

# SUBJECT INDEX—VOLUME 28

*Critical Reviews™ in Biomedical Engineering*

Page Numbers for Issues:

Issues 1&2: 1–347; Issues 3&4: 349–665; Issues 5&6: 667–899

- absorbable, 383
- accelerometer, 225
- access, 541
- accuracy, 557
- acetabular component, 7
- acrylic, 457
- acrylic bone cement, 451
- active contours models, 487
- arterial diseases, 53
- Asian knee, 33
- atherosclerosis, 47
- automatic control in anesthesia, 179, 187
- autonomic nervous system, 81, 87
- autonomy, 541
  
- BRCA1, 557
- balloon angioplasty, 47
- Baltimore Case, 529
- bileafet heart valve, 61
- biofluid, 61
- biomechanics, 11
- biotribology, 103
- blood pump model, 129, 135
- blood traumatization, 75
- body scheme, 231
- bone, 411
- bone cement, 7
- bone fixation, 377
- bone tunnel, 115
- brain imaging, 363, 493
- branching blood vessels, 53
- Brave New World, 563
- breast cancer, 209, 371
  
- CFD, 61
- cardiac, 173
- cardiac output, 69
- cardiac volumes, 69
- cartilage wear, 103
- centrifugal blood pump, 75
  
- child dummies, 213
- Children with Special Health Care Needs (CSHCN), 421
- clinical applications, 667
- clinical information systems, 421
- cloning, 567
- coatings, 667
- cobalt chrome alloy, 399
- colloid, 439
- colonoscopic, 355
- composite, 439
- computational fluid dynamics and flow visualization, 119
- confidentiality, 541
- contact area, 399
- covalent immobilization, 203
- crashworthiness, 219
  
- DSP chip, 429
- dental implants, 395
- diabetes, 87
- dignity, 541
- distal femur, 33
  
- ECM proteins, 203
- echocardiography, 487
- effect compartment, 179
- electrolyte compensation, 473
- electronic nose, 481
- endodontic treatment, 473
- esophagus, 81
- ethics, 529, 567
- ethos, 529
- ethylene oxide, 451
- evoked potentials, 81, 87
  
- FEM, 405, 411
- fMRI, 363
- femoral–neck fractures, 11
- fetal electrophysiological information, 165

fetal heart rate, 165  
 finite element analysis, 47  
 fluorescence imaging, 371  
 fracture mechanics, 439  
 fracture toughness, 457  
 frequency-domain, 371  
 functional electrical stimulation, 95  
 fuzzy rule, 355

gait analysis, 109  
 gait study, 225  
 gamma irradiation, 451  
 genetic determinism, 567  
 genetic screening, 557  
 genetic testing, 557  
 geometric design, 141  
 graft failure, 141

heart rate variability, 81, 87, 149  
 heel impact, 225  
 hemodialysis, 141  
 hemodynamic response, 363  
 hemodynamic simulation, 141  
 hidden Markov model, 429  
 hinge, 61  
 hip arthroplasty, 457  
 hip biomechanics, 109  
 hip fractures, 11  
 histology, 395  
 holism, 545  
 human, 213  
 human body odor, 481  
 human reproduction, 563  
 hybrid III adult, 213  
 hydroxyapatite, 667  
 hydroxyapatite (HA), 395, 667

IGFBP-3, 209  
 identification, 179  
 image segmentation, 355  
 impact shock, 225  
 impedance, 473  
 impeller blade design, 129  
 impeller design, 119, 135  
 implant, 411  
 implant design, 23  
 implant finite elements, 23  
 information technology, 421

injury mechanics, 219  
 injury prediction, 213  
 internet, 421  
 inverse design, 75

justice, 541

LDA measurement, 135  
 LabVIEW, 165

MAC-T, 209  
 mandible, 405  
 manual transport, 237  
 masseter, 389  
 maxilla, 405  
 measurement artifacts, 187  
 medical informatics, 421  
 mesh, 383  
 metallurgical analysis, 399  
 microphysiometer, 209  
 millimeter-wave radar, 173  
 minimal resource allocation, 463  
 morphometry, 395  
 multicontact cuff electrode, 95  
 muscle sense, 231

National Bioethics Advisory Commission,  
 563

networking, 421  
 noncardiac chest pain, 87  
 nonlinear control systems, 187  
 nonlinear estimation, 179  
 nonlinear systems, 545  
 numerical analysis, 53

occupant protection, 219  
 optical imaging, 371  
 orthopaedic implants, 395  
 osteoarthritis, 103

Parkinson's disease, 237  
 particle hemodynamics, 53  
 patella, 23  
 patello-femoral biomechanics, 23  
 paternalism, 557  
 periosteal autograft, 115  
 peripheral neuropathy, 231  
 phase smoothing, 149

philosophy of biology, 545  
 phosphonylation, 377  
 poly(methylmethacrylate), 457  
 polyethylene, 7  
 polyethylene wear, 23  
 polymer, 377  
 power spectra, 81  
 practice, 529  
 precision grip, 237  
 properties, 667  
 proprioception, 231  
 prosthesis, 231

quality, 541

radial basis function, 463  
 radiopacity, 439  
 reductionism, 545  
 regurgitation, 69  
 remote controller, 429  
 respiration or noninvasive monitoring, 173  
 restonosis, 47  
 revision hip arthroplasty, 7  
 rollovers, 219  
 roof crush, 219  
 root canal length, 473  
 rotary blood pump, 119

SV40-IGF-L, 209  
 sampling, 493  
 scale-space filtering, 355  
 scalp electrode, 165  
 screw-holes, 11  
 selective stimulation, 95  
 snakes, 487

source localization, 463  
 spectral estimation, 149  
 speech recognition, 429  
 statistical parameter mapping, 363  
 stereology, 493  
 stress analysis, 47, 411  
 subtrochanteric fractures, 11  
 symmetrical implant, 33  
 synovitis, 103

TMJ, 411  
 TMJ implant, 399  
 TMJ model, 389  
 technological determinism, 563  
 temporalis, 389  
 temporomandibular joint, 389, 399  
 tendon-bone healing, 115  
 testing device, 109  
 thermal dilution, 69  
 thrombus, 61  
 tissue engineering, 203, 383  
 titanium dental implant, 405  
 total knee arthroplasty, 23  
 total knee replacement, 33  
 touch, 231  
 tracking, 487

urine analysis, 481

volatile compounds, 481  
 volumetry, 493

white blood cell lysate, 103

zirconia, 439

# AUTHOR INDEX—VOLUME 28

*Critical Reviews™ in Biomedical Engineering*

Page Numbers for Issues:

Issues 1&2: 1–347; Issues 3&4: 349–665; Issues 5&6: 667–899\*

*[\*Bold italic page numbers represent the Russian Translation Section in Issues 5&6, which runs between pp. 711–892 but is numbered 1–182]*

- Abeyratne, Udantha R., 95,  
149, 463  
Abeysekara, S.S., 149  
Ackers, R. Michael, 209  
Adaskevich, V.P., **11**  
Adnan, Syed M., 95  
Alekseev, S.I., **52**  
Alexandrov, M.T., **137, 145**  
Allan, Jacqueline M., 377  
Andreotti, P.J., 141  
Anosov, A.A., 603  
Aoki, Mitsuhiro, 115  
Archie, Joseph P., Jr., 53
- Bagirov, A.V., **11**  
Bajwa, Absar, 81, 87  
Barger, Bill, 195  
Bartlett, Matthew, 371  
Batpenov, N.D., **11**  
Bauer, Keith Alan, 541  
Beiler, R.J., 383  
Belyaev, K.R., **104**  
Bensen, Christopher V., 7  
Berrien, La Shaun J., 103  
Betskii, O.V., 247, 269  
Bettencourt, Kerry, 159  
Bish, Jack, 219  
Bogachev, K.M., 603  
Boland, Thomas, 195  
Boss, Jochanan H., 23  
Bowman, Larry S., 523  
Brattain, Michael A., 109  
Bruley, Duane F., 157  
Bu, Lujia, 457  
Budsberg, Steve, 377  
Bulat, Robert, 87  
Bullinger, E., 187  
Burg, K.J.L., 383  
Burrow, Michael, 173
- Caldwell, Karin, 203  
Campbell, C.E., 399  
Chan, Daniel C.N., 667  
Chan, K.L., 355  
Chan, W.K., 119  
Chan, Weng Kong, 75  
Chernyi, V.V., **137, 145**  
Chinn, J.A., 127  
Christensen, Andrew M., 349  
Christensen, Robert W., 399  
Chua, C.K., 33  
Chua, L.P., 129, 135  
Clark, Mark D., 421  
Collmann, Jeff, 563  
Cook, Carl, 435  
Corpe, R. Scott, 395  
Culberson, C.R., 383
- D'Amico, Arnaldo, 481  
Del Schutte, H., Jr., 7  
Devyatkov, N.D., 247, 269  
Di Natale, Corrado, 481  
Dixon, Hong, 439  
Donovan, Francis M., Jr., 69  
Dooley, R. Larry, 377  
Dufrene, Yves, 195
- Edstrom, Patricia J., 421
- Fallen, Ernest L., 81, 87  
Farris, Harold, 377  
Finazzi-Agrò, 481  
Fitzpatrick, Debbie, 81, 87  
Forsten, Kimberly E., 209  
Frei, Christian W., 179, 187  
Friedman, Donald, 219  
Friedman, Keith, 219  
Furey, Michael J., 103  
Furman, Benjamin, 439
- Gailus, T., 323  
Gapochka, L.D., **40**  
Gapochka, M.G., **40**  
Garabadian, Charles, 389  
Gasilov, V.L., **160**  
Gaston, Fiona, 219  
Gentilini, Andrea, 179, 187  
Gerasimov, A.M., **11**  
Glass, Robert, 159  
Glattfelder, Adolf H., 179, 187  
Goh, S.B., 149  
Goulet, Ronald, 11  
Gourisankaran, Vijay, 47  
Graber, Glenn, 563  
Grant, Sheila A., 159  
Greene, K.G., 383  
Grundfest, Warren S., 527  
Guanglan, Zhang, 463  
Gulyaev, Yu.V., 269
- Halberstadt, C.R., 383  
Hamilton, Julie, 159  
Head, Sorin, 23  
Hejdukova, Blanka, 237  
Heifferon, Barbara, 551  
Heller, Jan C., 507  
Hendee, William R., 505  
Holder, W.D., Jr., 383  
Hollerback, Stephan, 81, 87  
Holls, William M., 165  
Hopkins, Christie B., 41, 435  
Horner, Steven L., 165  
Hosseini, Nasser, 237  
Hyun, Sinjae, 53
- Ingvarsson, Pall E., 237  
Irvin, W. Sean, 523
- James, D.W., 127

- Jaramillo, Carlos, 395  
 Jenkins, Linda F., 421  
 Jiang, Huabei, 371  
 Johnels, Bo, 237
- Kabisov, R.K., **29**  
 Kamath, Markad V., 81, 87  
 Kamenev, Yu. F., 659, **11**  
 Kazakov, Ya. E., **160**  
 Keong, Lee Kian, 493  
 Kershner, J.R., 17  
 Khizhnyak, Ye. P., 641  
 Khoo, L.P., 33  
 Kim, Deok W., 473  
 Kirikova, N.N., 589, **60**  
 Kislov, V.V., 247  
 Kleinstreuer, Clement, 53, 141  
 Kochetkova, N.V., **52**  
 Korolyov, A.F., **40**  
 Kotrovskaya, T.I., 323  
 Koz'ma, S. Yu., **137, 145**  
 Krishnan, S.M., 355  
 Krulevitch, Peter, 159  
 Kublanov, V.S., **160**  
 Kuo, Te-Son, 429  
 Kwarteng, Kofi B., 517
- Lankford, James, 439  
 Latour, Robert A., Jr., 109  
 Lebedeva, A.Yu., 339  
 Lebedeva, N.N., 323  
 Lee, Gil, 195  
 Lee, Maw-Huei, 429  
 Lee, Seung J., 473  
 Leo, H.L., 129, 135  
 Levedeva, A.Yu., **1**  
 Lewis, Gladius, 451  
 Lewis, Wilma C., 421  
 Li, H.D., 119  
 Li, Haidong, 75  
 Lim, Chu-Sing, 61  
 Lin, Chih-Lung, 429  
 Linden, David E., 377  
 Lo, N.N., 33  
 Loeb sack, A.B., 383  
 Longest, P.W., 141  
 Low, F.H., 33  
 Luh, Jer-Junh, 429
- Lye, Nah Teck, 463  
 Lyusov, V.A., **1**
- Macagnano, Antonella, 481  
 Mantini, Alessandro, 481  
 Masters, Timothy E., 349  
 Mathur, Anshu Bagga, 197  
 Matthews, Gregory, 173  
 May, Andrew, 81, 87  
 May, Brian M., 389  
 Mayeux, R.H., 445  
 Mays, Jimmy W., 457  
 Maysuria, Himaxi, 41  
 McIntire, Larry V., 193  
 Medvedev, O.S., **83**  
 Mele, Nancy Collis, 421  
 Mendes, David G., 23  
 Menter, David G., 193  
 Mladsi, Scott, 451  
 Moe, R., 127  
 Mooney, Donna M., 421  
 Morari, Manfred, 179  
 Morozov, **104**  
 Mukherjee, D.P., 445  
 Murashev, A.N., **83**
- Nachman, Ricardo, 23  
 Nam, Ki C., 473  
 Naser, Curtis R., 545  
 Ng, B.T.H., 119  
 Nicolella, Dan, 439  
 Norris, Brent, 11
- Ogden, A.L., 445  
 Ohtera, Kozo, 115  
 Olsson, Torsten, 237  
 Ong, Joo L., 667  
 Ovchinnikova, G.I., **77**
- Pace, Thomas B., 3  
 Pagano, Christopher C., 231  
 Pal, S., 405, 411  
 Paolesse, Roberto, 481  
 Papadimitriou, Minas N.B.,  
 193  
 Passechnik, V.I., 603  
 Patel, H., 445  
 Perez, R. Ron, 349
- Petrosyan, V.I., 269  
 Phillips, Winfred M., 1  
 Pienkowski, David, 513  
 Pletnev, S.D., 573  
 Puckett, Aaron D., 457
- Rajapakse, Jagath C., 363, 493  
 Ramesh, Sathappan, 371  
 Rawls, H. Ralph, 439  
 Ray, John D., 225  
 Reichert, W. Monty, 197  
 Roberts, Brad, 457  
 Robinson, Rose Marie, 209  
 Rogatkin, D.A., **126**  
 Roland, W.R., 383  
 Roshchin, A.V., **40**  
 Roychowdhury, A., 405, 411  
 Ru, Cheng-Tao, 429  
 Ruiz, Ramón, 487
- Sabo, Edmond, 23  
 Sadovnikov, V.B., 641, **83**  
 Saha, Pamela S., 537  
 Saha, S., 411  
 Saha, Subrata, 399, 537  
 Saha, Supryia, 399  
 Said, Mazen, 23  
 Sances, Anthony J., 213, 219  
 Sánchez, Pedro J., 487  
 Saratchandran, P., 463  
 Sarma, A., 399  
 Sarnowski, E., 127  
 Sasaki, Tetsuto, 115  
 Satris, Stephen, 567  
 Schnider, Thomas W., 179  
 Schookin, S.I., **104**  
 Schulz, Eldon G., 421  
 Scott, Andrea K., 527  
 Shalaby, Shalaby W., 377  
 Sharma, M.G., 47  
 Shekhotkin, A.V., 307  
 Shine, Glen, 81, 87  
 Shitikov, B.A., **11**  
 Sieber, T., 187  
 Sinitsyn, N.I., 269  
 Siriwardane, U., 445  
 Smith, Kelly, 557  
 Smothers, Crista L., 225

Stafford, Paul, 11  
 Steflik, David E., 395  
 Sudduth, Barry, 173  
 Sukhorukov, A.P., 40  
 Suleman, Jawal, 435  
 Sulimov, A.V., 323  
 Sulimova, O.P., 323  
 Sysoev, N.N., 40  
  
 Tambiev, A.Kh., 589, 60  
 Taubinsky, I.M., 137, 145  
 Taylor, Bruce C., 69  
 Temuryants, N.A., 307  
 Timoshkin, I.V., 40  
 Tougas, Gervais, 81, 87  
 Tresco, Patrick A., 203  
 Truskey, George A., 197  
 Tsarev, A.A., 1  
 Tun, Ang Kian, 463  
  
 Upton, Adrian R., 81, 87  
  
 Veit, Hugo P., 103  
 Volkov, N.A., 1  
 Voronkov, V.N., 641, 83  
  
 Walsh, W.R., 17  
 Walters, B., 17  
 Wang, JunHong, 61  
 Weaver, Kevin D., 7  
 Webb, Ken, 203  
 Wellinghoff, Stephen, 439  
 Whitehead, Raymond Y., 395  
 Wildman, Gary C., 225  
 Wilson, Michael D., 395  
 Won, Ren-Men, 429  
 Wrana, Jeffrey S., 377  
 Wueste, Daniel E., 529  
  
 Xia, Mengna, 499  
 Xie, Zeping, 499  
  
 Yamada, Yasuharu, 115  
 Yamakoshi, Ken-ichi, 115  
 Yang, Xin, 355  
 Yeo, Tony Joon Hock, 61  
 Yolkin, V.A., 269  
 Young, Timothy R., 395  
 Yu, S.C.M., 119, 129, 135  
 Yumatov, E.A., 89  
  
 Zapata, Juan, 487  
 Zavgorogny, S.V., 641, 83  
 Zbinden, A.M., 187  
 Zhu, Lingyi, 499  
 Zicat, B., 17  
 Ziskin, M.S., 52  
 Zubenko, V.G., 104