

Joan C Marini

List of Publications by Year in descending order

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101
papers

8,216
citations

53939

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109
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109
docs citations

109
times ranked

5765
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Osteogenesis Imperfecta: Mechanisms and Signaling Pathways Connecting Classical and Rare OI Types. <i>Endocrine Reviews</i> , 2022, 43, 61-90. | 8.9 | 58 |
| 2 | Osteogenesis Imperfecta: The Impact of Genotype and Clinical Phenotype on Adiposity and Resting Energy Expenditure. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2022, 107, 67-76. | 1.8 | 5 |
| 3 | Dissecting the phenotypic variability of osteogenesis imperfecta. <i>DMM Disease Models and Mechanisms</i> , 2022, 15, . | 1.2 | 16 |
| 4 | Alterations of bone material properties in growing <i>Itim5/BRIL p.S42</i> knock-in mice, a new model for atypical type VI osteogenesis imperfecta. <i>Bone</i> , 2022, 162, 116451. | 1.4 | 8 |
| 5 | SMAD3 mutation in <i>LDS3</i> causes bone fragility by impairing the TGF- β 2 pathway and enhancing osteoclastogenesis. <i>Bone Reports</i> , 2022, 17, 101603. | 0.2 | 3 |
| 6 | Stress Shielding in the Setting of Osteogenesis Imperfecta and the Effect of Downsizing an Intramedullary Rod. <i>JBJS Case Connector</i> , 2021, 11, . | 0.1 | 0 |
| 7 | Distribution and Functional Consequences of Somatic MAP2K1 Variants in Affected Skin Associated with Bone Lesions in Melorheostosis. <i>Journal of Investigative Dermatology</i> , 2021, 141, 688-692.e11. | 0.3 | 3 |
| 8 | Targeting cellular stress in vitro improves osteoblast homeostasis, matrix collagen content and mineralization in two murine models of osteogenesis imperfecta. <i>Matrix Biology</i> , 2021, 98, 1-20. | 1.5 | 19 |
| 9 | Bruck syndrome 2 variant lacking congenital contractures and involving a novel compound heterozygous PLOD2 mutation. <i>Bone</i> , 2020, 130, 115047. | 1.4 | 14 |
| 10 | Somatic <i>SMAD3</i> -activating mutations cause melorheostosis by up-regulating the TGF- β 2/SMAD pathway. <i>Journal of Experimental Medicine</i> , 2020, 217, . | 4.2 | 24 |
| 11 | Substitution of murine type I collagen A1 3-hydroxylation site alters matrix structure but does not recapitulate osteogenesis imperfecta bone dysplasia. <i>Matrix Biology</i> , 2020, 90, 20-39. | 1.5 | 11 |
| 12 | Antagonism Between PEDF and TGF- β 2 Contributes to Type VI Osteogenesis Imperfecta Bone and Vascular Pathogenesis. <i>Journal of Bone and Mineral Research</i> , 2020, 37, 925-937. | 3.1 | 7 |
| 13 | Distinct Clinical and Pathological Features of Melorheostosis Associated With Somatic <i>MAP2K1</i> Mutations. <i>Journal of Bone and Mineral Research</i> , 2019, 34, 145-156. | 3.1 | 22 |
| 14 | Sclerostin Antibody-Induced Changes in Bone Mass Are Site Specific in Developing Crania. <i>Journal of Bone and Mineral Research</i> , 2019, 34, 2301-2310. | 3.1 | 9 |
| 15 | Melorheostotic Bone Lesions Caused by Somatic Mutations in <i>MAP2K1</i> Have Deteriorated Microarchitecture and Periosteal Reaction. <i>Journal of Bone and Mineral Research</i> , 2019, 34, 883-895. | 3.1 | 16 |
| 16 | Bone biology: insights from osteogenesis imperfecta and related rare fragility syndromes. <i>FEBS Journal</i> , 2019, 286, 3033-3056. | 2.2 | 35 |
| 17 | COL1A1 C-propeptide mutations cause ER mislocalization of procollagen and impair C-terminal procollagen processing. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2019, 1865, 2210-2223. | 1.8 | 18 |
| 18 | Longitudinal growth curves for children with classical osteogenesis imperfecta (types III and IV) caused by structural pathogenic variants in type I collagen. <i>Genetics in Medicine</i> , 2019, 21, 1233-1239. | 1.1 | 22 |

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|----|--|------|-----------|
| 19 | 4-PBA ameliorates cellular homeostasis in fibroblasts from osteogenesis imperfecta patients by enhancing autophagy and stimulating protein secretion. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2018, 1864, 1642-1652. | 1.8 | 55 |
| 20 | Somatic activating mutations in MAP2K1 cause melorheostosis. <i>Nature Communications</i> , 2018, 9, 1390. | 5.8 | 56 |
| 21 | Low Dose of Bisphosphonate Enhances Sclerostin Antibody-Induced Trabecular Bone Mass Gains in Brl/+ Osteogenesis Imperfecta Mouse Model. <i>Journal of Bone and Mineral Research</i> , 2018, 33, 1272-1282. | 3.1 | 13 |
| 22 | Phenotypic Spectrum in Osteogenesis Imperfecta Due to Mutations in TMEM38B: Unraveling a Complex Cellular Defect. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2017, 102, 2019-2028. | 1.8 | 27 |
| 23 | Osteogenesis imperfecta: new genes reveal novel mechanisms in bone dysplasia. <i>Translational Research</i> , 2017, 181, 27-48. | 2.2 | 78 |
| 24 | Hypermineralization and High Osteocyte Lacunar Density in Osteogenesis Imperfecta Type V Bone Indicate Exuberant Primary Bone Formation. <i>Journal of Bone and Mineral Research</i> , 2017, 32, 1884-1892. | 3.1 | 55 |
| 25 | Osteogenesis imperfecta. <i>Nature Reviews Disease Primers</i> , 2017, 3, 17052. | 18.1 | 481 |
| 26 | Cyclophilin B Deficiency Causes Abnormal Dentin Collagen Matrix. <i>Journal of Proteome Research</i> , 2017, 16, 2914-2923. | 1.8 | 12 |
| 27 | Absence of the ER Cation Channel TMEM38B/TRIC-B Disrupts Intracellular Calcium Homeostasis and Dysregulates Collagen Synthesis in Recessive Osteogenesis Imperfecta. <i>PLoS Genetics</i> , 2016, 12, e1006156. | 1.5 | 49 |
| 28 | Cyclophilin-B Modulates Collagen Cross-linking by Differentially Affecting Lysine Hydroxylation in the Helical and Telo-peptidyl Domains of Tendon Type I Collagen. <i>Journal of Biological Chemistry</i> , 2016, 291, 9501-9512. | 1.6 | 46 |
| 29 | Single dose of bisphosphonate preserves gains in bone mass following cessation of sclerostin antibody in Brl/+ osteogenesis imperfecta model. <i>Bone</i> , 2016, 93, 79-85. | 1.4 | 24 |
| 30 | Non-Lethal Type VIII Osteogenesis Imperfecta Has Elevated Bone Matrix Mineralization. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2016, 101, 3516-3525. | 1.8 | 28 |
| 31 | MBTPS2 mutations cause defective regulated intramembrane proteolysis in X-linked osteogenesis imperfecta. <i>Nature Communications</i> , 2016, 7, 11920. | 5.8 | 112 |
| 32 | Bone mineral properties in growing Col1a2+/G610C mice, an animal model of osteogenesis imperfecta. <i>Bone</i> , 2016, 87, 120-129. | 1.4 | 29 |
| 33 | Effect of anti-sclerostin therapy and osteogenesis imperfecta on tissue-level properties in growing and adult mice while controlling for tissue age. <i>Bone</i> , 2016, 84, 222-229. | 1.4 | 33 |
| 34 | Osteogenesis imperfecta. <i>Lancet, The</i> , 2016, 387, 1657-1671. | 6.3 | 668 |
| 35 | Tissue level material composition and mechanical properties in Brl/+ mouse model of Osteogenesis Imperfecta after sclerostin antibody treatment. , 2015, , . | | 0 |
| 36 | Type V OI Primary Osteoblasts Display Increased Mineralization Despite Decreased COL1A1 Expression. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2015, 100, E325-E332. | 1.8 | 32 |

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|----|--|-----|-----------|
| 37 | Genetic Defects in TAPT1 Disrupt Ciliogenesis and Cause a Complex Lethal Osteochondrodysplasia. American Journal of Human Genetics, 2015, 97, 521-534. | 2.6 | 39 |
| 38 | Altered cytoskeletal organization characterized lethal but not surviving <i>Brtl</i> ^{+/Δ} mice: insight on phenotypic variability in osteogenesis imperfecta. Human Molecular Genetics, 2015, 24, 6118-6133. | 1.4 | 29 |
| 39 | Rapidly growing <i>Brtl</i> ⁺ mouse model of osteogenesis imperfecta improves bone mass and strength with sclerostin antibody treatment. Bone, 2015, 71, 115-123. | 1.4 | 71 |
| 40 | Heritable connective tissue disorders. , 2015, , 1715-1723. | | 0 |
| 41 | Allele-specific <i>Col1a1</i> silencing reduces mutant collagen in fibroblasts from <i>Brtl</i> mouse, a model for classical osteogenesis imperfecta. European Journal of Human Genetics, 2014, 22, 667-674. | 1.4 | 21 |
| 42 | Abnormal Type I Collagen Post-translational Modification and Crosslinking in a Cyclophilin B KO Mouse Model of Recessive Osteogenesis Imperfecta. PLoS Genetics, 2014, 10, e1004465. | 1.5 | 98 |
| 43 | A Novel <i>IFITM5</i> Mutation in Severe Atypical Osteogenesis Imperfecta Type VI Impairs Osteoblast Production of Pigment Epithelium-Derived Factor. Journal of Bone and Mineral Research, 2014, 29, 1402-1411. | 3.1 | 63 |
| 44 | Osteogenesis imperfecta due to mutations in non-collagenous genes. Current Opinion in Pediatrics, 2014, 26, 500-507. | 1.0 | 115 |
| 45 | Sclerostin antibody improves skeletal parameters in a <i>Brtl</i> ⁺ mouse model of osteogenesis imperfecta. Journal of Bone and Mineral Research, 2013, 28, 73-80. | 3.1 | 111 |
| 46 | Mutations in WNT1 Cause Different Forms of Bone Fragility. American Journal of Human Genetics, 2013, 92, 565-574. | 2.6 | 240 |
| 47 | New Genes in Bone Development: What's New in Osteogenesis Imperfecta. Journal of Clinical Endocrinology and Metabolism, 2013, 98, 3095-3103. | 1.8 | 163 |
| 48 | Mineral and Matrix Changes in <i>Brtl</i> ^{+/Δ} Teeth Provide Insights into Mineralization Mechanisms. BioMed Research International, 2013, 2013, 1-9. | 0.9 | 14 |
| 49 | Kuskokwim Syndrome, a Recessive Congenital Contracture Disorder, Extends the Phenotype of <i>FKBP10</i> Mutations. Human Mutation, 2013, 34, 1279-1288. | 1.1 | 53 |
| 50 | A founder mutation in LEPRE1 carried by 1.5% of West Africans and 0.4% of African Americans causes lethal recessive osteogenesis imperfecta. Genetics in Medicine, 2012, 14, 543-551. | 1.1 | 49 |
| 51 | Cardiopulmonary dysfunction in the Osteogenesis imperfecta mouse model <i>Aga2</i> and human patients are caused by bone-independent mechanisms. Human Molecular Genetics, 2012, 21, 3535-3545. | 1.4 | 57 |
| 52 | Effects of tissue hydration on nanoscale structural morphology and mechanics of individual Type I collagen fibrils in the <i>Brtl</i> mouse model of Osteogenesis Imperfecta. Journal of Structural Biology, 2012, 180, 428-438. | 1.3 | 45 |
| 53 | Differential response to intracellular stress in the skin from osteogenesis imperfecta <i>Brtl</i> mice with lethal and non lethal phenotype: A proteomic approach. Journal of Proteomics, 2012, 75, 4717-4733. | 1.2 | 19 |
| 54 | Increased susceptibility to microdamage in <i>Brtl</i> ⁺ mouse model for osteogenesis imperfecta. Bone, 2012, 50, 784-791. | 1.4 | 16 |

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|----|--|------|-----------|
| 55 | Impaired Osteoblastogenesis in a Murine Model of Dominant Osteogenesis Imperfecta: A New Target for Osteogenesis Imperfecta Pharmacological Therapy. <i>Stem Cells</i> , 2012, 30, 1465-1476. | 1.4 | 59 |
| 56 | Absence of <i>FKBP10</i> in recessive type XI osteogenesis imperfecta leads to diminished collagen cross-linking and reduced collagen deposition in extracellular matrix. <i>Human Mutation</i> , 2012, 33, 1589-1598. | 1.1 | 86 |
| 57 | A Novel Mutation in <i>LEPRE1</i> That Eliminates Only the KDEL ER- Retrieval Sequence Causes Non-Lethal Osteogenesis Imperfecta. <i>PLoS ONE</i> , 2012, 7, e36809. | 1.1 | 28 |
| 58 | New perspectives on osteogenesis imperfecta. <i>Nature Reviews Endocrinology</i> , 2011, 7, 540-557. | 4.3 | 556 |
| 59 | Nanoscale morphology of Type I collagen is altered in the <i>Brtl</i> mouse model of Osteogenesis Imperfecta. <i>Journal of Structural Biology</i> , 2011, 173, 146-152. | 1.3 | 74 |
| 60 | <i>COL1</i> C-propeptide cleavage site mutations cause high bone mass osteogenesis imperfecta. <i>Human Mutation</i> , 2011, 32, 598-609. | 1.1 | 119 |
| 61 | Variable bone fragility associated with an Amish <i>COL1A2</i> variant and a knock-in mouse model. <i>Journal of Bone and Mineral Research</i> , 2010, 25, 247-261. | 3.1 | 98 |
| 62 | Null mutations in <i>LEPRE1</i> and <i>CRTAP</i> cause severe recessive osteogenesis imperfecta. <i>Cell and Tissue Research</i> , 2010, 339, 59-70. | 1.5 | 108 |
| 63 | Near-infrared fluorescent probe traces bisphosphonate delivery and retention in vivo. <i>Journal of Bone and Mineral Research</i> , 2010, 25, 1748-1758. | 3.1 | 72 |
| 64 | Prolyl 3-hydroxylase 1 and <i>CRTAP</i> are mutually stabilizing in the endoplasmic reticulum collagen prolyl 3-hydroxylation complex. <i>Human Molecular Genetics</i> , 2010, 19, 223-234. | 1.4 | 73 |
| 65 | Lack of Cyclophilin B in Osteogenesis Imperfecta with Normal Collagen Folding. <i>New England Journal of Medicine</i> , 2010, 362, 521-528. | 13.9 | 158 |
| 66 | Use of bisphosphonates in children—proceed with caution. <i>Nature Reviews Endocrinology</i> , 2009, 5, 241-243. | 4.3 | 36 |
| 67 | Alendronate Treatment of the <i>Brtl</i> Osteogenesis Imperfecta Mouse Improves Femoral Geometry and Load Response Before Fracture but Decreases Predicted Material Properties and Has Detrimental Effects on Osteoblasts and Bone Formation. <i>Journal of Bone and Mineral Research</i> , 2009, 24, 849-859. | 3.1 | 57 |
| 68 | In utero transplantation of adult bone marrow decreases perinatal lethality and rescues the bone phenotype in the knockin murine model for classical, dominant osteogenesis imperfecta. <i>Blood</i> , 2009, 114, 459-468. | 0.6 | 93 |
| 69 | Popcorn calcification in osteogenesis imperfecta: Incidence, progression, and molecular correlation. <i>American Journal of Medical Genetics, Part A</i> , 2008, 146A, 2725-2732. | 0.7 | 36 |
| 70 | Cellular Mechanism of Decreased Bone in <i>Brtl</i> Mouse Model of OI: Imbalance of Decreased Osteoblast Function and Increased Osteoclasts and Their Precursors. <i>Journal of Bone and Mineral Research</i> , 2008, 23, 1983-1994. | 3.1 | 75 |
| 71 | Candidate Cell and Matrix Interaction Domains on the Collagen Fibril, the Predominant Protein of Vertebrates. <i>Journal of Biological Chemistry</i> , 2008, 283, 21187-21197. | 1.6 | 244 |
| 72 | Structural Heterogeneity of Type I Collagen Triple Helix and Its Role in Osteogenesis Imperfecta. <i>Journal of Biological Chemistry</i> , 2008, 283, 4787-4798. | 1.6 | 81 |

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|----|--|------|-----------|
| 73 | Mapping of SPARC/BM-40/Osteonectin-binding Sites on Fibrillar Collagens. <i>Journal of Biological Chemistry</i> , 2008, 283, 19551-19560. | 1.6 | 87 |
| 74 | Components of the Collagen Prolyl 3-Hydroxylation Complex are Crucial for Normal Bone Development. <i>Cell Cycle</i> , 2007, 6, 1675-1681. | 1.3 | 107 |
| 75 | Selective retention and degradation of molecules with a single mutant $\hat{I}\pm 1(I)$ chain in the Brlt IV mouse model of OI. <i>Matrix Biology</i> , 2007, 26, 604-614. | 1.5 | 52 |
| 76 | Consortium for osteogenesis imperfecta mutations in the helical domain of type I collagen: regions rich in lethal mutations align with collagen binding sites for integrins and proteoglycans. <i>Human Mutation</i> , 2007, 28, 209-221. | 1.1 | 620 |
| 77 | Differential expression of both extracellular and intracellular proteins is involved in the lethal or nonlethal phenotypic variation of BrltIV, a murine model for osteogenesis imperfecta. <i>Proteomics</i> , 2007, 7, 1877-1891. | 1.3 | 51 |
| 78 | Prolyl 3-hydroxylase 1 deficiency causes a recessive metabolic bone disorder resembling lethal/severe osteogenesis imperfecta. <i>Nature Genetics</i> , 2007, 39, 359-365. | 9.4 | 429 |
| 79 | Y-position cysteine substitution in type I collagen ($\hat{I}\pm 1(I)$ R888C/p.R1066C) is associated with osteogenesis imperfecta/Ehlers-Danlos syndrome phenotype. <i>Human Mutation</i> , 2007, 28, 396-405. | 1.1 | 63 |
| 80 | Should children with osteogenesis imperfecta be treated with bisphosphonates?. <i>Nature Clinical Practice Endocrinology and Metabolism</i> , 2006, 2, 14-15. | 2.9 | 11 |
| 81 | Deficiency of Cartilage-Associated Protein in Recessive Lethal Osteogenesis Imperfecta. <i>New England Journal of Medicine</i> , 2006, 355, 2757-2764. | 13.9 | 307 |
| 82 | Molecular Mechanism of $\hat{I}\pm 1(I)$ -Osteogenesis Imperfecta/Ehlers-Danlos Syndrome. <i>Journal of Biological Chemistry</i> , 2006, 281, 6463-6470. | 1.6 | 77 |
| 83 | Controlled Trial of Pamidronate in Children With Types III and IV Osteogenesis Imperfecta Confirms Vertebral Gains but Not Short-Term Functional Improvement. <i>Journal of Bone and Mineral Research</i> , 2005, 20, 977-986. | 3.1 | 176 |
| 84 | Mutations Near Amino End of $\hat{I}\pm 1(I)$ Collagen Cause Combined Osteogenesis Imperfecta/Ehlers-Danlos Syndrome by Interference with N-propeptide Processing. <i>Journal of Biological Chemistry</i> , 2005, 280, 19259-19269. | 1.6 | 118 |
| 85 | Brittle IV Mouse Model for Osteogenesis Imperfecta IV Demonstrates Postpubertal Adaptations to Improve Whole Bone Strength. <i>Journal of Bone and Mineral Research</i> , 2004, 19, 614-622. | 3.1 | 118 |
| 86 | Structure, stability and interactions of type I collagen with GLY349-CYS substitution in $\hat{I}\pm 1(I)$ chain in a murine Osteogenesis Imperfecta model. <i>Matrix Biology</i> , 2004, 23, 101-112. | 1.5 | 32 |
| 87 | Positive Linear Growth and Bone Responses to Growth Hormone Treatment in Children With Types III and IV Osteogenesis Imperfecta: High Predictive Value of the Carboxyterminal Propeptide of Type I Procollagen. <i>Journal of Bone and Mineral Research</i> , 2003, 18, 237-243. | 3.1 | 93 |
| 88 | Type I Collagen Triplet Duplication Mutation in Lethal Osteogenesis Imperfecta Shifts Register of $\hat{I}\pm 1(I)$ Chains throughout the Helix and Disrupts Incorporation of Mutant Helices into Fibrils and Extracellular Matrix. <i>Journal of Biological Chemistry</i> , 2003, 278, 10006-10012. | 1.6 | 29 |
| 89 | Do Bisphosphonates Make Children's Bones Better or Brittle?. <i>New England Journal of Medicine</i> , 2003, 349, 423-426. | 13.9 | 150 |
| 90 | Osteogenesis Imperfecta: Prospects for Molecular Therapeutics. <i>Molecular Genetics and Metabolism</i> , 2000, 71, 225-232. | 0.5 | 58 |

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|-----|---|-----|-----------|
| 91 | Use of the Cre/lox Recombination System to Develop a Non-lethal Knock-in Murine Model for Osteogenesis Imperfecta with an $\alpha 1(I)$ G349C Substitution. <i>Journal of Biological Chemistry</i> , 1999, 274, 37923-37931. | 1.6 | 125 |
| 92 | An $\alpha 2(I)$ glycine to aspartate substitution is responsible for the presence of a kink in type I collagen in a lethal case of osteogenesis imperfecta. <i>Matrix Biology</i> , 1998, 17, 575-584. | 1.5 | 20 |
| 93 | Phenotypic Comparison of an Osteogenesis Imperfecta Type IV Proband with a Novel $\alpha 2(I)$ Gly922 \rightarrow Ser Substitution in Type I Collagen and an Unrelated Patient with an Identical Mutation. <i>Biochemical and Molecular Medicine</i> , 1997, 62, 26-35. | 1.5 | 15 |
| 94 | Endocrine Aspects of Growth Deficiency in OI. <i>Connective Tissue Research</i> , 1995, 31, s55-s57. | 1.1 | 8 |
| 95 | Neurologic Profile in Osteogenesis Imperfecta. <i>Connective Tissue Research</i> , 1995, 31, s23-s26. | 1.1 | 10 |
| 96 | Moderately severe osteogenesis imperfecta associated with substitutions of serine for glycine in the $\alpha 1(I)$ chain of type I collagen. <i>American Journal of Medical Genetics Part A</i> , 1993, 45, 241-245. | 2.4 | 4 |
| 97 | Evaluation of growth hormone axis and responsiveness to growth stimulation of short children with osteogenesis imperfecta. <i>American Journal of Medical Genetics Part A</i> , 1993, 45, 261-264. | 2.4 | 49 |
| 98 | A de novo G \rightarrow A mutation at the $\alpha 2(I)$ exon 16 splice donor site causes skipping of exon 16 in the cDNA of one allele of an OI Type IV proband. <i>Human Mutation</i> , 1993, 2, 380-388. | 1.1 | 13 |
| 99 | New autosomal recessive syndrome of sparse hair, osteopenia, and mental retardation in Mennonite sisters. <i>American Journal of Medical Genetics Part A</i> , 1992, 43, 983-988. | 2.4 | 4 |
| 100 | Intractable vasculitis, resorptive osteolysis, and immunity to type I collagen in type VIII Ehlers-Danlos syndrome. <i>Arthritis and Rheumatism</i> , 1991, 34, 1466-1475. | 6.7 | 16 |
| 101 | Analysis Of cultured chorionic villi in a case of osteogenesis imperfecta type II: Implications for prenatal diagnosis. <i>American Journal of Medical Genetics Part A</i> , 1990, 36, 258-264. | 2.4 | 4 |