

## Author Index

Aalamialegha, M.E.	4587	Baquaera, M.	2223	Buchheit, T.E.	4081	Christensen, S.	445
Abbas, N.M.	3797	Barbieri, L.	2627	Buchkremer, H.P.	507	Chrysanthou, A.	2073
Abbas, T.	2037	Barmak, K.	3249	Bucio, L.	4777	Chryss, A.	3871
Abbaschian, R.	3861	Barralet, J.E.	3979	Buckley, R.A.	331	Chung, C.Y.	2499
Abdelkader, A.F.	1	Barron, A.R.	927, 2673	Buckman, J.	2161	Chung, D.-W.	1333
Abe, A.	1039	Barteri, M.	3257, 4725	Budruegac, P.	1995	Chung, D.D.L.	2785
Aboukaïs, A.	1967	Basque, M.	3137	Bunsell, A.R.	2117	Cilense, M.	3325
Abreu, H.F.G.	1007	Basu, A.N.	93	Burnell-Gray, J.S.	19	Cohen, P.	2945
Acchar, W.	4925	Bataille, A.	3245	Butcher, E.C.	4541	Colbeau-Justin, C.	2429
Adhikari, R.	4713	Batchu, S.	307	Butler, E.G.	767	Coles, G.	4075
Aduda, B.O.	2293	Baudin, I.	823	Butterwick, A.	4145	Colomban, P.	2117
Agarwal, A.	485	Baxter, W.J.	2851	Bysakh, S.	1377	Colón, G.	2219
Ahl, J.	2055	Beaudoin, J.J.	2247, 4957	Byun, I.	4603	Congjin, J.	4293
Ahmad, A.	4325	Becker, H.	4193	Byun, J.D.	621	Coon, D.N.	3121
Ahmed, M.A.	1087, 3677	Bedolla, E.	2771	Cabibbo, M.	81	Cooper, C.A.	795
Ahn, J.P.	13	Beitollahi, A.	1219	Cadek, J.	3535	Cooper, R.F.	2747
Ahn, S.T.	3611	Belio, I.A.	4777	Cai, B.	1895	Cornelissen, M.	1875
Aït-Mokhtar, A.	2845, 3521	Bell, J.	1721	Cai, W.	3051	Corona, S.A.M.	3765
Akamatsu, K.	2011	Bellosi, A.	2727	Caley, W.F.	1755	Corro-Hernández, G.	1339
Akay, G.	3169	Bencan, A.	3769	Camacho, H.	3269	Crampon, J.	3245
Akbar, S.	4239	Benmedakhne, S.	1479	Campion, C.	3979	Crosby, A.J.	4439
Akbar, S.A.	4237, 4271, 4609,	Bennison, S.J.	3965	Campo, M.A.	2265	Cross, M.	2893
	4611, 4639	Benzine, K.	1139	Campos, C.E.M.	1175	Cui, P.	1895
Akiyama, K.	2723	Berger, M.-H.	2913	Candela, N.	521	Cui, P.-L.	3669
Al-Badri, A.	2483	Berglund, L.	1321	Cankurtaran, M.	1107	Cunningham, J.C.	3629
Al-Ostaz, A.	2851	Bernéde, J.C.	2439	Cantonwine, P.E.	461, 471	Cusack, P.A.	2893
Alizadeh, P.	1529	Berthod, P.	2063	Cao, C.	3597	D'errico, F.	3567
Allahverdiev, Z.A.	917	Bertling, J.	1605	Cao, C.-B.	141, 2559	Da Costa, C.E.	521
Allainmat, G.	4027	Bertoncello, P.	4951	Cao, C.-N.	705	Dai, S.	1243
Allameh, S.	4, 4129	Beyerlein, I.J.	877	Cao, G.	307, 1819	Dalard, F.	1139, 1307, 4041
Allameh, S.M.	4115, 4145	Beyreuther, R.	2149	Cao, L.	3973	Dalui, S.K.	1063
Allard, L.F.	3831	Bhadeshia, H.K.D.H.	1195	Carr, C.M.	2171, 2179, 2945,	Daniel, I.M.	3029
Alley, D.W.	1353	Bhalerao, K.	4157		3307	Das, K.	3995
Allibert, C.H.	2581	Bhalerao, K.D.	4163		3515	Das, R.R.	1171
Almeida, A.F.L.	3713	Bhardwaj, P.	937		4047	Das, S.	1565, 3995
Almodóvar, N.S.	3085	Bhattacharya, P.	1171		699	Das, S.K.	2667
Alpas, A.T.	4849	Bhattacharya, S.N.	3871		3097	Das-Gupta, D.K.	1465
Altroe, M.V.P.	4805	Bhattacharyya, D.	2597		3765	Datta, P.K.	19, 3721
Altstädt, V.	2135	Bhavsar, S.R.	1931		843, 853	Davaajav, Y.	2347
Alvarez, Ma.A.	2219	Bhowmick, A.K.	2793, 3199		1021	Davies, D.	2743
Aly, E.H.	3449	Bidulská, J.	81		2727	Davies, H.A.	331
Amdouni, N.	4573	Bigerelle, M.	2525		3709	Davies, R.J.	2105
Amirat, A.	575	Biju, V.	4055		2581	Dávila-Jiménez, M.M.	1339
An, J.	1975	Bishop, D.P.	1755		155	Davis, R.D.	4451
Anandhan, S.	2793	Bland, C.R.	57		833	Davis, W.C.	941
Andreeva, D.	1995	Blassing, G.V.	1403		1631	Davy, C.	1231
Andrievski, R.A.	1367	Bismarck, A.	4965		2689	De Assis Andrade, F.	1465
Ang, C.	113, 1057	Bland, C.R.	57		2869	De Bouvier, O.	4041
Anilkumar, G.M.	1391	Blessing, G.V.	1403		3159	De Gaetano, F.	3097
Antolini, E.	2995	Bloek, A.	173		3159	De Klerk-Engels, B.	3697
Aono, M.	3069	Boccaccini, A.R.	1597		3159	De La Mata, M.G.	2809
Aarakaki, D.	1347	Boeri, R.	2971		2613	De Lima-Neto, P.	1007, 3527
Araújo, E.M.	3515	Bogachev, G.	3747		1523	De Macêdo, M.C.S.	3143
Arce-Estrada, E.M.	275	Bogomolova, L.D.	1967		575	De Maeyer, E.A.P.	1875
Arnold, F.E.	4013	Bonet, M.	4041		1565	De Oliveira, R.S.	3713
Aroca, M.	4757	Bolina, R.	2271		155	De With, G.	4003
Ashalaththa, M.B.	1431	Booth, K.R.	3831		2667	De Yao, K.	2283
Astley, O.M.	165	Borrajo, J.	2809		1033	Del Arco, M.	2815
Atchley, E.	3	Borrego, A.	2761		2209	Del Valle, M.A.	2439, 2455
Ateia, E.	1087	Bose, A.	1631		541	Delplancke-Ogletree,	
Atiq, S.	1597	Bostrom, T.	1721		4353	M.-P.	3117
Atkins, A.G.	245	Böttcher, R.	3211		4353	Demory, W.	4451
Atrens, A.	127, 323, 995, 3813	Bounoughaz, M.	1139		541	Denayer, J.F.	3131
Audier, M.	3945	Bourbigot, S.	2187, 4451		541	Depaoli, D.W.	979
Auh, K.-H.	1295	Bourithis, L.	2883		541	Derbyshire, H.M.	57
Avid, B.	2347	Bourlinos, A.B.	959		2547	Dermaut, L.R.	1875
Avila, M.	489	Boutorabi, S.M.A.	1901		3933	Dernovsek, O.	4925
Baaijens, F.P.T.	4393	Bradley, K.	4805		3495	Desai, C.F.	1931
Badini, C.	3567	Breedveld, V.	4461		693	Desai, K.	2357
Baer, E.	633	Brei, D.E.	2571		693	Devereux, O.F.	1353
Baffier, N.	843, 853	Brekelmans, W.A.M.	4393		2373	Devaux, E.	2187
Bagdahn, J.	4075, 4087	Brett, M.J.	4817		6	Dey, S.K.	93
Bai, X.	3883	Breuil, P.	4333		3729	Deyereux, O.F.	1353
Bai, Z.	4013	Breval, E.	1347		2619	Devaux, E.	2187
Baillie, C.A.	3903	Brice, C.A.	1517		909	Dey, S.K.	93
Baker, T.J.	4175	Broadhead, J.	57		1485, 1849	Dhayagude, D.	6
Bakre, P.P.	29	Brocklehurst, K.G.	57		3663	Díaz, F.R.	2439, 2455
Balasubramanian, G.	823	Bronson, A.	489		3663	Dibb, R.G.P.	3765
Ball, R.J.	1413, 3013	Broughton, J.N.	4817		1853	Dietz, T.	2755
Ballarini, R.	4, 4169	Brovelli, F.	2439		1853	Digeos, A.A.	1597
Balraj, A.	1431	Brown, A.	3307		1333	Diliberto, S.	2063
Baltá-Calleja, F.J.	4713	Brown, S.	4145		1013	Dimitrijevic, R.Z.	1983
Bandyopadhyay, P.P.	1565	Brungs, M.	1885		4221	Ding, F.	3455
Bandyopadhyay, S.	2793	Brüning, H.	2149		223	Dionysiou, D.D.	823
Bandyopadhyay, T.K.	1565	Bucchetti, T.	4129		2563	Djurfors, B.	4817
Bao, N.	3641	Buchheit, T.	4137		589		

Dodd, S.P.	1107	Focke, W.W.	1249	Hacke, A.-M.	3307	Ichiura, H.	1611
Doi, A.	3233	Fonseca, M.P.C.	3527	Hafez, K.M.	3491	Idesaki, A.	2591
Dominguez, C.	4757	Font, R.	3085	Hage, E.	3515	Iio, S.	1447
Donald, A.M.	165	Forsyth, M.	3293	Hall, I.W.	4745	Ikeda, S.	3791
Dong, C.	1377	Fouad, S.S.	527	Halloran, J.W.	2571	Ikeda, Y.	1447
Dong, J.	979	Frantzis, P.	1397	Hamerter, K.	1909	Ilieva, L.	1995
Dorantes-Rosales, H.J.	275, 2925	Fraser, H.L.	1517	Hamilton, T.	3	Imaiizumi, K.	2979
Dortmans, L.	4003	Fraser, J.W.	343	Han, B.Q.	3319	Imielinska, K.	533
Dos Santos, P.A.	3765	Friedmann, T.A.	4081	Han, E.H.	127	Ince, N.	2171
Doty, H.W.	1255, 4507, 4523	Froes, F.H.	613	Han, H.-M.	3669	Inoue, H.	657
Dougherty, J.P.	1347	Frye, B.A.	2547	Han, J.H.	13	Inui, T.	4535
Drazic, G.	3769	Fu, H.	407	Hansson, C.M.	4765	Io, M.	3431
Drofenik, M.	3063	Fu, L.	1147, 4857	Harada, H.	3955, 4883	lost, A.	2525
Dryzek, E.	3755	Fu, M.	2423	Harmon, L.	4479	Isacsson, U.	2835, 4941
Du, J.H.	689	Fu, Q.	141, 2901	Harris, J.J.	3979	Ishida, T.	1703
Du, S.G.	1147	Fu, Y.-P.	3081	Harris, S.J.	4587	Ishizaka, T.	1239
Du, Y.	4811	Fu, Y.Q.	421	Hartmann, E.	3211	Islam, M.-U.	2037
Du, Z.	4863	Fuentes, L.	3269	Harvey, J.A.F.	1021	Islam, S.R.	93
Duan, H.	4065	Fuentes, M.E.	3269	Hashemi, S.	3055	Ito, H.	1447
Duan, X.	1747	Fujii, T.	1689	Hatta, H.	3431	Ito, S.	1703
Duh, J.-G.	713, 3619	Fukada, Y.	2447	Haward, R.N.	2155	Itoh, H.	1695
Duh, J.G.	693	Gabal, M.A.	3677	Hayes, J.E.	4293	Itoh, M.	2591
Dumargue, P.	2845, 3521	Gabriel, J.-C..	4805	He, J.L.	1471	Ivey, D.G.	4817
Duszak, B.	223	Gaillet, L.	1479	He, P.	2299	Iwasaki, T.	739
Dutta, P.	155, 4239	Galante, M.J.	2809	He, W.D.	1097	Iyer, R.V.	133
Dutta, P.K.	4271	Gamboa, E.	3813	He, Y.	377, 3973	Jackson, V.A.	1967
Dwivedi, S.	485	Gan, B.K.	3223	Heaney, D.F.	4869, 4875	Jackson, K.	4075
Dybkov, V.I.	3249	Gao, L.	1377	Heide, K.	3747	Jadaan, O.M.	4087
Dzhafarov, T.D.	917	Gao, Y.	2209, 2499	Heikal, M.	4499	Jakubus, P.	3137
Easteal, A.J.	2597	Garcia, J.	489	Hench, L.L.	3783, 4697	James, B.	1107
Echigoya, J.	3037	Garcia, P.P.N.S.	3765	Heredia, A.	4777	Janek, R.	4081
Efimenko, K.	4471	Garcia, R.	2771	Hernández-Santiago, F.	275	Jang, J.H.	217
Efthimiadis, J.	3293	Gargin, V.G.	789	Herrmann, J.M.	3945	Jaroschuk, A.	2167
Egitto, F.D.	4831	Gassan, J.	2755	Heuer, A.H.	4169	Jasiuk, I.	2851
Ekblad, J.	4941	Gaudé-Fugarolas, D.	1195	Hibbert, S.	2179	Jayalakshmi, S.	1383
El-Dek, S.I.	1087	Gavrilov, K.L.	3965	Higashi, K.	3925	Jazayeri-G. A.	331
El-Korashy, S.A.	1709	Geng, D.Y.	689	Hill, R.	3891	Jensen, H.	3315
El-Shazely, A.A.	3449	Genzer, J.	4471	Hill, R.G.	2311	Jeong, S.H.	2143, 2199
El-Wahabb, E.A.	527	George, D.	107	Hiltner, A.	633	Jeronimidis, G.	245
Elbersen, H.W.	3697	Georget, D.M.R.	1933	Hiraga, H.	2447	Jhon, M.S.	1485, 1849
Elbir, S.	4745	German, R.M.	2271, 4869, 4875	Hirano, T.	4203	Ji, S.	1559
Eliades, P.	3871	Gersten, B.	1819	Hirota, K.	3431	Jian-Bin, Z.	3455
Elizalde-González, M.P.	1339	Gey, N.	1289	Hirsch, D.	3211	Jiang, G.	3559
Elliott, R.	795	Geyer, R.	2547	Hixson, A.D.	2265	Jiang, S.P.	3775
Emamighomi, M.	4587	Ghali, E.	1139	Hng, H.H.	2367	Jie, W.	3303
Endo, M.	2987	Ghanem, F.	3285	Hojo, M.	1737	Jie, W.Q.	1147
Epassaka, D.B.	3239	Ghosh, S.	1565	Holc, J.	3769	Jin, H.M.	1135, 1727
Ercelebi, G.	1507	Giannis, S.P.	533	Holt, C.T.	1073	Jin, J.-Y.	1039
Erdem, E.	3211	Gibeling, J.C.	3501	Holt, L.A.	4541	Jing, Z.	1057, 4863
Erlich, D.C.	3603	Gillespie, J.W., Jr.	565	Hong, H.U.	1535	Jing-Yi, W.	3455
Es, M.V.	2135	Gilman, J.W.	4451	Hong, S.I.	3437	Jiu, J.-T.	141
Eskin, D.G.	279	Gläsel, H.-J.	3211	Hong, Y.R.	4293	Johnson, R.	2953
Esparza, J.A.	941	Glasgow, D.G.	3485	Hornsby, P.R.	2893	Jones, C.	2179, 2945
Espinosa, H.D.	4125	Glass, S.J.	4081	Horrocks, R.	2195	Jones, J.R.	3783
Esquivel, E.V.	2223	Godfrey, T.A.	4365	Hoshina, T.	2655	Jones, R.E.	3797
Evangelista, E.	81	Góes, J.C.	3713	Hosoe, M.	515	Julien, C.M.	4573
Evans, K.L.M.	581	Gokhale, A.A.	1869	Hou, B.	1793	Jung, D.D.B.	2597
Evans, P.	3877	Gómez-Cortés, A.	4777	Howell, D.	3307,	Jung, G.-B.	2461
Evans, R.	3013	Gong, J.	2541	Hrovat, M.	2259, 3769	Jung, S.-B.	1281
Fabbri, G.	2727	González-Doncel, G.	2761	Hsieh, J.-C.	3933	Jung, S.B.	4183
Fadel, M.	527	Gopal, M.	3	Hsieh, Y.-L.	2125	Kadoguchi, T.	2537
Fahlén, J.	119	Gosselink, R.J.A.	3697	Hsu, C.-S.	1543, 3495	Kagawa, Y.	3103
Fahrenholtz, W.G.	3073	Gottstein, G.	1895	Hsueh, C.H.	1809	Kahn, H.	4169
Fan, P.	885	Gouma, P.I.	4347	Hu, D.	35	Kailas, S.V.	1383
Fan, Z.	2019, 3877	Gourbeyre, Y.	1307	Hu, J.	261	Kakemoto, H.	2655
Fang, B.Y.	127	Govindaraj, G.	107	Hu, J.-M.	705	Kakinuma, K.	7
Fang, X.	3877	Graham, M.J.	343	Hu, K.	4709	Kale, G.M.	4293
Fanjul, F.	427	Granda, M.	427	Hu, M.Z.-C.	3831	Kalesh, R.R.	4407
Farah, H.	727, 1885	Grantscharova, E.	3747	Hu, M.Z.C.	979	Kamada, Y.	3037
Fares-Karam, A.	3285	Greco, A.	1321	Hu, Y.	633	Kamonika, M.	4333
Fatahalla, N.	351	Green, D.H.	2007	Huang, A.	2353	Kanaev, A.V.	3315
Feldmann, C.	1731	Greil, P.	4925	Huang, C.-L.	3495	Kanda, D.H.F.	1465
Feng, G.	1523	Griffiths, W.D.	3683, 4373	Huang, J.-L.	1049	Kanda, K.	7
Feng, W.	1045	Grimes, R.W.	1597	Huang, J.G.	817	Kander, R.G.	195
Feng, X.	3641	Grimsey, I.M.	57	Huang, J.Y.	817	Kanemoto, T.	255
Feng, Y.	4917	Grosbras, M.	589	Huang, T.-J.	2461	Kaneno, Y.	657, 869
Fergus, J.W.	4259	Grujicic, M.	307, 1819, 3729	Huang, W.	1243	Kang, D.-J.	2619, 3545
Fernandez, A.	2331	Gryshchuk, O.	413	Huang, W.-Y.	541	Kang, D.-K.	1295
Ferreira, M.	2187	Guden, M.	4745	Huang, X.	3007	Kang, K.-S.	4319
Ferry, M.	1925	Guedes, A.	2409	Huang, Y.D.	759	Kang, N.	3579
Figueroa, O.	4239	Guencheva, V.	3747	Huguenin, D.	2429	Kar, A.	1953
Fillet, C.	843, 853	Guillard, C.	3945	Humbert, M.	1289	Karger-Kocsis, J.	413
Find, J.	1917	Guilmot, E.	1307	Hunag, Y.	3111	Karlsson, R.	2835
Fine, T.	2709	Günther, D.	1909	Hunt, R.D.	3831	Kashiwagi, T.	4451
Finegan, I.C.	3485	Guo, S.	1793	Hunter, G.W.	4289	Kasuya, T.	2011
Finlayson, T.R.	1161	Gupta, T.N.	3159	Hurata, T.	3925	Katase, Y.	2591
Flambard, X.	2187	Guthrie, J.T.	1097	Husain, M.	549	Kathuria, Y.P.	2875
Fleming, G.J.P.	3979	Gutzow, I.	3747	Hwang, J.R.	817	Katiyar, R.S.	1171
		Ha, C.-S.	909	Hyun, S.H.	1961	Kato, M.	1689

**Author Index - 2003**

Kato, O.	2607,	Kulyova, S.P.	1967	Lin, W.	3883	Mather, R.R.	2161
Kato, Y.	1153	Kumar, A.	2667	Lin, Y.S.	979, 1073	Mathew, G.	2469
Katsube, N.	1589	Kunst, M.	2429	Ling, Y.	3883	Matienzo, L.J.	4831
Kawahara, T.	1703	Kuo, R.C.	817	Lingois, P.	1321	Matsuda, N.	2979
Kawasaki, M.	739	Kurokawa, Y.	1239	Liu, C.	2423, 3641	Matsuki, T.	2661
Kaya, C.	767	Kurtis, K.E.	2027	Liu, C.C.	4289	Maximovitch, S.	4041
Kayikci, R.	3683, 4373	Kurzawa, M.	3137	Liu, H.L.	1727	Mazali, I.O.	3325
Ke, W.	127	Kusinski, G.	2679	Liu, L.	1255	Mazumadar, S.	6
Keane, M.A.	4661	Kuwagaki, H.	3279	Liu, L.X.	759	McCartney, S.R.	195
Keijser, E.R.P.	3697	La Vecchia, G.M.	3567	Liu, M.	4307	McLean, M.	4385
Kelleher, B.	3891	Labudovic, M.	35	Liu, P.	1939	McMillan, K.M.	2747
Keller, B.	1909	Labuschagné, F.J.W.J.	1249	Liu, S.M.	1471	Meguro, T.	3279
Kenawy, S.H.	1673	Lai, M.O.	613	Liu, T.	3223	Mehra, R.M.	937
Kenny, J.M.	3257, 4725	Laîné, J.-M.	823	Liu, W.	3051	Mehrtens, E.G.	3223
Kermanpur, A.	4385	Lake, M.L.	3485	Liu, X.	885, 2901	Melrose, J.R.	2489
Khadar, M.A.	4055	Lakes, R.S.	2747	Liu, Y.	1045, 4709	Menéndez, R.	427
Khan, M.A.M.	549	Laksimi, A.	1479	Liu, Y.B.	1975	Meng, G.	2901
Khan, T.I.	2483	Lam, H.M.	1803	Lo, C.L.	693	Meng, H.-M.	705
Kijkowska, R.	223, 229	Lancellotti, A.C.	2627	Löbmann, P.	1605	Mennig, M.	1645
Kikuchi, R.	515	Lanciotti, F., Jr.	1175	Lofaj, F.	1403, 2393	Mercer, C.	291
Killen, P.D.	2935	Langlet, M.	3945	Logan, P.E.	4831	Meredith, J.C.	4, 4427
Kim, A.	3945	Last, W.C.	3325	Loiseau, P.	843, 853	Merikhi, J.	1731
Kim, B.-H.	1295	Latella, B.A.	3223	Longo, E.	1175	Meulenbergh, W.A.	507
Kim, C.	2987	Lavan, D.A.	4081	Lopez, V.H.	2771	Mi, B.	4169
Kim, C.-S.	4221	Lavernia, E.J.	3319	Lopez-Hirata, V.M.	275	Miao, W.	2571
Kim, D.-U.	1281	Law, P.T.	4857	Lou, J.	4129, 4137	Michler, G.H.	4713
Kim, D.S.	3611	Leangsawan, P.	4739	Lozano, L.F.	4777	Michot, G.	3143
Kim, G.S.	1961	Lee, A.R.	4541	Lu, L.	613, 2907	Midlam-Mohler, S.	4239
Kim, H.	2043	Lee, B.-S.	3545	Lu, X.	3641	Mikeska, K.R.	3965
Kim, I.-H.	3553	Lee, B.K.	1135	Lu, Y.	1081, 1975, 2019	Minamino, Y.	4535
Kim, J.-H.	1333	Lee, C.	4239	Luecke, W.E.	1403	Miresmailli, S.M.	1901
Kim, J.-W.	1853	Lee, C.-C.	721	Lumpkin, G.R.	3223	Missiaen, J.M.	2581
Kim, K.-N.	4221	Lee, C.H.	1849	Lundström, R.	4941	Mitchell, L.D.	4415
Kim, N.-K.	2767	Lee, C.Y.-C.	4013	Lunin, V.V.	1967	Mitchell, R.	2171, 2945
Kim, N.J.	3647	Lee, D.W.	4493	Lunina, E.V.	1967	Mitomo, M.	1117
Kim, S.-G.	2619, 3545	Lee, H.-C.	2633	Luo, D.	401	Mitrovic, M.M.	1983
Kim, S.-H.	1117, 1787	Lee, H.-W.	1333	Luo, J.-J.	3029	Miura, N.	4283
Kim, S.-Y.	1281	Lee, H.J.	621, 2143, 2199	Luo, X.	1781	Miwa, K.	3591
Kim, T.-W.	1013	Lee, J.-H.	4247	Luprano, V.	2393	Miwa, Y.	2591
Kim, T.H.	1849	Lee, J.-W.	713, 1679, 3619	Lv, Q.	2559	Miyake, S.	101
Kim, W.	4603	Lee, J.C.	4493	Ma, C.-C.M.	3933	Mizutani, A.	89, 2215
Kim, W.-Y.	657	Lee, J.G.	217	Ma, J.	987, 2803	Mohamed, A.I.	3797
Kim, Y.-B.	1013	Lee, K.H.	4493	Maeda, M.	3791	Monteiro, O.R.	3117
Kim, Y.-U.	4221	Lee, J.K.	4933	Ma, W.	3883	Monteiro, P.J.M.	2027
Kim, Y.-W.	1117	Lee, K.-H.	4221	Ma, X.L.	689	Moisa, S.	343
Kim, Y.H.	4933	Lee, K.H.	235	Macfarlane, D.R.	3293	Momber, A.W.	747, 2861
Kim, Y.J.	2987	Lee, J.H.	3437	Maeda, M.	3791	Monteiro, O.R.	3117
Kim, Y.S.	621	Lee, M.-S.	4843	Maffezoli, A.	1321	Monteiro, P.J.M.	2027
Kimura, A.	89, 2215	Lee, P.D.	4385	Magyari, E.	1909	Montes-Morán, M.A.	2105
Kimura, Y.	739	Lee, S.	217, 3647	Mahajan, Y.R.	2953	Morales, E.	1773
Kincaid, R.W.	445	Lee, S.-B.	4221	Makita, K.	3479	Mosman, J.	173
Kinloch, A.J.	65	Lee, S.P.	4319	Makovec, D.	3063	Morgan, A.B.	4451
Kipouros, G.J.	1755	Lee, T.	2747	Maksimov, Yu.V.	2219	Mori, H.	3461
Kishi, K.	3791	Lee, W.-K.	909	Malai, A.	3527	Mori, K.	1153
Kishimoto, S.	4211	Lee, W.B.	1945, 2925, 4183	Maiti, H.S.	1063	Morita, T.	3089
Kishimoto, Y.	3479	Lee, W.H.	217	Majerus, O.	843, 853	Moser, W.R.	1917
Kitagawa, K.	2241, 2241	Lee, Y.-K.	4221	Makino, Y.	101	Mosman, J.	173
Kitaoka, T.	1611	Lee, Y.S.	2825	Makovec, D.	3063	Motai, S.	1695
Kitazawa, N.	3069	Leite, E.R.	1175	Maksimov, Yu.V.	2219	Moulin, G.	1479
Kleinschek, K.S.	2167	Leonelli, C.	2627	Malic, B.	2259	Moustafa, M.A.	4507, 4523
Klepper, C.C.	3117	Lessing, P.A.	2401	Mallesham, P.	1869	Muchtar, A.	235
Klimkiewicz, M.	1347	Levi-Setti, R.	3965	Mallick, P.K.	3183	Muddle, B.C.	1161
Knight, P.	2171	Lewis, M.H.	767	Malone, N.J.	57	Mukai, T.	3925
Knoll, K.	4713	Li, B.L.	2499	Mamatlis, A.G.	789	Mukherjee, S.	2667
Ko, Y.K.	217	Li, C.	2559	Man, H.C.	2689, 2925	Mukhopadhyay, A.K.	1063
Kobayashi, Y.	1239	Li, D.	2907	Mandal, R.K.	3469	Mullis, A.M.	2517
Kohjya, S.	1447	Li, D.C.	1471	Manik, N.B.	4081	Mumtaz, K.	3037
Kohzu, M.	3925	Li, G.	1377	Manzano, A.	93	Muniz, E.C.	699
Kohzuki, Y.	953, 1301, 4487	Li, G.Z.	921, 3741	Mao, J.S.	2771	Munroe, P.R.	1925
Koizumi, Y.	4883	Li, H.	4863	Marcellan, A.	2117	Munteanu, G.	1995
Kokawa, H.	4379	Li, H.-J.	3669	Marchand, J.	2247, 4957	Murakami, K.	1447
Komeya, K.	3279	Li, J.-F.	2661	Marcotte, T.D.	4765	Murakami, Y.	2723
Kondoh, J.	3689	Li, S.	4065	Marghussian, V.K.	1529	Murakumo, T.	4883
Kong, Q.P.	1895	Li, T.	2803	Marín, J.	4047	Murali, K.R.	3845
Kosak, A.	3063	Li, W.	1781, 3559	Marinel, S.	4027	Muramoto, K.	2043
Kosec, M.	2259, 3769	Li, X.	3051	Marinov, M.	3747	Murr, L.E.	941, 2223
Koshy, J.	481	Li, X.J.	2505	Mark, J.E.	4013	Murti, V.S.R.	1869
Kostadinov, L.	3747	Li, Y.	1953	Markovic, S.	3263	Murugaraj, R.	107
Kovacevic, R.	35, 2861	Li, Z.	1203, 1793, 4911	Marotta, A.	3097	Nair, N.R.	2469
Kozola, B.D.	901	Liang, G.	1179	Marquis, D.	1231	Nair, S.U.K.	481
Kozuka, H.	4203	Liao, K.	363	Martin, D.C.	8, 803	Nair, S.U.K.	995
Krishna, P.G.	2001	Lim, L.C.	235	Martin, J.P.	195	Nair, J.D.	995
Krishnappa, R.V.N.	2357	Lim, S.T.	1485, 1849	Martin, R.B.	3501	Najjar, D.	2525
Kristl, M.	3063	Lim, T.-Y.	1295	Martínez, E.	3085	Naka, M.	3491
Krstic, V.D.	4567, 4735	Lin, C.-H.	3081	Martínez, R.	2971	Nakagawa, Y.	657
Kuan, H.-C.	3933	Lin, C.-K.	965, 1667	Martínez, V.	4047	Nakamura, K.	2011
Kucharová, K.	3535	Lin, C.-L.	1269	Martinez-Lopez, L.	275	Nakamura, T.	4597
Kulkarni, M.	269	Lin, C.B.	2563	Martínez-Salazar, J.	4757	Nakao, K.	2011
Kulkarni, A.K.	3579	Lin, D.	261	Martins, A.F.	2415	Nakato, T.	3809
Kulkarni, K.	1803	Lin, J.	1499	Marx, B.	2271	Nakatsuchi, S.	1859
Kulkarni, S.D.	29	Lin, L.	1097	Mason, T.O.	2265	Nam, S.W.	1535
Kulkarni, S.K.	6	Lin, S.-T.	1543	Masud, L.	2971		

Nam, T.-H.	1333	Pattanaik, A.K.	2511	Ray, S.	3199	Shan, A.	2613
Nam, W.J.	3611	Pavlovic, Z.A.	3263	Raymond, O.	3085	Shang, Q.X.	2283
Narahara, M.	2655	Payzant, E.A.	979, 3831	Redwan, M.A.	3449	Shao, C.Y.	1049
Narisawa, M.	2591	Peña-Rico, M.A.	4777	Refaey, A.	351	Shaobo, Q.	1523
Nash, P.	3553	Peng, D.	2901	Reichmann, K.	2259	Shariff, G.	1431
Navio, J.A.	2219	Peón, J.	4757	Ren, T.	3007	Sharma, G.D.	485
Nayak, B.B.	2717	Perez, W.	1171	Reucroft, P.J.	217	Sharpe, W.N., Jr.	4075, 4087
Nemeth, N.N.	4087	Pertek, A.	269	Reutenaer, S.	2205	She, W.	401
Neubrand, A.	4193	Petridis, D.	959	Rhee, K.Y.	1013	Sheeja, D.	421
Neville, A.	2161	Petrovic, J.J.	1	Ribitsch, V.	2167	Shekariz, S.	2945
Newcomb, S.B.	343	Petrovic, S.T.	3263	Rickerby, D.S.	3797	Shelton, D.R.	3501
Ni, A.	4169	Phani, K.K.	1063	Riesel, C.	2105	Shen, J.-W.	541
Nicolini, C.	4951	Phanikumar, G.	155	Risnes, O.K.	2161	Shen, Y.-L.	901
Nielsen, A.S.	597	Philip, B.	1573	Rives, V.	2815	Sheppard, T.	1747
Nikolaou, J.	2883	Philip, J.	1513	Riviere, B.	4333	Sherman, D.	783, 4169
Nishi, Y.	89, 2215	Phillips, S.M.	4169	Rocherullé, J.	1425	Shi, G.	2423
Nisiro, D.	2727	Pijolat, C.	4333	Roels, A.	1875	Shi, J.	1243
Nitta, K.-H.	4889	Pine, D.J.	4461	Rokhlin, S.I.	1589	Shi, L.	973
Niwa, J.	3791	Pinheiro, A.G.	3713	Romaní, J.O.	2743	Shi, Y.	1895
Noda, H.	2043	Pinheiro, C.D.	1175	Rong, J.	4863	Shi, Y.T.	1347
Nogata, F.	1039	Pinto, A.M.P.	2409	Rose, S.R.	19	Shi, Z.-K.	3669
Noma, N.	1703	Pique, E.J.	4003	Rossacci, J.	201, 2321	Shi, Z.-M.	3597
Norimoto, M.	4551	Piques, R.	2117	Rosunee, S.	2179	Shield, J.E.	445
Northwood, D.O.	4849	Pittman, C.U., Jr.	3741	Row, T.N.G.	133	Shields, J.R.	4451
Nour, W.M.N.	1673	Pizani, P.S.	1175	Rozenberg, O.A.	789	Shim, I.-B.	4221
Nunes, R.C.R.	2415	Plekhanov, V.G.	3341	Rubio, F.	1773	Shimada, S.	1695
Nyden, M.	4451	Poels, E.	173	Rubio, J.	1773	Shimanoe, K.	4283
Nyongesa, F.W.	2293	Pollet, M.	4027	Rubira, A.F.	699	Shimizu, Y.	4301
O'Dwyer, T.	3891	Pontes, F.M.	1175	Russell, A.M.	3437	Shimoo, T.	1653, 3089, 4973
O'Sullivan, J.	2073	Poon, Y.M.	675	Ryu, H.H.	683, 3663	Shin, F.G.	675
Obata, K.	4283	Portelles, J.	3085	Sadatomi, N.	1623	Shin, H.-S.	3603
Ochiai, S.	1737	Poupard, O.	2845, 3521	Sadwick, L.P.	3663	Shin, M.C.	13
Ocotlán-Flores, J.	4777	Poutch, F.	2187	Saha, B.P.	2953	Shinada, T.	2447
Ogacho, A.A.	2293	Pradhan, S.D.	29	Saikali, Y.	3285	Shinozaki, D.M.	581
Ogata, T.	255	Pramada, P.N.	3159	Sailaja, G.S.	3653	Shintre, S.D.	29
Ogawa, Y.	4597	Prasad, A.K.	4347	Saito, N.	3925	Shinya, N.	4211
Oguri, K.	89, 2215	Prieto, O.	2815	Saitoh, H.	2447, 3239	Shiota, H.	3689
Oh, J.	3647	Procopio, A.T.	3629	Sakaguchi, K.	3069	Shirakabe, Y.	3191
Oh, T.-S.	1853	Prorok, B.C.	4125	Sakaguchi, Y.	3591	Shirtliff, V.J.	4697
Ohgaku, T.	1301, 4487	Puppo, D.	3567	Sakamoto, A.	2305	Shishodia, P.K.	937
Ohkawa, K.	3191	Purevsuren, B.	2347	Sakamoto, W.K.	1465	Shiue, R.-K.	1269
Ohkawara, Y.	2447	Pyare, R.	2079	Salem, F.M.	1087	Shiue, R.K.	2337
Ohshio, S.	2447, 3239	Pyo, S.G.	3647	Salhi, E.	1139	Shivkumar, S.	201, 667,
Ohta, T.	657	Pyrz, R.	597	Salmén, L.	119	2233, 2321	
Ohya, K.	1153	Qasrawi, A.F.	1507	Samantaray, S.K.	1835	Shockley, D.A.	3603
Oi, T.	515	Qi, L.-H.	3669	Sammes, N.M.	4811	Shoumura, K.	3191
Okabe, T.	1765	Qi, X.	1073	Sampson, W.W.	1617	Shrotriya, P.	4137, 4145
Okamura, K.	1653, 2591, 3089, 4973	Qian, J.	2299	Samuel, A.M.	1203, 1255	Shu-Rong, Y.	3455
Okuda, H.	1737	Qian, X.	4911	Samuel, F.H.	1203, 1255,	Shukla, A.	1631
Olivares, L.	4047	Qian, Y.	3473	4507, 4523	Shulzhenko, A.A.	789	
Omur, B.C.	917	Qiu, J.	4065	Sandler, J.	2135	Shur, C.-C.	1281
Onaka, S.	1689	Qiu, J.H.	759	Sands, M.	667, 2233	Shyu, J.-J.	721
Ordoñez, S.	4047	Qiu, K.-Y.	437	Santamaría, R.	427	Si, P.Z.	689
Oruc, C.	917	Qu, C.	4917	Sarkar, G.	1803	Sickafus, K.E.	1597
Osada, Y.	1457	Qu, H.L.	1579	Sarkar, S.	155	Siddaramaiah, U.L.	451
Ota, R.	2537	Qu, L.	2423	Sarwade, B.D.	29	Siligardi, C.	2627
Oteo, J.L.	1773	Quick, N.R.	1953	Sasaki, Y.	603	Silva, C.C.	3713
Ottiti, T.	1315	Radjai, A.	3591	Sathaye, S.D.	29	Silva, M.J.G.	1007
Otsuka, M.	2979	Radoev, B.	2703	Sathyaranayana, P.M.	1431	Silver, J.	2743
Ou, C.L.	2337	Radoeva, M.	2703	Sato, H.	1689	Simison, S.	2971
Ou, J.-L.	1269	Radwan, F.A.	3677	Sato, M.	3037	Simon, G.P.	147
Ouchetto, M.	589	Radwan, M.M.	4499	Sato, Y.S.	4379	Simpson, P.J.	581
Ovenstone, J.	2743	Rafferty, A.	2311, 3891	Satyaranayana, K.G.	3159	Singh, A.	51
Oyanguren, P.A.	2809	Raghavan, P.	3159	Saucedo-Muñoz, M.L.	275	Singh, J.	3579
Ozawa, M.	2607	Rahier, H.	3131	Sautereau, H.	2709	Singh, R.P.	2469
Page, N.W.	2935	Rajesh, R.	1513	Sauvant-Moynot, V.	2709	Singh, R.S.	1551
Paik, J.H.	621	Raki, L.	4957	Savaskan, T.	2639	Singh, S.P.	1551
Pajonk, G.M.	4407	Ralph, B.	3877	Sawata, A.	2723	Sinha, I.	3469
Pakes, A.	343	Ram, M.K.	4951	Schadler, L.S.	877	Siqueiros, J.M.	3085
Pan, A.	4581	Ram, S.	643	Scheffler, M.	4925	Sirdeshmukh, D.B.	2001
Pan, Y.	1049	Ramakrishna, J.	833	Schino, A.D.	3257, 4725	Skeldon, P.	343
Papadimitriou, G.	2883	Ramamoorthy, R.	4239, 4271	Schmitt, S.	413	Skennerton, S.G.	995
Papanicolau, G.C.	533	Raman, R.K.S.	147	Schulz, E.	4965	Smith, A.C.	1933
Parameswaran, V.	1631	Ramani, R.	1431	Schulz, R.	1179	Smith, D.T.	1403
Parfitt, M.	2171	Ramesh, K.P.	833	Schwarze, D.	4925	Smith, G.	57
Parida, K.M.	1835	Ramesh, P.	3653	Seal, A.	1063	Smith, J.E., Jr.	3, 377
Paris, E.C.	1175	Rana, M.U.	2037	Seferis, J.C.	2547	Smole, M.S.	2167
Park, C.-Y.	909	Ranganathaiah, C.	1431	Segal, E.	1995	Snowden, K.U.	3223
Park, C.O.	4609, 4611, 4639	Rangelov, B.	3747	Seghi, R.R.	1589	So, J.H.	2007
Park, D.	4933	Rao, A.V.	4407	Selvan, J.S.	4783	Soboyejo, A.B.O.	4157, 4163
Park, H.-M.	909	Rao, G.V.N.	2953	Selvaraj, S.L.	555	Soboyejo, W.	4, 4145
Park, H.C.	561	Rao, J.L.	833	Semmelhack, H.-C.	3211	Soboyejo, W.O.	291, 4129, 4137,
Park, H.M.	621	Rao, K.S.	391	Sen, D.	6	4157, 4163	
Park, S.	4493, 4603	Rapin, C.	2063	Sengoku, N.	4597	Sobral, A.V.C.	1007
Park, S.H.	1485	Ratna, D.	147	Sensato, F.	1175	Soejoko, D.S.	2087
Park, S.H.C.	4379	Ratnakaram, Y.C.	833	Seshan, S.	1383	Søgaard, E.G.	3315
Park, T.-H.	1295	Raucci, M.G.	3097	Sgraja, M.	1605	Sohn, J.-I.	1485, 1849
Parlak, M.	1507	Rauch, W.L.	4307	Shabestari, S.G.	1901	Sohn, K.-Y.	4843
Paskocimas, C.A.	1175	Ravikumar, B.	2667	Shademan, S.	291	Sokhan, S.V.	789
Patil, K.R.	29	Ravindran, C.	1203	Shaffer, M.S.P.	2135	Soliman, A.	4239
Paton, B.	1755	Rawn, C.J.	3831	Shafizadeh, J.E.	2547	Soliman, L.I.	3449
						Soloviev, A.	3315

**Author Index - 2003**

Somashekhar, R.	451	Tang, X.	3007	Vickers, P.E.	3903	Xu, G.	779
Sombra, A.S.B.	3713	Tanner, P.A.	4857	Vieira, M.F.	2409	Xu, H.	2353
Somers, J.	2331	Tarafder, S.	2667	Vijayan, A.	2073	Xu, S.-A.	207
Song, H.	2209	Tarpani, J.R.	1493	Vijayan, K.	133	Xu, X.	245, 2901
Song, S.-H.	499, 1661	Tatami, J.	3279	Vitasi, M.	2063	Yagasaki, K.	1039
Song, W.	1793	Tavares, S.S.M.	3527	Viricelle, J.P.	4333	Yakabe, S.	3809
Song, Z.	4211	Tawancy, H.M.	3797	Visconte, L.L.Y.	2415	Yamabe-Mitarai, Y.	3955
Soni, P.H.	1931	Tay, B.K.	421	Vogel, R.	2149	Yamada, Y.	4597
Sooryanarayana, K.	133	Taylor, A.C.	65	Vogel, W.	6	Yamaguchi, O.	3431
Souda, N.	4301	Téllez, L.	1773	Vos, B.	173	Yamamoto, H.	3191
Soulé, E.	2809	Tesche, B.	2347	Wada, S.	2655	Yamamoto, K.	255
Souza, A.A.	1007	Testamichael, T.	1721	Wagner, N.J.	2825	Yamamoto, S.	2305
Spigarelli, S.	81	Thacker, E.L.	3013	Wakasugi, T.	2537	Yamamoto, T.	2241
Spinelli, D.	1493	Thielmann, F.	2205	Waldron, K.W.	1933	Yamamura, H.	7
Sproule, G.I.	343	Thierens, H.	1875	Walsh, J.	4325	Yamane, H.	739
Sprung, J.P.	4805	Thimmegowda, M.C.	1431	Wan, Y.	3597	Yamasaki, M.	603
Sreekumar, K.	1573	Thomas, G.	2679	Wang, B.	2353	Yamashita, O.	1623, 3479
Sreenivasan, K.	3653	Thomas, S.	2469	Wang, C.	1377	Yamazoe, N.	4283
Srinivasan, A.	2511	Thompson, G.E.	343	Wang, C.-A.	3111	Yan, C.	3597
Stakne, K.	2167	Thwe, M.M.	363	Wang, C.-J.	3619	Yan, D.	1781
Steinmetz, P.	2063	Tian, F.	4709	Wang, G.	779	Yan, H.	2353
Stevens, R.	561, 1413, 3013	Tian, M.	4917	Wang, H.	141, 401, 1439, 1939, 2353	Yan, M.	3219
Stöckelhuber, K.W.	2703	Tian, Y.J.	1471	Wang, J.	323	Yanagisawa, O.	1471
Stöver, D.	507	Tianxiao, L.	4557	Wang, J.-H.	1667	Yanaka, M.	1809
Stover, S.M.	3501	Tibbets, G.G.	3485	Wang, J.Q.	127	Yang, C.-H.	1667
Stoyanov, E.	3747	Timms, R.	3871	Wang, K.	183, 4567	Yang, D.	4137
Strangeways, C.	3683, 4373	Ting, J.-M.	339, 3485	Wang, L.	1243, 3019, 4293	Yang, G.	885
Stremsoeder, G.	3285	Tjia, M.O.	2087	Wang, M.	4021	Yang, G.H.	2283
Strohm, H.	1605	Tjong, S.C.	207	Wang, P.W.	489	Yang, H.J.	217
Su, X.	4581	To, S.	1945	Wang, R.	1589	Yang, J.	2907, 3883
Suarez, J.C.M.	2415	Todorova, S.	3747	Wang, S.	3473	Yang, J.R.	2373
Subhadra, K.G.	2001	Tohge, N.	1703	Wang, W.	4385	Yang, K.-H.	1295
Subhash, G.	1185	Tokaji, K.	1153	Wang, W.Y.	2049	Yang, K.S.	2987
Subramanian, K.	4783	Toksoy, A.K.	4745	Wang, X.	2907, 3473	Yang, T.	1909
Subramanian, V.	823	Toledo, E.A.	699	Wang, X.	2283	Yang, T.Y.	561
Sudduth, R.D.	1123	Tomiyoshi, S.	1623	Wang, X.H.	1377	Yang, X.	2907
Suehiro, T.	3791	Tomlinson, M.	4471	Wang, Y.	2265	Yang, Y.	1243
Suganthi, R.	107	Tonegawa, A.	89, 2215	Wansom, S.	4289	Yang, Z.	4581
Sugawara, M.	255	Tong, L.	3169	Ward, B.J.	481	Yao, C.K.	2647
Sugimoto, T.	2011	Toriyama, T.	89	Warriar, P.R.S.	525	Yao, J.N.	1045
Sugiyama, M.	4551	Torralba, J.M.	521	Watanabe, K.	2661	Yao, L.	3051
Suh, D.-H.	2767	Torres, J.L.	2455	Watanabe, R.	1039	Yao, N.	4145
Suidan, M.T.	823	Tosaka, M.	1447	Watanabe, T.	3069	Yao, S.	401
Sujirote, K.	4739	Tosic, M.B.	1983	Watanabe, Y.	3903	Yao, W.	1939
Sullivan, J.R.	4081	Toth, A.	2893	Watts, J.F.	675	Yao, Z.	3051
Summers, J.	633	Toyama, N.	1765	Wei, E.B.	4033	Yaohe, Z.	4557
Sun, C.Q.	421	Toyoda, T.	2241	Wei, M.	425	Yarlagadda, S.	565
Sun, H.	4013	Trillo, E.A.	2223	Wei, W.	407	Yasuda, H.	1859
Sun, J.X.	3915	Trimboli, J.	4239	Wei, Y.	437	Yasue, K.	3591
Sun, R.C.	3915	Trusty, P.A.	245	Weiqun, C.	3303	Ye, J.	4021
Sun, X.-F.	3915	Tsai, D.-S.	2633	Weppner, W.	4639	Ye, S.	377
Sun, Z.	3029	Tsai, M.C.	2373	Werner, P.	2135	Yeh, J.J.	817
Sung, C.	2357	Tsay, L.-W.	1269	Wessel, E.	507	Yeo, S.Y.	2143, 2199
Sung, Y.-M.	1391	Tschudi, T.	4193	Wetzel, E.D.	2825	Yeon, Y.-M.	1281
Sunny, M.C.	3653	Tse, K.Y.	2367	White, J.R.	1	Yeon, Y.M.	4183
Suri, P.	2271, 4869, 4875	Tseng, K.K.	3019	Whitehouse, A.F.	3437	Yi, Z.	3303
Suwawatana, W.	565	Tsodikov, M.V.	2219	Whitfield, P.S.	4415	Yilmaz, S.	4745
Suyal, G.	1645	Tsukamoto, T.	739	Wiederhorn, S.M.	1403	Yin, J.	4911, 4911
Suzdalev, I.P.	2219	Tsuru, Y.	2723	Wilczynski, W.	4905	Ying, L.	407
Suzuki, N.	1737	Tsurumi, T.	2655	Wilkie, C.A.	4451	Yip, C.K.	3851
Suzuki, R.	2607	Tushima, E.	1737	Will, G.	1721	Yokota, K.	2011
Swamy, B.K.K.	451	Turhal, M.S.	2639	Windle, A.H.	2135	Yokoyama, S.	4535
Swartz, S.L.	1073	Uchida, N.	2215	Withers, P.J.	3437	Yoon, K.H.	391
Szabo, N.	4239	Uhlenbruck, S.	507	Witherspoon, F.D.	445	Yoshinaka, M.	3431
Tabaková, T.	1995	Underhill, R.	3877	Wong, K.-L.	4857	Yoshioka, T.	101
Tada, H.	1703	Unuma, H.	255	Wong, N.-B.	973	You, C.Y.	689
Tagle, L.H.	2439, 2455	Ur, S.-C.	3553	Wong, Y.-T.	973	You, L.H.	2963
Tai, W.-P.	1787	Urban, J.	6	Wongpreedee, K.	3437	Young, R.J.	2, 795, 2105
Takafuji, S.	1153	Valdez, J.A.	1597	Woo, J.	489	Yu, D.	183, 2353
Takahashi, H.	515	Valtierra, S.	1203, 1255	Woo, L.Y.	2265	Yu, D.L.	1471
Takahashi, J.	1695	Van Den Oever, M.J.A.	3697	Wood, D.	2311	Yu, Z.	113, 1057, 1499
Takahashi, S.	3037	Van Deventer, J.S.J.	3851	Wood, H.C.	2401	Yu, Z.B.	4735
Takasugi, T.	657, 869	Van Dommelen,		Wright, A.J.	3979	Yubao, L.	3303
Takayanagi, M.	4889	J.A.W.	4393	Wu, H.	1579	Yudong, H.	1523
Takeda, N.	1765	Van Mele, B.	3131	Wu, J.	183	Yue, L.	2679
Takeuchi, H.	4973	Vanderhart, D.L.	4451	Wu, J.-H.	965	Yue, T.M.	2689
Tamagawa, H.	1039	Varella, J.A.	1175	Wu, K.	2647	Yun, S.S.	2007
Tamai, H.	1859	Varley, R.	147	Wu, L.-C.	2563	Zafeiropoulos, N.E.	3903
Tamtia, B.T.	2247	Varma, H.K.	3653	Wu, P.	1135, 1727	Zarrouk, H.	4573
Tamura, K.	3279	Varma, K.B.R.	4895	Wu, Q.	4033	Zavaliangos, A.	3629
Tamura, S.	2011	Varma, S.K.	489	Wu, S.	401	Zayed, H.A.	3449
Tan, J.	3597	Vassis, P.	4541	Wu, T.	4471	Zelei, B.	2893
Tan, M.J.	2505	Vega, J.F.	4757	Wu, Y.	987, 2019, 2271	Zeng, M.Q.	2499
Tan, O.K.	4353	Velasco, F.	521	Xavier, F.P.	555	Zenou, V.Y.	2679,
Tan, R.	3973	Velayudhan, S.	3653	Xia, Y.	1377	Zhang, D.F.	2049
Tan, S.C.	4013	Velázquez, R.	4777	Xiang, Z.D.	19, 3721	Zhang, F.	613
Tanabe, S.	3925	Venkataraman, B.H.	4895	Xiao, P.	499, 1661	Zhang, G.	4033
Tanaka, H.	1611	Venz, G.J.	2935	Xie, D.	987	Zhang, H.	987
Tanaka, K.	2537	Verbeeck, R.M.H.	1875	Xie, J.	2125, 3641, 4849	Zhang, J.	2423
Tanaka, M.	1737	Verweij, H.	4239, 4677	Xiong, X.Y.	1161	Zhang, J.-Q.	705
Tändler, B.	2149	Viana, F.	2409	Xu, B.	3973	Zhang, J.-T.	2559
Tang, H.	8, 803	Vickerman, J.C.	2171	Xu, C.	779	Zhang, J.X.	4883

Zhang, L.	1439, 3037, 4917	Zhang, Z.	1499, 3473	Zhenming, X.	4557	Zhu, W.	4353
Zhang, M.	689	Zhang, Z.D.	689	Zhilinskaya, E.A.	1967	Zhu, Y.	407, 1939, 3641,
Zhang, Q.	1781	Zhang, Z.Q.	759	Zhou, A.	3111		3973, 4581
Zhang, Q.Y.	1975	Zhao, B.	4709	Zhou, C.H.	877	Zhu, Y.H.	1945, 2925
Zhang, S.	2195	Zhao, M.	3007	Zhou, L.	1579	Zhu, Z.Y.	127
Zhang, T.R.	1045	Zhao, X.G.	689	Zhou, Y.	3183, 4065	Zhuang, H.	1781, 3559
Zhang, W.	1185, 4863	Zhao, Y.Q.	1579	Zhu, H.-S.	141, 2559	Znidarsic, A.	3063
Zhang, W.C.	2647	Zhao, Y.Y.	1045	Zhu, H.X.	2489, 3861	Zuck, L.D.	2401
Zhang, X.	2353	Zheng, H.	4581	Zhu, K.Y.	1579	Zulfequar, M.	549
Zhang, Y.	173, 261, 987, 1359, 2353, 4065	Zheng, J.-Y.	437	Zhu, M.	2499	Zupei, Y.	1523
		Zheng, M.Y.	2647	Zhu, S.J.	3535		

## Subject Index

Ablation:	2447	Aluminum base alloys, Ternary systems:	3995
Abrasion:	739, 2415	Aluminum base alloys, Welding:	1147, 3579, 4183
Abrasive erosion:	2861	Aluminum nitride:	101, 1781
Abrasive machining:	789	Aluminum oxide:	235, 339, 461, 471, 927, 979,
ABS resins:	891, 1123, 1485, 3515	1081, 1353, 1439, 1565,	
Absorption (material):	3915	1661, 1673, 2043, 2673,	
Absorption spectra:	1573	2935, 3081, 3245, 3491,	
Absorptivity:	2559	3713, 3965, 4415, 4677,	
Accelerated tests:	3521	4857	
Acicular structure:	2717	Aluminum oxide, Brazing:	3491
Acidification:	4573	Aluminum oxide, Coatings:	1239, 1565
Acoustic emission testing:	1013	Aluminum oxide, Composite materials:	1383, 1925, 3073, 3535,
Acoustic properties:	1107	3567, 3669, 4193	
Acrylic resins:	3653	Aluminum silicates:	461, 471, 2311, 3131
Activated carbon:	2347, 3279	Amorphous structure:	549, 833, 1161, 1175, 1425,
Activated sintering:	3861, 4567	2311, 3891, 4415	
Activation energy:	1465, 1673, 1983, 1995,	Anelasticity:	2007
Activity (chemical):	2299, 2511, 3183	Annealing:	217, 2353, 2613
Actuators:	705, 1835, 1967, 1995	Anodes:	343
Actuators, Materials selection:	2803	Anodizing:	2439
Additives:	1039	Antimony compounds:	527
Adhesion:	65	Antiphase boundaries:	331, 3995
Adhesive bonding:	8, 1727, 2283, 3199, 3285,	Aramid fibers:	133, 1081
Adhesive joints, Corrosion:	3485, 4115, 4439, 4917, 4965	Arc deposition:	3117
Adhesive strength:	4831	Aromatic polyamides:	133, 2547, 2825
Adsorbents:	4831	Arsenic compounds:	937
Adsorption:	1339	Aspect ratio:	1499
Adsorptivity:	1695, 3891, 4041	Asphalts:	1021, 2835, 4941
Aerospace:	1339	Asymmetry:	2393
Aerospace engines:	2505	Atmospheric corrosion:	995
Agglomerates:	3029	Atomizing:	445, 3591
Agglomeration:	3269	Austempering:	351
Aggregates:	3315, 3775	Austenitic stainless steels, Coating:	2011
Aging:	2027	Austenitic stainless steels, Corrosion:	3257, 3527, 3619
Aging (artificial):	363, 1945, 2925, 3199	Austenitic stainless steels, Electrochemistry:	1007
Aircraft components, Materials selection:	1153	Austenitic stainless steels, Mechanical properties:	817, 1535, 4725
Airframes:	89	Austenitic stainless steels, Oxidation:	499
Alkali metal compounds:	3029	Austenitic stainless steels, Phase transformations:	3037
Alkali-aggregate reactions:	2001	Austenitic stainless steels, Powder technology:	4869, 4875
Alkali-silica reaction inhibitors:	2027	Austenitizing:	1195
Alkaline earth metals:	2027	Automobiles:	4347
Alkanes:	953	Automotive components:	8, 1081, 1967, 2607
Alloy steels, Mechanical properties:	2205	Automotive components, Mechanical properties:	4523
Alloy steels, Steel making:	575	Automotive components, Microstructure:	4507
Alloying:	713	Automotive components, Powder technology:	1755
Alloying effects:	4783	Automotive engines:	4239, 4293, 4353, 4639
Alternating current:	1203,	Automotive industry:	2505
Alumina hydrate:	1087	Axial stress:	603, 2709, 4393
Aluminates:	2893	Backscattering:	1289
Aluminides, Casting:	2673, 3883	Bacteria:	2143, 2199
Aluminides, Coating:	331	Bainite:	2373
Aluminides, Coatings:	19	Ball milling:	275, 1049, 1179, 2499, 3591,
Aluminides, Composite materials:	3721	3861	
Aluminides, Mechanical properties:	521, 589	Ballistic impact tests:	2825
Aluminides, Microstructure:	307	Banded structure:	2223
Aluminides, Oxidation:	261, 613	Barite:	1081, 1793
Aluminides, Powder technology:	489	Barium compounds:	3791, 4027
Aluminides, Reactions (chemical):	3861	Barium titanate:	2259, 2655
Aluminizing:	3647	Bauxite:	2861
Aluminum, Claddings:	155	Bearing alloys, Mechanical properties:	1975
Aluminum, Impurities:	13	Bearing steels, Corrosion:	4849
Aluminum, Microstructure:	4843	Bend properties:	363, 1039
Aluminum base alloys:	1895	Bend strength:	339, 767, 927, 2241, 2541,
Aluminum base alloys, Alloy development:	2547, 3591	3567	
Aluminum base alloys, Bonding:	1901	Bending:	1231, 2393
Aluminum base alloys, Casting:	4831	Beryllium, Alloying additive:	4507, 4523
Aluminum base alloys, Cladding:	667, 885, 1255, 2233, 2321,	Billets, Microstructure:	1457
Aluminum base alloys, Composite materials:	3683, 4373	Bimetals, Powder technology:	1859
Aluminum base alloys, Corrosion:	1869	Binders (adhesives):	1397, 2785
Aluminum base alloys, Crystal growth:	521, 901, 1755, 1925, 2505,	Binding:	2785
Aluminum base alloys, Crystal lattices:	2547, 2761, 2771, 2851,	Biocompatibility:	1465, 1875, 3097, 3783,
Aluminum base alloys, Extraction:	3535, 3567, 3669, 4193,	4221	
Aluminum base alloys, Heat treatment:	4745	Biodegradation:	909
Aluminum base alloys, Joining:	2689	Biomedical materials:	4, 1049, 1465, 1605, 2283,
Aluminum base alloys, Machining:	1747	3097, 3303, 3501, 3653,	
Aluminum base alloys, Mechanical properties:	3755	3713, 3783, 3979, 4221,	
Aluminum base alloys, Microstructure:	4557	4427, 4439, 4479, 4609,	
Aluminum base alloys, Powder technology:	2613	4777	
Aluminum base alloys, Reactions (chemical):	13, 3249	Birefringence:	4889
Aluminum base alloys, Ternary systems:	2525	Bismuth, Impurities:	4843
Aluminum base alloys, Welding:	81, 1975, 3319, 3925, 4523	Bisphenols:	2357
Aluminum base alloys, Welding:	279, 1203, 1457, 3143, 4507	Bitumens:	1397, 2835, 4941
Aluminum base alloys, Powder technology:	2875, 3591	Blasting:	3755
		Blending:	4393

Block copolymers:	451, 4713	Chemical analysis:	2179, 2945
Body centered cubic lattice:	3995	Chemical bonds:	1471
Bolts, Mechanical properties:	3813	Chemical composition:	987, 1679, 1901, 2037, 2171,
Bonding strength:	1869, 2563, 3491, 3491, 4065, 4065	Chemical properties:	2347
Bone cements:	1875	Chemical vapor deposition:	4573
Borate glasses:	833	Chemistry:	421, 683, 1171, 1819, 2633,
Borides, Powder technology:	445	Chill casting:	3051, 4933
Boriding:	269	Chlorides:	1755
Boron:	689	Chlorination:	3683, 4373
Boron carbide:	3117, 4567	Chromite refractories:	2195
Boron nitride:	689, 4805	Chromium, Alloying elements:	3619
Borosilicate glasses:	1185, 1589, 2311, 3891	Chromium, Composite materials:	2861
Brakes, Materials selection:	1081	Chromium compounds:	3249, 3611
Brasses, Coating:	1347	Chromium compounds, Mechanical properties:	3437
Brazed joints, Microstructure:	2337	Chromium molybdenum steels, Phases (state of matter):	2607, 2723
Brazing:	2483, 3491	Chromium molybdenum vanadium steels, Powder technology:	657
Brazing alloys:	2337, 2409, 3491	Chromium steels, Corrosion:	2373
Breaking:	4709	Chromium steels, Heat treatment:	4869
Brick:	2055	Circuits:	4849
Brittle fracture:	235, 339	Cleavage:	269
Brittleness:	2541	Clinker:	2265
Bronzes, Corrosion:	407	Clusters:	2971
Bulk density:	2019, 2347, 2935	Coagulation:	4415
Bulk modulus:	1107, 1403	Coalescing:	3755
Bursting:	4811	Coarsening:	2979
Cactus:	1339	Coatings:	1543
Cadmium, Impurities:	4843	Cobalt, Alloying elements:	2517, 2581, 3325, 3611,
Cadmium compounds:	2353, 3449, 3845	Cobalt, Composite materials:	3891, 3965, 4175
Calcining:	1939	Cobalt base alloys, Powder technology:	1661
Calcite:	1709, 2743	Cobalt compounds:	2581
Calcium aluminum silicates:	693	Cobalt compounds, Mechanical properties:	275
Calcium carbonate:	1909, 3169	Cobalt compounds, Microstructure:	3137
Calcium chloride:	2027	Codeposition:	869
Calcium hydroxide:	1909	Coeffective force:	4581
Calcium phosphate:	1049, 1875, 1983, 3629	Coextrusion:	3721
Calcium silicate hydrate:	3851	Cohesion:	565, 2037, 3479, 4581
Calcium silicates:	2027	Cold rolling:	2143
Calorimetry:	2511	Cold working:	4003
Capacitance:	4041, 4817	Colloids:	2525, 3455
Capacitors:	4027, 4817	Colloids, Synthesis:	1925
Carbides:	3111	Color:	1695
Carbon:	173, 427, 1859, 2209, 2987	Columnar structure:	1645
Carbon, Coatings:	421	Combustion:	1045
Carbon dioxide:	4283	Communication:	3579, 4385, 4817
Carbon fiber reinforced ceramics:	4735	Compacting:	2187, 3559, 3861, 3883,
Carbon fiber reinforced plastics:	89, 597, 759, 1013, 1765, 2135, 3485, 4965	3077	
Carbon fibers:	89, 2149	Comminution:	3073
Carbon monoxide:	3089, 4319	Compacting:	1623, 2935, 4745
Carbon nanotubes:	1819, 3051	Complexation:	4021
Carbon nanotubes, Coatings:	4933	Composite materials:	1611, 1961, 2265
Carbon nitride:	1471, 2559	Composition effects:	1513
Carbon steels, Coating:	1565	Compressibility:	2001, 4013
Carbon steels, Corrosion:	3597, 4587	Compressibility (powder):	1755
Carbon steels, Joining:	13	Compressing:	2709
Carbon-carbon composites:	1231, 1737, 2215	Compression tests:	3629, 3955
Carbon-epoxy composites:	1013, 3029	Compressive properties:	3567, 3689, 4169, 4745
Carbonates:	2087, 4289	Compressive strength:	1, 589, 3653, 3955
Carbonation:	1909	Computer aided design:	35
Carburizing:	269, 2883	Computer simulation:	1097, 2019, 2541, 3029,
Carrots:	1933	3121, 3629, 3669	
Cast iron, Microstructure:	795,	Concretes:	747, 2027, 3851
Casting defects:	1255, 4373	Conducting polymers:	4951
Catalysis:	705, 1819, 2607, 4661	Contact angle:	2283, 3933, 4047, 4047,
Catalysts:	275, 1835, 1859, 1967, 1995, 2995, 4427	4407	
Cation exchanging:	1709	Contact stresses:	1499
Cations:	4027	Contamination:	713
Cavitation:	747, 1403, 2393, 3245	Continuous fiber composites:	4735
Cellular structure:	119, 165, 201, 1933	Controlled atmospheres:	4293
Cellulose:	2195, 2415	Cooling rate:	885, 1013, 2299, 2883
Cemented carbides, Crystal growth:	2581	Coordination compounds:	727
Cements:	4415	Copolymerization:	1773, 2455
Ceramic coatings:	2011, 2673	Copolymers:	183, 1793, 2455, 3199, 3741
Ceramic fiber reinforced ceramics:	461, 471	Copper:	3491
Ceramic fibers:	471, 1081, 1499, 2913, 4973	Copper, Alloying additive:	2667, 4507, 4523
Ceramic fibers, Composite materials:	2851	Copper, Alloying elements:	377
Ceramic matrix composites:	789, 3121, 4047, 4925	Copper, Brazing:	3491
Ceramic powders:	1049, 2019	Copper, Coatings:	217, 917
Ceramics:	1631, 2541, 3019, 3085, 4609	Copper, Composite materials:	3437
Cerium:	561	Copper, Corrosion:	995
Cerium compounds, Brazing:	2483	Copper, Machining:	2525
Cerium oxide:	255, 1073, 1413, 2483	Copper, Physical properties:	2401
Cermets:	3775	Copper, Welding:	1281
Chain branching:	147	Copper base alloys:	1689, 4047
Chalcogenides:	549, 937, 1513	Copper base alloys, Physical properties:	4047,
Characterization:	4, 1573, 1605, 1631, 1731, 2167	Copper compounds:	1551, 3325
Charge (electric):	2987	Copper plating:	1039, 3285
Charge transfer:	51, 921	Core-shell structure:	689, 959, 2619, 3169
		Corrosion environments:	3597
		Corrosion environments, Australia:	995
		Corrosion fatigue:	1667, 2689
		Corrosion potential:	1139, 4041, 4849

## Subject Index - 2003

Corrosion prevention:	407, 1139, 4587	3431	
Corrosion products:	407, 499, 995, 1307, 3307, 4765	693, 1383, 1457, 1529, 1617 1321, 3765	
Corrosion rate:	995, 4849	3233	
Corrosion resistance:	1007, 1097, 1383, 1667, 2337, 2689, 3219, 3257, 3619, 4587, 4725	4709	
Corrosion tests:	2845	35, 255 3755	
Corundum:	2723	3891, 3915	
Coupling (molecular):	699	1479	
Coupling agents:	533, 1447	1359, 1425	
Crack growth:	783	779	
Crack initiation:	127, 1589, 2689, 2851, 2971, 4115, 4523, 4889	789, 789	
Crack opening displacement:	3055	589, 927, 1147, 1565, 1565 4783	
Crack propagation:	235, 291, 461, 471, 575, 633, 1063, 1359, 1667, 2117, 2647, 2971, 3501, 3813, 4145, 4175, 4567	141, 141 789, 3747, 4081	
Cracking (fracturing):	183, 307, 521, 891, 1021, 1153, 1479, 1737, 1765, 1809, 3029, 4003, 4869	527, 1087, 1803, 2049, 3713, 4895	
Crazing:	2357, 4889	113, 173, 693, 987, 1057, 1219, 2767, 3085, 3495, 3677, 3769, 4027	
Creep (materials):	633, 877, 1123, 1403, 1479, 2247, 2393, 3535, 3925, 4115	1465, 4055, 4551 3831	
Creep fatigue:	1535	1431, 2259, 2835, 3341	
Creep life:	3121	217	
Creep strength:	1535, 2337, 2785, 3223, 4883	3721	
Creep tests:	3223	Diffusivity:	51, 261, 2055
Cristobalite:	1529	Dioxides:	4333
Critical temperature (superconductivity):	481	Dipole moment:	1573
Cross sections:	2161, 3769	Dislocation density:	339, 953, 2761, 3319
Crosslinking:	413, 451, 1447, 2125, 3191	Dislocation mobility:	953
Crude oil:	2209	Dislocation pinning:	3319
Crustaceans:	2087	Dislocations:	1301, 2223, 2647, 3293, 3319, 3925, 3955, 4487
Cryogenics:	1013, 2007	Dispersion:	675
Crystal defects:	2655	Dispersion hardening alloys:	2483
Crystal growth:	555, 1917, 1983	Dispersions:	2019, 4917
Crystal structure:	113, 133, 223, 621, 643, 1057, 1161, 1179, 1219, 1289, 1787, 1945, 2105, 2161, 2953, 3137, 3239, 3303	1281	
Crystallization:	223, 229, 581, 597, 693, 699, 853, 979, 1161, 1425, 1529, 1709, 1983, 2143, 2299, 2311, 2511, 2537, 2743, 2815, 3469, 3747, 3831	Dissimilar metals, Joining:	4183
Cubic lattice:	4597	Dissimilar metals, Welding:	959, 2401, 2771, 3249, 4957
Curie temperature:	4597	Dissolution:	1485, 2271
Curing:	1321, 2469	Distortion:	7, 51, 113, 261, 437, 643, 721, 727, 833, 953, 973, 1033, 1073, 1219, 1301, 1413, 1967, 2049
Current carriers:	2429, 4055	Dopants:	217
Current density:	481, 1033, 1171	Dopants, Diffusion:	555, 1731
Current efficiency:	4843	Doping:	2155
Current voltage characteristics:	485, 1033, 1507	Draw ratio:	2305
Current voltage characteristics, Environmental effects:	917	Drawing:	1679
Curvature:	4169	Dual phase steels, Microstructure:	657, 3515
Cutting resistance:	3603	Ductile brittle transition:	2155, 2971, 3055, 3567, 4523
Cyclic loads:	3455	Ductile fracture:	1281
Damage:	739, 1013, 1231, 1479, 1765, 2055, 2117, 2357, 2393, 2755, 3029, 3121, 3437	Ductility:	1689, 2505, 2647, 3257, 3319, 3567, 3813
Damage tolerance:	2547, 2547	Durability:	843, 853, 2179, 2305, 2627, 4957
Damping:	2747	Dyeing:	1721
Deactivation:	4661	Dyes:	401
Debonding:	2489, 3437	Dynamic mechanical properties:	909, 1447
Debye-Waller factor:	2001	Dynamic recrystallization:	3925, 4379
Decagonal phase:	885	Dynamic recrystallization, Field effects:	1147
Decomposition:	689, 1605, 1611, 1703, 2447, 3089, 4033, 4739, 4777	Elastic constants:	2007, 2215
Decomposition reactions:	1709	Elastic modulus:	603
Decontamination:	1709	Elasticity:	2489, 4777
Defects:	2117, 2429, 2851	Elastomers:	65, 803
Deformation:	13, 165, 1185, 1367, 1367, 1403, 1737, 1793, 2105, 2161, 3437, 4883	Electric arc melting:	331
Deformation mechanisms:	207, 307, 817, 1021, 1123, 1479, 1895, 1953, 3925, 3955, 4713	Electric arcs:	4805
Deformation resistance:	81, 877	Electric batteries:	3013
Degradation:	1403, 1653, 2233, 2321, 3089, 3121, 3653	Electric connectors:	507
Degree of crystallinity:	2135	Electric discharge machining:	1679
Degree of polymerization:	3729	Electric fields:	485, 1147, 3085
Delaminating:	8, 4735, 4869, 4875	Electric furnaces:	1673
Dendritic structure:	1559, 1679, 2517, 2639, 3239, 3263, 3579, 4385, 4507	Electric potential:	4603
Densification:	101, 589, 721, 2271, 2661, 2727, 3111, 3269, 3325,	Electrical conductivity:	7, 107, 485, 527, 549, 675, 1073, 1087, 1507, 2455, 2627, 2727, 2901, 3431, 3449
Electrical properties:	1661, 1661, 3933, 4831	Electrical resistance:	3709
Electrical steels, Thermal properties:	275, 343, 705, 4951	Electrochemistry:	275, 343, 705, 4951
Electrodeposition:	141, 141, 2423, 2559	Electrodeposition:	141, 141, 2423, 2559
Electrodes:	7, 705, 2439	Electrodes:	7, 705, 2439
Electrodiffusion:	3521	Electroless coatings, Electrical properties:	2703
Electroless copper plating:	2703	Electroless copper plating:	2703
Electrolytes:	1413, 2461, 3007, 4301, 4639	Electromagnetic absorption:	833
Electron beams:	83	Electron mobility:	3845
Electron paramagnetic resonance:	727, 727, 1967, 2607	Electron paramagnetic resonance:	727, 727, 1967, 2607

Electronic devices:	1781, 1803, 4609	Filaments:	2105
Electronic devices, Fabrication:	217, 917, 1135, 1269	Filled plastics:	533, 2571, 2893
Electronic structure:	727, 1175	Filler metal:	3491
Electrophoretic deposition:	2803	Films:	485, 549, 739, 823, 937, 1045
Electroplating:	1039	Filtration:	767, 4557
Electrowinning:	4843	Fineness:	2149
Elongation:	1793, 2469, 2639, 3925, 4365	Finite element method:	1747, 2851, 3629, 3669, 3729, 4393
Embedding:	1243	Fire resistance:	1249, 2195, 2893
Embrittlement:	1493, 2971, 3527, 3611	Firing:	1049, 1523
Embrittlement, Environmental effects:	869	Flame retardants:	1249, 1485, 2195, 2893, 4451
Emissions control:	4239, 4247, 4259, 4293, 4347	Flammability:	2187
Emissivity:	1175	Flattening:	3629
Emulsion polymerization:	4911	Flexibility:	2283, 2825
Encapsulation:	959, 1597	Flexing:	1589
Energy consumption:	3461, 4603	Fluid flow:	667, 2517
Engine components:	3029	Fluids:	4461
Engines:	4259	Fluorination:	4965
Enthalpy:	1377, 4777	Foaming:	1249, 2875, 4745
Environmental effects:	1	Foams:	3783
Epitaxial growth:	683	Food processing:	245
Epitaxy:	3663	Formability:	81, 2305, 3591
Epoxy resins:	1, 147, 413, 1063, 2809, 3103, 4451	Foundry practice:	2233, 2321, 3683, 4373
Epoxy resins, Coatings:	1097	Fractal analysis:	6, 2793, 3469
Epoxy resins, Composite materials:	533	Fractography:	1063
Equal channel angular pressing:	2613	Fracture mechanics:	2117, 2667, 3813, 4003
Equiaxed structure:	941, 4379	Fracture mechanisms:	2415
Erosion:	4849	Fracture strength:	89, 461, 471, 561, 1231, 2135, 4075, 4087
Erosion rate:	747,	Fracture toughness:	1, 65, 183, 657, 767, 1117, 1359, 1631, 1787, 2117, 3111, 4567, 4735
Erosion resistance:	2861	Fractures:	1493, 2563
Esterification:	3915	Fragmentation:	3169
Etching:	4933	Free energy:	2205
Ethylene vinyl acetates:	2893	Freeform fabrication:	1517
Europium:	1731	Freezing:	245
Eutectics:	1543	Frequencies:	1661, 1661
Eutectoids, Phases (state of matter):	2925	Friction:	1081, 3629, 4965
Evaluation:	747, 1097	Friction stir welding:	941, 4183, 4379
Exhaust systems:	2607, 4661	Friction welding:	1147, 1281, 2563
Exothermic reactions:	1377, 2187	Fuel cells:	507, 2483, 2901, 2995, 3775, 4661, 4811
Expansion:	2875, 3877	Fuel cells, Brazing:	2483
Explosive cladding:	1869	Fuel consumption:	4247
Explosive welding:	13	Fuels:	3883
Exposure:	2861, 3597, 4765	Fullerenes:	921
Extraction:	3461	Functionally gradient materials:	2803, 4065
Extruders:	3169	Functionally gradient materials, Powder technology:	4869
Extrusion:	4451	Functionally gradient materials, Thermal properties:	4193
Extrusions:	767	Functionally gradient materials, Welding:	4065
Extrusions, Mechanical properties:	1975	Furnace brazing:	2337
Fabrication:	1727	Furnaces:	555
Fabrics:	2179, 2199, 2205	Gallium, Dopants:	1895,
Face centered cubic lattice:	275	Gallium arsenide:	683
Failure:	4, 1397, 1589, 1631, 2117, 2771, 2913, 3013, 3603	Gallium compounds:	3663
Failure analysis:	1021, 4163	Gallium nitride:	343
Fatigue (materials):	291, 575, 633, 817, 1397, 4075, 4163, 4725	Gallium selenides:	1507
Fatigue (materials), Processing effects:	1153	Galvanized steels, Coating:	1097
Fatigue failure:	2689, 2851, 3183, 3501, 4115, 4145	Gamma rays:	1431
Fatigue life:	1667, 2689, 4157, 4941	Garnet:	2331
Fatigue strength:	1787, 3183, 3455	Gas chromatography:	2205
Fatigue tests:	1667, 2689, 2755, 4941	Gas metal arc welding:	2771
FCC metals, Microstructure:	2223	Gas pipelines, Materials selection:	127
Ferrite:	2373	Gas tungsten arc welding:	3579
Ferrites:	29, 1087, 1523, 2037, 3063, 4221, 4499	Gas turbine engines, Materials selection:	291
Ferritic stainless steels, Brazeing:	2483	Gasoline engines:	4247
Ferroelectric materials:	721, 987, 1057, 1171, 1219, 1295, 1523, 4353	Gelation:	2571
Ferroelectricity:	391, 1853, 4895	Gels:	979, 3851
Ferromagnetism:	4535	Geometry:	1727
Ferrous alloys, Corrosion:	1307, 3219	Germanium base alloys, Thermal properties:	2511
Ferrous alloys, Heat treatment:	155	Germanium compounds:	1689
Ferrous alloys, Joining:	3249	Glass:	533, 1063, 1425, 1513, 1529, 1551, 1781, 3103, 3131, 3783
Ferrous alloys, Magnetic properties:	3479, 4535	Glass ceramics:	693, 843, 853, 2007, 2305, 3081, 3469, 4221
Ferrous alloys, Microstructure:	1161, 4581	Glass fiber reinforced plastics:	207, 1765
Ferrous alloys, Oxidation:	507	Glass fibers:	363
Ferrous alloys, Powder technology:	377	Glass transition temperature:	2311, 2511, 2597, 2627
Fiber composites:	2963	Glass-epoxy composites:	2755
Fiber composites, Extrusion:	3669	Gold:	4125
Fiber composites, Mechanical properties:	3437, 3535	Gold, Coating:	1727, 2423
Fiber orientation:	2135	Gold, Physical properties:	1243
Fiber technology:	89, 2149	Gold, Recovering:	4493
Fiber-matrix adhesion:	2755	Gold base alloys, Magnetic properties:	2679
Fibers:	1617, 2125, 2187, 3603, 4365	Gold plating:	4493
Fibrous structure:	119, 165, 541	Graft copolymers:	3515
Field effect transistor:	1853	Grafting:	4471
Field effects:	485	Grain boundaries:	323, 1359, 1367, 1367, 1535,
Field strength:	2627		

## Subject Index - 2003

Grain boundary migration:	1559, 1689, 1895, 2461, 2679, 2727, 3269, 1895	Ilmenite:	2353
Grain boundary segregation:	3965	Immersion coating:	1239
Grain boundary sliding:	3925	Impact:	2223, 2547, 2547, 2639, 3515, 4965
Grain growth:	885, 1117, 1367, 1367, 1391, 1543, 1653, 1747, 1953, 2259, 2367, 2581, 2727, 3069, 3089, 3245, 3269, 3965, 4895, 4973	Impact strength:	147, 183, 351, 533, 1383, 1485, 1793, 2597, 3527, 3611, 3697, 4013, 4863
Grain orientation:	3579, 4895	Impact tests:	1493, 3527
Grain refinement:	4379, 4725	Impedance:	1661, 1661, 2265
Grain size:	113, 613, 1147, 1161, 1367, 1367, 1493, 1925, 1953, 2043, 2259, 2461, 2581, 2613, 3257, 3319, 3325, 3431, 4379, 4725	Impregnation:	173, 3729, 4551
Grain structure:	767, 1117, 2373, 2689, 3143	Impurities:	1301, 1727, 2429, 3117, 4487
Grain sub boundaries:	2747	In vitro testing:	2283, 4697
Granulation:	3169	In vivo testing:	4697
Graphite:	1081, 2447, 2785, 3245, 3279, 4735	In vivo tests:	1875
Graphite fiber reinforced plastics:	877	Inclusions:	795, 2861
Graphite-epoxy composites:	877	Indentation:	235, 901, 1185, 1565, 1565, 1589, 1787, 3755, 4137, 4713
Grinding:	1185, 2525	Indium, Refining:	4843
Grinding wheels:	789, 789	Indium base alloys:	2747
Growth:	4805	Indium compounds:	4021
Growth rate:	1747, 2367, 3239	Indium phosphide:	683
Gypsum:	3871, 4499, 4957	Inert atmospheres:	4925
Halides:	2001, 4487	Infiltration:	927, 2331, 3567, 3669
Hardening:	2247	Infrared spectroscopy:	223
Hardness:	823, 1377, 1383, 2001, 2639, 2673, 2761, 2935, 3117, 4137, 4379, 4567, 4725, 4925	Inhibition:	4831
Hardness tests:	1185, 4523	Inhibitors:	407, 4831
Hardness tests, Size effects:	901	Initiation (polymerization):	4471
Heat affected zone, Mechanical properties:	2771	Injection molding:	195, 201
Heat affected zone, Microstructure:	4183	Inoculation:	1117, 1391
Heat affected zone, Phases (state of matter):	2373	Inorganic compounds:	3097
Heat resistant alloys, Phases (state of matter):	1579	Inorganic salts:	2979
Heat transfer:	3683, 4373	Intercalation compounds:	909, 3809
Helical springs:	3	Interface reactions:	1269, 1281, 2259, 2337, 2409, 2483, 2483, 3249, 3303, 3515
Heterogeneity:	2723	Interfaces:	8, 917, 1523, 1755, 1793, 1869
Hexagonal lattice:	1425	Interfacial shear strength:	759, 4965
High cycle fatigue:	1667	Interfacial shear stresses:	597
High speed tool steels, Powder technology:	4869, 4875	Interfacial strength:	183, 1063, 4439
High strength low alloy steels, Mechanical properties:	817, 2667	Intergranular corrosion:	1007, 3619
High strength low alloy steels, Microstructure:	323	Intergranular fracture:	461, 1689
High strength steels, Mechanical properties:	1493	Intergranular fracture, Microstructural effects:	323
High strength steels, Powder technology:	4869	Intergranular structure:	261, 323, 643, 1359
High temperature:	499, 877, 965	Intergranular structure, Welding effects:	941
High temperature effects:	973	Interlayers:	13, 533, 597, 1849
Historical artifacts:	407, 1307	Intermetallic phases:	275, 279, 1543, 4507
Historical metallurgy:	3307	Intermetallics:	3063
Homogeneity:	4033	Intermetallics, Brazing:	2409
Honeycomb construction:	2547, 2953	Intermetallics, Casting:	331
Honeycomb construction, Mechanical properties:	2547	Intermetallics, Coating:	19
Hot extrusion:	1975	Intermetallics, Coatings:	3721
Hot forming:	3245	Intermetallics, Composite materials:	521, 589
Hot isostatic pressing:	589, 2661, 3111	Intermetallics, Mechanical properties:	307, 657, 869
Hot pressing:	1781, 1961, 2209, 3073, 3979	Intermetallics, Microstructure:	261, 613, 4581
Hot rolling:	3647	Intermetallics, Oxidation:	489, 1333
Hot working:	81	Intermetallics, Powder technology:	445, 3861
Humidity:	1, 917, 1909, 2205, 2247, 4283, 4319, 4407, 4587	Intermetallics, Reactions (chemical):	3647
HVOF spraying:	363, 1081, 1605	Internal friction:	3689
Hybrid composites:	4499	Internal friction, Deformation effects:	1895
Hydrates:	57, 229, 4499	Interpenetrating networks:	413, 3097
Hydration:	2591	Interstitial impurities:	51
Hydrocarbons:	1819	Ion beam assisted deposition:	2011
Hydrodynamics:	4353	Ion exchanging:	515, 2815, 2907
Hydrogen:	1901	Ionic conductivity:	107, 1073, 1413, 3007, 3689, 2987
Hydrogen, Sorption:	3809, 3973	Ions:	3955
Hydrogen bonding:	2667, 3813	Iridium base alloys, Mechanical properties:	705
Hydrogen embrittlement:	2499	Iridium compounds:	1347
Hydrogen storage:	51	Iron, Composite materials:	4557
Hydrogenation:	4407, 4677	Iron, Recovering:	1623, 2219
Hydrolysis:	1439, 2743, 3063, 3973	Iron compounds:	4581
Hydrophobicity:	1945	Iron compounds, Microstructure:	445
Hydrostatic pressure:	1203	Iron compounds, Powder technology:	1995, 2723
Hydrothermal reactions:	1195	Irradiation:	1611, 2447
Hydroxides:	3085, 3709	Isotopes:	515, 3341
Hydroxyapatite:	1	Kaolinite:	2293
Hypereutectic structures:	4545	Kerr magneto optical effect:	1315
Hypo-eutectic structures:	3303, 3653, 3713, 3979	Ketones:	2439
Hypo-eutectoid structures:	1945	Kinematics:	1747
Hysteresis:	1203	Kinetics:	101, 699, 1391, 1747
Ice:	1195	Knoop hardness:	1565
Illumination:	3085, 3709	Ladle metallurgy:	713
	4541	Lamb waves:	1765
		Lamellar structure:	2409, 2717, 3641, 3647, 4713, 4889
		Laminates:	1013, 1063, 1765, 1781, 3029, 4735
		Laminating:	1781
		Lanthanum compounds:	1597, 1939, 2259, 2901,

Laser beam heating:	3495	Melt blends:	2597
Laser processing:	155	Melt spinning:	331, 2143, 2149
Lasers:	921, 1517, 1953, 2875, 4783	Melting furnaces:	713
Lattice parameters:	1171	Melting points:	1269, 2001
	133, 621, 1057, 1679, 2001,	Melts:	1885, 1901
	2499, 2767, 3137, 4597	Membranes:	1073, 2401, 4677
Lattice vacancies:	3755	Metal matrix composites, Mechanical properties:	1383, 2505, 2647, 2851,
Laves phase:	657		3535
Leaching:	959, 2079	Metal matrix composites, Microstructure:	2761
Lead (metal), Alloying elements:	2511	Metal matrix composites, Powder technology:	1755, 3073
Lead (metal), Impurities:	4843	Metal matrix composites, Welding:	2771
Lead compounds:	2767	Metal powders:	35, 445, 565, 589
Lead glass:	1597	Metallic glasses, Synthesis:	1377
Lead zirconate titanates:	1219, 1787, 2241, 2571, 3269, 3769	Metallic glasses, Thermal properties:	2511
Levitation casting:	885	Metallizing:	217, 917, 3285
Liquid phase sintering:	377, 1117, 2271, 2367	Metallurgical constituents:	965
Liquid phases:	1543, 1755, 2727, 3325	Metalorganic compounds:	1249, 1859
Lithium:	515	Metastability:	643
Lithium compounds:	1425, 2305, 2627, 2815, 3883, 4573, 4597	Metastable phases:	1161, 2723, 2925
Lithium oxide:	2537	Microalloying:	1755
Lithography:	4471	Microanalysis:	3851
Loose powder sintering:	767, 1597, 2661	Microcellular foams:	4013
Loss modulus:	1849	Microcracks:	1013, 1431, 1787, 2647, 2953, 3121
Lost foam casting:	667, 2233, 2321	Microelectromechanical systems:	4, 4075, 4081, 4087, 4115, 4125, 4129, 4137, 4145, 4157, 4163, 4169, 4603
Low carbon steels, Corrosion:	4849	Microgravity, Environment:	377
Low carbon steels, Machining:	2525	Microhardness:	657, 941, 2409, 2717, 2771, 4713
Low carbon steels, Mechanical properties:	4003	Micromachining:	4289
Low pressure:	2401	Microstrain:	4849
Low temperature:	1, 133, 195	Microstructural analysis:	581, 727, 795, 4507, 4817
Lubrication:	1667	Microstructural analysis, Automation:	1289
Machining:	1353	Microstructural effects:	339, 1117, 2001
Macroporosity:	3783	Microwave absorption:	693, 2429
Magnesite refractories:	2861	Microwave sintering:	101, 1033
Magnesium:	1737	Miniatrization:	4247
Magnesium, Alloying additive:	4507, 4523	Mischmetal, Powder technology:	2499
Magnesium, Impurities:	4843	Miscibility:	2597, 2809, 4757
Magnesium, Powder technology:	2499	Mixed alkali effect:	833
Magnesium aluminum silicates:	1803, 2953, 4863	Mixed oxides:	621, 727, 833, 843, 853, 1033, 1057, 1513, 1917, 1939, 1967
Magnesium base alloys, Composite materials:	1383, 2647	Mixing:	1377, 1961
Magnesium base alloys, Powder technology:	1179	Modification:	2167
Magnesium base alloys, Welding:	941, 4379	Modulus of elasticity:	1039, 1107, 1321, 1403, 1565, 1565, 1589, 1737, 1933, 2597, 3019, 3019, 3117, 3485, 3629, 4075, 4125, 4169
Magnesium hydroxide:	2893, 4957	Modulus of rupture:	1961
Magnesium oxide:	3, 3081	Modulus of rupture in bending:	8, 1485, 1793, 3111, 3697, 4567
Magnetic alloys, Powder technology:	445	Moisture content:	57
Magnetic anisotropy:	1315	Molding parameters:	3729
Magnetic cores:	4905	Molds:	667
Magnetic fields:	1347, 2679	Molecular composites:	541, 4013
Magnetic films, Materials selection:	1315	Molecular dynamics:	3641
Magnetic flux:	3479	Molecular structure:	147, 451
Magnetic induction:	3709	Molecular weight:	2233
Magnetic permeability:	2219, 4535, 4597	Molybdenum, Alloying elements:	3611
Magnetic properties:	29, 1171, 2037	Molybdenum, Ternary systems:	3995
Magnetic structure:	2679	Molybdenum base alloys, Oxidation:	2063
Magnetic testing:	3037	Molybdenum compounds:	3473, 4347
Magnetization:	1315	Monitoring:	4, 2845, 4293
Magnetization, Corrosion effects:	565	Monoclinic lattice:	3239
Magnetoresistivity:	2679	Montmorillonite:	909, 1849
Manganese:	4817	Morphology:	4, 6, 65, 183, 195, 201, 307, 331, 351, 377, 413, 521, 541, 589, 891, 965, 973, 1033, 1529, 1793, 1859, 2019, 2087, 2209, 2311, 2357, 2525, 3641, 3851, 3891, 3955, 3965, 4535, 4581, 4883
Manganese compounds:	2037, 2815	Mullite:	767, 1673
Manganese dioxide:	255	Multilayers:	561, 683, 1063, 1471, 1523, 1853
Manganese steels, Mechanical properties:	3877	Nanocomposites:	909, 927, 1045, 1849, 2143, 2299, 2619, 3097, 3183, 3245, 3303, 4451, 4863
Manganese steels, Steel making:	713	Nanomaterials:	6, 643, 689, 779, 1939, 2043, 3211, 3473, 3485
Manufacturing:	1517	Nanomaterials, Coating:	2423
Marine environments:	4765	Nanomaterials, Microstructure:	1161
Martensite:	2373	Nanomaterials, Physical properties:	1243
Martensitic stainless steels, Brazing:	2337	Nanomaterials, Powder technology:	1179, 1859
Martensitic transformations:	2717, 3037	Nanomaterials, Synthesis:	1645
Martensitic transformations, Corrosion effects:	1333	Nanostructure:	6, 275, 613, 1161, 1367, 1367, 1909, 1917, 3319
Masonry:	2055	Nanotubes:	4805
Mass:	1457		
Material removal rate (machining):	1185		
Mathematical analysis:	1953, 2105, 2469, 2639, 3223, 4379, 4849		
Mathematical models:	81, 155, 307, 339, 633, 675, 891, 901, 1021, 1097, 1107, 1123, 1135, 1185, 1195, 1301, 1321, 1499, 1819, 1933, 2019, 2049, 2247, 2461, 2525, 2541, 2703, 2913, 3183, 3199, 3269, 3629, 3709, 3729, 4003, 4163, 4169, 4175, 4365		
Mathematical models, Mechanical properties:	3567		
Mechanical alloying:	195, 275, 613, 1179, 2499, 2661		
Mechanical tests:	3689		
Mechanisms:	127, 155, 235, 291, 407, 461, 471, 549, 633, 747, 803, 1353, 1507		
Melt blending:	183, 909		

## Subject Index - 2003

Natural polymers:	2	Palladium, Physical properties:	2401
Natural rubber:	1447, 2415, 2469	Paper products:	2171
Near net shaping:	1517	Papermaking:	119
Neodymium compounds:	1087	Paramagnetism:	2219, 2679, 4535
Neodymium compounds, Powder technology:	445	Partial pressure:	3051
Neural networks:	4479	Partially stabilized zirconia:	3
New technology:	4471, 4479, 4609	Particle shape:	229, 675, 795, 1457
Nickel:	3257, 3769, 3775, 4129,	Particle size:	445, 565, 1859, 2619, 2907,
	4137	3131, 3325, 3831, 4507,	
Nickel, Alloying additive:	4507, 4523	4557, 4857, 4917	
Nickel, Coating:	1239	Particle size distribution:	1457, 2143, 2199, 3169,
Nickel, Composite materials:	3073		3653
Nickel, Corrosion:	4041	Particles:	1819
Nickel, Magnetic properties:	1315	Particulate composites:	533, 675, 1597, 1631, 1673,
Nickel, Metal working:	1953		2619, 2825, 3103, 3545,
Nickel, Microstructure:	2223		3653, 4567
Nickel, Oxidation:	565, 1479	Particulate composites, Coatings:	1347
Nickel base alloys:	4065	Particulate composites, Mechanical properties:	521, 901
Nickel base alloys, Coating:	3721, 3797	Particulate composites, Microstructure:	1925
Nickel base alloys, Coatings:	1661	Particulate composites, Powder technology:	589, 2073, 4745
Nickel base alloys, Crystal growth:	2517, 4385	Passivation:	1307, 4041
Nickel base alloys, Mechanical properties:	291, 4883	Pastes:	2247, 3871
Nickel base alloys, Powder technology:	35, 3861, 4211	Patterning:	1295
Nickel base alloys, Welding:	4065	Pavements:	1397
Nickel chromium molybdenum steels, Mechanical properties:	1493	Peeling:	4709,
Nickel chromium molybdenum steels, Powder technology:	4869	Pellets:	2331
Nickel compounds:	1803, 4055, 4811	Penetration:	2401
Nickel compounds, Coatings:	3721, 4783	Percolation:	3469
Nickel compounds, Composite materials:	521, 589	Permeability:	667, 739, 1073, 2489, 4307,
Nickel compounds, Microstructure:	261, 4581		4603, 4677
Nickel compounds, Oxidation:	1333	Perovskite structure:	481, 621, 721, 1853, 1939,
Nickel compounds, Powder technology:	3861		2353, 2767, 2901, 3431,
Nickel oxide:	779		3791, 4027, 4661, 4677
Nickel plating:	507, 1039	Peroxides:	4709
Niobates:	391, 481, 621, 1523, 3809	Petroleum engineering:	3915
Niobium, Ternary systems:	3995	pH effects:	127, 2079
Niobium carbide:	4925	Pharmaceuticals:	57,
Niobium compounds, Mechanical properties:	657	Phase assemblages:	3223
Nitrides:	3473	Phase decomposition:	1945, 2925
Nitriding:	689	Phase diagrams:	4461, 4581
Nodular iron, Corrosion:	1667	Phase ratio:	279
Nodular iron, Mechanical properties:	351, 2971	Phase separation:	65, 541, 1203, 2311, 2809,
Nondestructive testing:	1013		2979, 3469, 3891
Nonferrous metals, Corrosion:	3219	Phase stability:	3527, 4507
Nuclear reactor components, Mechanical properties:	1493	Phenol formaldehyde resins:	4551
Nucleation:	1391, 1425, 1529, 1645,	Phenolic resins:	759, 1081
	1925, 1983, 2619, 2743,	Phosphate glass:	1983, 2079, 3233
	3169, 3469, 3527	Phosphates:	223, 229, 515, 2087, 2785
Nuclei:	2537	Phosphorus pentoxide:	2079
Nylon 6:	739, 3515	Photocatalysis:	1611, 2429, 3545, 3945,
Nylon 66:	207, 541, 2597		4493
Nylons:	4365	Photochemistry:	93
Olefinic thermoplastic elastomers:	8	Photoconductivity:	93, 527, 921, 2429, 4021
Opacity:	3103	Photodegradation:	3545
Optical band gap:	1931	Photoelectric cells:	93
Optical bandgap:	937	Photoelectric effects:	4203
Optical fibers:	4603	Photoluminescence:	1175, 3663, 3741, 4493
Optical materials:	4, 1243, 3741, 3831	Photolysis:	1703
Optical properties:	391, 401, 1243, 3449, 3845	Photonics:	401, 937, 1045
Optoelectronics:	683	Photosensitivity:	3341
Order disorder:	6, 2219, 3791, 3995	Piezoelectric ceramics:	1787
Organic binders:	2293	Piezoelectricity:	987, 2241
Organic compounds:	2125, 3677, 4709	Pitting (corrosion):	2689
Organic fiber reinforced plastics:	1397, 3697	Plants (organisms):	2489, 3159, 3915, 4739
Organic fibers:	2, 2945, 3903, 4541	Plasma processing:	421, 445, 759
Organic materials:	451, 1339, 1933	Plaster:	3871
Organic salts:	3293	Plastic coatings:	1, 485, 2423
Organic/inorganic hybrid polymers:	1773	Plastic deformation:	81, 2155, 2505, 2709, 3037,
Orientation:	1731		3319
Orientation relationships:	165, 817, 1289, 1471, 3143	Plastic foam:	201
Oriented fiber composites:	1737	Plasticity:	4, 1953, 2851, 3629, 4129,
Orthorhombic lattice:	2353, 4597		4137
Overaging:	965	Plating bath wastes:	4493
Oxidation:	343, 1551, 1885, 1967, 2455,	Platinum:	2995
	2607, 3233	Platinum, Coatings:	3797
Oxidation rate:	489, 507, 1333, 1653, 1673,	Platinum, Powder technology:	1859
	4973	Poissons ratio:	1107, 1403, 3629
Oxidation rate, Size effects:	565	Polarization:	3233, 4905
Oxidation resistance:	173, 657, 1653, 3797	Pole figures:	1289
Oxidation resistance, Alloying effects:	2063	Polishing (finishing):	4933
Oxide coatings:	489, 499, 507, 565, 2063	Pollutants:	3597
Oxides:	101, 173, 705, 727, 1773,	Pollution abatement:	4, 3159, 4271, 4333, 4353
	2607, 2633, 2727, 3315,	Polyacrylamides:	1045, 2571, 4033
	3325, 3495, 3791, 4055,	Polyacrylates:	3007
	4325, 4347, 4611, 4661,	Polyamide resins:	1605, 2117, 2597, 3183,
	4811, 4895		3303, 4451
Oxides, Brazing:	2483	Polyamide resins, Coatings:	1097
Oxygen:	4271	Polyamide resins, Composite materials:	2547
Oxynitrides:	1425	Polyanilines:	2455
Pack cementation:	19, 3721	Polybutylene terephthalates:	183, 2597
Packaging:	1781	Polycarbonates:	183, 195, 1431, 1485, 2357,
Painting:	8		

Polycrystals:	4451	Raw materials:	451
Polyester resins:	1559, 1689	Reaction kinetics:	3131, 3315, 3619, 4499, 4739
Polyetheretherketones:	65, 1573, 1961	Reaction mechanisms:	141, 1611, 2499, 3559, 3861
Polyetherketoneketones:	195, 2135, 2149	Reactive processing:	427, 1447, 1859, 3861
Polyetherketoneketones:	4013	Reactivity:	3851, 4661
Polyethersulfones:	65	Reactors:	1819
Polyethylene oxides:	699, 4451	Recovery:	2709
Polyethylene terephthalates:	1809	Recrystallization:	613, 941, 1747, 1925, 1953, 2613
Polyethylenes:	2155, 2299, 2597, 3169, 3199, 4393, 4451, 4757,	Recycling:	1397, 3461
	4863	Reducing atmospheres:	1645
Polyimides:	3729	Reduction (chemical):	1551, 1885, 1967, 1995
Polymer blends:	93, 147, 183, 195, 413, 541, 699, 803, 1485, 2793, 2809, 3515, 4713, 4757, 4863	Refineries, Materials selection:	1007
Polymer matrix composites:	401, 1021, 1081, 1321, 1793, 3653, 3729, 3765, 4013, 4917	Reflectivity:	4541
Polymerization:	2439, 2809, 4863	Refractivity:	937, 2627, 3103
Polymers:	4, 3191, 4427, 4439, 4471	Refractories:	2293
Polymers, Coatings:	1727	Refractory metals:	713
Polymethyl methacrylates:	401, 2563, 3515, 3741	Reinforced concrete, Corrosion:	3721
Polyphenylene resins:	2105, 2187, 4951	Reinforcement:	2845, 3521, 4765
Polypropylenes:	363, 541, 597, 803, 1793, 2143, 2161, 2167, 3183, 3485, 3697, 4451, 4889	Reinforcing steels, Composite materials:	3191
Polysilanes:	1447, 2591, 3199, 4407	Reinforcing steels, Corrosion:	4765
Polystyrene resins:	201, 581, 891, 959, 1849, 3055, 4451, 4713, 4911	Relaxation:	2845, 3521
Polyurethane resins:	451, 1465, 1631, 3007, 3933, 4451	Repair welding:	1661, 1661, 4757
Polyvinyl acetates:	959	Reproducibility:	2337
Polyvinyl chlorides:	633, 699, 2563, 2893, 4451	Residual stress:	4283
Polyvinyl fluorides:	485, 4965	Residues:	1, 421, 901, 1321, 1359, 1367, 1367, 1809, 2117, 2667, 2689, 3455, 4065, 4065, 4169
Polyvinyl resins:	1063, 4021	Resin transfer molding:	2209
Polyvinylidene chlorides:	2987	Resistance heating:	3729
Pore formation:	1529	Resistivity:	173
Porosity:	437, 1255, 1617, 1695, 2293, 2337, 2347, 2483, 2483, 2785, 2875, 2979, 3097, 3891, 4587, 4765, 4875, 4925	Retained austenite, Mechanical properties:	2265, 2461, 2559, 2703, 2727, 3089, 3479, 3791, 4611, 4973
Porous materials:	173, 1933, 1961, 3019	Reviews:	3611
Porous materials, Mechanical properties:	3019	Rheological properties:	391, 1367, 1367, 1835
Portland cements:	1909, 2247, 3851, 4957	Rhombohedral lattice:	3515, 4461, 4941
Positron annihilation:	581, 3755	Rigidity:	2353
Potassium chloride:	953, 1301	Roads:	3
Potassium compounds:	2627, 3641, 3809	Roasting:	1397
Powder blending:	1049, 1179, 3591	Rockwell hardness:	979, 2673, 4911
Powder coatings:	4587	Room temperature:	351, 965
Powder compacts:	2271, 4745	Roughness:	4319
Powder injection molding:	4869	Rubber:	2525, 2793, 3455
Powder metallurgy:	657, 1517, 1755	Rusting:	1397, 2793, 4393
Powder metallurgy parts:	521, 2063	Ruthenium:	3597
Powder metallurgy parts, Mechanical properties:	2505	Rutile:	1721
Powders:	1731	S N diagrams:	1695, 4415
Precipitates:	279, 323, 1579	Saccharides:	1667
Precipitation:	1543, 1917, 2331, 3831, 3955, 3979	Sacrificial anodes:	57
Precipitation hardening:	3319	Salt spray tests:	1139
Precipitation hardening alloys:	279	Salt water:	4587
Precipitation hardening steels, Mechanical properties:	965	Samarium compounds:	2055
Precursors:	141, 427, 689, 779, 823, 927, 979, 1391, 1653, 1731, 1939, 2591, 4739	Scale (corrosion):	2461, 3431
Preferred orientation:	4393	Scavengers:	499, 507, 1479, 3619
Preforming:	759	Scrap, Recycling:	4493
Pressing:	1597, 3081	Scratching:	4557
Pressure molding:	427	Screen printing:	803
Pressure vessels, Mechanical properties:	1493	Sea water:	3713, 4325, 4333
Process parameters:	141, 141, 255, 427, 575, 667, 1353, 2233, 2321, 2525, 3669, 3945, 4325	Segregations:	4765
Processing effects:	195, 1087	Seizing:	261, 323, 1203
Projectiles:	2223	Selective laser sintering:	1975
Protective coatings:	2785, 3797, 4587, 4783	Selenides:	35
Protective coatings, Materials selection:	1097	Self-propagating synthesis:	527, 937
Pull out tests:	4965	Semiconductors:	1377, 2073, 3111, 3559, 3647, 4065, 4065
Pulping:	119	Semiconductivity:	1175
Purification:	4843	Semiconductors:	4041
Pyrolysis:	779, 1391, 2187, 2347, 2591, 2655, 3089, 3211, 4925	Sensitizing:	527, 1507, 3341, 4347
Quantitative analysis:	2581	Sensors:	1007, 1721, 3527
Quasicrystals, Microstructure:	885	Shape memory alloys, Mechanical properties:	4, 4239, 4247, 4259, 4271, 4283, 4289, 4293, 4301, 4307, 4319, 4325, 4333, 4347, 4353, 4611, 4639
Quaternary systems:	6	Shape memory alloys, Oxidation:	3019
Quenching (cooling):	2511	Shear modulus:	1333
Radiation effects:	921, 1431, 2215	Shear properties:	3, 1107, 1403
Radioactive waste:	843, 853, 1597, 3223	Shear rate:	13
Raman spectroscopy:	795	Shear strength:	1485, 2571, 3871
Rapid prototyping:	35	Shear stress:	1869
Rapid solidification:	331, 1517, 3995	Shear viscosity:	3, 3603
Rare earth compounds:	223, 229	Sheet metal, Coating:	1485, 3269

## Subject Index - 2003

Silica:	1447	Spinning (materials):	2125, 2357
Silica fume:	3159	Spinodal decomposition:	1367, 1367
Silica glass:	2537, 2627	Spray coating:	3285
Silicates:	727, 909, 1551, 2007, 4221, 4917	Spray drying:	1623
Silicates, Coatings:	739	Sprayed coatings:	1565
Silicides:	1623	Sprayed coatings, Mechanical properties:	1565
Silicides, Coatings:	19	Springs (elastic):	2215
Silicon:	51, 783, 4081, 4115, 4145, 4157, 4169	Sputtering:	1471
Silicon, Alloying elements:	1255	Squeeze casting:	1383
Silicon, Coating:	917	Stability:	2761
Silicon carbide:	789, 1117, 1653, 1673, 2447, 2591, 2661, 3089, 3121, 4033, 4047, 4065, 4075, 4087, 4735, 4739, 4973 4783	Stabilization:	1307, 1781
Silicon carbide, Coatings:	901, 2505, 2647, 2761, 4745	Stainless steels:	2483
Silicon carbide, Composite materials:	4065	Stainless steels, Coating:	4933
Silicon carbide, Welding:	959, 1499, 1809, 1961, 2299, 2619, 2825, 2979, 3081, 3097, 3461, 3545, 4407, 4677	Statistical analysis:	2541, 2913
Silicon dioxide:	1403, 2393, 4087 4905 3709 1773, 3933, 4925 2143, 3233 4507, 4523 2423 3307, 4493 1645 1803 1039, 4493 1499	Statistical methods:	4479
Silicon nitride:	391, 783, 953, 1301, 2655, 4487 4385 4883	Steel making:	1885
Silicon steels, Magnetic properties:	561, 1087, 4567	Steels, Corrosion:	127, 1139
Silicon steels, Thermal properties:	427, 693, 721, 927, 1731, 1755, 2043, 2049, 2209, 2461, 2673, 2935, 3081, 3269, 3325, 3775	Steels, Heat treatment:	2883
Silicone resins:	2073, 3479, 4869, 4875	Steels, Machining:	789
Silver:	101	Steels, Mechanical properties:	3611
Silver, Alloying additive:	1493, 1565, 1565	Steels, Phase transformations:	1195
Silver, Coating:	1885, 4415	Stiffening:	3697
Silver, Corrosion:	727	Stiffness:	2, 603, 1383, 1631, 1765, 2135, 2489, 2755, 3567, 4941
Silver, Recovering:	1499, 1975	Storage modulus:	1849, 2571
Silver base alloys, Synthesis:	2647, 4883	Storage tanks, Corrosion:	1139
Silver compounds:	4735	Strain:	1321, 1493, 1809
Silver plating:	817, 3293	Strain hardening:	2155, 3319
Simulation:	767, 1559	Strain rate:	81, 1631, 1953, 2117, 2155, 2505, 3183, 4365, 4487 1
Single crystals:	2171	Stress analysis:	1809, 2647, 2851, 2963,
Single crystals, Crystal growth:	1	Stress concentration:	3019, 3019, 4087, 4169, 4365
Single crystals, Mechanical properties:	107	Stress corrosion cracking:	127, 323, 1667, 3813, 4765
Sintered compacts:	2907	Stress cracking:	3501
Sintering:	2155	Stress intensity:	1787, 2117, 3501
Sintering (powder metallurgy):	437, 767, 823, 973, 1239, 1295, 1391, 1447, 1773, 2353, 3069, 3945, 3979, 4857	Stress relaxation:	1367, 1367, 1479, 1849, 3455
Sintering aids:	93	Stress strain curves:	869, 3319, 4125
Size effects:	555, 1721	Stress transfer:	3535
Slags:	1135, 1269	Stresses:	1737
Slags, Microstructure:	1269	Strontium, Additives:	1255
Sliding friction:	1135	Strontium, Alloying elements:	1901
Slip:	1499, 1975	Strontium compounds:	2633, 4895
Slip casting:	2647, 4883	Structural integrity:	1605
Slip planes:	4735	Structural materials:	603, 1737
Slurries:	817, 3293	Styrene acrylonitrile resins:	891, 2793
Smoothness:	767	Styrene butadiene resins:	207, 4713, 4917
Snow:	2171	Sublimation:	555
Sodium borate:	1	Substrates:	481, 979, 1439
Sodium compounds:	107	Sucrose:	245
Softening:	1499, 1975	Sulfides:	4301
Sol gel process:	2907	Sulfidization:	2167
Solar collectors:	2155	Superalloys, Brazing:	2483
Solar generators:	437, 767, 823, 973, 1239, 1295, 1391, 1447, 1773, 2353, 3069, 3945, 3979, 4857	Superalloys, Coating:	3721, 3797
Soldering:	93	Superalloys, Crystal growth:	2517, 4385
Solders, Development:	555, 1721	Superalloys, Mechanical properties:	291, 4883
Solders, Physical properties:	1135, 1269	Superalloys, Welding:	4065
Solid oxide fuel cells:	1269	Superconducting tapes:	481
Solid phases:	1135	Supercooling:	885
Solid solubility:	1499, 1975	Superplastic forming:	2505
Solid solutions:	4, 1543, 3263	Superplasticity:	2505, 3245, 3925
Solid state:	1179, 1203, 3769, 3965	Surface alloying:	155
Solidification:	279, 1931, 4193	Surface area:	3891
Solubility:	581, 2607, 2953, 3791	Surface chemistry:	489, 705, 1819, 1835, 1909, 3903
Solution annealing:	885, 1255, 1559, 1679, 2517, 2771, 3169, 3579, 3683, 4373, 4385	Surface defects:	2689,
Solution heat treatment:	2027, 3249	Surface energy:	57, 1535, 2167, 2205
Solutions:	1007, 1153	Surface grinding:	1353
Solvents:	4507, 4523	Surface hardening:	269, 1153
Sorption:	245, 255	Surface hardness:	269, 927, 1239, 2011
Spalling:	2563	Surface layer:	19, 489, 927, 1239, 1333, 2011, 2063
Spark plasma sintering:	1431	Surface pretreatments:	421, 759, 3285, 3485, 3903, 4831, 4933
Specific heat:	3797	Surface resistance:	3933
Specific surface:	1623, 3111, 4211	Surface structure:	217, 269, 421, 783, 1153, 1695, 1909, 2161, 2793, 3641, 3663, 4033
Spheres:	1513, 2511, 4407	Surface structure, Field effects:	1347
Spherical powders:	515, 1961, 2357	Surface tension:	1529
Spherulites:	959, 2019, 4911	Surfactants:	3069, 3783
Spin coating:	2331	Surgical implants:	4697
Spinel:	2161, 4889	Suspension polymerization:	2571
	29	Syndiotacticity:	581
	1661, 4597	Syntactic foams:	2709
		Synthesis:	427, 689, 979, 1049, 1439, 1573, 1731, 1773, 1917, 1939, 2353, 2447, 2455, 2591, 3069, 3473, 3747,

Synthetic rubber:	3831, 3883, 4805	Titanium base alloys, Oxidation:	489
Tantalates:	2469	Titanium base alloys, Phases (state of matter):	1579
Tantalum, Ternary systems:	1295, 1391, 1853	Titanium base alloys, Powder technology:	1517
Tantalum carbide:	3995	Titanium base alloys, Reactions (chemical):	3647
Tantalum compounds:	1107	Titanium carbide:	1107
Tape casting:	705, 2049	Titanium carbide, Composite materials:	2073, 2771
Tarnishing:	1781	Titanium compounds:	1773, 1803, 2661, 3111, 3315
Tear strength:	3307	Titanium compounds, Casting:	331
Tearing:	2469	Titanium compounds, Coating:	19
Tellurides:	2415, 3813	Titanium compounds, Coatings:	2011
Temperature distribution:	1931	Titanium compounds, Mechanical properties:	307, 869
Tempered martensite, Mechanical properties:	1953	Titanium compounds, Microstructure:	613
Tempering:	3611	Titanium compounds, Oxidation:	1333
Tensile properties:	575	Titanium compounds, Reactions (chemical):	3647
	1, 201, 363, 451, 521, 541, 869, 909, 941, 1383, 2155, 2233, 2321, 2613, 3319, 3437, 3515, 3877, 4725	Titanium dioxide:	437, 823, 973, 1605, 1611, 1695, 1721, 1835, 1983, 2049, 2429, 2619, 2743, 3069, 3545, 3945, 3973, 4259, 4677, 4911
Tensile properties, Microstructural effects:	351	Titanium nitride:	1471, 4567
Tensile strength:	533, 901, 1231, 1281, 1737, 2469, 2541, 2597, 2639, 3089, 3485, 3567, 3591, 3611, 3629, 3877, 4523, 4863, 4973	Topography:	3813, 4145
Tensile strength, Heating effects:	965	Torque:	603
Tensile stress:	1809, 2393, 2647, 3689	Toughness:	147, 207, 413, 891, 2043, 3055, 3257, 3527, 4013
Tension:	1631	Transformation temperature:	1983
Tension tests:	1689, 2135, 2709, 2771, 2913, 2971, 3089, 4075, 4081, 4129, 4523	Transition joints, Microstructure:	4183
Ternary systems, Microstructure:	3995	Transition metals:	1709
Tetragonal lattice:	1425, 4817	Translucence:	3765
Tetragonal zirconia polycrystals:	561, 3689	Transport properties:	549, 3553
Textile composites:	759, 1231	Tribology:	421, 3257
Texture:	2793, 2815	True strain:	3437
Theoretical density:	2331	True stress:	2155
Thermal analysis:	2597	Tungsten:	4065
Thermal barriers:	1661, 3797, 4783	Tungsten, Welding:	4065
Thermal barriers, Electrical properties:	1661	Tungsten base alloys, Crystal growth:	1543
Thermal conductivity:	1513, 1961, 2293, 3279, 4193, 4407	Tungsten base alloys, Oxidation:	2063
Thermal cycling:	133, 1013, 2483, 2483, 2953	Tungsten base alloys, Powder technology:	2271
Thermal diffusivity:	4193	Tungsten carbide:	2581, 2717, 3559
Thermal expansion:	1135, 1269, 2305, 2953, 3567, 3709	Tungsten compounds:	1045, 4347
Thermal mismatch:	597, 1523, 2963	Turbine blades, Brazing:	2337
Thermal properties:	4013	Turbine blades, Crystal growth:	4385
Thermal resistance:	2187, 4373	Turbines:	1661
Thermal shock:	4811	Turbines, Coating:	1661
Thermal stability:	437, 909, 973, 1367, 1367, 1579, 1653, 3089, 3545, 3797, 4407, 4777, 4973	Turgor:	1933
Thermal stresses:	597, 2963, 3709, 4065, 4065	Twining:	2223, 3143
Thermit brazing:	2483	Ultrasonic attenuation:	2007
Thermochemistry:	3883	Ultrasonic testing:	1107, 1403, 3683
Thermodynamics:	1551, 3747	Ultraviolet radiation:	1045, 1295, 3741
Thermoelastic properties:	2597, 4365	Unit cell:	1983
Thermoelectricity:	3553	Urea resins:	3933
Thermoplastic resins:	909, 2709	Vacuum arc furnaces:	885
Thermosetting resins:	2709	Vacuum induction melting:	1623
Thick films:	3713, 4289	Vacuum refining:	4843
Thick films, Coatings:	1347	Valence:	1551, 1967, 2219
Thickness:	823, 1679, 1747	Vanadates:	4573
Thin films:	29, 255, 343, 921, 1171, 1295, 1465, 1507, 1853, 1931, 2423, 2439, 2633, 3449, 3845, 3945, 4125, 4169, 4203, 4289, 4347, 4353, 4471, 4817, 4951	Vanadium:	1885
Thin films, Magnetic properties:	1315	Vanadium compounds:	2367
Thin films, Synthesis:	1645	Varistors:	1033
Thinning:	1781	Vegetable fibers:	165, 363, 3697
Thixoforming:	941	Vinyl ester resins:	65, 413
Tin base alloys, Machining:	2525	Viscoelastic liquids:	4757
Tin base alloys, Microstructure:	1559	Viscoelasticity:	1123, 1849, 2747, 4757
Tin base alloys, Physical properties:	1269	Viscosity:	1485, 1499, 1529, 2305, 2571, 2835, 3729, 3871
Tin compounds:	2727, 3325, 4325, 4333, 4611	Vitrification:	3131
Titanates:	113, 1175, 1523, 2353, 2907, 3211, 3641, 3831	Voids:	1689, 2271, 2337
Titanium, Alloying elements:	1179	Volume:	3199
Titanium, Coating:	421	Volume fraction:	675, 1961, 2709, 3263
Titanium, Composite materials:	2073	Wafers, Fabrication:	1727
Titanium, Mechanical properties:	3455	Wall thickness:	1605, 2709, 2851
Titanium, Ternary systems:	3995	Washing:	2179, 2199, 2673, 2945
Titanium, Welding:	1281	Waste disposal:	843, 853
Titanium base alloys, Brazing:	2409	Wastes:	1709, 2469, 3159, 3461
Titanium base alloys, Coating:	4783	Water, Sorption:	363
Titanium base alloys, Heat treatment:	1153	Water-cement ratio:	2247
Titanium base alloys, Mechanical properties:	291	Wave mechanics:	1107
Titanium base alloys, Metallography:	1289	Wavelengths:	1573, 1645
Titanium base alloys, Microstructure:	3995	Wear rate:	1975

## **Subject Index - 2003**

Whiskers:	3239, 3641	Zinc, Electrochemistry:	1139
White iron, Microstructure:	3263	Zinc base alloys, Mechanical properties:	2639
Wings (aircraft):	2547	Zinc base alloys, Phase transformations:	1945
Wings (aircraft), Mechanical properties:	2547	Zinc base alloys, Phases (state of matter):	2925
Wire, Fabrication:	2423	Zinc compounds:	3553
Wire drawing:	1953	Zinc oxide:	7, 2367, 4203
Wollastonite:	1529	Zinc sulfide:	6
Wood:	119, 603, 4551	Zircon:	1565
X ray diffraction:	223	Zircon, Coatings:	1565
Yield strength:	245, 657, 901, 1485, 1793, 2135, 2709, 3183, 3257, 3611, 3629, 3877, 4125, 4393, 4523	Zirconates:	1597
Yttria stabilized zirconia:	3689, 3775, 4293, 4811	Zirconium:	437
Yttrium, Dopants:	561	Zirconium, Alloying elements:	81
Yttrium compounds:	2331	Zirconium base alloys, Phase transformations:	1289
Yttrium oxide:	973, 1731, 4857	Zirconium base alloys, Synthesis:	1377
Zeolites:	979, 1439, 1611, 4307, 4661	Zirconium compounds:	1703, 3831
Zeta potential:	2803	Zirconium compounds, Mechanical properties:	657
Zinc:	2079	Zirconium dioxide:	643, 1413, 1673, 2627, 3239, 4247, 4259, 4639
Zinc, Alloying additive:	4507, 4523	Zirconium dioxide, Coatings:	1661, 3797
		Zirconium dioxide, Composite materials:	589

## Author Index

Adam, J.D.	1621	Calleja, F.J.B.	1011, 1741	Costa, L.C.	123, 699	Fu, R.W.	1057
Adhikary, K.	297	Candelária, A.F.	1151	Cribier, J.-F.	37	Fu, Y.	531
Agarwal, M.K.	985	Cantwell, W.J.	417	Croft, M.	655	Fu, Y.S.	695
Agarwal, V.K.	1377	Cao, G.	221	Crowley, C.M.	539	Fujii, H.	41, 441, 1061
Aggarwal, M.D.	179	Cao, J.W.	279	Cumming, D.J.	1627	Fujii, K.	1459
Ahn, K.H.	1325	Cao, Q.P.	195	D'Almeida, J.R.M.	1495	Fujita, M.	1329
Akao, M.	1483	Cao, Y.-B.	841	Da-Ming, Z.	1043	Fujita, T.	1459
Alam, S.	1283	Carotenuto, G.	1697	Dai, N.	575	Fukuda, Y.	1483
Aldinger, F.	91	Carroll, D.L.	5	Dai, S.	575	Fukui, T.	37
Alemár, A.	89	Caruso, R.A.	335	Dair, G.T.	303	Fukuyoshi, J.	687
Ali, N.	1039	Castellanos-Guzmán,		Dajornada, J.A.H.	107	Furetta, C.	1395
Ali, S.Z.	127	A.G.	449	Dana, K.	387	Furusawa, S.	323
Alma, M.H.	1225	Casuscelli, V.	1697	Danilkin, S.	1787	Furuzono, T.	1737
Alsaran, A.	1759	Catauro, M.	71	Das, S.	391, 1635	Gallant, D.	429
Altan, M.C.	1813	Celik, A.	1759	Das, S.K.	387	Gan, Q.L.	1701
An, C.	569	Chakrabarti, S.K.	1323	Dasgupta, R.	391, 1573	Ganguli, D.	181
An, S.K.	131	Chakraborty, P.K.	181	Datta, S.	1635	Gao, L.	339, 885
Annapurna, K.	873	Chan, H.L.W.	915	De Gaetano, F.	71	Gao, Y.	319, 1821
Aoyagi, Y.	273	Chan, H.Y.	1659	Delgado, M.R.	783	Gao, Z.Y.	1241
Aqili, A.K.S.	127	Chan, S.H.	1809	Denbeaux, G.P.	1335	Gartner, E.M.	1335
Aquino, R.C.M.P.	1495	Chandell, R.S.	1693	Deng, Y.F.	1731	Ge, D.	839
Arai, R.	979	Chang, C.W.	1269	DeQing, W.	1003	Gebre, T.	179
Araujo-Ororio, J.E.	1609	Chang, E.	919	Desai, V.	1623	Geng, K.	877
Areán, C.O.	783	Chatterjee, A.	181	Deshpande, M.P.	985	Geng, L.	861
Asahina, T.	1407	Chatterjee, M.	1747	Devi, P.S.	181	Ger, M.-D.	1515
Ashrit, P.V.	1095	Chatterjee, S.	99	Deying, S.	729	Ghosh, S.K.	217
Asmus, S.M.F.	139	Chaudhary, R.K.	1613	Di Schino, A.	691, 1511	Girgsdies, F.	335
Au, S.Y.	483	Chen, B.S.	1523	Digrak, M.	1225	Glaser, J.	349
Ayad, M.M.	1577	Chen, D.	163	Ding, B.Z.	1731	Gnanam, F.D.	663
Azuma, Y.	395, 1419	Chen, F.	1241	Ding, D.Y.	703	Godkhindi, M.M.	1189
Babu, K.M.	1755	Chen, G.	1183, 1303	Ding, H.	433	Goel, ...	737
Babushkin, O.	1487	Chen, H.	249, 599	Ding, S.-J.	479	Gokhale, A.A.	1793
Badenheim, D.	363	Chen, H.-Y.	377, 817	Ding, T.Z.	1	Golonka, L.	1193
Bae, D.-S.	735	Chen, J.	149, 213, 383, 437, 437	Dittmer, K.	1373	Gong, Y.J.	33
Baeva, M.	1787	Chen, J.L.	1241	Dong, B.Z.	33	Gong, J.	267
Bai, X.D.	1523	Chen, K.	603	Dong, K.-J.	779	Gong, Q.J.	831
Balasubramanian, M.	663	Chen, L.	45, 445, 1463	Dong, X.M.	1057	Gong, Y.	1229
Ballato, J.	5	Chen, L.F.	379	Dong, Y.	407, 803	Gong, Y.-J.	955
Bang, K.-S.	569	Chen, Q.	695	Douglas, E.P.	205	Gontareva, R.G.	241
Bao, C.L.	599	Chen, S.	311, 895	Drennan, J.	1627	Gordienko, Y.G.	241
Bardella, L.	1643, 1644	Chen, W.	283, 845, 1035	Drnovsek, S.	1193	Gotman, I.	29
Barinov, S.M.	1215	Chen, W.X.	651	Drzal, L.T.	459	Gotoh, A.	1205
Barrales-Mora, L.A.	1609	Chen, X.W.	1523	Du, H.	531	Gou, L.	257
Barteri, M.	691, 1511	Chen, Y.	319, 1223	Du, P.	1015	Gracio, J.	1039
Basturk, M.A.	1225	Chen, Y.J.	1689	Du, T.	1623	Green, S.M.	709, 709, 1147
Basu, C.	1113	Cheng, B.	967	Du, Y.	69	Gregorová, E.	959, 1673
Basu, D.	1635	Cheng, G.	153	Duan, X.	1581	Grell, P.	721
Batabyal, S.K.	1113	Cheng, J.J.R.	561, 835, 993	Duong, L.V.	825	Griffiths, C.	1105
Batra, A.K.	179	Cheng, K.	1015	Dupin, N.	975	Griggs, J.A.	1771, 1775
Becker, O.	1411	Cheng, P.	1165	Duthillet, Y.	975	Grodrian, I.-U.	1319
Bein, T.	751	Cheng, Y.	239, 1681	Dutta, A.	1793	Grozdanovski, D.	1727
Belavici, D.	1193	Cheng, Y.-B.	949	Dwivedi, R.N.	873	Grozdanovski, M.	1727
Berghmans, A.	1621	Chino, Y.	1407	Dziedzic, A.	1193	Gryshchuk, O.	1141
Bernard, J.	1193	Chirila, T.V.	303	Echigoya, J.	423	Gu, D.	383
Beskrovnyi, A.	1787	Chivavibul, P.	495	Edirisinghe, M.J.	1617, 1443	Gu, H.	1463
Bian, X.	1427	Cho, C.-W.	1639	Efeoglu, I.	1759	Gu, M.	261
Birgören, B.	1121	Cho, D.	459, 1591	Eftekhari, A.	1251	Gu, M.-Y.	1165
Birkedal, H.	1069	Cho, S.J.	865	Egawa, T.	799	Gu, S.R.	1255
Bissessur, R.	429	Choi, D.J.	1161	Equchi, H.	403	Gu, Y.	1463
Biswas, P.K.	181	Choi, H.J.	53, 299, 807, 1299	Emerich, H.	1069	Guden, M.	1533
Blanco, O.	449	Choi, J.H.	535	Enoki, M.	495, 1091	Gui, Z.	595
Blaschkowski, B.	349	Choi, K.-H.	1805	Eramo, S.	1401	Guida, A.	1401
Blom, D.A.	557	Choi, N.-S.	229	Erim, F.B.	89	Güngör, N.	89
Blomqvist, H.	1487	Choi, S.-S.	891	Fahrner, W.R.	1817	Guo, A.-M.	311
Bojanic, S.	1727	Choi, S.B.	807	Fakirov, S.	1011, 1741	Guo, J.	1019
Boniecki, M.	1719	Choi, S.Y.	477	Fan, J.F.	103	Guo, M.	639
Boo, J.-H.	945	Choi, Y.	499, 1209	Fan, P.	611	Guo, S.S.	915
Boyanova, M.	1011, 1741	Choi, Y.-S.	619, 945	Fan, Q.H.	1039	Guo, S.Y.	49
Brand, R.A.	1569	Choi, Y.G.	795	Fan, Z.	213	Guo, W.L.	1035
Breach, C.D.	1373	Chou, Y.-H.	1515	Fang, F.	175	Guo, X.-Y.	767, 1107
Bregliozzi, G.	981	Chouanine, L.	1279	Fang, J.	413	Guo, X.G.	1701
Brown, S.	1047	Choudhary, N.P.	99	Fang, L.	1705	Guo, X.Y.	701
Bruckel, P.	371	Choudhary, R.N.P.	21	Fang, S.	407	Guge, Z.	1693
Brüning, R.	429	Choudhary, S.N.	21	Fang, Z.	1447	Gurappa, I.	771
Buddhudu, S.	873	Choy, C.L.	915	Fazi, C.	1621	Ha, H.-P.	199
Bulbul, F.	1759	Chu, G.	437	Feng, Q.	999	Haefke, H.	981
Burchill, P.	455	Chu, J.P.	1269	Feng, Y.	1503	Hai-Dou, W.	1043
Bustos, O.	717	Chu, Y.-H.	479	Feng, Z.	725	Ha, L.-S.	209
Butler, E.G.	357	Chu, Z.-Y.	725	Fernandez, A.	383	Haas, D.	119
Byun, J.-Y.	199	Chuan, Z.T.	1791	Fett, T.	119	Hamada, H.	1315
Cagle, H.	1723	Chung, S.W.	467	Fischina, J.	1455	Hamidi, Y.K.	1813
Cai, L.C.	599	Chung, W.-Y.	907	Florían, S.	1237	Han, B.	695
Cai, M.	1295	Cintas, J.	1669	Friedrich, K.	1027	Han, C.-H.	477
Cai, S.-M.	577	Clegg, D.W.	203	Fu, R.	293	Hamada, I.W.	1533
Cai, W.	239, 1241, 1243, 1681	Cocen, U.	1247			Hai-Zeng, W.	1405
Cai, Z.	153	Comor, M.I.	235			Hai-Dou, W.	1627

Han, G.	483, 1015, 1491	Ishizu, K.	647, 1219	Kim, I.-S.	1805	Lee, K.R.	65
Han, H.	1077	Islam, P.	1287	Kim, J.	1591	Lee, K.W.	65
Han, I.-K.	467	Ito, S.	1737	Kim, J.-C.U.	569	Lee, M.H.	1291
Han, J.	695	Itoh, T.	185	Kim, J.-G.	269, 619, 945	Lee, O.S.	1157
Han, K.-S.	735	Ittyachen, M.A.	9	Kim, J.-T.	499	Lee, S.-H.	489
Han, K.S.	279	Ivanovic, N.	1727	Kim, J.H.	807	Lee, S.-J.	315
Han, K.Y.	1797	Iwaki, M.	273	Kim, J.J.	865	Lee, S.-S.	1591
Han, M.W.	1351	Iwasa, M.	895	Kim, J.W.	535, 807	Lee, S.G.	891
Han, S.	695	Iwasaki, M.	1737	Kim, K.J.	1157	Lee, S.J.	1291
Handa, K.	15	Iyi, N.	1459	Kim, K.S.	1117, 1155	Lee, S.O.	307
Handa, Y.P.	135	Jadrowski, E.	1787	Kim, M.D.	1767	Lee, T.-L.	479
Hanlon, D.N.	1385	Jagadish, C.	467	Kim, N.H.	1155	Lee, W.-B.	1751
Hao, S.M.	433	Jang, J.-I.	499	Kim, S.-I.	467	Lee, W.G.	1677, 1679
Hasan, S.T.	203	Jang, J.-W.	1451	Kim, S.J.	199	Lee, Y.-H.	499
He, B.	839	Jang, J.S.C.	79	Kim, S.H.	891	Lee, Y.-S.	569, 907
He, B.M.	1797	Jar, P.-Y.B.	561, 835, 993	Kim, S.J.	131	Lee, Y.J.	1161
He, J.	225, 413	Jasaitis, D.	349	Kim, T.W.	1263, 1685, 1767	Lehmann, B.	1027
He, S.R.	195, 869	Jayasinghe, S.N.	1443, 1617	Kim, W.-J.	581	Lei, T.C.	643
He, Z.-R.	375	Jean, B.	751	Kim, W.Y.	1415	Leng, Y.J.	1809
Heiermann, K.	363	Jeon, M.K.	1655	Kim, Y.-I.	1, 669, 1655	Lepistö, T.	463
Heiras, J.	449	Jhon, M.S.	53, 807, 1299	Kim, Y.H.	1537	Lewis, M.H.	357
Henry, F.	123, 699	Ji, Z.	1503	Kimura, Y.	1279	Li, A.D.	743
Henshall, J.L.	1105	Jia, D.C.	1531	Kinloch, A.J.	507, 1439	Li, B.	1295
Heo, J.	795	Jia, H.	811	Kishi, T.	1091	Li, C.	1125, 1183
Hernandez-Silva, D.	1609	Jia, J.	311	Kishida, A.	1737	Li, C.-J.	1499
Herrera, E.J.	1669	Jia, W.	205	Kishimoto, A.	1083	Li, D.	253, 791, 931
Higuchi, M.	395, 1419	Jia-Jun, L.	1043	Kishore, R.	515	Li, F.S.	1817
Hill, R.	1287	Jiang, D.L.	1343	Kisi, E.H.	1101	Li, G.	171, 261
Hill, R.G.	539, 1401	Jiang, H.	1745	Kita, J.	1193	Li, H.J.	831
Hiller, M.	707	Jiang, J.	175, 175, 257	Kitahara, T.	1567	Li, H.L.	701, 1107, 1519
Hing, P.	1809	Jiang, L.	149	Kitamura, K.	1459	Li, H.T.	1681
Hino, R.	323	Jiang, P.	577	Klimová, A.	1275	Li, J.	213, 759
Hokamoto, K.	1329	Jiang, Q.	1355	Kloprogge, J.T.	825	Li, J.-G.	549
Holc, J.	1193	Jiang, Q.-C.	549	Kobayashi, S.	1315	Li, J.-Y.	779
Hong, J.-S.	1, 669	Jiang, Z.	575	Kodama, H.	1459	Li, J.C.	1355
Hong, S.	257	Jin, D.	971	Kojima, Y.	1709	Li, J.F.	195, 869, 903
Hooper, R.M.	1105	Jin, G.-Q.	767	Kole, T.P.	787	Li, K.	639
Hori, R.	963	Jin, Y.-P.	1165	Komeya, K.	885	Li, K.Z.	831
Hosokawa, H.	1407	Jin, Y.S.	1365	Komlev, V.S.	1215	Li, L.	595, 639, 1595
Hou, Y.	345	Jin, Z.	1503	Kong, L.B.	701, 1809	Li, L.-W.	1763
Hrovat, M.	1193	Job, R.	1817	Kong, X.	1581	Li, M.	1131
Hsieh, J.H.	1125	John, U.	1073,	Konings, R.J.M.	119	Li, M.-W.	1223
Hsu, C.-M.	1079	Joo, Y.L.	891	Koo, J.-H.	935	Li, M.K.	701, 1107
Hsu, C.-S.	209	Joshi, A.S.	181	Korabiov, S.F.	821	Li, Q.	885
Hu, G.	1581	Juenger, M.C.G.	1335	Korablova, I.R.	821	Li, R.	397
Hu, J.	849	Jung, K.Y.	1527	Korematsu, A.	1737	Li, S.H.	1365
Hu, K.-A.	1303	Jung, M.-J.	1, 669	Korenberg, C.F.	507	Li, S.X.	899
Hu, L.	575	Jung, S.-B.	1751	Kosec, M.	1193	Li, W.	163, 399, 407
Hu, M.Z.	557	Jung, S.-J.	1083	Koshy, P.	217	Li, W.-L.	589
Hu, Z.	1223	Jung, W.-H.	527	Kotru, S.	591	Li, X.H.	1519
Hu, Z.Q.	1731	Jung, Y.-G.	1639	Kousar, Y.	1039	Li, Y.	707, 811, 813, 1015, 1651
Hua, Q.	407	Kagawa, Y.	159, 495, 1551	Kovacevic, A.	1727	Li, Y.R.	1585
Hua, Y.Q.	997	Kamada, Y.	423	Krasnov, A.N.	1415	Li, Y.S.	763
Huang, A.	293	Kamado, S.	1709	Krishnamurthy, R.	367	Li, Z.	585
Huang, C.-L.	209	Kamath, M.P.	181	Kubok, T.	835	Li, Z.-H.	955
Huang, C.J.	1423	Kameshima, Y.	553	Kuboki, T.	561, 993	Li, Z.H.	33
Huang, F.	143	Kamiya, K.	1205	Kuijpers, N.C.W.	1385	Li, Z.J.	831
Huang, H.-X.	1547	Kamiyama, T.	963	Kuljanin, J.	235	Liang, F.	1665
Huang, J.	225, 249, 397, 399	Kang, B.A.	307	Kumar, M.C.S.	287	Liang, G.	1503
Huang, L.-P.	13	Kang, F.	293	Kumar, S.	1323, 1323	Liang, G.-F.	549
Huang, Q.	599, 1165	Kang, S.-O.	669	Kun-Lin, W.	1043	Liang, J.	791, 811, 1503
Huang, Q.-W.	949	Kang, Y.C.	1527, 1537	Kundu, D.	1647	Liang, K.-M.	293, 855
Huang, Q.W.	1631	Karakan, M.	1759	Kundu, P.	873	Liang, K.M.	1255
Huang, W.	1169	Kareiva, A.	349	Kunyanucharat, A.	1587	Liang, M.	1709
Huang, W.-Y.	377	Karger-Kocsis, J.	1141	Kwak, W.-C.	75	Liang, P.	767
Huang, W.H.	651	Kartha, S.A.	9	Kwon, D.	499	Lim, H.K.	1399
Huang, W.M.	1399	Kasatkina, I.	335	Kwon, M.S.	1263	Lim, M.A.	477, 1351
Huang, Y.-F.	1547	Katayama, K.	395, 1419	Kwon, S.-I.	199	Lim, S.	1591
Huang, Y.L.	1817	Kato, R.	1279	Kwon, Y.-J.	353	Lim, S.-K.	569
Huang, Y.W.	997	Katz, J.L.	787	Kyoh, B.	403,	Lim, S.T.	53, 299, 1299
Huang, Z.-H.	293	Kawai, A.	1205	Lai, Q.	261	Lim, T.-C.	1783
Hui, X.	319	Kaya, C.	357	Lal, K.	515	Lin, C.C.	1269,
Huibin, X.	729	Kazmi, A.	127	Lal, R.B.	179	Lin, D.	849
Husain, M.	61	Kenny, J.M.	691, 981, 1511	Lalvani, S.B.	95, 655	Lin, P.	803
Hussain, M.	455, 1471	Kera, Y.	145	Lamour, V.H.R.	1335	Lin, Y.	615
Hwang, H.S.	581	Khadar, M.A.	9	Lapin, J.	747, 1275	Lisboa-Filho, P.N.	623
Hwang, K.S.	307	Khan, M.A.M.	61	Lau, S.T.	915	Liu, C.	709
Hwang, W.S.	939, 1067	Khanra, A.K.	1189	Le Bourhis, E.	565	Liu, C.Z.	1147
Hyun, Y.H.	53, 299	Khor, K.A.	775	Le, X.	811	Liu, G.	473
Iba, H.	159	Kikkawa, S.	297	Lee, B.I.	557	Liu, H.	41, 441, 1061, 1821
Ichiki, M.	1567	Kilner, J.A.	1809	Lee, C.	939, 1067, 1117	Liu, H.-N.	941
Ikazaki, F.	1205	Kim, B.-Y.	1451	Lee, C.H.	53, 299	Liu, H.R.	1173
Ikeda, T.	229	Kim, C.H.	477, 1351, 1537	Lee, D.-B.	229	Liu, J.	679, 1111
Ikuhara, Y.	1201	Kim, D.-H.	569	Lee, D.-D.	907	Liu, J.M.	743
Im, S.S.	891	Kim, D.-J.	499, 735	Lee, D.Y.	315, 1451	Liu, L.	213
Imahashi, Y.	159	Kim, D.S.	631	Lee, G.-W.	1591	Liu, P.	489
Imai, T.	353	Kim, D.Y.	1685	Lee, H.-K.	569	Liu, R.-J.	841
Imanari, Y.	979	Kim, E.-J.	735	Lee, H.S.	1263, 1767	Liu, R.-S.	779
Immirzi, B.	1389	Kim, G.-H.	1767	Lee, J.-S.	1805	Liu, R.P.	171
Inada, N.	979	Kim, H.S.	1197	Lee, J.H.	65	Liu, W.	57
Inoue, A.	857	Kim, H.W.	939, 1067, 1117,	Lee, J.Y.	1263, 1767	Liu, W.J.	1369
Inoue, M.	607		1155, 1233	Lee, K.K.	1527	Liu, W.M.	1519

## Author Index - 2003

Liu, X.-J.	13	Miyake, S.	403	Pandit, A.	1261	Ryou, J.	1023
Liu, X.B.	103, 611	Miyata, T.	927	Parbrook, P.J.	113	Ryu, B.-K.	1805
Liu, X.Z.	1585	Miyazaki, N.	229	Park, D.-W.	1325	Ryu, J.C.	807
Liu, Y.	1169, 1303	Miyazaki, S.	979	Park, D.P.	1299	Ryu, W.-S.	581
Liu, Y.G.	1531	Mlntova, S.	751	Park, H.D.	477, 1351, 1527	Saika, T.	543
Liu, Y.H.	989	Mlyao, T.	543	Park, H.L.	1263	San Martín, Y.A.	395, 403, 1419
Liu, Y.Y.	1051	Monber, A.W.	1477	Park, J.D.	535	Saito, H.	717
Liu, Z.	45, 445, 547, 811	Mondal, K.	95, 655	Park, J.H.	1197	Saito, N.	175, 353
Liu, Z.-F.	577	Monteiro, P.J.M.	1335	Park, J.K.	477, 1351	Saito, Y.	543
Lixin, C.	953	Monteiro, S.N.	1495	Park, J.Y.	581	Saitoh, H.	659
Loh, N.H.	775	Montes, J.M.	1669	Park, M.	1591	Saka, M.	115
Long, S.G.	911	Moon, E.-H.	1751	Park, S.	65	Sakai, M.	1359
Longo, A.	1697	Moon, S.-C.	1, 669	Park, S.H.	1537	Sakakura, S.	139
Losier, P.	1095	Mori, T.	403, 1065	Park, Y.-B.	1325	Sakamoto, M.	941
Lours, P.	371	Morin, F.	1185	Park, Z.-T.	945	Samuel, A.M.	585
Lu, A.	635	Mou, S.	343	Pasquini, L.	1697	Samuel, F.H.	585
Lu, C.-H.	615	Mouritz, A.P.	519, 1507	Patel, P.D.	985	Sang, L.X.	49
Lu, F.-H.	817	Mucalo, M.R.	1755	Pathak, L.C.	1189	Sano, S.	1205
Lu, L.	253, 931	Mücklich, M.O.F.	1455	Patriarche, G.	565	Santagata, G.	1389
Lu, M.	701, 1107	Mueller, F.	721	Pattison, P.	1069	Santulli, C.	1557
Lu, S.L.	813	Mukherjee, R.	1647	Payzant, E.A.	557	Saravanan, P.	1283
Lu, W.	877	Mukhopadhyay, A.K.	1635	Pelton, R.	265	Sasaoka, E.	1213
Lu, X.L.	1243	Mulay, V.N.	1563	Peng, D.Q.	1523	Satake, K.	513, 1363
Lu, Y.	651, 1581	Mulioliene, I.	349	Peng, K.	69	Sathitsusanhon, N.	95, 655
Luo, S.	111	Mumtaz, K.	423	Peng, L.M.	279	Sato, M.	423, 979, 1551
Luo, X.-J.	589	Munpakdee, A.	1307	Peng, W.F.	643	Sato, T.	629
Luo, X.T.	379	Murray, R.T.	113	Peng, Y.	639	Sato, Y.	1201
Luthern, J.	881	Murti, V.	1793	Peng, Z.	267	Satoh, J.	1219
Lv, H.	49	Nagamine, S.	1213	Peredes, A.	881	Satoh, T.	941
Lv, Y.Q.	1077	Naganuma, T.	159	Perottoni, C.A.	107	Satoh, Y.	659
Ma, A.	175	Nair, K.P.R.	1073	Perrot, P.	975	Sauce-Rangel, V.	1609
Ma, C.B.	49	Naito, S.	543	Petrovic, V.	1727	Savoie, S.	1185
Ma, H.T.	763	Nakai, A.	1315	Pezzotti, G.	139	Sawada, N.	1219
Ma, J.	839, 1809	Nakatsuchi, S.	145	Pham, M.T.	1099	Scanlon, M.G.	547
Ma, Y.	1817	Nam, W.J.	631	Phungphadung, J.	1587	Schaffer, G.B.	1627
Ma, Z.B.	1017	Nandi, A.K.	1113	Pinedo, C.E.	1151	Schattka, J.H.	335
Mabuchi, M.	1407	Narayanasamy, K.	367	Poling, S.A.	1467	Schinio, A.D.	981
Macodio, D.O.	115	Narayandass, Sa.K.	25	Pourarian, F.	1569	Schut, J.	507
Madhusoodana, C.D.	553	Naskar, M.K.	1747	Pradeep, B.	9, 287	Sebastian, P.J.	25
Maeda, K.	1259	Navruz, N.	17	Praserthdam, P.	1587	Segawa, H.	687
Maeda, M.	41, 1061	Nayar, S.	167	Pu, B.	1031	Sekhon, S.S.	1053
Maeda, R.	1567,	Nedeljkovic, J.M.	235	Pu, M.	33, 955	Seo, Y.B.	795
Maeoa, M.	441	Nejma, R.	363	Qi, S.K.	345	Serafini, D.	717
Mahalingam, T.	1269	Nelson, C.R.	1467	Qi, W.H.	1333	Settegast, S.	1319
Mahapatra, P.K.	99	Neto, V.F.	1039	Qi, Y.H.	371	Shalini, P.	1599
Mahato, D.K.	1613	Nettles, A.T.	1723	Qian, X.F.	1801	Shang, S.X.	345, 989
Mahmudi, R.	1435	Ni, D.Q.	157	Qian, Y.	1463	Shangguan, Y.-G.	1763
Mai, L.W.	1035	Nie, H.W.	651	Qin, W.	69	Shao, L.	437
Makino, Y.	403	Nie, Q.	1031	Qin, X.	473	Sharma, B.I.	733
Malik, S.	1113	Ning, J.	1019	Qin, Z.	635	Sharma, S.K.	737
Malinconico, M.	1389	Ning, J.-W.	13	Qiu, J.R.	15	She, J.H.	331
Mallesham, P.	1793	Ning, Z.	1627	Qu, S.Y.	713	Shen, B.L.	857
Mamiya, T.	1551	Nion, F.	1487	Que, D.	483	Shen, D.	483
Man, W.D.	1017	Nishida, Y.	175	Raeisinia, B.	1435,	Shen, D.-D.	311
Mandal, T.K.	675	Nishino, J.	1007	Raja, K.S.	1347	Shen, G.	1015
Mangalaraj, D.	25	Niu, Z.P.	1817	Rajkovic, V.	1727	Shen, J.-W.	377
Manna, I.	1099	Noda, J.	523	Raju, H.P.	367	Shen, W.	635, 1031
Mäntylä, T.	463	Noda, K.	279	Ram, S.	675	Sheng, X.	803
Maqsood, A.	127	Nogi, K.	41, 441, 1061	Rao, B.P.	1607	Shi, H.B.	695
Marinovic-Cincovic, M.	235	Noma, T.	1259	Rao, K.H.	1607	Shi, J.	213
Marotta, A.	71	Noreus, D.	1487	Rao, K.R.M.	1099	Shi, S.H.	1
Martens, W.N.	825	Nosaka, Y.	1007	Rao, K.S.	1563	Shi, W.	1447
Martin, S.W.	1467	Nothdurft, L.	825	Rao, P.P.	217	Shi, Z.M.	1255
Martínez, E.	449	Novák, I.	1237	Rasheed, T.M.A.	1073	Shibuya, Y.	523
Martínez, V.	717	O'Connor, C.J.	413	Ravi, J.	1073	Shigematsu, I.	175
Masaki, N.	629	Oba, F.	1201	Ravinder, D.	1599	Shih, H.P.	79
Masuda, I.	1213	Oberacker, R.	363	Ray, B.C.	201, 203	Shih, P.Y.	1779
Mathew, X.	25	Ogihara, S.	683	Reddy, N.K.	1563	Shim, J.-D.	199
Mathur, G.N.	1283	Oh, J.S.	307	Reddy, P.V.B.	1599	Shim, J.-J.	619
Mathus, M.	455	Oh, S.J.	131	Rehman, M.U.	127	Shim, Y.A.	307,
Matovic, B.	91	Oh, T.S.	535	Reif, R.	939, 1067	Shimizugawa, Y.	15
Matsumura, K.	159	Ohara, S.	37	Ren, Q.	49	Shimojima, K.	1407
Matsumura, S.	323	Ohji, T.	331	Ren, X.J.	1105	Shimokawa, K.	1083
Matsushima, Y.	1259	Ohlischläger, M.	1455	Ren, Y.P.	433	Shin, B.-C.	1805
McCallum, A.	1101	Ohmori, A.	1499	Ressler, T.	335	Shiue, R.K.	1659
McCaskie, A.W.	709, 709, 1147	Ohno, K.	979	Reumont, G.	975	Shlgematsu, I.	353
McPhee, W.A.G.	1627	Ohshio, S.	659	Rezan, S.A.	737	Shoji, T.	1347
Meenai, H.	391, 1573	Ohta, Y.	647	Rice, C.	1047	Silverston, P.	1587
Meguro, T.	885	Oishi, S.	927	Richter, E.	1099	Simon, G.P.	455, 1411, 1471
Mei, B.	889, 1111	Okada, K.	553	Riley, D.P.	1101	Singh, A.K.	99
Mendez, P.	1047	Ordoñez, S.	717	Rixecker, G.	91	Singh, H.P.	1053
Meng, F.C.	1705	Ortiz, W.A.	623	Rocherullé, J.	923, 1127	Singh, N.B.	1621
Meng, F.Q.	49	Otani, S.	1065	Rodrigues, J.P.	623	Singh, S.	515,
Meng, Z.	971	Ozasa, K.	273	Rodríguez, J.A.	1669	Sinha, A.	167
Metzger, T.H.	751	Ozawa, M.	513, 1363, 1543	Rojas, P.	717	Sinha, S.K.	21
Meyer, H.-J.	349	Pabst, W.	959, 1673	Romano, G.	1389	Siqueiros, J.M.	449
Miao, H.	267	Padture, N.P.	1261	Rong, M.Z.	1027, 1057	Siriwitayakorn, K.	1307
Miller, D.N.	1627	Paik, U.	1639	Rosenberg, R.	29	Sogabe, A.	1219
Min, C.J.	1791	Pan, F.	1255	Roumina, R.	1435	Solanki, G.K.	985
Min, G.	319	Pan, Y.	1019	Roy, M.	1377	Somers, J.	119
Mishra, S.K.	1189	Pan, Y.-B.	13	Russo, R.	1389	Somrang, P.	1587

Son, J.H.	1161	Tse, J.S.	603	Wu, G.H.	1241	Yin, J.	1801
Song, G.S.	103	Tsuda, H.	935	Wu, K.	643, 1709	Yin, S.	397
Song, J.	213	Tsuzuki, A.	1205	Wu, Q.	1223	Yodogawa, M.	1201
Song, J.K.	131	Tu, M.	343	Wu, Q.L.	379	Yokoi, D.	1543
Song, J.L.	869	Tu, Y.	651	Wu, W.	445, 1169	Yong, B.	1791
Song, L.	1651	Tucker, D.S.	1723	Wu, W.-Y.	1603	Yoo, K.H.	1767
Song, S.-H.	311, 755	Tunkasirin, T.	1307	Wu, X.	157	Yoshida, K.	687
Song, S.L.	713	Turner, J.A.	489	Wu, Z.H.	33	Yoshioka, T.	1737
Song, Y.-C.	725	Uchida, K.	1205	Wulff, F.	1373	You, S.-J.	619
Song, Y.-S.	315	Uchida, S.	629	Xi, L.F.	1179	Yu, A.-B.	779
Song, Y.C.	679	Ueda, T.	1213	Xia, H.	1031	Yu, H.	1131
Song, Y.T.	157	Uehara, T.	683	Xia, L.	407	Yu, J.-G.	967
Sorescu, M.	1569	Uematsu, K.	979	Xia, Y.	1393, 1447	Yu, M.-C.	1079
Sou, I.K.	483	Umebayashi, T.	1209	Xiao, D.H.	703	Yu, N.	1229
Soyama, H.	115	Unuma, H.	1359	Xiao, P.	755, 759	Yu, X.	261
Spinelli, D.	4	Urban, J.	335	Xiao, X.	407	Yu, Z.	149
Sreckovic, M.	1727	Vaidya, S.N.	985	Xiao, Z.	1339	Yuan, R.Z.	1705
Srinivasa, Y.G.	367	Van Beek, W.	1069	Xie, J.	221	Yuan, Z.	143
Srinivasan, A.	733	Van Der Zwaag, S.	1385	Xing, Y.	787	Yuan, Z.-X.	311, 755
Srivastava, A.K.	515	Varley, R.J.	455, 1411	Xiong, X.B.	831	Yue, C.	1043
Srivastava, S.C.	1613	Velumani, S.	25	Xu, D.	49	Yue, Z.	595
Stamboulis, A.	1287	Villanueva, G.R.	417	Xu, F.M.	899	Yun, S.H.	1591
Starosvetsky, D.	29	Vippola, M.	463	Xu, G.Y.	1333	Zai, G.	213
Stephens, J.	179	Viswabaskaran, V.	663	Xu, H.	989	Zasimchuk, E.E.	241
Su, C.	1213	Volpe, M.V.	1697	Xu, J.	163	Zec, S.	235
Suganuma, K.	1311	Vourinen, E.	1487	Xu, K.	703	Zeng, X.	445
Sugawara, M.	1359	Vulicevic, L.J.	1727	Xu, Q.	1035	Zhan, H.	283
Sugiyama, J.	963	Vuoristo, P.	463	Xu, Q.	589	Zhan, H.	1241
Sui, G.	791	Wa, Y.Z.	1797	Xu, W.	1183	Zhan, Y.	1087
Sumida, K.	1259	Wall, J.G.	1401	Xu, X.	1111, 1183	Zhang, B.	163, 1057
Sun, H.Q.	1369	Wan, L.	1581	Xu, X.-R.	345, 695, 1077	Zhang, B.H.	1017
Sun, J.	143, 339	Wang, C.	413, 473, 1183	Xu, X.H.	1369	Zhang, C.	437, 885
Sun, L.L.	171	Wang, C.-Y.	1547	Xu, X.Y.	1183	Zhang, C.-R.	841
Sun, X.	811	Wang, C.W.	1519	Xu, Y.	549	Zhang, D.	877
Sun, Y.	799, 1229	Wang, C.X.	1017	Xu, Z.-M.	1817	Zhang, F.	573
Sun, Y.-H.	955	Wang, D.-Z.	861	Xueping, G.	729	Zhang, G.	1087
Sun, Y.H.	33	Wang, F.G.	899	Xunyong, J.	729	Zhang, G.H.	49
Sun, Z.	57	Wang, G.	811	Yahong, X.	953	Zhang, H.	1621, 1705
Sung, J.H.	1299	Wang, G.-L.	855	Yamada, Y.	1407	Zhang, H.F.	1731
Sung, Y.	1515	Wang, H.	253, 319, 345,	Yamagishi, A.	1459	Zhang, H.L.	1179
Sung, Y.-M.	75		471, 989	Yamamoto, S.	1209	Zhang, J.	171, 1019,
Surthi, S.	591	Wang, H.-C.	615	Yamamoto, T.	1201	1031, 1427, 1595	
Sutherland, J.T.	1467	Wang, J.	635, 679, 839,	Yamasaki, N.	821	Zhang, J.-J.	13
Suzuki, H.	963		1015, 1031, 1503	Yamashita, M.	1311	Zhang, J.Y.	1701
Suzuki, K.	353	Wang, J.H.	1017	Yamazaki, A.	1483	Zhang, K.	111
Suzuki, R.	513	Wang, J.N.	703	Yamazaki, T.	1259	Zhang, L.	423, 799
Suzuki, S.	1363, 1543	Wang, K.	1665, 1713	Yan, L.	1713	Zhang, L.M.	739
Suzuki, T.	927, 1259	Wang, L.	249, 763, 1447	Yan, Q.B.	1173	Zhang, M.	573
Syamalakumari, B.	1073	Wang, M.	283, 345, 989, 1077	Yan, Q.B.	1503	Zhang, M.Q.	1027, 1057
Szabó, J.S.	1141	Wang, M.P.	1333	Yan, X.	157	Zhang, P.	1701
Szutkowska, M.	1719	Wang, N.	483	Yan, X.L.	489	Zhang, Q.	339
Taguchi, J.	1279	Wang, P.-L.	949	Yan, Y.	1801	Zhang, Q.S.	1731
Tai, W.-P.	191	Wang, S.	839, 1229	Yan, Y.L.	195, 869, 903	Zhang, R.J.	1365
Takabatake, H.	1359	Wang, S.-X.	855	Yan, Z.J.	383,	Zhang, S.Y.	157
Takahashi, S.	423	Wang, S.F.	1269	Yang, B.	1169	Zhang, T.S.	1809
Takatsubo, J.	523	Wang, S.G.	1017	Yang, D.	1499	Zhang, W.	1447, 1447
Takeda, S.	1359	Wang, W.K.	171	Yang, G.-J.	103, 611	Zhang, X.	791
Tamai, H.	145	Wang, X.	225, 253,	Yang, G.C.	1431	Zhang, X.-H.	855
Tamura, M.	1551		557, 931, 1339	Yang, H.	49, 703	Zhang, X.-Q.	967
Tan, S.	1339	Wang, X.-Z.	1223	Yang, H.L.	575	Zhang, X.-X.	861
Tan, S.H.	1343	Wang, X.H.	713	Yang, J.	293	Zhang, X.N.	503
Tanaka, H.	323	Wang, X.Y.	171	Yang, J.-B.	331, 1705	Zhang, X.Y.	1689
Tanaka, K.	687	Wang, Y.	445, 845,	Yang, J.F.	45	Zhang, Y.	45, 111, 345, 595,
Tanaka, M.	1279		1393, 1581, 1595	Yang, L.	635, 849, 989, 1771, 1775	635, 849, 989, 1771, 1775	
Tanaka, S.	1209	Wang, Y.-J.	57	Yang, M.	813, 1051	Zhang, Y.-H.	1547
Tanakulrungsank, W.	1587	Wang, Y.G.	1173	Yang, M.J.	1679	Zhang, Y.L.	1689
Tang, H.	111	Wang, Y.L.	1797	Yang, O.-B.	5	Zhang, Y.Q.	997
Tang, S.	343	Wang, Y.M.	1	Yang, P.	1131	Zhang, Z.	135, 1173
Tao, B.W.	1585	Wang, Y.X.	1343	Yang, R.	803	Zhao, B.	225, 249, 265
Tao, S.F.	1531	Wang, Z.	1077, 1427	Yang, S.	307	Zhao, G.	1491
Tarpani, J.R.	4	Wang, Z.G.	49, 899	Yang, S.H.	253, 931	Zhao, H.	33, 205
Tatami, J.	885	Warrier, K.G.K.	217	Yang, X.	989	Zhao, H.F.	1631
Tateishi, K.	687	Watanabe, K.	1359	Yang, X.N.	919	Zhao, J.	45, 397, 763, 899
Taylor, A.C.	507, 1439	Watanabe, M.	1091	Yang, Y.C.	253, 931	Zhao, L.C.	239, 1241,
Teekateereweji, S.	1007	Watkins, N.D.	709, 709, 1147	Yang, Z.	575	1243, 1681	
Tekmen, C.	1247	Webb, G.E.	825	Yang, Z.M.	739	Zhao, L.R.	603
Tezuka, A.	1259	Wei, T.	213	Yao, J.	1491	Zhao, M.	221, 643
Thian, E.S.	775	Weisensel, L.	721	Yao, K.D.	1179	Zhao, X.	221
Tian, F.	739	Weiss, K.	335	Yao, W.F.	989	Zhao, X.-J.	967
Tidrow, S.	1621	Wen, C.E.	1407	Yao, X.	799	Zhao, X.-Z.	915
Ting, J.-M.	1603	Wen, T.-L.	651	Yasuda, H.	145	Zhao, Z.K.	1355
Tirel, J.	1385	Wendt, U.	1319	Yasuda, S.	1737	Zheng, J.	635
Toda, K.	979	Weng, W.	1015	Yasumori, A.	553	Zheng, J.P.	1179
Tomoeda, T.	1329	Wenqin, P.	1405	Ye, F.	895	Zheng, M.-P.	1165
Tong, L.-F.	1763	Woo, S.I.	1655, 1677	Ye, H.	45	Zheng, M.Y.	643, 1709
Tontragoon, J.	1307	Wood, D.A.	113	Ye, K.-H.	315	Zheng, Q.	1431, 1763
Tor, S.B.	775	Wu, B.	695	Ye, L.	1713	Zheng, R.	651
Towler, M.R.	539, 1401	Wu, C.L.	1027	Ye, X.Y.	1255	Zheng, X.J.	743
Toyama, N.	523	Wu, D.	33, 791, 931, 955,	Ye, Y.	319	Zhong, M.L.	1369
Tracy, C.E.	489		1229, 1651, 1745	Ye, Z.	225, 249	Zhong, Y.	221, 257
Travitzky, F.M.	721	Wu, E.	1101	Yeo, J.-G.	1639	Zhou, C.	343
Tripathi, K.N.	737	Wu, G.	149	Yi, X.-S.	791		

**Author Index - 2003**

Zhou, F.G.	1797	Zhou, X.-D.	327	Zhu, L.-H.	949	Zong, R.	1295
Zhou, J.	1295	Zhou, X.-G.	841	Zhu, L.H.	1631	Zorzi, J.E.	107
Zhou, J.-E.	375	Zhou, Y.	143, 1531	Zhu, Q.Y.	1035	Zou, R.-P.	779
Zhou, J.M.	599	Zhou, Y.C.	83, 743, 911	Zhu, S.J.	899	Zou, Z.D.	713
Zhou, J.T.	989	Zhou, Y.H.	195, 869	Zhu, Z.K.	1801	Zulfquar, M.	61
Zhou, L.	1665	Zhou-Ping, C.	1043	Zhuang, H.	163, 399		
Zhou, P.H.	1817	Zhu, G.	759	Zhuang, H.-R.	589		
Zhou, Q.G.	1523	Zhu, J.	253, 889, 931, 1111	Ziyuan, S.	1003		

## Subject Index

Abrasion resistance:	1161	Antimony compounds, Electrochemistry:	221
Abrasive machining:	367	Antimony compounds, Microstructure:	515
Abrasive wear:	1499	Aramid fibers:	201, 203
Abrasives:	367	Arsenates:	471
Absorption (energy):	561, 835, 881	Arsenides:	1685
Absorption (material):	1401	Assemblies:	695
Absorption spectroscopy:	655	Atomic oxygen:	841
Acceptors (electronic):	1613	Atomic properties:	1491
Acicular structure:	663	Atomic structure:	603
Actinide metals:	119	Atomizing:	1443, 1617
Activated carbon:	293, 635, 1343	Austenite:	549
Activated sintering:	1101	Austenitic stainless steels, Brazing:	79
Activation:	293, 477, 635	Austenitic stainless steels, Corrosion:	821, 981, 1099, 1347
Activation energy:	733, 955, 1287	Austenitic stainless steels, Mechanical properties:	691, 1511
Activity (chemical):	953	Austenitic stainless steels, Phase transformations:	423, 573
Actuators:	729, 839, 971, 1193	Austenitic stainless steels, Phases (state of matter):	1787
Additives:	589, 663	Austenitizing:	1151
Adhesion:	315, 1039, 1261, 1499, 1737,	Automotive components, Coating:	1635
	1741	Automotive components, Mechanical properties:	911
Adhesive bonding:	229, 1311	Automotive industry:	1247, 1407, 1751, 1813
Adhesive joints, Mechanical properties:	229	Auxetic materials:	1783
Adhesives:	265, 1237	Axial stress:	1533, 1669
Adsorption:	253, 783, 787, 1483	Bacteria:	1401
Adsorptivity:	293	Ball milling:	717, 1185, 1377, 1427
Aerospace:	877, 899, 911, 1635, 1659,	Band gap:	799
	1813	Barium compounds:	1, 669, 895, 1351
Agglomerates:	1185, 1455	Barium titanate:	269, 557, 1269, 1307, 1639
Agglomeration:	33, 1587	BCC metals, Mechanical properties:	1783
Aging:	1247	Bend strength:	279, 721, 721
Aging (artificial):	375, 391	Bentonite:	89
Air pollution:	65	Bimetals, Phase transformations:	729
Aircraft components:	523, 1507,	Binders (adhesives):	107, 553, 775
Aircraft components, Coating:	1635	Biocompatibility:	29, 239, 343, 775, 919, 919,
Aircraft components, Mechanical properties:	911		1015, 1215, 1665
Aliphatic compounds:	53	Biocompatibility:	153
Alloying:	1319	Biodegradation:	53, 153, 1015
Aluminates:	1, 669, 1587, 1747	Biomedical materials:	153, 239, 299, 343, 775, 919,
Aluminides, Coatings:	845		1015, 1215, 1443, 1617,
Aluminides, Composite materials:	1369		1737
Aluminides, Mechanical properties:	747	Biomedical materials, Development:	139
Aluminides, Microstructure:	849	Biomedical materials, Materials selection:	479
Aluminoethermic reactions:	855	Bismaleimides:	459
Aluminum:	417, 721	Bismuth, Oxidation:	629
Aluminum, Alloying elements:	1609	Bismuth base alloys, Electrical properties:	61
Aluminum, Composite materials:	175, 417, 721	Bismuth compounds:	629, 989, 1655, 1727
Aluminum, Joining:	229	Blending:	1015, 1051
Aluminum, Mechanical properties:	241, 547	Block copolymers:	205
Aluminum, Microstructure:	779	Blowing agents:	135
Aluminum, Surface finishing:	115, 383	Boiling water reactors:	1347
Aluminum, Welding:	441	Bonding:	577, 791
Aluminum base alloys, Alloy development:	1319	Bonding strength:	919, 919, 1779, 1793
Aluminum base alloys, Coating:	1635	Bone cements:	709, 1147
Aluminum base alloys, Composite materials:	149, 279, 861, 899, 1247,	Borates:	1127
	1427, 1573, 1627	Borates, Composite materials:	1709
Aluminum base alloys, Crystal growth:	1079	Borides:	1065, 1069, 1189
Aluminum base alloys, Crystal lattices:	1385	Borides, Composite materials:	877
Aluminum base alloys, Heat treatment:	391	Boron carbide:	213
Aluminum base alloys, Joining:	353	Boron compounds:	725
Aluminum base alloys, Mechanical properties:	45, 611, 703, 1533, 1793	Borosilicate glasses:	181
Aluminum base alloys, Microstructure:	103, 433, 585	Borosilicate glasses, Irradiation:	873
Aluminum base alloys, Phases (state of matter):	1355	Brakes, Mechanical properties:	899
Aluminum base alloys, Powder technology:	1407	Brasses, Mechanical properties:	83, 1393
Aluminum base alloys, Reactions (chemical):	855	Brazed joints, Mechanical properties:	1659
Aluminum base alloys, Welding:	41, 1061	Brazed joints, Microstructure:	79
Aluminum compounds, Composite materials:	1709	Brazing alloys:	79
Aluminum compounds, Microstructure:	515	Breaking:	1185
Aluminum gallium nitride:	113	Brightness:	1423
Aluminum nitride:	589, 721	Brittleness:	1161, 1731, 1787
Aluminum nitride, Composite materials:	721, 1627	Bubbles:	639
Aluminum oxide:	107, 267, 327, 357, 363, 395,	Buckling:	791
	463, 495, 543, 701, 941,	Bulging:	83
	1007, 1083, 1451, 1499,	Cadmium compounds:	25, 1113, 1491
	1531, 1719, 1805, 1817	Cadmium compounds, Thin films:	577
Aluminum oxide, Coatings:	463, 1003, 1635	Cadmium sulfide:	127
Aluminum oxide, Composite materials:	149, 861	Calcium, Alloying elements:	849
Aluminum silicates:	895	Calcium aluminum silicates:	1291, 1401
Amorphization:	857, 869, 1355, 1377	Calcium carbonate:	167, 1713
Amorphous materials, Electrical properties:	61	Calcium carbonate, Coatings:	1023
Amorphous structure:	95, 143, 171, 319, 1011	Calcium compounds:	1065, 1287
Annealing:	375, 433, 1209, 1677	Calcium phosphate:	1015
Anodes:	143, 1251	Calcium silicate hydrate:	1335
Antimony, Alloying elements:	1435	Calcium silicates:	1483
Antimony, Impurities:	311	Capacitance:	755
Antimony compounds:	591	Capacitors:	569, 589, 1639

Carbides:	1111	Color:	1487
Carbon:	213, 1067	Combustion:	13, 65, 931, 975, 1185, 1189
Carbon, Alloying elements:	573	Communition:	1185
Carbon black:	699, 1057, 1237	Compacting:	553
Carbon dioxide:	135	Compatibility:	953
Carbon fiber reinforced plastics:	523, 993, 1797	Competitive materials:	771
Carbon fibers:	293	Complexation:	1801
Carbon nanotubes:	253, 701, 791, 1019, 1107, 1223	Compressing:	1329
Carbon nanotubes, Coatings:	1017	Compression tests:	1533
Carbon nitride:	1329	Compressive strength:	935
Carbon steels, Coating:	1369	Compressors, Coating:	1635
Carbon-epoxy composites:	791, 1411, 1507	Computer aided design:	1451
Carbonates:	825	Computer numerical control:	1791
Carbonitrides:	191, 725	Computer programs:	1279
Carbonitriding:	1759	Computer simulation:	473, 779
Carbothermic reactions:	885, 1627	Concentration (composition):	573
Carboxylic acids:	1053	Conducting polymers:	813, 1113, 1299, 1311, 1519, 1577
Carrier density:	1685	Conduction:	61, 1073
Cast iron, Machining:	367	Conduction band:	1685
Catalysis:	65, 163, 257, 635, 783, 787, 839, 1131	Conductivity:	699, 1161
Catalysts:	145, 335, 799, 1651	Connectors:	1515
Cathodes:	651	Consolidation:	775
Cationic polymerization:	647	Construction industry:	1635
Cavitation:	115	Contact stresses:	1477
Cavitation erosion:	981	Contaminants:	939, 1197
Cellular structure:	547	Contamination:	1363
Cellulose:	963, 1389	Copolymerization:	1219, 1303, 1519
Cemented carbides, Powder technology:	1631	Copolymers:	915, 1011, 1027, 1219, 1595
Cements:	539	Copper:	1323, 1603
Ceramic coatings:	181, 307, 449, 463, 817, 841	Copper, Alloying elements:	585
Ceramic fiber reinforced ceramics:	495, 553, 1161, 1551	Copper, Coatings:	1603
Ceramic fiber reinforced plastics:	159	Copper, Composite materials:	379, 1087, 1173, 1455
Ceramic fibers:	725	Copper, Microstructure:	335
Ceramic fibers, Composite materials:	175, 503	Copper, Surface finishing:	1623
Ceramic fibers, Electrical properties:	159	Copper base alloys, Casting:	195
Ceramic matrix composites:	119, 139, 191, 213, 327, 357, 395, 841, 895, 941, 1121, 1215, 1451, 1483, 1531, 1719, 1817	Copper base alloys, Mechanical properties:	1233, 1751
Ceramic powders:	629, 1185, 1329	Copper compounds:	185
Ceramic powders, Synthesis:	629	Copper compounds, Synthesis:	1801
Ceramics:	21, 959, 1121, 1477, 1673, 1745, 1771, 1775, 1783	Corrosion environments:	821, 975
Cerium compounds:	1809	Corrosion rate:	239, 581, 619, 975
Cerium compounds, Additives:	845	Corrosion resistance:	581, 619, 655, 691, 713, 771, 975, 981, 1003, 1099, 1151, 1347, 1511, 1523, 1681, 1693, 1787
Cerium oxide:	1805	Corrosion resistant alloys, Alloy development:	619
Chalcopyrites:	287	Corrosion tests:	865
Characterization:	107	Crack initiation:	507, 835, 865, 1091, 1644
Chelating:	1291	Crack propagation:	113, 363, 721, 721, 865, 899, 911, 1083, 1137, 1141, 1261, 1719, 1731, 1775, 1797
Chemical attack:	841	Cracking (fracturing):	139, 175, 201, 229, 331, 417, 417, 441, 743, 1023, 1315, 1477
Chemical composition:	445, 963, 1015, 1147	Creep (materials):	691, 747, 1275
Chemical properties:	65, 1483	Creep strength:	747
Chemical reactors:	437	Creep tests:	1435
Chemical reactors, Materials selection:	499	Critical temperature:	375, 423
Chemical vapor deposition:	345, 467, 581, 659, 841, 1017, 1039, 1117, 1161, 1325, 1581, 1635, 1677, 1679	Crosslinking:	459
Chemical-mechanical polishing:	1623	Crystal growth:	157, 167, 179, 751
Chemicals:	955	Crystal structure:	1, 13, 99, 111, 167, 403, 669, 687, 825, 1039, 1373
Chip formation:	1477	Crystal structure, Field effects:	729
Chitosan:	695	Crystal structure, Processing effects:	515
Chlorides, Environment:	239, 763	Crystallization:	71, 75, 319, 471, 553, 923, 949, 1079, 1287, 1291, 1405
Chromium, Alloying elements:	1151	Cubic lattice:	1385
Chromium, Coating:	1125	Cure monitoring:	459, 539
Chromium, Corrosion:	763, 1347	Curie temperature:	803
Chromium, Sorption:	513	Curing:	679, 1141, 1595
Chromium, Surface properties:	1365	Current carriers:	1415
Chromium base alloys, Chemical analysis:	655	Current voltage characteristics:	535, 591,
Chromium compounds:	817	Currents:	699
Chromium compounds, Coatings:	463	Cutlery, Corrosion:	1151
Chromium molybdenum vanadium steels, Nondestructive testing:	499	Cutting tool materials:	191
Chromium steels, Heat treatment:	1759	Cyclic loads:	241, 1399
Clay (material):	89, 1299	Cylinder heads, Coating:	1635
Clay minerals:	663	Damage:	83, 523, 561, 835, 911, 935, 993, 1157
Cleaning:	967, 1067	Damage tolerance:	519, 791, 889, 1411, 1557, 1797
Clinker:	1335	Damping:	1399
Clustering:	37	Damping capacity:	503, 1243
Clusters:	779	Deactivation:	783
Coarsening:	861, 1631	Debonding:	743, 911, 1411
Coatings:	841	Decomposition:	931
Cobalt, Alloying elements:	619	Defects:	927, 971
Cobalt base alloys, Composite materials:	1631	Deformation:	993, 1157
Cobalt compounds, Electrochemistry:	221	Deformation mechanisms:	631
Coercive force:	1689	Degradation:	763, 1709
Coextrusion:	357	Degree of polymerization:	459, 1219, 1291
Cohesion:	1499	Delaminating:	519, 523, 993, 1315, 1411,
Cold working:	573, 1247		
Colloid chemistry:	33		
Colloids:	1755,		

## Subject Index - 2003

Dendritic structure:	1499, 1797	1697, 1705
Densification:	1169	1311
	91, 403, 877, 895, 927, 1019,	1447
	1451, 1477, 1669	1173
Density:	91	1173
Dental materials:	539, 927, 1401, 1451	1685
Depletion:	849	1617
Deposition:	25, 307, 515, 1359,	915
Desorption:	1067, 1483	Elongation:
Deterioration:	1079	57, 445, 703, 849, 1061,
Devitrification:	71, 923, 1127	1157, 1609, 1751
Diamond films:	1447	4
Diamond films, Coatings:	1039	Emission:
Diamond pyramid hardness:	179, 191, 845, 1127, 1719	659, 873
Diamond pyramid hardness tests:	1435	575, 795, 811
Diamond-like carbon films:	1261	1051
Diamonds:	257, 1329	119, 543
Dielectric constant:	591, 807, 945, 1325, 1599	771
Dielectric properties:	21, 123, 209, 217, 569, 595,	Epitaxial growth:
	949, 1073, 1077, 1269, 1307,	467, 599, 939, 1067
	1613, 1705	113, 659, 1585, 1621
Dielectrics:	1007, 1131, 1537	159, 201, 229, 455, 507, 683,
Differential thermal analysis:	855	1141, 1315, 1439, 1471,
Diffusion welding:	759, 759, 1693	1643, 1644
Diffusivity:	171, 607, 949	631
Dimensional analysis:	1279	311
Dimensional stability:	643	Erosion:
Dipping:	967	1003, 1499
Direct current:	527	Erosion resistance:
Directional solidification:	515, 747	845
Dislocation density:	1751	Etching:
Dislocations:	565, 631	383
Dispersants:	253	Ethylene vinyl acetates:
Dispersing:	253	1027
Dispersion hardening alloys, Bonding:	1693	Eutectics:
Dispersions:	89, 739, 807, 1639, 1639,	549
	1755	Eutectics, Crystal growth:
Dissimilar material joining:	759	861
Dissimilar materials:	759	Eutectoid reactions:
Dissimilar metals, Brazing:	1659	941
Dissimilar metals, Joining:	353	Eutectoids:
Dissociation:	1053	1609
Dissolution:	383, 585, 1015	Evaporative cooling:
Distortion:	17	1295
Dopants:	127, 157, 209, 249, 283, 477,	Excitation:
	575, 595, 615, 735	873, 979
Doping:	1269	Extrudability:
Drawing:	377	1385
Ductility:	691, 747, 771, 849, 981,	Extrusion blow molding:
	1411, 1511, 1787	1547
Durability:	1127, 1315, 1779	Fabrication:
Dwell time:	1435	131
Dyes:	881	Failure:
Dynamic mechanical properties:	407, 997, 1157, 1533	1723, 1745, 1771
Dynamic tests:	1157	Failure analysis:
E glass:	1315, 1557, 1813	83
Eddy currents:	1607	Fatigue (materials):
Efficiency:	303, 1423	1399, 1511
Elastic constants:	911	Fatigue failure:
Electric batteries:	143, 429, 615, 999, 1035,	899, 1141, 1731, 1775, 1797
	1183, 1251	Fatigue strength:
Electric batteries, Design:	1701	1731, 1759, 1775
Electric batteries, Materials selection:	221, 1435	Fatigue tests:
Electric circuits:	699	1775
Electric current:	61	Fermi surface:
Electric fields:	807, 1079	573
Electric potential:	1763	Ferrite:
Electric power generation:	323, 1567	1787
Electrical conductivity:	99, 527, 839, 1727	Ferritic stainless steels, Phases (state of matter):
Electrical impedance:	755	1787
Electrical properties:	1095	Ferroelectric materials:
Electrical resistance:	1057	5, 75, 99, 217, 449, 527, 535,
Electro-optic coefficient:	49	591, 743, 1077, 1193, 1531
Electrochemistry:	615, 839, 1035	1677, 1679
Electrode potentials:	1251	Ferroelectricity:
Electrodeposition:	379, 413, 489, 1023, 1323	803, 1065, 1377, 1817
Electrodes, Materials selection:	221	Ferromagnetism:
Electroless plating:	1515, 1603, 1603	1693
Electroluminescence:	1339	Ferrous alloys:
Electrolysis:	1259	Ferrous alloys, Bonding:
Electrolytes:	145, 1053, 1083	Ferrous alloys, Claddings:
Electrolytic capacitors, Fabrication:	383	Ferrous alloys, Coating:
Electrolytic cells:	945	Ferrous alloys, Corrosion:
Electromagnetic absorption:	159	975
Electromagnetic shielding:	159,	Ferrous alloys, Magnetic properties:
Electromagnetism:	881	69, 1377
Electron conductivity:	1183	Ferrous alloys, X ray analysis:
Electron microscopy:	463	95
Electronic devices:	131, 577, 629, 629, 701, 891,	Fiber composites:
	1073, 1077, 1107, 1117,	935
	1197, 1237, 1269, 1307,	379
	1323, 1325, 1599, 1679,	Fiber composites, Mechanical properties:
		175
		Fiber pull out:
		1495, 1591
		Fiber reinforced plastics:
		519, 683
		Fiber technology:
		725
		Fiber-matrix adhesion:
		201, 203, 1495
		Fibrous structure:
		357, 377
		Field effects:
		807
		Field emission:
		1017
		Figure of merit:
		737
		Filled plastics:
		57, 235, 1237
		Films:
		249, 729, 751
		Fire resistance:
		455, 1471, 1507
		Flame retardants:
		1471
		Flame spraying:
		845
		Flammability:
		455
		Flaw detection:
		523
		Flexibility:
		589, 791, 963
		Flocculating:
		89
		Fluid flow:
		89, 807
		Fluorescence:
		459, 575, 811
		Fluorescent lamps:
		979
		Flux:
		927, 1065, 1607
		Fly ash:
		323, 1287
		Foamed metals, Electrical properties:
		1701
		Foamed metals, Mechanical properties:
		547
		Foamed metals, Powder technology:
		1407
		Foil:
		383
		Foil, Heat treatment:
		1627
		Foil, Mechanical properties:
		83
		Food packaging:
		1443
		Fourier analysis:
		655
		Fractal analysis:
		1279

Fractography:	139, 175	High carbon steels, Mechanical properties:	1609
Fracture mechanics:	1499	High pressure:	257
Fracture mechanisms:	993	High strength steels, Mechanical properties:	4
Fracture strength:	363, 495, 1121, 1121, 1745,	High temperature:	213, 257, 703, 763
	1787	Homogeneity:	107, 1291
Fracture toughness:	191, 279, 611, 683, 721, 721,	Honeycomb construction:	1783
	747, 895, 899, 923, 1137,	Honeycomb construction, Mechanical properties:	1783
	1215, 1643, 1644, 1719,	Honing:	367
	1731, 1797	Hot dip aluminizing:	1003
Fracturing:	41, 1279, 1439, 1531, 1551,	Hot extrusion:	377
	1771	Hot isostatic pressing:	139, 1101, 1111
Fragmentation:	1591	Hot pressing:	895, 1201, 1669
Free energy of formation:	663	Hybrid composites:	1179, 1459
Free radical polymerization:	1219	Hybrid composites, Mechanical properties:	1087
Freeform fabrication:	1, 1047	Hybrid composites, Physical properties:	503
Fretting:	1499	Hydrates:	825
Friction:	993, 997, 1087, 1105, 1365	Hydration:	303, 1335
Friction stir welding:	41, 353, 441, 1061	Hydraulic jets:	115
Frictional wear:	1573,	Hydraulic systems, Corrosion:	981
Frit:	1197	Hydrogen embrittlement:	499, 865
Fuel cells:	1, 145, 589, 651, 1053, 1185,	Hydrogen storage:	1487
	1595, 1747, 1809	Hydrogen sulfide:	1467
Functional groups:	1229	Hydrogenation:	1569
Functionally gradient materials:	971	Hydrolysis:	629, 629, 1015, 1131
Functionally gradient materials, Mechanical properties:	899	Hydrophobicity:	1713
Functionally gradient materials, Microstructure:	1455	Hydrothermal reactions:	471, 735, 821, 1405
Functionally gradient materials, Powder technology:	739	Hydroxyapatite:	139, 343, 513, 775, 919,
Fungi:	1443		1215, 1363, 1737
Furnace brazing:	1659	Hydroxyapatite, Coatings:	479, 919, 1665
Fused deposition modeling:	1, 1047	Hydroxyapatite, Composite materials:	775
Fusion welding:	1061	Hygroscopicity:	1197
Gallium, Alloying additive:	857	Hypereutectic structures:	1355
Gallium, Alloying elements:	1241	Hysteresis:	535, 993, 1243, 1557, 1607
Gallium arsenide:	467, 565, 599, 1263, 1767	Ignition:	399
Gallium compounds:	783, 1581, 1805	Immiscibility:	1127
Gallium nitride:	831	Impact:	935, 1157, 1315, 1797
Garnet:	349	Impact strength:	417, 417, 519, 523, 791,
Gas turbine engines:	603		1407, 1557
Gas turbine engines, Brazing:	79	Impact strength, Size effects:	4
Gas turbine engines, Materials selection:	771	Impact tests:	4, 561
Gelatin:	1179	Impurities:	585, 1065
Gelation:	1419	In vivo testing:	1015
Gels:	399	Incinerators, Corrosion:	975
Germanium:	985	Incinerators, Materials selection:	763
Germanium compounds:	1467	Inclusions:	1643
Getters:	1627	Indentation:	267, 499, 561, 835, 1105,
Glass:	9, 15, 71, 123, 267, 307, 575,		1137, 1261, 1435, 1477,
	1031, 1127, 1137, 1477,		1719, 1741
	1647, 1723	Indium compounds:	599, 907, 1767
Glass ceramics:	895, 923, 1287, 1451	Industrial wastes:	855
Glass fiber reinforced plastics:	417, 561, 835, 993, 1507,	Inert atmospheres:	675, 855
	1557, 1591	Inertia:	1157
Glass fibers, Composite materials:	379	Infiltration:	279, 379, 395, 503, 941,
Glass transition temperature:	171, 733, 923, 1011, 1127		1451
Glass-epoxy composites:	1315, 1813	Infrared brazing:	1659
Glasses:	795	Ingots, Melting:	903
Glow discharges:	1259	Injection molding:	377
Glucose oxidase:	695	Inoculation:	549
Gold:	1031, 1697	Insulation:	1515
Gold, Coating:	577	Integrated circuits:	945
Gold, Microstructure:	1373	Integrated circuits, Fabrication:	1623
Grain boundaries:	311, 433, 581, 981	Intercalation compounds:	297, 299, 429, 1179, 1431,
Grain boundary segregation:	849		1439
Grain growth:	69, 103, 195, 225, 473, 1079,	Interface reactions:	759, 759, 1551, 1709
	1275, 1609	Interfaces:	495, 599, 639, 1173, 1793
	577, 659	Interfaces, Mechanical properties:	919
Grain refinement:	195	Interfacial shear strength:	759, 1591
Grain size:	4, 195, 433, 1511, 1809	Interfacial strength:	201, 371, 417, 479, 743,
Grain size distribution:	473, 577		1147
Grain structure:	57, 163, 549	Intergranular structure:	311
Graphite:	889, 1237	Interlayers:	149, 759, 759, 999
Graphite, Composite materials:	1087	Intermetallics:	585, 1569, 1685
Green strength:	589	Intermetallics, Coatings:	845
Grinding:	1185, 1723	Intermetallics, Composite materials:	729
Growth rate:	923	Intermetallics, Corrosion:	239, 1681
Half life:	1395	Intermetallics, Crystal lattices:	1385
Hardening:	1151	Intermetallics, Electrochemistry:	221
Hardness:	343, 923, 1003, 1043, 1261,	Intermetallics, Magnetic properties:	803
	1319, 1573, 1741	Intermetallics, Mechanical properties:	747
	267, 499, 1105	Intermetallics, Microstructure:	515, 849, 1275
Hardness tests:	41, 499	Intermetallics, Phase transformations:	531, 1241, 1399
Heat affected zone:	589	Intermetallics, Physical properties:	1243
Heat exchangers:	975	Intermetallics, Powder technology:	717
Heat exchangers, Corrosion:	975	Interpenetrating networks:	1141
Heat transmission:	1507, 1727	Ion exchanging:	999
Heat treatment:	9, 717	Ion implantation:	1627
Heating:	1635	Ion plating:	1681
Heating rate:	135	Ionic conductivity:	471, 1083, 1809
Heterogeneity:	441, 1157	Ionic mobility:	1347
Heterojunctions:	1107	Ionomer resins:	539, 1401
Heterostructures:	1263	Ions:	607
Heusler alloys, Phase transformations:	1241	Iron:	1817
Hexagonal lattice:	1621		

## Subject Index - 2003

Iron, Coating:	1017	Mechanical alloying:	717, 877, 1201, 1377
Iron, Corrosion:	1347	Mechanical measurements:	1643, 1644
Iron compounds:	941, 1251, 1283, 1569	Mechanical tests:	265
Iron compounds, Coatings:	1043	Mechanisms:	303
Iron oxides:	235, 787, 931, 1587	Medical equipment:	131
Iron oxides, Reduction (chemical):	855	Medical equipment, Corrosion:	1151
Isomerization:	955	Medium carbon steels, Cladding:	713
Kaolinite:	663	Medium carbon steels, Coating:	1043
Kinetics:	311, 383	Medium carbon steels, Welding:	41
Lamb waves:	523	Melt spinning:	679, 903
Lamellar structure:	747, 1275	Melting points:	53, 927
Laminates:	203, 519, 523, 971, 1507, 1557	Melts:	639
Laminates, Mechanical properties:	417	Mesoporous materials:	489
Lanthanum compounds:	1, 651, 1077, 1563, 1621	Metal fibers, Composite materials:	379
Laser ablation:	303, 1141	Metal matrix composites, Crystal growth:	861
Laser beam cladding:	713, 1169	Metal matrix composites, Mechanical properties:	899, 911, 1121, 1573
Laser beam cutting, Automation:	1791	Metal matrix composites, Microstructure:	1169, 1173
Laser processing:	83	Metal matrix composites, Powder technology:	877, 1427
Lasers:	349, 811, 873	Metal matrix composites, Reactions (chemical):	1709
Latex:	1027, 1051	Metal powders:	739
Lattice parameters:	17, 515, 1333, 1767	Metal powders, Oxidation:	629
Lead base alloys, Mechanical properties:	1435	Metallic glasses:	171, 319
Lead compounds:	21	Metallic glasses, Chemical analysis:	655
Lead zirconate titanates:	449, 675, 743, 971, 1193, 1613, 1677, 1679	Metallic glasses, Crystal growth:	857
Leakage:	1401	Metallic glasses, Magnetic properties:	1377
Lifetime:	1723	Metallic glasses, Mechanical properties:	407, 1731
Light valves:	483	Metallic glasses, Melting:	903
Light-emitting diodes:	1205, 1351, 1415, 1423	Metallic glasses, Microstructure:	869
Liquid crystal polymers:	813	Metallic glasses, Phases (state of matter):	1355
Liquid crystals:	807, 1359, 1527	Metallizing:	945, 1603
Liquid metals:	779	Metallography:	273
Liquid phase sintering:	895	Metastable phases:	629, 1747
Liquidus:	1, 1047	Microgravity:	37
Lithium, Reactions (chemical):	221	Microhardness:	179, 611, 747, 1011, 1105, 1127, 1741
Lithium compounds:	923, 1035, 1183, 1747	Microminiaturization:	131
Lithium compounds, Additives:	91	Microstructural analysis:	335
Lithography:	1447	Microwave absorption:	123, 209, 569, 595
Loads (forces):	267	Microwaves:	1585, 1635
Localized corrosion:	239	Mineral, Mechanical properties:	1783
Low carbon steels, Coating:	845	Miniaturization:	267
Low carbon steels, Microstructure:	631	Mirrors:	841, 1723
Low cycle fatigue:	45	Mixed oxides:	123, 143, 209, 217, 569, 595, 623, 733, 755, 1307
Low pressure:	1223	Modification:	861
Lubrication:	1043	Modulus of elasticity:	29, 203, 603, 791, 877, 923, 959, 963, 1215, 1261, 1399, 1567, 1643, 1673, 1797
Luminescence:	477, 873, 979, 1351, 1415	Modulus of elasticity, Microstructural effects:	547
Machining:	131	Modulus of rupture in bending:	895, 1215
Magnesium, Composite materials:	503	Moisture resistance:	1713
Magnesium base alloys, Casting:	199	Molds, Corrosion:	1151
Magnesium base alloys, Composite materials:	643, 1709	Molecular beam epitaxy:	483, 1263, 1581
Magnesium base alloys, Mechanical properties:	445	Molecular dynamics:	779
Magnesium compounds:	825, 1069, 1487	Molecular sieves:	955
Magnesium compounds, Coatings:	1023	Molecular weight distribution:	709, 1147
Magnesium compounds, Powder technology:	717	Molybdenum, Alloying elements:	573
Magnesium oxide:	119, 663	Molybdenum, Composite materials:	739
Magnesium oxide, Composite materials:	1173	Molybdenum, Impurities:	171
Magnetic anisotropy:	803	Molybdenum, Magnetic properties:	69
Magnetic devices:	931	Molybdenum, Surface properties:	1365
Magnetic fields:	729, 1241	Molybdenum base alloys, Brazing:	1659
Magnetic induction:	69	Molybdenum disulfide:	429
Magnetic measurements:	423	Monitoring:	907
Magnetic moment:	623, 803	Monoclinic lattice:	1385
Magnetic permeability:	69, 623, 1377, 1563, 1689	Montmorillonite:	53, 299, 1179, 1431, 1471, 1547
Magnetic properties:	857	Morphology:	37, 135, 149, 191, 339, 357, 377, 395, 463, 495, 549, 585, 629, 721, 721, 739, 755, 775, 839, 1131, 1147, 1431, 1547, 1705, 1709, 1759, 1767
Magnetic tape:	787	Mossbauer spectroscopy:	1813
Magnetic transitions:	527, 623	Mullite:	573
Magnetism:	1569	Mullite, Composite materials:	663
Magnetization:	803, 1377, 1689, 1817	Multilayers:	503
Magnetoresistivity:	527, 1689	Multilayers, Mechanical properties:	135, 467, 535, 721, 1603, 1603
Magnetostriction:	1607	Nanocomposites:	53, 205, 235, 299, 327, 429, 543, 791, 997, 1019, 1027, 1165, 1179, 1261, 1299, 1431, 1439, 1459, 1471, 1547, 1713, 1737, 1817
Manganates:	615	Nanomaterials:	143, 145, 167, 261, 307, 403, 437, 557, 577, 615, 647, 735, 751, 767, 787, 799, 811, 831, 839, 885, 891, 931, 1007, 1019, 1113, 1131, 1205, 1283, 1333, 1519, 1697
Manganese, Alloying elements:	1241	Nanomaterials, Microstructure:	335
Manganese, Extraction:	1363	Nanomaterials, Nondestructive testing:	261
Manganese compounds:	143, 999		
Manganese steels, Microstructure:	311, 549		
Manganese steels, Phase transformations:	573		
Marine environments:	1023		
Martensite:	1243		
Martensitic stainless steels, Corrosion:	865, 1151		
Martensitic stainless steels, Phases (state of matter):	1787		
Martensitic transformations:	17, 573, 1241, 1399		
Martensitic transformations, Alloying effects:	531		
Martensitic transformations, Heating effects:	375		
Martensitic transformations, Temperature effects:	423		
Master alloys, Powder technology:	1427		
Material removal rate (machining):	303		
Mathematical analysis:	955, 959, 1137, 1673		
Mathematical models:	267, 363, 473, 639, 739, 755, 1121, 1121, 1125, 1219, 1335, 1355, 1643, 1771, 1783, 1783		

Nanostructure:	319, 335, 701, 779, 1205	Percolation:	699, 1057
Nanotubes:	339, 413, 543	Peritectoid reactions:	941
Natural polymers:	1303, 1389	Permanent magnets:	1563
Near net shaping:	1451	Permeability:	395, 997
Neodymium, Alloying elements:	445	Perovskite structure:	1, 21, 209, 345, 527, 623, 1655
Neutron diffraction:	1655	pH effects:	239
Nickel, Corrosion:	1347	Phase boundary:	1741
Nickel, Electrical properties:	1701	Phase decomposition:	397
Nickel, Oxidation:	371	Phase diagrams:	941, 1355
Nickel, Reactions (chemical):	1537	Phase separation:	433, 1343
Nickel base alloys:	759	Phase stability:	573
Nickel base alloys, Composite materials:	1369	Phase transformations:	21, 817
Nickel base alloys, Corrosion:	1681	Phases (state of matter):	75
Nickel base alloys, Joining:	759	Phenolic resins:	1507
Nickel base alloys, Microstructure:	849	Phonons:	795
Nickel base alloys, Phase transformations:	375, 1241, 1399	Phosphate glass:	1197, 1779
Nickel base alloys, Physical properties:	1243	Phosphates:	463
Nickel base alloys, Structural hardening:	603	Phosphates, Coatings:	463
Nickel base alloys, X ray analysis:	95	Phosphides:	1463
Nickel chromium molybdenum steels, Mechanical properties:	4	Phosphors:	1, 13, 477, 659, 669, 979, 1351, 1527
Nickel compounds, Brazing:	79	Phosphorus compounds:	455
Nickel compounds, Coatings:	845	Photocatalysis:	65, 687, 967, 989, 1007, 1165, 1209, 1213, 1255, 1503, 1821
Nickel compounds, Composite materials:	729	Photochemistry:	799
Nickel compounds, Corrosion:	239, 1681	Photochemistry:	1801
Nickel compounds, Microstructure:	849	Photoconductivity:	127, 287, 1763
Nickel compounds, Phase transformations:	531, 1399	Photoconductors:	1131
Nickel compounds, Physical properties:	1243	Photodegradation:	1165
Nickel compounds, Powder technology:	717	Photoelectron spectroscopy:	345
Nickel steels, Mechanical properties:	691	Photoluminescence:	659, 1339, 1527
Niobates:	209, 217, 225, 595, 1705	Photonics:	737
Niobium, Alloying elements:	1377	Photopolymerization:	647
Niobium compounds:	297	Photosensitivity:	813, 1763
Nitrates:	1577	Photovoltaic cells:	1079, 1113, 1359
Nitration:	885	Photovoltaic cells, Fabrication:	1801
Nitric acid:	967	Piezoelectric ceramics:	971, 1531, 1567
Nitrides:	817, 1581	Piezoelectricity:	989, 1091, 1613
Nitriding:	1627, 1779	Pigments:	1131
Notch toughness:	1027	Pipe, Corrosion:	821
Nuclear engineering:	1523	Pipe, Reactions (chemical):	855
Nuclear fuels:	119	Piston rings, Coating:	1365
Nuclear magnetic resonance:	107	Pistons, Coating:	1635
Nuclear reactor components:	581	Pitting (corrosion):	865
Nuclear reactor components, Brazing:	79	Planarization:	1623
Nucleation:	103, 839, 861, 923, 1039, 1079, 1261	Plants (organisms):	1495
Nylon 6:	1027, 1591	Plasma processing:	817, 939, 1125
Nylons:	1797	Plasma spraying:	463, 919, 919
Optical limiting:	283	Plastic deformation:	115, 241, 565, 703, 1393, 1483
Optical materials:	179, 225, 707, 979, 1031, 1679	Plastic flow:	1477
Optical microscopy:	241	Plastics industry:	1027
Optical properties:	9, 707, 737, 841, 949, 989, 1095, 1491	Platinum:	145, 327, 543, 971
Order disorder:	95	Platinum, Alloying elements:	531
Organic compounds:	589, 1617	Plugging:	83
Organic fiber reinforced plastics:	201, 203, 1495	Poissons ratio:	1783, 1783
Organic materials:	179	Polarization:	535, 1599, 1655
Orientation:	565, 747	Polishing (finishing):	1723
Orientation relationships:	1173	Pollution abatement:	387, 513, 1165, 1503
Oxidation:	999, 1003, 1209, 1755	Polyacrylates:	737, 1237
Oxidation rate:	763, 771	Polyamide resins:	1027, 1591
Oxidation resistance:	213, 941, 1693	Polyanilines:	179, 1073, 1519
Oxide coatings:	315, 371, 1347, 1359, 1635, 1647	Polycarbonates:	737
Oxide coatings, Mechanical properties:	1003	PolyCRYSTALS:	473
Oxides:	91, 111, 907, 999, 1035, 1095	Polyester resins:	53, 153, 201, 203, 299, 561, 993
Oxidizing agents:	1577	Polyetheretherketones:	1595
Oxynitrides:	923	Polyethylene oxides:	1219
Ozone:	907	Polyethylene terephthalates:	377, 1027
Packaging:	1389	Polyethylenes:	53, 57, 639, 997, 1027, 1431, 1547
Palladium:	707	Polyketones:	429
Paper:	265	Polymer blends:	57, 507, 1011, 1051, 1595, 1741
Paramagnetism:	1817	Polymer cements:	1401
Partially stabilized zirconia:	119, 735, 1185	Polymer matrix composites:	377, 699, 1015, 1439, 1643, 1644
Particle shape:	631	Polymerization:	1027, 1179, 1225, 1299, 1343, 1431, 1459, 1577
Particle size:	37, 629, 709, 735, 1131, 1147, 1537, 1587	Polymers:	1, 49, 1047, 1053, 1295, 1339, 1783
Particle size distribution:	1291, 1455	Polymethacrylates:	303, 647, 1057
Particulate composites:	343, 539, 699, 997, 1057, 1643, 1644, 1689	Polymethyl methacrylates:	709, 1011, 1027, 1147
Particulate composites, Casting:	279	Propylene:	377, 417, 1027, 1547, 1557
Particulate composites, Coatings:	1369	Polypyrrrole:	687, 839, 1299, 1519, 1577
Particulate composites, Heat treatment:	391, 1627	Polysilanes:	679, 1229, 1459
Particulate composites, Mechanical properties:	149, 911, 1573	Polystyrene resins:	135, 235, 507, 647, 699, 737, 1219, 1741
Particulate composites, Powder technology:	775, 877	Polysulfone resins:	1595
Particulate composites, Structural hardening:	1247	Polytrifluoroethylenes:	915
Patterns:	339		
Peel strength:	265		
Peening:	115		
Pellets:	119		
Penetration depth:	1435		

## Subject Index - 2003

Polyurethane resins:	561, 1027, 1225, 1643, 1644	Rocket engines, Brazing:	79
Polyvinyl acetates:	1027	Roughness:	1039, 1043
Polyvinyl alcohols:	675, 1595	Rubber:	1027, 1157
Polyvinyl chlorides:	679, 1027	Rubidium compounds:	1405
Polyvinyl resins:	1639	Rutile:	1131
Polyvinylidene fluorides:	915, 1011, 1713	Sandwich construction:	417
Polyynes:	707	Sandwiches:	417, 999
Porosity:	181, 293, 463, 635, 959, 1213, 1407, 1557, 1643, 1644, 1673, 1701, 1813	Saturation (magnetic):	803, 857, 1607
Porous materials:	153, 269, 331, 417, 959, 1295, 1343, 1673	Scale (corrosion):	371
Porous materials, Composite materials:	417	Scanning electron microscopy:	175, 273
Porous materials, Fabrication:	135	Schottky barrier:	483
Porous materials, Mechanical properties:	547	Screen printing:	1193
Portland cements:	1335	Sealers:	463
Potassium aluminum silicates:	927	Sealing:	463
Potential barriers:	1685	Sedimentation:	739
Powder blending:	775	Segregations:	311, 1275, 1455
Powder coatings:	1369	Seismic phenomena:	1157
Powder compacts:	107	Seizing:	1087
Powder metallurgy:	877	Selenides:	25, 483, 795, 985
Powder technology:	213, 629, 675, 775	Selenides, Synthesis:	1801
Power factor:	985	Self-propagating synthesis:	163, 399, 877, 1101, 1189
Precipitates:	397, 631	Semi-solid processing:	199
Precipitation:	167, 557, 585, 1131, 1291, 1355, 1751, 1759	Semiconductivity:	515
Precipitation hardening:	391, 1247	Semiconductor devices:	945, 1463
Precursors:	111, 213, 307, 327, 557, 675, 679, 725, 767, 841, 885	Semiconductors:	205, 249, 273, 287, 413, 565, 577, 733, 831, 985, 1117, 1213, 1263, 1295, 1347, 1491, 1503, 1515, 1519, 1581
Preforming:	279, 503	Semiconductors, Design:	1373
Presintering:	1451	Semiconductors, Electrical properties:	61
Pressure molding:	135	Sensitizing:	981
Prestraining:	683	Sensors:	695, 839, 1057, 1095
Printed circuits:	607	Separation:	967
Probes:	131	Service life:	771
Process parameters:	25, 269, 327, 449, 553, 1099, 1311, 1693, 1813	Setting (hardening):	539
Propellers, Corrosion:	981	Shape:	639, 1169
Protective coatings:	463, 919, 1023, 1099, 1261, 1665, 1681	Shape memory:	531, 1233
Protective coatings, Materials selection:	611	Shape memory alloys:	683
Protective coatings, Mechanical properties:	919	Shape memory alloys, Composite materials:	729
Pull out tests:	683, 1495	Shape memory alloys, Corrosion:	239, 1681
Pulsed laser deposition:	225, 591, 1201	Shape memory alloys, Phase transformations:	375, 1241, 1399
Purification:	1007	Shape memory alloys, Physical properties:	1243
Purity:	581, 1069, 1111	Shear deformation:	83
Pyroelectricity:	915	Shear strength:	759, 919, 919, 1793
Pyrolysis:	111, 679, 1007, 1537	Shear viscosity:	639
Quantum wires:	467	Ships, Corrosion:	981
Quasicrystalline structure:	103	Shock:	1329
Quasicrystals, Mechanical properties:	611	Shock resistance:	201, 203, 331, 889
Quenching and tempering:	1151	Short range order:	655, 869
Radiation damage:	1523	Shrinkage:	91
Radiation effects:	15, 873	Sialons:	885
Radioactive materials:	119	Silica glass:	1419
Raman spectroscopy:	139	Silicates:	1439, 1723
Rapid solidification:	103, 779, 877, 1377	Silicides:	941
Rare earth compounds:	111, 163, 217, 477, 623	Silicon:	131, 721, 1581, 1603
Rare earth compounds, Composite materials:	729	Silicon, Alloying elements:	1079, 1355
Rare earth compounds, Magnetic properties:	803	Silicon, Cleaning:	939
Raw materials:	323, 387, 513, 885, 1189	Silicon, Coating:	1039, 1447
Reaction mechanisms:	185, 855, 953, 1427	Silicon, Coatings:	1603
Reactive processing:	287, 307, 335, 721, 721, 759, 759	Silicon, Composite materials:	721
Reactivity:	1737	Silicon carbide:	213, 257, 581, 679, 725, 759, 767, 841, 889, 1101, 1161, 1279, 1551
Reactors:	1223, 1747	Silicon carbide, Composite materials:	391, 503, 643, 899, 911, 1087, 1247, 1573
Recovery:	683, 687, 1105	Silicon carbide, Joining:	759
Recrystallization:	115, 433, 1373	Silicon compounds:	1107
Recycling:	323, 513	Silicon dioxide:	33, 181, 283, 395, 543, 701, 783, 891, 997, 1019, 1027, 1155, 1229, 1423, 1459, 1603, 1689
Reflectivity:	181, 1727	Silicon dioxide, Coatings:	1603
Refractivity:	737	Silicon nitride:	91, 163, 267, 331, 895, 1261,
Regression:	1651, 1745	Silicon nitride, Composite materials:	279
Reinforced concrete, Coating:	1023	Silicone resins:	343, 679
Reinforced plastics, Composite materials:	417	Silicone rubber:	1821
Reinforcing steels, Coating:	1023	Silver:	139, 701, 1205
Relaxation:	599, 1767	Silver, Alloying elements:	1751
Reliability:	971	Silver brazing alloys:	1659
Repellents:	1713	Silver indium selenides:	287
Reproduction:	881	Single crystalas:	157
Residual stress:	817, 919, 919, 1137, 1723	Single crystals:	927, 985, 1587
Resilience:	1019	Single crystals, Mechanical properties:	241
Resin transfer molding:	1813	Single crystals, Phase transformations:	1241
Resistivity:	61, 159, 699, 971, 1053, 1359, 1487, 1701, 1751	Single screw extruders:	1547
Resistivity, Processing effects:	269	Sintered compacts:	1419
Rhenium:	1755	Sintering:	119, 269, 581, 595, 885, 1419, 1805, 1809
Rheocasting:	199	Sintering (powder metallurgy):	1669
Rheological properties:	1, 639, 997, 1047, 1141, 1639	Sintering aids:	91
Ring opening polymerization:	1303		
Roasting:	395, 553		

Size effects:	495, 535, 1333	Superconducting tapes:	315
Slags, End uses:	387	Superconductivity:	1069
Slags, Recycling:	387	Superconductors:	185, 297, 1585
Sliding contact:	1365	Supercooling:	195
Sliding friction:	713, 1573	Superlattices:	787
Slip:	1731	Superplasticity:	703, 1609
Slip casting:	1451	Supersaturation:	1385
Slurries:	1, 199, 357, 589, 1047	Surface area:	783, 799
Smart materials:	683, 729, 935	Surface chemistry:	343, 577, 783, 1551
Soaking:	967	Surface energy:	787, 861
Sodium:	967	Surface finish:	367, 1723
Sodium chloride:	865	Surface layer:	371, 713, 821
Sodium compounds:	811, 1083	Surface pretreatments:	967
Sodium silicates:	1229	Surface structure:	115, 181, 479, 565, 695, 1325, 1755
Softening:	1393, 1731	Surface structure, Deformation effects:	241
Sol gel process:	13, 181, 283, 349, 395, 615, 675, 767, 885, 891, 907, 1031, 1043, 1255, 1419, 1647	Surfactants:	1543
Solar generators:	127, 813	Surgical implants:	1797
Solders:	607	Surgical implants, Coating:	919, 1665
Solid lubricants:	1087	Surgical implants, Corrosion:	1099, 1681
Solid solubility:	1805	Surgical implants, Materials selection:	239, 775
Solid solutions:	75, 119, 297	Surgical implants, Mechanical properties:	29
Solid state:	185, 927	Swelling:	1179
Solidification:	195, 549, 861, 1169	Syndiotacticity:	507
Solidus:	1, 1047	Syntactic foams:	1643, 1644
Sols:	357, 1747	Synthesis:	13, 111, 185, 205, 257, 327, 339, 349, 413, 437, 471, 543, 557, 629, 679, 735, 767, 787, 825, 831, 839, 931, 953, 1113, 1127, 1223, 1229, 1283, 1299, 1329, 1459, 1463, 1467, 1543, 1697
Solubility:	927, 1355	Tantalum, Crystal lattices:	17
Solution blending:	299	Tantalum base alloys, Coatings:	1681
Solution heat treatment:	391, 585	Tantalum compounds:	191, 1603
Solution strengthening:	603	Tantalum compounds, Coatings:	1603
Sorption:	1057	Tape casting:	589
Space charge:	61	Telescopes:	1723
Space environment:	643	Tellurides:	1263
Space stations:	643	Tellurites:	575
Spacecraft components:	643	Temperature effects:	1039
Spark plasma sintering:	403, 889, 1111, 1407, 1631	Tempering:	631
Specific heat:	235, 733	Templates:	701
Specific surface:	787, 1291, 1335	Tensile properties:	41, 45, 149, 343, 407, 441, 499, 643, 691, 1061, 1511, 1551
Specimen preparation:	273	Tensile strength:	57, 353, 445, 495, 611, 997, 1061, 1215, 1643, 1644, 1751, 1797
Spectroscopy:	459	Tensile stress:	1121, 1121, 1771
Spherical powders:	1419	Tension tests:	503, 683, 1315, 1551
Spinel:	755, 979, 1621	Tetragonal zirconia polycrystals:	267
Spinning (materials):	891	Textile composites:	495, 519, 561, 1315
Spray forming:	45	Texture:	1131, 1373
Spray pyrolysis:	37	Thermal barriers:	1091, 1499
Sprayed coatings:	919, 1499	Thermal conductivity:	899, 1019, 1087, 1727
Sprayed coatings, Mechanical properties:	919	Thermal cycling:	643
Sprayed coatings, Surface properties:	1365	Thermal degradation:	1507
Sputtered films:	531, 1603, 1603	Thermal diffusivity:	1073
Sputtering:	449, 479, 1125, 1155, 1259	Thermal expansion:	861, 899, 1069, 1127, 1161, 1247, 1709, 1723
Squeeze casting:	149, 279	Thermal fatigue:	643
Stability:	1431	Thermal mismatch:	643
Stabilization:	89, 253	Thermal resistance:	691
Statistical analysis:	1121, 1121, 1651	Thermal shock:	201, 203, 331, 841, 911
Statistical methods:	1121, 1121	Thermal spraying:	1499
Steam:	821	Thermal stability:	53, 235, 455, 651, 877, 889, 903, 911, 1587
Steel making:	387	Thermite:	855
Steels, Coating:	1003, 1635	Thermodynamics:	1003, 1719
Steels, Corrosion:	619	Thermoelectricity:	985
Steels, Reactions (chemical):	855	Thermoluminescence:	1395
Stiffness:	29, 877, 899, 963, 1019, 1439, 1557	Thermomechanical treatment:	1233
Stitching:	519	Thermosetting resins:	201,
Stoichiometry:	881	Thick films:	687
Strain:	503, 599, 1783, 1783	Thickness:	25, 535
Strain aging:	397	Thickness measurements:	261, 261
Strain rate:	703, 865, 1157, 1393, 1557, 1609	Thin films:	9, 113, 127, 225, 261, 287, 315, 345, 449, 483, 489, 515, 591, 599, 659, 743, 907, 967, 1007, 1155, 1503, 1577, 1585, 1677, 1679
Straining:	631	Thin films, Crystal growth:	939
Stress analysis:	919, 919	Thin films, Irradiation:	873
Stress corrosion:	1635	Thin films, X ray analysis:	261
Stress corrosion cracking:	865, 1347	Thulium:	659
Stress intensity:	139, 507, 1137	Tile (material):	387
Stress relaxation:	817	Tile (material), Fabrication:	387
Stress strain curves:	149, 407, 495, 631	Tin, Bonding:	1311
Stresses:	683	Tin compounds:	143
Strontium:	1401	Titanates:	217, 345, 989, 1077, 1655
Strontium compounds:	5, 75, 949, 1705	Titanium, Alloying elements:	1319
Structural analysis:	1303		
Structural integrity:	835		
Structural materials:	1161		
Styrene butadiene resins:	699, 1741		
Submerged arc welding:	499		
Substitutional solid solutions:	573		
Sulfides:	205, 1113, 1491		
Sulfides, Coatings:	1043		
Sulfides, Thin films:	577		
Superalloys, Bonding:	1693		
Superalloys, Joining:	759		
Superalloys, Structural hardening:	603		

## Subject Index - 2003

Titanium, Coating:	1665	Vehicles, Materials selection:	1319
Titanium, Coatings:	479	Vermiculite:	1483
Titanium, Composite materials:	739	Vibration:	1243
Titanium base alloys:	775	Vinyl ester resins:	1141
Titanium base alloys, Brazing:	1659	Viscoelasticity:	53, 997
Titanium base alloys, Coating:	479, 919	Viscometers:	639
Titanium base alloys, Composite materials:	775, 877, 1169	Viscosity:	89, 171, 589, 791, 923, 1813
Titanium base alloys, Mechanical properties:	29	Vitrification:	663
Titanium base alloys, Microstructure:	1275	Voids:	1813
Titanium base alloys, Oxidation:	771	Volume fraction:	747, 1247, 1644
Titanium base alloys, Phase transformations:	531	Warp:	993
Titanium carbide:	889, 1719	Wastes:	513, 1225, 1287, 1363
Titanium carbide, Composite materials:	1169, 1427	Water pipelines, Corrosion:	619
Titanium compounds:	1101, 1111, 1463, 1723, 1763	Water pollution:	65, 513
Titanium compounds, Composite materials:	729	Water purification:	967, 1821
Titanium compounds, Corrosion:	239, 1681	Water tanks, Coating:	1635
Titanium compounds, Mechanical properties:	747	Waterproofing:	1023
Titanium compounds, Phase transformations:	1399	Waveguides:	225
Titanium compounds, Physical properties:	1243	Wear:	1365
Titanium diboride:	191	Wear mechanisms:	1087
Titanium dioxide:	307, 339, 403, 437, 687, 799, 967, 1007, 1131, 1165, 1209, 1213, 1255, 1325, 1503, 1587, 1647, 1737, 1821	Wear rate:	713, 845
Titanium nitride:	1719	Wear resistance:	691, 721, 721, 861, 899, 1003, 1043, 1087, 1247, 1261, 1319, 1511
Tomography:	107	Wear tests:	1573
Topography:	241, 1713	Weibull modulus:	1745
Toughness:	371, 691, 791, 877, 997, 1141, 1151, 1161, 1261, 1411, 1511, 1557, 1644, 1659	Weld defects:	1061
Toxicology:	691, 1197	Weldability:	41
Transducers:	1091, 1193, 1567, 1613	Welded joints, Corrosion:	1693
Transformation temperature:	1165	Welded joints, Mechanical properties:	41, 353, 441, 499, 1061
Transistors:	1079	Welding parameters:	41, 1061
Transition metal compounds, Magnetic properties:	803	Wettability:	1713
Transport properties:	1, 5	Wetting:	1003
Tribology:	1043, 1087	Whisker composites, Mechanical properties:	643
Tungstates:	99	Whisker composites, Reactions (chemical):	1709
Tungsten, Composite materials:	1455	Whiskers:	659, 1161
Tungsten base alloys, Structural hardening:	397	Wood:	963
Tungsten carbide, Composite materials:	1369, 1631	X ray absorption:	95, 107
Tungsten compounds:	1095	X ray diffraction:	261, 261, 751
Turbine blades:	747	X ray spectroscopy:	95, 655, 1255
Turbine blades, Bonding:	1693	X rays:	15
Turbine blades, Microstructure:	1275	Xenon compounds:	811
Turbines, Corrosion:	981	Xerogels:	283
Twin screw extruders:	1547	Yield strength:	45, 57, 611, 1393
Twinning:	17, 1399	Yield strength, Composition effects:	445
Ultrafines:	1189, 1639	Yttria stabilized zirconia:	1105
Ultrasonic testing:	523	Yttrium compounds:	91, 1127, 1585
Ultrasonics:	539	Yttrium orthovanadate:	157
Ultraviolet radiation:	1, 15, 669, 1527, 1647	Yttrium oxide:	659
Underground corrosion:	619	Zeolites:	323, 553, 751, 807
Unit cell:	335	Zinc compounds, Coatings:	1603
Vacuum brazing:	79, 1659	Zinc compounds, Irradiation:	873
Valence:	1487	Zinc oxide:	37, 65, 249, 971, 1117, 1155, 1201, 1587, 1603
Vanadium compounds:	489	Zirconates:	315
Vapor deposited coatings:	1713	Zirconium base alloys, Corrosion:	1523
Vapor deposited films, Microstructure:	1039	Zirconium base alloys, Diffusion:	171
Vapor deposition:	127, 817	Zirconium base alloys, Mechanical properties:	407, 1731
Vapor phases:	821	Zirconium base alloys, Melting:	903
		Zirconium base alloys, Microstructure:	319, 869
		Zirconium compounds:	297, 1189
		Zirconium dioxide:	191, 357, 495, 1451, 1543