TABLE I
THE HV RESULTS (MEDIAN VALUES) OF NTSPEA, RMNSGAII, RTEA, TWO_ARCH2 AND TSEA ON THE DTLZ PROBLEMS. THE BEST RESULT IN EACH PROBLEM IS MARKED. THE SYMBOLS " + " , " − " AND "≈" INDICATE THAT THE COMPARED ALGORITHM IS STATISTICALLY SIGNIFICANTLY SUPERIOR TO, INFERIOR TO, AND ALMOST EQUIVALENT TO TSEA, RESPECTIVELY (THE SIGNIFICANCE LEVEL IS 0.05).

Problems	σ	NTSPEA	RMNSGAII	RTEA	Two_Arch2	TSEA
DTLZ1	0.1	9.45e-01 (2.64e-02) −	9.18e-01 (5.24e-02) −	9.71e-01 (2.39e-02) −	9.84e-01 (1.79e-02) −	9.92e-01 (3.41e-03)
	0.2	9.24e-01 (5.33e-02) −	8.79e-01 (8.55e-02) −	9.32e-01 (3.27e-02) −	9.69e-01 (2.09e-02) −	9.90e-01 (4.88e-03)
	0.5	9.54e-01 (2.21e-02) −	9.51e-01 (4.23e-02) −	9.77e-01 (1.52e-02) −	9.76e-01 (1.27e-02) −	9.91e-01 (4.09e-03)
DTLZ2	0.1	5.74e-01 (1.18e-02) −	5.11e-01 (3.90e-02) −	5.80e-01 (2.39e-02) −	4.78e-01 (5.48e-02) −	6.22e-01 (7.23e-03)
	0.2	7.28e-01 (3.90e-02) −	7.07e-01 (3.31e-02) −	7.19e-01 (2.42e-02) −	6.55e-01 (3.50e-02) −	7.89e-01 (6.86e-03)
	0.5	7.92e-01 (2.06e-02) −	7.39e-01 (3.34e-02) −	7.06e-01 (4.50e-02) −	6.92e-01 (4.80e-02) −	8.49e-01 (2.19e-02)
DTLZ3	0.1	8.25e-01 (1.10e-01) −	8.03e-01 (1.02e-01) −	9.18e-01 (4.30e-02) −	9.57e-01 (2.60e-02) −	9.87e-01 (1.05e-02)
	0.2	9.19e-01 (3.91e-02) −	8.85e-01 (5.98e-02) −	9.68e-01 (2.16e-02) −	9.71e-01 (1.67e-02) −	9.92e-01 (6.28e-03)
	0.5	8.89e-01 (7.89e-02) −	8.89e-01 (5.87e-02) −	9.41e-01 (2.97e-02) −	9.58e-01 (2.07e-02) −	9.82e-01 (1.02e-02)
DTLZ4	0.1	8.39e-01 (2.91e-02) +	7.98e-01 (5.92e-02) −	8.39e-01 (5.77e-02) −	7.92e-01 (4.76e-02) −	8.52e-01 (5.42e-02)
	0.2	8.07e-01 (2.96e-02) +	7.59e-01 (6.25e-02) ≈	8.09e-01 (4.54e-02) ≈	7.39e-01 (4.52e-02) −	7.42e-01 (4.46e-02)
	0.5	8.26e-01 (2.47e-02) +	7.41e-01 (6.32e-02) −	7.33e-01 (5.64e-02) −	7.12e-01 (4.62e-02) −	7.64e-01 (4.24e-02)
DTLZ5	0.1	5.57e-01 (1.42e-02) −	4.71e-01 (3.64e-02) −	5.59e-01 (3.34e-02) −	4.53e-01 (3.66e-02) −	6.00e-01 (7.78e-03)
	0.2	5.63e-01 (6.71e-02) −	5.41e-01 (5.80e-02) −	5.78e-01 (5.66e-02) −	4.58e-01 (6.27e-02) −	6.68e-01 (1.52e-02)
	0.5	7.79e-01 (1.92e-02) −	7.39e-01 (5.40e-02) −	6.87e-01 (5.52e-02) −	6.75e-01 (4.31e-02) −	8.37e-01 (1.52e-02)
DTLZ6	0.1	9.82e-01 (2.30e-02) −	8.89e-01 (8.07e-02) −	9.55e-01 (5.59e-02) −	9.68e-01 (5.48e-02) −	9.92e-01 (1.10e-02)
	0.2	9.48e-01 (3.55e-02) −	7.31e-01 (1.36e-01) −	8.69e-01 (7.57e-02) −	8.75e-01 (6.80e-02) −	9.92e-01 (1.24e-02)
	0.5	9.39e-01 (3.25e-02) −	7.00e-01 (1.21e-01) −	8.51e-01 (4.75e-02) −	8.64e-01 (6.49e-02) −	9.87e-01 (1.35e-02)
DTLZ7	0.1	5.93e-01 (6.00e-03) −	5.21e-01 (3.54e-02) −	5.73e-01 (1.71e-02) −	5.53e-01 (2.26e-02) −	6.10e-01 (2.51e-02)
	0.2	6.58e-01 (3.66e-02) −	4.91e-01 (7.92e-02) −	6.06e-01 (3.57e-02) −	5.83e-01 (5.64e-02) −	7.18e-01 (2.93e-02)
	0.5	6.16e-01 (5.18e-02) −	4.39e-01 (7.46e-02) −	4.36e-01 (5.55e-02) −	5.28e-01 (7.83e-02) −	7.08e-01 (3.83e-02)
Average Rank		2.67	4.33	3.1	3.71	1.19
$+/\approx/-$		3/0/18	0/1/20	0/1/20	0/0/21	