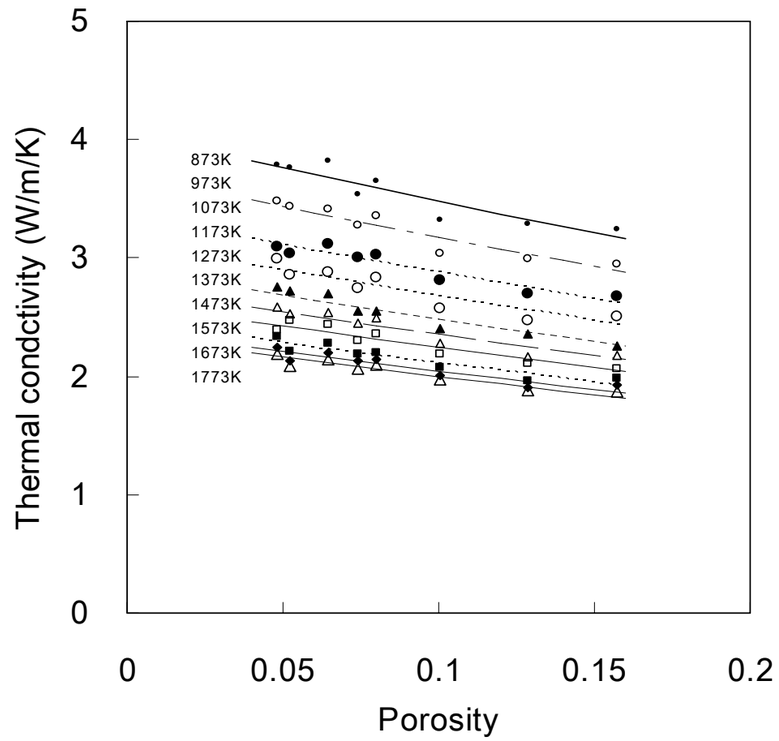
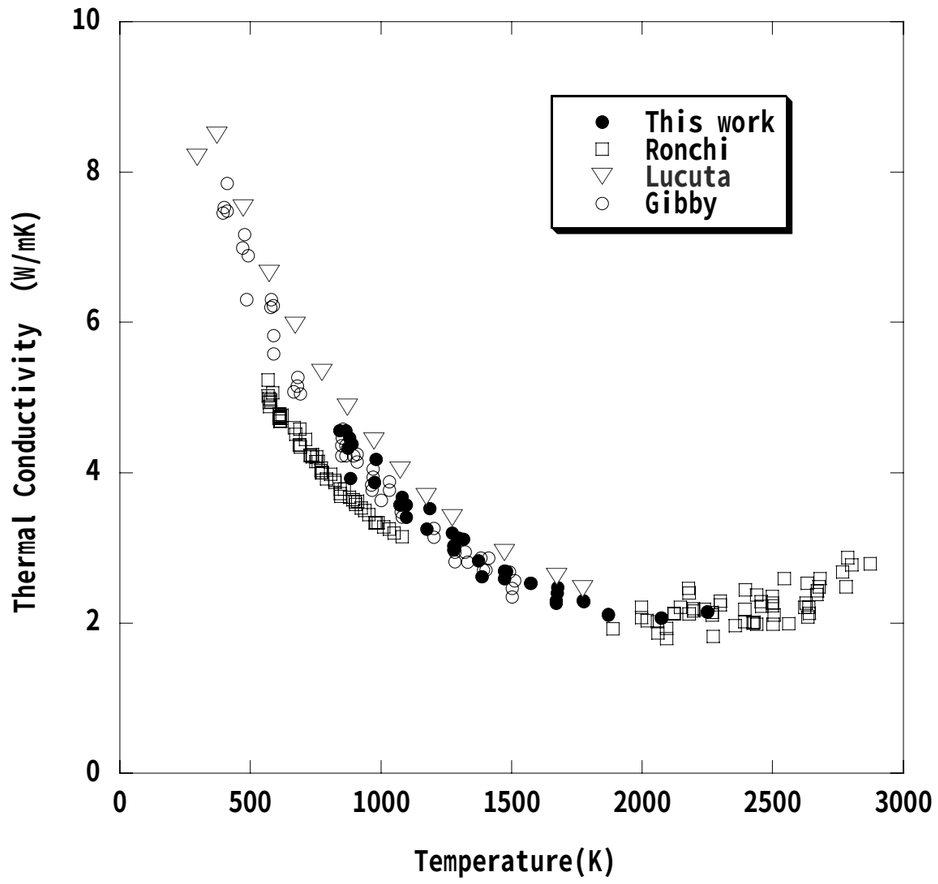
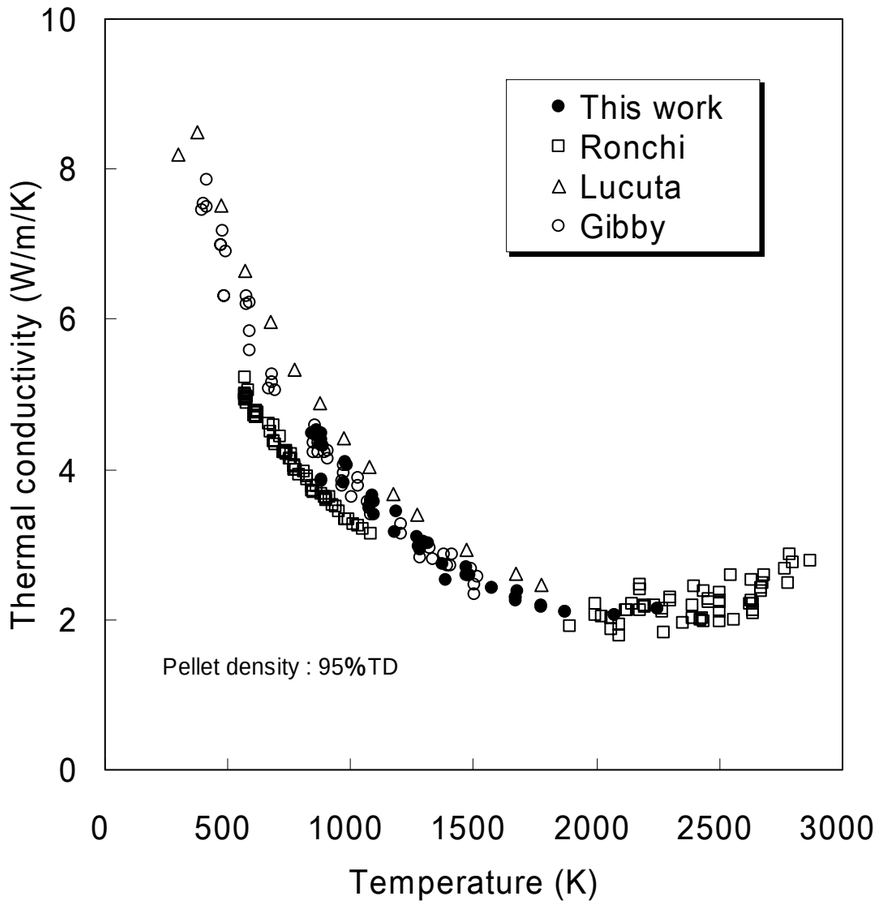
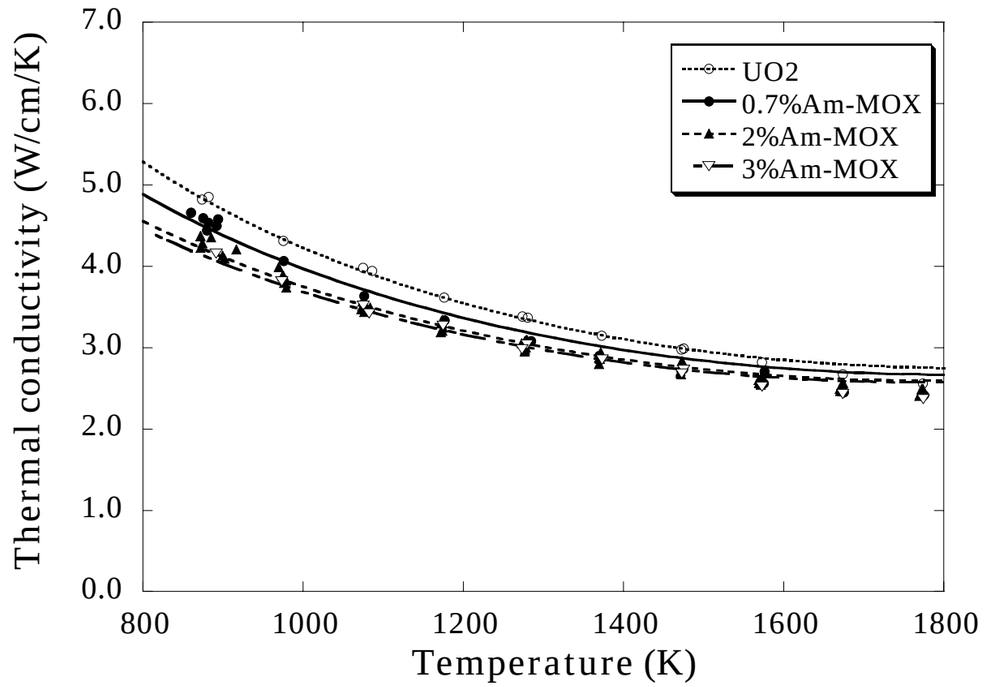
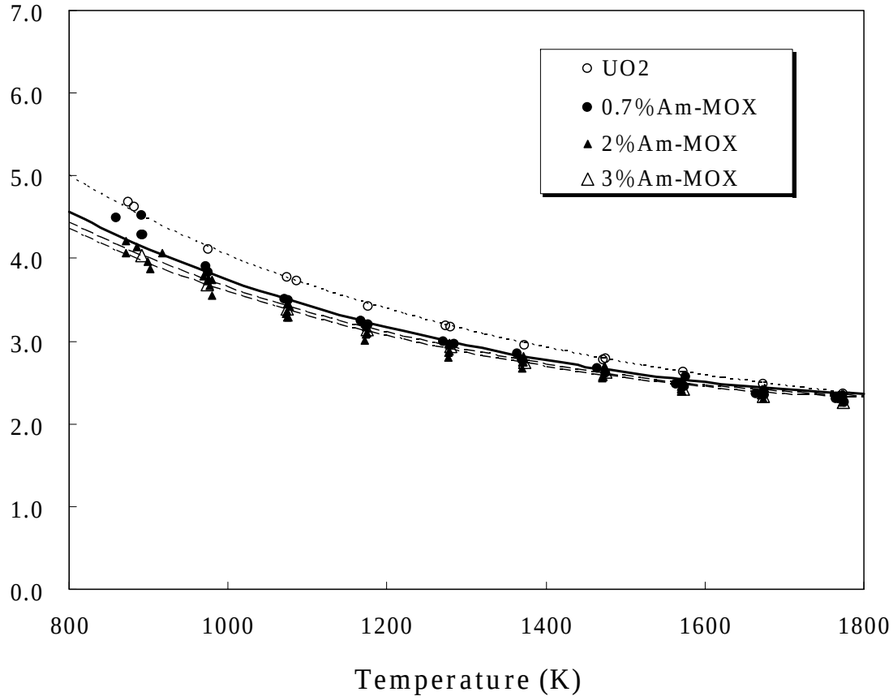
S02-MOX-06	29.5%	2.2%	2.00		91.99	92.04	873〜1773K	
S02-MOX-07	29.5%	2.2%	2.00		92.58	91.58	873〜1773K	
S02-MOX-08	29.5%	2.2%	2.00		95.17	95.23	873〜1773K	
S02-MOX-09	29.5%	2.2%	2.00		89.97	90.42	873〜1773K	
S02-MOX-20	29.5%	2.2%	2.00		87.16	87.42	873〜1773K	
S02-MOX-21	29.5%	2.2%	2.00		84.28	84.00	873〜1773K	
S02-MOX-01	29.8%	0.7%	2.00		91.52	-	873〜1773K	Am content
S02-MOX-02	29.8%	0.7%	2.00		91.52	91.48	873〜1773K	
S02-MOX-02	29.8%	0.7%	2.00		91.52	-	873〜1773K	
S02-MOX-03	29.5%	3.1%	2.00	2.00	92.88	92.88	873〜1773K	
S02-MOX-04	29.5%	2.2%	2.00	2.00	93.56	93.58	873〜1773K	
S02-MOX-05	29.5%	2.2%	2.00		94.76	93.85	873〜1773K	
S02-MOX-06	29.5%	2.2%	2.00		91.99	92.04	873〜1773K	
S02-MOX-07	29.5%	2.2%	2.00		92.58	91.58	873〜1773K	
S02-MOX-08	29.5%	2.2%	2.00		95.17	95.23	873〜1773K	
S02-MOX-09	29.5%	2.2%	2.00		89.97	90.42	873〜1773K	
S02-MOX-16	29.8%	0.7%	2.00		91.24	-	873〜1773K	
S02-MOX-04	29.4%	2.3%	2.00	2.00	93.56	93.58	873〜1773K	O/M ratio
S02-MOX-05	29.5%	2.2%	2.00		94.76	93.85	873〜1773K	
S02-MOX-06	29.5%	2.2%	2.00		91.99	92.04	873〜1773K	
S02-MOX-07	29.5%	2.2%	2.00		92.58	91.58	873〜1773K	
S02-MOX-08	29.5%	2.2%	2.00		95.17	95.23	873〜1773K	
S02-MOX-09	29.5%	2.2%	2.00		89.97	90.42	873〜1773K	
S02-MOX-10	29.5%	2.2%	1.98	1.98	94.21	94.25	873〜1773K	
S02-MOX-11	29.5%	2.2%	1.96	1.96	93.79	95.04	873〜1773K	
S02-MOX-12	29.5%	2.2%	1.94	1.95	94.16	95.08	873〜1773K	
S02-MOX-13	29.5%	2.2%	1.92	1.92	93.41	94.54	873〜1773K	
S02-MOX-14	29.5%	2.2%	1.90	1.93	93.08	95.32	873〜1773K	
S02-MOX-61	29.8%	0.7%	2.00	2.00	91.53	91.31	873〜1773K	
S02-MOX-62	29.8%	0.7%	1.97	1.97	91.26	-	873〜1773K	
S02-MOX-32	29.4%	2.3%	1.91	1.92	92.85	94.96	873〜2273K	High Temp.
S02-MOX-50	29.8%	0.7%	1.91	1.93	91.13	92.58	873〜2273K	
S02-MOX-51	29.4%	2.3%	1.92	1.93	93.37	95.19	873〜2273K	
S02-MOX-54	29.8%	0.7%	1.93	1.95	91.30	92.42	873〜2273K	
S02-MOX-56	29.5%	2.2%	1.95	1.95	93.12	93.23	873〜2273K	
S02-MOX-57	29.5%	2.2%	1.94	1.93	92.97	94.63	873〜2273K	
S01-UO2-06	0.0%	0.0%	2.00		93.00	92.83	873〜1773K	UO_2
S01-UO2-07	0.0%	0.0%	2.00		91.98	93.03	873〜2273K	

頁	誤	正
P.30	 Fig. 3.5 Effect of porosity on thermal conductivity	 Fig. 3.5 Effect of porosity on thermal conductivity

頁	誤	正
P.30	 Fig. 3.6 Thermal Conductivity of $UO_{2.00}$	 Fig. 3.6 Thermal conductivity of $UO_{2.00}$

頁	誤	正
P.31	 Fig. 3.7 Effect of Am content on thermal conductivity	 Fig. 3.7 Effect of Am content on thermal conductivity

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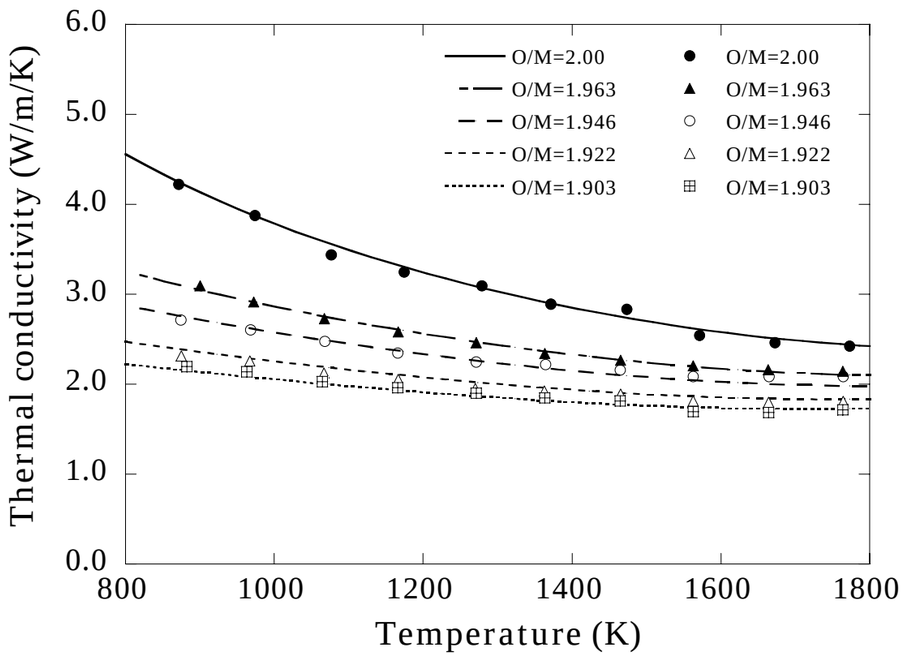
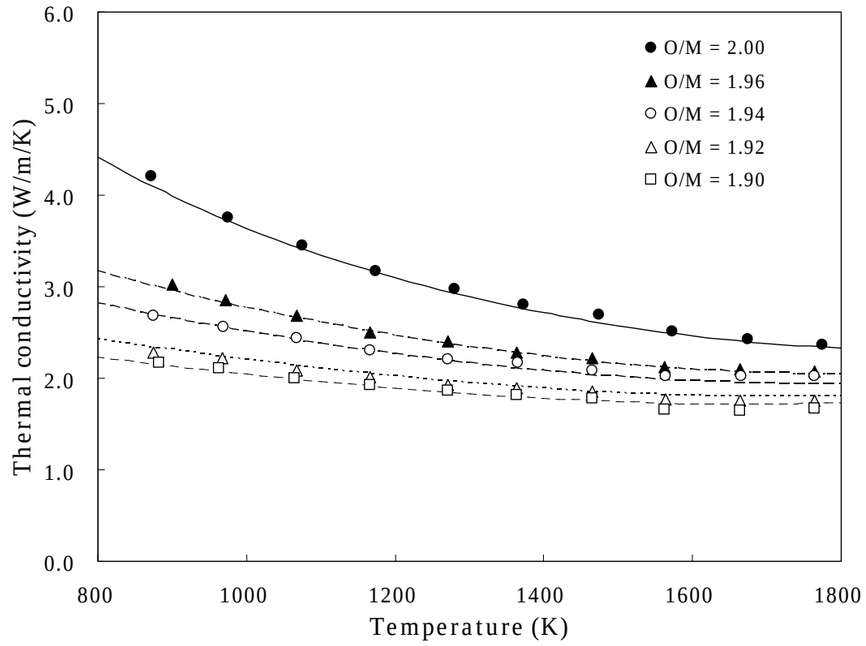
P.31	 Fig. 3.8 Effect of O/M on thermal conductivity	 Fig. 3.8 Effect of O/M on thermal conductivity